

PUBLICATIONS
OF THE
**GEOLOGICAL
SURVEY**

1879-1961



**PUBLICATIONS
OF THE
GEOLOGICAL
SURVEY**

1879 - 1961



THIS VOLUME IS A PERMANENT CATALOG
OF BOOKS, MAPS, AND CHARTS ISSUED BY
THE GEOLOGICAL SURVEY THROUGH DE-
CEMBER 1961. LATER PUBLICATIONS
WILL BE LISTED IN SUPPLEMENTARY
CATALOGS.

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, *Secretary*

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H. William Menard, *Director*

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CONTENTS

	Page
Publications of the Geological Survey 1879-1961	v
Book publications	1
Annual reports	1
Bulletins	10
Circulars	86
Mineral resources	98
Monographs	132
Professional papers	134
Water-supply papers	155
Miscellaneous reports	188
World atlas of commercial geography	187
Administrative publications	188
Regulations	188
Special publications	188
Maps and charts	190
General information	190
Geologic maps	190
United States	190
State maps distributed by the Geological Survey	190
Maps distributed by the States	191
Indexes to geologic mapping in the United States	191
Foreign countries	192
Folios of the geologic atlas of the United States	193
Topographic atlases of the United States	197
Geologic quadrangle maps of the United States	198
Miscellaneous geologic investigations maps	203
Mineral resource maps and charts	213
United States	213
Coal maps	213
Oil and gas maps	213
States	213
Oil and gas maps	213
Missouri Basin studies	213
Tennessee River basin	214
Oil and gas investigations	214
Maps	214
Charts	222
Coal investigations	224
Maps and charts	224
Mineral investigations	226
Preliminary strategic maps	226
Field study maps	226
Resource maps	234
General mineral resource maps	234
Geophysical investigations	236
Hydrologic investigations atlases	245
Topographic maps	247
National topographic map series	247
Quadrangle maps	247
Metropolitan-area maps	247
Shaded relief maps	248
United States 1:250,000 scale series	248
United States 1:1,000,000 scale series	248
Alaska	248
Hawaii	248
Puerto Rico	248
Virgin Islands	248
Aerial photographs	248
Antarctica reconnaissance series	249
Geodetic control diagrams	249
Index circulars	249
List of topographic maps	249
United States	249
Contour	249
Relief	249
States	249
Contour	249

Maps and charts--Continued	
List of topographic maps--Continued	
States--Continued	Page
Relief- - - - -	249
Elevation maps- - - - -	249
Base maps - - - - -	249
Metropolitan area maps - - - - -	251
Special topographic maps - - - - -	252
Special sets - - - - -	255
Miscellaneous maps and charts - - - - -	256
United States - - - - -	256
Status maps - - - - -	256
Base maps - - - - -	256
Outline maps - - - - -	256
Physical divisions - - - - -	257
Alaska base maps- - - - -	257
Puerto Rico base maps - - - - -	257
Land-classification maps- - - - -	257
River surveys- - - - -	257
Finding lists - - - - -	259
Subject - geographic list - - - - -	259
Geographic list - - - - -	365
Finding list of authors- - - - -	431

TABLES

Table 1. Reports containing records of quality of surface waters of the United States, 1941-59- - - - -	182
2. Reports containing records of water levels and artesian pressure in observation wells in the United States, 1935-57 - - - - -	183
3. Reports containing records of streamflow in the United States, 1901-6 - - - - -	184
4. Reports containing records of streamflow in the United States, 1907-43- - - - -	185
5. Reports containing records of streamflow in the United States, 1944-60- - - - -	186
6. Compilation of records of surface waters of the United States to 1950- - - - -	187
7. Reports on quality of surface waters for irrigation, western United States, 1951-57- - - - -	187

PUBLICATIONS OF THE GEOLOGICAL SURVEY 1879-1961

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¹ Individual topographic quadrangle maps are not listed; they are shown on State indexes to topographic maps, which are free on application. These indexes also show commercial dealers in each State.

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Survey maps are also sold by some 1,750 commercial dealers throughout the United States.

BOOK PUBLICATIONS

ANNUAL REPORTS¹

[An asterisk (*) indicates that the paper is out of print.]

- *First Annual Report of the United States Geological Survey, by Clarence King, Director, 1880, 79 p. [Some versions have 62 p. and 77 p.] A preliminary report, describing plan of organization and publications.
- *Second Annual Report of the United States Geological Survey, 1880-81; John Wesley Powell, Director. 1882, 588 p.
 - *a. Report of the Director, 1882, p. xi-iv; Administrative reports by the heads of divisions, 1882, p. 3-46.
 - *b. The physical geology of the Grand Canyon district, by C. E. Dutton, 1882, p. 47-166.
 - *c. Contributions to the history of Lake Bonneville, by G. K. Gilbert, 1882, p. 167-200.
 - *d. Abstract of report on geology and mining industry of Leadville, Lake County, Colo., by S. F. Emmons, 1882, p. 201-290.
 - *e. A summary of the geology of the Comstock lode and the Washoe district, by G. F. Becker, 1882, p. 291-330.
 - *f. Production of the precious metals in the United States, by Clarence King, 1882, p. 331-401.
 - *g. A new method of measuring heights by means of the barometer, by G. K. Gilbert, 1882, p. 403-566; Report index, 1882, p. 567-588.
- *Third Annual Report of the United States Geological Survey, 1881-82; J. W. Powell, Director. 1883, 564 p.
 - *a. Report of the Director, 1883, p. xv-xviii; Administrative reports of chiefs of divisions and heads of independent parties, 1883, p. 1-41.
 - *b. Birds with teeth, by O. C. Marsh, 1883, p. 45-88.
 - *c. The copper-bearing rocks of Lake Superior, by R. D. Irving, 1883, p. 89-188.
 - *d. Sketch of the geological history of Lake Lahontan, a Quaternary lake of northern Nevada, by I. C. Russell, 1883, p. 189-235.
 - *e. Abstract of report on the geology of the Eureka district, Nev., by Arnold Hague, 1883, p. 237-290.
 - *f. Preliminary paper on the terminal moraine of the second glacial epoch, by T. C. Chamberlin, 1883, p. 291-402.
 - *g. A review of the nonmarine fossil Mollusca of North America, by C. A. White, 1883, p. 403-550; Report index, 1883, p. 551-564.
- *Fourth Annual Report of the United States Geological Survey, 1882-83; J. W. Powell, Director. 1884, 473 p.
 - *a. Report of the Director, 1884, p. xiii-xxxii; Administrative reports of chiefs of divisions and heads of independent parties, 1884, p. 1-72.
 - *b. Hawaiian volcanoes, by C. E. Dutton, 1884, p. 75-219.
 - *c. Abstract of a report on the mining geology of the Eureka district, Nev., by J. S. Curtis, 1884, p. 221-251.
 - *d. Popular fallacies regarding the precious-metal ore deposits, by Albert Williams, Jr., 1884, p. 253-271.
 - *e. A review of the fossil Ostreidae of North America; and a comparison of the fossil with the living forms, by C. A. White, 1884, p. 273-308, with Appendix I, North American Tertiary Ostreidae, by Angelo Heilprin, 1884, p. 309-316, and Appendix II, A sketch of the life-history of the oyster, by J. A. Ryder, 1884, p. 317-430.
 - *f. A geological reconnaissance in southern Oregon, by I. C. Russell, 1884, p. 431-464; Report index, 1884, p. 465-473.
- *Fifth Annual Report of the United States Geological Survey, 1883-84; J. W. Powell, Director. 1885, 469 p.
 - *a. Report of the Director, 1885, p. xvii-xxxvi; Administrative reports of chiefs of divisions and heads of independent parties, 1885, p. 1-66.
 - *b. The topographic features of lake shores, by G. K. Gilbert, 1885, p. 69-123.
 - *c. The requisite and qualifying conditions of artesian wells, by T. C. Chamberlin, 1885, p. 125-173.

¹Beginning with the 23rd (1901-02), the annual reports of the Geological Survey contain no technical papers but were published separately until 1933. After 1933 a condensed form has been included in the annual report of the Secretary of the Interior. Each of the papers in the first 22 reports was issued also in separate form. In this list lower case letters are used before the titles to indicate these separates so that they may be listed in the geographic, subject, and author indexes at the end of this publication.

- *d. Preliminary paper on an investigation of Archean formations of the Northwestern States, by R. D. Irving, 1885, p. 175-242.
- *e. The gigantic mammals of the order Dinocerata, by O. C. Marsh, 1885, p. 243-302.
- *f. Existing glaciers of the United States, by I. C. Russell, 1885, p. 303-355.
- *g. Sketch of paleobotany, by L. F. Ward, 1885, p. 357-452; Report index, 1885, p. 453-469.
- *Sixth Annual Report of the United States Geological Survey, 1884-85; J. W. Powell, Director. 1885. 570 p.
 - *a. Report of the Director, 1885, p. xv-xxix; Administrative reports of chiefs of divisions and heads of independent parties, 1885, p. 1-101.
 - *b. Mount Taylor and the Zuni Plateau, by C. E. Dutton, 1885, p. 105-198.
 - *c. Preliminary paper on the Driftless Area of the upper Mississippi Valley, by T. C. Chamberlin and R. D. Salisbury, 1885, p. 199-322.
 - *d. The quantitative determination of silver by means of the microscope, by J. S. Curtis, 1885, p. 323-352.
 - *e. Preliminary report on seacoast swamps of the eastern United States, by N. S. Shaler, 1885, p. 353-398.
 - *f. Synopsis of the flora of the Laramie group, by L. F. Ward, 1885, p. 399-557; Report index, 1885, p. 559-570.
- *Seventh Annual Report of the United States Geological Survey, 1885-86; J. W. Powell, Director. 1888. 656 p.
 - *a. Report of the Director, 1888, p. 3-42; Administrative reports of chiefs of divisions and heads of independent parties, 1888, p. 43-143.
 - *b. The rock scorings of the great ice invasions, by T. C. Chamberlin, 1888, p. 147-248.
 - *c. Obsidian Cliff, Yellowstone National Park, by J. P. Iddings, 1888, p. 249-295.
 - *d. Report on the geology of Marthas Vineyard, by N. S. Shaler, 1888, p. 297-363.
 - *e. On the classification of the early Cambrian and pre-Cambrian formations, by R. D. Irving, 1888, p. 365-454.
 - *f. The structure of the Triassic formation of the Connecticut Valley, by W. M. Davis, 1888, p. 455-490.
 - *g. Salt-making processes in the United States, by T. M. Chatard, 1888, p. 491-535.
 - *h. The geology of the head of Chesapeake Bay, by W. J. McGee, 1888, p. 537-646; Report index, 1888, p. 647-656.
- *Eighth Annual Report of the United States Geological Survey, 1886-87; J. W. Powell, Director. 1889. 1063 p. 2 parts.
 - *Part I. Director's report, reports of chiefs of divisions, and papers of a theoretic nature, 1889, 474 p.
 - *a. Report of the Director, 1889, p. 1-93; Administrative reports of chiefs of divisions and heads of independent parties, 1889, p. 95-257.
 - *b. Quaternary history of Mono Valley, Calif., by I. C. Russell, 1889, p. 261-394.
 - *c. Geology of the Lassen Peak district [Calif.], by J. S. Diller, 1889, p. 395-432.
 - *d. The fossil butterflies of Florissant [Colo.], by S. H. Scudder, 1889, p. 433-474.
 - *Part II. Papers of a theoretic nature, 1889, p. 475-1063.
 - *a. The Trenton limestone as a source of petroleum and inflammable gas in Ohio and Indiana, by Edward Orton, 1889, p. 475-662.
 - *b. The geographical distribution of fossil plants, by L. F. Ward, 1889, p. 663-960.
 - *c. Summary of the geology of the quicksilver deposits of the Pacific slope, by G. F. Becker, 1889, p. 961-985.
 - *d. The geology of the island of Mount Desert, Maine, by N. S. Shaler, 1889, p. 987-1061; Report index, 1889, p. 1063.
- *Ninth Annual Report of the United States Geological Survey, 1887-88; J. W. Powell, Director. 1889. 717 p.
 - *a. Report of the Director, 1889, p. 1-46; Administrative reports of chiefs of divisions and heads of independent parties, 1889, p. 47-199.
 - *b. The Charleston earthquake of August 31, 1886, by C. E. Dutton, 1889, p. 203-528.
 - *c. The geology of Cape Ann, Mass., by N. S. Shaler, 1889, p. 529-611.
 - *d. Formation of travertine and siliceous sinter by the vegetation of hot springs, by W. H. Weed, 1889, p. 613-676.
 - *e. On the geology and physiography of a portion of northwestern Colorado and adjacent parts of Utah and Wyoming, by C. A. White, 1889, p. 677-712; Report index, 1889, p. 713-717.
- *Tenth Annual Report of the United States Geological Survey, 1888-89; J. W. Powell, Director. 1890. 774 p. and 123 p. 2 parts.
 - *Part I. Geology, 1890, 774 p.
 - *a. Report of the Director, 1890, p. 1-80; Administrative reports of chiefs of divisions and heads of independent parties, 1890, p. 81-252.
 - *b. General account of the fresh-water morasses of the United States, with a description of the Dismal Swamp district of Virginia and North Carolina, by N. S. Shaler, 1890, p. 255-339.
 - *c. The Penoquee iron-bearing series of Michigan and Wisconsin, by R. D. Irving and C. R. Van Hise, 1890, p. 341-507.
 - *d. The fauna of the Lower Cambrian or Olenellus zone, by C. D. Walcott, 1890, p. 509-763; Index, 1890, p. 765-774.
 - *Part II. Irrigation, 1890, 123 p.

- *a. Irrigation survey—First Annual Report, by J. W. Powell, 1890, p. 1-65.
- *b. Report of A. H. Thompson [Topographic Branch], 1890, p. 65-77.
- *c. Report of C. E. Dutton [Hydrographic work], 1890, p. 78-108.
- *d. Expenditures, by U. S. G. S. disbursing agents, 1890, p. 108-119; Index, 1890, p. 121-123.
- *Eleventh Annual Report of the United States Geological Survey, 1889-90; J. W. Powell, Director. 1891. 757 p. and 395 p. 2 parts.
- *Part I. Geology, 1891, 757 p.
- *a. Report of the Director, 1891, p. 1-30; Administrative reports of chiefs of divisions and heads of independent parties, 1891, p. 31-185.
- *b. The Pleistocene history of northeastern Iowa, by W J McGee, 1891, p. 189-577.
- *c. The natural-gas field of Indiana, by A. J. Phinney, 1891, p. 579-742; Index, 1891, p. 743-757.
- *Part II. Irrigation, 1891, 395 p.
- *a. Hydrography, by J. W. Powell, 1891, p. 1-110.
- *b. Engineering, by J. W. Powell, 1891, p. 111-200.
- *c. The arid lands, by J. W. Powell, 1891, p. 201-289.
- *d. Topography, by A. H. Thompson, 1891, p. 291-343.
- *e. Irrigation literature, 1891, p. 345-388; Index, 1891, p. 389-395.
- *Twelfth Annual Report of the United States Geological Survey, 1890-91; J. W. Powell, Director. 1891. 675 p. and 576 p. 2 parts.
- *Part I. Geology, 1891, 675 p.
- *a. Report of the Director, 1891, p. 1-19; Administrative reports of chiefs of divisions and heads of independent parties, 1891, p. 21-210.
- *b. The origin and nature of soils, by N. S. Shaler, 1891, p. 213-345.
- *c. The Lafayette formation, by W J McGee, 1891, p. 347-521.
- *d. The North American continent during Cambrian time, by C. D. Walcott, 1891, p. 523-568.
- *e. The eruptive rocks of Electric Peak and Sepulchre Mountain, Yellowstone National Park, by J. P. Iddings, 1891, p. 569-664; Index, 1891, p. 665-675.
- *Part II. Irrigation, 1891, 576 p.
- *a. Report upon the location and survey of reservoir sites during the fiscal year ended June 30, 1891, by A. H. Thompson, 1891, p. 1-212.
- *b. Hydrography of the arid regions, by F. H. Newell, 1891, p. 213-361.
- *c. Irrigation in India, by H. M. Wilson, 1891, p. 363-561. (See also Water-Supply Paper 87.)
- *d. Financial statement, 1891, p. 562-568; Index, 1891, p. 569-576.
- *Thirteenth Annual Report of the United States Geological Survey, 1891-92; J. W. Powell, Director. 1892. (Parts I and III, 1893.) 240 p., 372 p., and 486 p. 3 parts.
- *Part I. Director's report and reports of chiefs of divisions, 1893, 240 p.
- *Report of the Director, 1893, p. 1-66; Administrative reports of chiefs of divisions and heads of independent parties, 1893, p. 67-240.
- *Part II. Geology, 1892, 372 p.
- *a. Second expedition to Mount St. Elias, in 1891, by I. C. Russell, 1892, p. 1-91.
- *b. The geological history of harbors, by N. S. Shaler, 1892, p. 93-209.
- *c. The mechanics of Appalachian structure, by Bailey Willis, 1892, p. 211-281.
- *d. The average elevation of the United States, by Henry Gannett, 1892, p. 283-289.
- *e. The Rensselaer girt plateau in New York, by T. N. Dale, 1892, p. 291-340.
- *f. The American Tertiary Aphidae, with a list of the known species and tables for their determination, by S. H. Scudder, 1892, p. 341-366; Index, 1892, p. 367-372.
- *Part III. Irrigation, 1893, 486 p.
- *a. Water supply for irrigation, by F. H. Newell, 1893, p. 1-99.
- *b. American irrigation engineering, by H. M. Wilson, 1893, p. 101-349.
- *c. Engineering results of irrigation survey, by H. M. Wilson, 1893, p. 351-427.
- *d. Report upon the construction of topographic maps and the selection and survey of reservoir sites in the hydrographic basin of the Arkansas River, Colo., by A. H. Thompson, 1893, p. 429-444.
- *e. Report upon the location and survey of reservoir sites during the fiscal year ending June 30, 1892, by A. H. Thompson, 1893, p. 445-478; Index, 1893, p. 479-486.
- *Fourteenth Annual Report of the United States Geological Survey, 1892-93; J. W. Powell, Director. 1893. (Part II, 1894.) 321 p. and 597 p. 2 parts.
- *Part I. Director's report and reports of chiefs of divisions, 1893, 321 p.
- *Report of the Director, 1893, p. 1-165; Administrative reports of chiefs of divisions and heads of independent parties, 1893, p. 167-321.
- *Part II. Accompanying papers, 1894, 597 p.
- *a. Potable waters of eastern United States, by W J McGee, 1894, p. 1-47.
- *b. Natural mineral waters of the United States, by A. C. Peale, 1894, p. 49-88.
- *c. Results of stream measurements, by F. H. Newell, 1894, p. 89-155.
- *d. The laccolithic mountain groups of Colorado, Utah, and Arizona, by Whitman Cross, 1894, p. 157-241.
- *e. The gold-silver veins of Ophir, Calif., by Waldemar Lindgren, 1894, p. 243-284.
- *f. Geology of the Catoclin belt, by Arthur Keith, 1894, p. 285-395.
- *g. Tertiary revolution in the topography of the Pacific coast, by J. S. Diller, 1894, p. 397-434.
- *h. The rocks of the Sierra Nevada, by H. W. Turner, 1894, p. 435-495.
- *i. Pre-Cambrian igneous rocks of the Unkar terrane, Grand Canyon of the Colorado, Ariz., by C. D. Walcott, with notes on the petrographic character of the lavas, by J. P. Iddings, 1894, p. 497-524.

- *j. On the structure of the ridge between the Taconic and Green Mountain ranges in Vermont, by T. N. Dale, 1894, p. 525-549.
- *k. The structure of Monument Mountain in Great Barrington, Mass., by T. N. Dale, 1894, p. 551-565.
- *l. The Potomac and Roaring Creek coal fields in West Virginia, by J. D. Weeks, 1894, p. 567-590; Index, 1894, p. 591-597.
- Note. A pocket in the cover of Part II carries a reconnaissance map of the United States showing the distribution of the geologic systems as far as known, compiled by W J McGee from data in the possession of the United States Geological Survey in 1893.
- *Fifteenth Annual Report of the United States Geological Survey, 1893-94; J. W. Powell, Director. 1895. 755 p.
 - *a. Report of the Director, 1895, p. 1-110; Administrative reports of chiefs of divisions and heads of independent parties, 1895, p. 111-251.
 - *b. Preliminary report on the geology of the common roads of the United States, by N. S. Shaler, 1895, p. 255-306.
 - *c. The Potomac formation, by L. F. Ward, 1895, p. 307-397.
 - *d. Sketch of the geology of the San Francisco Peninsula, by A. C. Lawson, 1895, p. 399-476.
 - *e. Preliminary report on the Marquette iron-bearing district of Michigan, by C. R. Van Hise and W. S. Bayley, with a chapter on the Republic trough, by H. L. Smyth, 1895, p. 477-650.
 - *f. The general relations of the granitic rocks in the Middle Atlantic Piedmont Plateau, by G. H. Williams, 1895, p. 651-684.
 - *g. The origin and relations of central Maryland granites, by C. R. Keyes, 1895, p. 685-740; Report index, 1895, p. 741-755.
- *Sixteenth Annual Report of the United States Geological Survey, 1894-95; Charles D. Walcott, Director. 1896. (Parts II, III, and IV, 1895.) 910 p., 598 p., 646 p., and 735 p. 4 parts.
 - *Part I. Director's report and papers of a theoretic nature, 1896, 910 p.
 - *a. Report of the Director, 1896, p. 1-130.
 - *b. The dinosaurs of North America, by O. C. Marsh, 1896, p. 131-414.
 - *c. Glacier Bay and its glaciers, by H. F. Reid, 1896, p. 415-461.
 - *d. Some analogies in the Lower Cretaceous of Europe and America, by L. F. Ward, 1896, p. 463-542.
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- *Thirty-sixth, June 30, 1915. 1915. 186 p.
- *Thirty-seventh, June 30, 1916. 1916. 185 p.
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- *Forty-eighth, June 30, 1927. 1927. 77 p.
- *Forty-ninth, June 30, 1928. 1928. 77 p.
- *Fiftieth, June 30, 1929. 1929. 87 p.
- *Fifty-first, June 30, 1930. 1930. 91 p.
- *Fifty-second Annual Report of the Director of the Geological Survey for the fiscal year ended June 30, 1931; [Walter Curran Mendenhall, Acting Director.] 1931. 95 p.
- *Fifty-third Annual Report of the Director of the Geological Survey, for the fiscal year ended June 30, 1932; [Walter Curran Mendenhall, Director.] 1932. 94 p.

Note.--Annual reports of the Director of the Geological Survey for the fiscal years 1933, 1934, and 1935 were not published separately, but a condensed report was included in the annual report of the Secretary of the Interior. Since then the Director's report has continued to be included in the annual report of the Secretary. For the fiscal years 1936 to date, a limited number of copies of the annual report of the Director, as it appears in the annual report of the Secretary, have been reprinted for official use. A copy of any of these reports may be obtained free, as long as the supply lasts, upon application to the Director, Geological Survey, Washington, D. C. 20242

- *Geological Survey [annual report to the Secretary of the Interior, fiscal year 1936]; [Walter Curran Mendenhall, Director.] [1937.] p. 309-345.
- *Fiscal year 1937. [1937.] p. 151-189.
- Fiscal year 1938. [1939.] p. 125-172.
- *Fiscal year 1939. [1940.] p. 139-190.
- Fiscal year 1940. [1941.] p. 39-81.
- Annual report of the Director of the Geological Survey to the Secretary of the Interior [for the fiscal year ended June 30, 1941]. [Walter Curran Mendenhall, Director.] [1941.] p. 85-128.
- *Fiscal year ended June 30, 1942. [1943.] p. 45-68.
- Annual report of the Director of the Geological Survey to the Secretary of the Interior [for the fiscal year ended June 30, 1943]. [William Embry Wrather, Director.] [1944.] p. 33-59.
- Fiscal year ended June 30, 1944. [1945.] p. 101-126.
- Fiscal year ended June 30, 1945. [1946.] p. 105-129.
- *Fiscal year ended June 30, 1946. [1947.] p. 191-220.
- *Fiscal year ended June 30, 1947. [1948.] p. 213-258.
- Annual report of the Director, Geological Survey, to the Secretary of the Interior, fiscal year ended June 30, 1948. [William Embry Wrather, Director.] [1949.] p. 197-248.
- Fiscal year ended June 30, 1949. [1950.] p. 165-209.
- Fiscal year ended June 30, 1950. [1951.] p. 169-219.
- Fiscal year ended June 30, 1951. [1952.] p. 189-235.
- Fiscal year ended June 30, 1952. [1953.] p. 219-257.
- *Fiscal year ended June 30, 1953. [1954.] p. 249-286.
- *Fiscal year ended June 30, 1954. [1955.] p. 131-170.
- Fiscal year ended June 30, 1955. [1956.] p. 130-177.
- Annual report of the Director, Geological Survey, to the Secretary of the Interior, fiscal year ended June 30, 1956. [Thomas Brennan Nolan, Director.] [1957.] p. 106-144.
- Fiscal year ended June 30, 1957. [1958.] p. 131-167.
- Fiscal year ended June 30, 1958. [1959.] p. 99-138.
- Fiscal year ended June 30, 1959. [1960.] p. 119-159.
- Fiscal year ended June 30, 1960. [1961.] p. 99-138.

BULLETINS

[An asterisk (*) indicates that the paper is out of print.]

- *1. On hypersthene andesite and on triclinc pyroxene in augitic rocks, by Whitman Cross, with a geological sketch of Buffalo Peaks, Colo., by S. F. Emmons, geologist in charge of Rocky Mountain division, 1883, 42 p.
- *2. Gold and silver conversion tables, giving the coining values of troy ounces of fine metal and the weights of fine metal represented by given sums of United States money, computed by Albert Williams, Jr., 1883, 8 p.
- *3. On the fossil faunas of the Upper Devonian, along the meridian of 76° 30', from Tompkins County, N. Y., to Bradford County, Pa., by H. S. Williams, 1884, 36 p.
- *4. On Mesozoic fossils, by C. A. White, 1884, 36 p.
- *5. A dictionary of altitudes in the United States, compiled by Henry Gannett, chief geographer, 1884, 325 p. (See also Bulletins 76, 160, and 274.)
- *6. Elevations in the Dominion of Canada, by J. W. Spencer, 1884, 43 p.
- *7. *Mapoteca geologica americana*, a catalogue of geological maps of America (North and South), 1752-1881, in geographic and chronologic order, by Jules Marcou and John B. Marcou, 1884, 184 p.
- *8. On secondary enlargements of mineral fragments in certain rocks, by R. D. Irving and C. R. Van Hise, 1884, 56 p.
- *9. A report of work done in the Washington laboratory during the fiscal year 1883-84; F. W. Clarke, chief chemist; T. M. Chatard, assistant chemist, 1884, 40 p.
Contains: Introductory remarks, p. 7; Mineral, rock, and ore analyses, p. 9-18; Water analyses, p. 19-35; The estimation of alkalis in silicates, by T. M. Chatard, p. 36-37; Index, p. 39-40.
- *10. On the Cambrian faunas of North America (preliminary studies), by C. D. Walcott, 1884, 74 p.
- *11. On the Quaternary and Recent Mollusca of the Great Basin, with descriptions of new forms, by R. E. Call, introduced by a sketch of the Quaternary lakes of the Great Basin, by G. K. Gilbert, 1884, 66 p.
- *12. A crystallographic study of the thimolite of Lake Lahontan, by E. S. Dana, 1884, 34 p.
- *13. Boundaries of the United States and of the several States and Territories, with a historical sketch of the territorial changes, by Henry Gannett, chief geographer, 1885, 135 p. (See also Bulletins 171, 226, 689, and 817.)
- *14. The electrical and magnetic properties of the iron carburets, by Carl Barus and Vincent Strouhal, 1885, 238 p. (See also Bulletins 27 and 35.)
- *15. On the Mesozoic and Cenozoic paleontology of California, by C. A. White, 1885, 33 p.
- *16. On the higher Devonian faunas of Ontario County, N. Y., by J. M. Clarke, 1885, 86 p.
- *17. On the development of crystallization in the igneous rocks of Washoe, Nev., with notes on the geology of the district, by Arnold Hague and J. P. Iddings, 1885, 44 p.
- *18. On marine Eocene, fresh-water Miocene, and other fossil Mollusca of western North America, by C. A. White, 1885, 26 p.
- *19. Notes on the stratigraphy of California, by G. F. Becker, 1885, 28 p.
- *20. Contributions to the mineralogy of the Rocky Mountains, by Whitman Cross and W. F. Hillebrand, 1885, 114 p.
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- *21. The lignites of the Great Sioux Reservation, a report on the region between the Grand and Moreau Rivers, Dakota, by Bailey Willis, 1885, 16 p.
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- *27. Report of work done in the division of chemistry and physics, mainly during the fiscal year 1884-85, 1886, 80 p.
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- *a. Introduction, by C. W. Hayes, 1903, p. 9-14; Investigation of metalliferous ores, by S. F. Emmons, 1903, p. 15-28; Investigation of nonmetalliferous economic minerals, by C. W. Hayes, 1903, p. 29-30.
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- *221. Bibliography and index of North American geology, paleontology, petrology, and mineralogy for the year 1902, by F. B. Weeks, 1903, 200 p.
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- *224. A gazetteer of Texas (second edition), by Henry Gannett, 1904, 177 p.
- *225. Contributions to economic geology, 1903; S. F. Emmons and C. W. Hayes, geologists in charge, 1904, 527 p. [Not issued as separates; letters assigned to facilitate indexing.]
- *a. Introduction, by C. W. Hayes, 1904, p. 11-17; Investigation of metalliferous ores, by S. F. Emmons, 1904, p. 18-24; Investigation of nonmetalliferous economic minerals, by C. W. Hayes, 1904, p. 25-27.
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- *c. Quicksilver, Tin, Tungsten, Chromium, and Nickel.--Tin deposits of the York region, Alaska, by A. J. Collier, 1904, p. 154-167; Geological Survey publications on quicksilver, platinum, tin, tungsten, chromium, and nickel, 1904, p. 168.
- *d. Copper.--Mining and mineral resources in the Redding quadrangle, Calif., in 1903, by J. S. Diller, 1904, p. 169-179; Copper deposits in Georgia, by W. H. Weed, 1904, p. 180-181; The

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- *260. Contributions to economic geology, 1904; S. F. Emmons and C. W. Hayes, geologists in charge. 1905. 620 p. [Not issued as separates; letters assigned to facilitate indexing.]
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- *285-G. Petroleum and Natural Gas.--The Salt Lake oil field near Los Angeles, Calif., by Ralph Arnold, 1906, p. 357-361; The Nineveh and Gordon oil sands in western Greene County, Pa., by F. G. Clapp, 1906, p. 362-366; Survey publications on petroleum and natural gas, 1906, p. 367-368.
- *285-H. Asphalt.--Ozokerite deposits in Utah, by J. A. Taff and C. D. Smith, 1906, p. 369-372; Survey publications on asphalt, 1906, p. 373.
- *285-I. Portland, Natural, and Puzzolan Cements.--Cement resources of the Cumberland Gap district, Tenn.-Va., by E. C. Eckel, 1906, p. 374-376; Cement resources of Washington, by Henry Landes, 1906, p. 377-383; Survey publications on Portland, natural, and puzzolan cements, 1906, p. 384.
- *285-J. Lime and Magnesite.--Some magnesite deposits of California, by F. L. Hess, 1906, p. 385-392; The lime industry of Knox County, Maine, by E. S. Bastin, 1906, p. 393-400.
- *285-K. Gypsum and Plasters.--Gypsum of the Uncompahgre region, Colo., by C. E. Siebenthal, 1906, p. 401-403; Gypsum deposits of the Laramie district, Wyo., by C. E. Siebenthal, 1906, p. 404-405; Survey publications on gypsum, salt, borax, and soda, 1906, p. 406.
- *285-L. Clays.--Clays of Garland County, Ark., by E. C. Eckel, 1906, p. 407-410; Clay resources of northeastern Kentucky, by W. C. Phalen, 1906, p. 411-416; Clays of western Kentucky and Tennessee, by A. F. Crider, 1906, p. 417-427; Clays of the Penobscot Bay region, Maine, by E. S. Bastin, 1906, p. 428-431; Clays of Cape Cod, Mass., by M. L. Fuller, 1906, p. 432-441; Notes on clays and shales in central Pennsylvania, by G. H. Ashley, 1906, p. 442-444; Bentonite of the Laramie Basin, Wyo., by C. E. Siebenthal, 1906, p. 445-447; Survey publications on clays, fuller's earth, etc., 1906, p. 448.
- *285-M. Building Stone and Road Metal.--Note on a new variety of Maine slate, by T. N. Dale, 1906, p. 449-450; Survey publications on building stone and road metal, 1906, p. 451.
- *285-N. Glass-making Materials.--The requirements of sand and limestone, by E. F. Burchard, 1906, p. 452-458; Glass sand of the middle Mississippi basin, by E. F. Burchard, 1906, p. 459-472; The glass-sand industry in eastern West Virginia, by G. W. Stose, 1906, p. 473-475.
- *285-O. Miscellaneous Nonmetals.--Volcanic ash near Durango, Colo., by L. H. Woolsey, 1906, p. 476-479; Graphite in Maine, by G. O. Smith, 1906, p. 480-483; Survey publications on mica, graphite, abrasive materials, etc., 1906, p. 484; Survey publications on sulphur and pyrite, 1906, p. 485; Survey publications on phosphates and other mineral fertilizers, 1906, p. 486; Survey work on water, 1906, p. 487; Index, 1906, p. 489-506.
- (Bulletin 285 was issued as a single volume, Contributions to economic geology, 1905, and also as separate chapters, for which pagination of volume has been used above.)
- *286. Economic geology of the Beaver quadrangle, Pa. (southern Beaver and northwestern Allegheny counties), by L. H. Woolsey, 1906, 132 p.
- *287. The Juneau gold belt, Alaska, by A. C. Spencer; and A reconnaissance of Admiralty Island, Alaska, by C. W. Wright, 1906, 161 p.
- *288. Results of spirit leveling in Pennsylvania for the years 1899 to 1905, inclusive, by S. S. Gannett and D. H. Baldwin, 1906, 62 p. (See also Bulletin 515.)
- *289. A reconnaissance of the Matanuska coal field, Alaska, in 1905, by G. C. Martin, 1906, 36 p.
- *290. Preliminary report on the operations of the fuel-testing plant of the United States Geological Survey at St. Louis, Mo., 1905, by J. A. Holmes, 1906, 240 p.
- *291. A gazetteer of Colorado, by Henry Gannett, 1906, 185 p.
- *292. The bryozoan fauna of the Rochester shale, by R. S. Bassler, 1906, 137 p.
- *293. Reconnaissance of some gold and tin deposits of the southern Appalachians, by L. C. Graton, with notes on the Dahlonaga mines, by Waldemar Lindgren, 1906, 134 p.
- *294. Zinc and lead deposits of the upper Mississippi Valley, by H. F. Bain, 1906, 155 p.
- *295. The Yukon-Tanana region, Alaska: Description of Circle quadrangle, by L. M. Prindle, 1906, 27 p.
- *296. Economic geology of the Independence quadrangle, Kans., by F. C. Schrader and Erasmus Haworth, 1906, 74 p.
- *297. The Yampa coal field, Routt County, Colo., by N. M. Fenneman and H. S. Gale, with a chapter on the character and use of the Yampa coals, by M. R. Campbell, 1906, 96 p.
- *298. Record of deep-well drilling for 1905, by M. L. Fuller and Samuel Sanford, 1906, 299 p.
- *299. Geographic dictionary of Alaska, by Marcus Baker (second edition, prepared by James McCormick), 1906, 690 p.
- *300. Economic geology of the Amity quadrangle, eastern Washington County, Pa., by F. G. Clapp, 1907, 145 p.
- *301. Bibliography and index of North American geology, paleontology, petrology, and mineralogy for the years 1901-1905, inclusive, by F. B. Weeks, 1906, 770 p.
- *302. The areas of the United States, the States, and the Territories, by Henry Gannett, 1906, 9 p.
- *303. Preliminary account of Goldfield, Bullfrog, and other mining districts in southern Nevada, by F. L. Ransome, with notes on the Manhattan district, by G. H. Garrey and W. H. Emmons, 1907, 98 p.
- *304. Oil and gas fields of Greene County, Pa., by R. W. Stone and F. G. Clapp, 1907, 110 p.
- *305. The analysis of silicate and carbonate rocks, by W. F. Hillebrand, 1907, 200 p. (See also Bulletin 422 and 700.)

- *306. Rate of recession of Niagara Falls, by G. K. Gilbert, accompanied by a report on the survey of the crest, by W. C. Hall, 1907, 31 p.
- *307. Manual of topographic methods, by Henry Gannett, 1906, 86 p. (Superseded by Bulletin 788.)
- *308. A geologic reconnaissance in southwestern Nevada and eastern California, by S. H. Ball, 1907, 218 p.
- *309. The Santa Clara Valley, Puente Hills, and Los Angeles oil districts, southern California, by G. H. Eldridge and Ralph Arnold, 1907, 266 p.
- *310. Results of primary triangulation and primary traverse, fiscal year 1905-6, by S. S. Gannett, 1907, 248 p.
- *311. The green schists and associated granites and porphyries of Rhode Island, by B. K. Emerson and J. H. Perry, 1907, 74 p.
- *312. The interaction between minerals and water solutions, with special reference to geologic phenomena, by E. C. Sullivan, 1907, 69 p.
- *313. The granites of Maine, by T. N. Dale, with an introduction, by G. O. Smith, 1907, 202 p. (See also Bulletin 738.)
- *314-A. Administrative report, by A. H. Brooks, 1907, p. 11-18; The mining industry in 1906, by A. H. Brooks, 1907, p. 19-39.
- *314-B. The Alaska coal fields, by G. C. Martin, 1907, p. 40-46.
- *314-C. Lode mining in southeastern Alaska, by C. W. Wright, 1907, p. 47-72; Nonmetalliferous mineral resources of southeastern Alaska, by C. W. Wright, 1907, p. 73-81.
- *314-D. Reconnaissance on the Pacific coast from Yakutat to Alsek River, by Elliot Blackwelder, 1907, p. 82-88.
- *314-E. Petroleum at Controller Bay, by G. C. Martin, 1907, p. 89-103.
- *314-F. Reconnaissance in the Matanuska and Talkeetna Basins, Alaska, with notes on the placers of the adjacent region, by Sidney Paige and Adolph Knopf, 1907, p. 104-125.
- *314-G. The Nome region, Alaska, by F. H. Moffit, 1907, p. 126-145.
- *314-H. Gold fields of the Solomon and Niukluk river basins, by P. S. Smith, 1907, p. 146-156; Geology and mineral resources of Iron Creek, by P. S. Smith, 1907, p. 157-163.
- *314-I. The Kougarak region, Alaska, by A. H. Brooks, 1907, p. 164-181.
- *314-J. Water supply of Nome region, Seward Peninsula, 1906, by J. C. Hoyt and F. F. Henshaw, 1907, p. 182-186.
- *314-K. The Circle precinct, Alaska, by A. H. Brooks, 1907, p. 187-204.
- *314-L. The Bonnifield and Kantishna regions, Alaska, by L. M. Prindle, 1907, p. 205-226; Index, 1907, p. 227-235.
(Bulletin 314 was issued as a single volume, Report on progress of investigations of mineral resources of Alaska in 1906, and also as separate chapters.)
- *315-A. Introduction, by C. W. Hayes, 1907, p. 7-13; Investigations of metalliferous ores, by S. F. Emmons, 1907, p. 14-19; Investigations of iron ores, structural materials, etc., by E. C. Eckel, 1907, p. 20-25; Gold and Silver.--Lake Fork extension of the Silverton mining area, Colo., by L. H. Woolsey, 1907, p. 26-30; The Granite-Bimetallic and Cable mines, Philipsburg quadrangle, Mont., by W. H. Emmons, 1907, p. 31-55; Gold-bearing river sands of northeastern Washington, by A. J. Collier, 1907, p. 56-70; Gold developments in central Uinta County, Wyo., and at other points on Snake River, by A. R. Schultz, 1907, p. 71-88; Survey publications on gold and silver, 1907, p. 89-92.
- *315-B. Copper.--Copper deposits of the Hartville uplift, Wyo., by S. H. Ball, 1907, p. 93-107; Survey publications on copper, 1907, p. 108-109.
- *315-C. Nickel, Uranium, etc.--Carnotite in Rio Blanco County, Colo., by H. S. Gale, 1907, p. 110-117; Note on a mineral prospect in Maine, by G. O. Smith, 1907, p. 118-119; Nickel deposits of Nickel Mountain, Oreg., by G. F. Kay, 1907, p. 120-127; Survey publications on tin, quicksilver, platinum, nickel, etc., 1907, p. 128; Lead and Zinc.--Survey publications on lead and zinc, 1907, p. 129.
- *315-D. Iron and Manganese Ores.--The Clinton or red ores of the Birmingham district, Ala., by E. F. Burchard, 1907, p. 130-151; The brown ores of the Russellville district, Ala., by E. F. Burchard, 1907, p. 152-160; The gray iron ores of Talladega County, Ala., by P. S. Smith, 1907, p. 161-184; Magnetite deposits of the Cornwall type in Berks and Lebanon counties, Pa., by A. C. Spencer, 1907, p. 185-189; The Hartville iron-ore range, Wyo., by S. H. Ball, 1907, p. 190-205; Titaniferous iron ore of Iron Mountain, Wyo., by S. H. Ball, 1907, p. 206-212; Survey publications on iron and manganese ores, 1907, p. 213-214.
- *315-E. Aluminum and Bauxite.--The Gila River alum deposits, [N. Mex.], by C. W. Hayes, 1907, p. 215-223; Survey publications on aluminum ores--bauxite, cryolite, etc., 1907, p. 224.
- *315-F. Portland, Natural, and Puzzolan Cements.--Portland-cement materials near Dubuque, Iowa, by E. F. Burchard, 1907, p. 225-231; Portland-cement materials in eastern Wyoming, by S. H. Ball, 1907, p. 232-244; Survey publications on Portland, natural, and puzzolan cements, 1907, p. 245-246.
- *315-G. Lime, Magnesite, etc.--Limestone and dolomite in the Birmingham district, Ala., by Charles Butts, 1907, p. 247-255; Sand-lime brick making near Birmingham, Ala., by Charles Butts, 1907, p. 256-258; Survey publications on lime and magnesite, 1907, p. 259.
- *315-H. Gypsum, Plasters, etc.--Gypsum in northwestern New Mexico, by M. K. Shaler, 1907, p. 260-265; Survey publications on gypsum and plasters, 1907, p. 266; Survey publications on salt, borax, and soda, 1907, p. 267.
- *315-I. Clays and Clay Products.--Properties and tests of fuller's earth, by J. T. Porter, 1907, p. 268-290; Clays of the Birmingham district, Ala., by Charles Butts, 1907, p. 291-295; Clay deposits of the western part of the Durango-Gallup coal field, of Colorado and New Mexico, by M. K. Shaler and

- J. H. Gardner, 1907, p. 296-302; Kaolins and fire clays of central Georgia, by Otto Veatch, 1907, p. 303-314; Clay resources of the St. Louis district, Mo., by N. M. Fenneman, 1907, p. 315-321; White clays of South Mountain, Pa., by G. W. Stose, 1907, p. 322-334; Clays and shales of the Clarion quadrangle, Clarion County, Pa., by E. F. Lines, 1907, p. 335-343; Clays and shales of southwestern Cambria County, Pa., by W. C. Phalen and Lawrence Martin, 1907, p. 344-354; Survey publications on clays, fuller's earth, etc., 1907, p. 355.
- *315-J. Building Stone and Road Metal.--Recent work on New England granites, by T. N. Dale, 1907, p. 356-359; Survey publications on building stone and road metal, 1907, p. 360.
- *315-K. Glass-making Materials.--Glass-sand industry of Indiana, Kentucky, and Ohio, by E. F. Burchard, 1907, p. 361-376; Notes on various glass sands, mainly undeveloped, by E. F. Burchard, 1907, p. 377-382.
- *315-L. Quartz and Feldspar.--Feldspar and quartz deposits of Maine, by E. S. Bastin, 1907, p. 383-393; Feldspar and quartz deposits of southeastern New York, by E. S. Bastin, 1907, p. 394-399.
- *315-M. Mica, Graphite, etc.--Mica deposits of western North Carolina, by D. B. Sterrett, 1907, p. 400-422; Mica in the Hartsville uplift, Wyo., by S. H. Ball, 1907, p. 423-425; Graphite in the Haystack Hills, Laramie County, Wyo., by S. H. Ball, 1907, p. 426-428; Survey publications on mica, graphite, etc., 1907, p. 429.
- *315-N. Mineral Paints.--Southern red hematite as an ingredient of metallic paint, by E. F. Burchard, 1907, p. 430-434; The mineral paint ores of Lehigh Gap, Pa., by E. C. Eckel, 1907, p. 435-437.
- *315-O. Abrasive Materials.--Diatomaceous deposits of northern Santa Barbara County, Calif., by Ralph Arnold and Robert Anderson, 1907, p. 438-447; Survey publications on abrasive materials, 1907, p. 448.
- *315-P. Phosphates and Phosphorus.--Phosphate deposits in western United States, by F. B. Weeks and W. F. Ferrier, 1907, p. 449-462; Developed phosphate deposits of northern Arkansas, by A. H. Purdue, 1907, p. 463-473; Phosphorus ore at Mount Holly Springs, Pa., by G. W. Stose, 1907, p. 474-483; Survey publications on phosphates and other mineral fertilizers, 1907, p. 484.
- *315-Q. Sulphur and Pyrite.--The Cove Creek sulphur beds, Utah, by W. T. Lee, 1907, p. 485-489; Survey publications on sulphur and pyrite, 1907, p. 490; Index, 1907, p. 491-505.
(Bulletin 315 was issued as a single volume, Contributions to economic geology, 1906, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
- *316-A. Coal Fields of Pennsylvania, Kentucky, Virginia, and Alabama.--Coals of the Clarion quadrangle, Clarion County, Pa., by E. F. Lines, 1907, p. 13-19; Coal resources of Johnstown, Pa., and vicinity, by W. C. Phalen, 1907, p. 20-41; The Elkhorn coal field, Ky., by R. W. Stone, 1907, p. 42-54; The Russell Fork coal field, Va., by R. W. Stone, 1907, p. 55-67; Coal mining at Dante, Va., by R. W. Stone, 1907, p. 68-75; The northern part of the Cahaba coal field, Ala., by Charles Butts, 1907, p. 76-115.
- *316-B. Coal Fields of Illinois and Arkansas.--Coal investigation in the Saline-Gallatin field, Ill., and the adjoining area, by F. W. DeWolf, 1907, p. 116-136; The Arkansas coal field, by A. J. Collier, 1907, p. 137-160.
- *316-C. Coal Fields of Montana.--The Great Falls coal field, Mont., by C. A. Fisher, 1907, p. 161-173; Coals of Carbon County, Mont., by N. H. Darton, 1907, p. 174-193; The coal fields of parts of Dawson, Rosebud, and Custer counties, Mont., by A. G. Leonard, 1907, p. 194-211.
- *316-D. Coal Fields of Wyoming.--Coal fields in a portion of central Uinta County, Wyo., by A. R. Schultz, 1907, p. 212-241; The Lander coal field, Wyo., by E. G. Woodruff, 1907, p. 242-243; Coal fields of east-central Carbon County, Wyo., by A. C. Veatch, 1907, p. 244-260; Coal of Laramie Basin, Wyo., by C. E. Siebenthal, 1907, p. 261-263.
- *316-E. Coal Fields of Colorado and Utah.--Coal fields of the Danforth Hills and Grand Hogback, in northwestern Colorado, by H. S. Gale, 1907, p. 264-301; The Book Cliffs coal field, between Grand River, Colo., and Sunnyside, Utah, by G. B. Richardson, 1907, p. 302-320; The Durango coal district, Colo., by J. A. Taff, 1907, p. 321-337; The Pleasant Valley coal district, Carbon and Emery counties, Utah, by J. A. Taff, 1907, p. 338-358; The Iron County coal field, Utah, by W. T. Lee, 1907, p. 359-375.
- *316-F. Coal Fields of New Mexico and California.--A reconnaissance survey of the western part of the Durango-Gallup coal field of Colorado and New Mexico, by M. K. Shaler, 1907, p. 376-426; The Una del Gato coal field, Sandoval County, N. Mex., by M. R. Campbell, 1907, p. 427-430; Coal in the vicinity of Fort Stanton Reservation, Lincoln County, N. Mex., by M. R. Campbell, 1907, p. 431-434; Coal of Stone Canyon, Monterey County, Calif., by M. R. Campbell, 1907, p. 435-438.
- *316-G. General Papers on the Producer-gas Power Plant, the Coal-briquetting Industry and Coal-mine Sampling, with a Bibliography of Geological Survey Publications on Coal, Lignite, and Peat.--The present status of the producer-gas power plant in the United States, by R. H. Fernald, 1907, p. 439-459; Condition of the coal-briquetting industry in the United States, by E. W. Parker, 1907, p. 460-485; The importance of uniform and systematic coal-mine sampling, by J. S. Burrows, 1907, p. 486-517; Classified list of papers dealing with coal, coke, lignite, and peat contained in publications of U. S. Geological Survey, compiled by W. T. Lee and J. M. Nickles, 1907, p. 518-532; Index, 1907, p. 533-543.
(Bulletin 316 was issued as a single volume, Contributions to economic geology, 1906, Part II, Coal, lignite, and peat, and also as separate chapters.)
- *317. Preliminary report on the Santa Maria oil district, Santa Barbara County, Calif., by Ralph Arnold and Robert Anderson, 1907, 69 p. (See also Bulletin 322.)
- *318. Geology of oil and gas fields in Steubenville, Burgettstown, and Claysville quadrangles, Ohio, W. Va., and Pa., by W. T. Griswold and M. J. Munn, 1907, 196 p.

- *319. Summary of the controlling factors of artesian flows, by M. L. Fuller. 1908. 44 p.
- *320. The Downtown district of Leadville, Colo., by S. F. Emmons and J. D. Irving. 1907. 75 p.
- *321. Geology and oil resources of the Summerland district, Santa Barbara County, Calif., by Ralph Arnold. 1907. 93 p.
- *322. Geology and oil resources of the Santa Maria oil district, Santa Barbara County, Calif., by Ralph Arnold and Robert Anderson. 1907. 161 p.
- *323. Experimental work conducted in the chemical laboratory of the United States fuel-testing plant at St. Louis, Mo., January 1, 1905, to July 31, 1906, by N. W. Lord. 1907. 49 p.
- *324. The San Francisco earthquake and fire of April 18, 1906, and their effects on structures and structural materials, reports by G. K. Gilbert, R. L. Humphrey, J. S. Sewell, and Frank Soulé, with preface by J. A. Holmes. 1907. 170 p.
- *325. A study of four hundred steaming tests, made at the fuel-testing plant, St. Louis, Mo., in 1904, 1905, and 1906, by L. P. Breckenridge. 1907. 196 p.
- *326. The Arkansas coal field, by A. J. Collier, with reports on the paleontology, by David White and G. H. Girty. 1907. 158 p.
- *327. Geologic reconnaissance in the Matanuska and Talkeetna basins, Alaska, by Sidney Paige and Adolph Knopf. 1907. 71 p.
- *328. The gold placers of parts of Seward Peninsula, Alaska, including the Nome, Council, Kougarok, Port Clarence, and Goodhope precincts, by A. J. Collier, F. L. Hess, P. S. Smith, and A. H. Brooks. 1908. 343 p.
- *329. Organization, equipment, and operation of the structural-materials testing laboratories at St. Louis, Mo., by R. L. Humphrey, with preface by J. A. Holmes. 1908. 84 p.
- *330. The data of geochemistry, by F. W. Clarke. 1908. 716 p. (See also Bulletins 491, 616, 695, and 770.)
- *331. Portland cement mortars and their constituent materials, results of tests made at the structural-materials testing laboratories, Forest Park, St. Louis, Mo., 1905-1907, by R. L. Humphrey and William Jordan, Jr. 1908. 130 p.
- *332. Report of the United States fuel-testing plant at St. Louis, Mo., January 1, 1906, to June 30, 1907; J. A. Holmes in charge. 1908. 299 p.
- *333. Coal-mine accidents, their causes and prevention (a preliminary statistical report), by Clarence Hall and W. O. Snelling, with introduction by J. A. Holmes. 1907. 21 p.
- *334. The burning of coal without smoke in boiler plants (a preliminary report), by D. T. Randall. 1908. 26 p. (See also Bulletin 373.)
- *335. Geology and mineral resources of the Controller Bay region, Alaska, by G. C. Martin. 1908. 141 p.
- *336. Washing and coking tests of coal and cupola tests of coke, conducted by the United States fuel-testing plant at St. Louis, Mo., January 1, 1905, to June 30, 1907, by Richard Moldenke, A. W. Belden, and G. R. Delamater, with introduction by J. A. Holmes. 1908. 76 p.
- *337. The Fairbanks and Rampart quadrangles, Yukon-Tanana region, Alaska, by L. M. Prindle, with a section on the Rampart placers, by F. L. Hess, and a paper on the water supply of the Fairbanks region, by C. C. Covert. 1908. 102 p.
- *338. The iron ores of the Iron Springs district, southern Utah, by C. K. Leith and E. C. Harder. 1908. 102 p.
- *339. The purchase of coal under Government and commercial specifications on the basis of its heating value, with analyses of coal delivered under Government contracts, by D. T. Randall. 1908. 27 p.
- *340-A. Introduction, by C. W. Hayes, 1908, p. 7-11; Investigations relating to nonmetallic mineral resources, by C. W. Hayes, 1908, p. 12-17; Investigations relating to deposits of metalliferous ores, by Waldemar Lindgren, 1908, p. 18-22.
- Gold and Silver.--A geological analysis of the silver production of the United States in 1906, by Waldemar Lindgren, 1908, p. 23-35; Notes on some gold deposits of Alabama, by H. D. McCaskey, 1908, p. 36-52; The mineral deposits of the Cerbat Range, Black Mountains, and Grand Wash Cliffs, Mohave County, Ariz., by F. C. Schrader, 1908, p. 53-83; Gold placer deposits near Lay, Routt County, Colo., by H. S. Gale, 1908, p. 84-95; Gold deposits of the Little Rocky Mountains, Mont., by W. H. Emmons, 1908, p. 96-116; Geology and mineral resources of the Osceola mining district, White Pine County, Nev., by F. B. Weeks, 1908, p. 117-133; Mines of the Riddles quadrangle, Oreg., by J. S. Diller and G. F. Kay, 1908, p. 134-152; Survey publications on gold and silver, 1908, p. 153-156.
- *340-B. Copper.--Notes on copper deposits in Chaffee, Fremont, and Jefferson counties, Colo., by Waldemar Lindgren, 1908, p. 157-174; Notes on the Fort Hall mining district, Idaho, by F. B. Weeks and V. C. Heikes, 1908, p. 175-183; Survey publications on copper, 1908, p. 184-186.
- *340-C. Lead and Zinc.--Mineral resources of northeastern Oklahoma, by C. E. Siebenthal, 1908, p. 187-228; Survey publications on lead and zinc, 1908, p. 229-230.
- *340-D. Rare Metals.--Some molybdenum deposits of Maine, Utah, and California, by F. L. Hess, 1908, p. 231-240; The Arkansas antimony deposits, by F. L. Hess, 1908, p. 241-252; Antimony in southern Utah, by G. B. Richardson, 1908, p. 253-256; Carnotite and associated minerals in western Routt County, Colo., by H. S. Gale, 1908, p. 257-262; Tungsten deposits in Snake Range, White Pine County, eastern Nevada, by F. B. Weeks, 1908, p. 263-270; Note on a tungsten-bearing vein near Raymond, Calif., by F. L. Hess, 1908, p. 271; Monazite deposits of the Carolinas, by D. B. Sterrett, 1908, p. 272-285; Minerals of the rare-earth metals at Baringer Hill, Llano County, Tex., by F. L. Hess, 1908, p. 286-294; Tin ore at Spokane, Wash., by A. J. Collier, 1908, p. 295-305; Survey publications on antimony, chromium, nickel, platinum, quicksilver, tin, tungsten, uranium, vanadium, etc., 1908, p. 306-307.
- *340-E. Iron and Manganese.--An estimate of the tonnage of available Clinton iron ore in the Birmingham district, Ala., by E. F. Burchard, 1908, p. 308-317; Three deposits of iron ore in Cuba, by A. C.

- Spencer, 1908, p. 318-329; Iron ores near Ellijay, Ga., by W. C. Phalen, 1908, p. 330-334; Survey publications on iron and manganese ore, 1908, p. 335-337.
- Aluminum Ores.--Survey publications on aluminum ores--bauxite, cryolite, etc., 1908, p. 338.
- *340-F. Petroleum and Natural Gas.--The Miner ranch oil field, Contra Costa County, Calif., by Ralph Arnold, 1908, p. 339-342; Petroleum in southern Utah, by G. B. Richardson, 1908, p. 343-347; Gas fields of the Bighorn Basin, Wyo., by C. W. Washburne, 1908, p. 348-363; The Labarge oil field, central Uinta County, Wyo., by A. R. Schultz, 1908, p. 364-373; Survey publications on petroleum, and natural gas, 1908, p. 374-375.
- Asphalt.--Survey publications on asphalt, 1908, p. 376.
- *340-G. Building Stones.--Marble of White Pine County, Nev., near Gandy, Utah, by N. H. Darton, 1908, p. 377-380; Survey publications on building stone and road metal, 1908, p. 381-382.
- *340-H. Cement and Concrete Materials.--Concrete materials produced in the Chicago district, by E. F. Burchard, 1908, p. 383-410; Portland cement materials near El Paso, Tex., by G. B. Richardson, 1908, p. 411-414; Survey publications on cement and concrete materials, 1908, p. 415-416.
- *340-I. Clays.--Clays in the Kootenai formation near Belt, Mont., by C. A. Fisher, 1908, p. 417-423; Survey publications on clays, fuller's earth, etc., 1908, p. 424-425.
- Lime and Magnesite.--Survey publications on lime and magnesite, 1908, p. 426.
- Gypsum and Plasters.--Survey publications on gypsum and plasters, 1908, p. 427.
- Glass and Sand, etc.--Survey publications on glass and sand and glass-making materials, 1908, p. 428.
- *340-J. Abrasive Materials.--Tripoli deposits near Seneca, Mo., by C. E. Siebenthal and R. D. Mesler, 1908, p. 429-437; Survey publications on abrasive materials, quartz, feldspar, etc., 1908, p. 438-439.
- Mineral Paint.--Survey publications on mineral paint, 1908, p. 440.
- *340-K. Phosphates.--Phosphate deposits in the western United States, by F. B. Weeks, 1908, p. 441-447; Survey publications on phosphates and other mineral fertilizers, 1908, p. 448-449.
- Salines.--Survey publications on salines, including salt, borax, and soda, 1908, p. 450.
- *340-L. Sulphur and Pyrite.--Sulphur deposits at Cody, Wyo., by E. G. Woodruff, 1908, p. 451-456; Survey publications on sulphur and pyrite, 1908, p. 457.
- *340-M. Miscellaneous Nonmetallic Products.--A commercial occurrence of barite near Cartersville, Ga., by C. W. Hayes and W. C. Phalen, 1908, p. 458-462; Graphite deposits near Cartersville, Ga., by C. W. Hayes and W. C. Phalen, 1908, p. 463-465; Meerschaum in New Mexico, by D. B. Sterrett, 1908, p. 466-473; Survey publications on miscellaneous nonmetallic products, including mica, graphite, fluorspar, asbestos, and barite, 1908, p. 474; Index, 1908, p. 475-482.
- (Bulletin 340 was issued as a single volume, Contributions to economic geology, 1907, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
- *341-A. Coal Fields of North Dakota and Montana.--Introduction, by M. R. Campbell, 1909, p. 5-14; The Sentinel Butte lignite field, N. Dak. and Mont., by A. G. Leonard and C. D. Smith, 1909, p. 15-35; The Miles City coal field, Mont., by A. J. Collier and C. D. Smith, 1909, p. 36-61; The Bull Mountain coal field, Mont., by L. H. Woolsey, 1909, p. 62-77; Coal near the Crazy Mountains, Mont., by R. W. Stone, 1909, p. 78-91; The Red Lodge coal field, Mont., by E. G. Woodruff, 1909, p. 92-107; The Lewistown coal field, Mont., by W. R. Calvert, 1909, p. 108-122.
- *341-B. Coal Fields of Wyoming.--The Sheridan coal field, Wyo., by J. A. Taff, 1909, p. 123-150; The Glenrock coal field, Wyo., by E. W. Shaw, 1909, p. 151-164; Coal fields of the northeast side of the Bighorn Basin, Wyo., and of Bridger, Mont., by C. W. Washburne, 1909, p. 165-199; Coal fields of the southwest side of the Bighorn Basin, Wyo., by E. G. Woodruff, 1909, p. 200-219; The eastern part of the Great Divide Basin coal field, Wyo., by E. E. Smith, 1909, p. 220-242; The western part of the Little Snake River coal field, Wyo., by M. W. Ball, 1909, p. 243-255; The northern part of the Rock Springs coal field, Sweetwater County, Wyo., by A. R. Schultz, 1909, p. 256-282.
- *341-C. Coal Fields of Colorado, New Mexico, Utah, Oregon, and Virginia.--Coal fields of northwestern Colorado and northeastern Utah, by H. S. Gale, 1909, p. 283-315; The Grand Mesa coal field, Colo., by W. T. Lee, 1909, p. 316-334; The coal field between Gallina and Raton Spring, N. Mex., in the San Juan coal region, by J. H. Gardner, 1909, p. 335-351; The coal field between Durango, Colo., and Monero, N. Mex., by J. H. Gardner, 1909, p. 352-363; The coal field between Gallup and San Mateo, N. Mex., by J. H. Gardner, 1909, p. 364-378; The Harmony, Colob, and Kanab coal fields, southern Utah, by G. B. Richardson, 1909, p. 379-400; The Rogue River valley coal field, Oreg., by J. S. Diller, 1909, p. 401-405; A coal prospect on Willow Creek, Morrow County, Oreg., by W. C. Mendenhall, 1909, p. 406-408; The Pocket coal district, Va., in the Little Black Mountain coal field, by C. A. Fisher, 1909, p. 409-418; Classified list of papers dealing with coal, coke, lignite, and peat contained in publications of U. S. Geological Survey, except those on Alaska, compiled by W. T. Lee and J. M. Nickles, 1909, p. 419-436; Index, 1909, p. 437-444.
- (Bulletin 341 was issued as a single volume, Contributions to economic geology, 1907, Part II, Coal and lignite, and also as separate chapters, for which pagination of volume has been used above.)
- *342. Results of spirit leveling in California, 1896 to 1907, inclusive, by S. S. Gannett and D. H. Baldwin, 1908, 172 p. (See also Bulletin 766.)
- *343. Binders for coal briquets; investigations made at the fuel-testing plant, St. Louis, Mo., by J. E. Mills, 1908, 56 p.
- *344. The strength of concrete beams; results of tests of 108 beams, first series, made at the structural-materials testing laboratories, by R. L. Humphrey, 1908, 59 p.
- *345-A. Administrative report, by A. H. Brooks, 1908, p. 5-17; The distribution of mineral resources in Alaska, by A. H. Brooks, 1908, p. 18-29; The mining industry in 1907, by A. H. Brooks, 1908, p. 30-

- 53; Prospecting and mining gold placers in Alaska, by J. P. Hutchins, 1908, p. 54-77; Recent Survey publications on Alaska, 1908, p. i-v.
- *345-B. Lode mining in southeastern Alaska, 1907, by C. W. Wright, 1908, p. 78-97; Copper deposits on Kasaan Peninsula, Prince of Wales Island, by C. W. Wright and Sidney Paige, 1908, p. 98-115; The building stones and materials of southeastern Alaska, by C. W. Wright, 1908, p. 116-126.
- *345-C. The mineral resources of the Kotsina and Chitina valleys, Copper River region, by F. H. Moffit and A. G. Maddren, 1908, p. 127-175; Notes on copper prospects of Prince William Sound, by F. H. Moffit, 1908, p. 176-178.
- *345-D. Occurrence of gold in the Yukon-Tanana region, by L. M. Prindle, 1908, p. 179-186; The Forty-mile gold placer district, by L. M. Prindle, 1908, p. 187-197; Water supply of the Fairbanks district, 1907, by C. C. Covert, 1908, p. 198-205.
- *345-E. Investigations of the mineral deposits of Seward Peninsula, by P. S. Smith, 1908, p. 206-250; The Seward Peninsula tin deposits, by Adolph Knopf, 1908, p. 251-267; The mineral deposits of the Lost River and Brooks Mountain region, Seward Peninsula, by Adolph Knopf, 1908, p. 268-271; Water supply of the Nome and Kougarak regions, Seward Peninsula, 1906-7, by F. F. Henshaw, 1908, p. 272-285; Index, 1908, p. 287-294.
(Bulletin 345 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1907, and also as separate chapters.)
- *346. Structure of the Berea oil sand in the Flushing quadrangle, Harrison, Belmont, and Guernsey counties, Ohio, by W. T. Griswold, 1908, 30 p.
- *347. The Ketchikan and Wrangell mining districts, Alaska, by F. E. and C. W. Wright, 1908, 210 p.
- *348. Coal resources of the Russell Fork basin in Kentucky and Virginia, by R. W. Stone, 1908, 127 p.
- *349. Economic geology of the Kenova quadrangle, Ky., Ohio, and W. Va., by W. C. Phalen, 1908, 158 p.
- *350. Geology of the Rangely oil district, Rio Blanco County, Colo., with a section on the water supply, by H. S. Gale, 1908, 61 p.
- *351. The clays of Arkansas, by J. C. Branner, 1908, 247 p.
- *352. Geologic reconnaissance of a part of western Arizona, by W. T. Lee, with notes on the igneous rocks of western Arizona, by Albert Johannsen, 1908, 96 p.
- *353. Geology of the Taylorville region, Calif., by J. S. Diller, 1908, 128 p.
- *354. The chief commercial granites of Massachusetts, New Hampshire, and Rhode Island, by T. N. Dale, 1908, 228 p. (See also Bulletin 738.)
- *355. The magnesite deposits of California, by F. L. Hess, 1908, 67 p.
- *356. Geology of the Great Falls coal field, Mont., by C. A. Fisher, 1909, 85 p.
- *357. Preliminary report on the Coalinga oil district, Fresno and Kings counties, Calif., by Ralph Arnold and Robert Anderson, 1908, 142 p. (See also Bulletins 396 and 398.)
- *358. Geology of the Seward Peninsula tin deposits, Alaska, by Adolph Knopf, 1908, 71 p.
- *359. Magnetite deposits of the Cornwall type in Pennsylvania, by A. C. Spencer, 1908, 102 p.
- *360. Pre-Cambrian geology of North America, by C. R. Van Hise and C. K. Leith, 1909, 939 p.
- *361. Cenozoic mammal horizons of western North America, by H. F. Osborn, with faunal lists of the Tertiary Mammalia of the West, by W. D. Matthew, 1909, 138 p.
- *362. Mine sampling and chemical analyses of coals tested at the United States fuel-testing plant, Norfolk, Va., in 1907, by J. S. Burrows, 1908, 23 p.
- *363. Comparative tests of run-of-mine and briquetted coal on locomotives, including torpedo boat tests and some foreign specifications for briquetted fuel, by W. F. M. Goss, 1908, 57 p.
- *364. Geology and mineral resources of the Laramie Basin, Wyo. (a preliminary report), by N. H. Darton and C. E. Siebenhal, 1909, 81 p.
- *365. The fractionation of crude petroleum by capillary diffusion, by J. E. Gilpin and M. P. Cram, under the supervision of D. T. Day, 1908, 33 p.
- *366. Tests of coal and briquets as fuel for house-heating boilers, by D. T. Randall, 1908, 44 p.
- *367. The significance of drafts in steam-boiler practice, by W. T. Ray and Henry Kreisinger, 1909, 61 p.
- *368. Washing and coking tests of coal at the fuel-testing plant, Denver, Colo., July 1, 1907, to June 30, 1908, by A. W. Belden, G. R. Delamater, and J. W. Groves, 1909, 54 p.
- *369. The prevention of mine explosions, report and recommendations, by Victor Watteyne, Carl Meissner, and Arthur Desborough, 1908, 11 p.
- *370. The fire-resistive properties of various building materials, by R. L. Humphrey, 1909, 99 p.
- *371. Reconnaissance of the Book Cliffs coal field, between Grand River, Colo., and Sunnyside, Utah, by G. B. Richardson, 1909, 54 p.
- *372. Bibliography of North American geology for 1906 and 1907, with subject index, by F. B. Weeks and J. M. Nickles, 1909, 317 p.
- *373. The smokeless combustion of coal in boiler plants, with a chapter on central heating plants, by D. T. Randall and H. W. Weeks, 1909, 188 p.
- *374. Mineral resources of the Kotsina-Chitina region, Alaska, by F. H. Moffit and A. G. Maddren, 1909, 103 p.
- *375. The Fortymile quadrangle, Yukon-Tanana region, Alaska, by L. M. Prindle, 1909, 52 p.
- *376. Peat deposits of Maine, by E. S. Bastin and C. A. Davis, 1909, 127 p.
- *377. The fauna of the Caney shale of Oklahoma, by G. H. Girty, 1909, 106 p.
- *378. Results of purchasing coal under Government specifications, by J. S. Burrows, with a paper on burning the small sizes of anthracite for heat and power purposes, by D. T. Randall, 1909, 44 p.
- *379-A. Administrative report, by A. H. Brooks, 1909, p. 5-20; The mining industry in 1908, by A. H. Brooks, 1909, p. 21-62; The possible use of peat fuel in Alaska, by C. A. Davis, 1909, p. 63-66; Recent Survey publications on Alaska, 1909, p. 413-418.

- *379-B. Mining in southeastern Alaska, by C. W. Wright, 1909, p. 67-86.
- *379-C. Copper mining and prospecting on Prince William Sound, by U. S. Grant and D. F. Higgins, Jr., 1909, p. 87-96; Gold on Prince William Sound, by U. S. Grant, 1909, p. 97; Notes on the geology and mineral prospects in the vicinity of Seward, Kenai Peninsula, by U. S. Grant and D. F. Higgins, Jr., 1909, p. 98-107; Mineral resources of southwestern Alaska, by W. W. Atwood, 1909, p. 108-152.
- *379-D. Mining in the Kotsina-Chitina, Chistochina, and Valdez Creek regions, by F. H. Moffitt, 1909, p. 153-160; Mineral resources of the Nabesna-White River district, by F. H. Moffitt and Adolph Knopf, 1909, p. 161-180.
- *379-E. The Fairbanks gold-placer region, by L. M. Prindle and F. J. Katz, 1909, p. 181-200; Water supply of the Yukon-Tanana region, 1907-8, by C. C. Covert and C. E. Ellsworth, 1909, p. 201-228; Gold placers of the Ruby Creek district, by A. G. Maddren, 1909, p. 229-233; Placers of the Gold Hill district, by A. G. Maddren, 1909, p. 234-237; Gold placers of the Innoko district, by A. G. Maddren, 1909, p. 238-266.
- *379-F. Recent developments in southern Seward Peninsula, by P. S. Smith, 1909, p. 267-301; The Iron Creek region, by P. S. Smith, 1909, p. 302-354; Mining in the Fairhaven precinct, by F. F. Henshaw, 1909, p. 355-369; Water-supply investigations in Seward Peninsula, 1908, by F. F. Henshaw, 1909, p. 370-401; Index, 1909, p. 403-411; Recent Survey publications on Alaska, 1909, p. 413-418.
(Bulletin 379 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1908, and also as separate chapters.)
- *380-A. Introduction, by C. W. Hayes, 1909, p. 7-11; Investigations relating to nonmetallic mineral resources and iron ores, by C. W. Hayes, 1909, p. 12-15; Investigations relating to deposits of metal-liferous ores, by Waldemar Lindgren, 1909, p. 16-20.
Gold and Silver.--Notes on the economic geology of southeastern Gunnison County, Colo., by J. M. Hill, 1909, p. 21-40; The Hornsilver district, Nev., by F. L. Ransome, 1909, p. 41-43; Round Mountain, Nev., by F. L. Ransome, 1909, p. 44-47; Mineral resources of the Grants Pass quadrangle and bordering districts, Oreg., by J. S. Diller and G. F. Kay, 1909, p. 48-79; Notes on the Bohemia mining district, Oreg., by D. F. MacDonald, 1909, p. 80-84; Faulting and vein structure in the Cracker Creek gold district, Baker County, Oreg., by J. T. Pardee, 1909, p. 85-93; Survey publications on gold and silver, 1909, p. 94-98.
- *380-B. Copper.--The Yerington copper district, Nev., by F. L. Ransome, 1909, p. 99-119; Survey publications on copper, 1909, p. 120-122.
- *380-C. Lead and Zinc.--The Tres Hermanas mining district, N. Mex., by Waldemar Lindgren, 1909, p. 123-128; Survey publications on lead and zinc, 1909, p. 129-130.
- *380-D. Rare Metals.--Tin, tungsten, and tantalum deposits of South Dakota, by F. L. Hess, 1909, p. 131-163; Note on a wolframite deposit in the Whetstone Mountains, Ariz., by F. L. Hess, 1909, p. 164-165; Survey publications on antimony, chromium, nickel, platinum, quicksilver, tin, tungsten, uranium, vanadium, etc., 1909, p. 166-168.
- *380-E. Iron and Manganese.--Tonnage estimates of Clinton iron ore in the Chattanooga region of Tennessee, Georgia, and Alabama, by E. F. Burchard, 1909, p. 169-187; The Taylor Peak and Whitepine iron-ore deposits, Colo., by E. C. Harder, 1909, p. 188-198; The Hanover iron-ore deposits, N. Mex., by Sidney Paige, 1909, p. 199-214; The iron ores of the Appalachian region in Virginia, by E. C. Harder, 1909, p. 215-254; Manganese deposits of the United States, by E. C. Harder, 1909, p. 255-277; Survey publications on iron and manganese ores, 1909, p. 278-281.
Aluminum ores.--Survey publications on aluminum ores, 1909, p. 282.
- *380-F and G. Omitted.
- *380-H. Asphalt.--An occurrence of asphaltite in northeastern Nevada, by Robert Anderson, 1909, p. 283-285; Grahamite deposits of southeastern Oklahoma, by J. A. Taff, 1909, p. 286-297; Survey publications on asphalt, 1909, p. 298.
- *380-I. Building Stones.--Marble prospects in the Chiricahua Mountains, Ariz., by Sidney Paige, 1909, p. 299-311; Survey publications on building stone and road metal, 1909, p. 312-313.
- *380-J. Cement and Concrete Materials.--The Niobrara limestone of northern Colorado as a possible source of Portland cement material, by G. C. Martin, 1909, p. 314-326; Cement material near Havre, Mont., by L. J. Pepperberg, 1909, p. 327-336; Ganister in Blair County, Pa., by Charles Butts, 1909, p. 337-342; Survey publications on cement and cement and concrete materials, 1909, p. 343-345.
- *380-K. Clays.--Notes on the clays of Florida, by G. C. Matson, 1909, p. 346-357; Survey publications on clays, fuller's earth, etc., 1909, p. 358-360.
Lime and Magnesite.--Survey publications on lime and magnesite, 1909, p. 361.
Gypsum and Plasters.--Survey publications on gypsum and plasters, 1909, p. 362.
Abrasives.--Survey publications on abrasive materials, 1909, p. 364-365.
Mineral Paint.--Survey publications on mineral paint, 1909, p. 366.
Phosphates.--Survey publications on phosphates and other mineral fertilizers, 1909, p. 367.
- *380-L. Salines.--Sodium sulphate in Soda Lake, Carrizo Plain, San Luis Obispo County, Calif., by Ralph Arnold and H. R. Johnson, 1909, p. 369-372; Survey publications on salines, including salt, borax, and soda, 1909, p. 372.
- *380-M. Sulphur and Pyrite.--Sulphur deposits near Thermopolis, Wyo., by E. G. Woodruff, 1909, p. 373-380; Survey publications on sulphur and pyrite, 1909, p. 381.
- *380-N. Miscellaneous Nonmetallic Products.--Mica deposits of South Dakota, by D. B. Sterrett, 1909, p. 382-397; Survey publications on miscellaneous nonmetallic products, 1909, p. 398-399; Index, 1909, p. 401-406.

(Bulletin 380 was issued as a single volume, Contributions to economic geology, 1908, Part I, Metals and nonmetals except fuels, and also as separate chapters, for which pagination of volume has been used above.)

- *381-A. Introduction, by M. R. Campbell, 1910, p. 5-7;
Coal Fields in Indiana, North Dakota, and Montana.--Stratigraphy and coal beds of the Indiana coal field, by G. H. Ashley, 1910, p. 9-18; The Washburn lignite field, N. Dak., by C. D. Smith, 1910, p. 19-29; The Fort Berthold Indian Reservation lignite field, N. Dak., by C. D. Smith, 1910, p. 30-39; The Fort Peck Indian Reservation lignite field, Mont., by C. D. Smith, 1910, p. 40-59; The central part of the Bull Mountain coal field, Mont., by R. W. Richards, 1910, p. 60-81; The Milk River coal field, Mont., by L. J. Pepperberg, 1910, p. 82-107; Notes on the coals of the Custer National Forest, Mont., by C. H. Wegemann, 1910, p. 108-114.
 - *381-B. Coal Fields in Wyoming.--The Powder River coal field, Wyo., adjacent to the Burlington Railroad, by R. W. Stone and C. T. Lupton, 1910, p. 115-136; The Buffalo coal field, Wyo., by H. S. Goss and C. H. Wegemann, 1910, p. 137-169; The coal field in the southeastern part of the Bighorn Basin, Wyo., by E. G. Woodruff, 1910, p. 170-185; The eastern part of the Little Snake River coal field, Wyo., by M. W. Ball and Eugene Stebinger, 1910, p. 186-213; The southern part of the Rock Springs coal field, Sweetwater County, Wyo., by A. R. Schultz, 1910, 214-281; Weathering of coal in the arid region of the Green River Basin, Sweetwater County, Wyo., by A. R. Schultz, 1910, p. 282-296.
 - *381-C. Coal Fields in Colorado and New Mexico.--Coal of the Denver Basin, Colo., by G. C. Martin, 1910, p. 297-306; The South Park coal field, Colo., by C. W. Washburne, 1910, p. 307-316; The Colorado Springs coal field, Colo., by M. I. Goldman, 1910, p. 317-340; The Canon City coal field, Colo., by C. W. Washburne, 1910, p. 341-378; The Trinidad coal field, Colo., by G. B. Richardson, 1910, p. 379-446; Isolated coal fields in Santa Fe and San Miguel Counties, N. Mex., by J. H. Gardner, 1910, p. 447-451; The Carthage coal field, N. Mex., by J. H. Gardner, 1910, p. 452-460; The coal field between San Mateo and Cuba, N. Mex., by J. H. Gardner, 1910, p. 461-473.
 - *381-D. Petroleum and Natural Gas.--Geology and oil prospects of the Reno region, Nev., by Robert Anderson, 1910, p. 475-489; Two areas of oil prospecting in Lyon County, western Nevada, by Robert Anderson, 1910, p. 490-493; Analyses of crude petroleum from Oklahoma and Kansas, by D. T. Day, 1910, p. 494-503; The Madill oil pool, Okla., by J. A. Taff and W. J. Reed, 1910, p. 504-513; Development in the Boulder oil field, Colo., by C. W. Washburne, 1910, p. 514-516; The Florence oil field, Colo., by C. W. Washburne, 1910, p. 517-544; Survey publications on petroleum and natural gas, 1910, p. 545-547; Index, 1910, p. 549-559.
- (Bulletin 381 was issued as a single volume, Contributions to economic geology, 1908, Part II, Mineral fuels, and also as separate chapters, for which pagination of volume has been used above.)
- *382. The effect of oxygen in coal, by David White. 1909. 74 p.
 - *383. Notes on explosive mine gases and dusts, with special reference to explosions in the Monongah, Darr, and Naomi coal mines, by R. T. Chamberlin. 1909. 67 p.
 - *384. A geological reconnaissance in northern Idaho and northwestern Montana, by F. C. Calkins, with notes on the economic geology, by D. F. MacDonald. 1909. 112 p.
 - *385. Briquetting tests at the United States fuel-testing plant, Norfolk, Va., 1907-8, by C. L. Wright. 1909. 41 p.
 - *386. Pleistocene geology of the Leadville quadrangle, Colo., by S. R. Capps, Jr. 1909. 99 p.
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 - *393. Incidental problems in gas-producer tests, by R. H. Fernald, C. D. Smith, J. K. Clement, and H. A. Grine. 1909. 29 p.
 - *394. Papers on the conservation of mineral resources (reprinted from report of the National Conservation Commission, February, 1909). 1909. 214 p.
Contains: Introduction, 1909, p. 5; Coal fields of the United States, by M. R. Campbell and E. W. Parker, 1909, p. 7-26; Estimates of future coal production, by Henry Gannett, 1909, p. 27-29; The petroleum resources of the United States, by D. T. Day, 1909, p. 30-50; Natural-gas resources of the United States, by D. T. Day, 1909, p. 51-61; Peat resources of the United States, 1909, exclusive of Alaska, by C. A. Davis, 1909, p. 62-69; Iron ores of the United States, by C. W. Hayes, 1909, p. 70-113; Resources of the United States in gold, silver, copper, lead, and zinc, by Waldemar Lindgren, 1909, p. 114-156; The phosphate deposits of the United States, by F. B. Van Horn, 1909, p. 157-171; Mineral resources of Alaska, by A. H. Brooks, 1909, p. 172-207; Index, 1909, p. 209-214.
 - *395. Radioactivity of the thermal waters of Yellowstone National Park, by Herman Schlundt and R. B. Moore. 1909. 35 p.
 - *396. Paleontology of the Coalinga district, Fresno and Kings counties, Calif., by Ralph Arnold. 1909. 173 p.
 - *397. Mineral deposits of the Cerbat Range, Black Mountains, and Grand Wash Cliffs, Mohave County, Ariz., by F. C. Schrader. 1909. 226 p.
 - *398. Geology and oil resources of the Coalinga district, Calif., by Ralph Arnold and Robert Anderson, with a report on the chemical and physical properties of the oils, by I. C. Allen. 1910. 354 p.

- *399. Results of spirit leveling in West Virginia, 1896 to 1908, inclusive, compiled by S. S. Gannett and D. H. Baldwin. 1909. 81 p. (See also Bulletin 632.)
- *400. Iron ores, fuels, and fluxes of the Birmingham district, Ala., by E. F. Burchard and Charles Butts, with chapters on the origin of the ores, by E. C. Eckel. 1910. 204 p.
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- *408. A reconnaissance of some mining camps in Elko, Lander, and Eureka counties, Nev., by W. H. Emmons. 1910. 130 p.
- *409. Bibliography of North American geology for 1908, with subject index, by J. M. Nickles. 1909. 148 p.
- *410. The Innoko gold-placer district, Alaska, with accounts of the central Kuskokwim Valley and the Ruby Creek and Gold Hill placers, by A. G. Maddren. 1910. 87 p.
- *411. Results of spirit leveling in Ohio, 1898 to 1908, inclusive, compiled by S. S. Gannett and D. H. Baldwin. 1909. 147 p. (See also Bulletin 651.)
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- *420. Economic geology of the feldspar deposits of the United States, by E. S. Bastin. 1910. 85 p.
- *421. Results of spirit leveling in Illinois, 1896 to 1908, inclusive, compiled by S. S. Gannett and D. H. Baldwin. 1910. 74 p. (See also Bulletin 930.)
- *422. The analysis of silicate and carbonate rocks, by W. F. Hillebrand. 1910. 239 p. (A revision of Bulletin 305. Reprinted with minor corrections in 1916. See also Bulletin 700.)
- *423. A primer on explosives for coal miners, by C. E. Munroe and Clarence Hall. 1909. 61 p.
- *424. The valuation of public coal lands: The value of coal land, by G. H. Ashley; Depth and minimum thickness of beds as limiting factors in valuation, by C. A. Fisher. 1910. 75 p.
- *425. The explosibility of coal dust, by G. S. Rice, with chapters by J. C. W. Frazer, Axel Larsen, Frank Haas, and Carl Scholz. 1910. 186 p.
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- *427. Manganese deposits of the United States, with sections on foreign deposits, chemistry, and uses, by E. C. Harder. 1910. 298 p.
- *428. The purchase of coal by the Government under specifications, with analyses of coal delivered for the fiscal year 1908-9, by G. S. Pope. 1910. 80 p.
- *429. Oil and gas in Louisiana, with a brief summary of their occurrence in adjacent States, by G. D. Harris. 1910. 192 p.
- *430-A. Introduction, 1910, p. 9-10;
Gold and Silver.--Notes on the placer deposits of Greaterville, Ariz., by J. M. Hill, 1910, p. 11-22; Gold mining in the Randsburg quadrangle, Calif., by F. L. Hess, 1910, p. 23-47; The Weaverville-Trinity Center gold gravels, Trinity County, Calif., by D. F. MacDonald, 1910, p. 48-58; Placer gravels of the Sumpter and Granite districts, eastern Oregon, by J. T. Pardee, 1910, p. 59-65; Survey publications on gold and silver, 1910, p. 66-70.
- *430-B. Copper.--The occurrence of copper in Shasta County, Calif., by L. C. Graton, 1910, p. 71-111; Geology of the copper deposits near Montpelier, Bear Lake County, Idaho, by H. S. Gale, 1910, p. 112-121; The copper deposits of South Mountain in southern Pennsylvania, by G. W. Stose, 1910, p. 122-131; Survey publications on copper, 1910, p. 132-134.
- *430-C. Lead and Zinc.--Notes on the mineral deposits of the Bearpaw Mountains, Mont., by L. J. Pepperberg, 1910, p. 135-146; Survey publications on lead and zinc, 1910, p. 147-150.
- *430-D. Rare Metals.--Notes on the occurrence of cinnabar in central western Arizona, by Howland Bancroft, 1910, p. 151-153; Some occurrences of molybdenite in the Santa Rita and Patagonia mountains, Ariz., by F. C. Schrader and J. M. Hill, 1910, p. 154-163; Note on the occurrence of tungsten minerals near Calabasas, Ariz., by J. M. Hill, 1910, p. 164-166; Some chromite deposits in western and central California, by E. C. Harder, 1910, p. 167-183; An occurrence of monazite in northern Idaho, by F. C. Schrader, 1910, p. 184-191; Platinum in southeastern Nevada, by Howland Bancroft,

- 1910, p. 192-199; The Virginia rutile deposits, by T. L. Watson and Stephen Taber, 1910, p. 200-213; Notes on tungsten deposits near Deer Park, Wash., by Howland Bancroft, 1910, p. 214-216; Survey publications on antimony, chromium, nickel, platinum, quicksilver, tin, tungsten, uranium, vanadium, etc., 1910, p. 217-218.
- *430-E. Iron and Manganese.--Some iron ores of western and central California, by E. C. Harder, 1910, p. 219-227; The Iron Age iron-ore deposit, near Dale, San Bernardino County, Calif., by E. C. Harder and J. L. Rich, 1910, p. 228-239; Iron ores near Dayton, Nev., by E. C. Harder, 1910, p. 240-246; The Jauss iron mine, Dillsburg, Pa., by A. C. Spencer, 1910, p. 247-249; Deposits of brown iron ore near Dillsburg, York County, Pa., by E. C. Harder, 1910, p. 250-255; Preliminary report on pre-Cambrian geology and iron ores of Llano County, Tex., by Sidney Paige, 1910, p. 256-268; Survey publications on iron and manganese ores, 1910, p. 269-272.
- Aluminum Ores.--Survey publications on aluminum ores, 1910, p. 273.
- Asphalt.--Survey publications on asphalt, 1910, p. 274.
- *430-F. Structural Materials.--
- General.--Field investigations of structural materials, by E. F. Burchard, 1910, p. 275-279; Structural materials available in the vicinity of Minneapolis, Minn., by E. F. Burchard, 1910, p. 280-291; Structural materials available in the vicinity of Austin, Tex., by E. F. Burchard, 1910, p. 292-316.
- Building Stone.--The slates of Arkansas, by A. H. Purdue, 1910, p. 317-334; The oolitic limestone industry at Bedford and Bloomington, Ind., by J. A. Udden, 1910, p. 335-345; Supplementary notes on the granites of New Hampshire, by T. N. Dale, 1910, p. 346-372; Oolitic limestone at Bowling Green and other places in Kentucky, by J. H. Gardner, 1910, p. 373-378; Survey publications on building stone and road metal, 1910, p. 379-380.
- Cement and Concrete Materials.--Cement materials in Republican Valley, Nebr., by N. H. Darton, 1910, p. 381-387; Gravel and sand in the Pittsburgh district, Pa., by E. W. Shaw, 1910, p. 388-399; Survey publications on cement and concrete materials, 1910, p. 400-401.
- Clay.--Fuller's earth and brick clays near Clinton, Mass., by W. C. Alden, 1910, p. 402-404; Survey publications on clays, fuller's earth, etc., 1910, p. 405.
- Gypsum and Plasters.--The gypsum deposits of the Palen Mountains, Riverside County, Calif., by E. C. Harder, 1910, p. 407-416; Gypsum deposits near Cane Springs, Kern County, Calif., by F. L. Hess, 1910, p. 417-418; Survey publications on gypsum and plasters, 1910, p. 419.
- Lime and Magnesite.--Survey publications on lime and magnesite, 1910, p. 420.
- Glass and Sand, etc.--Survey publications on glass sand, and glass-making materials, 1910, p. 421.
- Abrasives.--Survey publications on abrasive materials, 1910, p. 422.
- *430-G. Mineral Paints.--Ocher deposits of eastern Pennsylvania, by J. C. Stoddard and A. C. Callen, 1910, p. 424-439; Paint-ore deposits near Lehigh Gap, Pa., by F. T. Agthe and J. L. Dynan, 1910, p. 440-454; Survey publications on mineral paint, 1910, p. 455-456.
- *430-H. Phosphates.--Preliminary report on the phosphate deposits in southeastern Idaho and adjacent parts of Wyoming and Utah, by H. S. Gale and R. W. Richards, 1910, p. 457-535; Phosphate deposits east of Ogden, Utah, by Eliot Blackwelder, 1910, p. 536-551; Survey publications on phosphates and other mineral fertilizers, 1910, p. 552-553.
- *430-I. Salines.--The salt resources of the Idaho-Wyoming border, with notes on the geology, by C. L. Breger, 1910, p. 555-569; Deposits of sodium salts in Wyoming, by A. R. Schultz, 1910, p. 570-589; Survey publications on salines, including salt, borax, and soda, 1910, p. 590.
- Sulphur and Pyrite.--Survey publications on sulphur and pyrite, 1910, p. 591.
- *430-J. Miscellaneous Nonmetallic Products.--Mica deposits of North Carolina, by D. B. Sterrett, 1910, p. 593-638; Supposed graphite deposits near Brigham, Utah, by H. S. Gale, 1910, p. 639-640; Survey publications on miscellaneous nonmetallic products, 1910, p. 641-642; Index, 1910, p. 643-653. (Bulletin 430 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1909, Part I, Metals and nonmetals except fuels, and also as separate chapters, for which pagination of volume has been used above.)
- *431-A. Petroleum and Natural Gas.--Introduction, 1911, p. 5-6; Natural gas in North Dakota, by A. G. Leonard, 1911, p. 7-10; The San Juan oil field, San Juan County, Utah, by H. E. Gregory, 1911, p. 11-25; Gas and oil prospects near Vale, Oreg., and Payette, Idaho, by C. W. Washburne, 1911, p. 26-55; Gas prospects in Harney Valley, Oreg., by C. W. Washburne, 1911, p. 56-57; Preliminary report on the geology and the oil prospects of the Cantua-Panoche region, Calif., by Robert Anderson, 1911, p. 58-87.
- *431-B. Coal and Lignite.--The southern part of the Cahaba coal field, Ala., by Charles Butts, 1911, p. 89-146; The Powell Mountain coal field, Scott and Wise counties, Va., by M. R. Campbell, and E. G. Woodruff, 1911, p. 147-162; The eastern part of the Bull Mountain coal field, Mont., by C. T. Lupton, 1911, p. 163-189; Preliminary report on the Coos Bay coal field, Oreg., by J. S. Diller and M. A. Pishel, 1911, p. 190-228; The Black Mesa coal field, Ariz., by M. R. Campbell and H. E. Gregory, 1911, p. 229-238; Coal deposits near Pinedale, Navajo County, Ariz., by A. C. Veatch, 1911, p. 239-242; Coal in San Benito County, Calif., by M. R. Campbell, 1911, p. 243-247; Index, 1911, p. 249-254.
- (Bulletin 431 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1909, Part II, Mineral fuels, and also as separate chapters, for which pagination of volume has been used above.)
- *432. Some ore deposits in Maine and the Milan mine, N. H., by W. H. Emmons, 1910, 62 p.
- *433. Geology and mineral resources of the Solomon and Casadepaga quadrangles, Seward Peninsula, Alaska, by P. S. Smith, 1910, 234 p.
- *434. Results of spirit leveling in Delaware, District of Columbia, Maryland, and Virginia, 1896 to 1909, inclusive; R. B. Marshall, chief geographer. 1910. 74 p. (See also Bulletins 562, Virginia, and 563, Maryland.)

- *435. A reconnaissance of parts of northwestern New Mexico and northern Arizona, by N. H. Darton. 1910. 88 p.
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- *442-A. Administrative report, 1910, p. 17-19; The mining industry in 1909, by A. H. Brooks, 1910, p. 20-46; Alaska coal and its utilization, by A. H. Brooks, 1910, p. 47-100.
- *442-B. The preparation and use of peat as fuel, by C. A. Davis, 1910, p. 101-132.
- *442-C. Mining in southeastern Alaska, by Adolph Knopf, 1910, p. 133-143; The occurrence of iron ore near Haines, by Adolph Knopf, 1910, p. 144-146; A water-power reconnaissance in southeastern Alaska, by J. C. Hoyt, 1910, p. 147-157.
- *442-D. Mining in the Chitina district, by F. H. Moffit, 1910, p. 158-163; Mining and prospecting on Prince William Sound in 1909, by U. S. Grant, 1910, p. 164-165; Preliminary report on the mineral resources of the southern part of Kenai Peninsula, by U. S. Grant and D. F. Higgins, 1910, p. 166-178.
- *442-E. Outline of the geology and mineral resources of the Iliamna and Clark lakes region, by G. C. Martin and F. J. Katz, 1910, p. 179-200; Gold placers of the Mulchatna, by F. J. Katz, 1910, p. 201-202.
- *442-F. Sketch of the geology of the northeastern part of the Fairbanks quadrangle, by L. M. Prindle, 1910, p. 203-209; Auriferous quartz veins in the Fairbanks district, by L. M. Prindle, 1910, p. 210-229; Placer mining in the Yukon-Tanana region, by C. E. Ellsworth, 1910, p. 230-245; Occurrence of wolframite and cassiterite in the gold placers of Deadwood Creek, Birch Creek district, by B. L. Johnson, 1910, p. 246-250; Water supply of the Yukon-Tanana region, 1909, by C. E. Ellsworth, 1910, p. 251-283.
- *442-G. The Koyukuk-Chandalar gold region, by A. G. Maddren, 1910, p. 284-315.
- *442-H. Mineral resources of the Nulato-Council region, by P. S. Smith and H. M. Eakin, 1910, p. 316-352.
- *442-I. Mining in Seward Peninsula, by F. F. Henshaw, 1910, p. 353-371; Water-supply investigations in Seward Peninsula in 1909, by F. F. Henshaw, 1910, p. 372-418.
- *442-J. Alaska coal and its utilization, by A. H. Brooks, 1910, p. 47-100 (a reprint of part of separate A); Index, 1910, p. 419-426; Recent Survey publications on Alaska, 1910, p. 427-432. (Bulletin 442 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1909, and also as separate chapters for which pagination of volume has been used above.)
- *443. Reconnaissance of the geology and mineral resources of Prince William Sound, Alaska, by U. S. Grant and D. F. Higgins. 1910. 89 p.
- *444. Bibliography of North American geology for 1909, with subject index, by J. M. Nickles. 1910. 174 p.
- *445. Geology of the pegmatites and associated rocks of Maine, including feldspar, quartz, mica, and gem deposits, by E. S. Bastin. 1911. 152 p.
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- *458. Results of spirit leveling in Arkansas, Louisiana, and Mississippi, 1896 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 79 p. (See also Bulletins 634, Louisiana, 636, Arkansas, and 639, Mississippi.)
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- *460. Results of spirit leveling in Iowa, 1896 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 32 p. (See also Bulletin 569.)
- *461. Results of spirit leveling in Michigan and Wisconsin, 1897 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 64 p. (See also Bulletins 559 and 919, Michigan, and 570, Wisconsin.)
- *462. Results of spirit leveling in Oregon, 1896 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 82 p. (See also Bulletin 556.)
- *463. Results of spirit leveling in Arizona, 1899 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 94 p. (See also Bulletin 573.)
- *464. Results of spirit leveling in New Mexico, 1902 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 53 p. (See also Bulletin 638.)
- *465. The State geological surveys of the United States, compiled under the direction of C. W. Hayes. 1911. 177 p.
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- *467. Geology and mineral resources of parts of the Alaska Peninsula, by W. W. Atwood. 1911. 137 p.
- *468. Results of spirit leveling in Texas, 1896 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 133 p. (See also Bulletin 637.)
- *469. Results of spirit leveling in North Dakota, 1897 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 23 p.
- *470-A. Introduction, 1911, p. 9-10; Phosphates in Montana, by H. S. Gale. (Reprinted in separate H.)
- *470-B. Gold and Silver.--The auriferous gravels of the Trinity River basin, Calif., by J. S. Diller, 1911, p. 11-29; The economic geology of Carson camp, Hinsdale County, Colo., by E. S. Larsen, Jr., 1911, p. 30-38; Geology and mineralization of the upper St. Joe River basin, Idaho, by J. T. Pardee, 1911, p. 39-61; Gold-bearing ground moraine in northwestern Montana, by F. C. Schrader, 1911, p. 62-74; Geologic relation of ore deposits in the Elkhorn Mountains, Mont., by R. W. Stone, 1911, p. 75-98; Notes on the economic geology of the Ramsey, Talapoosa, and White Horse mining districts, in Lyon and Washoe counties, Nev., by J. M. Hill, 1911, p. 99-108; The ore deposits near Pinos Altos, N. Mex., by Sidney Paige, 1911, p. 109-125; Survey publications on gold and silver, 1911, p. 126-130.
- *470-C. Copper.--Metalliferous ore deposits near the Burro Mountains, Grant County, N. Mex., by Sidney Paige, 1911, p. 131-150; Preliminary report on the mineral deposits of Ducktown, Tenn., by W. H. Emmons and F. B. Laney, 1911, p. 151-172; Survey publications on copper, 1911, p. 173-175.
- *470-D. Lead and Zinc.--Notes on lead and copper deposits in the Bear River Range, Idaho and Utah, by R. W. Richards, 1911, p. 177-187; Lead and zinc deposits in the Metaltine mining district, northeastern Washington, by Howland Bancroft, 1911, p. 188-200; Survey publications on lead and zinc, 1911, p. 201-204.
- *470-E. Rare Metals.--The arsenic deposits at Brinton, Va., by F. L. Hess, 1911, p. 205-211; Survey publications on antimony, chromium, monazite, nickel, platinum, quicksilver, tin, tungsten, uranium, vanadium, etc., 1911, p. 212-214.
- *470-F. Iron and Manganese.--Iron ores in the Montevallo-Columbiana region, Ala., by Charles Butts, 1911, p. 215-230; Survey publications on iron and manganese ores, 1911, p. 231-234. Aluminum Ores.--Survey publications on aluminum ores--bauxite, cryolite, etc., 1911, p. 235. Asphalt.--Survey publications on asphalt, 1911, p. 236.
- *470-G. Structural Materials.--Building Stone.--Variegated marble southeast of Calera, Shelby County, Ala., by Charles Butts, 1911, p. 237-239; Supplementary notes on the granites of Massachusetts, by T. N. Dale, 1911, p. 240-288; Survey publications on building stone and road metal, 1911, p. 289-290. Cement and Concrete Materials.--Survey publications on cement and concrete materials, 1911, p. 291. Clays.--Clay near Calhan, El Paso County, Colo., by G. B. Richardson, 1911, p. 293-296; Clay resources of the Murphysboro quadrangle, Ill., by E. W. Shaw, 1911, p. 297-301; Notes on some clays from Texas, by Alexander Deussen, 1911, p. 302-351; Survey publications on clays, fuller's earth, etc., 1911, p. 352-353. Gypsum and Plasters.--Gypsum deposits in Eagle County, Colo., by E. F. Burchard, 1911, p. 354-365; Survey publications on gypsum and plasters, 1911, p. 366. Lime and Magnesite.--Survey publications on lime and magnesite, 1911, p. 367. Glass Sand, etc.--Survey publications on glass sand and glass-making materials, 1911, p. 368. Abrasives.--Survey publications on abrasive materials, 1911, p. 369-370.
- *470-H. Phosphates.--Preliminary report on a portion of the Idaho phosphate reserve, by R. W. Richards and G. R. Mansfield, 1911, p. 371-439; Rock phosphate near Melrose, Mont., by H. S. Gale, 1911, p. 440-451; A reconnaissance of the phosphate deposits in western Wyoming, by Eliot Blackwelder, 1911, p. 452-481; Survey publications on phosphates and other mineral fertilizers, 1911, p. 482-483.
- *470-I. Mineral Paints.--Paint shales of Pennsylvania, by B. L. Miller, 1911, p. 485-496; Survey publications on mineral paints, 1911, p. 497. Salines.--Survey publications on salines, including salt, borax, and soda, 1911, p. 498.
- *470-J. Sulphur and Pyrite.--Sulphur deposits near Soda Springs, Idaho, by R. W. Richards and J. H. Bridges, 1911, p. 499-503; Survey publications on sulphur and pyrite, 1911, p. 504.
- *470-K. Miscellaneous Nonmetallic Products.--The types, modes of occurrence, and important deposits of asbestos in the United States, by J. S. Diller, 1911, p. 505-524; Dolomite for flux in the vicinity of Montevallo, Shelby County, Ala., by Charles Butts, 1911, p. 525-527; Graphite near Dillon, Mont., by A. N. Winchell, 1911, p. 528-532; Fluorspar near Deming, N. Mex., by N. H. Darton and

- E. F. Burchard, 1911, p. 533-545; Survey publications on miscellaneous nonmetallic products--Asbestos, barite, feldspar, fluorspar, graphite, mica, quartz, etc., 1911, p. 546-547; Index, 1911, p. 549-558.
- (Bulletin 470 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1910, Part I, Metals and nonmetals except fuels, and also as separate chapters, for which pagination of volume has been used above.)
- *471-A. Introduction, 1912, p. 7; The Campton oil pool, Ky., by M. J. Munn, 1912, p. 9-17; Oil and gas development in Knox County, Ky., by M. J. Munn, 1912, p. 18-29; The Fayette gas field, Ala., by M. J. Munn, 1912, p. 30-55; The Powder River oil field, Wyo., by C. H. Wegemann, 1912, p. 56-75; Geology of the San Juan oil field, Utah, by E. G. Woodruff, 1912, p. 76-104; Marsh gas along Grand River near Moab, Utah, by E. G. Woodruff, 1912, p. 105; Preliminary report on the geology and possible oil resources of the south end of the San Joaquin Valley, Calif., by Robert Anderson, 1912, p. 106-136.
 - This chapter has been reprinted in five separate pamphlets, with the following titles:
 - *(A-1) Petroleum and natural gas in Kentucky, 1912, p. 9-29.
 - *(A-2) Petroleum and natural gas in Alabama, 1912, p. 30-55.
 - *(A-3) Petroleum and natural gas in Wyoming, 1912, p. 56-75.
 - *(A-4) Petroleum and natural gas in Utah, 1912, p. 76-105.
 - *(A-5) Petroleum and natural gas in California, 1912, p. 106-136.
 - *471-B. Coal on Dan River, N. C., by R. W. Stone, 1912, p. 137-169.
 - *471-C. Lignite in the Fort Berthold Indian Reservation, N. Dak., north of Missouri River, by M. A. Pishel, 1912, p. 170-186.
 - *471-D. Geology of certain lignite fields in eastern Montana, by W. R. Calvert, 1912, p. 187-201; The Baker lignite field, Custer County, Mont., by C. F. Bowen, 1912, p. 202-226; The Terry lignite field, Custer County, Mont., by F. A. Herald, 1912, p. 227-270; The Glendive lignite field, Dawson County, Mont., by J. H. Hance, 1912, p. 271-283; The Sidney lignite field, Dawson County, Mont., by Eugene Stebinger, 1912, p. 284-318; The Culbertson lignite field, Valley County, Mont., by A. L. Beekly, 1912, p. 319-358.
 - *471-E. The southern extension of the Milk River coal field, Chouteau County, Mont., by L. J. Peppenberg, 1912, p. 359-383; The Livingston and Trail Creek coal fields, Park, Gallatin, and Sweetgrass counties, Mont., by W. R. Calvert, 1912, p. 384-405; The Electric coal field, Park County, Mont., by W. R. Calvert, 1912, p. 406-422.
 - *471-F. The Little Powder River coal field, Campbell County, Wyo., by J. A. Davis, 1912, p. 423-440; The Sussex coal field, Johnson, Natrona, and Converse counties, Wyo., by C. H. Wegemann, 1912, p. 441-471; The Lost Spring coal field, Converse County, Wyo., by D. E. Winchester, 1912, p. 472-515.
 - *471-G. Coal fields of the Wind River region, Fremont and Natrona counties, Wyo., by E. G. Woodruff and D. E. Winchester, 1912, p. 516-564.
 - *471-H. The coal resources of Gunnison Valley, Mesa and Delta counties, Colo., by E. G. Woodruff, 1912, p. 565-573; The Tijeras coal field, Bernalillo County, N. Mex., by W. T. Lee, 1912, p. 575-578.
 - *471-I. The Deep Creek district of the Vernal coal field, Uintah County, Utah, by C. T. Lupton, 1912, p. 579-594; The Blacktail (Tabby) Mountain coal field, Wasatch County, Utah, by C. T. Lupton, 1912, p. 595-628.
 - *471-J. Miscellaneous analyses of coal samples from various fields of the United States, 1912, p. 629-655; Index, 1912, p. 657-663.
 - (Bulletin 471 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1910, Part II, Mineral fuels, and also as separate chapters, for which pagination of volume has been used above.)
 - *472. Results of spirit leveling in South Dakota, 1896 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 54 p. (See also Bulletin 643.)
 - *473. Results of spirit leveling in Kansas and Nebraska, 1896 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 42 p. (See also Bulletins 571 and 889, Kansas, and 572, Nebraska.)
 - *474. Coals of the State of Washington, by E. E. Smith. 1911. 206 p.
 - *475. The diffusion of crude petroleum through fuller's earth, with notes on its geologic significance, by J. E. Gilpin and O. E. Bransky. 1911. 50 p.
 - *476. Results of spirit leveling in Ohio, 1909 and 1910; R. B. Marshall, chief geographer. 1911. 79 p. (See also Bulletin 651.)
 - *477. Results of spirit leveling in West Virginia, 1909 and 1910; R. B. Marshall, chief geographer. 1911. 54 p. (See also Bulletin 632.)
 - *478. Geology and ore deposits near Lake City, Colo., by J. D. Irving and Howland Bancroft. 1911. 128 p.
 - *479. The geochemical interpretation of water analyses, by Chase Palmer. 1911. 31 p.
 - *480-A. Administrative report, by A. H. Brooks, 1911, p. 5-14; Report on progress of surveys of public lands in Alaska during 1910, by A. H. Brooks, 1911, p. 15-20.
 - *480-B. The mining industry in 1910, by A. H. Brooks, 1911, p. 21-42.
 - *480-C. Geologic features of Alaskan metalliferous lodes, by A. H. Brooks, 1911, p. 43-93.
 - *480-D. Mining in southeastern Alaska, by Adolph Knopf, 1911, p. 94-102; The Eagle River region, by Adolph Knopf, 1911, p. 103-111.
 - *480-E. The upper Susitna and Chistochina districts, by F. H. Moffit, 1911, p. 112-127.
 - *480-F. Preliminary report on a detailed survey of part of the Matanuska coal fields, by G. C. Martin, 1911, p. 128-136; A reconnaissance of the Willow Creek gold region, by F. J. Katz, 1911, p. 139-152.
 - *480-G. Placer mining in the Yukon-Tanana region, by C. E. Ellsworth and G. L. Parker, 1911, p. 153-172; Water supply of the Yukon-Tanana region, 1910, by C. E. Ellsworth and G. L. Parker, 1911, p. 173-217.

- *480-H. Mineral resources of the Bonfield region, by S. R. Capps, 1911, p. 218-235.
- *480-I. Gold placer mining developments in the Innoko-Iditarod region, by A. G. Maddren, 1911, p. 236-270.
- *480-J. The Shungnak region, Kobuk Valley, by P. S. Smith and H. M. Eakin, 1911, p. 271-305; The Squirrel River placers, by P. S. Smith, 1911, p. 306-319; Index, 1911, p. 321-325; Recent Survey publications on Alaska, 1911, p. 327-333.
(Bulletin 480 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1910, and also as separate chapters.)
- *481. Results of spirit leveling in California, 1907 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 115 p. (See also Bulletin 766.)
- *482. Results of spirit leveling in Montana, 1896 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 154 p.
- *483. Economic geology of Richmond, Va., and vicinity, by N. H. Darton. 1911. 48 p.
- *484. The granites of Connecticut, by T. N. Dale and H. E. Gregory. 1911. 137 p. (See also Bulletin 738.)
- *485. A geologic reconnaissance of the Iliamna region, Alaska, by G. C. Martin and F. J. Katz. 1912. 138 p.
- *486. Results of spirit leveling in Colorado, 1896 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 107 p. (See also Bulletin 565.)
- *487. Results of spirit leveling in Idaho, 1896 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 46 p. (See also Bulletin 567.)
- *488. Results of spirit leveling in Nevada, 1897 to 1909, inclusive; R. B. Marshall, chief geographer. 1911. 28 p. (See also Bulletin 654.)
- *489. Results of spirit leveling in Utah, 1897 to 1910, inclusive; R. B. Marshall, chief geographer. 1911. 38 p. (See also Bulletin 566.)
- *490. Mineralogical notes, series 1, by W. T. Schaller. 1911. 109 p.
- *491. The data of geochemistry (second edition), by F. W. Clarke. 1911. 782 p. (See also Bulletins 616, 695, and 770.)
- *492. The gabbros and associated rocks at Preston, Conn., by G. F. Loughlin, 1912. 158 p.
- *493. Results of spirit leveling in Illinois, 1909 and 1910; R. B. Marshall, chief geographer. 1911. 115 p. (See also Bulletins 421, 553, 672 and 930-A, B, C, and D.)
- *494. The New Madrid earthquake, by M. L. Fuller. 1912. 119 p.
- *495. Bibliography of North American geology for 1910, with subject index, by J. M. Nickles. 1911. 179 p.
- *496. Results of triangulation and primary traverse for the years 1909 and 1910; R. B. Marshall, chief geographer. 1912. 392 p.
- *497. A reconnaissance of the Jarbidge, Contact, and Elk Mountain mining districts, Elko County, Nev., by F. C. Schrader. 1912. 162 p.
- *498. Headwater regions of Gulkana and Susitna Rivers, Alaska, with accounts of the Valdez Creek and Chistochina placer districts, by F. H. Moffit. 1912. 82 p.
- *499. Coal near the Black Hills, Wyo.-S. Dak., by R. W. Stone. 1912. 66 p.
- *500. Geology and coal fields of the lower Matanuska Valley, Alaska, by G. C. Martin and F. J. Katz. 1912. 98 p.
- *501. The Bonfield region, Alaska, by S. R. Capps. 1912. 64 p.
- *502. The Eagle River region, southeastern Alaska, by Adolph Knopf. 1912. 61 p.
- *503. Iron-ore deposits of the Eagle Mountains, Calif., by E. C. Harder. 1912. 81 p.
- *504. The Sitka mining district, Alaska, by Adolph Knopf. 1912. 32 p.
- *505. Mining laws of Australia and New Zealand, by A. C. Veatch, with a preface, by W. L. Fisher, Secretary of the Interior. 1911. 180 p.
- *506. Geology and mineral resources of the Peoria quadrangle, Ill., by J. A. Uddeh. 1912. 103 p.
- *507. The mining districts of the Western United States, by J. M. Hill, with a geologic introduction, by Waldemar Lindgren. 1912. 309 p.
- *508. The Onondaga fauna of the Allegheny region, by E. M. Kindle. 1912. 144 p.
- *509. Mineralogical notes, series 2, by W. T. Schaller. 1912. 115 p.
- *510. Coal fields of Grand Mesa and the West Elk Mountains, Colo., by W. T. Lee. 1912. 237 p.
- *511. Alunite--a newly discovered deposit near Marysville, Utah, by B. S. Butler and H. S. Gale. 1912. 64 p.
- *512. Potash-bearing rocks of the Leucite Hills, Sweetwater County, Wyo., by A. R. Schultz and Whitman Cross. 1912. 39 p.
- *513. Pliocene and Pleistocene Foraminifera from southern California, by R. M. Bagg, Jr. 1912. 153 p.
- *514. Results of spirit leveling in New York, 1906 to 1911, inclusive; R. B. Marshall, chief geographer. 1912. 139 p. (See also Bulletin 671.)
- *515. Results of spirit leveling in Pennsylvania, 1899 to 1911, inclusive; R. B. Marshall, chief geographer. 1912. 164 p.
- *516. Results of spirit leveling in Florida, 1911; R. B. Marshall, chief geographer. 1912. 24 p.
- *517. Results of spirit leveling in Alabama, 1911; R. B. Marshall, chief geographer. 1912. 38 p.
- *518. Results of spirit leveling in Ohio, 1911; R. B. Marshall, chief geographer. 1912. 108 p. (See also Bulletin 651.)
- *519. Results of spirit leveling in Tennessee, 1910 and 1911; R. B. Marshall, chief geographer. 1912. 45 p.
- *520-A. Preface, by A. H. Brooks, 1912, p. 5-6; Administrative report, by A. H. Brooks, 1912, p. 7-16; The mining industry in 1911, by A. H. Brooks, 1912, p. 17-44; Railway routes from the Pacific seaboard to Fairbanks, by A. H. Brooks, 1912, p. 45-88; Recent Survey publications on Alaska, 1912, p. 353-360.

- *520-B. Tin resources of Alaska, by F. L. Hess, 1912, p. 89-92.
- *520-C. The Taral and Bremner River districts, by F. H. Moffitt, 1912, p. 93-104; The Chitina copper district, by F. H. Moffitt, 1912, p. 105-107.
- *520-D. Gold deposits near Valdez, by A. H. Brooks, 1912, p. 108-130.
- *520-E. Gold deposits of the Seward-Sunrise region, Kenai Peninsula, by B. L. Johnson, 1912, p. 131-173.
- *520-F. Gold placers of the Yentna district, by S. R. Capps, 1912, p. 174-200.
- *520-G. Gold placers between Woodchopper and Fourth of July Creeks, upper Yukon River, by L. M. Prindle and J. B. Mertie, Jr., 1912, p. 201-210.
- *520-H. Placer mining in the Fortymile, Eagle, and Seventymile River districts, by E. A. Porter, 1912, p. 211-218; Water supply of the Fortymile, Seventymile, and Eagle districts, by E. A. Porter, 1912, p. 219-239; Placer mining in the Fairbanks and Circle districts, by C. E. Ellsworth, 1912, p. 240-245; Water supply of the Fairbanks, Salchaket, and Circle districts, by C. E. Ellsworth, 1912, p. 246-270.
- *520-I. The Rampart and Hot Springs regions, by H. M. Eakin, 1912, p. 271-286.
- *520-J. The Ruby placer district, by A. G. Maddren, 1912, p. 287-296.
- *520-K. Geologic investigations along the Canada-Alaska boundary, by A. G. Maddren, 1912, p. 297-314.
- *520-L. The Altna-Noatak region, by P. S. Smith, 1912, p. 315-338.
- *520-M. Notes on mining in Seward Peninsula, by P. S. Smith, 1912, p. 339-344; Index, 1912, p. 345-352. (Bulletin 520 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1911, and also as separate chapters, for which pagination of volume has been used above.)
- *521. The commercial marbles of western Vermont, by T. N. Dale, 1912, 170 p.
- *522. Portland cement materials and industry in the United States, by E. C. Eckel, with contributions, by E. F. Burchard and others, 1913, 401 p.
- *523. Nitrate deposits, by H. S. Gale, 1912, 36 p. (See also Bulletin 838.)
- *524. Bibliography of North American geology for 1911, with subject index, by J. M. Nickles, 1912, 162 p.
- *525. A geologic reconnaissance of the Fairbanks quadrangle, Alaska, by L. M. Prindle, with a detailed description of the Fairbanks district, by L. M. Prindle and F. J. Katz, and an account of lode mining near Fairbanks, by P. S. Smith, 1913, 220 p.
- *526. Coastal glaciers of Prince William Sound and Kenai Peninsula, Alaska, by U. S. Grant and D. F. Higgins, 1913, 75 p.
- *527. Ore deposits of the Helena mining region, Mont., by Adolph Knopf, 1913, 143 p.
- *528. Geology and ore deposits of Lemhi County, Idaho, by J. B. Umpleby, 1913, 182 p.
- *529. The enrichment of sulphide ores, by W. H. Emmons, 1913, 260 p. (See also Bulletin 625.)
- *530. Contributions to economic geology (short papers and preliminary reports), 1911, Part I, Metals and nonmetals except fuels; Waldemar Lindgren, chief geologist, 1913, 400 p. [This bulletin was issued as a single volume and also as chapters, which failed to follow any systematic page or subject arrangement. The small letters used here are not chapter letters but rather have been assigned to facilitate the indexing and follow the pagination of the volume.]
 - *a. Introduction, 1913, p. 7-8; Gold and Silver.--Notes on the gold lodes of the Carrville district, Trinity County, Calif., by D. F. MacDonald, 1913, p. 9-41; A preliminary report on the geology and ore deposits of Creede, Colo., by W. H. Emmons and E. S. Larsen, Jr., 1913, p. 42-65; A preliminary account of the ore deposits of the Loon Creek district, Idaho, by J. B. Umpleby, 1913, p. 66-74; Geology of the St. Joe-Clearwater region, Idaho, by F. C. Calkins and E. L. Jones, Jr., 1913, p. 75-86; Notes on the Antelope district, Nev., by F. C. Schrader, 1913, p. 87-98; Notes on the northern La Sal Mountains, Grand County, Utah, by J. M. Hill, 1913, p. 99-118; Survey publications on gold and silver, 1913, p. 119-124.
 - *b. Copper.--The Turquoise copper-mining district, Ariz., by F. L. Ransome, 1913, p. 125-134; Survey publications on copper, 1913, p. 135-137; Lead and Zinc.--Survey publications on lead and zinc, 1913, p. 138-141.
 - *c. Rare Metals.--Notes on the vanadium deposits near Placerville, Colo., by F. L. Hess, 1913, p. 142-156; Vanadium in the Sierra de los Caballos, N. Mex., by F. L. Hess, 1913, p. 157-160; Carnotite near Green River, Utah, by F. L. Hess, 1913, p. 161-164; Zirconiferous sandstone near Ashland, Va., by T. L. Watson and F. L. Hess, 1913, p. 165-171; Survey publications on antimony, chromium, monazite, nickel, platinum, quicksilver, tin, tungsten, uranium, vanadium, etc., 1913, p. 172-174; Iron and Manganese.--Survey publications on iron and manganese ores, 1913, p. 175-178.
 - *d. Aluminum Ores.--Alunite in the San Cristobal quadrangle, Colo., by E. S. Larsen, Jr., 1913, p. 179-183; Survey publications on aluminum ores-bauxite, cryolite, etc., 1913, p. 184.
 - *e. Structural Materials.--Notes on the clays of Delaware, by G. C. Matson, 1913, p. 185-201; Clay in the Portland region, Maine, by F. J. Katz, 1913, p. 202-206; Developed deposits of fuller's earth in Arkansas, by H. D. Miser, 1913, p. 207-219; Gypsum along the west flank of the San Rafael Swell, Utah, by C. T. Lupton, 1913, p. 221-231; Geology of the salt and gypsum deposits of southwestern Virginia, by G. W. Stose, 1913, p. 232-255; Survey publications on building stone and road metal, 1913, p. 256-257; Survey publications on cement and concrete materials, 1913, p. 258-259; Survey publications on clays, etc., 1913, p. 260-261; Survey publications on gypsum and plasters, 1913, p. 262; Survey publications on glass sand and glass-making materials, 1913, p. 263; Survey publications on lime and magnesite, 1913, p. 264; Survey publications on asphalt, 1913, p. 265; Survey publications on abrasive materials, 1913, p. 266.
 - *f. Phosphates.--A geologic reconnaissance in southeastern Idaho, by A. R. Schultz and R. W. Richards, 1913, p. 267-284; Some further discoveries of rock phosphate in Montana, by J. T. Pardee, 1913, p. 285-291; Survey publications on phosphates and other mineral fertilizers, 1913, p. 292-293; Mineral Paints.--Survey publications on mineral paint, 1913, p. 294.

- *g. Salines.--The search for potash in the United States--a report of progress, by H. S. Gale. (Revision published in volume as "The search for potash in the desert basin region," 1913, p. 295-312.); The occurrence of potash salts in the bitterns of the eastern United States, 1913, by W. C. Phalen, 1913, p. 313-329; Exploration of salines in Silver Peak Marsh, Nev., by R. B. Dole, 1913, p. 330-345; Survey publications on salines, including salt, borax, and soda, 1913, p. 346.
- *h. Sulphur and Pyrite.--A sulphur deposit in the San Rafael Canyon, Utah, by F. L. Hess, 1913, p. 347-349; Sulphur deposits of Sunlight Basin, Wyo., by D. F. Hewett, 1913, p. 350-362; Two sulphur deposits in Mineral County, Colo., by E. S. Larsen, Jr. and J. F. Hunter, 1913, p. 363-369; Survey publications on sulphur and pyrite, 1913, p. 370.
- *i. Miscellaneous Nonmetallic Products.--Graphite near Raton, N. Mex., by W. T. Lee, 1913, p. 371-374; Mica in Idaho, New Mexico, and Colorado, by D. B. Sterrett, 1913, p. 375-390; Survey publications on miscellaneous nonmetallic products, asbestos, barite, feldspar, fluorspar, graphite, mica, quartz, etc., 1913, p. 391-392; Index, 1913, p. 393-400.
- *531-A. Petroleum and Natural Gas.--Introduction, 1913, p. 7; The Menifee gas field and the Ragland oil field, Ky., by M. J. Munn, 1913, p. 9-26.
- *531-B. Oil and gas development in north-central Oklahoma, by R. H. Wood, 1913, p. 27-53.
- *531-C. Geology and petroleum resources of the De Beque oil field, Colo., by E. G. Woodruff, 1913, p. 54-68.
- *531-D. Geologic structure of the Punxsutawney, Curwensville, Houtzdale, Barnesboro, and Patton quadrangles, central Pennsylvania, by G. H. Ashley and M. R. Campbell, 1913, p. 69-89.
- *531-E. Coal and Lignite.--The Williston lignite field, Williams County, N. Dak., by F. A. Herald, 1913, p. 91-157.
- *531-F. The Little Sheep Mountain coal field, Dawson, Custer, and Rosebud counties, Mont., by G. S. Rogers, 1913, p. 159-227.
- *531-G. Coal in the Tertiary lake beds of southwestern Montana, by J. T. Pardee, 1913, p. 229-244.
- *531-H. Coal at Horseshoe Bend and Jerusalem Valley, Boise County, Idaho, by C. F. Bowen, 1913, p. 245-251; Lignite in the Goose Creek district, Cassia County, Idaho, by C. F. Bowen, 1913, p. 252-262.
- *531-I. The Barber coal field, Johnson County, Wyo., by C. H. Wegemann, 1913, p. 263-284.
- *531-J. The Cerrillos coal field, Santa Fe County, N. Mex., by W. T. Lee, 1913, p. 285-312.
- *531-K. The Coaldale coal field, Esmeralda County, Nev., by J. H. Hance, 1913, p. 313-322.
- *531-L. Coal resources of Cowlitz River valley, Cowlitz and Lewis counties, Wash., by A. J. Collier, 1913, p. 323-330.
- *531-M. Miscellaneous analyses of coal samples from various fields of the United States, 1913, p. 331-355; Index, 1913, p. 357-361.
(Bulletin 531 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1911, Part II, Mineral fuels, and also as separate chapters, for which pagination of volume has been used above.)
- *532. The Koyukuk-Chandalar region, Alaska, by A. G. Maddren, 1913, 119 p.
- *533. Geology of the Nome and Grand Central quadrangles, Alaska, by F. H. Moffit, 1913, 140 p.
- *534. The Yentna district, Alaska, by S. R. Capps, 1913, 75 p.
- *535. A geologic reconnaissance of a part of the Rampart quadrangle, Alaska, by H. M. Eakin, 1913, 38 p.
- *536. The Noatak-Kobuk region, Alaska, by P. S. Smith, 1913, 160 p.
- *537. The classification of the public lands, by G. O. Smith and others, 1913, 197 p.
- *538. A geologic reconnaissance of the Circle quadrangle, Alaska, by L. M. Prindle, 1913, 82 p.
- *539. Some ore deposits in northwestern Custer County, Idaho, by J. B. Umpleby, 1913, 104 p.
- *540-A. Gold and Silver.--Introduction, 1914, p. 9-10; Auriferous gravels in the Weaverville quadrangle, Calif., by J. S. Diller, 1914, p. 11-21; Gold lodes of the Weaverville quadrangle, Calif., by H. G. Ferguson, 1914, p. 22-79.
- *540-B. Mineral resources of the Inyo and White mountains, Calif., by Adolph Knopf, 1914, p. 81-120.
- *540-C. The ore deposits of Kirwin, Wyo., by D. F. Hewett, 1914, p. 121-132; Survey publications on gold and silver, 1914, p. 133-138.
- *540-D. Copper.--Copper deposits near Superior, Ariz., by F. L. Ransome, 1914, p. 139-158; Copper deposits of the White Mesa district, Ariz., by J. M. Hill, 1914, p. 159-163; Survey publications on copper, 1914, p. 164-166.
- *540-E. Lead and Zinc.--Economic geology of the region around Mullan, Idaho, and Salt Lake, Mont., by F. C. Calkins and E. L. Jones, Jr., 1914, p. 167-211; The lead-silver deposits of the Dome district, Idaho, by J. B. Umpleby, 1914, p. 212-222.
- *540-F. The Yellow Pine mining district, Clark County, Nev., by J. M. Hill, 1914, p. 223-274; Survey publications on lead and zinc, 1914, p. 275-278.
- *540-G. Iron and Manganese.--Preliminary report on the red iron ores of east Tennessee, northeast Alabama, and northwest Georgia, by E. F. Burchard, 1914, p. 279-328.
- *540-H. Titaniferous magnetite beds on the Blackfoot Indian Reservation, Mont., by Eugene Stebinger, 1914, p. 329-337; Recent discoveries of "Clinton" iron ore in eastern Wisconsin, by F. T. Thwaites, 1914, p. 338-342; Survey publications on iron and manganese ores, 1914, p. 343-345.
- *540-I. Aluminum Ores.--Alunite in granite porphyry near Patagonia, Ariz., by F. C. Schrader, 1914, p. 347-350; Alunite at Bovard, Nev., by F. C. Schrader, 1914, p. 351-356; Survey publications on aluminum ores--bauxite, cryolite, etc., 1914, p. 357.
- *540-J. Omitted.
- *540-K. Structural Materials, etc.--The Aberdeen granite quarry near Gunnison, Colo., by J. F. Hunter, 1914, p. 359-362; Ornamental marble near Barstow, Calif., by R. W. Pack, 1914, p. 363-368; Clay in northeastern Montana, by C. M. Bauer, 1914, p. 369-372; Survey publications on building stone

- and road metal, 1914, p. 373-374; Survey publications on cement and cement and concrete materials, 1914, p. 375-376; Survey publications on clays, fuller's earth, etc., 1914, p. 377-379; Survey publications on gypsum and plasters, 1914, p. 380; Survey publications on glass sand and glass-making materials, 1914, p. 381; Survey publications on lime and magnesite, 1914, p. 382.
- *540-L. Phosphate Rock.--Phosphate deposits in southwestern Virginia, by G. W. Stose, 1914, p. 383-396; Survey publications on phosphates and other mineral fertilizers, 1914, p. 397-398.
- *540-M. Omitted.
- *540-N. Salines.--Notes on the Quaternary lakes of the Great Basin, with special reference to the deposition of potash and other salines, by H. S. Gale, 1914, p. 399-406; Prospecting for potash in Death Valley, Calif., by H. S. Gale, 1914, p. 407-415; Salt, borax, and potash in Saline Valley, Inyo County, Calif., by H. S. Gale, 1914, p. 416-421; Potash tests at Columbus Marsh, Nev., by H. S. Gale, 1914, p. 422-427; Sodium sulphate in the Carrizo Plain, San Luis Obispo County, Calif., by H. S. Gale, 1914, p. 428-433.
- *540-O. Borate deposits in Ventura County, Calif., by H. S. Gale, 1914, p. 434-456.
- *540-P. Potash in western saline deposits, by J. H. Hance, 1914, p. 457-469.
- *540-Q. Niter near Melrose, Mont., by R. W. Richards, 1914, p. 470-473; Survey publications on salines, including salt, borax, and soda, 1914, p. 474-475.
- *540-R. Sulphur and Pyrite.--Sulphur deposits in Park County, Wyo., by D. F. Hewett, 1914, p. 477-480; Survey publications on sulphur and pyrite, 1914, p. 481.
- *540-S. Late developments of magnesite deposits in California and Nevada, by H. S. Gale, 1914, p. 483-520.
- *540-T. Celestite deposits in California and Arizona, by W. C. Phalen, 1914, p. 521-533.
- *540-U. New areas of diamond-bearing peridotite in Arkansas, by H. D. Miser, 1914, p. 534-546; Survey publications on antimony, chromium, monazite, nickel, platinum, quicksilver, tin, tungsten, uranium, vanadium, etc., 1914, p. 547-549; Survey publications on asphalt, 1914, p. 550; Survey publications on abrasive materials, 1914, p. 551; Survey publications on mineral paint, 1914, p. 552; Survey publications on miscellaneous nonmetallic products--asbestos, barite, feldspar, fluorspar, graphite, mica, quartz, etc., 1914, p. 553-554; Index, 1914, p. 555-563.
(Bulletin 540 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1912, Part I, Metals and nonmetals except fuels, and also as separate chapters, for which pagination of volume has been used above.)
- *541-A. Introduction, 1914, p. 7; Oil and gas in the northern part of the Cadiz quadrangle, Ohio, by D. D. Condit, 1914, p. 9-17; Gas from mud lumps at the mouths of the Mississippi, by E. W. Shaw, 1914, p. 19-22.
- *541-B. Structure of the Fort Smith-Poteau gas field, Ark. and Okla., by C. D. Smith, 1914, p. 23-33; The Glenn oil and gas pool and vicinity, Okla., by C. D. Smith, 1914, p. 34-48.
- *541-C. The Douglas oil and gas field, Converse County, Wyo., by V. H. Barnett, 1914, p. 49-88; The Shoshone River section, Wyo., by D. F. Hewett, 1914, p. 89-113.
- *541-D. Oil and gas near Green River, Grand County, Utah, by C. T. Lupton, 1914, p. 115-133; Petroleum near Dayton, N. Mex., by G. B. Richardson, 1914, p. 135-140.
- *541-E. Reconnaissance of the Barstow-Kramer region, Calif., by R. W. Pack, 1914, p. 141-154.
- *541-F. Rhode Island anthracite, by G. H. Ashley, 1914, p. 155-162; Coking coal in Powell Mountain, Scott County, Va., by M. R. Campbell, 1914, p. 163-164; The coal resources and general geology of the Pound quadrangle of Virginia and Kentucky, by Charles Butts, 1914, p. 165-221; The coal resources of a part of northeastern Missouri, by F. C. Greene, 1914, p. 223-242.
- *541-G. The Cannonball River lignite field, Morton, Adams, and Mettinger counties, N. Dak., by E. R. Lloyd, 1914, p. 243-291.
- *541-H. Lignite in the vicinity of Plentywood and Scobey, Sheridan County, Mont., by C. M. Bauer, 1914, p. 293-315; Geology and coal resources of the area southwest of Custer, Yellowstone and Bighorn counties, Mont., by G. S. Rogers, 1914, p. 316-328; Coal discovered in a reconnaissance survey between Musselshell and Judith, Mont., by C. F. Bowen, 1914, p. 338-355; The Big Sandy coal field, Chouteau County, Mont., by C. F. Bowen, 1914, p. 356-378.
- *541-I. The Horseshoe Creek district of the Teton Basin coal field, Fremont County, Idaho, by E. G. Woodruff, 1914, p. 379-388; The Glacier coal field, Whatcom County, Wash., by E. G. Woodruff, 1914, p. 389-398; The Eden Ridge coal field, Coos County, Oreg., by C. E. Leshner, 1914, p. 399-418.
- *541-J. Geology and coal resources of the Sierra Blanca coal field, Lincoln and Otero counties, N. Mex., by C. H. Wegemann, 1914, p. 419-452; Coal near Thompson, Grand County, Utah, by F. R. Clark, 1914, p. 453-477; Coal near Wales, Sanpete County, Utah, by F. R. Clark, 1914, p. 478-489.
- *541-K. Analyses of coal samples from various fields of the United States, by M. R. Campbell, 1914, p. 491-526; Index, 1914, p. 527-532.
(Bulletin 541 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1912, Part II, Mineral fuels, and also as separate chapters, for which pagination of volume has been used above.)
- *542-A. Preface, by A. H. Brooks, 1913, p. 5-6; Administrative report, by A. H. Brooks, 1913, p. 7-17; The mining industry in 1912, by A. H. Brooks, 1913, p. 18-51.
- *542-B. Marble resources of Ketchikan and Wrangell districts, by E. F. Burchard, 1913, p. 52-77.
- *542-C. The McKinley Lake district, by Theodore Chapin, 1913, p. 78-80; Mining in Chitina Valley, by F. H. Moffit, 1913, p. 81-85.
- *542-D. Mineral deposits of the Ellamar district, by S. R. Capps and B. L. Johnson, 1913, p. 86-124.
- *542-E. Mineral deposits of Kodiak and the neighboring islands, by G. C. Martin, 1913, p. 125-136.

- *542-F. Lode mining near Fairbanks, by P. S. Smith, 1913, p. 137-202; Placer mining in the Yukon-Tanana region, by C. E. Ellsworth and R. W. Davenport, 1913, p. 203-222; Water supply of the Yukon-Tanana region, 1912, by C. E. Ellsworth and R. W. Davenport, 1913, p. 223-278.
- *542-G. Gold placers of the Ruby district, by H. M. Eakin, 1913, p. 279-292; Gold placers of the Innokolditarod region, by H. M. Eakin, 1913, p. 293-303; Index, 1913, p. 305-308.
(Bulletin 542 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1912, and also as separate chapters.)
- *543. Geology and geography of a portion of Lincoln County, Wyo., by A. R. Schultz, 1914, 141 p.
- *544. Fauna of the Wewoka formation of Oklahoma, by G. H. Girty, 1915, 353 p.
- *545. Bibliography of North American geology for 1912, with subject index, by J. M. Nickles, 1913, 192 p.
- *546. Mineral resources of southwestern Oregon, by J. S. Diller, 1914, 147 p.
- *547. Reconnaissance of the Grandfield district, Okla., by M. J. Munn, 1914, 85 p.
- *548. Electric activity in ore deposits, by R. C. Wells, 1914, 78 p.
- *549. The Shinumo quadrangle, Grand Canyon district, Ariz., by L. F. Noble, 1914, 100 p.
- *550. The ore deposits of northeastern Washington, by Howland Bancroft, including a section on the Republic mining district, by Waldemar Lindgren and Howland Bancroft, 1914, 215 p.
- *551. Results of triangulation and primary traverse, 1911 and 1912; R. B. Marshall, chief geographer. 1914, 396 p.
- *552. Results of triangulation and primary traverse in Ohio, 1898 to 1911, inclusive; R. B. Marshall, chief geographer. 1914, 232 p.
- *553. Results of spirit leveling in Illinois, 1911 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 110 p. (See also Bulletin 930.)
- *554. Results of spirit leveling in Kentucky, 1898 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 184 p. (See also Bulletin 673.)
- *555. Results of spirit leveling in Indiana, 1897 to 1911, inclusive; R. B. Marshall, chief geographer. 1913, 51 p.
- *556. Results of spirit leveling in Oregon, 1896 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 175 p.
- *557. Results of spirit leveling in the State of Washington, 1896 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 178 p. (See also Bulletin 674.)
- *558. Results of spirit leveling in Wyoming, 1896 to 1912, inclusive; R. B. Marshall, chief geographer. 1914, 148 p.
- *559. Results of spirit leveling in Michigan, 1911 and 1913; R. B. Marshall, chief geographer. 1914, 79 p. (See also Bulletin 461.)
- *560. Results of spirit leveling in Minnesota, 1897 to 1914, inclusive; R. B. Marshall, chief geographer. 1915, 190 p.
- *561. Results of spirit leveling in Hawaii, 1910 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 42 p.
- *562. Results of spirit leveling in Virginia, 1900 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 68 p.
- *563. Results of spirit leveling in Maryland, 1896 to 1911, inclusive; R. B. Marshall, chief geographer. 1914, 80 p.
- *564. Results of spirit leveling in Oklahoma, 1895 to 1912, inclusive; R. B. Marshall, chief geographer. 1914, 119 p.
- *565. Results of spirit leveling in Colorado, 1896 to 1914, inclusive; R. B. Marshall, chief geographer. 1915, 192 p.
- *566. Results of spirit leveling in Utah, 1897 to 1914, inclusive; R. B. Marshall, chief geographer. 1915, 77 p. (See also Bulletin 912.)
- *567. Results of spirit leveling in Idaho, 1896 to 1914, inclusive; R. B. Marshall, chief geographer. 1915, 130 p.
- *568. Results of spirit leveling in Missouri, 1896 to 1914, inclusive; R. B. Marshall, chief geographer. 1915, 219 p. (See also Bulletin 898.)
- *569. Results of spirit leveling in Iowa, 1896 to 1913, inclusive; R. B. Marshall, chief geographer. 1915, 126 p.
- *570. Results of spirit leveling in Wisconsin, 1897 to 1914, inclusive; R. B. Marshall, chief geographer. 1914, 86 p.
- *571. Results of spirit leveling in Kansas, 1896 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 47 p.
- *572. Results of spirit leveling in Nebraska, 1896 to 1913, inclusive; R. B. Marshall, chief geographer. 1914, 57 p.
- *573. Results of spirit leveling in Arizona, 1899 to 1915, inclusive; R. B. Marshall, chief geographer. 1915, 123 p.
- *574. Mining districts of the Dillon quadrangle, Mont., and adjacent areas, by A. N. Winchell, 1914, 191 p.
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- *580-A. The Darwin silver-lead mining district, Calif., by Adolph Knopf, 1915, p. 1-18.

- *580-B. Notes on the Unaweep copper district, Colo., by B. S. Butler, 1915, p. 19-23.
- *580-C. Some cerusite deposits in Custer County, Colo., by J. F. Hunter, 1915, p. 25-37.
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- *580-F. Some deposits of mica in the United States, by D. B. Sterrett, 1915, p. 65-125.
- *580-G. Gold placers on Wind and Bighorn Rivers, Wyo., by F. C. Schrader, 1915, p. 127-145.
- *580-H. Carnotite near Mauch Chunk, Pa., by E. T. Wherry, 1915, p. 147-151.
- *580-I. Lode deposits of the Alleghany district, Calif., by H. G. Ferguson, 1915, p. 153-182.
- *580-J. The phosphate deposits of South Carolina, by G. S. Rogers, 1915, p. 183-220.
- *580-K. Ore deposits in the Sawtooth quadrangle, Blaine and Custer Counties, Idaho, by J. B. Umpleby, 1915, p. 221-249.
- *580-L. Salines in the Owens, Searles, and Panamint basins, southeastern California, by H. S. Gale, 1915, p. 251-323.
- *580-M. The Rochester mining district, Nev., by F. C. Schrader, 1915, p. 325-372.
- *580-N. The Elliston phosphate field, Mont., by R. W. Stone and C. A. Bonine, 1915, p. 373-383.
- *580-O. The rutile deposits of the eastern United States, by T. L. Watson, 1915, p. 385-412.
- *580-P. Publications by Survey authors on metals and nonmetals except fuels, compiled by I. P. Evans, 1915, p. 413-455; Index, 1915, p. 457-462.
(Bulletin 580 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1913, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
- *581-A. Oil shale of northwestern Colorado and northeastern Utah, by E. G. Woodruff and D. T. Day, 1915, p. 1-21.
- *581-B. Oil and gas in the western part of the Olympic Peninsula, Wash., by C. T. Lupton, 1915, p. 23-81.
- *581-C. The Moorcroft oil field, Crook County, Wyo., by V. H. Barnett, 1915, p. 83-104; Possibilities of oil in the Big Muddy dome, Converse and Natrona counties, Wyo., by V. H. Barnett, 1915, p. 105-117.
- *581-D. Geology and oil prospects of Waltham, Priest, Bitterwater, and Peachtree Valleys, Calif., by R. W. Pack and W. A. English, 1915, p. 119-160.
- *581-E. The Coalville coal field, Utah, by C. H. Wegemann, 1915, p. 161-184; Index, 1915, p. 185-187; i-iv (including title page, contents, and list of illustrations of volume).
(Bulletin 581 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1913, Part II, Mineral fuels, and also as separate chapters.)
- *582. Mineral deposits of the Santa Rita and Patagonia Mountains, Ariz., by F. C. Schrader, with contributions, by J. M. Hill, 1915, 373 p.
- *583. Colorado ferberite and the wolframite series, by F. L. Hess and W. T. Schaller, 1914, 75 p.
- *584. Bibliography of North American geology for 1913, with subject index, by J. M. Nickles, 1914, 183 p.
- *585. Useful minerals of the United States, compiled by Samuel Sanford and R. W. Stone, 1914, 250 p. (See also Bulletin 624.)
- *586. Slate in the United States, by T. N. Dale and others, 1914, 220 p.
- *587. Geology and mineral resources of Kenai Peninsula, Alaska, by G. C. Martin, B. L. Johnson, and U. S. Grant, 1915, 243 p.
- *588. The constitution of the natural silicates, by F. W. Clarke, 1914, 128 p.
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- *591. Analyses of rocks and minerals from the laboratory of the United States Geological Survey, 1880 to 1914, tabulated by F. W. Clarke, chief chemist, 1915, 376 p.
- *592-A. Preface, by A. H. Brooks, 1914, p. 5-6; Administrative report, by A. H. Brooks, 1914, p. 7-17; The mineral deposits of Alaska, by A. H. Brooks, 1914, p. 18-44; The Alaskan mining industry in 1913, by A. H. Brooks, 1914, p. 45-74; Recent Survey publications on Alaska, 1914, p. i-xi.
- *592-B. Lode mining in the Ketchikan region, by P. S. Smith, 1914, p. 75-94.
- *592-C. Marble resources of the Juneau, Skagway, and Sitka districts, by E. F. Burchard, 1914, p. 95-107.
- *592-D. A barite deposit near Wrangell, by E. F. Burchard, 1914, p. 109-117.
- *592-E. Mineral deposits of the Yakataga district, by A. G. Maddren, 1914, p. 119-153.
- *592-F. Preliminary report on a water-power reconnaissance in south-central Alaska, by C. E. Ellsworth and R. W. Davenport, 1914, p. 155-193.
- *592-G. The Port Wells gold-lode district, by B. L. Johnson, 1914, p. 195-236; Mining on Prince William Sound, by B. L. Johnson, 1914, p. 237-243.
- *592-H. Gold lodes and placers of the Willow Creek district, by S. R. Capps, 1914, p. 245-272; Mineral resources of the upper Matanuska and Nelchina valleys, by G. C. Martin and J. B. Mertie, Jr., 1914, p. 273-299; Preliminary report on the Broad Pass region, by F. H. Moffitt, 1914, p. 301-305; Mining in the Valdez Creek placer district, by F. H. Moffitt, 1914, p. 307-308.
- *592-I. The Chisana placer district, by A. H. Brooks, 1914, p. 309-320.
- *592-J. Lode mining near Fairbanks, by Theodore Chapin, 1914, p. 321-355; Placer mining in the Yukon-Tanana region, by Theodore Chapin, 1914, p. 357-362; Placer mining in the Ruby district, by H. M. Eakin, 1914, p. 363-369.
- *592-K. Mineral resources of the Yukon-Koyukuk region, by H. M. Eakin, 1914, p. 371-384.
- *592-L. Placer mining on Seward Peninsula, by Theodore Chapin, 1914, p. 385-395; Lode developments on Seward Peninsula, by Theodore Chapin, 1914, p. 397-407; Index, 1914, p. 409-413.
(Bulletin 592 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1913, and also as separate chapters.)

- *593. The fauna of the Batesville sandstone of northern Arkansas, by G. H. Girty. 1915. 170 p.
- *594. Some mining districts in northeastern California and northwestern Nevada, by J. M. Hill. 1915. 200 p.
- *595. Fauna of the so-called Boone chert near Batesville, Ark., by G. H. Girty. 1915. 45 p.
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- *597. Geology of Massachusetts and Rhode Island, by B. K. Emerson. 1917. 285 p.
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- *599. Our mineral reserves--how to make America industrially independent, by G. O. Smith. 1914. 48 p.
- *600. The Glacier National Park, a popular guide to its geology and scenery, by M. R. Campbell. 1914. 54 p.
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- *605. The Ellamar district, Alaska, by S. R. Capps and B. L. Johnson. 1915. 125 p.
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- *610. Mineralogic notes, series 3, by W. T. Schaller. 1916. 164 p.
- *611. Guidebook of the western United States, Part A, The Northern Pacific Route, with a side trip to Yellowstone Park, by M. R. Campbell and others. 1915. 218 p., 27 route maps.
- *612. Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park, by W. T. Lee, R. W. Stone, H. S. Gale, and others. 1915. 244 p., 29 route maps.
- *613. Guidebook of the western United States, Part C, The Santa Fe Route, with a side trip to the Grand Canyon of the Colorado, by N. H. Darton and others. 1915. 200 p., 25 route maps.
- *614. Guidebook of the western United States, Part D, The Shasta Route and Coast Line, by J. S. Diller and others. 1915. 142 p., 19 route maps.
- *615. Rhode Island coal, by G. H. Ashley. 1915. 62 p.
- *616. The data of geochemistry (third edition), by F. W. Clarke. 1916. 821 p. (See also Bulletins 695 and 770.)
- *617. Bibliography of North American geology for 1914, with subject index, by J. M. Nickles. 1915. 167 p.
- *618. Geology and underground water of Luna County, N. Mex., by N. H. Darton. 1916. 188 p.
- *619. The Caddo oil and gas field, Louisiana and Texas, by G. C. Matson. 1916. 62 p.
- *620-A. A gold-platinum-palladium lode in southern Nevada, by Adolph Knopf, 1916, p. 1-18.
- *620-B. Nitrate deposits in southern Idaho and eastern Oregon, by G. R. Mansfield, 1916, p. 19-44.
- *620-C. Gold deposits near Quartzsite, Ariz., by E. L. Jones, Jr., 1916, p. 45-57.
- *620-D. Some cinnabar deposits in western Nevada, by Adolph Knopf, 1916, p. 59-68.
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- *620-F. Quicksilver deposits of the Mazatzal Range, Ariz., by F. L. Ransome, 1916, p. 111-128.
- *620-G. Iron-bearing deposits in Bossier, Caddo, and Webster parishes, La., by E. F. Burchard, 1916, p. 129-150.
- *620-H. A reconnaissance in the Kofa Mountains, Ariz., by E. L. Jones, Jr., 1916, p. 151-164.
- *620-I. A reconnaissance of the Cottonwood-American Fork mining region, Utah, by B. S. Butler and G. F. Loughlin, with notes on history and production, by V. C. Heikes, 1916, p. 165-226.
- *620-J. Potash in certain copper and gold ores, compiled by B. S. Butler, with a note on muscovite, by George Steiger, 1916, p. 227-236.
- *620-K. Recent alunite developments near Marysvale and Beaver, Utah, by G. F. Loughlin, 1916, p. 237-270.
- *620-L. Notes on the fine gold of Snake River, Idaho, by J. M. Hill, 1916, p. 271-294.
- *620-M. Preliminary report on the economic geology of Gilpin County, Colo., by E. S. Bastin and J. M. Hill, 1916, p. 295-323.
- *620-N. The Aztec gold mine, Baldy, N. Mex., by W. T. Lee, 1916, p. 325-330.
- *620-O. A reconnaissance for phosphate in the Salt River Range, Wyo., by G. R. Mansfield, 1916, p. 331-349.
- *620-P. Cassiterite in San Diego County, Calif., by W. T. Schaller, 1916, p. 351-354; Index, 1916, p. 355-361.
(Bulletin 620 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1915, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
- *621-A. Field apparatus for determining ash in coal, by C. E. Leshner, 1916, p. 1-12.
- *621-B. The Healdton oil field, Carter County, Okla., by C. H. Wegemann and K. C. Heald, 1916, p. 13-30.
- *621-C. The Loco gas field, Stephens and Jefferson counties, Okla., by C. H. Wegemann, 1916, p. 31-42.
- *621-D. The Duncan gas field, Stephens County, Okla., by C. H. Wegemann, 1916, p. 43-50.
- *621-E. A reconnaissance in Palo Pinto County, Tex., with special reference to oil and gas, by C. H. Wegemann, 1916, p. 51-59.

- *621-F. Possibilities of oil in the Porcupine dome, Rosebud County, Mont., by C. F. Bowen, 1916, p. 61-70.
- *621-G. The Lawton oil and gas field, Okla., by C. H. Wegemann and R. W. Howell, 1916, p. 71-85.
- *621-H. Anticlines in the Clinton sand near Wooster, Wayne County, Ohio, by C. A. Bonine, 1916, p. 87-98.
- *621-I. The Orofino coal field, Clearwater, Lewis, and Idaho counties, Idaho, by C. T. Lupton, 1916, p. 99-108.
- *621-J. A reconnaissance for oil near Quanah, Hardeman County, Tex., by C. H. Wegemann, 1916, p. 109-115.
- *621-K. Geology and coal resources of northern Teton County, Mont., by Eugene Stebinger, 1916, p. 117-156.
- *621-L. Oil and gas near Basin, Big Horn County, Wyo., by C. T. Lupton, 1916, p. 157-190.
- *621-M. Geology and oil prospects of Cuyama Valley, Calif., by W. A. English, 1916, p. 191-215.
- *621-N. Structure of the Berea oil sand in the Summerfield quadrangle, Guernsey, Noble, and Monroe counties, Ohio, by D. D. Condit, 1916, p. 217-231.
- *621-O. Structure of the Berea oil sand in the Woodsfield quadrangle, Belmont, Monroe, Noble, and Guernsey counties, Ohio, by D. D. Condit, 1916, p. 233-249.
- *621-P. Analyses of coal samples from various parts of the United States, by M. R. Campbell and F. R. Clark, 1916, p. 251-370; Index, 1916, p. 371-375; i-vii (including title page, contents, and list of illustrations of volume).
(Bulletin 621 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1915, Part II, Mineral fuels, and also as separate chapters.)
- *622-A. Preface, by A. H. Brooks, 1915, p. 5-6; Administrative report, by A. H. Brooks, 1915, p. 7-14; The Alaskan mining industry in 1914, by A. H. Brooks, 1915, p. 15-68; The future of gold placer mining in Alaska, by A. H. Brooks, 1915, p. 69-79; Recent Survey publications on Alaska, 1915, p. i-xi.
- *622-B. Tin mining in Alaska, by H. M. Eakin, 1915, p. 81-94.
- *622-C. Mining in the Juneau region, by H. M. Eakin, 1915, p. 95-102.
- *622-D. Mineral deposits of the Kotsina-Kuskulana district, with notes on mining in Chitina Valley, by F. H. Moffit, 1915, p. 103-117; Auriferous gravels of the Nelchina-Susitna region, by Theodore Chapin, 1915, p. 118-130.
- *622-E. Mining on Prince William Sound, by B. L. Johnson, 1915, p. 131-139; The gold and copper deposits of the Port Valdez district, by B. L. Johnson, 1915, p. 140-188.
- *622-F. Mineral resources of the Chisana-White River district, by S. R. Capps, 1915, p. 189-228.
- *622-G. Mining in the Fairbanks districts, by H. M. Eakin, 1915, p. 229-238; Mining in the Hot Springs district, by H. M. Eakin, 1915, p. 239-245.
- *622-H. Mineral resources of the Lake Clark-Iditarod region, by P. S. Smith, 1915, p. 247-271; Quick-silver deposits of the Kuskokwim region, by P. S. Smith and A. G. Maddren, 1915, p. 272-291; Gold placers of the lower Kuskokwim, with a note on copper in the Russian Mountains, by A. G. Maddren, 1915, p. 292-360.
- *622-I. Iron-ore deposits near Nome, by H. M. Eakin, 1915, p. 361-365; Placer mining in Seward Peninsula, by H. M. Eakin, 1915, p. 366-373; Index, 1915, p. 375-380.
(Bulletin 622 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1914, and also as separate chapters.)
- *623. Petroleum withdrawals and restorations affecting the public domain, by M. W. Ball; compilation by L. W. Stockbridge. 1916. 427 p. Appendix A. 1916, p. 429-444.
- *624. Useful minerals of the United States, compiled by F. C. Schrader, R. W. Stone, and Samuel Sanford. 1917. 412 p. (Revision of Bulletin 585.)
- *625. The enrichment of ore deposits, by W. H. Emmons. 1917. 530 p.
- *626. The Atlantic gold district and the North Laramie Mountains, Fremont, Converse, and Albany counties, Wyo., papers by A. C. Spencer, 1916, 85 p.
Contains: Preface, by F. L. Ransome, 1916, p. 7-8; The Atlantic gold district, Fremont County, Wyo., by A. C. Spencer, 1916, p. 9-45; Economic geology of the North Laramie Mountains, Converse and Albany counties, Wyo., by A. C. Spencer, 1916, p. 47-81; Index, 1916, p. 83-85.
- *627. The lignite field of northwestern South Dakota, by D. E. Winchester, C. J. Hares, E. R. Lloyd, and E. M. Parks. 1916. 169 p.
- *628. Geology and coal resources of Castle Valley in Carbon, Emery, and Sevier counties, Utah, by C. T. Lupton, 1916. 88 p.
- *629. Natural gas resources of parts of north Texas: Gas in the area north and west of Fort Worth, by E. W. Shaw; Gas prospects south and southeast of Dallas, by G. C. Matson; with Notes on the gas fields of central and southern Oklahoma, by C. H. Wegemann, 1916. 129 p.
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- *630. The Chisana-White River district, Alaska, by S. R. Capps. 1916. 130 p.
- *631. The Yukon-Koyukuk region, Alaska, by H. M. Eakin. 1916. 88 p.
- *632. Spirit leveling in West Virginia, 1896 to 1915, inclusive; R. B. Marshall, chief geographer. 1916. 168 p.
- *633. Spirit leveling in Maine, 1899-1915; R. B. Marshall, chief geographer. 1916. 64 p.
- *634. Spirit leveling in Louisiana, 1903 to 1915, inclusive; R. B. Marshall, chief geographer. 1916. 101 p.

- *635. Spirit leveling in Georgia, 1896 to 1914, inclusive; R. B. Marshall, chief geographer. 1916. 60 p.
- *636. Spirit leveling in Arkansas, 1896 to 1915, inclusive; R. B. Marshall, chief geographer. 1916. 56 p.
- *637. Spirit leveling in Texas, 1896 to 1915, inclusive; R. B. Marshall, chief geographer. 1916. 254 p.
- *638. Spirit leveling in New Mexico, 1902 to 1915, inclusive; R. B. Marshall, chief geographer. 1916. 112 p.
- *639. Spirit leveling in Mississippi, 1901 to 1915, inclusive; R. B. Marshall, chief geographer. 1916. 80 p.
- *640-A. Notes on the Promontory district, Utah, by B. S. Butler and V. C. Heikes, 1917, p. 1-10.
- *640-B. Reconnaissance of the Conconully and Ruby mining districts, Wash., by E. L. Jones, Jr., 1917, p. 11-36.
- *640-C. Some manganese mines in Virginia and Maryland, by D. F. Hewett, 1917, p. 37-71.
- *640-D. Molybdenite near Ramona, San Diego County, Calif., by F. C. Calkins, 1917, p. 73-76; An occurrence of nickel ore in San Diego County, Calif., by F. C. Calkins, 1917, p. 77-82.
- *640-E. Lode mining in the Quartzburg and Grimes Pass porphyry belt, Boise Basin, Idaho, by E. L. Jones, Jr., 1917, p. 83-111.
- *640-F. The Golden Arrow, Clifford, and Ellendale districts, Nye County, Nev., by H. G. Ferguson, 1917, p. 113-123.
- *640-G. Tin ore in northern Lander County, Nev., by Adolph Knopf, 1917, p. 125-138.
- *640-H. Gypsum in the southern part of the Bighorn Mountains, Wyo., by C. T. Lupton and D. D. Condit, 1917, p. 139-157.
- *640-I. The Gold Log mine, Talladega County, Ala., by E. S. Bastin, 1917, p. 159-161.
- *640-J. Placer deposits of the Manhattan district, Nev., by H. G. Ferguson, 1917, p. 163-193.
- *640-K. The Garrison and Phillipsburg phosphate fields, Mont., by J. T. Pardee, 1917, p. 195-228.
- *640-L. Lungsten deposits of northwestern Inyo County, Calif., by Adolph Knopf, 1917, p. 229-249; Index, 1917, p. 251-255; i-viii (including title page, contents, and list of illustrations of volume).
(Bulletin 640 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1916, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
- *641-A. Ozokerite in central Utah, by H. M. Robinson, 1917, p. 1-16.
- *641-B. The oil and gas geology of the Foraker quadrangle, Osage County, Okla., by K. C. Heald, 1917, p. 17-47.
- *641-C. Possibilities of oil and gas in north-central Montana, by Eugene Stebinger, 1917, p. 49-91.
- *641-D. Structure of the Vicksburg-Jackson area, Miss., with special reference to oil and gas, by O. B. Hopkins, 1917, p. 93-120.
- *641-E. An anticlinal fold near Billings, Noble County, Okla., by A. E. Fath, 1917, p. 121-138.
- *641-F. Oil shale in northwestern Colorado and adjacent areas, by D. E. Winchester, 1917, p. 139-198.
- *641-G. Geology of the Upper Stillwater Basin, Stillwater and Carbon counties, Mont.; with special reference to coal and oil, by W. R. Calvert, 1917, p. 199-214.
- *641-H. Geology of the Hound Creek district of the Great Falls coal field, Cascade County, Mont., by V. H. Barnett, 1917, p. 215-231.
- *641-I. Anticlines in central Wyoming, by C. J. Hares, 1917, p. 233-279.
- *641-J. Anticlines in the Blackfeet Indian Reservation, Mont., by Eugene Stebinger, 1917, p. 281-305.
- *641-K. Coals in the area between Bon Air and Clifty, Tenn., by Charles Butts, 1917, p. 307-310.
- *641-L. Oil resources of black shales of the eastern United States, by G. H. Ashley, 1917, p. 311-324; Index, 1917, p. 325-333; i-viii (including title page, contents, and list of illustrations of volume).
(Bulletin 641 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1916, Part II, Mineral fuels, and also as separate chapters.)
- *642-A. Preface, by A. H. Brooks, 1916, p. 5-6; Administrative report, by A. H. Brooks, 1916, p. 7-15; The Alaskan mining industry in 1915, by A. H. Brooks, 1916, p. 16-71; Recent Survey publications on Alaska, 1916, p. i-x.
- *642-B. Mining developments in southeastern Alaska, by Theodore Chapin, 1916, p. 73-104; Waterpower investigations in southeastern Alaska, by G. H. Canfield, 1916, p. 105-127.
- *642-C. Mineral resources of the upper Chitina Valley, by F. H. Moffit, 1916, p. 129-136.
- *642-D. Mining on Prince William Sound, by B. L. Johnson, 1916, p. 137-145.
- *642-E. The Turnagain-Knik region, by S. R. Capps, 1916, p. 147-194.
- *642-F. Gold mining in the Willow Creek district, by S. R. Capps, 1916, p. 195-200.
- *642-G. Preliminary report on the Tolovana district, by A. H. Brooks, 1916, p. 201-209.
- *642-H. Exploration in the Cosna-Nowitna region, by H. M. Eakin, 1916, p. 211-222; Mineral resources of the Ruby-Kuskokwim region, by J. B. Mertie, Jr. and G. L. Harrington, 1916, p. 223-266; Index 1916, p. 267-279.
(Bulletin 642 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1915, and also as separate chapters.)
- *643. Spirit leveling in South Dakota, 1896 to 1915, inclusive; R. B. Marshall, chief geographer. 1916. 100 p.
- *644-A. Primary traverse in Alabama and North Carolina, 1913-1915. 1916, p. 1-12.
- *644-B. Triangulation in Arizona and New Mexico, 1913-1915. 1916, p. 13-24.
- *644-C. Triangulation in California, 1913-1915. 1916, p. 25-84.
- *644-D. Triangulation in Colorado, Utah, Idaho, Montana, and Wyoming, 1913-1915. 1916, p. 85-223.
- *644-E. Primary traverse in Illinois, Wisconsin, Minnesota, North Dakota, and South Dakota, 1913-1915. 1916, p. 225-296.
- *644-F. Primary traverse in Indiana and Michigan, 1913-1915. 1916, p. 297-345.
- *644-G. Primary traverse in Iowa and Missouri, 1913-1915. 1916, p. 347-390.

- *644-H. Triangulation and primary traverse in Kentucky, Tennessee, and Arkansas, 1913-1915, 1916, p. 391-404.
- *644-I. Primary traverse in Louisiana and Mississippi, 1913-1915, 1916, p. 405-414.
- *644-J. Triangulation and primary traverse in Maine and Vermont, 1913-1915, 1916, p. 415, 417-421.
- *644-K. Primary traverse in Maryland and the District of Columbia, 1913-1915, 1916, p. 423-429.
- *644-L. Primary traverse in Nebraska, Kansas, and Oklahoma, 1913-1915, 1916, p. 431-446.
- *644-M. Triangulation in Nevada, 1913-1915, 1916, p. 447-472.
- *644-N. Triangulation and primary traverse in New York, New Jersey, and Pennsylvania, 1913-1915, 1916, p. 473-496.
- *644-O. Triangulation and primary traverse in Oregon, 1913-1915, 1916, p. 497-520.
- *644-P. Triangulation and primary traverse in Texas, 1913-1915, 1916, p. 521-597.
- *644-Q. Triangulation and primary traverse in Washington, 1913-1915, 1916, p. 599-608.
- *644-R. Triangulation and primary traverse in Virginia and West Virginia, 1913-1915, 1916, p. 609-632; Index, 1916, p. 633-555.
(Bulletin 644 was issued as a single volume, Triangulation and primary traverse, 1913-1915; R. B. Marshall, chief geographer, and also as separate chapters.)
- *645. Bibliography of North American geology for 1915, with subject index, by J. M. Nickles, 1916, 144 p.
- *646. Spirit leveling in North Carolina, 1896 to 1914, inclusive; R. B. Marshall, chief geographer. 1916, 71 p.
- *647. The Bull Mountain coal field, Musselshell and Yellowstone counties, Mont., by L. H. Woolsey, R. W. Richards, and C. T. Lupton. 1917, 218 p.
- *648. Notes on some mining districts in eastern Nevada, by J. M. Hill. 1916, 214 p.
- *649. Antimony deposits of Alaska, by A. H. Brooks. 1916, 67 p.
- *650. Geographic tables and formulas, fourth edition, compiled by S. S. Gannett. Reprinted with additions and corrections, 1924, 424 p. (Superseded in part by Bulletin 809.)
- *651. Spirit leveling in Ohio, 1898 to 1916, inclusive; R. B. Marshall, chief geographer. 1917, 456 p.
- *652. Tungsten minerals and deposits, by F. L. Hess. 1917, 85 p.
- *653. Chemical relations of the oil-field waters in San Joaquin Valley, Calif. (preliminary report), by G. S. Rogers. 1917, 119 p.
- *654. Spirit leveling in Nevada, 1897 to 1916, inclusive; R. B. Marshall, chief geographer. 1917, 91 p.
- *655. The Lake Clark-central Kuskokwim region, Alaska, by P. S. Smith. 1917, 162 p.
- *656. Anticlines in the southern part of the Bighorn Basin, Wyo. (a preliminary report on the occurrence of oil), by D. F. Hewett and C. T. Lupton. 1917, 192 p.
- *657. The use of the panoramic camera in topographic surveying, with notes on the application of photogrammetry to aerial surveys, by J. W. Bagley. 1917, 88 p.
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- *659. Cannel coal in the United States, by G. H. Ashley. 1918, 127 p.
- *660-A. Notes on the geology and iron ores of the Cuyuna district, Minn., by E. C. Harder and A. W. Johnston, 1918, p. 1-26.
- *660-B. Notes on the greensand deposits of the eastern United States, by G. H. Ashley, 1918, p. 27-49; Methods of analysis of greensand, by W. B. Hicks and R. K. Bailey, 1918, p. 51-58.
- *660-C. Manganese deposits of the Caddo Gap and De Queen quadrangles, Ark., by H. D. Miser, 1918, p. 59-122.
- *660-D. Tin resources of the Kings Mountain district, N. C. and S. C., by Arthur Keith and D. B. Sterrett, 1918, p. 123-146.
- *660-E. Louisiana clays, including the results of tests made in the laboratory of the Bureau of Standards at Pittsburgh, by G. C. Matson, 1918, p. 147-158.
- *660-F. Ore deposits of the northwestern part of the Garnet Range, Mont., by J. T. Pardee, 1918, p. 159-239.
- *660-G. The Dunkleberg mining district, Granite County, Mont., by J. T. Pardee, 1918, p. 241-247.
- *660-H. The antimonial silver-lead veins of the Arabia district, Nev., by Adolph Knopf, 1918, p. 249-255.
- *660-I. Strontianite deposits near Barstow, Calif., by Adolph Knopf, 1918, p. 257-270.
- *660-J. Possibilities for manganese ore on certain undeveloped tracts in the Shenandoah Valley, Va., by D. F. Hewett, G. W. Stose, F. J. Katz, and H. D. Miser, 1918, p. 271-296; Index, 1918, p. 297-304; i-viii (including title page, contents, and list of illustrations of volume).
(Bulletin 660 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1917, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
- *661-A. The Cleveland gas field, Cuyahoga County, Ohio, with a study of rock pressure, by G. S. Rogers, 1918, p. 1-68.
- *661-B. Structure of the northern part of the Bristow quadrangle, Creek County, Okla., with reference to petroleum and natural gas, by A. E. Fath, 1918, p. 69-99.
- *661-C. The De Soto-Red River oil and gas field, La., by G. C. Matson and O. B. Hopkins, 1918, p. 101-140.
- *661-D. The Irvine oil field, Estill County, Ky., by E. W. Shaw, 1918, p. 141-192.
- *661-E. The Bowdoin dome, Mont., a possible reservoir of oil or gas, by A. J. Collier, 1918, p. 193-209.
- *661-F. The Corsicana oil and gas field, Tex., by G. C. Matson and O. B. Hopkins, 1918, p. 211-252.
- *661-G. The Palestine salt dome, Anderson County, Tex., by O. B. Hopkins, 1918, p. 253-270; The Brenham salt dome, Washington and Austin counties, Tex., by O. B. Hopkins, 1918, p. 271-280.
- *661-H. Oil and gas possibilities of the Hatchetigbee anticline, Ala., by O. B. Hopkins, 1918, p. 281-313.

- *661-I. Phosphatic oil shales near Dell and Dillon, Beaverhead County, Mont., by C. F. Bowen, 1918, p. 315-320; Index, 1918, p. 321-328; i-viii (including title page, contents, and list of illustrations of volume).
(Bulletin 661 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1917, Part II, Mineral fuels, and also as separate chapters.)
- *662-A. Administrative report, 1918, p. 3-10; The Alaskan mining industry in 1916, by A. H. Brooks, 1918, p. 11-62; Recent Survey publications on Alaska, 1918, p. i-xi.
- *662-B. Mining developments in the Ketchikan and Wrangell mining districts, by Theodore Chapin, 1918, p. 63-75; Lode mining in the Juneau gold belt, by H. M. Eakin, 1918, p. 77-92; Gold-placer mining in the Porcupine district, by H. M. Eakin, 1918, p. 93-100; Water-power investigations in southeastern Alaska, by G. H. Canfield, 1918, p. 101-154.
- *662-C. Mining in the lower Copper River basin, by F. H. Moffit, 1918, p. 155-182; Mining on Prince William Sound, by B. L. Johnson, 1918, p. 183-192; Copper deposits of the Latouche and Knight Island districts, Prince William Sound, by B. L. Johnson, 1918, p. 193-220.
- *662-D. The gold placers of the Tolovana district, by J. B. Mertie, Jr., 1918, p. 221-277.
- *662-E. Mineral resources of the Kantishna region, by S. R. Capps, 1918, p. 279-331.
- *662-F. Gold placers of the Anvik-Andreafski region, by G. L. Harrington, 1918, p. 333-349.
- *662-G. Lode deposits near the Nenana coal field, by R. M. Overbeck, 1918, p. 351-362; Gold placers near the Nenana coal field, by A. G. Maddren, 1918, p. 363-402.
- *662-H. Lode mining in the Fairbanks district, by J. B. Mertie, Jr., 1918, p. 403-424.
- *662-I. Lode mining and prospecting on Seward Peninsula, by J. B. Mertie, Jr., 1918, p. 425-449; Placer mining on Seward Peninsula, by J. B. Mertie, Jr., 1918, p. 451-458; Index, 1918, p. 459-469. (Bulletin 662 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1916, and also as separate chapters.)
- *663. The structural and ornamental stones of Minnesota, by Oliver Bowles, 1918, 225 p.
- *664. The Nenana coal field, Alaska, by G. C. Martin, 1919, 54 p.
- *665. Bibliography of North American geology for 1916, with subject index, by J. M. Nickles, 1917, 172 p.
- *666-A. Chromite, by J. S. Diller, 1919, p. 13-17.
- *666-B. Sulphur, by P. S. Smith, 1919, p. 19-22.
- *666-C. Manganese, by D. F. Hewett, 1919, p. 23-34.
- *666-D. Platinum, by J. M. Hill, 1919, p. 35-38.
- *666-E. Gypsum, by R. W. Stone, 1919, p. 39-41.
- *666-F. Salt, bromine, and calcium chloride, by R. W. Stone, 1919, p. 43-46.
- *666-G. Sand and gravel, by R. W. Stone, 1919, p. 47-49.
- *666-H. Asbestos, by J. S. Diller, 1919, p. 51-54.
- *666-I. Talc and soapstone, by J. S. Diller, 1919, p. 55-56.
- *666-J. Phosphate rock, by R. W. Stone, 1919, p. 57-60.
- *666-K. Grinding and polishing materials, by F. J. Katz, 1919, p. 61-63.
- *666-L. Graphite, by H. G. Ferguson, 1919, p. 65-71.
- *666-M. Coal, by C. E. Leshner, 1919, p. 73-79.
- *666-N. Potash, by H. S. Gale, 1919, p. 81-84.
- *666-O. Bauxite and aluminum, by J. M. Hill, 1919, p. 85-88.
- *666-P. Alaska's mineral supplies, by A. H. Brooks, 1919, p. 89-102.
- *666-Q. Copper, by B. S. Butler, 1919, p. 103-106.
- *666-R. Limestone and lime, by G. F. Loughlin, 1919, p. 107-112.
- *666-S. Portland cement, by E. F. Burchard, 1919, p. 113-117.
- *666-T. Clay and clay products, by Jefferson Middleton, 1919, p. 119-121.
- *666-U. The rarer metals, by F. L. Hess, 1919, p. 123-135.
- *666-V. Iron, by E. F. Burchard, 1919, p. 137-148.
- *666-W. Barium and strontium, by J. M. Hill, 1919, p. 149-151.
- *666-X. Mica, monazite, and lithium minerals, by W. T. Schaller, 1919, p. 153-158.
- *666-Y. Zinc, by C. E. Siebenthal, 1919, p. 159-162.
- *666-Z. Nitrates, by H. S. Gale, 1919, p. 163-166.
- *666-AA. Lead, by C. E. Siebenthal, 1919, p. 167-169.
- *666-BB. Magnesite, by H. S. Gale, 1919, p. 171-173.
- *666-CC. Fluorspar, by E. F. Burchard, 1919, p. 175-182.
- *666-DD. Petroleum, by J. D. Northrop, 1919, p. 183-195.
- *666-EE. Manganiferous iron ores, by E. C. Harder, 1919, p. 197-209.
- *666-FF. Quicksilver, by F. L. Ransome, 1919, p. 211-219.
- *666-GG. Bibliography, compiled under the direction of G. M. Wood, 1919, p. 221-278.
(Bulletin 666 was issued as a single volume, Our mineral supplies, and also as separate chapters, for which pagination of volume has been used above.)
- *667. The Cosna-Nowitna region, Alaska, by H. M. Eakin, 1918, 54 p.
- *668. The Nelchina-Susitna region, Alaska, by Theodore Chapin, 1918, 67 p.
- *669. Salt resources of the United States, by W. C. Phalen, 1919, 284 p.
- *670. The Salt Creek oil field, Wyo., by C. H. Wegemann, 1918, 52 p.
- *671. Spirit leveling in New York, 1896-1905 and 1912-1916; R. B. Marshall, chief geographer. 1918, 214 p. (See also Bulletin 514.)
- *672. Spirit leveling in Illinois, 1914 to 1917, inclusive; R. B. Marshall, chief geographer. 1918, 108 p. (See also Bulletin 930.)
- *673. Spirit leveling in Kentucky, 1914 to 1916, inclusive; R. B. Marshall, chief geographer. 1918, 100 p. (See also Bulletin 554.)

- *674. Spirit leveling in the State of Washington, 1896 to 1917, inclusive; R. B. Marshall, chief geographer. 1918. 204 p.
- *675. The upper Chitina Valley, Alaska, by F. H. Moffit, with a description of the igneous rocks, by R. M. Overbeck. 1918. 82 p.
- *676. Some Pliocene and Miocene Foraminifera of the Coastal Plain of the United States, by J. A. Cushman. 1918. 100 p.
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- *678. Clays and shales of Minnesota, by F. F. Grout, with contributions, by E. K. Soper. 1919. 259 p.
- *679. The microscopic determination of the nonopaque minerals, by E. S. Larsen, Jr., 1921. 294 p. (See also Bulletin 848.)
- *680. A geologic reconnaissance for phosphate and coal in southeastern Idaho and western Wyoming, by A. R. Schultz. 1918. 84 p.
- *681. The oxidized zinc ores of Leadville, Colo., by G. F. Loughlin. 1918. 91 p.
- *682. Marble resources of southeastern Alaska, by E. F. Burchard, with a section on the geography and geology, by Theodore Chapin. 1920. 118 p.
- *683. The Anvik-Andreafski region, Alaska (including the Marshall district), by G. L. Harrington. 1918. 70 p.
- *684. Bibliography of North American geology for 1917, with subject index, by J. M. Nickles. 1918. 154 p.
- *685. Relation of landslides and glacial deposits to reservoir sites in the San Juan Mountains, Colo., by W. W. Atwood. 1918. 38 p.
- *686-A. Introduction, by David White, 1922, p. ix-xvi.
- *686-B. T. 23 N., R. 11 E.; Tps. 22 and 23 N., R. 12 E., by W. B. Emery, 1922, p. 1-9.
- *686-C. T. 27 N., R. 9 E., by D. E. Winchester, 1922, p. 11-15.
- *686-D. T. 24 N., R. 10 E., by C. F. Bowen, 1922, p. 17-26.
- *686-E. T. 25 N., R. 9 E., by K. C. Heald, 1922, p. 27-41.
- *686-F. T. 28 N., Rs. 9 and 10 E.; T. 29 N., R. 10 E., by C. F. Bowen, 1922, p. 43-58.
- *686-G. T. 25 N., R. 10 E., by D. E. Winchester, K. C. Heald, and others, 1922, p. 59-73.
- *686-H. T. 25 N., Rs. 11 and 12 E., by O. B. Hopkins, 1922, p. 75-90.
- *686-I. T. 26 N., Rs. 9, 10, and 11 E., by F. R. Clark, 1922, p. 91-118.
- *686-J. T. 20 N., R. 11 E., by E. R. Lloyd and K. F. Mather, 1922, p. 119-127.
- *686-K. T. 27 N., R. 7 E., by K. C. Heald, 1922, p. 129-135.
- *686-L. Tps. 24, 25, and 26 N., Rs. 6 and 7 E.; Tps. 25 and 26 N., R. 5 E.; T. 26 N., R. 4 E., by C. F. Bowen, 1922, p. 137-148.
- *686-M. Tps. 24 and 25 N., R. 8 E., by K. C. Heald and K. F. Mather, 1922, p. 149-170.
- *686-N. Tps. 20 and 21 N., R. 12 E., by C. S. Ross, 1922, p. 171-178.
- *686-O. Tps. 21 and 22 N., R. 11 E., by C. S. Ross, 1922, p. 179-191.
- *686-P. T. 24 N., R. 9 E., by K. C. Heald, C. F. Bowen, and others, 1922, p. 193-212.
- *686-Q. T. 27 N., R. 8 E., by K. C. Heald, 1922, p. 213-222.
- *686-R. T. 26 N., R. 8 E., by K. C. Heald and K. F. Mather, 1922, p. 223-236.
- *686-S. T. 24 N., Rs. 11 and 12 E., by O. B. Hopkins and Sidney Powers, 1922, p. 237-253.
- *686-T. T. 27 N., R. 11 E., by H. M. Robinson and R. V. A. Mills, 1922, p. 255-277.
- *686-U. Tps. 21-23 N., Rs. 6-7 E., and Tps. 23-25 N., Rs. 3-5 E., by C. F. Bowen, P. V. Roundy, C. S. Ross, and Frank Reeves, 1922, p. 279-301.
- *686-V. T. 27 N., R. 10 E., by H. M. Robinson and R. V. A. Mills, 1922, p. 303-327.
- *686-W. T. 29 N., Rs. 11 and 12 E., by M. I. Goldman, 1922, p. 329-352.
- *686-X. T. 20 N., R. 10 E., by M. I. Goldman, 1922, p. 353-358.
- *686-Y. T. 28 N., Rs. 11 and 12 E., by M. I. Goldman and H. M. Robinson, 1922, p. 359-394.
- *686-Z. Tps. 26 and 27 N., R. 12 E., by P. V. Roundy, K. C. Heald, and G. B. Richardson, 1922, p. 395-420; Index, 1922, p. 421-427.
(Bulletin 686 was issued as a single volume, Structure and oil and gas resources of the Osage Reservation, Oklahoma, and also as separate chapters, for which pagination of volume has been used above.)
- *687. The Kantishna region, Alaska, by S. R. Capps. 1919. 116 p.
- *688. The oil fields of Allen County, Ky., with notes on the oil geology of adjoining counties, by E. W. Shaw and K. F. Mather. 1919. 126 p.
- *689. Boundaries, areas, geographic centers, and altitudes of the United States and the several States, with a brief record of important changes in their territory, by E. M. Douglas. 1923. 234 p. (See also Bulletin 817.)
- *690-A. Zinc carbonate and related copper carbonate ores at Ophir, Utah, by G. F. Loughlin, 1919, p. 1-14.
- *690-B. Gravel deposits of the Caddo Gap and De Queen quadrangles, Ark., by H. D. Miser and A. H. Purdue, 1919, p. 15-30.
- *690-C. A geologic reconnaissance of the Uinta Mountains, northern Utah, with special reference to phosphate, by A. R. Schultz, 1919, p. 31-94.
- *690-D. Quicksilver deposits of the Phoenix Mountains, Ariz., by F. C. Schrader, 1919, p. 95-109.
- *690-E. Manganese at Butte, Mont., by J. T. Pardee, 1919, p. 111-130.
- *690-F. Some manganese deposits in Madison County, Mont., by J. T. Pardee, 1919, p. 131-143; Index, 1919, p. 145-149; i-vi (including title page, contents, and list of illustrations of volume).
(Bulletin 690 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1918, Part I, Metals and nonmetals except fuels, and also as separate chapters.)

- *691-A. The structure of parts of the central Great Plains, by N. H. Darton, 1919, p. 1-26.
- *691-B. Oil shale of the Uinta Basin, northeastern Utah, by D. E. Winchester, 1919, p. 27-50; Results of dry distillation of miscellaneous shale samples, by D. E. Winchester, 1919, p. 51-55.
- *691-C. Geologic structure of the northwestern part of the Pawhuska quadrangle, Okla., by K. C. Heald, 1919, p. 57-100.
- *691-D. Geology and oil and gas prospects of the Lake Basin field, Mont., by E. T. Hancock, 1919, p. 101-147.
- *691-E. Oil and gas geology of the Birch Creek-Sun River area, northwestern Montana, by Eugene Stebinger, 1919, p. 149-184.
- *691-F. Anticlines in a part of the Musselshell Valley, Musselshell, Meagher, and Sweetgrass counties, Mont., by C. F. Bowen, 1919, p. 185-209.
- *691-G. The Nesson anticline, Williams County, N. Dak., by A. J. Collier, 1919, p. 211-217.
- *691-H. Geology and oil prospects of the Salinas Valley-Parkfield area, Calif., by W. A. English, 1919, p. 219-250.
- *691-I. The Santo Tomas cannel coal, Webb County, Tex., by G. H. Ashley, 1919, p. 251-270.
- *691-J. Asphalt deposits and oil conditions in southwestern Arkansas, by H. D. Miser and A. H. Purdue, 1919, p. 271-292.
- *691-K. Coal south of Mancos, Montezuma County, Colo., by A. J. Collier, 1919, p. 293-310.
- *691-L. Geology of the Lost Creek coal field, Morgan County, Utah, by F. R. Clark, 1919, p. 311-322.
- *691-M. Structure and oil resources of the Simi Valley, southern California, by W. S. W. Kew, 1919, p. 323-347; Index, 1919, p. 349-355; i-viii (including title page, contents, and list of illustrations of volume).
- (Bulletin 691 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1918, Part II, Mineral fuels, and also as separate chapters.)
- *692-A. Administrative report, 1919, p. 3-10; The Alaskan mining industry in 1917, by G. C. Martin, 1919, p. 11-42; Recent Survey publications on Alaska, 1919, p. i-xiv.
- *692-B. Water-power investigations in southeastern Alaska, by G. H. Canfield, 1919, p. 43-83; Mining developments in the Ketchikan district, by Theodore Chapin, 1919, p. 85-89; Geology and mineral resources of the west coast of Chichagof Island, by R. M. Overbeck, 1919, p. 91-136.
- *692-C. Platinum-bearing auriferous gravels of Chistochina River, by Theodore Chapin, 1919, p. 137-141; Mining on Prince William Sound, by B. L. Johnson, 1919, p. 143-151; Mineral resources of Jack Bay district and vicinity, Prince William Sound, by B. L. Johnson, 1919, p. 153-173; Mining in central and northern Kenai Peninsula, by B. L. Johnson, 1919, p. 175-176.
- *692-D. Gold lode mining in the Willow Creek district, by S. R. Capps, 1919, p. 177-186; Mineral resources of the western Talkeetna Mountains, by S. R. Capps, 1919, p. 187-205; Mineral resources of the upper Chulitna region, by S. R. Capps, 1919, p. 207-232; Platinum-bearing gold placers of the Kahiltna Valley, by J. B. Mertie, Jr., 1919, p. 233-264; Chromite deposits in Alaska, by J. B. Mertie, Jr., 1919, p. 265-267; Geologic problems at the Matanuska coal mines, by G. C. Martin, 1919, p. 269-282.
- *692-E. Sulphur on Unalaska and Akun islands and near Stepovak Bay, by A. G. Maddren, 1919, p. 283-298; The beach placers of the west coast of Kodiak Island, by A. G. Maddren, 1919, p. 299-319.
- *692-F. Mining in the Fairbanks district, by Theodore Chapin, 1919, p. 321-327; A molybdenite lode on Healy River, by Theodore Chapin, 1919, p. 329; Mining in the Hot Springs district, by Theodore Chapin, 1919, p. 331-335; Tin deposits of the Ruby district, by Theodore Chapin, 1919, p. 337; The gold and platinum placers of the Tolstoi district, by G. L. Harrington, 1919, p. 339-351.
- *692-G. Tin mining in Seward Peninsula, by G. L. Harrington, 1919, p. 353-361; Graphite mining in Seward Peninsula, by G. L. Harrington, 1919, p. 363-367; The gold and platinum placers of the Kivalik-Koyuk region, by G. L. Harrington, 1919, p. 369-400; Index, 1919, p. 401-408.
- (Bulletin 692 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1917, and also as separate chapters.)
- *693. The evaporation and concentration of waters associated with petroleum and natural gas, by R. V. A. Mills and R. C. Wells. 1919. 104 p.
- *694. Bibliography of the metals of the platinum group: Platinum, palladium, iridium, rhodium, osmium, ruthenium, 1748-1917, by J. L. Howe and H. C. Holtz. 1919. 558 p.
- *695. The data of geochemistry (fourth edition), by F. W. Clarke. 1920. 832 p. (See also Bulletin 770.)
- *696. A catalogue of the Mesozoic and Cenozoic plants of North America, by F. H. Knowlton. 1919. 815 p.
- *697. Gypsum deposits of the United States, by R. W. Stone and others. 1920. 326 p.
- *698. Bibliography of North American geology for 1918, with subject index, by J. M. Nickles. 1919. 148 p.
- *699. The Porcupine gold placer district, Alaska, by H. M. Eakin. 1919. 29 p.
- *700. The analysis of silicate and carbonate rocks, by W. F. Hillebrand. 1919. 285 p. (A revised and enlarged edition of Bulletin 422.)
- *701. Geothermal data of the United States, including many original determinations of underground temperature, by N. H. Darton. 1920. 97 p.
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- *708. High-grade clays of the eastern United States, with notes on some western clays, by H. Ries, W. S. Bayley, and others. 1922. 314 p.
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- *709-B. Primary traverse in Florida, 1917. 1923. p. 23-41.
- *709-C. Primary traverse in Georgia, 1916-1918. 1923. p. 43-154.
- *709-D. Triangulation in Idaho and Montana, 1914-1916. 1923. p. 155-166.
- *709-E. Primary traverse in Illinois and Wisconsin, 1916-1918. 1923. p. 167-186.
- *709-F. Primary traverse in Michigan, 1916-1917. 1923. p. 187-209.
- *709-G. Primary traverse in Iowa, Kansas, Missouri, Nebraska, and Oklahoma, 1916-1918. 1923. p. 211-266.
- *709-H. Triangulation and primary traverse in Kentucky and Tennessee, 1916-1918, including spirit leveling in Camp Knox Military Reservation, Ky., 1923. p. 267-302.
- *709-I. Triangulation in Maine and New Hampshire, 1916-1918. 1923. p. 303-330.
- *709-J. Primary traverse in New York, 1916. 1923. p. 331-346.
- *709-K. Triangulation and primary traverse in Oregon and Washington, 1916-1919. 1923. p. 347-420.
- *709-L. Primary traverse in Virginia, 1916-1918. 1923. p. 421-509.
- *709-M. Triangulation in Arizona, California, and Nevada, 1915-1919. 1923. p. 511-597.
- *709-N. Primary traverse in South Carolina, 1917-1919. 1923. p. 599-738.
- *709-O. Triangulation in New Mexico and Texas, 1915-1917. 1923. p. 739-779.
- *709-P. Triangulation in Wyoming and Colorado, 1916-1919. 1923. p. 781-798.
- *709-Q. Triangulation and primary traverse in Texas, 1916-1920. 1923. p. 799-851.
- *709-R. Triangulation and primary traverse in North Carolina, 1918. 1923. p. 853-879; Index, 1923, p. 880-914.
(Bulletin 709 was issued as a single volume, Triangulation and primary traverse, 1916-1918, and also as separate chapters.)
- *710-A. A reconnaissance of the Pine Creek district, Idaho, by E. L. Jones, Jr., 1920. p. 1-36.
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- *710-C. Deposits of manganese ore in Costa Rica, by J. D. Sears, 1920. p. 61-83; Deposits of manganese ore near Boqueron River, Panama, by J. D. Sears, 1920. p. 85-91.
- *710-D. Deposits of manganese ore in Arizona, by E. L. Jones, Jr. and F. L. Ransome, 1920. p. 93-184.
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- *710-F. Deposits of manganese ore in Nevada, by J. T. Pardee and E. L. Jones, Jr., 1920. p. 209-242; Index, 1920, p. 243-248; i-viii (including title page, contents, and list of illustrations of volume).
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- *711-H. Anticlines near Maverick Springs, Fremont County, Wyo., by A. J. Collier, 1920. p. 149-166; Index, 1920. p. 167-171; i-viii (including title page, contents, and list of illustrations of volume).
(Bulletin 711 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1919, Part II, Mineral fuels, and also as separate chapters.)
- *712-A. Administrative report, by G. C. Martin, 1920. p. 3-10; The Alaskan mining industry in 1918, by G. C. Martin, 1920. p. 11-52; Recent Survey publications on Alaska, 1920. p. i-xv.
- *712-B. Water-power investigations in southeastern Alaska, by G. H. Canfield, 1920. p. 53-90.
- *712-C. Nickel deposits in the lower Copper River valley, by R. M. Overbeck, 1920. p. 91-98.
- *712-D. Preliminary report on the chromite of Kenai Peninsula, by A. C. Gill, 1920. p. 99-129.
- *712-E. Mining developments in the Matanuska coal fields, by Theodore Chapin, 1920. p. 131-167; Lode developments in the Willow Creek district, by Theodore Chapin, 1920. p. 169-176.
- *712-F. Placer mining in the Tolovana district, by R. M. Overbeck, 1920. p. 177-184.
- *712-G. Mining in northwestern Alaska, by S. H. Cathcart, 1920. p. 185-198; Index, 1920. p. 199-204.
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- *713. Geography, geology, and mineral resources of the Fort Hall Indian Reservation, Idaho, by G. R. Mansfield, with a chapter on water resources, by W. B. Heroy. 1920. 152 p.
- *714-A. The future of Alaska mining, by A. H. Brooks, 1921. p. 5-57; The Alaskan mining industry in 1919, by A. H. Brooks and G. C. Martin, 1921. p. 59-95; Administrative report, by A. H. Brooks and G. C. Martin, 1921. p. 97-103; Recent Survey publications on Alaska, 1921. p. i-xv.
- *714-B. Lode mining in the Juneau and Ketchikan districts, by J. B. Mertie, Jr., 1921. p. 105-128; Notes on the Salmon-Unuk River region, compiled by J. B. Mertie, Jr., 1921. p. 129-142; Water-power investigations in southeastern Alaska, by G. H. Canfield, 1921. p. 143-187.
- *714-C. Mining in Chitina Valley, by F. H. Moffit, 1921. p. 189-196.

- *714-D. Mining developments in the Matanuska coal fields, by Theodore Chapin, 1921, p. 197-199; Lode developments in the Willow Creek district, by Theodore Chapin, 1921, p. 201-206.
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- *714-F. Mining on Seward Peninsula, by G. L. Harrington, 1921, p. 229-237; Index, 1921, p. 239-244; i-xv (including title page, contents, and list of illustrations of volume).
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- *715-B. The potash deposits of Alsace, by H. S. Gale, 1921, p. 17-55.
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- *716-B. The Upton-Thornton oil field, Wyo., by E. T. Hancock, 1921, p. 17-34.
- *716-C. The Mule Creek oil field, Wyo., by E. T. Hancock, 1921, p. 35-53.
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- *725-J. Ore deposits of the Sierrita Mountains, Pima County, Ariz., by F. L. Ransome, 1922, p. 407-428; Index, 1922, p. 428-440; i-xi (including title page, contents, and list of illustrations of volume). (Bulletin 725 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1921, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
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- *736-B. Oil and gas prospects in and near the Crow Indian Reservation, Mont., by W. T. Thom, Jr., 1923, p. 35-53.
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- *751-B. Progress report on a subsurface study of the Pershing oil and gas field, Osage County, Okla., by W. W. Rubey, 1925, p. 23-70.
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- *751-F. The Ekalaka lignite field, southeastern Montana, by C. M. Bauer, 1925, p. 231-267.
- *751-G. Geology and oil and gas prospects of part of Moffat County, Colo., and southern Sweetwater County, Wyo., by J. D. Sears, 1925, p. 269-319; Index, 1925, p. 321-326.
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- *755-C. Geology and mineral resources of the region traversed by the Alaska Railroad, by S. R. Capps, 1924, p. 73-150.
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 - *757. Geology and coal resources of the Axial and Monument Butte quadrangles, Moffat County, Colo., by E. T. Hancock. 1925. 134 p.
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| *E. 32°-33°, 117°-118°, 1925, p. 15-19. | *GG. 37°-38°, 118°-119°, 1925, p. 433-438. |
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| *G. 33°-34°, 115°-116°, 1925, p. 25-26. | *II. 37°-38°, 120°-121°, 1925, p. 493-531. |
| *H. 33°-34°, 116°-117°, 1925, p. 27-33. | *JJ. 37°-38°, 121°-122°, 1925, p. 533-572. |
| *I. 33°-34°, 117°-118°, 1925, p. 35-46. | *KK. 37°-38°, 122°-123°, 1925, p. 573-577. |
| *J. 33°-34°, 118°-119°, 1925, p. 47-64. | *LL. 38°-39°, 118°-119°, 1925, p. 579. |
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| *L. 34°-35°, 115°-116°, 1925, p. 71-74. | *NN. 38°-39°, 120°-121°, 1925, p. 587-585. |
| *M. 34°-35°, 116°-117°, 1925, p. 75-79. | *OO. 38°-39°, 121°-122°, 1925, p. 589-617. |
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| *O. 34°-35°, 118°-119°, 1925, p. 99-151. | *QQ. 38°-39°, 123°-124°, Omitted. |
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| *R. 35°-36°, 114°-115°, 1925, p. 173. | *TT. 39°-40°, 122°-123°, 1925, p. 651-658. |
| *S. 35°-36°, 115°-116°, 1925, p. 175-180. | *UU. 40°-41°, 122°-123°, 1925, p. 659-670. |
| *T. 35°-36°, 116°-117°, 1925, p. 181-187. | *VV. 40°-41°, 123°-124°, 1925, p. 671-673. |
| *U. 35°-36°, 117°-118°, 1925, p. 189-196. | *WW. 40°-41°, 124°-125°, 1925, p. 675-676. |
| *V. 35°-36°, 118°-119°, 1925, p. 197-208. | *XX. 41°-42°, 121°-122°, 1925, p. 677-679. |
| *W. 35°-36°, 119°-120°, 1925, p. 209-218. | *YY. 41°-42°, 122°-123°, 1925, p. 681-696. |
| *X. 35°-36°, 120°-121°, 1925, p. 219-257. | *ZZ. 41°-42°, 123°-124°, 1925, p. 697-708. |
| *Y. 35°-36°, 121°-122°, 1925, p. 259-265. | *AAA. 41°-42°, 124°-125°, 1925, p. 709-711. |
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| *AA. 36°-37°, 117°-118°, 1925, p. 269-275. | |
| *BB. 36°-37°, 118°-119°, 1925, p. 277-285. | |
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- *824-B. The Slana district, upper Copper River region, by F. H. Moffit, 1932, p. 111-124.
- *824-C. The Lake Clark-Mulchatna region, by S. R. Capps, 1932, p. 125-154.
- *824-D. Mining in the Circle district, Alaska, by J. B. Mertie, Jr., 1932, p. 155-172.
- *824-E. The occurrences of gypsum at Iyaukeen Cove, Chichagof Island, Alaska, by B. D. Stewart, 1932, p. 173-177; Index, 1932, p. 178-181; i-ii (including title page, contents, and list of illustrations of volume).
(Bulletin 824 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1929, and also as separate chapters.)
- *825. Microscopic determination of the ore minerals, by M. N. Short. 1931. 204 p. (See also Bulletin 914.)
- *826. Names and definitions of the geologic units of California, by M. G. Wilmarth. 1931. 97 p.
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- *828. Geology and mineral resources of the Quakertown-Doylestown district, Pennsylvania and New Jersey, by F. Bascom, E. T. Wherry, G. W. Stose, and A. I. Jonas. 1931. 62 p.
- *829. Geology and coal, oil, and gas resources of the New Kensington quadrangle, Pa., by G. B. Richardson. 1932. 102 p.
- *830-A. Copper deposits near Keating, Oreg., by James Gilluly, 1933, p. 1-32.
- *830-B. Geology of the Robertson, Humdinger, and Robert E. gold mines, southwestern Oregon, by P. J. Shenon, 1933, p. 33-55; Notes on the Chieftain and Continental mines, Douglas County, Oreg., by F. G. Wells, 1933, p. 57-62; Index, 1933, p. 63-64; i-iii (including title page, contents, and list of illustrations of volume).
(Bulletin 830 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1931-32, Part I, Metals and nonmetals except fuels, and also as separate chapters.)
- *831-A. The Jackson gas field, Hinds and Rankin counties, Miss., by W. H. Monroe, 1932, p. 1-17.
- *831-B. The Ashland coal field, Rosebud, Powder River, and Custer counties, Mont., by N. W. Bass, 1932, p. 19-105.
[Title page, contents, list of illustrations, and index for volume, 1932, p. i-iv, 107-108.]
(Bulletin 831 was issued as a single volume, Contributions to economic geology (short papers and preliminary reports), 1931-32, Part II, Mineral fuels, and also as separate chapters.)
- *832. The crystal cavities of the New Jersey zeolite region, by W. T. Schaller. 1932. 90 p.
- *833. Mineralogy of drill cores from the potash field of New Mexico and Texas, by W. T. Schaller and E. P. Henderson. 1932. 124 p.
- *834. Bibliography of North American geology, 1929 and 1930, by J. M. Nickles. 1931. 280 p.
- *835. Geology and oil resources of the Elk Hills, Calif., including Naval Petroleum Reserve No. 1, by W. P. Woodring, P. V. Roundy, and H. R. Farnsworth. 1932. 82 p.
- *836-A. Mineral industry of Alaska in 1930, by P. S. Smith, 1933, p. 1-83; Administrative report, by P. S. Smith, 1933, p. 85-115; Selected list of Geological Survey publications on Alaska, 1933, p. 1a-14a.

- *836-B. Notes on the geography and geology of Lituya Bay, by J. B. Mertie, Jr., 1933, p. 117-135.
- *836-C. Surface water supply of southeastern Alaska, 1909-1930, by F. F. Henshaw, 1933, p. 137-218.
- *836-D. The eastern portion of Mount McKinley National Park, by S. R. Capps, 1933, p. 219-300; The Kantishna district, by F. H. Moffitt, 1933, p. 301-338; Mining development in the Tatlanika and Totatlanika Basins, by F. H. Moffitt, 1933, p. 339-345.
- *836-E. The Tatonduk-Nation district, by J. B. Mertie, Jr., 1933, p. 347-443; Index, 1933, p. 445-454; i-ii (including title page, contents, and list of illustrations of volume).
(Bulletin 836 was issued as a single volume, Mineral resources of Alaska, report on progress of investigations in 1930, and also as separate chapters.)
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- *843. A brief review of the geology of the San Juan region of southwestern Colorado, by Whitman Cross and E. S. Larsen, Jr. 1935. 138 p. (See also Professional Paper 258.)
- *844-A. Mineral industry of Alaska in 1931, by P. S. Smith, 1933, p. 1-82; Administrative report, by P. S. Smith, 1933, p. 83-117; Selected list of Geological Survey publications on Alaska, 1933, 1A-15A.
- *844-B. Mineral investigations in the Alaska Railroad belt, 1931, by S. R. Capps. 1933. p. 119-135.
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- *844-E. Reconnaissance of the northern Koyukuk Valley, Alaska, by Robert Marshall, 1934, p. 247-256; Index, 1934, p. 257-264; i-iii (Includes title page, contents, and list of illustrations of volume).
(Bulletin 844, issued only as separate chapters² under the general title, Mineral resources of Alaska, report on progress of investigations in 1931.)
- 845. Guidebook of the western United States, part F, The Southern Pacific lines, New Orleans to Los Angeles, by N. H. Darton. 1933. 304 p., 29 route maps. \$1.
- *846-A. Some mining districts of eastern Oregon, by James Gilluly, J. C. Reed, and C. F. Park, Jr. 1933. p. 1-140.
- *846-B. Geology and ore deposits of the Takilma-Waldo district, Oreg., including the Blue Creek district, by P. J. Shenon. 1933. p. 141-194.
- *846-C. The Climax molybdenum deposit, Colorado, by B. S. Butler and J. W. Vanderwilt, with a section on history, production, metallurgy, and development, by C. W. Henderson. 1933. p. 195-237.
- *846-D. Some lode deposits in the northwestern part of the Boise Basin, Idaho, by C. P. Ross, 1934, p. 239-277; Index, 1934, p. 279-285. [Includes title page, contents, and list of illustrations of volume.]
(Bulletin 846, issued only as separate chapters under the general title, Contributions to economic geology (short papers and preliminary reports), 1933.)
- *847-A. The Contact mining district, Nev., by F. C. Schrader. 1935. p. 1-41.
- *847-B. The Rosebud coal field, Rosebud and Custer Counties, Mont., by W. G. Pierce. 1936. p. 43-120.
- *847-C. The Richey-Lambert coal field, Richland and Dawson Counties, Mont., by F. S. Parker. 1936. p. 121-174.
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- *847-F. Geology and mineral resources of north-central Chouteau, western Hill, and eastern Liberty Counties, Mont., by W. G. Pierce and C. B. Hunt, 1937, p. 225-264; Index, 1937, p. 265-270. [Includes title page, contents, and list of illustrations of volume.]
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- 848. The microscopic determination of the nonopaque minerals (2d edition), by E. S. Larsen, Jr. and Harry Berman. 1934. 266 p. \$1.
- *849-A. Foreword, by P. S. Smith, 1933, p. 1-4; Progress of surveys in the Anthracite Ridge district, Alaska, by R. W. Richards and G. A. Waring, 1933, p. 5-27.
- *849-B. Lode deposits of the Fairbanks district, Alaska, by J. M. Hill. 1933. p. 29-163.
- *849-C. The Willow Creek gold-lode district, Alaska, by J. C. Ray. 1933. p. 165-229.
- *849-D. The Mount Eielson district, Alaska, by J. C. Reed. 1933 [1934]. p. 231-287.

² The plan of issuing a consolidated volume for each of the series published first in chapters was abandoned in 1933.

- *849-E. Mineral deposits near the West Fork of the Chulitna River, Alaska, by C. P. Ross. 1933. p. 289-333.
- *849-F. Lode deposits of Eureka and vicinity, Kantishna district, Alaska, by F. G. Wells. 1933. p. 335-379.
- *849-G. The Girdwood district, Alaska, by C. F. Park, Jr. 1933 [1934]. p. 381-424.
- *849-H. The Valdez Creek mining district, Alaska, by C. P. Ross. 1933. p. 425-468.
- *849-I. The Moose Pass-Hope district, Kenai Peninsula, Alaska, by Ralph Tuck. 1933, p. 469-527; Index, 1933, p. 529-530. [Includes title page, contents, and list of illustrations of volume.]
(Bulletin 849, issued only as separate chapters under the general title, Investigations in Alaska Railroad belt, 1931. Each chapter contains its own index.)
- *850. Quicksilver deposits of southwestern Oregon, by F. G. Wells and A. C. Waters. 1934. 58 p.
- *851. The Book Cliffs coal field in Garfield and Mesa Counties, Colo., by C. E. Erdmann. 1934 [1935]. 150 p.
- *852. The Book Cliffs coal field in Emery and Grand Counties, Utah, by D. J. Fisher. 1936. 104 p.
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- *857-D. Notes on the geology of the Alaska Peninsula and Aleutian Islands, by S. R. Capps. 1934. p. 141-153.
- *857-E. Core drilling for coal in the Moose Creek area, Alaska, by G. A. Waring. 1934, p. 155-166; Index, 1934, p. 167-173. [Includes title page, contents, and list of illustrations of volume.]
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- *858. Bibliography of North American geology, 1931 and 1932, by J. M. Nickles. 1934. 300 p.
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- *860-A. Part 1, The coal field from Gallup eastward toward Mount Taylor, with a measured section of pre-Dakota(?) rocks near Navajo Church, by J. D. Sears. 1934 [1935]. p. 1-29.
- *860-B. Part 2, The Mount Taylor coal field, by C. B. Hunt. 1936. p. 31-80.
- *860-C. Part 3, The La Ventana-Chacra Mesa coal field, by C. H. Dane. 1936 [1937]. p. 81-161; Index, 1936 [1937]. p. 163-166. [Includes title page, contents and list of illustrations of volume.]
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- *861. Geology of the Anthracite Ridge coal district, Alaska, by G. A. Waring. 1936 [1937]. 57 p.
- *862. The southern Alaska Range, by S. R. Capps. 1935. 101 p.
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- *864-C. Mineral deposits of the Ruby-Kuskokwim region, by J. B. Mertie, Jr., 1936, p. 115-245; Index, 1936, p. 247-255. [Includes title page, contents, and list of illustrations of volume.]
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- *868-B. Kodiak and vicinity, by S. R. Capps. 1937. p. 93-134.
- *868-C. Upper Copper and Tanana Rivers, Alaska, by F. H. Moffit. 1936. p. 135-143.
- *868-D. The Kaiyuh Hills, Alaska, by J. B. Mertie, Jr. 1937. p. 145-177. [Includes title page, contents, and list of illustrations of volume.]
(Bulletin 868, issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1934. Each chapter contains its own index.)
- *869. Bibliography of North American geology, 1933 and 1934, by E. M. Thom. 1935 [1936]. 389 p.
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- *874-A. Part 1, The McAlester district, Pittsburg, Atoka, and Latimer Counties, by T. A. Hendricks. 1937. p. 1-90.
- *874-B. Part 2, The Lehigh district, Coal, Atoka, and Pittsburg Counties, by M. M. Knechtel. 1937. p. 91-149.
- *874-C. Part 3, The Quinton-Scipio district, Pittsburg, Haskell, and Latimer Counties, by C. H. Dane, H. E. Rothrock, and J. S. Williams. 1938. p. 151-253.
- *874-D. Part 4, The Howe-Wilburton district, Latimer and LeFlore Counties, by T. A. Hendricks. 1939. p. 255-298. [Includes title page, contents, and list of illustrations of volume.] (Bulletin 874, issued only as separate chapters under the general title, Geology and fuel resources of the southern part of the Oklahoma coal field. Each chapter contains its own index.)
- *875. Nonmetallic mineral resources of eastern Oregon, by B. N. Moore. 1937. 180 p.
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- *880-C. Kodiak and adjacent islands, by S. R. Capps. 1937. p. 111-184.
- *880-D. The Eeka Creek coal deposits, Matanuska Valley, by Ralph Tuck. 1937. p. 185-214.
*[Title page, contents, and list of illustrations of volume. 1938. p. i-ii.] (Bulletin 880 issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1935. Each chapter contains its own index.)
- *881. Spirit leveling in Connecticut, 1922-35; J. G. Staack, chief topographic engineer. 1937. 65 p.
- *882. Spirit leveling in Massachusetts, 1922-35; J. G. Staack, chief topographic engineer. 1937. 156 p.
- *883-A. Part 1, Western Texas, 1896-1935. 1937. p. 1-50.
- *883-B. Part 2, Panhandle, 1896-1939. 1941. p. 51-149.
- *883-C. Part 3, West-central Texas, 1896-1938. 1941. p. 151-239.
- *883-D. Part 4, North-central Texas, 1896-1938. 1942. p. 241-559.
- *883-E. Part 5, South-central Texas, 1896-1938. 1941. p. 561-789.
*[Title page, contents, and list of illustrations of volume. 1950. p. i-ii.] (Bulletin 883, issued only as separate chapters under the general title, Spirit leveling in Texas. Each chapter contains its own index.)
- *884. Geology and mineral deposits of the Snowmass Mountain area, Gunnison County, Colo., by J. W. Vanderwilt. 1937 [1938]. 184 p.
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- *886-C. Geology and ore deposits of the southwestern Arkansas quicksilver district, by J. C. Reed and F. G. Wells. 1938. p. 15-90.
- *886-D. Preliminary report on the alunite deposits of the Marysville region, Utah, by Eugene Callaghan. 1938. p. 91-134. [Includes title page, contents, and list of illustrations of volume.] (Bulletin 886, issued only as separate chapters under the general title, Contributions to economic geology (short papers and preliminary reports), 1937. Each chapter, except A and B, contains its own index.)
- *887. Geophysical abstracts 87, July-December 1936, compiled by W. Ayvazoglou. 1937. 98 p. Geophysical abstracts 1 to 86 were issued in mimeographed form by the geophysical section of the Bureau of Mines. That section was transferred to the Geological Survey on July 1, 1936. (See also note under Bulletin 957.)
- *888. Spirit leveling in Vermont, 1896-1935; J. G. Staack, chief topographic engineer. 1938. 155 p.
- *889. Spirit leveling in Kansas, 1896-1935; J. G. Staack, chief topographic engineer. 1938. 88 p.
- *890-A. Part 1, Northern South Carolina. 1939. p. 1-455.
- *890-B. Part 2, Southern South Carolina. 1940. p. 457-766. [Includes title page, contents, and list of illustrations of volume.] (Bulletin 890, issued only as separate chapters under the general title, Spirit leveling in South Carolina, 1896-1938. Each chapter contains its own index.)
- *891. Geology and mineral resources of the Honeybrook and Phoenixville quadrangles, Pa., by F. Bascom and G. W. Stose. 1938. 145 p.
- *892. Bibliography of North American geology for 1935 and 1936, by E. M. Thom. 1937. 504 p.
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- *895-B. Geophysical abstracts 89, April-June 1937, compiled by W. Ayvazoglou. 1938. p. 43-92.
- *895-C. Geophysical abstracts 90, July-September 1937, compiled by W. Ayvazoglou. 1938. p. 93-196.
- *895-D. Geophysical abstracts 91, October-December 1937, compiled by W. Ayvazoglou. 1938. p. 137-203. [Includes title page, contents, and index to volume.]

- (Bulletin 895, issued only as separate chapters under the general title, Geophysical abstracts, 88-91, January-December 1937. Each chapter contains its own index.)
896. Lexicon of geologic names of the United States (including Alaska), by M. G. Wilmarth. 1938. Part 1, A-L, p. 1-1244; Part 2, M-Z, p. 1245-2396. \$8.
- *897-A. Mineral industry of Alaska in 1936, by P. S. Smith. 1938. p. 1-107.
- *897-B. The Valdez Creek mining district in 1936, by Ralph Tuck. 1938. p. 109-131.
- *897-C. Gold placers of the Fortymile, Eagle, and Circle districts, Alaska, by J. B. Mertie, Jr. 1938. p. 133-261.
- *897-D. Nickel content of an Alaskan basic rock, by J. C. Reed. 1939. p. 263-268. [Includes title page, contents, and list of illustrations of volume.]
- (Bulletin 897, issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1936. Each chapter, except D, contains its own index.)
- *898-A. Part 1, Southeastern Missouri, 1896-1937. 1938. p. 1-132.
- *898-B. Part 2, South-central Missouri, 1896-1937. 1938. p. 133-308.
- *898-C. Part 3, East-central Missouri, 1896-1937. 1938. p. 309-450.
- *898-D. Part 4, Northwestern Missouri, 1896-1937. 1938. p. 451-580.
- *898-E. Part 5, Southwestern Missouri, 1896-1937. 1939. p. 581-735.
- *898-F. Part 6, Northeastern Missouri, 1896-1938. 1939. p. 737-869.
- *898-G. Part 7, Central Missouri, 1896-1938. 1939. p. 871-1004.
- *898-H. Part 8, West-central Missouri, 1896-1938. 1939. p. 1005-1106.
- *[Title page, contents, and list of illustrations of volume. 1940. p. i-iii.]
- (Bulletin 898, issued only as separate chapters under the general title, Spirit leveling in Missouri, 1896-1938. Each chapter contains its own index.)
- *899-A. Part 1, Structure and gas possibilities of the Oriskany sandstone in Steuben, Yates, and parts of the adjacent counties, by W. H. Bradley and J. F. Pepper. 1938. p. 1-68.
- *899-B. Part 2, Subsurface structure in part of southwestern New York and mode of occurrence of gas in the Medina group, by G. B. Richardson. 1941. p. 69-93. [Includes title page, contents, and list of illustrations of volume.]
- (Bulletin 899, issued only as separate chapters under the general title, Geologic structure and occurrence of gas in part of southwestern New York. Each chapter contains its own index.)
- *900-A. Part 1, Townships 22 and 23 north, ranges 10 and 11 east, by N. W. Bass, L. E. Kennedy, W. R. Dillard, Otto Leatherock, and J. H. Hengst. 1938. p. 1-45.
- *900-B. Part 2, Townships 22 and 23 north, ranges 8 and 9 east, by C. T. Kirk, H. D. Jenkins, Otto Leatherock, W. R. Dillard, L. E. Kennedy, and N. W. Bass. 1939. p. 47-82.
- *900-C. Part 3, Townships 24 and 25 north, ranges 8 and 9 east, by N. W. Bass, L. E. Kennedy, J. N. Conley, and J. H. Hengst. 1939. p. 83-129.
- *900-D. Part 4, Townships 24 and 25 north, ranges 10 and 11 east, by L. E. Kennedy, J. D. McClure, H. D. Jenkins, and N. W. Bass. 1940. p. 131-171.
- *900-E. Part 5, Townships 26 and 27 north, ranges 10 and 11 east, by L. E. Kennedy, W. E. Shamblin, Otto Leatherock, and N. W. Bass. 1940. p. 173-208.
- *900-F. Part 6, Township 28 north, ranges 10 and 11 east, and township 29 north, ranges 9 to 11 east, by H. B. Goodrich, L. E. Kennedy, and Otto Leatherock. 1940 [1941]. p. 209-236.
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- *900-H. Part 8, Parts of township 20 north, ranges 9 and 10 east, and township 21 north, ranges 8 and 9 east and all of township 21 north, range 10 east, by C. T. Kirk, W. R. Dillard, Otto Leatherock, and H. D. Jenkins. 1941. p. 269-302.
- *900-I. Part 9, Townships 23 and 24 north, range 7 east, by N. W. Bass, W. R. Dillard, L. E. Kennedy, and H. B. Goodrich. 1941. p. 303-319.
- *900-J. Part 10, Burbank and South Burbank oil fields, townships 26 and 27 north, range 5 east, and townships 25 to 27 north, range 6 east, by N. W. Bass, H. B. Goodrich, and W. R. Dillard. 1942. p. 321-342.
- *900-K. Part 11, Summary of subsurface geology with special reference to oil and gas, by N. W. Bass. 1942 [1943]. p. 343-393. [Includes title page, contents, list of illustrations, and index to volume.]
- (Bulletin 900, issued only as separate chapters under the general title, Subsurface geology and oil and gas resources of Osage County, Okla.)
- *901. Clay investigations in the Southern States, 1934-35, reports by W. B. Lang, P. B. King, M. N. Bramlette, T. N. McVay, H. S. Bay, and A. C. Munyan, with an introduction, by G. R. Mansfield. 1940. 346 p.
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- *904. Geology of the Siana-Tok district, Alaska, by F. H. Moffit. 1938. 54 p.
- *905. The coal resources of McCone County, Mont., by A. J. Collier, and M. M. Knechtel. 1939. 80 p.
- *906-A. Gravel and sand deposits of eastern Maryland adjacent to Washington and Baltimore, by N. H. Darton. 1939. p. 1-42.
- *906-B. Geology and coal resources of the Minot region, N. Dak., by D. A. Andrews. 1939. p. 43-84.
- *906-C. The Mizpah coal field, Custer County, Mont., by F. S. Parker and D. A. Andrews. 1939 [1940]. p. 85-133.
- *906-D. Geology of the Searchlight district, Clark County, Nev., by Eugene Callaghan. 1939. p. 135-188.
- *906-E. Structural control of ore deposition in the Uncompahgre district, Ouray County, Colo., with suggestions for prospecting, by W. S. Burbank. 1940 [1941]. p. 189-265.

- *906-F. Phosphate investigation in Florida, 1934 and 1935, by P. V. Roundy. 1941. p. 267-345. [Includes title page, contents, and list of illustrations of volume.]
(Bulletin 906, issued only as separate chapters under the general title, Contributions to economic geology, 1938-39, short papers and preliminary reports. Each chapter contains its own index.)
- *907. Geology of the Alaska Railroad region, by S. R. Capps. 1940. 201 p.
- *908. Geology of area between Green and Colorado Rivers, Grand and San Juan Counties, Utah, by E. T. McKnight. 1940 [1941]. 147 p.
- *909-A. Geophysical abstracts 92, January-March 1938, compiled by W. Ayvazoglou. 1938. p. 1-50.
- *909-B. Geophysical abstracts 93, April-June 1938, compiled by W. Ayvazoglou. 1939. p. 51-104.
- *909-C. Geophysical abstracts 94, July-September 1938, compiled by W. Ayvazoglou. 1939. p. 105-150.
- *909-D. Geophysical abstracts 95, October-December 1938, compiled by W. Ayvazoglou. 1939. p. 151-222. [Includes title page, contents, and index to volume.]
(Bulletin 909, issued only as separate chapters under the general title, Geophysical abstracts, 92-95, January-December 1938. Each chapter contains its own index.)
- *910-A. Mineral industry of Alaska in 1937, by P. S. Smith. 1939. p. 1-113.
- *910-B. Platinum deposits of the Goodnews Bay district, Alaska, by J. B. Mertie, Jr. 1939 [1940]. p. 115-145.
- *910-C. Fineness of gold from Alaska placers, by P. S. Smith. 1941. p. 147-272. [Includes title page, contents, and list of illustrations for volume.]
(Bulletin 910, issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1937. Each chapter contains its own index.)
- *911. Ore deposits in the vicinity of the London fault of Colorado, by Q. D. Singewald and B. S. Butler. 1941. 74 p.
- *912. Spirit leveling in Utah, 1897-1938; J. G. Staack, chief topographic engineer. 1940. 222 p.
- *913. Triangulation in Utah, 1871-1934; J. G. Staack, chief topographic engineer. 1940. 170 p.
- 914. Microscopic determination of the ore minerals (2d edition), by M. N. Short. 1940. 314 p. \$1.75. [Reprinted.]
- *915-A. Geophysical abstracts 96, January-March 1939, compiled by W. Ayvazoglou. 1940. p. 1-48.
- *915-B. Geophysical abstracts 97, April-June 1939, compiled by W. Ayvazoglou. 1940. p. 49-86.
- *915-C. Geophysical abstracts 98, July-September 1939, compiled by W. Ayvazoglou. 1940. p. 87-132.
- *915-D. Geophysical abstracts 99, October-December 1939, compiled by W. Ayvazoglou. 1940 [1941]. p. 133-195. [Includes title page, contents, and index to volume.]
(Bulletin 915, issued only as separate chapters under the general title, Geophysical abstracts, 96-99, January-December 1939. Each chapter contains its own index.)
- *916-A. Part 1, Southeastern Missouri, 1903-37. 1939. p. 1-124.
- *916-B. Part 2, South-central Missouri, 1908-37. 1939 [1940]. p. 125-295.
- *916-C. Part 3, East-central Missouri, 1903-37. 1939 [1940]. p. 297-439.
- *916-D. Part 4, Northwestern Missouri, 1911-37. 1940. p. 441-563. [Index, p. xi-xii, incorrectly inserted preceding p. 441.]
- *916-E. Part 5, Southwestern Missouri, 1900-37. 1940. p. 565-732.
- *916-F. Part 6, Northeastern Missouri, 1900-37. 1940. p. 733-868.
- *916-G. Part 7, Central Missouri, 1902-37. 1940. p. 869-1024.
- *916-H. Part 8, West-central Missouri, 1906-37. 1940 [1941]. p. 1025-1156. [Includes title page, contents, and list of illustrations of volume.]
(Bulletin 916, issued only as separate chapters under the general title, Transit traverse in Missouri, 1900-1937. Each chapter contains its own index.)
- *917-A. Mineral industry of Alaska in 1938, by P. S. Smith. 1939. p. 1-113.
- *917-B. Geology of the upper Tetling River district, Alaska, by F. H. Moffit. 1941. p. 115-157.
- *917-C. Past lode-gold production from Alaska, by P. S. Smith. 1941. p. 159-212.
- *917-D. Tertiary deposits of the Eagle-Circle district, Alaska, by J. B. Mertie, Jr. 1942. p. 213-264. [Includes title page, contents, and list of illustrations of volume.]
(Bulletin 917, issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1938. Each chapter contains its own index.)
- *918. The Goodnews platinum deposits, Alaska, by J. B. Mertie, Jr. 1940 [1941]. 97 p.
- *919. Spirit leveling in Michigan, 1896-1938; J. G. Staack, chief topographic engineer. 1941. 523 p.
- *920. Pre-Cambrian geology and mineral resources of the Delaware Water Gap and Easton quadrangles, N. J.-Pa., by W. S. Bayley. 1941. 98 p.
- *921-A. Manganese carbonate in the Batesville district, Ark., by H. D. Miser, with a chapter on minerals of the ores, by D. F. Hewett and H. D. Miser. 1941. p. 1-97.
- *921-B. Geology and oil and coal resources of the region south of Cody, Park County, Wyo., by W. G. Pierce and D. A. Andrews. 1941. p. 99-180. [Includes title page, contents, and list of illustrations of volume.]
(Bulletin 921, issued only as separate chapters under the general title, Contributions to economic geology, 1940, short papers. Each chapter contains its own index.)
- *922-A. Quicksilver deposits of the Bottle Creek district, Humboldt County, Nev., a preliminary report, by R. J. Roberts. 1940. p. 1-29.
- *922-B. Quicksilver deposits of the Mount Diablo district, Contra Costa County, Calif., by C. P. Ross. 1940. p. 31-54.
- *922-C. Manganese deposits in the Little Florida Mountains, Luna County, N. Mex., a preliminary report, by S. G. Lasky. 1940. p. 55-73.
- *922-D. Chromite deposits of Grant County, Oreg., a preliminary report, by T. P. Thayer. 1940. p. 75-113.

- *922-E. Quicksilver deposit at Buckskin Peak, National mining district, Humboldt County, Nev., a preliminary report, by R. J. Roberts. 1940. p. 115-133.
- *922-F. Tungsten deposits of Boulder County, Colo., by T. S. Lovering. 1940. p. 135-156.
- *922-G. Manganese deposits at Phillipsburg, Granite County, Mont., a preliminary report, by E. N. Goddard. 1940. p. 157-204.
- *922-H. Tungsten deposits of the Atolia district, San Bernardino and Kern Counties, Calif., by D. M. Lemmon and J. V. N. Dorr, 2d. 1940. p. 205-245.
- *922-I. Antimony deposits of a part of the Yellow Pine district, Valley County, Idaho, a preliminary report, by D. E. White. 1940. p. 247-279.
- *922-J. Chromite deposits in the Selad quadrangle, Siskiyou County, Calif., by G. A. Rynearson and C. T. Smith. 1940 [1941]. p. 281-306.
- *922-K. Antimony deposits of the Wildrose Canyon area, Inyo County, Calif., by D. E. White. 1940. p. 307-325.
- *922-L. Quicksilver deposits of the Mayacmas and Sulphur Bank districts, Calif., a preliminary report, by C. P. Ross. 1940 [1941]. p. 327-353.
- *922-M. Tin deposits of the Black Range, Catron and Sierra Counties, N. Mex., a preliminary report, by Carl Fries, Jr. 1940. p. 355-370.
- *922-N. Chromite deposits of the eastern part of the Stillwater complex, Stillwater County, Mont., by J. W. Peoples and A. L. Howland. 1940 [1941]. p. 371-416.
- *922-O. Chromite deposits of the Pilliken area, Eldorado County, Calif., by F. G. Wells, L. R. Page, and H. L. James. 1940 [1941]. p. 417-460.
- *922-P. Chromite deposits in the Sourdough area, Curry County, and the Briggs Creek area, Josephine County, Oreg., by F. G. Wells, L. R. Page, and H. L. James. 1940. p. 461-496.
- *922-Q. Tungsten deposits in the Tungsten Hills, Inyo County, Calif., by D. M. Lemmon. 1941. p. 497-514.
- *922-R. Quicksilver deposits in San Luis Obispo County and southwestern Monterey County, Calif., by E. B. Eckel, R. G. Yates, and A. E. Granger. 1941. p. 515-580.
- *922-S. Tungsten deposits of the Benton Range, Mono County, Calif., by D. M. Lemmon. 1941. p. 581-593.
- *922-T. Tin-bearing pegmatites of the Tinton district, Lawrence County, S. Dak., a preliminary report, by W. C. Smith and L. R. Page. 1941. p. 595-630. [Includes title pages, contents, lists of illustrations, and indexes for part 1, A-K, and part 2, L-T.]
(Bulletin 922, issued only as separate chapters, in two parts, Part 1, A-K, and Part 2, L-T, under the general title, Strategic minerals investigations, 1940, short papers and preliminary reports.)
- *923. Geology and mineral resources of the Randolph quadrangle, Utah-Wyo., by G. B. Richardson. 1941. 54 p.
- *924. Supplement to catalogue of Mesozoic and Cenozoic plants of North America, 1919-37, by R. S. LaMotte. 1944. 330 p. (See also Bulletin 696.)
- *925-A. Geophysical abstracts 100, January-March 1940, compiled by W. Ayvazoglou. 1940 [1941]. p. 1-50.
- *925-B. Geophysical abstracts 101, April-June 1940, compiled by W. Ayvazoglou. 1941. p. 51-92.
- *925-C. Geophysical abstracts 102, July-September 1940, compiled by W. Ayvazoglou. 1941. p. 93-136.
- *925-D. Geophysical abstracts 103, October-December 1940, compiled by W. Ayvazoglou. 1941. p. 137-200. [Includes title page, contents, and index for volume.]
(Bulletin 925, issued only as separate chapters under the general title, Geophysical abstracts, 100-103, January-December 1940. Each chapter contains its own index.)
- *926-A. Mineral industry of Alaska in 1939, by P. S. Smith. 1941. p. 1-106.
- *926-B. Geology of the Gerstle River district, Alaska, with a report on the Black Rapids Glacier, by F. H. Moffit. 1942. p. 107-160.
- *926-C. Occurrences of molybdenum minerals in Alaska, by P. S. Smith. 1942. p. 161-210.
- *926-D. Geology of the Portage Pass area, Alaska, by F. F. Barnes. 1943. p. 211-235. [Includes title page, contents, and list of illustrations for volume.]
(Bulletin 926, issued only in separate chapters under the general title, Mineral resources of Alaska, 1939. Each chapter contains its own index.)
- *927-A. Superposition in the interpretation of two-layer earth-resistivity curves, by Irwin Roman. 1941. p. 1-18.
No other chapters will be issued for Bulletin 927, Contributions to geophysics, 1941.
- *928-A. Stratigraphy, structure, and mineralization in the Beaver-Tarryall area, Park County, Colo., a reconnaissance report, by Q. D. Singewald. 1942. p. 1-44.
- *928-B. Geology and ore deposits of the Shafter mining district, Presidio County, Tex., by C. P. Ross. 1943. p. 45-125.
- *928-C. Adsorbent clays, their distribution, properties, production, and uses, by P. G. Nutting. 1943. p. 127-221.
- *928-D. Manganiferous and ferruginous chert in Perry and Lewis Counties, Tenn., by E. F. Burchard, with a statement on concentration tests on manganese from Perry County, by H. S. Rankin. 1943. p. 223-273. [Includes title page, contents, and list of illustrations for volume.]
(Bulletin 928, issued only as separate chapters under the general title, Contributions to economic geology, 1941-42. Each chapter contains its own index.)
- *929. Geology and ore deposits of the Chichagof mining district, Alaska, by J. C. Reed and R. R. Coats. 1941 [1942]. 148 p.
- *930-A. Part 1, Southern Illinois. 1942. p. 1-481.

- *930-B. Part 2, West-central Illinois. 1942. p. 483-918.
- *930-C. Part 3, East-central Illinois. 1943. p. 919-1281.
- *930-D. Part 4, Northern Illinois. 1943. p. 1283-1704. [Includes title pages, contents, and lists of illustrations for volumes 1 and 2.]
(Bulletin 930, issued only in separate chapters in 2 volumes, volume 1, A-B, and volume 2, C-D, Spirit leveling in Illinois, 1896-1942. Each chapter contains its own index.)
- *931-A. Tungsten resources of the Blue Wing district, Lemhi County, Idaho, by Eugene Callaghan and D. M. Lemmon. 1941. p. 1-21.
- *931-B. Some quicksilver prospects in adjacent parts of Nevada, California, and Oregon, by C. P. Ross. 1941. p. 23-37.
- *931-C. Tin deposit at Majuba Hill, Pershing County, Nev., by W. C. Smith and V. P. Glaneila. 1942. p. 39-55.
- *931-D. Nickel-gold deposit near Mount Vernon, Skagit County, Wash., by S. W. Hobbs and W. T. Pecora. 1941. p. 57-78.
- *931-E. Tungsten deposits in the Sierra Nevada near Bishop, Calif., a preliminary report, by D. M. Lemmon. 1941 [1942]. p. 79-104.
- *931-F. Nickel deposits of Bohemia Basin and vicinity, Yakobi Island, Alaska, by J. C. Reed and J. V. N. Dorr, 2d. 1942. p. 105-138.
- *931-G. Chromite deposits of Kenai Peninsula, Alaska, by P. W. Guild. 1942. p. 139-175.
- *931-H. Tin and tungsten deposits at Silver Hill, Spokane County, Wash., by L. R. Page. 1942. p. 177-203.
- *931-I. Nickel deposit near Riddle, Douglas County, Oreg., by W. T. Pecora and S. W. Hobbs. 1942. p. 205-26.
- *931-J. Quicksilver deposits in the Steens and Pueblo Mountains, southern Oregon, by C. P. Ross. 1942. p. 227-258.
- *931-K. The Wild Horse quicksilver district, Lander County, Nev., by C. H. Dane and C. P. Ross. 1942. p. 259-278.
- *931-L. Tin deposits of northern Lander County, Nev., by Carl Fries, Jr. 1942. p. 279-294.
- *931-M. Manganese deposits in the Nevada district, White Pine County, Nev., by R. J. Roberts. 1942. p. 295-318.
- *931-N. Quicksilver deposits of the Opalite district, Malheur County, Oreg., and Humboldt County, Nev., by R. G. Yates. 1942. p. 319-348.
- *931-O. Nickel deposit near Gold Hill, Boulder County, Colo., by E. N. Coddard and T. S. Lovering. 1942. p. 349-362.
- *931-P. Mica-bearing pegmatites of New Hampshire, a preliminary report, by J. C. Olson. 1942. p. 363-403.
- *931-Q. Quicksilver and antimony deposits of the Stayton district, Calif., by E. H. Bailey and W. B. Myers. 1942. p. 405-434.
- *931-R. Manganese resources of the Olympic Peninsula, Wash., a preliminary report, by C. F. Park, Jr. 1942. p. 435-457.
- *931-S. Manganese deposits in the Paymaster mining district, Imperial County, Calif., by J. B. Hadley. 1942. p. 459-473.
*[Title pages, contents, lists of illustrations, and indexes for part 1, A-J, and part 2, K-S. 1943. p. i-ix, i-ix.]
(Bulletin 931, issued only as separate chapters, in two parts, Part 1, A-J, and Part 2, K-S, under the general title, Strategic minerals investigations, 1941, short papers and preliminary reports.)
- *932-A. Geophysical abstracts 104, January-March 1941, compiled by W. Ayvazoglou. 1941. p. 1-40.
- *932-B. Geophysical abstracts 105, April-June 1941, compiled by W. Ayvazoglou. 1942. p. 41-84.
- *932-C. Geophysical abstracts 106, July-September 1941, compiled by W. Ayvazoglou. 1942. p. 85-122.
- *932-D. Geophysical abstracts 107, October-December 1941, compiled by W. Ayvazoglou. 1942. p. 123-183. [Includes title pages, contents, and index for volume.]
(Bulletin 932, issued only as separate chapters under the general title, Geophysical abstracts, 104-107, January-December 1941. Each chapter contains its own index.)
- *933-A. Mineral industry of Alaska in 1940, by P. S. Smith. 1942. p. 1-102.
- *933-B. Geology of the Nutzotin Mountains, Alaska, by F. H. Moffit, with a section on the igneous rocks, by R. G. Wayland. 1943. p. 103-174; Gold deposits near Nabesna, by R. G. Wayland. 1943. p. 175-199.
- *933-C. Relations of structure to mineral deposition at the Independence mine, Alaska, by W. C. Stoll. 1944. p. 201-217.
- *933-D. Reconnaissance of Porcupine Valley, Alaska, by Gerald Fitzgerald. 1944. p. 219-243. [Includes title page, contents, and list of illustrations for volume.]
(Bulletin 933, issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1940. Each chapter contains its own index.)
- *934. Phosphate resources of Florida, by G. R. Mansfield. 1942 [1943]. 82 p
- *935-A. Chrome resources of Cuba, by T. P. Thayer. 1942. p. 1-74.
- *935-B. Manganese deposits of Cuba, by C. F. Park, Jr. 1942. p. 75-97.
- *935-C. Tin deposits of the Republic of Mexico, by W. F. Foshag and Carl Fries, Jr. 1942 [1943]. p. 99-176.
- *935-D. Tungsten deposits, Isla de Pinos, Cuba, by L. R. Page and J. F. McAllister. 1944. p. 177-246.
- *935-E. Nickel-silicate and associated nickel-cobalt-manganese-oxide deposits near São José do Tocantins, Goiaz, Brazil, by W. T. Pecora. 1944. p. 247-305.

- *935-F. Manganese deposits in part of the Sierra Maestra, Cuba, by C. F. Park, Jr., and M. W. Cox. 1944. p. 307-355.
- *935-G. Geology and manganese deposits of Guisa-Los Negros area, Oriente Province, Cuba, by W. P. Woodring and S. N. Daviess. 1944. p. 357-386.
- *935-H. Manganese deposits in Costa Rica, by R. J. Roberts. 1944. p. 387-414.
*[Title page, preface, contents, and list of illustrations for volume. 1947. p. i-x.]
(Bulletin 935, issued only as separate chapters under the general title, *Geologic investigations in the American Republics*, 1941-43.)
- *936-A. Muscovite in the Spruce Pine district, N. C., by T. L. Kesler and J. C. Olson. 1942. p. 1-38.
- *936-B. Tungsten deposits of the Nightingale district, Pershing County, Nev., by W. C. Smith and P. W. Guild. 1942. p. 39-58.
- *936-C. Topaz deposits near the Brewer mine, Chesterfield County, S. C., by Carl Fries, Jr. 1942. p. 59-78.
- *936-D. Chromite and quicksilver deposits of the Del Puerto area, Stanislaus County, Calif., by H. E. Hawkes, Jr., F. G. Wells, and D. P. Wheeler, Jr. 1942. p. 79-110.
- *936-E. Manganese deposits of Cedar Creek Valley, Frederick and Shenandoah Counties, Va., by W. H. Monroe. 1942. p. 111-141.
- *936-F. Quicksilver deposits of the Parkfield district, Calif., by E. H. Bailey. 1942. p. 143-169.
- *936-G. Chromite deposits of Red Bluff Bay and vicinity, Baranof Island, Alaska, by P. W. Guild and J. R. Balsley, Jr. 1942. p. 171-187. 45c.
- *936-H. Quicksilver deposits near the Little Missouri River, Pike County, Ark., by David Gallagher. 1942. p. 189-219.
- *936-I. Nickel-copper deposits on the west coast of Chichagof Island, Alaska, by W. T. Pecora. 1942. p. 221-243.
- *936-J. The tin-spodumene belt of the Carolinas, a preliminary report, by T. L. Kesler. 1942. p. 245-269.
- *936-K. Tin deposits of Irish Creek, Va., by A. H. Koschmann, J. J. Glass, and J. S. Vhay. 1942. p. 271-296.
- *936-L. The Three Kids manganese district, Clark County, Nev., by C. B. Hunt, V. E. McKelvey, and J. H. Wiese. 1942. p. 297-319.
- *936-M. Nickel-copper deposit at Snipe Bay, Baranof Island, Alaska, by J. C. Reed and G. O. Gates. 1942. p. 321-330. 10c.
- *936-N. Antimony deposits of the Stampede Creek area, Kantishna district, Alaska, by D. E. White. 1942 [1943]. p. 331-348.
- *936-O. Nickel-copper deposit at Funter Bay, Admiralty Island, Alaska, by J. C. Reed. 1942. p. 349-361.
- *936-P. Vanadium deposits of Colorado and Utah, a preliminary report, by R. P. Fischer. 1942 [1943]. p. 363-394.
- *936-Q. The Coso quicksilver district, Inyo County, Calif., by C. P. Ross and R. G. Yates. 1943. p. 395-416.
- *936-R. Manganese deposits in the Artillery Mountains region, Mohave County, Ariz., by S. G. Lasky and B. N. Webber. 1944. p. 417-448.
*[Title pages, contents, lists of illustrations, and indexes for part 1, A-I, and part 2, J-R. 1944. p. i-ix, i-x.]
(Bulletin 936, issued only as separate chapters in two parts, Part 1, A-I, and Part 2, J-R, under the general title, *Strategic mineral investigations*, 1942, short papers and preliminary reports. Each chapter contains its own index.)
- 937. Bibliography of North American geology, 1929-39, by E. M. Thom. 1944. Part 1, Bibliography, p. 1-1063; Part 2, Index, p. 1065-1546 (in one volume, bound). \$4.25 per set.
- *938. Bibliography of North American geology for 1940 and 1941, by E. M. Thom. 1942 [1943]. 479 p.
- *939-A. Geophysical abstracts 108, January-March 1942, compiled by W. Ayvazoglou. 1942. p. 1-38.
- *939-B. Geophysical abstracts 109, April-June 1942, compiled by W. Ayvazoglou. 1942. p. 39-66.
- *939-C. Geophysical abstracts 110, July-September 1942, compiled by W. Ayvazoglou. 1943. p. 67-98.
- *939-D. Geophysical abstracts 111, October-December 1942, compiled by W. Ayvazoglou. 1943. p. 99-138. [Includes title page, contents, and index for volume.]
(Bulletin 939, issued only as separate chapters under the general title, *Geophysical abstracts*, 108-111, January-December 1942. Each chapter contains its own index.)
By Departmental Order of October 5, 1942, the geophysical section of the Geological Survey was transferred back to the Bureau of Mines, Department of the Interior, by whom later *Geophysical Abstracts* were issued. (See also note under Bulletin 957.)
- *940-A. The Rose Creek tungsten mine, Pershing County, Nev., by R. J. Roberts. 1943. p. 1-14.
- *940-B. Manganese deposits of the Elkon area, Va., by P. B. King. 1943. p. 15-55.
- *940-C. Geophysical surveys in the Ochoco quicksilver district, Oreg., a preliminary report, by E. L. Stephenson. 1943. p. 57-98.
- *940-D. Vanadium-bearing magnetite-ilmenite deposits near Lake Sanford, Essex County, N. Y., by J. R. Balsley, Jr. 1944. p. 99-123.
- *940-E. Occurrence of manganese in eastern Aroostook County, Maine, by W. S. White. 1943. p. 125-161.
- *940-F. Manganese deposits of the Lyndhurst-Vesuvius district, Augusta and Rockbridge Counties, Va., by M. M. Knechtel. 1944. p. 163-198. 30c.
- *940-G. Manganese deposits of the Sweet Springs district, W. Va. and Va., by H. S. Ladd. 1944. p. 199-217.

- 940-H. Manganese deposits of the Flat Top and Round Mountain districts, Bland and Giles Counties, Va., by H. S. Ladd and F. W. Stead. 1944. p. 219-245. 75c.
- *940-I. Tungsten deposits in the Boriana district and the Aquarius Range, Mohave County, Ariz., by S. W. Hobbs. 1944. p. 247-264.
- *940-J. Cobalt-bearing manganese deposits of Alabama, Georgia, and Tennessee, by W. G. Pierce. 1944. p. 265-285.
[Title page, contents, and list of illustrations for volume. p. i-vii. 5c.]
(Bulletin 940, issued only as separate chapters under the general title, Strategic mineral investigations, 1943.)
- *941. Geology of the Coastal Plain of Georgia, by C. W. Cooke. 1943 [1944]. 121 p.
- *942. Geological and geophysical survey of fluorspar areas in Hardin County, Ill.--Part 1, Geology of the Cave in Rock district, by L. W. Currier, with the collaboration of O. E. Wagner, Jr., 1944, p. 1-72; Part 2, An exploratory study of faults in the Cave in Rock and Rosiclare districts by the earth-resistivity method, by M. K. Hubbert, 1944, p. 73-150.
- *943-A. Mineral industry of Alaska in 1941 and 1942, by P. S. Smith. 1944. p. 1-23.
- *943-B. Mining in the northern Copper River region, Alaska, by F. H. Moffit. 1944. p. 25-47.
- *943-C. Nickel-copper prospect near Spirit Mountain, Copper River region, Alaska, by Jack Kingston and D. J. Miller. 1945. p. 49-57. [Includes title page and contents for volume.]
(Bulletin 943, issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1941 and 1942. Each chapter contains its own index.)
- *944-A. Phosphate deposits of the Teton Basin area, Idaho and Wyoming, by L. S. Gardner. 1944. p. 1-36.
- *944-B. Geology of the lead-silver deposits of the Clark Fork district, Bonner County, Idaho, by A. L. Anderson. 1947. p. 37-117.
- *944-C. Geology and ore deposits of Boise Basin, Idaho, by A. L. Anderson. 1947 [1949]. p. 119-319. [Includes title page, contents, and list of illustrations for volume.]
(Bulletin 944, issued only as separate chapters under the general title, Contributions to economic geology, 1943-44. Each chapter contains its own index.)
- *945-A. Geology of the Grey Eagle and some nearby chromite deposits in Glenn County, Calif., by G. A. Rynearson and F. G. Wells. 1944. p. 1-22.
- *945-B. Chromite deposits near San Luis Obispo, San Luis Obispo County, Calif., by C. T. Smith and A. B. Griggs. 1944. p. 23-44.
- *945-C. Beryllium and tungsten deposits of the Iron Mountain district, Sierra and Socorro Counties, N. Mex., by R. H. Jahns, with a section on the beryllium minerals, by J. J. Glass. 1944. p. 45-79.
- *945-D. Tungsten deposits in Beaver County, Utah, by S. W. Hobbs. 1945. p. 81-111.
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* [Title page, contents, and list of illustrations for volume. p. i-viii.]
(Bulletin 945, issued only as separate chapters under the general title, Strategic mineral investigations, 1945.)
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[Title page, preface, contents, and list of illustrations for volume. p. i-vii. (Bulletin 946, issued only as separate chapters under the general title, Geologic investigations in the American Republics, 1944-45.)]
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*[Title page, contents, list of illustrations, and index for volume. p. i-v, 143-145.]
(Bulletin 947, issued only as separate chapters under the general title, Mineral resources of Alaska, report on progress of investigations in 1943 and 1944.)
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- *957-B. Geophysical abstracts 129, April-June 1947, by V. L. Skitsky, 1947, p. 57-116.
- *957-C. Geophysical abstracts 130, July-September 1947, by V. L. Skitsky, 1947, p. 117-177.
- *957-D. Geophysical abstracts 131, October-December 1947, by V. L. Skitsky, 1948, p. 179-265. [Includes title page, contents, and index for volume.]
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- Departmental Order of October 5, 1942, the geophysical work was again placed with the Bureau of Mines, and abstracts 112 to 127 were issued by that Bureau. Beginning July 1, 1947, the geophysics section was again transferred to the Geological Survey.
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 - *959-A. Geophysical abstracts 132, January-March 1948, by V. L. Skitsky and S. T. Vesselowsky. 1948. p. 1-85.
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- *966-B. Geophysical abstracts 137, April-June 1949, by M. C. Rabbitt, V. L. Skitsky, and S. T. Vesselowsky. 1949, p. 95-164.
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- *966-D. Geophysical abstracts 139, October-December 1949, by M. C. Rabbitt, V. L. Skitsky, and S. T. Vesselowsky. 1950, p. 253-333.
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Includes: Quicksilver, 1883, p. 387-398; Nickel, by W. P. Blake, 1883, p. 399-420; Cobalt, by F. W. Taylor, 1883, p. 421-423; Manganese, by D. T. Day, 1883, p. 424-427; Chromium, by D. T. Day, 1883, p. 428-430; Tungsten, by D. T. Day, 1883, p. 431-433; Tin, 1883, p. 434-437; Antimony, 1883, p. 438-439; Bismuth, 1883, p. 440; Arsenic, 1883, p. 441; Platinum, 1883, p. 442-443; Iridium, by F. W. Clarke, 1883, p. 444; Aluminum, by R. L. Packard, 1883, p. 445; Molybdenum, 1883, p. 446; Tellurium, 1883, p. 447; Uranium, 1883, p. 448; Vanadium, 1883, p. 449.

*i. [Industrial materials, 1883, p. 450-479.]

Includes: Structural materials, 1883, p. 450-464; Clays, 1883, p. 465-475, including Fire-clay in the eastern division, by F. A. Wilber, 1883, p. 465-468; Abrasive materials, 1883, p. 476-481, including Corundum and emery, by Henry Gannett, 1883, p. 476-477, and Berea grit, by M. C. Read, 1883, p. 478-479.

*j. Precious stones, 1883, p. 482-503.

Includes: American gems and precious stones, by G. F. Kunz, 1883, p. 483-499; The discovery of emeralds in North Carolina, by W. E. Hidden, 1883, p. 500-502; Hiddenite--the new emerald-green gem, by W. E. Hidden, 1883, p. 502-503.

*k. Fertilizers, 1883, p. 504-531.

Includes: The phosphate deposits of South Carolina, by O. A. Moses, 1883, p. 504-521; Apatite, by F. A. Wilber, 1883, p. 521; Marls, by F. A. Wilber, 1883, p. 522-526.

*l. Salt, 1883, p. 532-565.

Includes: The salines of Louisiana, by E. W. Hilgard, 1883, p. 554-565.

*m. [Miscellaneous nonmetals, 1883, p. 566-609.]

Includes: Borax, 1883, p. 566-577; Sulphur, 1883, p. 578-579; Barytes, 1883, p. 580-581; Strontia, 1883, p. 582; Mica, 1883, p. 583-584; Talc, 1883, p. 585; Quartz, 1883, p. 586; Fluorspar, 1883, p. 587; Asbestos, 1883, p. 588-589; Graphite, by J. A. Walker, 1883, p. 590-594; Lithographic stone, 1883, p. 595-596; Niter, 1883, p. 597-598; Nitrate of soda, 1883, p. 599-600; Carbonate of soda, 1883, p. 601-602; Sulphate of soda, 1883, p. 603-604; Asphaltum, 1883, p. 605; Alum, 1883, p. 606; Copperas, 1883, p. 607; Cryolite, 1883, p. 608; Ozocerite, 1883, p. 609.

*n. Miscellaneous contributions, 1883, p. 610-775.

Includes: The diving rod, by R. W. Raymond, 1883, p. 610-626; Electrolysis in the metallurgy of copper, lead, and other metals, by C. O. Mailloux, 1883, p. 627-658; The minor metals of North Carolina, by W. C. Kerr, 1883, p. 659-661; Minor metals of the Pacific Coast, by C. G. Yale, 1883, p. 662-663; The useful minerals of the United States, 1883, p. 664-775.

*o. Appendix: The new tariff, 1883, p. 777-787; Index, 1883, p. 789-813.

¹ Each chapter of Mineral Resources dealing with a particular mineral or group of minerals was usually also published separately. In this list, lower case letters are used before the titles to indicate these separates so that they may be listed in the author index at the end of this publication. Only those chapters that are of special permanent interest are specifically listed in the subject index.

*Mineral Resources of the United States, calendar years 1883 and 1884. 1885. 1016 p.

*a. Summary, 1885, p. 1-10; Coal, 1885, p. 11-143.

Includes: Anthracite coal mining, by H. M. Chance, 1885, p. 104-131; Coal mining in the Kanawha Valley of West Virginia, by S. M. Buck, 1885, p. 131-143; The manufacture of coke, by J. D. Weeks, 1885, p. 144-213.

*b. Petroleum, by S. H. Stowell, 1885, p. 214-232; Natural gas, 1885, p. 233-245.

*c. Iron, 1885, p. 246-311.

Includes: The manufacture of iron and steel in the United States, by J. M. Swank, 1885, p. 246-257; Iron ores in the United States, by J. M. Swank, 1885, p. 257-281; Iron in the Rocky Mountain division, by F. F. Chisolm, 1885, p. 281-286; Iron on the Pacific Coast, by C. G. Yale, 1885, p. 286-290; American blast-furnace progress, by John Birkinbine, 1885, p. 290-311.

*d. Gold and silver, 1885, p. 312-321.

*e. Copper, 1885, p. 322-410.

Includes: The copper industry of the United States, by Charles Kirchhoff, Jr., 1885, p. 322-374; The mines and reduction works of Butte City, Montana, by E. D. Peters, Jr., 1885, p. 374-396; The cupola smelting of copper in Arizona, by James Douglas, Jr., 1885, p. 297-410.

*f. Lead, 1885, p. 411-473.

Includes: The lead industry of the United States, by Charles Kirchhoff, Jr., 1885, p. 411-440; Lead slags, by M. W. Iles, 1885, p. 440-462; Recent improvements in desilverizing lead in the United States, by H. O. Hoffman, 1885, p. 462-473.

*g. Zinc, 1885, p. 474-491.

Includes: The zinc industry of the United States, by Charles Kirchhoff, Jr., 1885, p. 474-491.

*h. [Miscellaneous metals, 1885, p. 492-661.]

Includes: Quicksilver, 1885, p. 492-536, including Quicksilver reduction at New Almaden, by S. B. Christy, 1885, p. 503-536; Nickel, by W. P. Blake, 1885, p. 537-543; Cobalt, by D. T. Day, 1885, p. 544-549; Manganese, by D. T. Day, 1885, p. 550-566; Chromium, by D. T. Day, 1885, p. 567-573; Tungsten, by D. T. Day, 1885, p. 574-575; Platinum, 1885, p. 576-580; Iridium, by W. L. Dudley, 1885, p. 581-591; Tin, by W. P. Blake, 1885, p. 592-640; Antimony, by W. P. Blake, 1885, p. 641-653; Bismuth, 1885, p. 654-655; Arsenic, 1885, p. 656-657; Aluminum, by R. L. Packard, 1885, p. 658-660; Zirconium, by D. T. Day, 1885, p. 661.

*i. [Industrial materials, 1885, p. 662-720.]

Includes: Structural materials, 1885, p. 662-711, including Clays, by F. A. Wilber, 1885, p. 676-711; Abrasive materials, 1885, p. 712-722, including Corundum and emery, by T. M. Chatard, 1885, p. 714-720.

*j. Precious stones, by G. F. Kunz, 1885, p. 723-782.

*k. Fertilizers, 1885, p. 783-826.

Includes: Phosphate rock, by D. T. Day, 1885, p. 783-805; Marls, by F. A. Wilber, 1885, p. 808; Gypsum, by F. A. Wilber, 1885, p. 809-815; Manufactured fertilizers, by D. T. Day, 1885, p. 815-826.

*l. Salt, 1885, p. 827-850.

*m. [Miscellaneous nonmetals, 1885, p. 851-977.]

Includes: Bromine, by D. T. Day, 1885, p. 851-853; Iodine, by D. T. Day, 1885, p. 854-858; Borax, 1885, p. 859-863; Sulphur, by D. T. Day, 1885, p. 864-876; Pyrites, by William Martyn, 1885, p. 877-905; Mica, by F. W. Clarke, 1885, p. 906-912; Asbestos, 1885, p. 913-914; Graphite, by J. A. Walker, 1885, p. 915-919; Mineral paints, 1885, p. 920-929; Chalk, 1885, p. 930-932; Feldspar, by D. T. Day, 1885, p. 933-934; Lithographic stone, 1885, p. 935-936; Asphaltum, 1885, p. 937-948; Alum, 1885, p. 949-950; Bluestone, 1885, p. 951; Copperas, 1885, p. 952-953; Cryolite, 1885, p. 954; Ozocerite, 1885, p. 955-957; Glass materials, by J. D. Weeks, 1885, p. 958-977.

*n. Mineral waters, by A. C. Peale, 1885, p. 978-987.

*o. Historical sketch of mining law, by R. W. Raymond, 1885, p. 988-1004; Index, 1885, p. 1005-1016.

*Mineral Resources of the United States, calendar year 1885. 1886. 576 p.

*a. Summary, 1886, p. 1-9; Coal, by C. A. Ashburner, 1886, p. 10-73; The manufacture of coke, by J. D. Weeks, 1886, p. 74-129.

*b. Petroleum, by S. H. Stowell, 1886, p. 130-154; Natural gas, by J. D. Weeks, 1886, p. 155-179.

*c. Iron, 1886, p. 180-199.

Includes: Twenty-one years of progress in the manufacture of iron and steel in the United States, by J. M. Swank, 1886, p. 180-195; Iron in the Rocky Mountain division, by F. F. Chisolm, 1886, p. 196; Iron on the Pacific Coast, by C. G. Yale, 1886, p. 196-199.

*d. Gold and silver, 1886, p. 200-207.

*e. Copper, 1886, p. 208-243.

Includes: The copper industry of the United States, by Charles Kirchhoff, Jr., 1886, p. 208-243.

*f. Lead, by Charles Kirchhoff, Jr., 1886, p. 244-271.

*g. Zinc, by Charles Kirchhoff, Jr., 1886, p. 273-284.

*h. [Miscellaneous metals, 1886, p. 284-394.]

Includes: Quicksilver, 1886, p. 284-296; Nickel, 1886, p. 297-302; Manganese, by J. D. Weeks, 1886, p. 303-356; Chromium, by D. T. Day, 1886, p. 357-360; Cobalt, by D. T. Day, 1886, p. 361-365; Tungsten, by D. T. Day, 1886, p. 366; Platinum and iridium, 1886, p. 367-369; Tin, 1886, p. 370-385; Arsenic, 1886, p. 386; Antimony, 1886, p. 387-388; Bismuth, 1886, p. 389; Aluminum, by R. L. Packard, 1886, p. 390-392; Zirconium, by D. T. Day, 1886, p. 393-394.

*i. [Industrial materials, 1886, p. 395-436.]

Includes: Structural materials, by H. S. Sproull, 1886, p. 395-427; Abrasive materials, 1886, p. 428-

- 436, including Novaculite, by G. M. Turner, 1886, p. 433-436.
- *j. Precious stones, by G. F. Kunz, 1886, p. 437-444.
- *k. Fertilizers, 1886, p. 445-473.
- Includes: Phosphate rock, by D. T. Day, 1886, p. 445-455; Gypsum, by H. S. Sproull, 1886, p. 458-464.
- *l. Salt, 1886, p. 474-485.
- *m. [Miscellaneous nonmetals, 1886, p. 486-535.]
- Includes: Bromine, by D. T. Day, 1886, p. 486-487; Iodine, by D. T. Day, 1886, p. 488-490; Borax, 1886, p. 491-493; Sulphur, by W. C. Day, 1886, p. 494-500; Pyrites, by H. J. Davis, 1886, p. 501-517; Mica, 1886, p. 518-520; Asbestos, 1886, p. 521-522; Feldspar, by W. C. Day, 1886, p. 523; Mineral paints, by Marcus Benjamin, 1886, p. 524-533; Talc, by G. F. Perrenoud, 1886, p. 534-535.
- *n. Mineral waters, by A. C. Peale, 1886, p. 536-543.
- *o. Glass materials, by J. D. Weeks, 1886, p. 544-557; Index, 1886, p. 559-576.
- *Mineral Resources of the United States, calendar year 1886, 1887, 813 p.
- *a. Summary, 1887, p. 1-10; Iron, 1887, p. 11-103.
- Includes: The American iron trade in 1886, by J. M. Swank, 1887, p. 11-22; The American iron industry from its beginning in 1619 to 1886, by J. M. Swank, 1887, p. 23-38; The iron ores east of the Mississippi River, by John Birkinbine, 1887, p. 39-103.
- *b. Gold and silver, 1887, p. 104-108.
- *c. Copper, by Charles Kirchhoff, Jr., 1887, p. 109-139.
- *d. Lead, by Charles Kirchhoff, Jr., 1887, p. 140-153.
- *e. Zinc, by Charles Kirchhoff, Jr., 1887, p. 154-159.
- *f. [Miscellaneous metals, 1887, p. 160-223.]
- Includes: Quicksilver, 1887, p. 160-168; Nickel, 1887, p. 169-173; Cobalt, 1887, p. 174-175; Chromium, 1887, p. 176-179; Manganese, by J. D. Weeks, 1887, p. 180-213; Tin, 1887, p. 214-217; Tungsten, 1887, p. 218-219; Aluminum, by R. L. Packard, 1887, p. 220-221; Platinum and iridium, 1887, p. 222-223.
- *g. Coal, by C. A. Ashburner, 1887, p. 224-377; The manufacture of coke, by J. D. Weeks, 1887, p. 378-438; Petroleum, by J. D. Weeks, 1887, p. 439-487; Natural gas, by J. D. Weeks, 1887, p. 488-516.
- *h. [Industrial materials, 1887, p. 517-594.]
- Includes: Structural materials, by W. C. Day, 1887, p. 517-580; Abrasive materials, 1887, p. 581-594, including Buhrstones, by W. A. Raborg, 1887, p. 581-582, Grindstones, by W. A. Raborg, 1887, p. 582-585, Corundum, by W. A. Raborg, 1887, p. 585-586, and Novaculite, by G. M. Turner, 1887, p. 589-594.
- *i. Precious stones, by G. F. Kunz, 1887, p. 595-605.
- *j. Fertilizers, 1887, p. 606-627.
- Includes: The fertilizer trade in North Carolina in 1886, by W. B. Phillips, 1887, p. 611-619.
- *k. [Miscellaneous nonmetals, 1887, p. 628-701.]
- Includes: Salt, by W. A. Raborg, 1887, p. 628-641; Bromine, 1887, p. 642-643; Sulphur, by W. C. Day, 1887, p. 644-647; Tellurium, 1887, p. 648-649; Pyrites, by R. P. Rothwell, 1887, p. 650-675; Phosphorous, by G. M. Turner, 1887, p. 676-677; Borax, 1887, p. 678-680; Alum, 1887, p. 681-682; Bluestone, 1887, p. 683; Copperas, 1887, p. 684-685; Graphite, by W. A. Raborg, 1887, p. 686-689; Lithographic stone, 1887, p. 690-691; Fluorspar, 1887, p. 692-693; Magnesium, 1887, p. 694-698; Strontium, 1887, p. 699-700; Feldspar, by W. C. Day, 1887, p. 701.
- *l. Mineral paints, by Marcus Benjamin, 1887, p. 702-714.
- *m. Mineral waters, by A. C. Peale, 1887, p. 715-721.
- *n. Mining law, by E. R. L. Gould, 1887, p. 722-790; Index, 1887, p. 791-813.
- *Mineral Resources of the United States, calendar year 1887, 1888, 832 p.
- *a. Summary, 1888, p. 1-9; Iron, 1888, p. 10-57.
- Includes: The iron and steel industries of the United States in 1887 and 1888, by J. M. Swank, 1888, p. 10-27; Iron in the Rocky Mountain division, by F. F. Chisolm, 1888, p. 28-29; Iron ore mining in 1887, by John Birkinbine, 1888, p. 30-57.
- *b. Gold and silver, 1888, p. 58-65.
- *c. Copper, by Charles Kirchhoff, Jr., 1888, p. 66-97.
- *d. Lead, by Charles Kirchhoff, Jr., 1888, p. 98-112.
- *e. Zinc, by Charles Kirchhoff, Jr., 1888, p. 113-117.
- *f. [Miscellaneous metals, 1888, p. 118-167.]
- Includes: Quicksilver, 1888, p. 118-125; Nickel, 1888, p. 126-129; Cobalt, 1888, p. 130-131; Chromium, 1888, p. 132-133; Tin, 1888, p. 134-137; Aluminum, by R. L. Packard, 1888, p. 138-141; Platinum, 1888, p. 142-143; Manganese, by J. D. Weeks, 1888, p. 144-167, including statements on Great Britain, by G. E. Blackwell, 1888, p. 154-159, on Spain, by W. D. Marvel, 1888, p. 159-160, and on Hadfield's manganese steel, by R. A. Hadfield, 1888, p. 161-167.
- *g. Coal, by C. A. Ashburner, 1888, p. 168-382; The manufacture of coke, by J. D. Weeks, 1888, p. 383-435; Petroleum, by J. D. Weeks, 1888, p. 436-463; Natural gas, by J. D. Weeks, 1888, p. 464-502.
- *h. Structural materials, by W. C. Day, 1888, p. 503-551; Abrasive materials, 1888, p. 552-554.
- *i. Precious stones, 1888, p. 555-579.
- *j. Fertilizers, 1888, p. 580-603.
- *k. [Miscellaneous nonmetals, 1888, p. 604-673.]
- Includes: Sulphur, by W. C. Day, 1888, p. 604-610; Salt by W. A. Raborg, 1888, p. 611-625; Bromine, 1888, p. 626-627; Potassium salts, by W. C. Day, 1888, p. 628-650; Sodium salts, by W. C. Day,

- 1888, p. 651-658; Fluorspar, 1888, p. 659; Mica, 1888, p. 660-671; Graphite, 1888, p. 672-673.
- *l. Mineral paints, 1888, p. 674-679.
 - *m. Mineral waters, by A. C. Peale, 1888, p. 680-687.
 - *n. Useful minerals of the United States, edited by Albert Williams, Jr., 1888, p. 688-812; Index, 1888, p. 813-832.
- *Mineral Resources of the United States, calendar year 1888. 1890. 652 p.
- *a. Summary, 1890, p. 1-11; Iron, 1890, p. 12-35.
 - Includes: The iron and steel industries of the United States in 1888 and 1889, by J. M. Swank, 1890, p. 12-32; Iron in the Rocky Mountain division, by F. F. Chisolm, 1890, p. 33-35.
 - *b. Gold and silver, 1890, p. 36-42.
 - *c. Copper, by Charles Kirchhoff, Jr., 1890, p. 43-77.
 - *d. Lead, by Charles Kirchhoff, Jr., 1890, p. 78-91.
 - *e. Zinc, by Charles Kirchhoff, Jr., 1890, p. 92-96.
 - *f. [Miscellaneous metals, 1890, p. 97-167.]
 - Includes: Quicksilver, 1890, p. 97-107; Nickel, 1890, p. 108-118, including The nickel ores at Sudbury, Canada, by E. D. Peters, 1890, p. 110-116; Chromium, 1890, p. 119-122; Manganese, by J. D. Weeks, 1890, p. 123-143; Tin, 1890, p. 144-159; Aluminum, by R. L. Packard, 1890, p. 160-164; Platinum, 1890, p. 165-167.
 - *g. Coal, by C. A. Ashburner, 1890, p. 168-394; The manufacture of coke, by J. D. Weeks, 1890, p. 395-441; Petroleum, by J. D. Weeks, 1890, p. 442-480; Natural gas, by J. D. Weeks, 1890, p. 481-512; Asphaltum, 1890, p. 513-514; Ozokerite, 1890, p. 515.
 - *h. Structural materials, by W. C. Day, 1890, p. 516-575; Abrasive materials, 1890, p. 576-579.
 - *i. Precious stones, by G. F. Kunz, 1890, p. 580-585.
 - *j. Fertilizers, 1890, p. 586-596.
 - *k. Salt, by W. A. Raborg, 1890, p. 597-612.
 - *l. Bromine, 1890, p. 613; Mica, 1890, p. 614-615.
 - *m. Mineral paints, 1890, p. 616-622.
 - *n. Mineral waters, by A. C. Peale, 1890, p. 623-630; Index, 1890, p. 631-652.
- *Mineral Resources of the United States, calendar years 1889 and 1890. 1892. 671 p.
- *a. Summary, 1892, p. 1-9; Iron and steel, 1892, p. 10-47.
 - Includes: The iron and steel industries of the United States in 1889, 1890, and 1891, by J. M. Swank, 1892, p. 10-22; Iron ores, by John Birkinbine, 1892, p. 23-47.
 - *b. Gold and silver, by William Kent, 1892, p. 48-55.
 - *c. Copper, by Charles Kirchhoff, Jr., 1892, p. 56-77.
 - *d. Lead, by Charles Kirchhoff, Jr., 1892, p. 78-87.
 - *e. Zinc, by Charles Kirchhoff, Jr., 1892, p. 88-93.
 - *f. [Miscellaneous metals, 1892, p. 94-144.]
 - Includes: Quicksilver, 1892, p. 94-109; Aluminum, by R. L. Packard, 1892, p. 110-118; Tin, 1892, p. 119-123; Nickel and cobalt, 1892, p. 124-126; Manganese, by J. D. Weeks, 1892, p. 127-136; Chromic iron ore, 1892, p. 137-140; Antimony, 1892, p. 141-142; Platinum, 1892, p. 143-144.
 - *g. Coal, by E. W. Parker, 1892, p. 145-286; Petroleum, by J. D. Weeks, 1892, p. 287-365; Natural gas, by J. D. Weeks, 1892, p. 366-372.
 - *h. Stone, by W. C. Day, 1892, p. 373-440; Pottery, 1892, p. 441-444.
 - *i. Precious stones, by G. F. Kunz, 1892, p. 445-448.
 - *j. Fertilizers, 1892, p. 449-455.
 - *k. [Industrial materials, 1892, p. 456-464.]
 - Includes: Buhrstones, 1892, p. 456; Corundum and emery, 1892, p. 457; Grindstones, 1892, p. 458; Infusorial earth, 1892, p. 459; Oilstones, whetstones, etc., 1892, p. 460; Cement, 1892, p. 461-464.
 - *l. [Miscellaneous nonmetals, 1892, p. 465-520.]
 - Includes: Gypsum, 1892, p. 465-467; Fluorspar, 1892, p. 468-473; Mica, 1892, p. 474-475; Soapstone, 1892, p. 476; Asphaltum, by E. W. Parker, 1892, p. 477-481; Salt, by W. A. Raborg, 1892, p. 482-492; Bromine, 1892, p. 493; Borax, by C. G. Yale, 1892, p. 494-506; Graphite, 1892, p. 507; Mineral paints, 1892, p. 508-512; Barytes, 1892, p. 513; Asbestos, 1892, p. 514; Sulphur, 1892, p. 515-517; Pyrites, 1892, p. 518; Lithographic stone, 1892, p. 519-520.
 - *m. Mineral waters, by A. C. Peale, 1892, p. 521-535.
 - *n. General index to mineral resources of the United States from 1882 to 1890, 1892, p. 537-651; Index, 1892, p. 653-671.
- *Mineral Resources of the United States, calendar year 1891. 1893. 630 p.
- *a. Summary, 1893, p. 1-9; Iron ores, by John Birkinbine, 1893, p. 10-46; Twenty years of progress in the manufacture of iron and steel in the United States, by J. M. Swank, 1893, p. 47-73.
 - *b. Gold and silver, 1893, p. 74-80.
 - *c. Copper, by Charles Kirchhoff, Jr., 1893, p. 81-102.
 - *d. Lead, by Charles Kirchhoff, Jr., 1893, p. 103-110.
 - *e. Zinc, by Charles Kirchhoff, Jr., 1893, p. 111-116.
 - *f. [Miscellaneous metals, 1893, p. 117-176.]
 - Includes: Quicksilver, 1893, p. 117-125; Manganese, by J. D. Weeks, 1893, p. 126-146; Aluminum, by R. L. Packard, 1893, p. 147-163; Tin, 1893, p. 164-166; Nickel and cobalt, 1893, p. 167-170; Chrome iron ore, 1893, p. 171-173; Antimony, by E. W. Parker, 1893, p. 174-176.
 - *g. Coal, by E. W. Parker, 1893, p. 177-356; The manufacture of coke, by J. D. Weeks, 1893, p. 357-402; Petroleum, by J. D. Weeks, 1893, p. 403-435; Natural gas, by J. D. Weeks, 1893, p. 436-451; Asphaltum, by E. W. Parker, 1893, p. 452-455.
 - *h. [Industrial materials, 1893, p. 456-538.]

- Includes: Stone, by W. C. Day, 1893, p. 456-473; Clay materials of the United States, by R. T. Hill, 1893, p. 474-528; Natural and artificial cements, by S. B. Newberry, 1893, p. 529-538.
- *i. Precious stones, by G. F. Kunz, 1893, p. 539-551.
- *j. [Miscellaneous nonmetals, 1893, p. 552-600.]
- Includes: Abrasive materials, by E. W. Parker, 1893, p. 552-556; Fertilizers, 1893, p. 557-563; Sulphur, by E. W. Parker, 1893, p. 564-571; Salt, 1893, p. 572-578; Bromine, 1893, p. 579; Gypsum, by E. W. Parker, 1893, p. 580-583; Magnesite, 1893, p. 584-585; Fluorspar, 1893, p. 586; Borax, 1893, p. 587-588; Graphite, by E. W. Parker, 1893, p. 589-590; Asbestos, by E. W. Parker, 1893, p. 591-592; Soapstone, by E. W. Parker, 1893, p. 593-594; Mineral paints, by E. W. Parker, 1893, p. 595-598; Barytes, 1893, p. 599-600.
- *k. Mineral waters, by A. C. Peale, 1893, p. 601-610; Index, 1893, p. 611-630.
- *Mineral Resources of the United States, calendar year 1892. 1893. 850 p.
- *a. Summary, 1893, p. 1-11; Iron, 1893, p. 12-45.
- Includes: The American iron trade in 1892, by J. M. Swank, 1893, p. 12-22; Iron ores, by John Birkinbine, 1893, p. 23-45.
- *b. Progress of the precious metal industry in the United States since 1880, by S. F. Emmons, 1893, p. 46-94.
- *c. Copper, by Charles Kirchhoff, Jr., 1893, p. 95-120.
- *d. Lead, by Charles Kirchhoff, Jr., 1893, p. 121-129.
- *e. Zinc, by Charles Kirchhoff, Jr., 1893, p. 130-138.
- *f. [Miscellaneous metals, 1893, p. 139-261.]
- Includes: Quicksilver ore deposits, by G. F. Becker, 1893, p. 139-168; Manganese, by J. D. Weeks, 1893, p. 169-226; Aluminum, by A. E. Hunt, 1893, p. 227-254; Nickel and cobalt, 1893, p. 255-257; Tin, 1893, p. 258-259; Antimony, 1893, p. 260-261.
- *g. Coal, by E. W. Parker, 1893, p. 263-550; Manufacture of coke, by J. D. Weeks, 1893, p. 551-602; Petroleum, by J. D. Weeks, 1893, p. 603-651; Natural gas, by J. D. Weeks, 1893, p. 652-698; Asphaltum, by E. W. Parker, 1893, p. 699-703.
- *h. [Industrial materials, 1893, p. 704-755.]
- Includes: Stone, by W. C. Day, 1893, p. 704-711; Clay materials of the United States, by R. T. Hill, 1893, p. 712-738; Natural and artificial cements, by S. B. Newberry, 1893, p. 739-747; Abrasive materials, by E. W. Parker, 1893, p. 748-755.
- *i. Precious stones, by G. F. Kunz, 1893, p. 756-781.
- *j. [Miscellaneous nonmetals, 1893, p. 782-822.]
- Includes: Phosphate rock, 1893, p. 782-784; Sulphur, by E. W. Parker, 1893, p. 785-791; Salt, by E. W. Parker, 1893, p. 792-800; Gypsum, 1893, p. 801-804; Fluorspar, 1893, p. 805; Graphite, 1893, p. 806-807; Asbestos, 1893, p. 808-812; Soapstone, 1893, p. 813-814; Mineral paints, 1893, p. 815-820; Barytes, 1893, p. 821-822.
- *k. Mineral waters, by A. C. Peale, 1893, p. 823-834; Index, 1893, p. 835-850.
- *Mineral Resources of the United States, calendar year 1893. 1894. 810 p.
- *a. Summary, 1894, p. 1-12; Iron and steel, 1894, p. 13-49.
- Includes: Progress of the iron and steel industries of the United States in 1892 and 1893, by J. M. Swank, 1894, p. 13-22; Iron ores, by John Birkinbine, 1894, p. 23-49.
- *b. Gold and silver, by R. E. Preston, 1894, p. 50-61.
- *c. Copper, by Charles Kirchhoff, Jr., 1894, p. 62-88.
- *d. Lead, by Charles Kirchhoff, Jr., 1894, p. 89-102.
- *e. Zinc, by Charles Kirchhoff, Jr., 1894, p. 103-110.
- *f. [Miscellaneous metals, 1894, p. 111-186.]
- Includes: Quicksilver, 1894, p. 111-118; Manganese, by J. D. Weeks, 1894, p. 119-155; Aluminum, 1894, p. 156-159; Bauxite, by C. W. Hayes, 1894, p. 159-167; Nickel and cobalt, 1894, p. 168-177, including Genesis of nickel ores, by R. L. Packard, 1894, p. 170-177; Tin, 1894, p. 178-183; Antimony, 1894, p. 184-186.
- *g. Coal, by E. W. Parker, 1894, p. 187-344; Pennsylvania anthracite, by J. H. Jones, 1894, p. 344-414; Manufacture of coke, by J. D. Weeks, 1894, p. 415-460; Petroleum, by J. D. Weeks, 1894, p. 461-533; Natural gas, by J. D. Weeks, 1894, p. 534-541.
- *h. [Industrial materials, 1894, p. 542-679.]
- Includes: Stone, by W. C. Day, 1894, p. 542-602; Clay materials of the United States, by R. T. Hill, 1894, p. 603-617; Cement, by S. B. Newberry, 1894, p. 618-623; Soapstone, 1894, p. 624-626; Asphaltum, 1894, p. 627-669; Abrasive materials, by E. W. Parker, 1894, p. 670-679.
- *i. Precious stones, by G. F. Kunz, 1894, p. 680-702.
- *j. [Miscellaneous nonmetals, 1894, p. 703-771.]
- Includes: Fertilizers, 1894, p. 703-712; Gypsum, 1894, p. 713-716; Salt, by E. W. Parker, 1894, p. 717-727; Natural sodium salts, by R. L. Packard, 1894, p. 728-738; Sulphur and pyrites, by E. W. Parker, 1894, p. 739-745; Fluorspar, 1894, p. 746-747; Mica, by E. W. Parker, 1894, p. 748-755; Asbestos, 1894, p. 756-757; Mineral paints, by E. W. Parker, 1894, p. 758-766; Graphite, 1894, p. 767-769; Barytes, 1894, p. 770-771.
- *k. Mineral waters, by A. C. Peale, 1894, p. 772-794; Index, 1894, p. 795-810.
- *Mineral Resources of the United States, 1894. (Parts III and IV of the Sixteenth Annual Report.)
- *Part III, Metallic products. 1895. 646 p.
- *a. Introduction, 1895, p. 3; Summary, 1895, p. 5-19; The production of iron ores in various parts of the world, by John Birkinbine, 1895, p. 21-218; Iron and steel and allied production in all countries, by J. M. Swank, 1895, p. 219-250.
- *b. Reconnaissance of the gold fields of the southern Appalachians, by G. F. Becker, 1895, p. 251-

- 319; Review of the gold fields of the British maritime provinces and the Green Mountains, by G. F. Becker, 1895, p. 320-331.
- *c. Copper, by Charles Kirchhoff, Jr., 1895, p. 332-358.
- *d. Lead, by Charles Kirchhoff, Jr., 1895, p. 359-377.
- *e. Zinc, by Charles Kirchhoff, Jr., 1895, p. 378-388.
- *f. Manganese, by J. D. Weeks, 1895, p. 389-457.
- *g. The production of tin in various parts of the world, by C. M. Rolker, 1895, p. 458-538.
- *h. Aluminum, by R. L. Packard, 1895, p. 539-546; Bauxite, by C. W. Hayes, 1895, p. 547-597.
- *i. Quicksilver, 1895, p. 598-604.
- *j. Nickel, 1895, p. 605-607.
- *k. Chromium, 1895, p. 608-614, including Alloys of iron and chromium, by F. L. Garrison, 1895, p. 610-614.
- *l. Tungsten, 1895, p. 615-623, including Alloys of iron and tungsten, by F. L. Garrison, 1895, p. 615-623.
- *m. Antimony, by E. W. Parker, 1895, p. 624-627.
- *n. Platinum, 1895, p. 628-633; Index, 1895, p. 635-646.
- *Part IV, Nonmetallic products, 1895, 735 p.
- *a. The production of coal in 1894, by E. W. Parker, 1895, p. 1-217.
- *b. The manufacture of coke, by J. D. Weeks, 1895, p. 218-304.
- *c. Origin, distribution, and commercial value of peat deposits, by N. S. Shaler, 1895, p. 305-314.
- *d. Petroleum, by J. D. Weeks, 1895, p. 315-404.
- *e. Natural gas in 1894, by J. D. Weeks, 1895, p. 405-429.
- *f. Asphaltum, by E. W. Parker, 1895, p. 430-435.
- *g. Stone, by W. C. Day, 1895, p. 436-510, including Notes on Iowa building stone, by H. F. Bain, 1895, p. 500-503.
- *h. Soapstone, by E. W. Parker, 1895, p. 511-513.
- *i. Magnesite, by C. G. Yale, 1895, p. 514-516.
- *j. Clay, by Jefferson Middleton, 1895, p. 517-522; Technology of the clay industry, by Heinrich Ries, 1895, p. 523-575.
- *k. Cement, 1895, p. 576-585, including American rock cement, by Uriah Cummings, 1895, p. 576-579, and Portland cement, by S. B. Newberry, 1895, p. 580-583.
- *l. Abrasive materials, by E. W. Parker, 1895, p. 586-594.
- *m. Precious stones, by G. F. Kunz, 1895, p. 595-605.
- *n. Fertilizers, 1895, p. 606-630, including The Tennessee phosphates, by C. W. Hayes, 1895, p. 610-630; Commercial development of the Tennessee phosphates, by C. G. Memminger, 1895, p. 631-635.
- *o. Sulphur and pyrites, by E. W. Parker, 1895, p. 636-645.
- *p. Salt, by E. W. Parker, 1895, p. 646-657.
- *q. Fluorspar, 1895, p. 658-659.
- *r. Mica, 1895, p. 660-661.
- *s. Gypsum, by E. W. Parker, 1895, p. 662-666.
- *t. Monazite, by H. B. C. Nitze, 1895, p. 667-693.
- *u. Mineral paints, by E. W. Parker, 1895, p. 694-700.
- *v. Barytes, by E. W. Parker, 1895, p. 701-702.
- *w. Asbestos, by E. W. Parker, 1895, p. 703-706.
- *x. Mineral waters, by A. C. Peale, 1895, p. 707-721; Index, 1895, p. 723-735.
- *Mineral Resources of the United States, 1895, [Part III (in 2 vols.) of the Seventeenth Annual Report.]
- *Part III, Metallic products and coal, 1896, p. 1-542.
- *a. Introduction, 1896, p. 3; Summary, 1896, p. 5-21; Iron ores, by John Birkinbine, 1896, p. 23-43; Present condition of the iron and steel industries of the United States, by J. M. Swank, 1896, p. 45-71.
- *b. Gold and silver, 1896, p. 72-79.
- *c. Copper, by Charles Kirchhoff, Jr., 1896, p. 81-129.
- *d. Lead, by Charles Kirchhoff, Jr., 1896, p. 131-162.
- *e. Zinc, by Charles Kirchhoff, Jr., 1896, p. 163-178.
- *f. Quicksilver, 1896, p. 179-184.
- *g. Manganese, by J. D. Weeks, 1896, p. 185-225.
- *h. Tin, 1896, p. 227-242, including Introduction, 1896, p. 227, and The occurrence of tin ore in the islands of Banca and Billiton, by O. H. Van der Wyck, 1896, p. 227-242.
- *i. Aluminum, 1896, p. 243-251, including Aluminum manufacture in Europe, by A. E. Hunt, 1896, p. 245-251.
- *j. Nickel and cobalt, 1896, p. 253-260.
- *k. Chromic iron, with reference to its occurrence in Canada, by William Glenn, 1896, p. 261-273.
- *l. Antimony, by E. W. Parker, 1896, p. 275-280.
- *m. Platinum, 1896, p. 281-283.
- *n. Coal, by E. W. Parker, 1896, p. 285-542.
- *Part III (continued), Nonmetallic products except coal, 1896, p. 543-1058.
- *a. Coke, by J. D. Weeks, 1896, p. 543-620.
- *b. Petroleum, by J. D. Weeks, 1896, p. 621-731.
- *c. Natural gas, by J. D. Weeks, 1896, p. 733-750.
- *d. Asphaltum, by E. W. Parker, 1896, p. 751-758.
- *e. Stone, by W. C. Day, 1896, p. 759-811, including The sandstones of western Indiana, by T. C.

- Hopkins, 1896, p. 780-787, and The limestone quarries of eastern New York, western Vermont, Massachusetts, and Connecticut, by Heinrich Ries, 1896, p. 795-811.
- *f. Soapstone, by E. W. Parker, 1896, p. 813-816.
- *g. Clay, 1896, p. 817-880.
- Includes: The statistics of the clay-working industries of the United States, by Jefferson Middleton, 1896, p. 817-841; The pottery industry of the United States, by Heinrich Ries, 1896, p. 842-876; Fuller's earth, by Heinrich Ries, 1896, p. 876-880.
- *h. Cement, 1896, p. 881-893, including Portland cement, by S. B. Newberry, 1896, p. 881-888, and American rock cement, by Uriah Cummings, 1896, p. 889-893.
- *i. Precious stones, by G. F. Kunz, 1896, p. 895-926.
- *j. Abrasive materials, by E. W. Parker, 1896, p. 927-950, including Corundum deposits of the Southern Appalachian region, by J. A. Holmes, 1896, p. 935-943, and The manufacture and use of corundum, by C. N. Jenks, 1896, p. 943-947.
- *k. Phosphate rock, 1896, p. 951-954, including A phosphate prospect in Pennsylvania, by M. C. Ihlse, 1896, p. 955-957.
- *l. Sulphur and pyrites, by E. W. Parker, 1896, p. 958-977.
- *m. Gypsum, by E. W. Parker, 1896, p. 978-983.
- *n. Salt, by E. W. Parker, 1896, p. 984-997.
- *o. Fluorspar and cryolite, 1896, p. 998-999.
- *p. Mica, 1896, p. 1000-1003.
- *q. Asbestos, by E. W. Parker, 1896, p. 1004-1006.
- *r. Graphite, 1896, p. 1007-1010, including Occurrences of graphite in the South, by W. M. Brewer, 1896, p. 1008-1010.
- *s. Mineral paints, by E. W. Parker, 1896, p. 1011-1022.
- *t. Barytes, by E. W. Parker, 1896, p. 1023-1024.
- *u. Mineral waters, by A. C. Peale, 1896, p. 1025-1044; Index, 1896, p. 1045-1058.
- *Mineral Resources of the United States, 1896. [Part V (in 2 vols.) of the Eighteenth Annual Report.]
- *Part V, Metallic products and coal, 1897, p. 1-642.
- *a. Introduction, 1897, p. 3; Summary, 1897, p. 5-21; Iron ores, by John Birkinbine, 1897, p. 23-50; Iron and steel and allied industries in all countries, by J. M. Swank, 1897, p. 51-140.
- *b. Gold and silver, 1897, p. 141-151; Witwatersrand banket, with notes on other gold-bearing pudding stones, by G. F. Becker, 1897, p. 153-184.
- *c. Copper, by Charles Kirchhoff, Jr., 1897, p. 185-235.
- *d. Lead, by Charles Kirchhoff, Jr., 1897, p. 237-262.
- *e. Zinc, by Charles Kirchhoff, Jr., 1897, p. 263-280.
- *f. Aluminum, by R. L. Packard, 1897, p. 281-285.
- *g. Quicksilver, 1897, p. 287-290.
- *h. Manganese ores, by John Birkinbine, 1897, p. 291-328.
- *i. Nickel and cobalt, by Joseph Wharton, 1897, p. 329-342.
- *j. Antimony, by E. W. Parker, 1897, p. 343-348.
- *k. Platinum, 1897, p. 349.
- *l. Coal, by E. W. Parker, 1897, p. 351-632; Index, 1897, p. 633-642.
- *Part V (continued), Nonmetallic products except coal, 1897, p. 643-1400.
- *a. Coke, by E. W. Parker, 1897, p. 659-746.
- *b. Petroleum, by F. H. Oliphant, 1897, p. 747-893; Natural gas, by F. H. Oliphant, 1897, p. 895-918.
- *c. Asphaltum, by E. W. Parker, 1897, p. 919-948, including The asphalt deposits of western Texas, by T. W. Vaughan, 1897, p. 930-935; The chemistry of gilsonite, by W. C. Day, 1897, p. 937-945.
- *d. Stone, by W. C. Day, 1897, p. 949-1068.
- Includes: The sandstone industry in the various states, 1897, p. 1015-1043, including Brownstones of Pennsylvania, by T. C. Hopkins, 1897, p. 1025-1043; The limestone product, by states, from 1890 to 1896, 1897, p. 1045-1068, including The Bedford oolitic limestone, by T. C. Hopkins and C. E. Siebenthal, 1897, p. 1050-1057.
- *e. Soapstone, by E. W. Parker, 1897, p. 1069-1075.
- *f. Statistics of the clay-working industries in the United States in 1896, by Jefferson Middleton, 1897, p. 1077-1104; The clay-working industry in 1896, by Heinrich Ries, 1897, p. 1105-1168.
- *g. Cement, 1897, p. 1169-1182.
- Includes: Portland cement, by S. B. Newberry, 1897, p. 1169-1177; Rock cement, by Uriah Cummings, 1897, p. 1178-1182.
- *h. Precious stones, by G. F. Kunz, 1897, p. 1183-1217.
- *i. Abrasive materials, by E. W. Parker, 1897, p. 1219-1231.
- *j. Phosphate rock, 1897, p. 1233-1242.
- *k. Sulphur and pyrites, by E. W. Parker, 1897, p. 1243-1261.
- *l. Gypsum, by E. W. Parker, 1897, p. 1263-1271.
- *m. Salt, by E. W. Parker, 1897, p. 1273-1313.
- *n. Fluorspar and cryolite, by E. W. Parker, 1897, p. 1315-1316.
- *o. Mica, by E. W. Parker, 1897, p. 1317-1321.
- *p. Asbestos, by E. W. Parker, 1897, p. 1323-1331.
- *q. Graphite, 1897, p. 1332-1334.
- *r. Mineral paints, by E. W. Parker, 1897, p. 1335-1347.
- *s. Barytes, by E. W. Parker, 1897, p. 1348-1349.
- *t. Fuller's earth, 1897, p. 1351-1359.

- *u. Lithographic stone, 1897, p. 1361-1363.
- *v. Feldspar and quartz, by Heinrich Ries, 1897, p. 1365-1368.
- *w. Mineral waters, by A. C. Peale, 1897, p. 1369-1389; Index, 1897, p. 1391-1400.
- *Mineral Resources of the United States, 1897. [Part VI (in 2 vols.) of the Nineteenth Annual Report.]
 - *Part VI, Metallic products, coal and coke. 1898. 651 p.
 - *a. Introduction, 1898, p. 3; Summary, 1898, p. 3-22; Iron ores, by John Birkinbine, 1898, p. 23-63; The American iron trade in 1897 and immediately preceding years, by J. M. Swank, 1898, p. 65-83; The foreign iron trade in 1897 and immediately preceding years, by J. M. Swank, 1898, p. 84-89.
 - *b. Manganese ores, by John Birkinbine, 1898, p. 91-125.
 - *c. Gold and silver, 1898, p. 127-135.
 - *d. Copper, by Charles Kirchhoff, Jr., 1898, p. 137-196.
 - *e. Lead, by Charles Kirchhoff, Jr., 1898, p. 197-222.
 - *f. Zinc, by Charles Kirchhoff, Jr., 1898, p. 223-239.
 - *g. Aluminum, 1898, p. 241-242.
 - *h. Quicksilver, 1898, p. 243-248.
 - *i. Nickel and cobalt, 1898, p. 249-252.
 - *j. Antimony, by E. W. Parker, 1898, p. 253-258.
 - *k. Chromic iron ore, 1898, p. 259-264, including The chrome ores of Turkey, by William Glenn, 1898, p. 261-264.
 - *l. Platinum, by D. T. Day, 1898, p. 265-271.
 - *m. Coal, by E. W. Parker, 1898, p. 273-543.
 - *n. Coke, by E. W. Parker, 1898, p. 545-642; Index, 1898, p. 643-651.
- *Part VI (continued), Nonmetallic products except coal and coke. 1898. 706 p.
 - *a. Petroleum, by F. H. Oliphant, 1898, p. 1-166.
 - *b. Natural gas, by F. H. Oliphant, 1898, p. 167-185.
 - *c. Asphaltum, by E. W. Parker, 1898, p. 187-204, including Production of an asphalt resembling gilsonite by the distillation of a mixture of fish and wood, by W. C. Day, 1898, p. 202-204.
 - *d. Stone, by W. C. Day, 1898, p. 205-309.
 - *e. Soapstone, by E. W. Parker, 1898, p. 311-315.
 - *f. Clay statistics, by Jefferson Middleton, 1898, p. 317-376; The kaolins and fire clays of Europe, by Heinrich Ries, 1898, p. 377-467; The clay-working industry of the United States in 1897. 1898, p. 469-486.
 - *g. Cement, 1898, p. 487-496.
- Includes: Portland cement, by S. B. Newberry, 1898, p. 487-494; American rock cement, by Uriah Cummings, 1898, p. 495-496.
- *h. Precious stones, by G. F. Kunz, 1898, p. 497-514.
- *i. Abrasive materials, by E. W. Parker, 1898, p. 515-533.
- *j. Phosphate rock, 1898, p. 535-556.
- *k. Sulphur and pyrites, by E. W. Parker, 1898, p. 557-576.
- *l. Gypsum, by E. W. Parker, 1898, p. 577-585.
- *m. Salt, by E. W. Parker, 1898, p. 587-612.
- *n. Fluorspar and mica, by E. W. Parker, 1898, p. 613-622.
- *o. Asbestos and graphite, by E. W. Parker, 1898, p. 623-631.
- *p. Mineral paints and barytes, by E. W. Parker, 1898, p. 633-653.
- *q. Fuller's earth, 1898, p. 655-656.
- *r. Quartz and feldspar, 1898, p. 657.
- *s. Mineral waters, by A. C. Peale, 1898, p. 659-680.
- *t. Mineral resources of Hawaii, 1898, p. 681-686.
- *u. Memorandum on the mineral resources of the Philippine Islands, by G. F. Becker, 1898, p. 687-692.
- *Mineral Resources of the United States, 1898. [Part VI (in 2 vols.) of the Twentieth Annual Report.]
 - *Part VI, Metallic products, coal, and coke. 1899. 616 p.
 - *a. Introduction, 1899, p. 3-4; Summary, 1899, p. 5-26; Iron ores, by John Birkinbine, 1899, p. 27-59; Statistics of the American iron trade in 1898, by J. M. Swank, 1899, p. 61-88; The foreign iron trade in 1898 and immediately preceding years, by J. M. Swank, 1899, p. 89-101.
 - *b. Gold and silver, 1899, p. 103-123, including History of gold mining and metallurgy in the southern States, by H. B. C. Nitze, 1899, p. 111-123.
 - *c. Manganese ores, by John Birkinbine, 1899, p. 125-158.
 - *d. Copper, by Charles Kirchhoff, Jr., 1899, p. 159-220.
 - *e. Lead, by Charles Kirchhoff, Jr., 1899, p. 221-247.
 - *f. Zinc, by Charles Kirchhoff, Jr., 1899, p. 249-266.
 - *g. Aluminum and bauxite, 1899, p. 267-269.
 - *h. Quicksilver, 1899, p. 271-275.
 - *i. Nickel and cobalt, 1899, p. 277-281.
 - *j. Antimony, by E. W. Parker, 1899, p. 283-289.
 - *k. Chromic iron ore, 1899, p. 291-292.
 - *l. Platinum, 1899, p. 293.
 - *m. Coal, by E. W. Parker, 1899, p. 295-507.
 - *n. The manufacture of coke, by E. W. Parker, 1899, p. 509-608; Index, 1899, p. 609-616.
- *Part VI (continued), Nonmetallic products except coal and coke. 1899. 804 p.
 - *a. Petroleum, by F. H. Oliphant, 1899, p. 1-202.
 - *b. Natural gas, by F. H. Oliphant, 1899, p. 203-224; Illuminating and fuel gas and by-products, by W. B. Phillips, 1899, p. 225-250.

- *c. Asphaltum and bituminous rock, by E. W. Parker, 1899, p. 251-268.
- *d. Stone, by W. C. Day, 1899, p. 269-464.
- *e. Clay statistics in 1898, by Jefferson Middleton, 1899, p. 465-538.
- *f. Cement, 1899, p. 539-550.
- Includes: Portland cement, by S. B. Newberry, 1899, p. 539-546; American rock cement, by Uriah Cummings, 1899, p. 547-550.
- *g. Soapstone, by E. W. Parker, 1899, p. 551-556.
- *h. Precious stones, by G. F. Kunz, 1899, p. 557-602.
- *i. Abrasive materials, by E. W. Parker, 1899, p. 603-617.
- *j. Phosphate rock, 1899, p. 619-639, including A brief reconnaissance of the Tennessee phosphate fields, by C. W. Hayes, 1899, p. 633-639.
- *k. Sulphur and pyrite, by E. W. Parker, 1899, p. 641-655.
- *l. Gypsum, by E. W. Parker, 1899, p. 657-666.
- *m. Salt, by E. W. Parker, 1899, p. 667-688.
- *n. Mica, 1899, p. 689-707, including Mica deposits in the United States, by J. A. Holmes, 1899, p. 691-707.
- *o. Fluorspar, by E. W. Parker, 1899, p. 709-710.
- *p. Asbestos and graphite, by E. W. Parker, 1899, p. 711-718.
- *q. Mineral paints and barytes, by E. W. Parker, 1899, p. 719-740.
- *r. Fuller's earth, 1899, p. 741-743.
- *s. Quartz and feldspar, by Heinrich Ries, 1899, p. 745.
- *t. Mineral waters, by A. C. Peale, 1899, p. 747-769.
- *u. Mineral resources of Porto Rico, by R. T. Hill, 1899, p. 771-778; Investigations of some of the mineral resources of Porto Rico, by H. B. C. Nitze, 1899, p. 779-787; Index, 1899, p. 789-804.
- *Mineral Resources of the United States, 1899. [Part VI (in 2 vols.) of the Twenty-first Annual Report.]
 - *Part VI, Metallic products, coal and coke. 1901. 656 p.
 - *a. Introduction, 1901, p. 3-4; Summary, 1901, p. 5-29; Iron ores, by John Birkinbine, 1901, p. 31-67; The American and foreign iron trades in 1899, by J. M. Swank, 1901, p. 69-118.
 - *b. Gold and silver, 1901, p. 119-127.
 - *c. Manganese ores, by John Birkinbine, 1901, p. 129-162.
 - *d. Copper, by Charles Kirchhoff, Jr., 1901, p. 163-223.
 - *e. Lead, by Charles Kirchhoff, Jr., 1901, p. 225-247.
 - *f. Zinc, by Charles Kirchhoff, Jr., 1901, p. 249-266.
 - *g. Aluminum and bauxite, 1901, p. 267-271.
 - *h. Quicksilver, by E. W. Parker, 1901, p. 273-283.
 - *i. Nickel and cobalt, 1901, p. 285-289.
 - *j. Antimony, by E. W. Parker, 1901, p. 291-297.
 - *k. Tungsten, molybdenum, uranium, and vanadium, by J. H. Pratt, 1901, p. 299-318; An occurrence of tungsten ore in eastern Nevada, by F. B. Weeks, 1901, p. 319-320.
 - *l. Coal, by E. W. Parker, 1901, p. 321-519.
 - *m. Coke, by E. W. Parker, 1901, p. 521-633; Index, 1901, p. 635-656.
 - *Part VI (continued), Nonmetallic products except coal and coke. 1901. 634 p.
 - *a. Petroleum, by F. H. Oliphant, 1901, p. 1-292.
 - *b. Natural gas, by F. H. Oliphant, 1901, p. 293-318.
 - *c. Asphaltum and bituminous rock, by E. W. Parker, 1901, p. 319-332.
 - *d. Stone, 1901, p. 333-360.
 - *e. Clay, 1901, p. 361-364; Clay and clay products at the Paris exposition of 1900, by Heinrich Ries, 1901, p. 365-392.
 - *f. Portland cement, by S. B. Newberry, 1901, p. 393-406; American rock cement, by Uriah Cummings, 1901, p. 407-411.
 - *g. Soapstone, by E. W. Parker, 1901, p. 413-418.
 - *h. Precious stones, by G. F. Kunz, 1901, p. 419-462.
 - *i. Abrasive materials, 1901, p. 463-479.
 - *j. Phosphate rock, by E. W. Parker, 1901, p. 481-502.
 - *k. Sulphur and pyrite, by E. W. Parker, 1901, p. 503-522.
 - *l. Gypsum, by E. W. Parker, 1901, p. 523-530.
 - *m. Salt, by E. W. Parker, 1901, p. 531-554.
 - *n. Mica, 1901, p. 555-558.
 - *o. Fluorspar, by E. W. Parker, 1901, p. 559-560.
 - *p. Asbestos, by E. W. Parker, 1901, p. 561-564.
 - *q. Graphite, 1901, p. 565-568.
 - *r. Mineral paints, by E. W. Parker, 1901, p. 569-586.
 - *s. Barytes, by E. W. Parker, 1901, p. 587-588.
 - *t. Fuller's earth, 1901, p. 589-592.
 - *u. Feldspar and quartz, by Heinrich Ries, 1901, p. 593-596.
 - *v. Mineral waters, by A. C. Peale, 1901, p. 597-622; Index, 1901, p. 623-634.
- Note: By act of Congress approved March 3, 1901, the report on mineral resources was again made a distinct publication.
- *Mineral Resources of the United States, calendar year 1900. 1901. 927 p.
 - *a. Introduction, 1901, p. 11-12; Summary, 1901, p. 13-38; Iron and steel, 1901, p. 39-104. Includes: Iron ores, by John Birkinbine, 1901, p. 39-67; Iron and steel at the close of the nineteenth century, by J. M. Swank, 1901, p. 69-90.

- *b. Gold and silver, 1901, p. 105-113.
 - *c. Manganese ores, by John Birkinbine, 1901, p. 115-140.
 - *d. Copper, by Charles Kirchhoff, Jr., 1901, p. 141-190.
 - *e. Lead, by Charles Kirchhoff, Jr., 1901, p. 191-211.
 - *f. Zinc, by Charles Kirchhoff, Jr., 1901, p. 213-227.
 - *g. Aluminum and bauxite, by J. H. Pratt, 1901, p. 229-231.
 - *h. Platinum, quicksilver, lithium, and nickel and cobalt, 1901, p. 233-249.
 - *i. Antimony, by J. H. Pratt, 1901, p. 251-255.
 - *j. Tungsten, molybdenum, and uranium and vanadium, by J. H. Pratt, 1901, p. 257-265.
 - *k. An occurrence of stream tin in the York region, Alaska, by A. H. Brooks, 1901, p. 267-271.
 - *l. Coal, by E. W. Parker, 1901, p. 273-457.
 - *m. Coke, by E. W. Parker, 1901, p. 459-536.
 - *n. Petroleum, by F. H. Oliphant, 1901, p. 537-627.
 - *o. Natural gas, by F. H. Oliphant, 1901, p. 629-651.
 - *p. Asphaltum and bituminous rock, by E. W. Parker, 1901, p. 653-660.
 - *q. Stone, 1901, p. 661-692.
 - *r. Clay products, by Jefferson Middleton, 1901, p. 693-736.
 - *s. Cement, 1901, p. 737-748.
- Includes: Portland cement, by S. B. Newberry, 1901, p. 737-744; American rock cement, by Uriah Cummings, 1901, p. 745-746; The manufacture of slag cement in Alabama, by E. C. Eckel, 1901, p. 747-748.
- *t. Precious stones, by G. F. Kunz, 1901, p. 749-778.
 - *u. Talc and soapstone, by J. H. Pratt, 1901, p. 779-786.
 - *v. Abrasive materials, by J. H. Pratt, 1901, p. 787-801.
 - *w. Phosphate rock, 1901, p. 803-814.
 - *x. Sulphur and pyrite, by E. W. Parker, 1901, p. 815-826.
 - *y. Gypsum, by E. W. Parker, 1901, p. 827-833.
 - *z. Salt, by E. W. Parker, 1901, p. 835-847.
 - *aa. Mica, by E. W. Parker, 1901, p. 849-856.
 - *bb. Fluorspar, by E. W. Parker, 1901, p. 857-859.
 - *cc. Asbestos, by J. H. Pratt, 1901, p. 861-868.
 - *dd. Lithographic stone, by S. J. Kübel, 1901, p. 869-873.
 - *ee. Graphite, by J. H. Pratt, 1901, p. 875-877.
 - *ff. Mineral paints, by E. W. Parker, 1901, p. 879-890.
 - *gg. Barytes, by E. W. Parker, 1901, p. 891-892.
 - *hh. Fuller's earth, 1901, p. 893-894.
 - *ii. Flint and feldspar, 1901, p. 895.
 - *jj. Chromite, or chromic iron ore, by J. H. Pratt, 1901, p. 897-898.
 - *kk. Mineral waters, by A. C. Peale, 1901, p. 899-905; Index, 1901, p. 907-927.
- *Mineral Resources of the United States, calendar year 1901. 1902. 996 p.
- *a. Introduction, 1902, p. 13-14; Summary, 1902, p. 15-41; Iron, 1902, p. 43-115.
- Includes: Iron ores, by John Birkinbine, 1902, p. 43-72; Statistics of the American iron trade for 1901, by J. M. Swank, 1902, p. 73-115.
- *b. Gold and silver, by G. E. Roberts, 1902, p. 117-126.
 - *c. Manganese ores, by John Birkinbine, 1902, p. 127-155.
 - *d. Copper, by Charles Kirchhoff, Jr., 1902, p. 157-198.
 - *e. Lead, by Charles Kirchhoff, Jr., 1902, p. 199-210.
 - *f. Zinc, by Charles Kirchhoff, Jr., 1902, p. 211-223.
 - *g. Aluminum and bauxite, by Joseph Struthers, 1902, p. 225-229.
 - *h. Platinum, by Joseph Struthers, 1902, p. 231-233.
 - *i. Quicksilver, by Joseph Struthers, 1902, p. 235-238.
 - *j. Lithium, by J. H. Pratt, 1902, p. 239-240.
 - *k. Nickel and cobalt, by J. H. Pratt, 1902, p. 241-250.
 - *l. Antimony, by Joseph Struthers, 1902, p. 251-256.
 - *m. Arsenic, by Joseph Struthers, 1902, p. 257-258.
 - *n. Bismuth, by Joseph Struthers, 1902, p. 259-260.
 - *o. Tungsten, molybdenum, uranium, and vanadium, by J. H. Pratt, 1902, p. 261-270.
 - *p. Titanium ores, by W. O. Snelling, 1902, p. 271-278.
 - *q. Coal, by E. W. Parker, 1902, p. 279-449.
 - *r. Coke, by E. W. Parker, 1902, p. 451-523.
 - *s. Petroleum, by F. H. Oliphant, 1902, p. 525-611.
 - *t. Natural gas, by F. H. Oliphant, 1902, p. 613-632.
 - *u. Asphaltum and bituminous rock, by Joseph Struthers, 1902, p. 633-640.
 - *v. Stone, 1902, p. 641-670.
 - *w. Clay-working industries, by Jefferson Middleton, 1902, p. 671-720.
 - *x. Cement, 1902, p. 721-728.
 - *y. Precious stones, by G. F. Kunz, 1902, p. 729-771.
 - *z. Talc and soapstone, by J. H. Pratt, 1902, p. 773-780.
 - *aa. Abrasive materials, by J. H. Pratt, 1902, p. 781-809.
 - *bb. Phosphate rock, by Joseph Struthers, 1902, p. 811-822.
 - *cc. Greensand marl, by A. L. Parsons, 1902, p. 823-827.
 - *dd. Sulphur and pyrite, by Joseph Struthers, 1902, p. 829-842.

- *ee. Gypsum, by Joseph Struthers, 1902, p. 843-851.
- *ff. Salt, by Joseph Struthers, 1902, p. 853-865.
- *gg. Bromine, by Joseph Struthers, 1902, p. 867-868.
- *hh. Borax, by Joseph Struthers, 1902, p. 869-872.
- *ii. Mica, by J. H. Pratt, 1902, p. 873-878.
- *jj. Fluorspar and cryolite, by J. H. Pratt, 1902, p. 879-885.
- *kk. Asbestos, by J. H. Pratt, 1902, p. 887-895.
- *ll. Graphite, by Joseph Struthers, 1902, p. 897-900.
- *mm. Mineral paints, by Joseph Struthers, 1902, p. 901-914.
- *nn. Barytes, by J. H. Pratt, 1902, p. 915-919.
- *oo. Fuller's earth, 1902, p. 921-934, including Fuller's earth of southwestern Georgia and western Florida, by T. W. Vaughan, 1902, p. 922-932.
- *pp. Flint and feldspar, by Heinrich Ries, 1902, p. 935-939.
- *qq. Chromite, or chromic iron ore, by J. H. Pratt, 1902, p. 941-948.
- *rr. Monazite, by J. H. Pratt, 1902, p. 949-954.
- *ss. Strontium ores, by J. H. Pratt, 1902, p. 955-958.
- *tt. Magnesite, by Joseph Struthers, 1902, p. 959-960.
- *uu. Mineral waters, 1902, p. 961-966.
- *vv. Ores of economic importance, by E. O. Hovey, 1902, p. 967-973; Index, 1902, p. 975-996.
- *Mineral Resources of the United States, calendar year 1902, 1904, 1038 p.
 - *a. Introduction, 1904, p. 9-10; Summary, 1904, p. 11-39; Iron ores, by John Birkinbine, 1904, p. 41-73; Statistics of the American iron trade for 1902, by J. M. Swank, 1904, p. 75-99; General statistics of iron and steel, iron ore, and coal to the year 1901, inclusive for five leading iron and steel producing countries, by J. M. Swank, 1904, p. 101-122.
 - *b. Gold and silver, by G. E. Roberts, 1904, p. 123-131.
 - *c. Manganese ores, by John Birkinbine, 1904, p. 133-161.
 - *d. Copper, by Charles Kirchhoff, Jr., 1904, p. 163-203.
 - *e. Lead, by Charles Kirchhoff, Jr., 1904, p. 205-216.
 - *f. Zinc, by Charles Kirchhoff, Jr., 1904, p. 217-229.
 - *g. Aluminum and bauxite, by Joseph Struthers, 1904, p. 231-238.
 - *h. Platinum, 1904, p. 239-250.
- Includes: Production, by Joseph Struthers, 1904, p. 239-243; Platinum in the Rambler mine, Wyoming, by J. F. Kemp, 1904, p. 244-250.
- *i. Quicksilver, by Joseph Struthers, 1904, p. 251-258.
- *j. Lithium, by J. H. Pratt, 1904, p. 259-261.
- *k. Nickel and cobalt, by J. H. Pratt, 1904, p. 263-270.
- *l. Antimony, by Joseph Struthers, 1904, p. 271-277.
- *m. Arsenic, by Joseph Struthers, 1904, p. 279-282.
- *n. Bismuth, by Joseph Struthers, 1904, p. 283-284.
- *o. Tungsten, molybdenum, uranium, and vanadium, by J. H. Pratt, 1904, p. 285-288.
- *p. Coal, by E. W. Parker, 1904, p. 289-447.
- *q. Coke, by E. W. Parker, 1904, p. 449-515; Gas, coke, tar, and ammonia at gas works, and in retort coke ovens, by E. W. Parker, 1904, p. 517-533.
- *r. Petroleum, by F. H. Oliphant, 1904, p. 535-630.
- *s. Natural gas, by F. H. Oliphant, 1904, p. 631-655.
- *t. Asphaltum and bituminous rock, by Joseph Struthers, 1904, p. 657-664.
- *u. Stone, 1904, p. 665-701.
- *v. Clay-working industries, by Jefferson Middleton, 1904, p. 703-776, including Effect of tannin on clay, by Heinrich Ries, 1904, p. 775-776.
- *w. Cement, 1904, p. 777-812, including Review of cement industry in United States, by L. L. Kimball, 1904, p. 789-812.
- *x. Precious stones, by G. F. Kunz, 1904, p. 813-865.
- *y. Talc and soapstone, by J. H. Pratt, 1904, p. 867-872.
- *z. Abrasive materials, by J. H. Pratt, 1904, p. 873-890.
- *aa. Borax, by Joseph Struthers, 1904, p. 891-896.
- *bb. Bromine, by Joseph Struthers, 1904, p. 897-898.
- *cc. Fluorspar and cryolite, by J. H. Pratt, 1904, p. 899-902.
- *dd. Gypsum, by G. I. Adams, 1904, p. 903-913.
- *ee. Phosphate rock, by Joseph Struthers, 1904, p. 915-920.
- *ff. Salt, by Joseph Struthers, 1904, p. 921-932.
- *gg. Sulphur and pyrite, by Joseph Struthers, 1904, p. 933-943.
- *hh. Barytes, by J. H. Pratt, 1904, p. 945-948.
- *ii. Mineral paints, by Joseph Struthers, 1904, p. 949-962.
- *jj. Asbestos, by J. H. Pratt, 1904, p. 963-966.
- *kk. Chromite, or chromic iron ore, by J. H. Pratt, 1904, p. 967-969.
- *ll. Flint and feldspar, by Heinrich Ries, 1904, p. 971-973.
- *mm. Graphite, by Joseph Struthers, 1904, p. 975-982.
- *nn. Magnesite, by Joseph Struthers, 1904, p. 983-984.
- *oo. Mica, by J. A. Holmes, 1904, p. 985-991.
- *pp. Mineral waters, 1904, p. 993-1002.
- *qq. Monazite, by J. H. Pratt, 1904, p. 1003-1006.
- *rr. Glass sand, by A. T. Coons, 1904, p. 1007-1016; Index, 1904, p. 1017-1038.

*Mineral Resources of the United States, calendar year 1903. 1904. 1204 p.

- *a. Introduction, 1904, p. 9-10; Summary of the mineral production of the United States in 1903, 1904, p. 11-39.
- *b. Iron ores, by John Birkinbine, 1904, p. 41-73; Statistics of the American iron trade for 1903, by J. M. Swank, 1904, p. 75-127.
- *c. Manganese ores, by John Birkinbine, 1904, p. 129-156.
- *d. Gold and silver, 1904, p. 157-199.
- *e. Copper, by Charles Kirchhoff, Jr., 1904, p. 210-239.
- *f. Lead, by Charles Kirchhoff, Jr., 1904, p. 241-252.
- *g. Zinc, by Charles Kirchhoff, Jr., 1904, p. 253-264.
- *h. Aluminum and bauxite, by Joseph Struthers, 1904, p. 265-279.
- *i. Quicksilver, 1904, p. 281-284.
- *j. Steel-hardening metals, by J. H. Pratt, 1904, p. 285-310.
- *k. Platinum, 1904, p. 311-312.
- *l. Lithium, by J. H. Pratt, 1904, p. 313-315.
- *m. Antimony, by Joseph Struthers, 1904, p. 317-326.
- *n. Arsenic, by Joseph Struthers, 1904, p. 327-334.
- *o. Tin, by Joseph Struthers and J. H. Pratt, 1904, p. 335-349, including Carolina tin belt, by J. H. Pratt, 1904, p. 337-344.
- *p. Coal, by E. W. Parker, 1904, p. 351-538.
- *q. Coke, by E. W. Parker, 1904, p. 539-608; Gas, coke, tar, and ammonia at gas works and in retort coke ovens, by E. W. Parker, 1904, p. 609-634.
- *r. Petroleum, by F. H. Oliphant, 1904, p. 635-718.
- *s. Natural gas, by F. H. Oliphant, 1904, p. 719-743.
- *t. Asphaltum and bituminous rock, by E. O. Hovey, 1904, p. 745-754.
- *u. Stone, 1904, p. 755-789.
- *v. Clay-working industries, by Jefferson Middleton, 1904, p. 791-882, including The sand-lime brick industry, by S. V. Peppel, 1904, p. 866-882.
- *w. Cement, 1904, p. 883-910.
- *x. Precious stones, by G. F. Kunz, 1904, p. 911-977.
- *y. Talc and soapstone, by J. H. Pratt, 1904, p. 979-987.
- *z. Abrasive materials, by J. H. Pratt, 1904, p. 989-1015.
- *aa. Borax, by C. G. Yale, 1904, p. 1017-1028.
- *bb. Fluorspar and cryolite, by J. H. Pratt, 1904, p. 1029-1032.
- *cc. Gypsum and gypsum products, 1904, p. 1033-1045.
- *dd. Phosphate rock, by E. O. Hovey, 1904, p. 1047-1058.
- *ee. Salt, by E. O. Hovey, 1904, p. 1059-1071.
- *ff. Sulphur and pyrite, by J. H. Pratt, 1904, p. 107a-1087.
- *gg. Barytes, by J. H. Pratt, 1904, p. 1089-1094.
- *hh. Mineral paints, by J. H. Pratt, 1904, p. 1095-1110.
- *ii. Asbestos, by J. H. Pratt, 1904, p. 1111-1116.
- *jj. Flint and feldspar, by Heinrich Ries, 1904, p. 1117-1119.
- *kk. Graphite, by J. H. Pratt, 1904, p. 1121-1129.
- *ll. Magnesite, by C. G. Yale, 1904, p. 1131-1135.
- *mm. Mineral waters, 1904, p. 1137-1162.
- *nn. Monazite and zircon, by J. H. Pratt, 1904, p. 1163-1170.
- *oo. Glass sand, by A. T. Coons, 1904, p. 1171-1178; Index, 1904, p. 1179-1204.

*Mineral Resources of the United States, calendar year 1904. 1905. 1264 p.

- *a. Introduction, 1905, p. 7-8; Summary, 1905, p. 9-36; Iron ores, by John Birkinbine, 1905, p. 37-68; Statistics of the American iron ore trade for 1904, by J. M. Swank, 1905, p. 69-111.
- *b. Manganese ores, by John Birkinbine, 1905, p. 113-140.
- *c. Gold and silver, by Waldemar Lindgren and others, 1905, p. 141-220. Includes: Alaska, by C. G. Yale, 1905, p. 155-157; Arizona, by V. C. Heikes, 1905, p. 157-164; California, by C. G. Yale, 1905, p. 165-177; Colorado, by W. S. Ward, 1905, p. 177-180; Idaho, by V. C. Heikes, 1905, p. 181-190; Montana, by A. N. Winchell, 1905, p. 191-196; Nevada, by C. G. Yale, 1905, p. 196-200; New Mexico, by F. A. Jones, 1905, p. 200-203; Oregon, by C. G. Yale, 1905, p. 203-206; South Dakota, by E. P. Porter, 1905, p. 206-211; Utah, by V. C. Heikes, 1905, p. 212-217; Washington, by C. G. Yale, 1905, p. 217-219; Wyoming, by E. P. Porter, 1905, p. 219-220.
- *d. Copper, by Charles Kirchhoff, Jr., 1905, p. 221-257.
- *e. Lead, by Charles Kirchhoff, Jr., 1905, p. 259-271.
- *f. Zinc, by Charles Kirchhoff, Jr., 1905, p. 273-283.
- *g. Aluminum and bauxite, 1905, p. 285-294.
- *h. Quicksilver, 1905, p. 295-299.
- *i. Steel and iron hardening metals, by J. H. Pratt, 1905, p. 301-358.
- *j. Platinum, by D. T. Day, 1905, p. 359-360.
- *k. Lithium minerals, by J. H. Pratt, 1905, p. 361-362.
- *l. Antimony, by E. O. Hovey, 1905, p. 363-369.
- *m. Arsenic, by E. O. Hovey, 1905, p. 371-374.
- *n. Bismuth, by E. O. Hovey, 1905, p. 375-376.
- *o. Tin, by J. H. Pratt, 1905, p. 377-380.
- *p. Coal, by E. W. Parker, 1905, p. 381-577.
- *q. Coke, by E. W. Parker, 1905, p. 579-648; Gas, coke, tar, and ammonia at gas works, and in re-tort coke ovens, by E. W. Parker, 1905, p. 649-674.

- *r. Petroleum, by F. H. Oliphant, 1905, p. 675-759.
- *s. Natural gas, by F. H. Oliphant, 1905, p. 761-788.
- *t. Asphaltum and bituminous rock, by E. O. Hovey, 1905, p. 789-799.
- *u. Stone, 1905, p. 801-841.
- *v. Clay-working industries, by Jefferson Middleton, 1905, p. 843-908.
- *w. Cement, 1905, p. 909-939, including Average characteristic tests of cement, by L. L. Kimball, 1905, p. 933-939.
- *x. Precious stones, by G. F. Kunz, 1905, p. 941-987.
- *y. Talc and soapstone, by J. H. Pratt, 1905, p. 989-994.
- *z. Abrasive materials, by J. H. Pratt, 1905, p. 995-1015.
- *aa. Borax, by C. G. Yale, 1905, p. 1017-1028.
- *bb. Bromine, by F. J. H. Merrill, 1905, p. 1029-1030.
- *cc. Fluorspar and cryolite, by J. H. Pratt, 1905, p. 1031-1036.
- *dd. Gypsum and gypsum products, by G. P. Grimsley, 1905, p. 1037-1052.
- *ee. Phosphate rock, by E. O. Hovey, 1905, p. 1053-1064.
- *ff. Salt, by E. O. Hovey, 1905, p. 1065-1077.
- *gg. Sulphur and pyrite, by J. H. Pratt, 1905, p. 1079-1094.
- *hh. Barytes, by J. H. Pratt, 1905, p. 1095-1102.
- *ii. Mineral paints, by J. H. Pratt, 1905, p. 1103-1119.
- *jj. Fuller's earth, 1905, p. 1121-1123.
- *kk. Asbestos, by J. H. Pratt, 1905, p. 1125-1142.
- *ll. Flint and feldspar, by Heinrich Ries, 1905, p. 1143-1145.
- *mm. Glass sand and other sand, by A. T. Coons, 1905, p. 1147-1155.
- *nn. Graphite, by J. H. Pratt, 1905, p. 1157-1167.
- *oo. Magnesite, by C. G. Yale, 1905, p. 1169-1174.
- *pp. Mica, by J. H. Pratt, 1905, p. 1175-1184.
- *qq. Mineral waters, 1905, p. 1185-1208.
- *rr. Production of monazite, zircon, gadolinite, and columbite or tantalum minerals, by J. H. Pratt, 1905, p. 1209-1227.
- *ss. Peat, by H. H. Hindshaw, 1905, p. 1229-1234; Index, 1905, p. 1235-1264.
- *Mineral Resources of the United States, calendar year 1905, 1906, 1403 p.
 - *a. Introduction, 1906, p. 9-12; Summary, 1906, p. 13-52, including Value, by states, of the mineral products of the United States in the calendar year 1905, compiled by W. T. Thom, 1906, p. 42-52.
 - *b. Iron ores, by John Birkinbine, 1906, p. 53-86.
 - *c. Manganese ores, by John Birkinbine, 1906, p. 87-111.
 - *d. Gold and silver, by Waldemar Lindgren and others, 1906, p. 113-341.
 - Includes: Production in the United States, by Waldemar Lindgren, 1906, p. 113-127; Alaska, by A. H. Brooks, 1906, p. 127-134; Arizona, by V. C. Heikes, 1906, p. 134-162; California, by C. G. Yale, 1906, p. 162-185; Colorado, by Waldemar Lindgren, 1906, p. 185-214; Idaho, by V. C. Heikes, 1906, p. 214-242; Montana, by A. N. Winchell, 1906, p. 242-259; Nevada, by C. G. Yale, 1906, p. 259-275; New Mexico, by Waldemar Lindgren, 1906, p. 275-284; Oregon, by C. G. Yale, 1906, p. 284-293; South Dakota, by Waldemar Lindgren, 1906, p. 293-297; Southern Appalachian States, by Waldemar Lindgren, 1906, p. 297-304; Texas, by Waldemar Lindgren, 1906, p. 304-305; Utah, by V. C. Heikes, 1906, p. 305-331; Washington, by C. G. Yale, 1906, p. 331-337; Wyoming, by Waldemar Lindgren, 1906, p. 337-341.
 - *e. Copper, by Charles Kirchhoff, Jr., 1906, p. 343-362.
 - *f. Lead, by Charles Kirchhoff, Jr., 1906, p. 363-370.
 - *g. Zinc, by Charles Kirchhoff, Jr., 1906, p. 371-377; Zinc and lead ores, by H. F. Bain, 1906, p. 379-392.
 - *h. Quicksilver, by F. W. Horton, 1906, p. 393-404.
 - *i. Steel-hardening metals, by J. H. Pratt, 1906, p. 405-421.
 - *j. Platinum, by F. W. Horton, 1906, p. 423-434.
 - *k. Antimony, by C. C. Schnatterbeck, 1906, p. 435-439.
 - *l. Bismuth, by C. C. Schnatterbeck, 1906, p. 441-443.
 - *m. Tin, by F. L. Hess, 1906, p. 445-451.
 - *n. Coal, by E. W. Parker, 1906, p. 453-714, including Coal in the Philippine Islands, compiled from a report by W. H. Smith, 1906, p. 477-479.
 - *o. Coke, by E. W. Parker, 1906, p. 715-766; Gas, coke, tar, and ammonia at gas works and in retort coke ovens, by E. W. Parker, 1906, p. 767-798.
 - *p. Natural gas, by W. T. Griswold, 1906, p. 799-812.
 - *q. Petroleum, by W. T. Griswold, 1906, p. 813-920.
 - *r. Cement, 1906, p. 921; Advance in cement technology, by E. C. Eckel, 1906, p. 921-923; Statistics of cement industry, by L. L. Kimball, 1906, p. 924-944.
 - *s. Clay-working industries, by Jefferson Middleton, 1906, p. 945-1002.
 - *t. Lime and sand-lime brick, by E. C. Eckel, 1906, p. 1003-1006.
 - *u. Sand and gravel, by A. T. Coons, 1906, p. 1007-1010.
 - *v. Slate, 1906, p. 1011-1020.
 - *w. Stone industry, by A. T. Coons, 1906, p. 1021-1067.
 - *x. Abrasive materials, by J. H. Pratt, 1906, p. 1069-1085.
 - *y. Arsenious oxide, by C. C. Schnatterbeck, 1906, p. 1087-1089.
 - *z. Borax, by C. G. Yale, 1906, p. 1091-1096.
 - *aa. Bromine, by F. J. H. Merrill, 1906, p. 1097-1098.

- *bb. Fluorspar and cryolite, by E. O. Hovey, 1906, p. 1099-1103.
- *cc. Gypsum and gypsum products, by E. C. Eckel, 1906, p. 1105-1115.
- *dd. Phosphate rock, by E. O. Hovey, 1906, p. 1117-1126.
- *ee. Salt, by E. O. Hovey, 1906, p. 1127-1135.
- *ff. Sulphur and pyrite, 1906, p. 1137-1143.
- *gg. Barytes, 1906, p. 1145-1146.
- *hh. Mineral paints, 1906, p. 1147-1154.
- *ii. Asbestos, by G. O. Smith, 1906, p. 1155-1159.
- *jj. Asphaltum and bituminous rock, by E. O. Hovey, 1906, p. 1161-1169.
- *kk. Bauxite and aluminum, 1906, p. 1171-1174.
- *ll. Black sands of the Pacific slope, by D. T. Day and R. H. Richards, 1906, p. 1175-1246; Electric smelting of magnetite from black sands, by D. T. Day, C. E. Wilson, and G. H. Clevenger, 1906, p. 1247-1258.
- *mm. Carbon dioxide, by M. L. Fuller, 1906, p. 1259-1263.
- *nn. Graphite, by G. O. Smith, 1906, p. 1265-1269.
- *oo. Lithium minerals, by E. O. Hovey, 1906, p. 1271-1272.
- *pp. Magnesite, by C. G. Yale, 1906, p. 1273-1278.
- *qq. Mica, by G. O. Smith, 1906, p. 1279-1283.
- *rr. Mineral waters, by M. L. Fuller, 1906, p. 1285-1312.
- *ss. Production of monazite, zircon, gadolinite, and columbite, or tantalum minerals, by J. H. Pratt, 1906, p. 1313-1317.
- *tt. Peat, by M. R. Campbell, 1906, p. 1319-1322.
- *uu. Precious stones, by G. F. Kunz, 1906, p. 1323-1358.
- *vv. Quartz (flint) and feldspar, by Heinrich Ries, 1906, p. 1359-1360.
- *ww. Talc and soapstone, by J. H. Pratt, 1906, p. 1361-1368.
- *xx. Note on timber used in the mines of the United States in 1905. 1906, p. 1369; Index, 1906, p. 1371-1403.
- *Mineral Resources of the United States, calendar year 1906. 1907. 1307 p.
 - *a. Introduction, by D. T. Day and E. W. Parker, 1907, p. 9-12; Summary of mineral production of the United States in 1906, compiled by W. T. Thom, 1907, p. 13-65.
 - *b. Iron ores, pig iron, and steel, by E. C. Eckel, 1907, p. 67-102.
 - *c. Manganese ores, by E. C. Eckel, 1907, p. 103-109.
 - *d. Gold and silver, 1907, p. 111-371.
 Includes: Production in the United States, by Waldemar Lindgren, 1907, p. 111-134; Alaska, by A. H. Brooks, 1907, p. 134-146; Arizona, by V. C. Heikes, 1907, p. 147-177; California, by C. G. Yale, 1907, p. 178-198; Colorado, by Chester Naramore, 1907, p. 199-240; Idaho, by V. C. Heikes, 1907, p. 240-267; Montana, by A. N. Winchell, 1907, p. 267-287; Nevada, by C. G. Yale, 1907, p. 287-300; New Mexico, by Chester Naramore, 1907, p. 300-312; Oregon, by C. G. Yale, 1907, p. 312-318; South Dakota, by Chester Naramore, 1907, p. 319-323; Southern Appalachian States, by H. D. McCaskey, 1907, p. 323-333; Texas, by H. D. McCaskey, 1907, p. 333-334; Utah, by V. C. Heikes, 1907, p. 334-362; Vermont, by H. D. McCaskey, 1907, p. 362; Washington, by C. G. Yale, 1907, p. 362-368; Wyoming, by Chester Naramore, 1907, p. 368-371.
 - *e. Copper, by L. C. Graton, 1907, p. 373-438.
 - *f. Lead, by J. M. Boutwell, 1907, p. 439-457.
 - *g. Zinc, by J. M. Boutwell, 1907, p. 459-489.
 - *h. Quicksilver, by J. M. Boutwell, 1907, p. 491-499.
 - *i. Bauxite and aluminum, by E. F. Burchard, 1907, p. 501-510.
 - *j. Antimony, by F. L. Hess, 1907, p. 511-516.
 - *k. Bismuth, by F. L. Hess, 1907, p. 517.
 - *l. Nickel, cobalt, tungsten, vanadium, molybdenum, titanium, uranium, and tantalum, by F. L. Hess, 1907, p. 519-540.
 - *m. Chromite or chromic iron ore, by A. J. Collier, 1907, p. 541-542.
 - *n. Tin, by F. L. Hess, 1907, p. 543-549.
 - *o. Platinum, by D. T. Day, 1907, p. 551-562.
 - *p. Coal, by E. W. Parker, 1907, p. 563-753.
 - *q. Coke, by E. W. Parker, 1907, p. 755-809.
 - *r. Natural gas, by Belle Hill, 1907, p. 811-826, including Introduction, by D. T. Day, 1907, p. 811-812.
 - *s. Petroleum, by W. T. Griswold, 1907, p. 827-896.
 - *t. Cement, 1907, p. 897-931.
 Includes: Advances in cement technology, 1906, by E. C. Eckel, 1907, p. 897-905; Statistics of cement industry in 1906, by L. L. Kimball, 1907, p. 906-931.
 - *u. Clay-working industries, by Jefferson Middleton, 1907, p. 933-983.
 - *v. Lime and sand-lime brick, by E. C. Eckel, 1907, p. 985-991.
 - *w. Glass sand, sand, and gravel, by E. F. Burchard, 1907, p. 993-1000.
 - *x. Slate, by A. T. Coons, 1907, p. 1001-1005.
 - *y. Stone, by A. T. Coons, 1907, p. 1007-1041.
 - *z. Abrasive materials, by D. B. Sterrett, 1907, p. 1043-1054.
 - *aa. Arsenic, by F. L. Hess, 1907, p. 1055-1058.
 - *bb. Borax, by C. G. Yale, 1907, p. 1059-1062.
 - *cc. Fluorspar and cryolite, by E. F. Burchard, 1907, p. 1063-1067.
 - *dd. Gypsum and gypsum products, by E. F. Burchard, 1907, p. 1069-1078.

- *ee. Phosphate rock and phosphorus, 1907, p. 1079-1090.
Includes: Phosphate rock, by M. L. Fuller, 1907, p. 1079-1084; Phosphorus, by G. W. Stose, 1907, p. 1084-1090.
- *ff. Salt and bromine, by A. T. Coons, 1907, p. 1091-1101.
- *gg. Sulphur and pyrite, 1907, p. 1103-1108.
- *hh. Barytes, with a note on strontium, by E. F. Burchard, 1907, p. 1109-1114.
- *ii. Mineral paints, 1907, p. 1115-1122, including Geology and technology, by E. C. Eckel, 1907, p. 1120-1122.
- *jj. Asbestos, by J. S. Diller, 1907, p. 1123-1129.
- *kk. Asphalt and bituminous rock, by J. A. Taff, 1907, p. 1131-1137.
- *ll. Graphite, by G. O. Smith, 1907, p. 1139-1143.
- *mm. Magnesite, by C. G. Yale, 1907, p. 1145-1147.
- *nn. Mica, by D. B. Sterrett, 1907, p. 1149-1163.
- *oo. Mineral waters, by Samuel Sanford, 1907, p. 1165-1194.
- *pp. Monazite and zircon, by D. B. Sterrett, 1907, p. 1195-1209.
- *qq. Peat, by M. R. Campbell, 1907, p. 1211-1212.
- *rr. Precious stones, by D. B. Sterrett, 1907, p. 1213-1252.
- *ss. Quartz (flint) and feldspar, by E. S. Bastin, 1907, p. 1253-1270.
- *tt. Selenium, by F. L. Hess, 1907, p. 1271.
- *uu. Talc and soapstone, by A. J. Collier, 1907, p. 1273-1275; Index, 1907, p. 1277-1307.
- *Mineral Resources of the United States, calendar year 1907 (in 2 parts).
 - *Part I, Metallic products. 1908. 743 p.
 - *a. Introduction, 1908, p. 5-6; Summary of mineral production in the United States in 1907, compiled by W. T. Thom, 1908, p. 7-49.
 - *b. Iron ores, pig iron, and steel, by E. C. Eckel, 1908, p. 51-85, including Note on value of production of pig iron in 1907, by W. T. Thom, 1908, p. 84-85.
 - *c. Manganese ores, by E. C. Harder, 1908, p. 87-110.
 - *d. Gold and silver, by Waldemar Lindgren and H. D. McCaskey, 1908, p. 111-135.
 - *e. Gold, silver, copper, lead, and zinc in western States (mine production), 1908, p. 137-482. Includes: Alaska, by A. H. Brooks, 1908, p. 139-150; Arizona, by V. C. Heikes, 1908, p. 150-187; California, by C. G. Yale, 1908, p. 187-234; Colorado, by Chester Naramore, 1908, p. 235-279; Idaho, by V. C. Heikes, 1908, p. 279-312; Montana, by C. T. Kirk, 1908, p. 312-337; Nevada, by C. G. Yale, 1908, p. 337-338; New Mexico, by Chester Naramore, 1908, p. 398-414; Oregon, by C. G. Yale, 1908, p. 414-427; South Dakota, by Chester Naramore, 1908, p. 428-432; Texas, by H. D. McCaskey, 1908, p. 432-433; Utah, by V. C. Heikes, 1908, p. 433-467; Washington, by C. G. Yale, 1908, p. 468-477; Wyoming, by Chester Naramore, 1908, p. 477-482.
 - *f. Silver, copper, lead, and zinc in central States (mine production), 1908, p. 483-549. Includes: Arkansas, by C. E. Siebenthal, 1908, p. 486-488; Illinois, by C. E. Siebenthal, 1908, p. 489-491; Iowa, by C. E. Siebenthal, 1908, p. 491-492; Kansas, by C. E. Siebenthal, 1908, p. 493-495; Kentucky, by C. E. Siebenthal, 1908, p. 495-496; Michigan, by L. C. Graton, 1908, p. 496-523; Missouri, by C. E. Siebenthal, 1908, p. 523-541; Oklahoma, by C. E. Siebenthal, 1908, p. 542-544; Wisconsin, by C. E. Siebenthal, 1908, p. 544-549.
 - *g. Gold, silver, copper, lead, and zinc in eastern States (mine production), by H. D. McCaskey, 1908, p. 551-570.
 - *h. Copper, by L. C. Graton, 1908, p. 571-644.
 - *i. Lead, by C. E. Siebenthal, 1908, p. 645-658.
 - *j. Zinc, by C. E. Siebenthal, 1908, p. 659-676.
 - *k. Quicksilver, by H. D. McCaskey, 1908, p. 677-692.
 - *l. Bauxite and aluminum, by W. C. Phalen, 1908, p. 693-705.
 - *m. Antimony, by F. L. Hess, 1908, p. 707-710.
 - *n. Tungsten, nickel, cobalt, etc., by F. L. Hess, 1908, p. 711-722.
 - *o. Chromite or chromic iron ore, 1908, p. 723-724.
 - *p. Tin, by F. L. Hess, 1908, p. 725-729.
 - *q. Platinum, by D. T. Day, 1908, p. 731-732; Index, 1908, p. 733-743; Map of mining districts of western United States, by Waldemar Lindgren and others, 1908 (in pocket).
 - *Part II, Nonmetallic products. 1908. 897 p.
 - *a. Fuels, p. 5-475.
Includes: Coal, by E. W. Parker, 1908, p. 5-222; Coal briquetting in 1907, by E. W. Parker, 1908, p. 223-228; Coke, by E. W. Parker, 1908, p. 229-290; Gas, coke, tar, and ammonia, by E. W. Parker, 1908, p. 291-322; Natural gas, by Belle Hill, 1908, p. 323-346, including Introduction, by D. T. Day, 1908, p. 323; Petroleum, by D. T. Day, 1908, p. 347-475.
 - *b. Structural materials, 1908, p. 477-605.
Includes: The cement industry in the United States in 1907, by E. C. Eckel, 1908, p. 477-493; Clay-working industries, by Jefferson Middleton, 1908, p. 495-544; Lime and sand-lime brick, by E. C. Eckel, 1908, p. 545-551; Sand and gravel, 1908, p. 553-556; Slates, by A. T. Coons, 1908, p. 557-562; Stone, by A. T. Coons, 1908, p. 563-605.
 - *c. Abrasive materials, by W. C. Phalen, 1908, p. 607-626.
 - *d. Chemical materials, 1908, p. 627-683.
Includes: Arsenic, by F. L. Hess, 1908, p. 627-630; Borax, by C. G. Yale, 1908, p. 631-635; Fluorspar and cryolite, by E. F. Burchard, 1908, p. 637-641; Gypsum, by E. F. Burchard, 1908, p. 643-650; Phosphate rock, by F. B. Van Horn, 1908, p. 651-657; Salt and bromine, by W. C. Phalen, 1908, p. 659-672; Sulphur and pyrite, by W. C. Phalen, 1908, p. 673-683.

- *e. Pigments, 1908, p. 685-709.
Includes: Barytes and strontium, by E. F. Burchard, 1908, p. 685-696; Mineral paints, by E. F. Burchard, 1908, p. 697-709.
- *f. Miscellaneous, 1908, p. 711-876.
Includes: Asbestos, by J. S. Diller, 1908, p. 711-722; Asphalt and bituminous rock, by J. A. Taff, 1908, p. 723-730; Fuller's earth, by F. B. Van Horn, 1908, p. 731-734; Graphite, by F. L. Hess, 1908, p. 735-736; Magnesite, by C. G. Yale, 1908, p. 737-740; Mica, by D. B. Sterrett, 1908, p. 741-750; Mineral waters, by Samuel Sanford, 1908, p. 751-784; Monazite and zircon, by D. B. Sterrett, 1908, p. 785-794; Precious stones, by D. B. Sterrett, 1908, p. 795-842; Quartz and feldspar, by E. S. Bastin, 1908, p. 843-872; Talc and soapstone, 1908, p. 873-876; Index, 1908, p. 877-897; Map showing coal fields of the United States, by M. R. Campbell, 1908 (in pocket).
- *Mineral Resources of the United States, calendar year 1908 (in 2 parts).
 - *Part I, Metallic products. 1909. 816 p.
 - *a. Introduction, 1909, p. 5-6; Summary of mineral production in the United States in 1908, compiled by W. T. Thom, 1909, p. 7-59.
 - *b. Iron ores, pig iron, and steel, by E. C. Harder, 1909, p. 61-134, including Note on value of production of pig iron in the United States in 1908, by W. T. Thom, 1909, p. 127-134.
 - *c. Manganese ores, by E. C. Harder, 1909, p. 135-156.
 - *d. Gold and silver, by Waldemar Lindgren and H. D. McCaskey, 1909, p. 157-183.
 - *e. Copper, by B. S. Butler, 1909, p. 185-226.
 - *f. Lead, by C. E. Siebenthal, 1909, p. 227-243.
 - *g. Zinc, by C. E. Siebenthal, 1909, p. 245-273.
 - *h. Gold, silver, copper, lead, and zinc in the United States (mine production), Prefatory note, 1909, p. 275-276; Gold, silver, copper, lead, and zinc in the western States (mine production), 1909, p. 277-586.
Includes: Alaska, by A. H. Brooks, 1909, p. 277-285; Arizona, by V. C. Heikes, 1909, p. 286-313; California, by C. G. Yale, 1909, p. 314-359; Colorado, by C. W. Henderson, 1909, p. 360-405; Idaho, by C. N. Gerry, 1909, p. 405-435; Montana, by V. C. Heikes, 1909, p. 435-461; Nevada, by Chester Naramore and C. G. Yale, 1909, p. 462-506; New Mexico, by C. W. Henderson, 1909, p. 506-519; Oregon, by C. G. Yale, 1909, p. 520-534; South Dakota, by C. W. Henderson, 1909, p. 534-541; Utah, by V. C. Heikes, 1909, p. 542-573; Washington, by C. G. Yale, 1909, p. 573-582; Wyoming, by C. W. Henderson, 1909, p. 582-586.
 - *i. Silver, copper, lead, and zinc in central States (mine production), 1909, p. 587-643.
Includes: Arkansas, by C. E. Siebenthal, 1909, p. 589-592; Illinois, by C. E. Siebenthal, 1909, p. 592-595; Iowa, by C. E. Siebenthal, 1909, p. 595-596; Kansas, by C. E. Siebenthal, 1909, p. 597-599; Kentucky, by C. E. Siebenthal, 1909, p. 599-600; Michigan, by B. S. Butler, 1909, p. 601-617; Missouri, by C. E. Siebenthal, 1909, p. 617-636; Oklahoma, by C. E. Siebenthal, 1909, p. 636-638; Wisconsin, by C. E. Siebenthal, 1909, p. 639-643.
 - *j. Gold, silver, copper, lead, and zinc in the eastern States (mine production), by H. D. McCaskey, 1909, p. 645-681.
 - *k. Quicksilver, by H. D. McCaskey, 1909, p. 683-695.
 - *l. Bauxite and aluminum, by W. C. Phalen, 1909, p. 697-708.
 - *m. Antimony, by F. L. Hess, 1909, p. 709-711.
 - *n. Bismuth, by F. L. Hess, 1909, p. 713-714.
 - *o. Selenium, by F. L. Hess, 1909, p. 715-717.
 - *p. Tellurium, by F. L. Hess, p. 719-720.
 - *q. Tungsten, nickel, cobalt, vanadium, etc., by F. L. Hess, 1909, p. 721-749.
 - *r. Chromic iron ore, by E. C. Harder, 1909, p. 751-770.
 - *s. Tin, by F. L. Hess, 1909, p. 771-779.
 - *t. Platinum, by D. T. Day, 1909, p. 781-791.
 - *u. Cadmium, by C. E. Siebenthal, 1909, p. 793-803; Index, 1909, p. 805-816; Map showing deposits of iron ore in the United States, by E. C. Harder, 1909 (in pocket); Map showing location of blast furnaces in the United States in 1908, by W. T. Thom, 1909 (in pocket).
 - *Part II, Nonmetallic products. 1909. 899 p.
 - *a. Coal, by E. W. Parker, 1909, p. 5-196; Classified list of papers dealing with coal, coke, lignite, and peat contained in publications of the United States Geological Survey, compiled by W. T. Lee and J. M. Nickles, 1909, p. 197-211; Coal briquetting, by E. W. Parker, 1909, p. 213-221.
 - *b. Coke, by E. W. Parker, 1909, p. 223-283; Gas, coke, tar, and ammonia, by E. W. Parker, 1909, p. 285-316.
 - *c. Natural gas, by Belle Hill, 1909, p. 317-344.
 - *d. Petroleum, by D. T. Day, 1909, p. 345-440.
 - *e. Cement industry in the United States in 1908, by E. C. Eckel, 1909, p. 441-453.
 - *f. Clay-working industries, by Jefferson Middleton, 1909, p. 455-504.
 - *g. Glass sand, other sand, and gravel, 1909, p. 505-510.
 - *h. Lime, by A. T. Coons, 1909, p. 511-515.
 - *i. Sand-lime brick, 1909, p. 517-519.
 - *j. Slate, by A. T. Coons, 1909, p. 521-532, including General note on slate, by T. N. Dale, 1909, p. 528-532, and Note on a "black" roofing slate from Nevada, by T. N. Dale, 1909, p. 532.
 - *k. Stone, by A. T. Coons, 1909, p. 533-579.
 - *l. Abrasive materials, by W. C. Phalen, 1909, p. 581-598.
 - *m. Arsenic, by F. L. Hess, 1909, p. 599-601.

- *n. Borax, by C. G. Yale, 1909, p. 603-605.
- *o. Fluorspar and cryolite, by E. F. Burchard, 1909, p. 607-620.
- *p. Gypsum, by E. F. Burchard, 1909, p. 621-628.
- *q. Phosphate rock, by F. B. Van Horn, 1909, p. 629-642.
- *r. Salt and bromine, by W. C. Phalen, 1909, p. 643-657.
- *s. Sulphur and pyrite, by W. C. Phalen, 1909, p. 659-668.
- *t. Barytes and strontium, by E. F. Burchard, 1909, p. 669-673.
- *u. Mineral paints, by E. F. Burchard, 1909, p. 675-696.
- *v. Asbestos, by J. S. Diller, 1909, p. 697-706.
- *w. Asphalt, related bitumens, and bituminous rock, by J. A. Taff, 1909, p. 707-715.
- *x. Graphite, by E. S. Bastin, 1909, p. 717-738.
- *y. Magnesite, by C. G. Yale, 1909, p. 739-741.
- *z. Mica, by D. B. Sterrett, 1909, p. 743-754.
- *aa. Mineral waters, by Samuel Sanford, 1909, p. 755-790.
- *bb. Monazite and zircon, by D. B. Sterrett, 1909, p. 791-794.
- *cc. Peat, by C. A. Davis, 1909, p. 795-804.
- *dd. Precious stones, by D. B. Sterrett, 1909, p. 805-859.
- *ee. Quartz and feldspar, by E. S. Bastin, 1909, p. 861-868.
- *ff. Talc and soapstone, by J. S. Diller, 1909, p. 869-878; Index, 1909, p. 879-899.
- *Mineral Resources of the United States, calendar year 1909 (in 2 parts).
- *Part I, Metals. 1911. 617 p.
- *a. Introduction, 1911, p. 5-6; Summary of the mineral production of the United States in 1909, compiled by W. T. Thom, 1911, p. 7-63; Metals and metallic ores in 1908 and 1909, by Waldemar Lindgren, 1911, p. 65-69.
- *b. Iron ore, pig iron, and steel, by E. F. Burchard, 1911, p. 71-99; Movement of Lake Superior iron ore in 1909, by John Birkinbine, 1911, p. 101-105.
- *c. Manganese ore, by E. F. Burchard, 1911, p. 107-119.
- *d. Gold and silver, by H. D. McCaskey, 1911, p. 121-149.
- *e. Copper, by B. S. Butler, 1911, p. 151-180.
- *f. Lead, by C. E. Siebenthal, 1911, p. 181-201.
- *g. Zinc, by C. E. Siebenthal, 1911, p. 203-220.
- *h. Gold, silver, copper, lead, and zinc in the United States in 1909 (mine production): Prefatory note, 1911, p. 221-222; Gold, silver, copper, lead, and zinc in the western States in 1909 (mine production), 1911, p. 223-494.
Includes: Alaska, by A. H. Brooks, 1911, p. 223-232; Arizona, by V. C. Heikes, 1911, p. 232-259; California, by C. G. Yale, 1911, p. 259-290; Colorado, by C. W. Henderson, 1911, p. 290-333; Idaho, by C. N. Gerry, 1911, p. 333-357; Montana, by V. C. Heikes, 1911, p. 357-386; Nevada, by Chester Naramore, 1911, p. 386-430; New Mexico, by C. W. Henderson, 1911, p. 430-441; Oregon, by C. G. Yale, 1911, p. 441-450; South Dakota, by C. W. Henderson, 1911, p. 450-454; Texas, by C. W. Henderson, 1911, p. 454-455; Utah, by V. C. Heikes, 1911, p. 456-485; Washington, by C. G. Yale, 1911, p. 485-491; Wyoming, by C. W. Henderson, 1911, p. 491-494.
- *i. Silver, copper, lead, and zinc in the central States in 1909 (mine production), by B. S. Butler and C. E. Siebenthal, 1911, p. 495-531.
- *j. Gold, silver, copper, lead, and zinc in the eastern States in 1909 (mine production), by H. D. McCaskey, 1911, p. 533-547.
- *k. Quicksilver, by H. D. McCaskey, 1911, p. 549-559.
- *l. Bauxite and aluminum, by W. C. Phalen, 1911, p. 561-572.
- *m. Antimony, by F. L. Hess, 1911, p. 573-574.
- *n. Bismuth, by F. L. Hess, 1911, p. 575-576.
- *o. Tungsten, by F. L. Hess, 1911, p. 577-581.
- *p. Nickel and cobalt, by F. L. Hess, 1911, p. 582-583.
- *q. Vanadium, by F. L. Hess, 1911, p. 584-585.
- *r. Titanium, by F. L. Hess, 1911, p. 586.
- *s. Molybdenum, uranium, and tantalum, by F. L. Hess, 1911, p. 587.
- *t. Tin, by F. L. Hess, 1911, p. 588-590.
- *u. Chromic iron ore, by E. F. Burchard, 1911, p. 591-593.
- *v. Platinum and allied metals, by Waldemar Lindgren, 1911, p. 595-601.
- *w. Cadmium, by C. E. Siebenthal, 1911, p. 603-604.
- *x. Selenium, by F. L. Hess, 1911, p. 605; Index, 1911, p. 607-617.
- *Part II, Nonmetals. 1911. 942 p.
- *a. Coal, by E. W. Parker, 1911, p. 5-195, including a section on Alaska, by A. H. Brooks, 1911, p. 98-100; Coal briquetting in 1909, by E. W. Parker, 1911, p. 197-209; United States Geological Survey briquetting plant, Pittsburgh, Pa., by C. L. Wright, 1911, p. 210-211.
- *b. Coke, by E. W. Parker, 1911, p. 213-267.
- *c. Natural gas, by Belle Hill, 1911, p. 269-302.
- *d. Petroleum, by D. T. Day, 1911, p. 303-427.
- *e. Peat, by C. A. Davis, 1911, p. 429-432.
- *f. Cement, by E. F. Burchard, 1911, p. 433-452.
- *g. Clay-working industries, by Jefferson Middleton, 1911, p. 453-517.
- *h. Glass sand, other sand, and gravel, by E. F. Burchard, 1911, p. 519-542.
- *i. Lime, by E. F. Burchard, 1911, p. 543-555.

- *j. Slate, by A. T. Coons, 1911, p. 557-568.
- *k. Stone, by E. F. Burchard, 1911, p. 569-608.
- *l. Abrasive materials, by W. C. Phalen, 1911, p. 609-627.
- *m. Arsenic, by F. L. Hess, 1911, p. 629-630.
- *n. Borax, by C. G. Yale, 1911, p. 631-632.
- *o. Fluorspar and cryolite, by E. F. Burchard, 1911, p. 633-638.
- *p. Gypsum, by E. F. Burchard, 1911, p. 639-647.
- *q. Lithium, by F. L. Hess, 1911, p. 649-653.
- *r. Phosphate rock, by F. B. Van Horn, 1911, p. 655-659.
- *s. Salt and bromine, by W. C. Phalen, 1911, p. 661-683.
- *t. Sulphur and pyrite, by W. C. Phalen, 1911, p. 685-696.
- *u. Barytes and strontium, by E. F. Burchard, 1911, p. 697-700.
- *v. Mineral paints, by E. F. Burchard, 1911, p. 701-720.
- *w. Asbestos, by J. S. Diller, 1911, p. 721-729.
- *x. Asphalt, by D. T. Day, 1911, p. 731-733.
- *y. Fuller's earth, compiled by F. B. Van Horn, 1911, p. 735-738.
- *z. Gems and precious stones, by D. B. Sterrett, 1911, p. 739-808.
- *aa. Graphite, by E. S. Bastin, 1911, p. 809-840.
- *bb. Magnesite, by C. G. Yale, 1911, p. 841-843.
- *cc. Mica, by D. B. Sterrett, 1911, p. 845-856.
- *dd. Mineral waters, by Samuel Sanford, 1911, p. 857-895.
- *ee. Monazite and zircon, by D. B. Sterrett, 1911, p. 897-905.
- *ff. Quartz and feldspar, by E. S. Bastin, 1911, p. 907-913.
- *gg. Talc and soapstone, by J. S. Diller, 1911, p. 915-923; Index, 1911, p. 925-942.

*Mineral Resources of the United States, calendar year 1910 (in 2 parts).

*Part I, Metals. 1911. 796 p.

- *a. Introduction, 1911, p. 7-8; Summary of the mineral production of the United States in 1910, compiled by W. T. Thom, 1911, p. 9-62; Metals and metallic ores in 1909 and 1910, by H. D. McCaskey, 1911, p. 63-68.
 - *b. Iron ore, pig iron, and steel, by E. F. Burchard, 1911, p. 69-102.
 - *c. Manganese ore, by E. F. Burchard, 1911, p. 103-115.
 - *d. Gold, silver, copper, lead, and zinc in the United States in 1910, prefatory note, 1911, p. 117-118; Gold and silver, by H. D. McCaskey, 1911, p. 119-153.
 - *e. Copper, by B. S. Butler, 1911, p. 155-220.
 - *f. Lead, by C. E. Siebenthal, 1911, p. 221-259.
 - *g. Zinc, by C. E. Siebenthal, 1911, p. 261-304.
 - *h. Gold, silver, copper, lead, and zinc in the western States (mine production), 1911, p. 305-610. Includes: Introduction, by H. D. McCaskey, 1911, p. 305-307; Alaska, by A. H. Brooks, 1911, p. 307-320; Arizona, by V. C. Heikes, 1911, p. 320-347; California, by C. G. Yale, 1911, p. 347-384; Colorado, by C. W. Henderson, 1911, p. 384-445; Idaho, by C. N. Gerry, 1911, p. 446-469; Montana, by V. C. Heikes, 1911, p. 469-498; Nevada, by V. C. Heikes, 1911, p. 498-534; New Mexico, by C. W. Henderson, 1911, p. 534-552; Oregon, by C. G. Yale, 1911, p. 553-565; South Dakota, by C. W. Henderson, 1911, p. 565-570; Texas, by C. W. Henderson, 1911, p. 571-573; Utah, by V. C. Heikes, 1911, p. 573-597; Washington, by C. N. Gerry, 1911, p. 597-605; Wyoming, by C. W. Henderson, 1911, p. 606-610.
 - *i. Silver, copper, lead, and zinc in the central States in 1910 (mine production), by B. S. Butler and J. P. Dunlop, 1911, p. 611-674.
 - *j. Gold, silver, copper, lead, and zinc in the eastern States in 1910 (mine production), by H. D. McCaskey, 1911, p. 675-691.
 - *k. Quicksilver, by H. D. McCaskey, 1911, p. 693-710.
 - *l. Bauxite and aluminum, by W. C. Phalen, 1911, p. 711-723.
 - *m. Antimony, by F. L. Hess, 1911, p. 725-727.
 - *n. Bismuth, by F. L. Hess, 1911, p. 729-730.
 - *o. Selenium, by F. L. Hess, 1911, p. 731.
 - *p. Tungsten, by F. L. Hess, 1911, p. 733-751.
 - *q. Nickel and cobalt, by F. L. Hess, 1911, p. 753-757.
 - *r. Vanadium, titanium, molybdenum, uranium, and tantalum, by F. L. Hess, 1911, p. 759-764.
 - *s. Tin, by F. L. Hess, 1911, p. 765-767.
 - *t. Chromic iron ore, by E. F. Burchard, 1911, p. 769-771.
 - *u. Platinum and allied metals, by Waldemar Lindgren, 1911, p. 773-780.
 - *v. Cadmium, by C. E. Siebenthal, 1911, p. 781-783; Index, 1911, p. 785-796; Map of the United States showing location of copper producing districts and of reduction plants operated in 1908-1910 (in pocket).
- *Part II, Nonmetals. 1911. 1005 p.
- *a. Coal, by E. W. Parker, 1911, p. 5-242.
 - *b. Coke, by E. W. Parker, 1911, p. 243-297.
 - *c. Natural gas, by Belle Hill, 1911, p. 299-326, including Introduction, by D. T. Day, 1911, p. 299.
 - *d. Petroleum, by D. T. Day, 1911, p. 327-458.
 - *e. Peat, by C. A. Davis, 1911, p. 459-468.
 - *f. Cement, by E. F. Burchard, 1911, p. 469-535.
 - *g. Clay-working industries, by Jefferson Middleton, 1911, p. 537-600.
 - *h. Glass sand, other sand, and gravel, by E. F. Burchard, 1911, p. 601-608.

- *i. Lime, by E. F. Burchard, 1911, p. 609-621.
- *j. Sand-lime brick, by Jefferson Middleton, 1911, p. 623-626.
- *k. Slate, by A. T. Coons, 1911, p. 627-641.
- *l. Stone, by E. F. Burchard, 1911, p. 643-682.
- *m. Abrasive materials, by W. C. Phalen, 1911, p. 683-697.
- *n. Arsenic, by F. L. Hess, 1911, p. 699-700.
- *o. Borax, by C. G. Yale, 1911, p. 701-702.
- *p. Fluorspar and cryolite, by E. F. Burchard, 1911, p. 703-716.
- *q. Gypsum, by E. F. Burchard, 1911, p. 717-733.
- *r. Phosphate rock, by F. B. Van Horn, 1911, p. 735-746.
- *s. Potash salts: Their uses and occurrence in the United States, by W. C. Phalen, 1911, p. 747-767.
- *t. Salt and bromine, by W. C. Phalen, 1911, p. 769-781.
- *u. Sulphur and pyrite, by W. C. Phalen, 1911, p. 783-798, including The sulphur industry in Italy, translation of a paper by O. Stutzer, 1911, p. 785-792.
- *v. Barytes and strontium, by E. F. Burchard, 1911, p. 799-802.
- *w. Mineral paints, by E. F. Burchard, 1911, p. 803-821.
- *x. Asbestos, by J. S. Diller, 1911, p. 823-831.
- *y. Asphalt, by D. T. Day, 1911, p. 833-839.
- *z. Fuller's earth, by Jefferson Middleton, 1911, p. 841-846.
- *aa. Gems and precious stones, by D. B. Sterrett, 1911, p. 847-900.
- *bb. Graphite, by E. S. Bastin, 1911, p. 901-910.
- *cc. Magnesite, by C. G. Yale, 1911, p. 911-914.
- *dd. Mica, by D. B. Sterrett, 1911, p. 915-920.
- *ee. Mineral waters, by G. C. Matson, 1911, p. 921-958.
- *ff. Monazite, by D. B. Sterrett, 1911, p. 959-962.
- *gg. Quartz and feldspar, by E. S. Bastin, 1911, p. 963-975.
- *hh. Talc and soapstone, by J. S. Diller, 1911, p. 977-986; Index, 1911, p. 987-1005; Map showing location of salt, sulphur, and pyrite deposits of the United States, 1911 (in pocket).
- *Mineral Resources of the United States, calendar year 1911 (in 2 parts).
 - *Part I, Metals, 1912, 1018 p.
 - *a. Mineral products of the United States: Review of conditions and output in 1910 and 1911, by E. W. Parker, 1912, p. 7-90; Summary of the mineral production of the United States in 1911, compiled by W. T. Thom, 1912, p. 91-112; Metals and metallic ores in 1910 and 1911, by H. D. McCaskey, 1912, p. 113-118.
 - *b. Iron ore, pig iron, and steel, by E. F. Burchard, 1912, p. 119-174; Iron-ore reserves of Michigan, by C. K. Leith, 1912, p. 175-190.
 - *c. Manganese and manganiferous ores, by E. F. Burchard, 1912, p. 191-208.
 - *d. Gold, silver, copper, lead, and zinc in the United States in 1911, prefatory note, 1912, p. 209.
 - *e. Gold and silver, by H. D. McCaskey, 1912, p. 211-254.
 - *f. Copper, by B. S. Butler, 1912, p. 255-313.
 - *g. Lead, by C. E. Siebenthal, 1912, p. 315-351.
 - *h. Zinc, by C. E. Siebenthal, 1912, p. 353-398.
 - *i. Cadmium, by C. E. Siebenthal, 1912, p. 399-401.
 - *j. Gold, silver, copper, lead, and zinc in the western States (mine production), 1911, p. 403-791. Includes: Introduction, by H. D. McCaskey, 1912, p. 403-406; Alaska, by A. H. Brooks, 1912, p. 406-420; Arizona, by V. C. Heikes, 1912, p. 420-462; California, by C. G. Yale, 1912, p. 462-505; Colorado, by C. W. Henderson, 1912, p. 505-569; Idaho, by C. N. Gerry, 1912, p. 570-602; Montana, by V. C. Heikes, 1912, p. 602-646; Nevada, by V. C. Heikes, 1912, p. 646-702; New Mexico, by C. W. Henderson, 1912, p. 702-721; Oregon, by C. G. Yale, 1912, p. 721-733; South Dakota, by C. W. Henderson, 1912, p. 734-738; Texas, by C. W. Henderson, 1912, p. 739-740; Utah, by V. C. Heikes, 1912, p. 740-777; Washington, by C. N. Gerry, 1912, p. 778-788; Wyoming, by C. W. Henderson, 1912, p. 788-791.
 - *k. Silver, copper, lead, and zinc in the central States in 1911 (mine production), by B. S. Butler and J. P. Dunlop, 1912, p. 793-872.
 - *l. Gold, silver, copper, lead, and zinc in the eastern States in 1911 (mine production), by H. D. McCaskey, 1912, p. 873-888.
 - *m. Quicksilver, by H. D. McCaskey, 1912, p. 889-921.
 - *n. Bauxite and aluminum, by W. C. Phalen, 1912, p. 923-939.
 - *o. Tungsten, by F. L. Hess, 1912, p. 941-948.
 - *p. Vanadium, by F. L. Hess, 1912, p. 949-951.
 - *q. Uranium, by F. L. Hess, 1912, p. 952-953.
 - *r. Titanium, by F. L. Hess, 1912, p. 954.
 - *s. Molybdenum, by F. L. Hess, 1912, p. 955.
 - *t. Nickel, by F. L. Hess, 1912, p. 956-958.
 - *u. Cobalt, by F. L. Hess, 1912, p. 959.
 - *v. Tantalum, by F. L. Hess, 1912, p. 960.
 - *w. United States Geological Survey publications on rare metals, 1912, p. 961-962.
 - *x. Tin, by F. L. Hess, 1912, p. 963-972.
 - *y. Antimony, by F. L. Hess, 1912, p. 973-975.
 - *z. Bismuth, by F. L. Hess, 1912, p. 976.
 - *aa. Selenium, by F. L. Hess, 1912, p. 977.

- *bb. Chromic iron ore, by W. C. Phalen, 1912, p. 979-986.
- *cc. Platinum and allied metals, by Waldemar Lindgren, 1912, p. 987-1003; Index, 1912, p. 1005-1018.
- *Part II, Nonmetals. 1912. 1224 p.
- *a. Coal, by E. W. Parker, 1912, p. 5-207.
- *b. Coke, by E. W. Parker, 1912, p. 209-267; Fuel briquetting, by E. W. Parker, 1912, p. 269-278.
- *c. Natural gas, by D. T. Day and Belle Hill, 1912, p. 279-333.
- *d. Petroleum, by D. T. Day, 1912, p. 335-480.
- *e. Peat, by C. A. Davis, 1912, p. 481-484.
- *f. Cement, by E. F. Burchard, 1912, p. 485-519.
- *g. Clay-working industries, by Jefferson Middleton, 1912, p. 521-584.
- *h. Glass sand, other sand, and gravel, by E. F. Burchard, 1912, p. 585-638.
- *i. Gypsum, by E. F. Burchard, 1912, p. 639-644.
- *j. Lime, by E. F. Burchard, 1912, p. 645-718.
- *k. Sand-lime brick, 1912, p. 719-721.
- *l. Slate, by A. T. Coons, 1912, p. 723-739.
- *m. Stone, by E. F. Burchard, 1912, p. 741-834.
- *n. Abrasive materials, by W. C. Phalen, 1912, p. 835-854.
- *o. Arsenic, by F. L. Hess, 1912, p. 855-856.
- *p. Borax, by C. G. Yale, and H. S. Gale, 1912, p. 857-866, including The Lila C. Borax mine at Ryan, Cal., by H. S. Gale, 1912, p. 861-865.
- *q. Fluorspar and cryolite, by E. F. Burchard, 1912, p. 867-875.
- *r. Phosphate rock, by F. B. Van Horn, 1912, p. 877-888.
- *s. Potash salts: summary for 1911, by W. C. Phalen, 1912, p. 889-917.
- *t. Salt and bromine, by W. C. Phalen, 1912, p. 919-936.
- *u. Sulphur, pyrite, and sulphuric acid, by W. C. Phalen, 1912, p. 937-957; The manufacture of sulphuric acid from smelter fumes at Ducktown, Tenn., by F. B. Laney, 1912, p. 958-964.
- *v. Barytes, by W. C. Phalen, 1912, p. 965-970.
- *w. Mineral paints, by W. C. Phalen, 1912, p. 971-993.
- *x. Asbestos, by J. S. Diller, 1912, p. 995-1001.
- *y. Asphalt, by D. T. Day, 1912, p. 1003-1021.
- *z. Feldspar and quartz, by Jefferson Middleton, 1912, p. 1023-1030.
- *aa. Fuller's earth, by Jefferson Middleton, 1912, p. 1031-1035.
- *bb. Gems and precious stones, by D. B. Sterrett, 1912, p. 1037-1078.
- *c. Graphite, by E. S. Bastin, 1912, p. 1079-1112.
- *dd. Magnesite, by H. S. Gale, 1912, p. 1113-1127.
- *ee. Mica, by D. B. Sterrett, 1912, p. 1129-1135.
- *ff. Mineral waters, by G. C. Matson, 1912, p. 1137-1174.
- *gg. The concentration of mineral water in relation to therapeutic activity, by R. B. Dole, 1912, p. 1175-1192.
- *hh. Monazite and zircon, by D. B. Sterrett, 1912, p. 1193-1196.
- *ii. Talc and soapstone, by J. S. Diller, 1912, p. 1197-1203; Index, 1912, p. 1205-1224.
- *Mineral Resources of the United States, calendar year 1912 (in 2 parts).
- *Part I, Metals. 1913. 1079 p.
- *a. Mineral products of the United States: Review of conditions and output in 1911 and 1912, by E. W. Parker, 1913, p. 7-112; Summary of the mineral production of the United States in 1912, by W. T. Thom, 1913, p. 113-138.
- *b. Iron ore, pig iron, and steel, by E. F. Burchard, 1913, p. 147-202.
- *c. Manganese and manganiferous ores, by D. F. Hewett, 1913, p. 203-221.
- *d. Precious and related semiprecious metals in 1912: Prefatory note, by H. D. McCaskey, 1913, p. 223-224; Gold and silver, by H. D. McCaskey, 1913, p. 225-273, including Beach mining in California and Oregon, by C. G. Yale, 1913, p. 253-254, and Dry placers in Arizona, Nevada, New Mexico, and California, by V. C. Heikes, 1913, p. 255-263.
- *e. Copper, by B. S. Butler, 1913, p. 275-334.
- *f. Lead, by C. E. Siebenthal, 1913, p. 335-372.
- *g. Zinc, by C. E. Siebenthal, 1913, p. 373-416.
- *h. Precious and semiprecious metals in the eastern States in 1912 (mine production), by H. D. McCaskey, 1913, p. 417-436; Precious and semiprecious metals in the central States in 1912 (mine production), by B. S. Butler and J. P. Dunlop, 1913, p. 437-521; Precious and semiprecious metals in the western States in 1912 (mine production), 1913, p. 523-930.
- Includes: Alaska, by A. H. Brooks, 1913, p. 523-535; Arizona, by V. C. Heikes, 1913, p. 536-568; California, by C. G. Yale, 1913, p. 569-634; Colorado, by C. W. Henderson, 1913, p. 635-705; Idaho, by C. N. Gerry, 1913, p. 706-738; Montana, by V. C. Heikes, 1913, p. 739-772; Nevada, by V. C. Heikes, 1913, p. 773-818; New Mexico, by C. W. Henderson, 1913, p. 819-846; Oregon, by C. G. Yale, 1913, p. 847-866; South Dakota, by C. W. Henderson, 1913, p. 867-875; Texas, by C. W. Henderson, 1913, p. 876-881; Utah, by V. C. Heikes, 1913, p. 882-913; Washington, by C. N. Gerry, 1913, p. 914-923; Wyoming, by C. W. Henderson, 1913, p. 924-930.
- *i. Quicksilver, by H. D. McCaskey, 1913, p. 931-948.
- *j. Bauxite and aluminum, by W. C. Phalen, 1913, p. 949-962.
- *k. Cobalt, by F. L. Hess, 1913, p. 963-968, including Idaho, by J. B. Umpleby, 1913, p. 963-964, and Alloys of cobalt, by Elwood Haynes, 1913, p. 965-967.

- *l. Molybdenum, by F. L. Hess, 1913, p. 969.
- *m. Nickel, by F. L. Hess, 1913, p. 971-975.
- *n. Tantalum, by F. L. Hess, 1913, p. 977-979.
- *o. Tin, by F. L. Hess, 1913, p. 981-984.
- *p. Titanium, by F. L. Hess, 1913, p. 985.
- *q. Tungsten, by F. L. Hess, 1913, p. 987-1001.
- *r. Uranium and vanadium, by F. L. Hess, 1913, p. 1003-1037.
- *s. Antimony, by F. L. Hess, 1913, p. 1039-1041.
- *t. Bismuth, by F. L. Hess, 1913, p. 1043-1044.
- *u. Selenium, by F. L. Hess, 1913, p. 1045.
- *v. Chromic iron ore, by J. S. Diller, 1913, p. 1047-1054.
- *w. Platinum and allied metals, by D. T. Day, 1913, p. 1055-1059.
- *x. Cadmium, by C. E. Siebenthal, 1913, p. 1061-1063; Index, 1913, p. 1065-1079.
- *Part II, Nonmetals. 1913. 1218 p.
- *a. Coal, by E. W. Parker, 1913, p. 5-279.
- *b. Coke, by E. W. Parker, 1913, p. 231-292; Fuel briquetting, by E. W. Parker, 1913, p. 293-300.
- *c. Natural gas, by Belle Hill, 1913, p. 301-359.
- *d. Petroleum, by D. T. Day, 1913, p. 361-495.
- *e. Peat, by C. A. Davis, 1913, p. 497-501.
- *f. Cement, by E. F. Burchard, 1913, p. 503-524.
- *g. Clay-working industries, by Jefferson Middleton, 1913, p. 525-607; Notes on the occurrence of different varieties of clay, by J. H. Hance, 1913, p. 608-620.
- *h. Sand and gravel, by R. W. Stone, 1913, p. 621-636.
- *i. Gypsum, by R. W. Stone, 1913, p. 637-649.
- *j. Lime, by R. W. Stone, 1913, p. 651-668.
- *k. Sand-lime brick, 1913, p. 669-673.
- *l. Slate, by A. T. Coons, 1913, p. 675-692.
- *m. The commercial qualities of the slates of the United States and their localities, by T. N. Dale, 1913, p. 693-707.
- *n. Stone, by E. F. Burchard, 1913, p. 709-818.
- *o. Abrasive materials, by F. J. Katz, 1913, p. 819-831.
- *p. Arsenic, by F. L. Hess, 1913, p. 833-837.
- *q. Borax, by C. G. Yale and H. S. Gale, 1913, p. 839-846.
- *r. Fluorspar and cryolite, by E. F. Burchard, 1913, p. 847-853.
- *s. Phosphate rock, by W. C. Phalen, 1913, p. 855-876.
- *t. Potash salts, summary for 1912, by W. C. Phalen, 1913, p. 877-908; Other investigations of saline deposits, Searles Lake, California, by H. S. Gale, 1913, p. 885-888.
- *u. Salt and bromine, by W. C. Phalen, 1913, p. 909-929.
- *v. Sulphur, pyrite, and sulphuric acid, by W. C. Phalen, 1913, p. 931-953.
- *w. Barytes and strontium, by J. M. Hill, 1913, p. 955-960.
- *x. Mineral paints, by J. M. Hill, 1913, p. 961-984.
- *y. Asbestos, by J. S. Diller, 1913, p. 985-995.
- *z. Asphalt, by D. T. Day, 1913, p. 997-1006.
- *aa. Feldspar and quartz, by F. J. Katz, 1913, p. 1007-1015.
- *bb. Fuller's earth, by Jefferson Middleton, 1913, p. 1017-1022.
- *cc. Gems and precious stones, by D. B. Sterrett, 1913, p. 1023-1060.
- *dd. Graphite, by E. S. Bastin, 1913, p. 1061-1069.
- *ee. Magnesite, by C. G. Yale and H. S. Gale, 1913, p. 1071-1077.
- *ff. Mica, by D. B. Sterrett, 1913, p. 1079-1091.
- *gg. Mineral waters, by G. C. Matson, 1913, p. 1093-1131.
- *hh. Talc and soapstone, by J. S. Diller, 1913, p. 1133-1160.
- *ii. Gas, coke, tar, and ammonia, by E. W. Parker, 1913, p. 1161-1193; Index, 1913, p. 1195-1218.
- *Mineral Resources of the United States, 1913 (in 2 parts).
- *Part I, Metals. 1914. clxxiii, 901 p.
- *a. Mineral products of the United States: Review of conditions and output in 1912 and 1913, by E. W. Parker, 1914, p. vii-cxxv; Summary of the mineral production of the United States in 1913, by W. T. Thom, 1914, p. cxxvii-clxix; prefatory note to the general and mines reports on gold, silver, copper, lead, and zinc, by H. D. McCaskey, 1914, p. clxxi-clxxiii.
- *b. Bauxite and aluminum, by W. C. Phalen, 1914, p. 1-27.
- *c. Chromic iron ore, by J. S. Diller, 1914, p. 29-39.
- *d. Gold, silver, copper, lead, and zinc in South Dakota and Wyoming, by C. W. Henderson, 1914, p. 41-55.
- *e. Manganese and manganiferous ores, by D. F. Hewett, 1914, p. 57-74.
- *f. Recovery of secondary metals, by J. P. Dunlop, 1914, p. 75-80.
- *g. Silver, copper, lead, and zinc in the central States, by B. S. Butler and J. P. Dunlop, 1914, p. 81-171.
- *h. Gold, silver, copper, lead, and zinc in the eastern States, by H. D. McCaskey, 1914, p. 173-196.
- *i. Quicksilver, by H. D. McCaskey, 1914, p. 197-212.
- *j. Gold, silver, and copper in Alaska, by A. H. Brooks, 1914, p. 213-225.
- *k. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1914, p. 227-278.
- *l. Antimony, by F. L. Hess, 1914, p. 279-281.
- *m. Arsenic, by F. L. Hess, 1914, p. 283-284.

- *n. Bismuth, by F. L. Hess, 1914, p. 285-288.
- *o. Selenium and tellurium, by F. L. Hess, 1914, p. 289.
- *p. Iron ore, pig iron, and steel, by E. F. Burchard, 1914, p. 291-338.
- *q. Cobalt, by F. L. Hess, 1914, p. 339-340.
- *r. Molybdenum, by F. L. Hess, 1914, p. 341.
- *s. Nickel, by F. L. Hess, 1914, p. 343-345.
- *t. Tin, by F. L. Hess, 1914, p. 247-249.
- *u. Titanium, by F. L. Hess, 1914, p. 351.
- *v. Tungsten, by F. L. Hess, 1914, p. 353-361.
- *w. Radium, uranium, and vanadium, by F. L. Hess, 1914, p. 363-364.
- *x. Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1914, p. 365-413.
- *y. Gold, silver, copper, lead, and zinc in New Mexico and Texas, by C. W. Henderson, 1914, p. 415-443.
- *z. Platinum and allied metals, by D. T. Day, 1914, p. 445-457.
- *aa. Gold, silver, copper, lead, and zinc in California and Oregon, by C. G. Yale, 1914, p. 459-522.
- *bb. Copper, by B. S. Butler, 1914, p. 523-581.
- *cc. Gold, silver, copper, lead, and zinc in Montana, by V. C. Heikes, 1914, p. 583-620.
- *dd. Zinc, by C. E. Siebenthal, 1914, p. 621-667.
- *ee. Cadmium, by C. E. Siebenthal, 1914, p. 669-671.
- *ff. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1914, p. 673-707.
- *gg. Lead, by C. E. Siebenthal, 1914, p. 709-745.
- *hh. Metals and metallic ores in 1912 and 1913, by J. P. Dunlop, 1914, p. 747-753.
- *ii. Gold, silver, copper, lead, and zinc in Idaho and Washington, by C. N. Gerry, 1914, p. 755-801; Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1914, p. 803-844; Gold and silver, by H. D. McCaskey, 1914, p. 845-885; Index, 1914, p. 887-901.
- *Part II, Nonmetals. (In 2 vols.) 1914. 1617 p.
- *a. Mica, by D. B. Sterrett, 1914, p. 1-9.
- *b. Fuel briquetting, by E. W. Parker, 1914, p. 11-16.
- *c. Sand-lime brick, by Jefferson Middleton, 1914, p. 17-22.
- *d. Sulphur, pyrite, and sulphuric acid, by W. C. Phalen, 1914, p. 23-47.
- *e. Mineral paints, by J. M. Hill, 1914, p. 49-70.
- *f. Slate, by A. T. Coons, 1914, p. 71-84.
- *g. Potash salts: summary for 1913, by W. C. Phalen, 1914, p. 85-107.
- *h. Fuller's earth, by Jefferson Middleton, 1914, p. 109-115.
- *i. Cement industry, by E. F. Burchard, 1914, p. 117-143.
- *j. Feldspar, by F. J. Katz, 1914, p. 145-151.
- *k. Talc and soapstone, by J. S. Diller, 1914, p. 153-163.
- *l. Barytes and strontium, by J. M. Hill, 1914, p. 165-174.
- *m. Silica (quartz), by F. J. Katz, 1914, p. 175-180.
- *n. Graphite, by E. S. Bastin, 1914, p. 181-251.
- *o. Abrasive materials, by F. J. Katz, 1914, p. 253-272.
- *p. Phosphate rock, by W. C. Phalen, 1914, p. 273-289.
- *q. Salt, bromine, and calcium chloride, by W. C. Phalen, 1914, p. 291-307.
- *r. Lime, by R. W. Stone, 1914, p. 309-324.
- *s. Sand and gravel, by R. W. Stone, 1914, p. 325-337.
- *t. Asbestos, by J. S. Diller, 1914, p. 339-354.
- *u. Gypsum, by R. W. Stone, 1914, p. 355-372.
- *v. Fluorspar and cryolite, by E. F. Burchard, 1914, p. 373-381.
- *w. Peat, by C. A. Davis, 1914, p. 383-392.
- *x. Mineral waters, by R. B. Dole, 1914, p. 393-434.
- *y. Radioactivity of mineral waters, by R. B. Dole, 1914, p. 435-440.
- *z. Magnesite, by C. G. Yale and H. S. Gale, 1914, p. 441-454.
- *aa. Coke, by E. W. Parker, 1914, p. 455-520.
- *bb. Borax, by C. G. Yale and H. S. Gale, 1914, p. 521-536.
- *cc. Asphalt, by D. T. Day, 1914, p. 537-544.
- *dd. Clay-working industries, by Jefferson Middleton, 1914, p. 545-637; Occurrence and use of flint clay, by J. H. Hance, 1914, p. 639-648.
- *ee. Gems and precious stones, by D. B. Sterrett, 1914, p. 649-708.
- *ff. Coal, by E. W. Parker, 1914, p. 709-928.
- *gg. Petroleum, by D. T. Day, 1914, p. 929-1284.
- *hh. Stone industry, by E. F. Burchard, 1914, p. 1285-1410.
Includes: Stone resources in the States west of the Rocky Mountains, 1914, p. 1346-1387, including Utah, by G. F. Loughlin, 1914, p. 1346-1354; California, by G. F. Loughlin, 1914, p. 1354-1366; Idaho, by G. F. Loughlin, 1914, p. 1376-1387.
- *ii. Natural gas, by Belle Hill, 1914, p. 1411-1507, including a section on carbon black, by G. L. Cabot, 1914, p. 1488-1499.
- *jj. Source, manufacture, and use of lime, by E. F. Burchard and W. E. Emley, 1914, p. 1509-1593; Index, 1914, p. 1595-1617.
- *Mineral Resources of the United States, in 1914 (in 2 parts). 1916.
- *Part I, Metals. 1916. *73, 995 p.
- *a. Mineral production of the United States in 1914, by H. D. McCaskey, 1916, p. *1-*69; Prefatory note to the general and mines reports on gold, silver, copper, lead, and zinc, by H. D. McCaskey, 1916, p. *71-*73.

- *b. Chromic iron ore, by J. S. Diller, 1916, p. 1-15.
- *c. Recovery of secondary metals, by J. P. Dunlop, 1916, p. 17-25.
- *d. Silver, copper, lead, and zinc in the central States, by B. S. Butler and J. P. Dunlop, 1916, p. 27-124.
- *e. Gold, silver, and copper in Alaska, by A. H. Brooks, 1916, p. 125-137; Gold, silver, copper, lead, and zinc in the eastern States, by J. P. Dunlop, 1916, p. 139-163.
- *f. Manganese and manganese ores, by D. F. Hewett, 1916, p. 165-181.
- *g. Bauxite and aluminum, by W. C. Phalen, 1916, p. 183-209.
- *h. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1916, p. 211-234; Gold, silver, copper, lead, and zinc in Texas, by C. W. Henderson, 1916, p. 235-238; Gold, silver, copper, and lead in South Dakota, by C. W. Henderson, 1916, p. 239-245; Gold, silver, and copper in Wyoming, by C. W. Henderson, 1916, p. 247-254; Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1916, p. 255-313.
- *i. Quicksilver, by H. D. McCaskey, 1916, p. 315-332.
- *j. Platinum and allied metals, by J. M. Hill, 1916, p. 333-352.
- *k. Gold, silver, copper, lead, and zinc in California, by C. G. Yale, 1916, p. 353-400; Gold, silver, copper, and lead in Oregon, by C. G. Yale, 1916, p. 401-414.
- *l. Metals and ores in 1913 and 1914, by J. P. Dunlop, 1916, p. 415-425.
- *m. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1916, p. 427-475.
- *n. Iron ore, pig iron, and steel, by E. F. Burchard, 1916, p. 477-539.
- *o. Copper, by B. S. Butler, 1916, p. 541-596.
- *p. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1916, p. 597-639; Gold, silver, copper, and lead in Washington, by C. N. Gerry, 1916, p. 641-654; Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1916, p. 655-716; Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1916, p. 717-756; Gold, silver, copper, lead, and zinc in Montana, by V. C. Heikes, 1916, p. 757-797.
- *q. Lead, by C. E. Siebenthal, 1916, p. 799-827.
- *r. Gold and silver, by H. D. McCaskey, 1916, p. 829-865.
- *s. Zinc, by C. E. Siebenthal, 1916, p. 867-919.
- *t. Cadmium, by C. E. Siebenthal, 1916, p. 921-922.
- *u. Cobalt, by F. L. Hess, 1916, p. 923-924.
- *v. Molybdenum, by F. L. Hess, 1916, p. 925-926.
- *w. Nickel, by F. L. Hess, 1916, p. 927-930.
- *x. Tin, by F. L. Hess, 1916, p. 931-934.
- *y. Titanium, by F. L. Hess, 1916, p. 935-936.
- *z. Tungsten, by F. L. Hess, 1916, p. 937-942.
- *aa. Radium, uranium, and vanadium, by F. L. Hess, 1916, p. 943-946.
- *bb. Antimony, by F. L. Hess, 1916, p. 947-952.
- *cc. Arsenic, by F. L. Hess, 1916, p. 953-964.
- *dd. Bismuth, by F. L. Hess, 1916, p. 965-968.
- *ee. Selenium, by F. L. Hess, 1916, p. 969-974.
- *ff. Tellurium, by F. L. Hess, 1916, p. 975-977; Index, 1916, p. 979-995.
- *Part II, Nonmetals, 1916, 1122 p.
- *a. Sand-lime brick, by Jefferson Middleton, 1916, p. 1-7.
- *b. Potash salts, by W. C. Phalen, 1916, p. 9-34.
- *c. Fuller's earth, by Jefferson Middleton, 1916, p. 35-40.
- *d. Phosphate rock, by W. C. Phalen, 1916, p. 41-56.
- *e. Fuel briquetting, by E. W. Parker, 1916, p. 57-60.
- *f. Barytes, by J. M. Hill, 1916, p. 61-65.
- *g. Strontium, by J. M. Hill, 1916, p. 66.
- *h. Mica, by D. B. Sterrett, 1916, p. 67-77.
- *i. Slate, by A. T. Coons, 1916, p. 79-92.
- *j. Asbestos, by J. S. Diller, 1916, p. 93-102.
- *k. Mineral paints, by J. M. Hill, 1916, p. 103-122.
- *l. Fluorspar and cryolite, by E. F. Burchard, 1916, p. 123-129.
- *m. Sulphur, pyrite, and sulphuric acid, by W. C. Phalen, 1916, p. 131-149.
- *n. Talc and soapstone, by J. S. Diller, 1916, p. 151-157.
- *o. Graphite, by E. S. Bastin, 1916, p. 159-174.
- *p. Mineral waters, by R. B. Dole, 1916, p. 175-219.
- *q. Cement, by E. F. Burchard, 1916, p. 221-259.
- *r. Gypsum, by G. F. Loughlin, 1916, p. 261-270.
- *s. Sand and gravel, by G. F. Loughlin, 1916, p. 271-283.
- *t. Borax, by C. G. Yale and H. S. Gale, 1916, p. 285-290.
- *u. Salt, bromine, and calcium chloride, by W. C. Phalen, 1916, p. 291-306.
- *v. Gems and precious stones, by D. B. Sterrett, 1916, p. 307-346.
- *w. Asphalt, by J. D. Northrop, 1916, p. 347-362.
- *x. Lime, by G. F. Loughlin, 1916, p. 363-373.
- *y. Peat, by C. A. Davis, 1916, p. 375-385.
- *z. Coke, by C. E. Leshner, 1916, p. 387-442.
- *aa. Silica (quartz), by F. J. Katz, 1916, p. 443-448.
- *bb. Feldspar, by F. J. Katz, 1916, p. 449-454.
- *cc. Clay-working industries, by Jefferson Middleton, 1916, p. 455-548.

- *dd. Abrasive materials, by F. J. Katz, 1916, p. 549-568.
- *ee. Magnesite, by C. G. Yale and H. S. Gale, 1916, p. 569-586.
- *ff. Coal, by C. E. Leshner, 1916, p. 587-746.
- *gg. Natural gas, by J. D. Northrop, 1916, p. 747-818.
- *hh. Stone, by G. F. Loughlin, 1916, p. 819-891.
- *ii. Petroleum, by J. D. Northrop, 1916, p. 893-1098, including List of United States Geological Survey publications, 1901-1914, on the oil fields of the United States, 1916, p. 1093-1098; Index, 1916, p. 1099-1122.
- *Mineral Resources of the United States, 1915 (in 2 parts), 1917.
 - *Part I, Metals, 1917, v. 95a, 1000 p.
 - *a. The public interest in mineral resources, by G. O. Smith, 1917, p. 1a-9a; Mineral production of the United States: Introduction, by H. D. McCaskey, 1917, p. 11a-15a; and Summary, by M. B. Clark, 1917, p. 16a-95a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by H. D. McCaskey, 1917, p. iii-v.
 - *b. Chromic iron ore, by J. S. Diller, 1917, p. 1-6.
 - *c. Gold, silver, copper, lead, and zinc in the eastern States, by J. M. Hill, 1917, p. 7-20.
 - *d. Secondary metals, by J. P. Dunlop, 1917, p. 21-28.
 - *e. Manganese and manganiferous ores, by D. F. Hewett, 1917, p. 29-43.
 - *f. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop and B. S. Butler, 1917, p. 45-137.
 - *g. Platinum and allied metals, by J. M. Hill, 1917, p. 139-157.
 - *h. Bauxite and aluminum, by W. C. Phalen, 1917, p. 159-174.
 - *i. Gold, silver, and copper in Alaska, by A. H. Brooks, 1917, p. 175-186.
 - *j. Lead, by C. E. Siebenthal, 1917, p. 187-205.
 - *k. Gold, silver, copper, lead, and zinc in California, by C. G. Yale, 1917, p. 207-246.
 - *l. Gold, silver, copper, and lead in Oregon, by C. G. Yale, 1917, p. 247-257.
 - *m. Quicksilver, by H. D. McCaskey, 1917, p. 259-277.
 - *n. Iron ore, pig iron, and steel, by E. F. Burchard, 1917, p. 279-341, including Beneficiation of Lake Superior iron ores, by Edmund Newton and H. H. Bradt, 1917, p. 303-314, and Bibliography, Survey Publications on iron ores, 1917, p. 337-341.
 - *o. Gold, silver, and lead in South Dakota, by C. W. Henderson, 1917, p. 343-349; Gold, silver, and copper in Wyoming, by C. W. Henderson, 1917, p. 351-356; Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1917, p. 357-380; Gold, silver, copper, lead, and zinc in Texas, by C. W. Henderson, 1917, p. 381-383; Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1917, p. 385-419; Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1917, p. 421-484; Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1917, p. 485-521; Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1917, p. 523-560; Gold, silver, copper, lead, and zinc in Washington, by C. N. Gerry, 1917, p. 561-575; Gold, silver, copper, lead, and zinc in Montana, by V. C. Heikes, 1917, p. 577-612; Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1917, p. 613-654.
 - *p. Copper, by B. S. Butler, 1917, p. 655-722.
 - *q. Metals and ores in 1914 and 1915, by J. P. Dunlop, 1917, p. 723-733.
 - *r. Magnesium, by F. L. Hess, 1917, p. 735-741.
 - *s. Nickel, by F. L. Hess, 1917, p. 743-766.
 - *t. Gold and silver, by H. D. McCaskey and J. P. Dunlop, 1917, p. 767-803.
 - *u. Cobalt, by F. L. Hess, 1917, p. 805.
 - *v. Molybdenum, by F. L. Hess, 1917, p. 807-812.
 - *w. Tin, by F. L. Hess, 1917, p. 813-819.
 - *x. Titanium, by F. L. Hess, 1917, p. 821-822.
 - *y. Tungsten, by F. L. Hess, 1917, p. 823-830.
 - *z. Radium, uranium, and vanadium, by F. L. Hess, 1917, p. 831-836.
 - *aa. Antimony, by F. L. Hess, 1917, p. 837-843.
 - *bb. Arsenic, by F. L. Hess, 1917, p. 845-846.
 - *cc. Bismuth, by F. L. Hess, 1917, p. 847-848.
 - *dd. Selenium and tellurium, by F. L. Hess, 1917, p. 849-850.
 - *ee. Zinc, by C. E. Siebenthal, 1917, p. 851-977.
 - *ff. Cadmium, by C. E. Siebenthal, 1917, p. 979-981; Index, 1917, p. 983-1000; Map of United States showing location of copper-producing districts and of reduction plants in 1915 (in pocket).
 - *Part II, Nonmetals, 1917, 1084 p.
 - *a. Fuel briquetting, by C. E. Leshner, 1917, p. 1-6.
 - *b. Sand-lime brick, by Jefferson Middleton, 1917, p. 7-8.
 - *c. Fuller's earth, by Jefferson Middleton, 1917, p. 9-12.
 - *d. Asbestos, by J. S. Diller, 1917, p. 13-18.
 - *e. Slate, by G. F. Loughlin, 1917, p. 19-31.
 - *f. Fluorspar, by E. F. Burchard, 1917, p. 33-41.
 - *g. Feldspar, by F. J. Katz, 1917, p. 43-53.
 - *h. Silica, by F. J. Katz, 1917, p. 55-60.
 - *i. Talc and soapstone, by J. S. Diller, 1917, p. 61-64.
 - *j. Abrasive materials, by F. J. Katz, 1917, p. 65-80.
 - *k. Graphite, by E. S. Bastin, 1917, p. 81-93.
 - *l. Potash salts, 1915, by W. C. Phalen, 1917, p. 95-133, including Simple tests for potash, by W. B. Hicks, 1917, p. 129-133.

- *m. Asphalt, by J. D. Northrop, 1917, p. 135-150.
- *n. Gypsum, by R. W. Stone, 1917, p. 151-159.
- *o. Barytes and strontium, by J. M. Hill, 1917, p. 161-187.
- *p. Cement, by E. F. Burchard, 1917, p. 189-212.
- *q. Sand and gravel, by R. W. Stone, 1917, p. 213-225.
- *r. Phosphate rock, by W. C. Phalen, 1917, p. 227-244.
- *s. Lime, by G. F. Loughlin, 1917, p. 245-264.
- *t. Salt, bromine, and calcium chloride, by W. C. Phalen, 1917, p. 265-276.
- *u. Mica, by W. T. Schaller, 1917, p. 277-290.
- *v. Sulphur, pyrite, and sulphuric acid, by W. C. Phalen, 1917, p. 291-306.
- *w. Mineral waters, by R. B. Dole, 1917, p. 307-344.
- *x. Coal--Part A, Production, by C. E. Leshner, 1917, p. 345-431; Part B, Distribution and consumption, by C. E. Leshner, 1917, p. 433-513.
- *y. Coke, by C. E. Leshner, 1917, p. 515-558.
- *z. Petroleum, by J. D. Northrop, 1917, p. 559-760.
- *aa. Stone, by G. F. Loughlin, 1917, p. 761-842.
- *bb. Gems and precious stones, by W. T. Schaller, 1917, p. 843-858.
- *cc. Clay-working industries, by Jefferson Middleton, 1917, p. 859-926.
- *dd. Natural gas, by J. D. Northrop, 1917, p. 927-1015.
- *ee. Borax, by C. G. Yale, 1917, p. 1017-1018.
- *ff. Magnesite, by C. G. Yale, 1917, p. 1019-1026.
- *gg. Peat, by J. S. Turp, 1917, p. 1027-1030.
- *hh. Artificial gas, by C. E. Leshner, 1917, p. 1031-1060; Index, 1917, p. 1061-1084.
- *Mineral Resources of the United States, 1916 (in 2 parts). 1919.
 - *Part I, Metals. 1919. 73a, 871 p.
 - *a. Mineral production of the United States, 1919, p. 1a-70a, including Introduction, by H. D. McCaskey, 1919, p. 1a-9a, and Summary, by M. B. Clark, 1919, p. 11a-70a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by H. D. McCaskey, 1919, p. 71a-73a.
 - *b. Platinum and allied metals, by J. M. Hill, 1919, p. 1-19.
 - *c. Chromite, by J. S. Diller, 1919, p. 21-37.
 - *d. Secondary metals, by J. P. Dunlop, 1919, p. 39-52.
 - *e. Silver, copper, lead, and zinc in the central States (mines report), by J. P. Dunlop and B. S. Butler, 1919, p. 53-157.
 - *f. Bauxite and aluminum, by J. M. Hill, 1919, p. 159-170.
 - *g. Gold, silver, copper, and lead in Alaska (mines report), by A. H. Brooks, 1919, p. 171-183; Gold, silver, copper, lead, and zinc in New Mexico (mines report), by C. W. Henderson, 1919, p. 185-210; Gold, silver, copper, lead, and zinc in Texas (mines report), by C. W. Henderson, 1919, p. 211-213; Gold, silver, copper, lead, and zinc in California (mines report), by C. G. Yale, 1919, p. 215-255; Gold, silver, copper, and lead in Oregon (mines report), by C. G. Yale, 1919, p. 257-267; Gold, silver, and lead in South Dakota (mines report), by C. W. Henderson, 1919, p. 269-275; Gold, silver, and copper in Wyoming (mines report), by C. W. Henderson, 1919, p. 277-282; Gold, silver, copper, lead, and zinc in Arizona (mines report), by V. C. Heikes, 1919, p. 283-319; Gold, silver, copper, lead, and zinc in the eastern States (mines report), by J. M. Hill, 1919, p. 321-329; Gold, silver, copper, lead, and zinc in Colorado (mines report), by C. W. Henderson, 1919, p. 331-388; Gold, silver, copper, lead, and zinc in Montana (mines report), by V. C. Heikes, 1919, p. 389-420; Gold, silver, copper, lead, and zinc in Utah (mines report), by V. C. Heikes, 1919, p. 421-455; Gold, silver, copper, lead, and zinc in Nevada (mines report), by V. C. Heikes, 1919, p. 457-500.
 - *h. Arsenic, by J. B. Umpleby, 1919, p. 501-502.
 - *i. Bismuth, by J. B. Umpleby, 1919, p. 503.
 - *j. Selenium and tellurium, by J. B. Umpleby, 1919, p. 505.
 - *k. Iron ore, pig iron, and steel, by E. F. Burchard, 1919, p. 507-564.
 - *l. Gold, silver, copper, lead, and zinc in Idaho (mines report), by C. N. Gerry, 1919, p. 565-602; Gold, silver, copper, lead, and zinc in Washington (mines report), by C. N. Gerry, 1919, p. 603-616.
 - *m. Tin, by Adolph Knopf, 1919, p. 617-622.
 - *n. Copper (general report), by B. S. Butler, 1919, p. 623-677.
 - *o. Gold, and silver (general report), by H. D. McCaskey and J. P. Dunlop, 1919, p. 679-721.
 - *p. Antimony, by E. S. Bastin, 1919, p. 723-729.
 - *q. Manganese and manganiferous ores, by D. F. Hewett, 1919, p. 731-756.
 - *r. Quicksilver, by H. D. McCaskey, 1919, p. 757-773.
 - *s. Cobalt, by F. L. Hess, 1919, p. 775-776.
 - *t. Molybdenum, by F. L. Hess, 1919, p. 777-779.
 - *u. Nickel, by F. L. Hess, 1919, p. 781-785.
 - *v. Titanium, by F. L. Hess, 1919, p. 787.
 - *w. Tungsten, by F. L. Hess, 1919, p. 789-803.
 - *x. Radium, uranium, and vanadium, by F. L. Hess, 1919, p. 805-807.
 - *y. Zinc (general report), by C. E. Siebenthal, 1919, p. 809-832.
 - *z. Cadmium, by C. E. Siebenthal, 1919, p. 833-835.
 - *aa. Lead (general report), by C. E. Siebenthal, 1919, p. 837-854; Index, 1919, p. 855-871.
 - *Part II, Nonmetals. 1919. 1115 p.
 - *a. Fuel briquetting, by C. E. Leshner, 1919, p. 1-4.
 - *b. Sand-lime brick, by Jefferson Middleton, 1919, p. 5-6.

- *c. Lithium minerals, by W. T. Schaller, 1919, p. 7-17.
- *d. Asbestos, by J. S. Diller, 1919, p. 19-24.
- *e. Talc and soapstone, by J. S. Diller, 1919, p. 25-28.
- *f. Phosphate rock, by R. W. Stone, 1919, p. 29-41.
- *g. Graphite, by H. G. Ferguson, 1919, p. 43-59.
- *h. Slate, by G. F. Loughlin, 1919, p. 61-72.
- *i. Potash, by H. S. Gale, 1919, p. 73-171.
- *j. Feldspar, by F. J. Katz, 1919, p. 173-184.
- *k. Strontium, by J. M. Hill, 1919, p. 185-195.
- *l. Abrasive materials, by F. J. Katz, 1919, p. 197-212.
- *m. Salt, bromine, and calcium chloride, by R. W. Stone, 1919, p. 213-221.
- *n. Thorium minerals, by W. T. Schaller, 1919, p. 223-237.
- *o. Fuller's earth, by Jefferson Middleton, 1919, p. 239-241.
- *p. Barytes and barium products, by J. M. Hill, 1919, p. 243-254.
- *q. Gypsum, by R. W. Stone, 1919, p. 255-261.
- *r. Asphalt, related bitumens, and bituminous rock, by J. D. Northrop, 1919, p. 263-281.
- *s. Silica, by F. J. Katz, 1919, p. 283-287.
- *t. Pear, by J. S. Turp, 1919, p. 289-290.
- *u. Mica, by W. T. Schaller, 1919, p. 291-308.
- *v. Fluorspar and cryolite, by E. F. Burchard, 1919, p. 309-325.
- *w. Sand and gravel, by R. W. Stone, 1919, p. 327-339.
- *x. Cement, by E. F. Burchard, 1919, p. 341-375.
- *y. Zirconium and rare-earth minerals, by W. T. Schaller, 1919, p. 377-386.
- *z. Borax, by C. G. Yale and H. S. Gale, 1919, p. 387-389.
- *aa. Magnesite, by C. G. Yale and H. S. Gale, 1919, p. 391-401.
- *bb. Sulphur, pyrite, and sulphuric acid, by P. S. Smith, 1919, p. 403-431.
- *cc. Lime, by G. F. Loughlin, 1919, p. 433-462.
- *dd. Mineral waters, by A. J. Ellis, with a Comparison of American and European mineral waters, by A. A. Chambers, 1919, p. 463-510.
- *ee. Clay-working industries and building operations in the larger cities, by Jefferson Middleton, 1919, p. 511-583.
- *ff. Natural gas, by J. D. Northrop, 1919, p. 585-678.
- *gg. Petroleum, by J. D. Northrop, 1919, p. 679-886.
- *hh. Gems and precious stones, by W. T. Schaller, 1919, p. 887-899.
- *ii. Coal, by C. E. Leshner, 1919, p. 901-991.
- *jj. Stone, by G. F. Loughlin, 1919, p. 993-1078.
- *kk. Coke, by C. E. Leshner, 1919, p. 1079-1090; Index, 1919, p. 1091-1115.
- *Mineral Resources of the United States, 1917 (in 2 parts).
- *Part I, Metals. 1921. 79a, 980 p.
- *a. The economic limits to domestic independence in minerals, by G. O. Smith, 1921, p. 1a-6a.
- *b. International control of minerals, by C. K. Leith, 1921, p. 7a-16a.
- *c. Mineral production of the United States, by H. D. McCaskey and M. B. Clark, 1921, p. 17a-76a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by H. D. McCaskey, 1921, p. 77a-79a.
- *d. Bauxite and aluminum, by J. M. Hill, 1921, p. 1-9.
- *e. Platinum and allied metals, by J. M. Hill, 1921, p. 11-21.
- *f. Arsenic, by J. B. Umpleby, 1921, p. 23-27.
- *g. Bismuth, by J. B. Umpleby, 1921, p. 29-31.
- *h. Selenium, by J. B. Umpleby, 1921, p. 33.
- *i. Tellurium, by J. B. Umpleby, 1921, p. 35.
- *j. Chromite, by J. S. Diller, 1921, p. 37-47.
- *k. Cadmium, by C. E. Siebenthal, 1921, p. 49-53.
- *l. Gold, silver, copper, lead, and zinc in the eastern States, by J. M. Hill, 1921, p. 55-62.
- *m. Tin, by Adolph Knopf, 1921, p. 63-72.
- *n. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop and B. S. Butler, 1921, p. 73-130.
- *o. Gold, silver, copper, and lead in Alaska, by G. C. Martin, 1921, p. 131-145.
- *p. Magnesium, by R. W. Stone, 1921, p. 147-151.
- *q. Gold, silver, copper, and lead in South Dakota, by C. W. Henderson, 1921, p. 153-160; Gold, silver, and copper in Wyoming, by C. W. Henderson, 1921, p. 161-165; Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1921, p. 167-202; Gold, silver, copper, lead, and zinc in California, by C. G. Yale, 1921, p. 203-241; Gold, silver, copper, and lead in Oregon, by C. G. Yale, 1921, p. 243-252; Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1921, p. 253-298.
- *r. Secondary metals, by J. P. Dunlop, 1921, p. 299-330.
- *s. Gold, silver, copper, lead, and zinc in Montana, by V. C. Heikes, 1921, p. 331-366.
- *t. Quicksilver, by F. L. Ransome, with a bibliography by I. P. Evans, 1921, p. 367-455.
- *u. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1921, p. 457-492; Gold, silver, copper, lead, and zinc in Washington, by C. N. Gerry, 1921, p. 493-507; Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1921, p. 509-553.
- *v. Iron ore, pig iron, and steel, by E. F. Burchard, 1921, p. 557-603.
- *w. Gold and silver (general report), by H. D. McCaskey and J. P. Dunlop, 1921, p. 605-651.
- *x. Antimony, by E. S. Bastin, 1921, p. 653-663.

- *y. Manganese and manganiferous ores, by D. F. Hewett, 1921, p. 665-696.
- *z. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1921, p. 697-720;
- Gold, silver, copper, lead, and zinc in Texas, by C. W. Henderson, 1921, p. 721-722.
- *aa. Copper (general report), by B. S. Butler, 1921, p. 723-796.
- *bb. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1921, p. 797-853.
- *cc. Zinc (general report), by C. E. Siebenthal, 1921, p. 855-879.
- *dd. Lead (general report), by C. E. Siebenthal, 1921, p. 881-897.
- *ee. Cobalt, by F. L. Hess, 1921, p. 899-906.
- *ff. Molybdenum, by F. L. Hess, 1921, p. 907-915.
- *gg. Nickel, by F. L. Hess, 1921, p. 917-927.
- *hh. Titanium, by F. L. Hess, 1921, p. 929-930.
- *ii. Tungsten, by F. L. Hess, 1921, p. 931-954.
- *jj. Radium, uranium, and vanadium, by F. L. Hess, 1921, p. 955-959; Index, 1921, p. 961-980.
- *Part II, Nonmetals. 1920. 1293 p.
- *a. Fuel briquetting, by C. E. Leshner, 1920, p. 1-3.
- *b. Strontium, by J. M. Hill, 1920, p. 5-6.
- *c. Phosphate rock, by R. W. Stone, 1920, p. 7-18.
- *d. Sulphur, pyrites, and sulphuric acid, by P. S. Smith, 1920, p. 19-62.
- *e. Magnesite, by C. G. Yale and R. W. Stone, 1920, p. 63-79.
- *f. Talc and soapstone, by J. S. Diller, 1920, p. 81-84.
- *g. Gypsum, by R. W. Stone, 1920, p. 85-95.
- *h. Graphite, by H. G. Ferguson, 1920, p. 97-119.
- *i. Slate, by G. F. Loughlin, 1920, p. 121-138.
- *j. Feldspar, by F. J. Katz, 1920, p. 139-144.
- *k. Gems and precious stones, by W. T. Schaller, 1920, p. 145-168.
- *l. Salt, bromine, and calcium chloride, by R. W. Stone, 1920, p. 169-181.
- *m. Mica, by W. T. Schaller, 1920, p. 183-195.
- *n. Asbestos, by J. S. Diller, 1920, p. 197-204.
- *o. Sand-lime brick, by Jefferson Middleton, 1920, p. 205-206.
- *p. Silica, by F. J. Katz, 1920, p. 207-211.
- *q. Abrasive materials, by F. J. Katz, 1920, p. 213-232.
- *r. Asphalt, related bitumens, and bituminous rock, by J. D. Northrop, 1920, p. 233-251.
- *s. Fuller's earth, by Jefferson Middleton, 1920, p. 253-255.
- *t. Peat, by C. C. Osborn, 1920, p. 257-283.
- *u. Barytes and barium products, by J. M. Hill, 1920, p. 285-291.
- *v. Fluorspar and cryolite, by E. F. Burchard, 1920, p. 293-304.
- *w. Sodium salts, by R. C. Wells, 1920, p. 305-341.
- *x. Cement, by E. F. Burchard, 1920, p. 343-380.
- *y. Sand and gravel, by R. W. Stone, 1920, p. 381-396.
- *z. Potash, by H. S. Gale and W. B. Hicks, 1920, p. 397-481.
- *aa. Mineral waters, by A. J. Ellis, 1920, p. 483-520.
- *bb. Clay-working industries, by Jefferson Middleton, 1920, p. 521-582.
- *cc. Lime, by G. F. Loughlin, 1920, p. 583-613.
- *dd. Stone, by G. F. Loughlin and A. T. Coons, 1920, p. 615-682.
- *ee. Petroleum, by J. D. Northrop, 1920, p. 683-901.
- *ff. Coal--Part A, Production, by C. E. Leshner, 1920, p. 903-1049.
- *gg. Natural gas, by J. D. Northrop, 1920, p. 1051-1114; Gasoline from natural gas, by J. D. Northrop, 1920, p. 1115-1136.
- *hh. Coal--Part B, Distribution and consumption, by C. E. Leshner, 1920, p. 1203-1259; Index, 1920, p. 1261-1293.
- *Mineral Resources of the United States, 1918 (in 2 parts). 1921.
- *Part I, Metals. 1921. 149a, 1096 p.
- *a. The work on mineral resources done by the United States Geological Survey, by E. S. Bastin and H. D. McCaskey, 1921, p. 1a-5a; Introduction, by E. S. Bastin, 1921, p. 7a-14a; Summary, by M. B. Clark, 1921, p. 15a-145a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by E. S. Bastin, 1921, p. 147a-149a.
- *b. Cadmium, by C. E. Siebenthal, 1921, p. 1-12.
- *c. Magnesium, by R. W. Stone, 1921, p. 13-21.
- *d. Tin, by Adolph Knopf, 1921, p. 23-31.
- *e. Antimony, by H. G. Ferguson, 1921, p. 33-57.
- *f. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop and B. S. Butler, 1921, p. 59-125.
- *g. Gold, silver, copper, and lead in Alaska, by G. C. Martin, 1921, p. 127-142.
- *h. Quicksilver, by F. L. Ransome, with a supplementary bibliography by I. P. Evans, 1921, p. 143-182.
- *i. Gold, silver, copper, and lead in South Dakota, by C. W. Henderson, 1921, p. 183-188.
- *j. Gold, silver, and copper in Wyoming, by C. W. Henderson, 1921, p. 189-192.
- *k. [Miscellaneous metals, 1921, p. 193-209.]
- Includes: Arsenic, by J. M. Hill, 1921, p. 193-194; Bismuth, by J. M. Hill, 1921, p. 195; Selenium, by J. M. Hill, 1921, p. 197; Tellurium, by J. M. Hill, 1921, p. 199; Platinum and allied metals, by J. M. Hill, 1921, p. 201-209.
- *l. Gold, silver, copper, lead, and zinc in the eastern States, by J. M. Hill, 1921, p. 211-215.

- *m. Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1921, p. 217-264.
- *n. Gold, silver, copper, lead, and zinc in Montana, by C. N. Gerry, 1921, p. 265-302.
- *o. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1921, p. 303-326.
- *p. Gold, silver, copper, lead, and zinc in Texas, by C. W. Henderson, 1921, p. 327-328.
- *q. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1921, p. 329-368.
- *r. Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1921, p. 369-403.
- *s. Gold, silver, copper, lead, and zinc in California, by C. G. Yale, 1921, p. 405-445.
- *t. Gold, silver, copper, and lead in Oregon, by C. G. Yale, 1921, p. 447-459.
- *u. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1921, p. 461-495.
- *v. Gold, silver, copper, lead, and zinc in Washington, by C. N. Gerry, 1921, p. 497-511.
- *w. Bauxite and aluminum, by J. M. Hill, 1921, p. 513-526.
- *x. Iron ore, pig iron, and steel, by E. F. Burchard, 1921, p. 527-584.
- *y. Secondary metals, by J. P. Dunlop, 1921, p. 585-605.
- *z. Manganese and manganiferous ores, by D. F. Hewett, 1921, p. 607-656.
- *aa. Chromite, by J. S. Diller, 1921, p. 657-679; Foreign deposits of chromite, by E. F. Bliss and H. R. Aldrich, 1921, p. 679-716; Chromite and chromiferous iron ore in Cuba, by E. F. Burchard, 1921, p. 716-725.
- *bb. Gold and silver, by J. P. Dunlop, 1921, p. 727-781.
- *cc. Nickel, by F. L. Hess, 1921, p. 783-790.
- *dd. Cobalt, by F. L. Hess, 1921, p. 791-794.
- *ee. Molybdenum, by F. L. Hess, 1921, p. 795-805.
- *ff. Tantalum, by F. L. Hess, 1921, p. 807.
- *gg. Titanium, by F. L. Hess, 1921, p. 809-810.
- *hh. Radium, uranium, and vanadium, by F. L. Hess, 1921, p. 811-817.
- *ii. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1921, p. 819-875.
- *jj. Copper, by B. S. Butler, 1921, p. 877-935.
- *kk. Lead, by C. E. Siebenthal, 1921, p. 937-971.
- *ll. Tungsten, by F. L. Hess, 1921, p. 973-1026.
- *mm. Zinc, by C. E. Siebenthal, 1921, p. 1027-1074; Index, 1921, p. 1075-1096.
- *Part II, Nonmetals. 1921. 1557 p.
- *a. Fuel briquetting, by C. E. Leshner, 1921, p. 1-3.
- *b. Sand-lime brick, by Jefferson Middleton, 1921, p. 5-6.
- *c. Gems and precious stones, by W. T. Schaller, 1921, p. 7-14.
- *d. Prices of coal and coke, 1913-1918, by C. E. Leshner, 1921, p. 15-115.
- *e. Salt, bromine, and calcium chloride, by R. W. Stone, 1921, p. 117-134.
- *f. Fuller's earth, by Jefferson Middleton, 1921, p. 135-140.
- *g. Magnesite, by C. G. Yale and R. W. Stone, 1921, p. 141-158.
- *h. Sodium and sodium compounds, by R. C. Wells, 1921, p. 159-198.
- *i. Phosphate rock, by R. W. Stone, 1921, p. 199-222.
- *j. Graphite, by H. G. Ferguson, 1921, p. 223-265.
- *k. Slate, by G. F. Loughlin and A. T. Coons, 1921, p. 267-282.
- *l. Gypsum, by R. W. Stone, 1921, p. 283-298.
- *m. Sand and gravel, by R. W. Stone, 1921, p. 299-315.
- *n. Fluorspar and cryolite, by E. F. Burchard, 1921, p. 317-329.
- *o. Peat, by C. C. Osbon, 1921, p. 331-356.
- *p. Sulphur and pyrites, by P. S. Smith, 1921, p. 357-377.
- *q. Silica, by F. J. Katz, 1921, p. 279-384.
- *r. Potash, by W. B. Hicks, 1921, p. 385-445.
- *s. Asphalt, by C. C. Osbon, 1921, p. 447-494.
- *t. Mineral waters, by A. J. Ellis, 1921, p. 495-531.
- *u. Architectural concrete stone and concrete blocks in 1917 and 1918, by G. F. Loughlin, 1921, p. 533-540.
- *v. Strontium, by G. W. Stose, 1921, p. 541-544.
- *w. Asbestos, by J. S. Diller, 1921, p. 545-556.
- *x. Talc and soapstone, by J. S. Diller, 1921, p. 557-563.
- *y. Cement, by E. F. Burchard, 1921, p. 565-627.
- *z. Mica, by W. T. Schaller, 1921, p. 629-694.
- *aa. Coal--Part A, Production, by C. E. Leshner, 1921, p. 695-813.
- *bb. Lime, by G. F. Loughlin and Herbert Insley, 1921, p. 815-856.
- *cc. Clay-working industries, by Jefferson Middleton, 1921, p. 857-944.
- *dd. Feldspar, by L. M. Beach, 1921, p. 945-949.
- *ee. Barytes, by G. W. Stose, 1921, p. 951-967.
- *ff. Petroleum, by E. R. Lloyd, 1921, p. 969-1169.
- *gg. Abrasive materials, by F. J. Katz, 1921, p. 1171-1187.
- *hh. Stone, by G. F. Loughlin and A. T. Coons, 1921, p. 1189-1313.
- *ii. Coal--Part B, Distribution and consumption, by C. E. Leshner, 1921, p. 1315-1392.
- *jj. Natural gas, by E. G. Sievers, 1921, p. 1393-1401.
- *kk. Natural-gas gasoline, by E. G. Sievers, 1921, p. 1043-1437.
- *ll. Coke, by C. E. Leshner and F. G. Tryon, 1921, p. 1439-1528; Index, 1921, p. 1529-1557.
- *Mineral Resources of the United States, 1919 (in 2 parts). 1922.
- *Part I, Metals. 1922. 157a, 807 p.

- *a. Introduction, by G. F. Loughlin, 1922, p. 1a-4a; Summary, by M. B. Clark, 1922, p. 5a-153a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by G. F. Loughlin, 1922, p. 155a-157a.
- *b. Cadmium, by C. E. Siebenthal, 1922, p. 1-8.
- *c. Platinum and allied metals, by J. M. Hill, 1922, p. 9-18.
- *d. Arsenic, by J. M. Hill, 1922, p. 19-21².
- *e. Bismuth, by J. M. Hill, 1922, p. 23-24.
- *f. Selenium, by J. M. Hill, 1922, p. 25-26.
- *g. Tellurium, by J. M. Hill, 1922, p. 27.
- *h. Magnesium, by R. W. Stone, 1922, p. 29-32.
- *i. Bauxite and aluminum, by J. M. Hill, 1922, p. 33-40.
- *j. Gold, silver, copper, lead, and zinc in the eastern States, by J. P. Dunlop, 1922, p. 41-50.
- *k. Secondary metals, by J. P. Dunlop, 1922, p. 51-85.
- *l. Chromite, by J. S. Diller, 1922, p. 87-91.
- *m. Manganese and manganiferous ores, by H. A. C. Jenison, 1922, p. 93-148.
- *n. Quicksilver, by F. L. Ransome, 1922, p. 149-180.
- *o. Gold, silver, copper, lead, and zinc in California, by C. G. Yale, 1922, p. 181-215.
- *p. Gold, silver, copper, and lead in Oregon, by C. G. Yale, 1922, p. 217-226.
- *q. Gold, silver, copper, and lead in Alaska, by A. H. Brooks and G. C. Martin, 1922, p. 227-233.
- *r. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop, 1922, p. 235-285.
- *s. Antimony, by F. C. Schrader, 1922, p. 287-311.
- *t. Lead, by C. E. Siebenthal and A. Stoll, 192², p. 313-330.
- *u. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1922, p. 331-371.
- *v. Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1922, p. 373-416.
- *w. Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1922, p. 417-449.
- *x. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1922, p. 451-483.
- *y. Gold, silver, copper, and lead in Washington, by C. N. Gerry, 1922, p. 485-496.
- *z. Gold, silver, copper, lead, and zinc in Montana, by C. N. Gerry, 1922, p. 497-535.
- *aa. Copper, by H. A. C. Jenison, 1922, p. 537-614.
- *bb. Gold, silver, copper, and lead in South Dakota, by C. W. Henderson, 1922, p. 615-617.
- *cc. Gold, silver, and copper in Wyoming, by C. W. Henderson, 1922, p. 619-620.
- *dd. Iron ore, pig iron, and steel, by E. F. Burchard, 1922, p. 621-652.
- *ee. Zinc, by C. E. Siebenthal and A. Stoll, 1922, p. 653-664.
- *ff. Gold and silver, by J. P. Dunlop, 1922, p. 665-709.
- *gg. Cobalt, by F. L. Hess, 1922, p. 711.
- *hh. Molybdenum, by F. L. Hess, 1922, p. 713-714.
- *ii. Nickel, by F. L. Hess, 1922, p. 715-716.
- *jj. Tantalum, by F. L. Hess, 1922, p. 717.
- *kk. Titanium, by F. L. Hess, 1922, p. 719-720.
- *ll. Tungsten, by F. L. Hess, 1922, p. 721-725.
- *mm. Radium, uranium, and vanadium, by F. L. Hess, 1922, p. 727-729.
- *nn. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 192², p. 731-744.
- *oo. Gold, silver, copper, and lead in Texas, by C. W. Henderson, 1922, p. 745.
- *pp. Tin, by Adolph Knopf and B. L. Johnson, 1922, p. 747-750.
- *qq. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1922, p. 751-792; Index, 1922, p. 793-807.
- *Part II, Nonmetals. 1922. 565 p.
- *a. Thorium, zirconium, and rare-earth minerals, by W. T. Schaller, 1922, p. 1-32.
- *b. Fuel briquetting, by F. G. Tryon, 1922, p. 33-36.
- *c. Lithium minerals, by Herbert Insley, 1922, p. 37-40.
- *d. Peat, by K. W. Cottrell, 1922, p. 41-46.
- *e. Sodium compounds, by R. C. Wells, 1922, p. 47-76.
- *f. Potash, by W. B. Hicks and M. R. Nourse, 1922, p. 77-94.
- *g. Strontium, by G. W. Stose, 1922, p. 95-98.
- *h. Gypsum, by R. W. Stone, 192², p. 99-113, including Agricultural gypsum and its uses, by William Crocker, 1922, p. 109-111.
- *i. Mineral waters, by A. J. Ellis, 1922, p. 115-149.
- *j. Sand and gravel, by R. W. Stone, 192², p. 151-164.
- *k. Gems and precious stones, by B. H. Stoddard, 1922, p. 165-180.
- *l. Foreign graphite, by A. H. Redfield, 1922, p. 181-210.
- *m. Phosphate rock, by R. W. Stone, 1922, p. 211-225.
- *n. Magnesite, by C. G. Yale and R. W. Stone, 1922, p. 227-235.
- *o. Sand-lime brick, by Jefferson Middleton, 1922, p. 237-238.
- *p. Salt, bromine, and calcium chloride, by Herbert Insley, 1922, p. 239-256.
- *q. Fuller's earth, by Jefferson Middleton, 1922, p. 257-264.
- *r. Talc and soapstone, by J. S. Diller, 1922, p. 265-268.
- *s. Mica, by Herbert Insley, 1922, p. 269-277.
- *t. Asphalt and related bitumens, by K. W. Cottrell, 1922, p. 279-297.
- *u. Asbestos, by J. S. Diller, 192², p. 299-307.
- *v. Graphite, by L. M. Beach, 1922, p. 309-317; History of graphite mining in Pennsylvania, by F. Bascom, 1922, p. 318-324.
- *w. Concrete stone and concrete blocks, by G. F. Loughlin and M. E. McCaslin, 1922, p. 325-333.

- *x. Barytes and barium products, by G. W. Stose, 1922, p. 335-347.
- *y. Fluorspar and cryolite, by H. W. Davis, 1922, p. 349-368.
- *z. Slate, by G. F. Loughlin and A. T. Coons, 1922, p. 369-375.
- *aa. Feldspar, by L. M. Beach, 1922, p. 377-378.
- *bb. Silica, by L. M. Beach, 1922, p. 379-380.
- *cc. Abrasive materials, by L. M. Beach and A. T. Coons, 1922, p. 381-386.
- *dd. Cement, by E. F. Burchard, 1922, p. 387-404.
- *ee. Lime, by G. F. Loughlin and A. T. Coons, 1922, p. 405-418.
- *ff. Stone, by G. F. Loughlin and A. T. Coons, 1922, p. 419-455.
- *gg. Artificial gas and by-products in 1917-18, by R. S. McBride, 1922, p. 457-518.
- *hh. Natural-gas gasoline, by E. G. Sievers, 1922, p. 519-534.
- *ii. Sulphur and pyrites, by P. S. Smith, 1922, p. 535-546; Index, 1922, p. 547-565.
- *Mineral Resources of the United States, 1920 (in 2 parts). 1922 and 1923.
 - *Part I, Metals. 1922. 155a, 611 p.
 - *a. Introduction, by G. F. Loughlin, 1922, p. 5a-9a; Summary, by M. B. Clark, 1922, p. 10a-151a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by G. F. Loughlin, 1922, p. 153a-155a.
 - *b. Cadmium, by C. E. Siebenthal and A. Stoll, 1922, p. 1-6.
 - *c. Gold, silver, copper, lead, and zinc in the eastern States, by J. P. Dunlop, 1922, p. 7-15.
 - *d. Magnesium, by R. W. Stone, 1922, p. 17-20.
 - *e. Chromite, by Edward Sampson, 1922, p. 21-28.
 - *f. Bauxite and aluminum, by J. M. Hill, 1922, p. 29-36.
 - *g. Platinum and allied metals, by J. M. Hill, 1922, p. 37-50.
 - *h. Arsenic, by V. C. Heikes, 1922, p. 51-65.
 - *i. Bismuth, by V. C. Heikes, 1922, p. 67-69.
 - *j. Selenium and tellurium, by V. C. Heikes, 1922, p. 71-72.
 - *k. Antimony, by F. C. Schrader, 1922, p. 73-84.
 - *l. Lead, by C. E. Siebenthal and A. Stoll, 1922, p. 85-95.
 - *m. Secondary metals, by J. P. Dunlop, 1922, p. 97-111.
 - *n. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop and F. Begeman, 1922, p. 113-150.
 - *o. Gold, silver, and lead in South Dakota, by C. W. Henderson, 1922, p. 151-154.
 - *p. Gold, silver, and copper in Wyoming, by C. W. Henderson, 1922, p. 155-156.
 - *q. Gold, silver, copper, lead, and zinc in California, by C. G. Yale, 1922, p. 157-186.
 - *r. Gold, silver, and copper in Oregon, by C. G. Yale, 1922, p. 187-193.
 - *s. Gold, silver, copper, lead, and zinc in Montana, by C. N. Gerry, 1922, p. 195-219.
 - *t. Zinc, by C. E. Siebenthal and A. Stoll, 1922, p. 221-237.
 - *u. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1922, p. 239-259.
 - *v. Gold, silver, copper, lead, and zinc in Washington, by C. N. Gerry, 1922, p. 261-269.
 - *w. Manganese and manganiferous ores, by H. A. C. Jenison, 1922, p. 271-283.
 - *x. Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1922, p. 285-307.
 - *y. Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1922, p. 309-337.
 - *z. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1922, p. 339-364.
 - *aa. Iron ore, pig iron, and steel, by E. F. Burchard and H. W. Davis, 1922, p. 365-399.
 - *bb. Cobalt, by F. L. Hess, 1922, p. 401.
 - *cc. Molybdenum, by F. L. Hess, 1922, p. 403.
 - *dd. Nickel, by F. L. Hess, 1922, p. 405-406.
 - *ee. Tantalum, by F. L. Hess, 1922, p. 407.
 - *ff. Titanium, by F. L. Hess, 1922, p. 409-410.
 - *gg. Tungsten, by F. L. Hess, 1922, p. 411-413.
 - *hh. Radium, uranium, and vanadium, by F. L. Hess, 1922, p. 415-417.
 - *ii. Quicksilver, by F. L. Ransome, 1922, p. 419-439.
 - *jj. Gold, silver, copper, and lead in Alaska, by A. H. Brooks, 1922, p. 441-446.
 - *kk. Lead and zinc pigments and salts, by C. E. Siebenthal and A. Stoll, 1922, p. 447-450.
 - *ll. Copper, by H. A. C. Jenison, 1922, p. 451-503.
 - *mm. Tin, by B. L. Johnson, 1922, p. 505-509.
 - *nn. Gold and silver, by J. P. Dunlop, 1922, p. 511-548.
 - *oo. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1922, p. 549-561.
 - *pp. Gold, silver, copper, and lead in Texas, by C. W. Henderson, 1922, p. 563.
 - *qq. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1922, p. 565-595; Index, 1922, p. 597-611.
 - *Part II, Nonmetals. 1923. 529 p.
 - *a. Magnesite, by C. G. Yale and R. W. Stone, 1923, p. 1-16.
 - *b. Salt, bromine, and calcium chloride, by R. W. Stone, 1923, p. 17-25.
 - *c. Phosphate rock, by R. W. Stone, 1923, p. 27-35.
 - *d. Sand-lime brick, by Jefferson Middleton, 1923, p. 37-38.
 - *e. Fuller's earth, by Jefferson Middleton, 1923, p. 39-40.
 - *f. Peat, by K. W. Cottrell, 1923, p. 41-43.
 - *g. Asphalt and related bitumens, by K. W. Cottrell, 1923, p. 45-53.
 - *h. Gypsum, by R. W. Stone, 1923, p. 55-64.
 - *i. Fluorspar and cryolite, by H. W. Davis, 1923, p. 65-80.
 - *j. Graphite, by L. M. Beach, 1923, p. 81-86.

- *k. Fuel briquets, by W. F. McKenney, 1923, p. 87-91.
- *l. Strontium, by G. W. Stose, 1923, p. 93-95.
- *m. Potash, by M. R. Nourse, 1923, p. 97-121.
- *n. Sodium compounds, by R. C. Wells, 1923, p. 123-134.
- *o. Slate, by G. F. Loughlin and A. T. Coons, 1923, p. 135-143.
- *p. Carbon black produced from natural gas, by E. G. Sievers, 1923, p. 145-149.
- *q. Silica, by L. M. Beach, 1923, p. 151-152.
- *r. Feldspar, by L. M. Beach, 1923, p. 153-154.
- *s. Abrasive materials, by L. M. Beach and A. T. Coons, 1923, p. 155-159.
- *t. Mineral waters, by W. D. Collins, 1923, p. 161-166.
- *u. Sand and gravel, by L. M. Beach, 1923, p. 167-176.
- *v. Lime, by G. F. Loughlin and A. T. Coons, 1923, p. 177-188.
- *w. Barytes and barium products, by G. W. Stose, 1923, p. 189-199.
- *x. Talc and soapstone, by Edward Sampson, 1923, p. 201-213.
- *y. Gems and precious stones, by B. H. Stoddard, 1923, p. 215-218.
- *z. Concrete stone and concrete blocks, by R. W. Stone, 1923, p. 219-224.
- *aa. Stone, by G. F. Loughlin and A. T. Coons, 1923, p. 225-262.
- *bb. Cement, by E. F. Burchard, 1923, p. 263-282.
- *cc. Mica, by B. H. Stoddard, 1923, p. 283-287.
- *dd. Natural-gas gasoline, by E. G. Sievers, 1923, p. 289-300.
- *ee. Sulphur, pyrites, and sulphuric acid, by P. S. Smith, 1923, p. 301-308.
- *ff. Asbestos, by Edward Sampson, 1923, p. 309-322.
- *gg. Clay-working industries, clay and silica brick, by Jefferson Middleton, 1923, p. 323-359.
- *hh. Coke and by-products, by R. S. McBride and F. G. Tryon, 1923, p. 361-437.
- *ii. Manufactured gas and by-products, by R. S. McBride, 1923, p. 439-497; Index, 1923, p. 499-529.
- *Mineral Resources of the United States, 1921 (in 2 parts). 1924.
 - *Part I, Metals. 1924. 130a, 617 p.
 - *a. Introduction, by G. F. Loughlin, 1924, p. 1a-5a; Summary, by M. B. Clark, 1924, p. 6a-128a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by G. F. Loughlin, 1924, p. 129a-130a.
 - *b. Cadmium, by C. E. Siebenthal and A. Stoll, 1924, p. 1-5.
 - *c. Gold, silver, copper, lead, and zinc in the eastern States, by J. P. Dunlop, 1924, p. 7-13.
 - *d. Chromite, by Edward Sampson, 1924, p. 15-17.
 - *e. Magnesium, by G. F. Loughlin, 1924, p. 19-20.
 - *f. Zinc, by C. E. Siebenthal and A. Stoll, 1924, p. 21-33.
 - *g. Lead, by C. E. Siebenthal and A. Stoll, 1924, p. 35-43.
 - *h. Manganese and manganiferous ores, by H. A. C. Jenison, 1924, p. 45-54.
 - *i. Lead and zinc pigments and salts, by C. E. Siebenthal and A. Stoll, 1924, p. 55-62.
 - *j. Bauxite and aluminum, by J. M. Hill, 1924, p. 63-70.
 - *k. Tin, by B. L. Johnson, 1924, p. 71-73.
 - *l. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop and F. Begeman, 1924, p. 75-105.
 - *m. Quicksilver, by F. L. Ransome, 1924, p. 107-117; Recent publications on quicksilver, compiled by I. P. Evans, 1924, p. 117-120.
 - *n. Antimony, by F. C. Schrader, 1924, p. 121-128.
 - *o. Arsenic, by V. C. Heikes, 1924, p. 129-136.
 - *p. Bismuth, by V. C. Heikes, 1924, p. 137-139.
 - *q. Selenium, by V. C. Heikes, 1924, p. 140.
 - *r. Tellurium, by V. C. Heikes, 1924, p. 141-142.
 - *s. Platinum and allied metals, by J. M. Hill, 1924, p. 143-149.
 - *t. Secondary metals, by J. P. Dunlop, 1924, p. 151-166.
 - *u. Gold, silver, copper, lead, and zinc in California, by C. G. Yale, 1924, p. 167-196.
 - *v. Gold, silver, and copper in Oregon, by C. G. Yale, 1924, p. 197-206.
 - *w. Cobalt, by F. L. Hess, 1924, p. 207-208.
 - *x. Molybdenum, by F. L. Hess, 1924, p. 209.
 - *y. Nickel, by F. L. Hess, 1924, p. 211-212.
 - *z. Tantalum, by F. L. Hess, 1924, p. 213.
 - *aa. Titanium, by F. L. Hess, 1924, p. 215.
 - *bb. Tungsten, by F. L. Hess, 1924, p. 217-224.
 - *cc. Radium, uranium, and vanadium, by F. L. Hess, 1924, p. 225-233.
 - *dd. Copper, by H. A. C. Jenison, 1924, p. 235-281.
 - *ee. Gold, silver, copper, lead, and zinc in Montana, by C. N. Gerry, 1924, p. 283-309.
 - *ff. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1924, p. 311-339.
 - *gg. Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1924, p. 341-362.
 - *hh. Gold, silver, and lead in South Dakota, by C. W. Henderson, 1924, p. 363-366.
 - *ii. Gold, silver, and copper in Wyoming, by C. W. Henderson, 1924, p. 367-368.
 - *jj. Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1924, p. 369-398.
 - *kk. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1924, p. 399-420.
 - *ll. Gold, silver, copper, lead, and zinc in Washington, by C. N. Gerry, 1924, p. 421-428.
 - *mm. Gold and silver, by J. P. Dunlop, 1924, p. 429-466.
 - *nn. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1924, p. 467-476.

- *oo. Silver and copper in Texas, by C. W. Henderson, 1924, p. 477.
- *pp. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1924, p. 479-511.
- *qq. Summary of mineral production in foreign countries, 1919 and 1920, by L. M. Jones, 1924, p. 513-564.
- *rr. Iron ore, pig iron, and steel, by E. F. Burchard and H. W. Davis, 1924, p. 565-597.
- *ss. Gold, silver, copper, and lead in Alaska, by A. H. Brooks, 1924, p. 599-602; Index, 1924, p. 603-617.
- *Part II, Nonmetals. 1924. 682 p.
- *a. Fuel briquets, by W. F. McKenney, 1924, p. 1-5.
- *b. Graphite, by L. M. Beach, 1924, p. 7-12.
- *c. Peat, by K. W. Cottrell, 1924, p. 13-14.
- *d. Abrasive materials, by L. M. Beach and A. T. Coons, 1924, p. 15-18.
- *e. Silica, by L. M. Beach, 1924, p. 19-20.
- *f. Fuller's earth, by Jefferson Middleton, 1924, p. 21-22.
- *g. Slate, by G. F. Loughlin and A. T. Coons, 1924, p. 23-30.
- *h. Strontium, by G. W. Stose, 1924, p. 31-32.
- *i. Carbon black produced from natural gas, by E. G. Sievers, 1924, p. 33-37.
- *j. Fluorspar and cryolite, by H. W. Davis, 1924, p. 39-50.
- *k. Potash, by M. R. Nourse, 1924, p. 51-63.
- *l. Phosphate rock, by K. W. Cottrell, 1924, p. 65-68.
- *m. Asphalt and related bitumens, by K. W. Cottrell, 1924, p. 69-75.
- *n. Mica, by B. H. Stoddard, 1924, p. 77-82.
- *o. Magnesite, by C. G. Yale, 1924, p. 83-88; Gypsum, by K. W. Cottrell, 1924, p. 89-96.
- *p. Talc and soapstone, by Edward Sampson, 1924, p. 97-103.
- *q. Clay, by Jefferson Middleton, 1924, p. 105-110.
- *r. Feldspar, by F. J. Katz, 1924, p. 111-115.
- *s. Salt, bromine, and calcium chloride, by K. W. Cottrell, 1924, p. 117-123.
- *t. Barytes and barium products, by G. W. Stose, 1924, p. 125-134.
- *u. Asbestos, by Edward Sampson, 1924, p. 135-142.
- *v. Gems and precious stones, by B. H. Stoddard, 1924, p. 143-146.
- *w. Sand and gravel, by L. M. Beach, 1924, p. 147-154.
- *x. Lime, by G. F. Loughlin and A. T. Coons, 1924, p. 135-168.
- *y. Sulphur and pyrites, by H. A. C. Jenison and H. M. Meyer, 1924, p. 169-173.
- *z. Stone, by G. F. Loughlin and A. T. Coons, 1924, p. 175-213.
- *aa. Cement, by E. F. Burchard and B. W. Bagley, 1924, p. 215-228.
- *bb. Mineral waters, by W. D. Collins, 1924, p. 229-236.
- *cc. Natural-gas gasoline, by E. G. Sievers, 1924, p. 237-252.
- *dd. Petroleum, by G. B. Richardson, 1924, p. 253-333.
- *ee. Natural gas in 1919-1921, by R. S. McBride and E. G. Sievers, 1924, p. 335-369.
- *ff. Coke and by-products, by R. S. McBride, 1924, p. 371-444.
- *gg. Coal in 1919, 1920, and 1921, by F. G. Tryon and S. A. Hale, 1924, p. 445-662; Index, 1924, p. 663-682.
- *Mineral Resources of the United States, 1922 (in 2 parts). 1925.
- *Part I, Metals. 1925. 127a, 648 p.
- *a. Introduction, by G. F. Loughlin, 1925, p. 1a-6a; Summary, by M. B. Clark, 1925, p. 7a-124a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by G. F. Loughlin, 1925, p. 125a-127a.
- *b. Cadmium, by C. E. Siebenthal and A. Stoll, 1925, p. 1-5.
- *c. Gold, silver, copper, lead, and zinc in the eastern States, by J. P. Dunlop, 1925, p. 7-14.
- *d. Bismuth, by V. C. Heikes, 1925, p. 15-22.
- *e. Selenium, by V. C. Heikes, 1925, p. 23-24.
- *f. Tellurium, by V. C. Heikes, 1925, p. 25.
- *g. Lead, by C. E. Siebenthal and A. Stoll, 1925, p. 27-36.
- *h. Zinc, by C. E. Siebenthal and A. Stoll, 1925, p. 37-52.
- *i. Arsenic, by V. C. Heikes and G. F. Loughlin, 1925, p. 53-76.
- *j. Lead and zinc pigments and salts, by C. E. Siebenthal and A. Stoll, 1925, p. 77-85.
- *k. Bauxite and aluminum, by J. M. Hill, 1925, p. 87-96.
- *l. Antimony, by F. C. Schrader, 1925, p. 97-105.
- *m. Chromite, by Edward Sampson, 1925, p. 107-112.
- *n. Quicksilver, by F. L. Ransome, 1925, p. 113-120; Recent publications on quicksilver compiled by I. P. Evans, 1925, p. 121-124.
- *o. Platinum and allied metals, by J. M. Hill, 1925, p. 125-135.
- *p. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop and F. Begeman, 1925, p. 137-168.
- *q. Tin, by B. L. Johnson, 1925, p. 169-172.
- *r. Secondary metals, by J. P. Dunlop, 1925, p. 173-191, including Secondary nonferrous metals, by W. M. Corse, 1925, p. 174-176.
- *s. Gold, silver, and lead in South Dakota, by C. W. Henderson, 1925, p. 193-196.
- *t. Gold, silver, and copper in Wyoming, by C. W. Henderson, 1925, p. 197-198.
- *u. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1925, p. 199-213.
- *v. Silver, copper, and lead in Texas, by C. W. Henderson, 1925, p. 215.
- *w. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1925, p. 217-244.

- *x. Gold, silver, copper, lead, and zinc in Washington, by C. N. Gerry, 1925, p. 245-256.
- *y. Copper, by H. A. C. Jenison, 1925, p. 257-304.
- *z. Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1925, p. 305-339.
- *aa. Iron ore, pig iron, and steel, by E. F. Burchard and H. W. Davis, 1925, p. 341-376.
- *bb. Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1925, p. 377-403.
- *cc. Gold, silver, copper, lead, and zinc in California, by J. M. Hill, 1925, p. 405-438.
- *dd. Gold, silver, copper, and lead in Oregon, by J. M. Hill, 1925, p. 439-451.
- *ee. Gold, silver, copper, lead, and zinc in Montana, by C. N. Gerry, 1925, p. 453-488.
- *ff. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1925, p. 489-518.
- *gg. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1925, p. 519-556.
- *hh. Cobalt, by F. L. Hess, 1925, p. 557-559.
- *ii. Molybdenum, by F. L. Hess, 1925, p. 561-562.
- *jj. Nickel, by F. L. Hess, 1925, p. 563-566.
- *kk. Tantalum, by F. L. Hess, 1925, p. 567-568.
- *ll. Titanium, by F. L. Hess, 1925, p. 569-570.
- *mm. Tungsten, by F. L. Hess, 1925, p. 571-574.
- *nn. Radium, uranium, and vanadium, by F. L. Hess, 1925, p. 575-583.
- *oo. Manganese and manganiferous ores, by H. A. C. Jenison and H. M. Meyer, 1925, p. 585-594.
- *pp. Gold and silver, by J. P. Dunlop, 1925, p. 595-635.
- *qq. Gold, silver, copper, and lead in Alaska, by A. H. Brooks and S. R. Capps, 1925, p. 637-642; Index, 1925, p. 643-648.
- *Part II, Nonmetals. 1925. 804 p.
- *a. Fuel briquets, by W. F. McKenney, 1925, p. 1-4.
- *b. Peat, by K. W. Cottrell, 1925, p. 5-6.
- *c. Asphalt and related bitumens, by K. W. Cottrell, 1925, p. 7-13.
- *d. Fluorspar and cryolite, by H. W. Davis, 1925, p. 15-22.
- *e. Salt, bromine, and calcium chloride, by K. W. Cottrell, 1925, p. 23-29.
- *f. Asbestos, by Edward Sampson, 1925, p. 31-37.
- *g. Nitrates, by G. R. Mansfield, 1925, p. 39-40.
- *h. Magnesium and its compounds, by J. M. Hill and G. F. Loughlin, 1925, p. 41-57.
- *i. Strontium, by G. W. Stose, 1925, p. 59-61.
- *j. Graphite, by A. H. Redfield, 1925, p. 63-68.
- *k. Fuller's earth, by Jefferson Middleton, 1925, p. 69-71.
- *l. Clay, by Jefferson Middleton, 1925, p. 73-80.
- *m. Talc and soapstone, by Edward Sampson, 1925, p. 81-86.
- *n. Potash, by G. R. Mansfield, 1925, p. 87-107.
- *o. Phosphate rock, by G. R. Mansfield, 1925, p. 109-132.
- *p. Gypsum, by K. W. Cottrell, 1925, p. 133-139.
- *q. Barytes and barium products, by G. W. Stose, 1925, p. 141-152.
- *r. Mica, by B. H. Stoddard, 1925, p. 153-164.
- *s. Slate, by G. F. Loughlin and A. T. Coons, 1925, p. 165-175.
- *t. Sulphur and pyrites, by H. A. C. Jenison and H. M. Meyer, 1925, p. 177-181.
- *u. Silica, by F. J. Katz, 1925, p. 183-186.
- *v. Sand and gravel, by L. M. Beach, 1925, p. 187-194.
- *w. Lime, by G. F. Loughlin and A. T. Coons, 1925, p. 195-206.
- *x. Mineral waters, by W. D. Collins, 1925, p. 207-210.
- *y. Abrasive materials, by L. M. Beach and A. T. Coons, 1925, p. 221-225.
- *z. Cement, by E. F. Burchard and B. W. Bagley, 1925, p. 227-248.
- *aa. Feldspar, by F. J. Katz, 1925, p. 251-259.
- *bb. Stone, by G. F. Loughlin and A. T. Coons, 1925, p. 261-344.
- *cc. Carbon black produced from natural gas, by G. B. Richardson, 1925, p. 345-346.
- *dd. Natural-gas gasoline, by G. B. Richardson, 1925, p. 347-351.
- *ee. Natural gas, by G. B. Richardson, 1925, p. 353-358.
- *ff. Petroleum, by G. B. Richardson, 1925, p. 359-438.
- *gg. Coal, by F. G. Tryon and S. A. Hale, 1925, p. 439-669.
- *hh. Coke and by-products, by F. G. Tryon, 1925, p. 671-799; Index, 1925, p. 801-804.
- *Mineral Resources of the United States, 1923 (in 2 parts). 1927.
- *Part I, Metals. 1927. 133a, 653 p.
- *a. Introduction, by F. J. Katz, 1927, p. 1a-8a; Summary, by M. B. Clark, 1927, p. 9a-130a; Prefatory note to the reports on gold, silver, copper, lead, and zinc, by F. J. Katz, 1927, p. 131a-133a.
- *b. Gold, silver, copper, lead, and zinc in the eastern States, by J. P. Dunlop, 1927, p. 1-7.
- *c. Platinum and allied metals, by J. M. Hill, 1927, p. 9-22.
- *d. Bauxite and aluminum, by J. M. Hill, 1927, p. 23-34.
- *e. Quicksilver, by C. P. Ross, 1927, p. 35-41; Recent publications on quicksilver, compiled by I. B. Evans, 1927, p. 42-46.
- *f. Silver, copper, lead, and zinc in the central States, by J. P. Dunlop and F. Begeman, 1927, p. 47-78.
- *g. Zinc, by C. E. Siebenthal and A. Stoll, 1927, p. 79-99.
- *h. Tin, by B. L. Johnson, 1927, p. 101-103.
- *i. Bismuth, by V. C. Heikes, 1927, p. 105-108.
- *j. Selenium, by V. C. Heikes, 1927, p. 109-110.
- *k. Tellurium, by V. C. Heikes, 1927, p. 111.

- *l. Chromite, by Edward Sampson and H. M. Meyer, 1927, p. 113-117.
- *m. Lead and zinc pigments and salts, by C. E. Siebenthal and A. Stoil, 1927, p. 129-144.
- *n. Manganese and manganiferous ores, by H. M. Meyer, 1927, p. 145-157.
- *o. Arsenic, by V. C. Heikes and G. F. Loughlin, 1927, p. 159-181.
- *p. Copper, by H. M. Meyer, 1927, p. 183-234.
- *q. Rare metals [including cobalt, molybdenum, nickel, tantalum, titanium, tungsten, radium, uranium, and vanadium], by F. L. Hess, 1927, p. 235-258, including Discussion of foreign deposits of uranium and vanadium, by F. L. Hess, 1927, p. 252-258.
- *r. Secondary metals, by J. P. Dunlop, 1927, p. 259-276.
- *s. Antimony, by F. C. Schrader, 1927, p. 277-293.
- *t. Iron ore, pig iron, and steel, by E. F. Burchard and H. W. Davis, 1927, p. 295-329.
- *u. Gold, silver, copper, and lead in California, by J. M. Hill, 1927, p. 331-362.
- *v. Gold, silver, copper, and lead in Oregon, by J. M. Hill, 1927, p. 363-374.
- *w. Gold, silver, copper, lead, and zinc in Idaho, by C. N. Gerry, 1927, p. 375-404.
- *x. Gold, silver, copper, lead, and zinc in Washington, by C. N. Gerry, 1927, p. 405-416.
- *y. Gold, silver, copper, lead, and zinc in Utah, by V. C. Heikes, 1927, p. 417-445.
- *z. Gold, silver, copper, lead, and zinc in Montana, by C. N. Gerry, 1927, p. 447-479.
- *aa. Gold, silver, copper, lead, and zinc in Nevada, by V. C. Heikes, 1927, p. 481-514.
- *bb. Gold, silver, copper, lead, and zinc in Arizona, by V. C. Heikes, 1927, p. 515-548.
- *cc. Gold and silver, by J. P. Dunlop, 1927, p. 549-585.
- *dd. Gold and silver in South Dakota, by C. W. Henderson, 1927, p. 587-590.
- *ee. Gold, silver, and copper in Wyoming, by C. W. Henderson, 1927, p. 591.
- *ff. Gold, silver, copper, lead, and zinc in New Mexico, by C. W. Henderson, 1927, p. 593-607.
- *gg. Gold, silver, copper, and lead in Texas, by C. W. Henderson, 1927, p. 609.
- *hh. Gold, silver, copper, lead, and zinc in Colorado, by C. W. Henderson, 1927, p. 611-648; Index, 1927, p. 649-653.
- *Part II, Nonmetals. 1927. 750 p.
- *a. Sulphur and pyrites, by H. M. Meyer, 1927, p. 1-6.
- *b. Magnesium and its compounds, by J. M. Hill and G. F. Loughlin, 1927, p. 7-21.
- *c. Strontium, by G. W. Stose, 1927, p. 23-26.
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- *f. Slate, by G. F. Loughlin and A. T. Coons, 1927, p. 49-61.
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- *h. Peat, by K. W. Cottrell, 1927, p. 69-70.
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- *r. Sand and gravel, by A. T. Coons, 1927, p. 149-159.
- *s. Talc and soapstone, by B. H. Stoddard, 1927, p. 161-165.
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- *u. Stone, by G. F. Loughlin and A. T. Coons, 1927, p. 205-234.
- *v. Silica, by F. J. Katz, 1927, p. 235-237.
- *w. Phosphate rock, by G. R. Mansfield, 1927, p. 239-273.
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- *dd. Natural-gas gasoline, by G. B. Richardson, 1927, p. 359-364.
- *ee. Petroleum, by G. B. Richardson, 1927, p. 365-426.
- *ff. Coke and by-products, by F. G. Tryon and H. L. Bennit, 1927, p. 427-497.
- *gg. Coal, by F. G. Tryon and L. Mann, 1927, p. 499-746; Index, 1927, p. 747-750.

Note. On July 1, 1925, by Executive order, the Division of Mineral Resources of the Geological Survey was transferred to the United States Department of Commerce, Bureau of Mines. On April 24, 1934, the Bureau was transferred to the Department of the Interior. The series (entitled Mineral Resources during the years 1924-31 and Minerals Yearbook thereafter) is published by the Department of the Interior, Bureau of Mines, to which applications should be addressed.

MONOGRAPHS

[All monographs are out of print, as indicated by asterisks (*).]

- *1. Lake Bonneville, by G. K. Gilbert. 1890. 438 p.
- *2. Tertiary history of the Grand Canyon district, with atlas, by C. E. Dutton. 1882. 264 p. and atlas of 23 sheets folio.
- *3. Geology of the Comstock lode and the Washoe district, with atlas, by G. F. Becker. 1882. 422 p. and atlas of 21 sheets folio.
- *4. Comstock mining and miners, by Eliot Lord. 1883. 451 p.
- *5. The copper-bearing rocks of Lake Superior, by R. D. Irving. 1883. 464 p.
- *6. Contributions to the knowledge of the older Mesozoic flora of Virginia, by W. M. Fontaine. 1883. 144 p.
- *7. Silver-lead deposits of Eureka, Nev., by J. S. Curtis. 1884. 200 p.
- *8. Paleontology of the Eureka district [Nev.], by C. D. Walcott. 1884. 298 p.
- *9. Brachiopoda and Lamellibranchiata of the Raritan clays and greensand marls of New Jersey, by R. P. Whitfield. 1885. 338 p.
- *10. Dinocerata, a monograph of an extinct order of gigantic mammals, by O. C. Marsh. 1886. 243 p.
- *11. Geological history of Lake Lahontan, a Quaternary lake of northwestern Nevada, by I. C. Russell. 1885. 288 p.
- *12. Geology and mining industry of Leadville, Colo., with atlas, by S. F. Emmons. 1886. 770 p. and atlas of 35 sheets folio.
- *13. Geology of the quicksilver deposits of the Pacific slope, with an atlas, by G. F. Becker. 1888. 486 p.
- *14. Fossil fishes and fossil plants of the Triassic rocks of New Jersey and the Connecticut Valley, by J. S. Newberry. 1888. 152 p.
- *15. The Potomac or younger Mesozoic flora, by W. M. Fontaine. 1889. 377 p. (Text and plates bound separately.)
- *16. The Paleozoic fishes of North America, by J. S. Newberry. 1889. 340 p.
- *17. The flora of the Dakota group, by Leo Lesquereux, (a posthumous work, edited by F. H. Knowlton). 1891. 400 p.
- *18. Gasteropoda and Cephalopoda of the Raritan clays and greensand marls of New Jersey, by R. P. Whitfield. 1892. 402 p. (Text and plates bound separately.)
- *19. The Penokee iron-bearing series of Michigan and Wisconsin, by R. D. Irving and C. R. Van Hise. 1892. 534 p.
- *20. Geology of the Eureka district, Nev., by Arnold Hague. 1892. 419 p. and atlas of 13 sheets folio.
- *21. Tertiary rhynchophorous Coleoptera of the United States, by S. H. Scudder. 1893. 206 p.
- *22. A manual of topographic methods, by Henry Gannett, chief topographer. 1893. 300 p. (See also Bulletins 307 and 788.)
- *23. Geology of the Green Mountains in Massachusetts, by Raphael Pumpelly, J. E. Wolff, and T. N. Dale. 1894. 206 p.
- *24. Mollusca and Crustacea of the Miocene formations of New Jersey, by R. P. Whitfield. 1894. 195 p.
- *25. The glacial Lake Agassiz, by Warren Upham. 1895. 658 p. (Published in July, 1896.)
- *26. The flora of the Amboy clays, by J. S. Newberry (a posthumous work, edited by Arthur Hollick). 1895. 260 p. (Published in December, 1896.)
- *27. Geology of the Denver Basin in Colorado, by S. F. Emmons, Whitman Cross, and G. H. Eldridge. 1896. 556 p.
- *28. The Marquette iron-bearing district of Michigan, with atlas, by C. R. Van Hise and W. S. Bayley, including a chapter on the Republic trough, by H. L. Smyth. 1897. 608 p. and atlas of 39 sheets folio.
- *29. Geology of old Hampshire County, Mass., comprising Franklin, Hampshire, and Hampden Counties, by B. K. Emerson. 1898. 790 p.
- *30. Fossil medusae, by C. D. Walcott. 1898. 201 p.
- *31. Geology of the Aspen mining district, Colo., with atlas, by J. E. Spurr. 1898. 260 p. and atlas of 30 sheets folio.
- *32. Geology of the Yellowstone National Park.
Part I. General geology (not published).
*Part II. Descriptive geology, petrography, and paleontology by Arnold Hague, J. P. Iddings, W. H. Weed, C. D. Walcott, G. H. Girty, T. W. Stanton, and F. H. Knowlton. 1899. 893 p. and atlas of 27 sheets folio.
- *33. Geology of the Narragansett basin, by N. S. Shaler, J. B. Woodworth, and A. F. Foerste. 1899. 402 p.
- *34. The glacial gravels of Maine and their associated deposits, by G. H. Stone. 1899. 499 p.
- *35. The later extinct floras of North America, by J. S. Newberry (a posthumous work, edited by Arthur Hollick). 1898. 295 p.

- *36. The Crystal Falls iron-bearing district of Michigan, by J. M. Clements and H. L. Smyth, with a chapter on the Sturgeon River tongue, by W. S. Bayley, and an introduction, by C. R. Van Hise. 1899. 512 p.
- *37. Fossil flora of the Lower Coal Measures of Missouri, by David White. 1899. 467 p.
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- *41. Glacial formations and drainage features of the Erie and Ohio Basins, by Frank Leverett. 1902. 802 p.
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- *44. Pseudoceratites of the Cretaceous, by Alpheus Hyatt, edited by T. W. Stanton. 1903. 351 p.
- *45. The Vermilion iron-bearing district of Minnesota, by J. M. Clements. 1903. 463 p. and atlas of 26 sheets folio.
- *46. The Menominee iron-bearing district of Michigan, by W. S. Bayley. 1904. 513 p.
- *47. A treatise on metamorphism, by C. R. Van Hise. 1904. 1286 p.
- *48. Status of the Mesozoic floras of the United States (second paper), by L. F. Ward, with the collaboration of W. M. Fontaine, Arthur Bibbins, and G. R. Wieland. 1905. 616 o. (Text and plates bound separately.)
- *49. The Ceratopsia, by J. B. Hatcher, based on preliminary studies, by O. C. Marsh, edited and completed, by R. S. Lull. 1907. 300 p.
- *50. The Cretaceous flora of southern New York and New England, by Arthur Hollick. 1906. 219 p.
- *51. Cambrian Brachiopoda, by C. D. Walcott. 1912. In two parts. Part I, 872 p.; Part II, 363 p.
- *52. The geology of the Lake Superior region, by C. R. Van Hise and C. K. Leith. 1911. 641 p.
- *53. The Pleistocene of Indiana and Michigan and the history of the Great Lakes, by Frank Leverett and F. B. Taylor. 1915. 529 p.
- *54. The Mesozoic and Cenozoic Echinodermata of the United States, by W. B. Clark and M. W. Twitchell. 1915. 341 p.
- *55. The titanotheres of ancient Wyoming, Dakota, and Nebraska, by H. F. Osborn. 1929. In two volumes. Vol. 1, p. 1-701; Vol. 2, p. 703-953.

PROFESSIONAL PAPERS

[An asterisk (*) indicates that the paper is out of print.]

- *1. Preliminary report on the Ketchikan mining district, Alaska, with an introductory sketch of the geology of southeastern Alaska, by A. H. Brooks, 1902, 120 p.
- *2. A reconnaissance of the northwestern portion of Seward Peninsula, Alaska, by A. J. Collier, 1902, 70 p.
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- *7. Forest conditions in Olympic Forest Reserve, Wash., from notes by Arthur Dodwell and T. F. Rixon, 1902, 110 p.
- *8. Forest conditions in the northern Sierra Nevada, Calif., by J. B. Leiberg, 1902, 194 p.
- *9. Forest conditions in the Cascade Range Forest Reserve, Oreg., by H. D. Langille, F. G. Plummer, Arthur Dodwell, T. F. Rixon, and J. B. Leiberg, with an introduction by Henry Gannett, 1903, 298 p.
- *10. Reconnaissance from Fort Hamlin to Kotzebue Sound, Alaska, by way of Dall, Kanuti, Allen, and Kowak rivers, by W. C. Mendenhall, 1902, 68 p.
- *11. The clays of the United States east of the Mississippi River, by Heinrich Ries, 1903, 298 p.
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- *13. Drainage modifications in southeastern Ohio and adjacent parts of West Virginia and Kentucky, by W. G. Tight, 1903, 111 p.
- *14. Chemical analyses of igneous rocks published from 1884 to 1900, with a critical discussion of the character and use of analyses, by H. S. Washington, 1903, 495 p. (See also Professional Paper 99.)
- *15. The mineral resources of the Mount Wrangell district, Alaska, by W. C. Mendenhall and F. C. Schrader, 1903, 71 p.
- *16. The Carboniferous formations and faunas of Colorado, by G. H. Girty, 1903, 546 p.
- *17. Preliminary report on the geology and water resources of Nebraska west of the one hundred and third meridian, by N. H. Darton, 1903, 69 p.
- *18. Chemical composition of igneous rocks expressed by means of diagrams, with reference to rock classification on a quantitative chemico-mineralogical basis, by J. P. Iddings, 1903, 98 p.
- *19. Contributions to the geology of Washington, 1903, 101 p.
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- *20. A reconnaissance in northern Alaska across the Rocky Mountains, along Koyukuk, John, Anaktuvuk, and Colville rivers and the Arctic coast to Cape Lisburne, in 1901, by F. C. Schrader, with notes, by W. J. Peters, 1904, 139 p.
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- *33. Forest conditions in the Lincoln Forest Reserve, N. Mex., by F. G. Plummer and M. G. Gowsell. 1904. 47 p.
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- *45. The geography and geology of Alaska, a summary of existing knowledge, by A. H. Brooks, with a section on climate, by Cleveland Abbe, Jr., and a topographic map and description thereof, by R. U. Goode. 1906. 327 p.
- *46. Geology and underground water resources of northern Louisiana and southern Arkansas, by A. C. Veatch. 1906. 422 p.
- *47. The Tertiary and Quaternary pectens of California, by Ralph Arnold. 1906. 264 p.
- *48. Report on the operations of the coal-testing plant of the United States Geological Survey at the Louisiana Purchase Exposition, St. Louis, Mo., 1904; E. W. Parker, J. A. Holmes, M. R. Campbell, committee in charge. 1906. 1492 p. (In three parts.)
- *49. Geology and mineral resources of part of the Cumberland Gap coal field, Ky., by G. H. Ashley and L. C. Glenn, in cooperation with the State Geological Department of Kentucky, C. J. Norwood, curator. 1906. 239 p.
- *50. The Montana lobe of the Keewatin ice sheet, by F. H. H. Calhoun. 1906. 62 p.
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- *59. Contributions to the Tertiary paleontology of the Pacific coast: I. The Miocene of Astoria and Coos Bay, Oregon, by W. H. Dall. 1909. 278 p.
Includes: The Miocene of Astoria and Coos Bay, Oregon, by W. H. Dall, 1909, p. 5-142; A further account of the fossil sea lion *Pontolis magnus*, from the Miocene of Oregon, by F. W. True, 1909, p. 143-148; Appendices 1-13 [in which the papers by P. P. Carpenter, T. A. Conrad, J. D. Dana, and B. F. Shumard are all reprints of much earlier articles]: 1. Fossil shells from Tertiary deposits on the Columbia River, near Astoria, by T. A. Conrad, 1909, p. 150-151; 2. Fossils from northwestern America, by J. D. Dana, 1909, p. 152-157; 3. Notes on shells, with descriptions of new species, by T. A. Conrad, 1909, p. 158; 4. Descriptions of new fossil shells of the United States, by T. A. Conrad, 1909, p. 159-161; 5. Notes on shells, with descriptions of three recent and one fossil species, by T. A. Conrad, 1909, p. 162; 6. Descriptions of fossil shells from the Eocene and Miocene formations of California, by T. A. Conrad, 1909, p. 163-171; 7. Note on the Miocene and post-Pliocene deposits of California, with descriptions of two new fossil corals, by T. A. Conrad, p. 172; 8. Descriptions of three new genera; twenty-three new species middle Tertiary fossils from California, and one from Texas, by T. A. Conrad, 1909, p. 173-175; 9. Descriptions of the Tertiary fossils collected on the [Pacific Railroad] survey, by T. A. Conrad, 1909, p. 176-179; 10. Report on the paleontology of the [Pacific Railroad] survey, by T. A. Conrad, 1909, p. 180-185; 11. Descriptions of new fossils from the Tertiary formation of Oregon and Washington Territories and the Cretaceous of Vancouver Island, collected by Dr. John Evans, United States geologist, under instructions from the Department of the Interior, by B. F. Shumard, 1909, p. 186-188; 12. On the Pleistocene fossils collected by Col. E. Jewett at Santa Barbara, Cal., with descriptions of new species, by P. P. Carpenter, 1909, p. 189-191; 13. Material toward a bibliography of publications on the post-Eocene marine mollusks of the northwest coast of America, 1865-1908, by W. H. Dall, 1909, p. 192-216; Plates, 1909, p. 217-261; Index, 1909, p. 263-278.
- *60. The interpretation of topographic maps, by R. D. Salisbury and W. W. Atwood. 1908. 84 p.
- *61. Glaciation of the Uinta and Wasatch mountains, by W. W. Atwood. 1909. 96 p.
- *62. The geology and ore deposits of the Coeur d'Alene district, Idaho, by F. L. Ransome and F. C. Calkins. 1908. 203 p.
- *63. Economic geology of the Georgetown quadrangle (together with the Empire district), Colo., by J. E. Spurr and G. H. Garrey, with general geology, by S. H. Ball. 1908. 422 p.

- *64. The Yakutat Bay region, Alaska. 1909. 183 p.
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- *65. Geology and water resources of the northern portion of the Black Hills and adjoining regions in South Dakota and Wyoming, by N. H. Darton. 1909. 105 p.
- *66. The geology and ore deposits of Goldfield, Nev., by F. L. Ransome, assisted in the field by W. H. Emmons and G. H. Garrey. 1909. 258 p.
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- *70. The Mount McKinley region, Alaska, by A. H. Brooks, with descriptions of the igneous rocks and of the Bonfield and Kantishna districts, by L. M. Prindle. 1911. 234 p.
- *71. Index to the stratigraphy of North America, by Bailey Willis, accompanied by a geologic map of North America, compiled by the United States Geological Survey in cooperation with the Geological Survey of Canada and the Instituto Geológico de México, under the supervision of Bailey Willis and G. W. Stose. 1912. 894 p.
- *72. Denudation and erosion in the southern Appalachian region and the Monongahela basin, by L. C. Glenn. 1911. 137 p.
- *73. The Tertiary gravels of the Sierra Nevada of California, by Waldemar Lindgren. 1911. 226 p.
Includes the following contributions:
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- *74. Geology and ore deposits of the Butte district, Mont., by W. H. Weed. 1912. 262 p.
- *75. Geology and ore deposits of the Breckenridge district, Colo., by F. L. Ransome. 1911. 187 p.
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- *80. Geology and ore deposits of the San Francisco and adjacent districts, Utah, by B. S. Butler. 1913. 212 p.
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- *82. The geology of Long Island, N. Y., by M. L. Fuller. 1914. 231 p.
- *83. The Middle Triassic marine invertebrate faunas of North America, by J. P. Smith. 1914. 254 p.
- *84. The Upper Cretaceous and Eocene floras of South Carolina and Georgia, by E. W. Berry. 1914. 200 p.
- *85-A. The origin of coemanite deposits, by H. S. Gale, 1914, p. 1-9.
- *85-B. The mud lumps at the mouths of the Mississippi, by E. W. Shaw, 1914, p. 11-27.
- *85-C. Interpretation of anomalies of gravity, by G. K. Gilbert, 1914, p. 29-37.
- *85-D. The Jurassic flora of Cape Lisburne, Alaska, by F. H. Knowlton, 1914, p. 39-64.
- *85-E. Resins in Paleozoic plants and in coals of high rank, by David White, 1914, p. 65-96.
(Professional Paper 85 was issued as a single volume, Shorter contributions to general geology, 1913, and also as separate chapters.)
- *86. The transportation of debris by running water, by G. K. Gilbert, based on experiments made with the assistance of E. C. Murphy. 1914. 263 p.
- *87. Geology and ore deposits of Copper Mountain and Kasaan Peninsula, Alaska, by C. W. Wright. 1915. 110 p.
- *88. Lavas of Hawaii and their relations, by Whitman Cross. 1915. 97 p.
- *89. The fauna of the Chapman sandstone of Maine, including descriptions of some related species from the Moose River sandstone, by H. S. Williams, assisted by C. L. Bregier. 1916. 347 p.
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- *90-H. A deep well at Charleston, S. C., by L. W. Stephenson, with a report on the mineralogy of the water, by Chase Palmer, 1915, p. 69-94.
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- *90-L. The inorganic constituents of echinoderms, by F. W. Clarke and W. C. Wheeler, 1915, p. 191-196; Index, 1915, p. 197-199; i-iv (includes title page, contents, and list of illustrations of volume). (Professional Paper 90 was issued as a single volume, Shorter contributions to general geology, 1914, and also as separate chapters.)
- *91. The lower Eocene floras of southeastern North America, by E. W. Berry. 1916. 481 p.
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(Professional Paper 98 was issued as a single volume, Shorter contributions to general geology, 1916, and also as separate chapters.)
- *99. Chemical analyses of igneous rocks published from 1884 to 1913, inclusive, with a critical discussion of the character and use of analyses (a revision and expansion of Professional Paper 14), by H. S. Washington. 1917. 1201 p.
*Extract: A description of the quantitative classification of igneous rocks, with tables for the calculation of the norm, p. 1-7, 1151-1180. (Contains Appendixes 1-5, also corrections and additions to Professional Paper 99.)
- *100-A. General introduction, by M. R. Campbell, 1917, p. 1-33.

- *100-B. The coal fields of Ohio, by J. A. Bownocker, State geologist, with a computation of the original content of the fields, by F. R. Clark, 1918, p. 35-96.
No other chapters will be published.
(Professional Paper 100 was issued as a single volume, The coal fields of the United States, published 1929 [1930], and also as separate chapters.)
- *101. Geology and paleontology of the Raton Mesa and other regions in Colorado and New Mexico, by W. T. Lee and F. H. Knowlton, 1917 [1918], 450 p.
Includes: Geology of the Raton Mesa and other regions in Colorado and New Mexico, by W. T. Lee, 1917 [1918], p. 9-221; Fossil floras of the Vermejo and Raton formations of Colorado and New Mexico, by F. H. Knowlton, 1917 [1918], p. 223-435; Index, 1917 [1918], p. 437-450.
- *102. The inorganic constituents of marine invertebrates, by F. W. Clarke and W. C. Wheeler. 1917. 56 p.
(See also Professional Paper 124.)
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- *127. The composition of the earth's crust, by F. W. Clarke and H. S. Washington, 1924, 117 p.
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- *141. Upper Triassic marine invertebrate faunas of North America, by J. P. Smith, 1927, 262 p.
- *142-A. Part I, Prionodesmacea and Anomalodesmacea, by Julia Gardner, 1926, p. 1-79.
- *142-B. Part II, Astartacea, Carditacea, Chamacea, by Julia Gardner, 1926, p. 81-99.
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- *142-D. Part IV, Veneracea, by Julia Gardner, 1926, p. 151-184.
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- *142-F. Part VI, Pteropoda, Opisthobranchia, and Ctenobranchia (in part), by Julia Gardner, 1937 [1938], p. 251-435.
- *142-G. Part VII, Stenoglossa (in part), by Julia Gardner, 1944, p. 437-491.
- *142-H. Part VIII, Ctenobranchia (remainder), Aspidobranchia and Scaphopoda, by Julia Gardner, 1947, p. 493-656. [Includes title page, contents, and list of illustrations for volume.]
- *142-I. Part IX, Index to chapters A-H, by Julia Gardner, 1950, p. 657-709. [Contains new list of contents for volume.]
(Professional Paper 142, issued only as separate chapters under the general title, The molluscan fauna of the Alum Bluff group of Florida. Each chapter contains its own index.)
- *143. Paleontology and stratigraphy of the Castle Hayne and Trent marls in North Carolina, by L. B. Kellum, 1926, 56 p.
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- *150-B. The scaphites, an Upper Cretaceous ammonite group, by J. B. Reeside, Jr., 1928, p. 21-40.
- *150-C. A section of the Kaibab limestone in Kaibab Gulch, Utah, by L. F. Noble, 1928, p. 41-60.
- *150-D. Sedimentary rocks of the San Rafael Swell and some adjacent areas in eastern Utah, by James Gilluly and J. B. Reeside, Jr., 1928, p. 61-110.
- *150-E. The Pocono fauna of the Broad Top coal field, Pennsylvania, by G. H. Girty, 1928, p. 111-127.
- *150-F. Notes on Pleistocene faunas from Maryland and Virginia and Pliocene and Pleistocene faunas from North Carolina, by W. C. Mansfield, 1928, p. 129-140; Index, 1928, p. 141-142; i-iii (including title page, contents, and list of illustrations of volume). (Professional Paper 150 was issued as a single volume, Shorter contributions to general geology, 1927, and also as separate chapters.)
- *151. The cephalopods of the Eagle sandstone and related formations in the Western Interior of the United States, by J. B. Reeside, Jr., 1927, 87 p.
- *152. Geography, geology, and mineral resources of parts of southeastern Idaho, by G. R. Mansfield, with descriptions of Carboniferous and Triassic fossils, by G. H. Girty, 1927, 453 p.
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- *154-A. Moraines and shore lines of the Lake Superior Basin, by Frank Leverett, 1929 [1930], p. 1-72.
- *154-B. The fauna of the middle Boone near Batesville, Ark., by G. H. Girty, 1929 [1930], p. 73-103.
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- *154-D. Origin of the siliceous Mowry shale of the Black Hills region, by W. W. Rubey, 1929 [1930], p. 153-170.
- *154-E. Oil shale in a producing oil field in California, by H. W. Hoots, 1929 [1930], p. 171-173.
- *154-F. Water-laid volcanic rocks of early Upper Cretaceous age in southwestern Arkansas, southeastern Oklahoma, and northeastern Texas, by C. S. Ross, H. D. Miser, and L. W. Stephenson, 1929 [1930], p. 175-202.
- *154-G. Algae reefs and oolites of the Green River formation, by W. H. Bradley, 1929 [1930], p. 203-223.
- *154-H. A revision of the flora of the Latah formation, by E. W. Berry, 1929 [1930], p. 225-265.
- *154-I. *Exogyra olisiponensis* Sharpe and *Exogyra costata* Say in the Cretaceous of the Western interior, by J. B. Reeside, Jr., 1929 [1930], p. 267-278.
- *154-J. Additions to the flora of the Green River formation, by R. W. Brown, 1929 [1930], p. 279-292; Index, 1929 [1930], p. 295-299; i-iv (including title page, contents, and list of illustrations of volume). (Professional Paper 154 was issued as a single volume, Shorter contributions to general geology, 1928, and also as separate chapters.)
- *155. The flora of the Denver and associated formations of Colorado, by F. H. Knowlton, a posthumous work, edited by E. W. Berry, 1930, 142 p.
- *156. Revision of the lower Eocene Wilcox flora of the Southeastern States, with descriptions of new species, chiefly from Tennessee and Kentucky, by E. W. Berry, 1930, 196 p.
- *157. The Mother lode system of California, by Adolph Knopf, 1929, 88 p.
- *158-A. The occurrence and origin of analcite and meerschaum beds in the Green River formation of Utah, Colorado, and Wyoming, by W. H. Bradley, 1930, p. 1-7.
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- *158-C. The Helderberg group of parts of West Virginia and Virginia, by F. M. Swartz, 1930, p. 27-75.
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- *158-H. The flora of the Frontier formation, by E. W. Berry, 1930, p. 129-135.
- *158-I. Borate minerals from the Kramer district, Mohave Desert, Calif., by W. T. Schaller, 1930, p. 137-170; Index, 1930, p. 171-173; i-iv (including title page, contents, and list of illustrations of volume).

- (Professional Paper 158 was issued as a single volume, Shorter contributions to general geology, 1929, and also as separate chapters.)
- *159. The Upper Cretaceous floras of Alaska, by Arthur Hollick, with a description of the plant-bearing beds, by G. C. Martin. 1930. 123 p.
 - 160. Geologic history of the Yosemite Valley, by F. E. Matthes. 1930. 137 p. \$5.25.
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 - *165-C. Geology of the eastern part of the Santa Monica Mountains, Los Angeles County, Calif., by H. W. Hoots. 1931, p. 83-134.
 - *165-D. Geology of the Big Snowy Mountains, Mont., by Frank Reeves. 1931, p. 135-149.
 - *165-E. The kaolin minerals, by C. S. Ross and P. F. Kerr. 1931, p. 151-176; Index, 1931, p. 177-180; i-iv (including title page, contents, and list of illustrations of volume).
(Professional Paper 165 was issued as a single volume, Shorter contributions to general geology, 1930, and also as separate chapters.)
 - *166. Physiography and Quaternary geology of the San Juan Mountains, Colo., by W. W. Atwood and K. F. Mather. 1932. 176 p.
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 - *170-E. The geologic importance of the lime-secreting algae, with a description of a new travertine-forming organism, by M. A. Howe. 1932, p. 57-65; Index, 1932, p. 67-69; i-iii (including title page, contents, and list of illustrations of volume).
(Professional Paper 170 was issued as a single volume, Shorter contributions to general geology, 1931, and also as separate chapters.)
 - *171. Geology and ore deposits of the Pioche district, Nev., by L. G. Westgate and Adolph Knopf. 1932. 79 p.
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*[Title page, contents, list of illustrations, and index to volume. 1933, p. i-iv, 115-117.]
(Professional Paper 175, issued only as separate chapters† under the general title, Shorter contributions to general geology, 1932-33.)
 - *176. Geology and ore deposits of the Breckenridge mining district, Colo., by T. S. Lovering. 1934. 64 p.
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 - *183. Correlation of the Jurassic formations of parts of Utah, Arizona, New Mexico, and Colorado, by A. A. Baker, C. H. Dane, and J. B. Reeside, Jr. 1936. 66 p.

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- *184. Pre-Cambrian rocks of the Lake Superior region, a review of newly discovered geologic features, with a revised geologic map, by C. K. Leith, R. J. Lund, and Andrew Leith. 1935. 34 p.
- *185-A. Studies on the alkalinity of some silicate minerals, by R. E. Stevens. 1934. p. 1-13.
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- *185-C. The recognizable species of the Green River flora, by R. W. Brown. 1934 [1935]. p. 45-77.
- *185-D. A flora of Pottsville age from the Mosquito Range, Colo., by C. B. Read. 1934. p. 79-96.
- *185-E. Miocene plants from Idaho, by E. W. Berry. 1934 [1935]. p. 97-125.
- *185-F. A lower Lance florule from Harding County, S. Dak., by E. W. Berry. 1934. p. 127-133.
- *185-G. Halloysite and allophane, by C. S. Ross and P. F. Kerr. 1934. p. 135-148.
- *185-H. The flora of the New Albany shale; Part 1, *Dicchnia kentuckiensis*, a new representative of the Calamopityeae, by C. B. Read. 1936. p. 149-161.
- *185-I. Geomorphology of the north flank of the Uinta Mountains, by W. H. Bradley. 1936. p. 163-199; Index, 1936, p. 201-204; i-iv (includes title page, contents, and list of illustrations of volume). (Professional Paper 185, issued only as separate chapters under the general title, Shorter contributions to general geology, 1934-35.)
- *186-A. New Upper Cretaceous Ostreidae from the Gulf region, by L. W. Stephenson. 1936. p. 1-12.
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- *186-E. The flora of the New Albany shale, Part 2, The Calamopityeae and their relationships, by C. B. Read. 1937. p. 81-104.
- *186-F. American Cretaceous ferns of the genus *Tempskya*, by C. B. Read and R. W. Brown. 1937. p. 105-131.
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- *186-M. A redescription of Ferdinand Roemer's Paleozoic types from Texas, by Josiah Bridge and G. H. Girty. 1937. p. 239-271.
- *186-N. Relation of salinity to the calcium carbonate content of marine sediments, by P. D. Trask. 1938. p. 273-299.
*[Title page, contents, list of illustrations, and index to volume. 1940. p. i-iv, 301-313.]
(Professional Paper 186, issued only as separate chapters under the general title, Shorter contributions to general geology, 1936.)
- *187. Geology of the Marathon region, Tex., by P. B. King. 1937 [1938]. 148 p.
- *188. The San Juan country, a geographic and geologic reconnaissance of southeastern Utah, by H. E. Gregory. 1938. 123 p.
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- *189-I. Fossil plants from the Colgate member of the Fox Hills sandstone and adjacent strata, by R. W. Brown. 1939. p. 239-271; Index, 1939, p. 273-275. [Includes title page, contents, and list of illustrations for volume.]
(Professional Paper 189, issued only as separate chapters under the general title, Shorter contributions to general geology, 1937.)
- *190. Lower Pliocene mollusks and echinoids from the Los Angeles Basin, Calif., and their inferred environment, by W. P. Woodring. 1938. 67 p.
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- *193-F. Transgressive and regressive Cretaceous deposits in southern San Juan Basin, N. Mex., by J. D. Sears, C. B. Hunt, and T. A. Hendricks, 1941. p. 110-119; Index, 1941, p. 121. [Includes title page, contents, and list of illustrations for volume.]
(Professional Paper 193, issued only as separate chapters under the general title, Shorter contributions to general geology, 1938-1940.)
- *194. The gold quartz veins of Grass Valley, Calif., by W. D. Johnston, Jr. 1940. 101 p.
- *195. Geology of the Kettleman Hills oil field, Calif.; stratigraphy, paleontology, and structure, by W. P. Woodring, Ralph Stewart, and R. W. Richards, 1940 [1941]. 170 p.
- *196-A. Summary of the report, 1942, p. vii-x; Foreword, by C. S. Piggot, 1941, p. xi-xii; General introduction, by W. H. Bradley, 1941, p. xiii-xv; Part 1, Lithology and geologic interpretations, by M. N. Bramlette and W. H. Bradley, 1941, p. 1-34; Part 2, Foraminifera, by J. A. Cushman and L. G. Henbest, 1941, p. 35-54.
- *196-B. Part 3, Diatomaceae, by K. E. Lohman, 1942. p. 55-93.
- *196-C. Part 4, Ostracoda, by W. L. Tressler, 1941. p. 95-106.
- *196-D. Part 5, Mollusca, by H. A. Rehder, 1942, p. 107-109; Part 6, Echinodermata, by A. H. Clark, 1942, p. 111-117; Part 7, Miscellaneous fossils and significance of faunal distribution, by L. G. Henbest, 1942, p. 119-133.
- *196-E. Part 8, Organic matter content, by P. D. Trask, H. W. Patnode, J. L. Stimson, and J. R. Gay, 1942. p. 135-149.
- *196-F. Part 9, Selenium content and chemical analyses, by Glen Edgington and H. G. Byers, 1942. p. 151-155.
*Title page, contents, list of illustrations, and index for volume 1942[1943]. p. i-iv, 157-163. (Professional Paper 196 was issued as a single volume with the general title, Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland, published 1942 [1943], and also as advance separate chapters for which the chapter publication date has been used above. Each advance chapter contained the summary of the report, foreword, general introduction, and its own index.)
- *197-A. Alkaline rocks of Iron Hill, Gunnison County, Colo., by E. S. Larsen, Jr. 1942. p. 1-64.
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(Professional Paper 197, issued only as separate chapters under the general title, Shorter contributions to general geology, 1941-42.)
- *198. Occurrence and origin of the titanium deposits of Nelson and Amherst Counties, Va., by C. S. Ross, 1941. 59 p.
- *199-A. Part 1, Pelecypoda, by Julia Gardner, with a summary of the stratigraphy, by W. C. Mansfield, 1943. p. 1-178.
- *199-B. Part 2, Scaphopoda and Gastropoda, by Julia Gardner, 1948. p. 179-297; Index, 1948, p. 299-310. [Includes title page, contents, and list of illustrations for volume.]
(Professional Paper 199, issued only as separate chapters under the general title, Mollusca from the Miocene and lower Pliocene of Virginia and North Carolina.)
- *200. Geology and ore deposits of the Magdalena mining district, N. Mex., by G. F. Loughlin and A. H. Koschmann, 1942 [1943]. 168 p.
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- *205-C. Geology of Reef Ridge, Coalinga district, Calif., by Ralph Stewart, 1946 [1947]. p. 81-115.
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(Professional Paper 205, issued only as separate chapters under the general title, Shorter contributions to general geology, 1943-45.)
- *206. Upper Cretaceous Foraminifera of the Gulf coastal region of the United States and adjacent areas, by J. A. Cushman, 1946. 241 p.

- *207. Geology and paleontology of Palos Verdes Hills, Calif., by W. P. Woodring, M. N. Bramlette, and W. S. W. Kew. 1946. 145 p.
- 208. Geology and ore deposits of the Little Hatchet Mountains, Hidalgo and Grant Counties, N. Mex., by S. G. Lasky. 1947. 101 p. \$2.50.
- *209. The Ajo mining district, Ariz., by James Gilluly. 1946 [1947]. 112 p. Supplement, 1949. 1 p., new pl. 21A, revised sections of pls. 20, 22, and 23. [Free on application to the Geological Survey.]
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- *210-E. New Upper Cretaceous fossils from Mississippi and Texas, part 1, Fossils from two deep wells in Mississippi; part 2, A new Venericardia from Uvalde County, Tex., by L. W. Stephenson. 1947. p. 161-196. [Includes title page, contents, and list of illustrations for volume.] (Professional Paper 210, issued only as separate chapters under the general title, Shorter contributions to general geology, 1946.)
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- *214-C. Paleocene fresh-water mollusks from southern Montana, by Teng-Chien Yen. 1948. p. 35-50.
- *214-D. Petrography of the island of Hawaii, by G. A. Macdonald. 1949. p. 51-96.
[The title page, contents, and list of illustrations for the volume have been printed separately and may be obtained free on application to the Geological Survey, Washington 25, D. C.] (Professional Paper 214, issued only as separate chapters under the general title, Shorter contributions to general geology, 1947-1948.)
- *215. Geology of the southern Guadalupe Mountains, Tex., by P. B. King. 1948 [1949]. 183 p.
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- *221-A. The foraminiferal fauna of the Upper Cretaceous Arkadelphia marl of Arkansas, by J. A. Cushman. 1949. p. 1-19.
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- 221-C. Growth series of ostracodes from the Permian of Texas, by I. G. Sohn. 1950. p. 33-44. 30c.
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- *221-F. Pleistocene shore lines in Florida and Georgia, by F. S. MacNeil. 1950 [1951]. p. 95-107.
*(Plate 19 printed separately.)
- *221-G. Pre-Wisconsin soil in the Rocky Mountain region, a progress report, by C. B. Hunt, and V. P. Sokoloff. 1950. p. 109-123.
- 221-H. The habits and adaptation of the Oligocene saber tooth carnivore, Hoplophoneus, by Jean Hough. 1950 [1951]. p. 125-146. [Includes title page, contents, and list of illustrations for volume.] 40c. (Professional Paper 221, issued only as separate chapters under the general title, Shorter contributions to general geology, 1949.)
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- *36. Operations at river stations, 1899, Part II. 1900. p. 101-198.
- *37. Operations at river stations, 1899, Part III. 1900. p. 199-298.
- *38. Operations at river stations, 1899, Part IV. 1900. p. 299-396.
- *39. Operations at river stations, 1899, Part V. 1900. p. 397-471.
- *40. The Austin dam, by T. U. Taylor. 1900. 52 p.
- *41. The windmill, its efficiency and economic use, Part I, by E. C. Murphy. 1901. p. 1-72.
- *42. The windmill, its efficiency and economic use, Part II, by E. C. Murphy. 1901. p. 73-147.
- *43. Conveyance of water in irrigation canals, flumes, and pipes, by Samuel Fortier. 1901. 86 p.
- *44. Profiles of rivers in the United States, by Henry Gannett. 1901. 100 p.
- *45. Water storage on Cache Creek, Calif., by A. E. Chandler. 1901. 48 p.

¹Many Geological Survey reports on water resources, particularly ground water, are published by State cooperating agencies.

Certain Water-Supply Papers are listed only by number and in tabular form in this section. The tables under which the listings appear and their pages are as follows:

- Table 1. Reports containing records of quality of surface water of the United States, 1941-59, p. 182.
- Table 2. Reports containing records of water levels and artesian pressure in observation wells in the United States, 1935-57, p. 183.
- Table 3. Reports containing records of streamflow in the United States, 1901-06, p. 184.
- Table 4. Reports containing records of streamflow in the United States, 1907-43, p. 185.
- Table 5. Reports containing records of streamflow in the United States, 1944-60, p. 186-187.
- Table 6. Compilation of records of surface waters of the United States to 1950, p. 187.
- Table 7. Reports on quality of surface waters for irrigation, Western United States, 1951-58, p. 187.

- *46. Physical characteristics of Kern River, Calif., by F. H. Olmsted, and Reconnaissance of Yuba River, Calif., by Marsden Manson. 1901. 57 p.
- *47. Operations at river stations, 1900, Part I. 1901. p. 1-99.
- *48. Operations at river stations, 1900, Part II. 1901. p. 101-195.
- *49. Operations at river stations, 1900, Part III. 1901. p. 197-292.
- *50. Operations at river stations, 1900, Part IV. 1901. p. 293-387.
- *51. Operations at river stations, 1900, Part V. 1901. p. 389-487.
- *52. Operations at river stations, 1900, Part VI. 1901. p. 489-575.
- *53. Geology and water resources of Nez Perce County, Idaho, Part I, by I. C. Russell. 1901. p. 1-85.
- *54. Geology and water resources of Nez Perce County, Idaho, Part II, by I. C. Russell. 1901. p. 87-141.
- *55. Geology and water resources of a portion of Yakima County, Wash., by G. O. Smith. 1901. 68 p.
- *56. Methods of stream measurement. 1901. 51 p.
- *57. Preliminary list of deep borings in the United States, Part I, Alabama-Montana, by N. H. Darton. 1902. 60 p. (See also Water-Supply Papers 61 and 149.)
- *58. Storage of water on Kings River, Calif., by J. B. Lippincott. 1902. 101 p.
- *59. Development and application of water near San Bernardino, Colton, and Riverside, Calif., Part I, by J. B. Lippincott. 1902. p. 1-95.
- *60. Development and application of water near San Bernardino, Colton, and Riverside, Calif., Part II, by J. B. Lippincott. 1902. p. 97-141.
- *61. Preliminary list of deep borings in the United States, Part II, Nebraska-Wyoming, by N. H. Darton. 1902. 67 p. (See also Water-Supply Paper 149.)
- *62. Hydrography of the southern Appalachian Mountain region, Part I, by H. A. Pressey. 1902. 95 p.
- *63. Hydrography of the southern Appalachian Mountain region, Part II, by H. A. Pressey. 1902. 95 p.
- *64. Accuracy of stream measurements, by E. C. Murphy. 1902. 99 p. (See also Water-Supply Paper 95.)
- *65. Operations at river stations, 1901, Part I, East of Mississippi River. 1902. 334 p.
- *66. Operations at river stations, 1901, Part II, West of Mississippi River. 1902. 188 p.
- *67. The motions of underground waters, by C. S. Slichter. 1902. 106 p.
- *68. Water storage in the Truckee Basin, Calif.-Nev., by L. H. Taylor. 1902. 90 p.
- *69. Water powers of the State of Maine, by H. A. Pressey. 1902. 124 p.
- *70. Geology and water resources of the Patrick and Goshen Hole quadrangles, in eastern Wyoming and western Nebraska, by G. I. Adams. 1902. 50 p.
- *71. Irrigation systems of Texas, by T. U. Taylor. 1902. 137 p.
- *72. Sewage pollution in the metropolitan area near New York City and its effect on inland water resources, by M. O. Leighton. 1902. 75 p.
- *73. Water storage on Salt River, Ariz., by A. P. Davis. 1903. 54 p.
- *74. Water resources of the State of Colorado, by A. L. Fellows. 1902. 151 p.
- *75. Report of progress of stream measurements for the calendar year 1901, by F. H. Newell. 1903. 246 p.
- *76. Observations on the flow of rivers in the vicinity of New York City, by H. A. Pressey. 1903. 108 p.
- *77. The water resources of Molokai, Hawaiian Islands, by Waldemar Lindgren. 1903. 62 p.
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- *81. California hydrography, by J. B. Lippincott. 1903. 488 p.
- *82. Report of progress of stream measurements for the calendar year 1902, by F. H. Newell, Part I, Northern Atlantic coast and St. Lawrence River drainage. 1903. 199 p.
- *83. Report of progress of stream measurements for the calendar year 1902, by F. H. Newell, Part II, Southern Atlantic, eastern Gulf, Eastern Mississippi, and Great Lakes drainage. 1903. 304 p.
- *84. Report of progress of stream measurements for the calendar year 1902, by F. H. Newell, Part III, Western Mississippi River and western Gulf drainage. 1903. 200 p.
- *85. Report of progress of stream measurements for the calendar year 1902, by F. H. Newell, Part IV, Interior Basin, Pacific coast, and Hudson Bay drainage. 1903. 250 p.
- *86. Storage reservoirs on Stony Creek, Calif., by Burt Cole. 1903. 62 p.
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- *92. The Passaic flood of 1903, by M. O. Leighton. 1904. 48 p.
- *93. Proceedings of first conference of engineers of the Reclamation Service, with accompanying papers, compiled by F. H. Newell, chief engineer. 1904. 361 p.
Contains: Chief engineer's address, by F. H. Newell, 1904, p. 21-116, and papers read at the conference, among others the following: Topographic work in the Grand Canyon of the Gunnison, by I. W. McConnell, 1904, p. 162-167; Colorado River, by J. B. Lippincott, 1904, p. 168-172; Relation of Federal and State laws to irrigation, by Morris Bien, 1904, p. 232-237; Electrical transmission of power for pumping, by H. A. Storrs, 1904, p. 237-240; The use of alkaline waters for irrigation, by T. H. Means, 1904, p. 255-258; Portland cement manufacture, by E. C. Eckel, 1904, p. 284-296,

- *94. Hydrographic manual of the United States Geological Survey, prepared by E. C. Murphy, J. C. Hoyt, and G. B. Hollister. 1904. 76 p.
- *95. Accuracy of stream measurements (second, enlarged edition), by E. C. Murphy. 1904. 169 p.
- *96. Destructive floods in the United States in 1903, by E. C. Murphy. 1904. 81 p.
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- *97. Report of progress of stream measurements for the calendar year 1903, by J. C. Hoyt, Part I, Northern Atlantic, St. Lawrence River, and Great Lakes drainage. 1904. 518 p.
- *98. Report of progress of stream measurements for the calendar year 1903, by J. C. Hoyt, Part II, Southern Atlantic, eastern Gulf of Mexico, and eastern Mississippi River drainage. 1904. 313 p.
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- *103. A review of the laws forbidding pollution of inland waters in the United States, by E. B. Goodell. 1904. 120 p. (See also Water-Supply Paper 152.)
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- *111. Preliminary report on the underground waters of Washington, by Henry Landes. 1905. 85 p.
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- *115. River surveys and profiles made during 1903, arranged by W. C. Hall and J. C. Hoyt. 1905. 115 p.
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- *125. Report of progress of stream measurements for the calendar year 1904, Part II, Hudson, Passaic, Raritan, and Delaware River drainages, by R. E. Horton, N. C. Grover, and J. C. Hoyt. 1905. 114 p.
- *126. Report of progress of stream measurements for the calendar year 1904, Part III, Susquehanna, Patapsco, Potomac, James, Roanoke, Cape Fear, and Yadkin River drainages, by N. C. Grover and J. C. Hoyt. 1905. 125 p.
- *127. Report of progress of stream measurements for the calendar year 1904, Part IV, Santee, Savannah, Ogeechee, and Altamaha Rivers and eastern Gulf of Mexico drainages, by M. R. Hall and J. C. Hoyt. 1905. 192 p.
- *128. Report of progress of stream measurements for the calendar year 1904, Part V, Eastern Mississippi River drainage, by M. R. Hall, Edward Johnson, Jr., and J. C. Hoyt. 1905. 168 p.
- *129. Report of progress of stream measurements for the calendar year 1904, Part VI, Great Lakes and St. Lawrence River drainage, by R. E. Horton, Edward Johnson, Jr., and J. C. Hoyt. 1905. 150 p.
- *130. Report of progress of stream measurements for the calendar year 1904, Part VII, Hudson Bay and Minnesota, Wapsipinicon, Iowa, Des Moines, and Missouri River drainages, by C. C. Babb and J. C. Hoyt. 1905. 204 p.
- *131. Report of progress of stream measurements for the calendar year 1904, Part VIII, Platte, Kansas, Meramec, Arkansas, and Red River drainages, by M. C. Hinderlider and J. C. Hoyt. 1905. 203 p.
- *132. Report of progress of stream measurements for the calendar year 1904, Part IX, Western Gulf of Mexico and Rio Grande drainages, by T. U. Taylor and J. C. Hoyt. 1905. 132 p.
- *133. Report of progress of stream measurements for the calendar year 1904, Part X, Colorado River and Great Basin drainage, by M. C. Hinderlider, G. L. Swendsen, and A. E. Chandler. 1905. 384 p.
- *134. Report of progress of stream measurements for the calendar year 1904, Part XI, The Great Basin and Pacific Ocean drainage in California, by W. B. Clapp. 1905. 276 p.
- *135. Report of progress of stream measurements for the calendar year 1904, Part XII, Columbia River and Puget Sound drainage, by D. W. Ross, J. T. Whistler, and T. A. Noble. 1905. 300 p.
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- *137. Development of underground waters in the eastern coastal-plain region of southern California, by W. C. Mendenhall. 1905. 140 p.
- *138. Development of underground waters in the central coastal-plain region of southern California, by W. C. Mendenhall. 1905. 162 p.
- *139. Development of underground waters in the western coastal-plain region of southern California, by W. C. Mendenhall. 1905. 105 p.
- *140. Field measurements of the rate of movement of underground waters, by C. S. Slichter. 1905. 122 p.
- *141. Observations on the ground waters of Rio Grande valley, by C. S. Slichter. 1905. 83 p.
- *142. The hydrology of San Bernardino Valley, Calif., by W. C. Mendenhall. 1905. 124 p.

- *143. Experiments on steel-concrete pipes on a working scale, by J. H. Quinton, 1905, 61 p.
- *144. The normal distribution of chlorine in the natural waters of New York and New England, by D. D. Jackson, 1905, 31 p.
- *145. Contributions to the hydrology of eastern United States, 1905; M. L. Fuller, geologist in charge, 1905, 220 p.
Contains: Hydrologic work in eastern United States and publications on ground waters, 1905, p. 9-29; The drainage of ponds into drilled wells, by R. E. Horton, 1905, p. 30-39; Two unusual types of artesian flow, by M. L. Fuller, 1905, p. 40-45; Construction of so-called fountain and geyser springs, by M. L. Fuller, 1905, p. 46-50; A convenient gage for determining low artesian heads, by M. L. Fuller, 1905, p. 51-52; Water resources of the Catatonk area, N. Y., by E. M. Kindle, 1905, p. 53-57; Water resources of the Pawpaw and Hancock quadrangles, W. Va., Md., and Pa., by G. W. Stose and G. C. Martin, 1905, p. 58-63; Water resources of the Nicholas quadrangle, W. Va., by G. H. Ashley, 1905, p. 64-66; Water resources of the Mineral Point quadrangle, Wis., by U. S. Grant, 1905, p. 67-73; Water resources of the Joplin district, Mo.-Kans., by W. S. T. Smith, 1905, p. 74-83; Water resources of the Winslow quadrangle, Ark., by A. H. Purdue, 1905, p. 84-87; Water resources of the contact region between the Paleozoic and Mississippian embayment deposits in northern Arkansas, by A. H. Purdue, 1905, p. 88-119; Water resources of the Portsmouth-York region, N. H. and Maine, by G. O. Smith, 1905, p. 120-128; A ground-water problem in southeastern Michigan, by M. L. Fuller, 1905, p. 129-147; Water supplies at Waterloo, Iowa, by W. H. Norton, 1905, p. 148-155; Water supply from glacial gravels near Augusta, Maine, by G. O. Smith, 1905, p. 156-160; Water supply from the delta type of sand plain, by W. O. Crosby, 1905, p. 161-178; Waters of a gravel-filled valley near Tully, N. Y., by G. B. Hollister, 1905, p. 179-184; Notes on certain hot springs of the southern United States, by W. H. Weed, 1905, p. 185-206; Notes on certain large springs of the Ozark region, Mo. and Ark., compiled by M. L. Fuller, 1905, p. 207-210; Report index, 1905, p. 211-220.
- *146. Proceedings of second conference of engineers of the Reclamation Service, with accompanying papers, compiled by F. H. Newell, chief engineer, 1905, 267 p.
Contains, among other papers: Proposed State code of water laws, by Morris Bien, 1905, p. 29-34; Power engineering applied to irrigation problems, by O. H. Ensign, 1905, p. 37-42; Estimates on tunneling in irrigation projects, by A. L. Fellows, 1905, p. 42-48; Pumping underground water in southern California, by F. C. Finkle, 1905, p. 56-72; Collection of stream-gaging data, by N. C. Grover, 1905, p. 72-74; Rio Grande project, by B. M. Hall, 1905, p. 75-78; Diamond-drill methods, by G. A. Hammond, 1905, p. 78-80; Mean-velocity and area curves, by F. W. Hanna, 1905, p. 80-87; Importance of general hydrographic data concerning basins of streams gaged, by R. E. Horton, 1905, p. 87-89; Effect of aquatic vegetation on stream flow, by R. E. Horton, 1905, p. 89-90; Klamath project, by J. B. Lippincott, 1905, p. 95-102; Necessity of draining irrigated land, by T. H. Means, 1905, p. 106-108; Alkali soils, by T. H. Means, 1905, p. 108-113; Underground waters of southern California, by W. C. Mendenhall, 1905, p. 113-121; Cost of stream-gaging work, by E. C. Murphy, 1905, p. 121-123; Equipment of a cable-gaging station, by E. C. Murphy, 1905, p. 124-126; Silting of reservoirs, by W. M. Reed, 1905, p. 126-128; Cost of power for pumping irrigating water, by H. A. Storrs, 1905, p. 131-138; Records of flow at current-meter gaging stations during the frozen season, by F. H. Tillinghast, 1905, p. 141-148; List of technical papers by members of the Reclamation Service, 1905, p. 256-261; Report index, 1905, p. 263-267.
- *147. Destructive floods in the United States in 1904, by E. C. Murphy and others, 1905, 206 p.
Contains: Introduction, 1905, p. 11-12; Sacramento River flood, Calif., from report of S. G. Bennett, 1905, p. 12-22; Susquehanna River flood, Pa., by E. C. Murphy, 1905, p. 22-32; Mohawk River flood, N. Y., from report of R. E. Horton, 1905, p. 32-40; Grand River flood, Mich., from report of R. E. Horton, 1905, p. 40-45; Wabash River flood, Ind., by F. W. Hanna, 1905, p. 45-54; Belle Fourche River flood, S. Dak., from report of R. F. Walter, 1905, p. 55-59; Kansas floods, by E. C. Murphy, 1905, p. 59-113; Pennsylvania floods, by E. C. Murphy, 1905, p. 113-115; Troxton Canyon flood, Ariz., by E. C. Murphy, 1905, p. 115-118; Globe flood, Ariz., by O. T. Reedy, 1905, p. 118-120; Canadian River basin flood, N. Mex., Okla., and Indian Territory, from report of F. S. Dobson and G. B. Monk, 1905, p. 120-130; Pecos River basin flood, N. Mex., from report of F. S. Dobson, 1905, p. 130-141; Failures of Lake Avalon dam near Carlsbad, N. Mex., by E. C. Murphy, 1905, p. 141-143; Rio Grande floods, N. Mex., by E. C. Murphy, 1905, p. 143-150; Floods in the Denver district, by M. C. Hinderlider and assistants, 1905, p. 150-171; Floods due to failure of dams and reservoir walls, by E. C. Murphy, 1905, p. 172-173; Drought in Ohio River drainage basin, by E. C. Murphy, 1905, p. 173-182; A method of computing cross-section area of waterways by E. C. Murphy, 1905, p. 183-192; General summary, 1905, p. 192-193; Report index, p. 195-206.
- *148. Geology and water resources of Oklahoma, by C. N. Gould, 1905, 178 p.
- *149. Preliminary list of deep borings in the United States (second edition, with additions), by N. H. Darton, 1905, 175 p.
- *150. Weir experiments, coefficients, and formulas, by R. E. Horton, 1906, 189 p. (See also Water-Supply Paper 200.)
- *151. Field assay of water, by M. O. Leighton, 1905, 77 p.
- *152. A review of the laws forbidding pollution of inland waters in the United States (second edition), by E. B. Goodell, 1905, 149 p.
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- *368. Profile surveys in Wenatchee River basin, Wash., prepared under the direction of R. B. Marshall, chief geographer, 1914, 7 p.
- *369. Water powers of the Cascade Range, Part III, Yakima River basin, by G. L. Parker and F. B. Storey, 1915 [1916], 169 p.
- *370. Surface water supply of Oregon, 1878-1910, by F. F. Henshaw and H. J. Dean, 1915, 829 p.
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- *373. Water resources of Hawaii, 1913, by G. K. Larrison, 1915, 190 p. See also Table 4.
- *374. Ground water in the Hartford, Stamford, Salisbury, Willimantic, and Saybrook areas, Conn., by H. E. Gregory and A. J. Ellis, 1916, 150 p.
- *375-A. Ground water for irrigation in the Sacramento Valley, Calif., by Kirk Bryan, 1916, p. 1-49.
- *375-B. Ground water in Paradise Valley, Ariz., by O. E. Meinzer and A. J. Ellis, 1916, p. 51-75.
- *375-C. The relation of stream gaging to the science of hydraulics, by C. H. Pierce and R. W. Davenport, 1916, p. 77-84.
- *375-D. Ground water in Big Smoky Valley, Nev., by O. E. Meinzer, 1916, p. 85-116.

- *375-E. A method of correcting river discharge for a changing stage, by Benjamin E. Jones, 1915.
- *375-F. Conditions requiring the use of automatic gages in obtaining records of stream flow, by C. H. Pierce, 1916, p. 131-139.
- *375-G. Ground water in Lasalle and McMullen Counties, Tex., by Alexander Deussen and R. B. Dole, 1916, p. 141-177; Index, 1916, p. 179-181.
(Water-Supply Paper 375 was issued as one volume, Contributions to the hydrology of the United States, 1915, and also as separate chapters.)
- *376. Profile surveys in Chelan and Methow River basins, Wash., prepared under the direction of R. B. Marshall, chief geographer. 1915. 8 p.
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- *381-394. Surface water supply of the United States, 1914. See Table 4.
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- *400-E. Ground water for irrigation in the Morgan Hill area, Calif., by W. O. Clark, 1917, p. 61-105; Index, 1917, p. 107-108.
(Water-Supply Paper 400 was issued as one volume, Contributions to the hydrology of the United States, 1916, and also as separate chapters.)
- *401-414. Surface water supply of the United States, 1915. See Table 4.
- *415. Surface waters of Massachusetts, by C. H. Pierce and H. J. Dean. 1916. 433 p.
- *416. The diving rod, a history of water witching, with a bibliography, by A. J. Ellis. 1917. 59 p. [Reprints, additions on p. 6, 1934, 1938, 1952, 1957.] 30c.
- *417. Profile surveys of rivers in Wisconsin, prepared under the direction of W. H. Herron, acting chief geographer. 1916 [1917]. 16 p.
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- *424. Surface waters of Vermont, by C. H. Pierce. 1917. 218 p.
- *425-A. Ground water in San Simon Valley, Ariz., and N. Mex., by A. T. Schwennessen, 1919, p. 1-28, with a section on agriculture, by R. H. Forbes, 1919, p. 29-35.
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- *425-C. Hydraulic conversion tables and convenient equivalents, 1919, p. 71-94.
- *425-D. Ground water in Reese River basin and adjacent parts of Humboldt River basin, Nev., by G. A. Waring, 1919, p. 95-129.
- *425-E. Ground water in Quincy Valley, Wash., by A. T. Schwennessen and O. E. Meinzer, 1919, p. 131-161, i-iv (including title page, contents, list of illustrations, and index to volume).
(Water-Supply Paper 425 was issued as one volume, Contributions to the hydrology of the United States, 1917, and also as separate chapters.)
- *426. Southern California floods of January 1916, by H. D. McGlashan and F. C. Ebert. 1918. 80 p.
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- *429. Ground water in the San Jacinto and Temecula basins, Calif., by G. A. Waring. 1919. 113 p.
- *430. Surface water supply of Hawaii, July 1, 1913, to June 30, 1915. See Table 4.
- *431-445. Surface water supply of the United States and Hawaii, 1916. See Table 4.
- *446. Geology and ground waters of the western part of San Diego County, Calif., by A. J. Ellis and C. H. Lee. 1919. 321 p.
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- *450-B. Ground water in Lanfair Valley, Calif., by D. G. Thompson, 1921, p. 29-50.
- *450-C. Ground water in Pahrump, Mesquite, and Ivanpah valleys, Nev. and Calif., by G. A. Waring, 1921, p. 51-86, i-iv (including title page, contents, list of illustrations, and index to volume). (Water-Supply Paper 450 was issued as one volume, Contributions to the hydrology of the United States, 1919, and also as separate chapters.)
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- *466. Ground water in the Southington-Granby area, Conn., by H. S. Palmer. 1921. 219 p.
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- *490-B. Routes to desert watering places in the Mohave Desert region, Calif., by D. G. Thompson. 1921. p. 87-269.
- *490-C. Routes to desert watering places in the lower Gila region, Ariz., by C. P. Ross. 1922. p. 271-315.
- *490-D. Routes to desert watering places in the Papago country, Ariz., by Kirk Bryan. 1922. p. 317-429. (Water-Supply Paper 490, issued only as separate chapters under the general title, Routes to desert watering places in California and Arizona.)
- *491. Water supply of St. Mary and Milk rivers, 1898-1917, by B. E. Jones and R. J. Burley. 1920. 590 p.
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- *497. The Salton Sea region, Calif., a geographic, geologic, and hydrologic reconnaissance, with a guide to desert watering places, by J. S. Brown. 1923. 292 p.
- *498. The lower Gila region, Ariz., a geographic, geologic, and hydrologic reconnaissance, with a guide to desert watering places, by C. P. Ross. 1923. 237 p.
- *499. The Papago country, Ariz., a geographic, geologic, and hydrologic reconnaissance with a guide to desert watering places, by Kirk Bryan. 1925. 436 p.
- *500-A. Coeur d'Alene Lake, Idaho, and the overflow lands, by R. W. Davenport. 1922, p. 1-31.
- *500-B. Ground water for irrigation near Gage, Ellis County, Okla., by D. G. Thompson. 1922, p. 33-53.
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- *517. Water powers of the Great Salt Lake basin, by R. R. Woolley, with an introduction by N. C. Grover. 1924. 270 p.
- *518. Ground water in Musselshell and Golden Valley Counties, Mont., by A. J. Ellis and O. E. Meinzer. 1924. 92 p.
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- *520-F. Temperature of water available for industrial use in the United States, by W. D. Collins, 1925, p. 97-104.
- *520-G. Some floods in the Rocky Mountain region, by Robert Follansbee and P. V. Hodges, 1925, p. 105-129, i-iv (including title page, contents, list of illustrations, and index to volume). (Water-Supply Paper 520 was issued as one volume, Contributions to the hydrology of the United States, 1923-1924, and also as separate chapters.)
- *521-535. Surface water supply of the United States and Hawaii, 1921. See Table 4.
- *536. Surface water supply of the New-Kanawha River basin, W. Va., Va., and N. C.; N. C. Grover, chief hydraulic engineer; A. H. Horton and G. C. Stevens, district engineers. 1925. 282 p.
- 537. A study of coastal ground water, with special reference to Connecticut, by J. S. Brown. 1925. 101 p. [Reprinted.] 60c.
- *538. The San Juan Canyon, southeastern Utah, a geographic and hydrographic reconnaissance, by H. D. Miser. 1924. 80 p.
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- *540. Ground water in the New Haven area, Conn., by J. S. Brown. 1928. 206 p.
- *541-555. Surface water supply of the United States and Hawaii, 1922. See Table 4.
- *556. Water power and flood control of Colorado River below Green River, Utah, by E. C. La Rue, with a foreword by Hubert Work, Secretary of the Interior, 1925, p. 1-100. [Appendix A, A report on water supply by E. C. La Rue and G. F. Holbrook, 1925, p. 101-123; and Appendix B, A geologic report on the inner gorge of the Grand Canyon of Colorado River by R. C. Moore, 1925, p. 125-171; Index, 1925, p. 173-176].
- *557. Large springs in the United States, by O. E. Meinzer. 1927. 94 p.
- *558. Preliminary index to river surveys made by the United States Geological Survey and other agencies, by B. E. Jones and R. O. Helland, 1926. 108 p. (See also Water-Supply Paper 995.)
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- *560-C. Index of analyses of natural waters in the United States, by W. D. Collins and C. S. Howard, 1926, p. 53-85.
- *560-D. Preliminary report on the geology and water resources of the Mud Lake basin, Idaho, by H. T. Stearns and L. L. Bryán, 1926, p. 87-134, i-iv, i-iii (including title page, contents, list of illustrations, and index to volume). (Water-Supply Paper 560 was issued as one volume, Contributions to the hydrology of the United States, 1925, and also as separate chapters.)
- *561-575. Surface water supply of the United States and Hawaii, 1923. See Table 4.
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- *580-B. Water power and irrigation in the Jefferson River basin, Mont., by J. F. Deeds and W. N. White, 1927, p. 41-116, i-ii (including title page, contents, list of illustrations, and index to volume). (Water-Supply Paper 580 was issued as one volume, Contributions to the hydrology of the United States, 1926, and also as separate chapters.)
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- *596-A. Methods of exploring and repairing leaky artesian wells: Preface, by O. E. Meinzer, 1928, p. 1-3; Methods of exploring and repairing leaky artesian wells on the island of Oahu, Hawaii, by John McCombs, 1928, p. 4-24; The Au deep-well current meter and its use in the Roswell artesian basin, N. Mex., by A. G. Fiedler, 1928, p. 24-32.
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- *596-H. Notes on practical water analysis, by W. D. Collins, 1928, p. 235-266, i-v (including title page, contents, list of illustrations, and index to volume). [Two reprints differ slightly from the original. Reprint in 1937 omits volume title page. Reprint in 1945 omits volume title page and volume index; it includes as p. 262, "Correction for determination of nitrate."]

- (Water-Supply Paper 596 was issued as one volume, Contributions to the hydrology of the United States, 1927, and also as separate chapters.)
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 - *597-B. A study of ground water in the Pomperaug basin, Conn., with special reference to intake and discharge, by O. E. Meinzer and N. D. Stearns, 1929, p. 73-146.
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 - *597-D. Geology and water resources of the upper McKenzie Valley, Oreg., by H. T. Stearns, 1929, p. 171-188.
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 - *636-B. Suspended matter in the Colorado River in 1925-1928, by C. S. Howard, 1930, p. 15-44.
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 - *636-F. Water-power resources of the Umpqua River and its tributaries, Oreg., by B. E. Jones and H. T. Stearns, 1930, p. 221-330, i-v (including title page, contents, list of illustrations, and index to volume). (Water-Supply Paper 636 was issued as one volume, Contributions to the hydrology of the United States, 1929, and also as separate chapters.)
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 - *637-B. Preliminary report on the ground-water supply of Mimbres Valley, N. Mex., by W. N. White, 1931, p. 69-90.
 - *637-C. Water-power resources of the McKenzie River and its tributaries, Oreg., by B. E. Jones and H. T. Stearns, 1931, p. 91-124.
 - *637-D. Geology and water resources of the middle Deschutes River Basin, Oreg., by H. T. Stearns, 1931, p. 125-220, i-iv (including title page, contents, list of illustrations, and index to volume). (Water-Supply Paper 637 was issued as one volume, Contributions to the hydrology of the United States, 1930, and also as separate chapters.)
 - *638-A. A preliminary report on the artesian water supply of Memphis, Tenn., by F. G. Wells, 1932, p. 1-34.
 - *638-B. Water-power resources of the Rogue River drainage basin, Oreg., by B. E. Jones, Warren Oakey, and H. T. Stearns, 1932, p. 35-97.
 - *638-C. Outline of methods for estimating ground-water supplies, by O. E. Meinzer, 1932, p. 99-144, 20c.
 - *638-D. Quality of water of the Colorado River in 1928-1930, by C. S. Howard, 1932, p. 145-162, i-v (including title page, contents, list of illustrations, and index to volume). (Water-Supply Paper 638 was issued as one volume, Contributions to the hydrology of the United States, 1931, and also as separate chapters.)
 - *639. Geology and ground-water resources of the Roswell artesian basin, N. Mex., by A. G. Fiedler and S. S. Nye, 1933, 372 p.
 - *640. Ground water in north-central Tennessee, by A. M. Piper, 1932, 238 p.
 - *641-655. Surface water supply of the United States and Hawaii, 1927. See Table 4.
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 - *658. The industrial utility of public water supplies in the United States, 1932, by W. D. Collins, W. L. Lamar, and E. W. Lohr, 1934, 135 p. [Superseded by Water-Supply Papers 1299 and 1300.]

- *659-A. A method of estimating ground-water supplies based on discharge by plants and evaporation from soil--results of investigations in Escalante Valley, Utah, by W. N. White, 1932, p. 1-105.
- *659-B. Geology and ground-water resources of The Dalles region, Oreg., by A. M. Piper, 1932, p. 107-189.
- *659-C. Index of analyses of natural waters in the United States, 1926 to 1931, by W. D. Collins and C. S. Howard, 1932, p. 191-209, i-v (including title page, contents, list of illustrations, and index to volume).
(Water-Supply Paper 659 was issued as one volume, Contributions to the hydrology of the United States, 1932, and also as separate chapters.)
- *660. Artesian water in Somervell County, Tex., by A. G. Fiedler. 1934 [1935]. 86 p.
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- *676. Geology and ground-water resources of Atascosa and Frio Counties, Tex., by J. T. Lonsdale. 1935. 90 p.
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- *679-B. Thermal springs in the United States, by N. D. Stearns, H. T. Stearns, and G. A. Waring. 1937. p. 59-206, i-iv. [Includes title page, contents, list of illustrations, and index to volume.]
(Water-Supply Paper 679, issued only as separate chapters under the general title, Contributions to the hydrology of the United States, 1935.)
- *680. Droughts of 1930-34, by J. C. Hoyt. 1936, 106 p.
- *681-695. Surface water supply of the United States and Hawaii, 1929. See Table 4.
- *696-710. Surface water supply of the United States, 1930. See Table 4.
- *711-725. Surface water supply of the United States, 1931. See Table 4.
- *726-740. Surface water supply of the United States, 1932. See Table 4.
- *741-755. Surface water supply of the United States, 1933. See Table 4.
- *756-770. Surface water supply of the United States, 1934. See Table 4.
- *771. Floods in the United States, magnitude and frequency, by C. S. Jarvis and others. 1936, 497 p.
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- *773-C. Artesian water in the Florida peninsula, by V. T. Stringfield, 1936, p. 115-195.
- *773-D. Ground-water resources of Kleberg County, Tex., by Penn Livingston and T. W. Bridges. 1936, p. 197-232.
- *773-E. The New York State flood of July 1935, by Hollister Johnson. 1936, p. 233-268.
*Title page, contents, list of illustrations, and index to volume. 1938, p. i-v, 269-278.
(Water-Supply Paper 773, issued only as separate chapters under the general title, Contributions to the hydrology of the United States, 1936.)
- *774. Geology and ground-water resources of the Snake River Plain in southeastern Idaho, by H. T. Stearns, Lynn Crandall, and W. G. Steward. 1938 [1939]. 268 p.
- *775. Records of wells on the Snake River Plain, southeastern Idaho, by H. T. Stearns, Lynn Crandall, and W. G. Steward. 1936, 139 p.
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- *777. Water levels and artesian pressure in observation wells in the United States in 1935. See Table 2.
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- *796-E. Ground water in Avra-Altar Valley, Ariz., by D. A. Andrews. 1937, p. 163-180.

²The plan of issuing a consolidated volume for each of the series published first in chapters was abandoned in 1933.

- *796-F. Geology and ground-water resources of the valley of Gila River and San Simon Creek, Graham County, Ariz., by M. M. Knechtel, with a section on the Chemical character of the ground water, by E. W. Lohr. 1938. p. 181-222.
- *796-G. Major Texas floods of 1935, by Tate Dalrymple and others. 1939. p. 223-290. [Includes title page, contents, list of illustrations, and index for volume.]
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- *799. The floods of March 1936, part 2, Hudson River to Susquehanna River region; N. C. Grover, chief hydraulic engineer. 1937 [1938]. 380 p.
- *800. The floods of March 1936, part 3, Potomac, James, and upper Ohio Rivers, N. C. Grover, chief hydraulic engineer; with a section on the Weather associated with the floods of March 1936, by Stephen Lichtblau. 1937 [1938]. 351 p.
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Flood deposits of the Ohio River, January-February 1937, a study of sedimentation, by G. R. Mansfield. 1939. p. 693-736. [Reprinted from Water-Supply Paper 838.]
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 - *866-C. Part 3, Miscellaneous dam sites on the Flathead River upstream from Columbia Falls, Mont., by C. E. Erdmann. 1947. p. 117-219, i-iv. [Includes title page, contents, and list of illustrations for volume.]
- (Water-Supply Paper 866, issued only as separate chapters under the general title, Geology of dam sites on the upper tributaries of the Columbia River in Idaho and Montana.)
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 - *874. Summary of yearly discharge at gaging stations in St. Lawrence River Basin. 1940 [1941]. p. 183-212.
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- *1079-D. Ground-water resources of the Republic of El Salvador, Central America, by A. N. Sayre and G. C. Taylor, Jr. 1951. p. 155-225. [Includes title page, contents, and list of illustrations for volume.]
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1470. Geology and ground water features of the Eureka area, Humboldt County, Calif., by R. E. Evenson. 1959. 80 p. \$1.
1471. Hydrology of the Long Beach-Santa Ana area, California, with special reference to the watertightness of the Newport-Inglewood structural zone, by J. F. Poland, with a section on Withdrawal of ground water, 1932-41, by Allen Sinnott and J. F. Poland. 1959. 257 p. \$2.25.
1472. Hydrologic budget of the Beaverdam Creek basin, Maryland, by W. C. Rasmussen and G. E. Andreasen. 1959. 106 p. \$1.50.
1473. Study and interpretation of the chemical characteristics of natural water, by J. D. Hem. 1959. 269 p. \$1.50.
1474. Geology and ground-water resources of the Big Blue River basin above Crete, Nebr., by C. R. Johnson and C. F. Keech, with a section on Chemical quality of the water, by Robert Brennan. 1959. 94 p. 75c.
- 1475-A. Hydrologic data, Wind River and Fifteen Mile Creek basins, Wyoming, 1947-54, by N. J. King. 1959. p. 1-44. \$1.
- 1475-B. Hydrology of Cornfield Wash, Sandoval County, N. Mex., 1951-55, by F. W. Kennon and H. V. Peterson. 1960. p. 45-103. 55c.
- 1475-C. Geology in relation to availability of water along the south rim, Grand Canyon National Park, Ariz., by D. G. Metzger. 1961. p. 105-138. 65c.
- 1475-D. Geology and occurrence of ground water at Jewel Cave National Monument, S. Dak., by C. F. Dyer. 1961. p. 139-157. 15c.
- 1475-E. Ground water in the western part of Cow Creek and Soldier Creek grazing units, Malheur County, Ore., by R. C. Newcomb. 1961. p. 159-172. 15c.
(Water-Supply Paper 1475, issued only as separate chapters under the general title, Hydrology of the public domain. Each chapter contains its own index.)
- *1476. Investigations of sediment transportation, Middle Loup River at Dunning, Nebr., with application of data from turbulence flume, by D. W. Hubbell and D. Q. Matejka. 1959. 123 p.
1477. Annotated bibliography on artificial recharge of ground water through 1954, by D. K. Todd. 1959. 115 p. 50c.
1478. Ground-water resources of the middle Big Wood River-Silver Creek area, Blaine County, Idaho, by R. O. Smith. 1959. 64 p. \$1.75.
1479. Geohydrologic evaluation of streamflow records in the Big Wood River basin, Idaho, by R. O. Smith. 1960. 68 p. \$1.
1480. Evaporation control research, 1955-58, by R. R. Cruse and G. E. Harbeck, Jr. 1960. 45 p. 50c.
1481. Geology and ground-water resources of the Winter Garden district, Texas, 1948, by S. F. Turner, T. W. Robinson, and W. N. White. Revised by D. E. Outlaw, W. O. George, and others. 1960. 247 p. \$2.
1482. Geology and ground water resources of the Gallatin Valley, Gallatin County, Mont., by O. M. Hackett, F. N. Visser, R. G. McMurtrey, and W. L. Steinhilber, with a section on Surface-water, by Frank Stermitz and F. C. Boner, and a section on Chemical quality of the water, by R. A. Krieger. 1960. 282 p. \$3.50.
1483. Geology and ground-water resources of the upper Lodgepole Creek drainage basin, Wyoming, by L. J. Bjorklund, with a section on Chemical quality of the water, by R. A. Krieger and E. R. Jochens. 1959. 40 p. 75c.
1484. Geology and ground-water features of Shasta Valley, Siskiyou County, Calif., by Seymour Mack. 1960. 115 p. \$1.50.
1485. Quality of surface waters for irrigation, Western United States, 1956. 1960. 185 p. 75c. See Table 7.
- *1486. Quantity and quality of surface waters of Alaska, October 1953 to September 1956. 1958 [1959]. 229 p. See Tables 1 and 5.
1487. Geology and ground-water resources of the lower Little Bighorn River Valley, Big Horn County, Mont., with special reference to the drainage of waterlogged lands, by E. A. Moulder, M. F. Klug,

- D. A. Morris, and F. A. Swenson, with a section on Chemical quality of the water, by R. A. Krieger. 1960. 223 p. \$3.
1488. The geology and ground water resources of Calcasieu Parish, La., by A. H. Harder. 1960. 102 p. \$2.50.
1489. Geology and ground water in the Platte-Republican Rivers watershed and the Little Blue River basin above Angus, Nebr., by C. R. Johnson, with a section on Chemical quality of the ground water, by Robert Brennan, 1960. 142 p. \$1.25.
1490. Geology and ground-water resources of Platte County, Wyo., by D. A. Morris and H. M. Babcock, with a section on Chemical quality of the water, by R. H. Langford, 1960 [1961]. 195 p. \$2.75.
1491. Geology and ground-water features of the Butte Valley region, Siskiyou County, Calif., by P. P. Wood, 1960 [1961]. 150 p. \$2.
1492. Bibliography of publications relating to ground water prepared by the Geological Survey and cooperating agencies, 1946-55, by R. C. Vorhis. 1957. 203 p. 60c.
1493. Geologic and ground-water reconnaissance of the Loup River drainage basin, Nebraska, by R. T. Sniegocki, with a section on Chemical quality of the water, by R. H. Langford. 1959 [1960]. 106 p. \$1.
1494. Geology and ground-water resources of the Matanuska Valley agricultural area, Alaska, by F. W. Trainer, 1960. 116 p. \$1.25. [Supersedes Circular 268.]
1495. Geology and ground water in Napa and Sonoma Valleys, Napa and Sonoma Counties, Calif., by Fred Kunkel and J. E. Upson, 1960. 252 p. \$2.25.
- 1496-A. A survey of analytical methods for the determination of strontium in natural water, by C. A. Horr. 1959. p. 1-18. 15c.
- 1496-B. Copper-spark method for spectrochemical determination of strontium in water, by M. W. Skougstad. 1961. p. 19-31. 15c.
(Water-Supply Paper 1496, issued only as separate chapters under the general title, Chemistry of strontium in natural waters.)
1497. Geologic features and ground-water storage capacity of the Sacramento Valley, Calif., by F. H. Olmsted and G. H. Davis. 1961. 241 p. \$2.50.
- 1498-A. Flume studies using medium sand (0.45 mm), by D. B. Simons, E. V. Richardson, and M. L. Albertson. 1961. p. A1-A76. 30c.
- *1498-C. Depth-discharge relations of alluvial streams--discontinuous rating curves, by D. R. Dawdy. 1961. p. C1-C16.
- 1498-D. Effect of depth of flow on discharge of bed material, by B. R. Colby. 1961. p. D1-D12. 15c.
(Water-Supply Paper 1498, issued only as separate chapters under the general title, Studies of flow in alluvial channels.)
- 1499-A. Water resources of the Providence area, Rhode Island, by H. N. Halberg, C. E. Knox, and F. H. Pauszek. 1961. p. A1-A50. 65c.
(Water-Supply Paper 1499, issued only as separate chapters under the general title, Water resources of industrial areas.)
1500. Quantity and quality of surface waters of Alaska, 1957. 1960. 100 p. 45c. See Tables 1 and 5.
- 1501-1518. Surface water supply of the United States, 1957. See Table 5.
1519. Geology and ground-water resources of the Owl Creek area, Hot Springs County, Wyo., by D. W. Berry and R. T. Littleton. 1961. 58 p. 65c.
- 1520-1523. Quality of surface waters of the United States, 1957. See Table 1.
1524. Quality of surface waters for irrigation, Western United States, 1957. 1960. 183 p. \$1. See Table 7.
1526. Hydraulic and hydrologic aspects of flood-plain planning, by S. W. Wiltala, K. R. Jetter, and A. J. Sommerville. 1961. 69 p. \$2.
1527. Floods in the Skagit River basin, Washington, by J. E. Stewart and G. L. Bodhaine. 1961. 66 p. \$1.25.
1531. Hydrology of the upper Cheyenne River basin: Part A. Hydrology of stock-water reservoirs in upper Cheyenne River basin, by R. C. Culler; Part B. Sediment sources and drainage-basin characteristics in upper Cheyenne River basin, by R. F. Hadley and S. A. Schumm. 1961. 198 p. \$2.50.
1533. Reconnaissance of ground-water resources in the Blue Grass region, Kentucky, by W. H. Palmquist, Jr., and F. R. Hall. 1961. 39 p. \$1.
1534. Progress report on wells penetrating artesian aquifers in South Dakota, by R. W. Davis, C. F. Dyer, and J. E. Powell. 1961. 100 p. \$1.25.
- 1535-A. Ammoniated thermal waters of Lake and Colusa Counties, Calif., by C. E. Roberson and H. C. Whitehead. 1961. p. A1-A11. 15c.
- 1535-B. Geologic control of mineral composition of stream waters of the eastern slope of the southern Coast Ranges, Calif., by G. H. Davis. 1961. p. B1-B30. 20c.
- 1535-C. Calculation and use of ion activity, by J. D. Hem. 1961. p. C1-C17. 50c.
- 1535-D. Calcium carbonate saturation in ground water, from routine analyses, by William Back. 1961. p. D1-D14. 45c.
- 1535-E. Chemical degradation on opposite flanks of the Wind River Range, Wyo., by C. H. Hembree and F. H. Rainwater. 1961. p. E1-E9. 15c.
(Water-Supply Paper 1535, issued only as separate chapters under the general title, Geochemistry of water.)
- 1536-A. Borehole geophysical methods for analyzing specific capacity of multiaquifer wells, by G. D. Bennett and E. P. Patten, Jr. 1960. p. 1-25. 15c.
- 1536-B. Water levels near a well discharging from an unconfined aquifer, by Irwin Remson, S. S. McNeary, and J. R. Randolph. 1961. p. 27-39. 15c.
- 1536-C. A simple method for determining specific yield from pumping tests, by L. E. Ramsahoye and S. M. Lang. 1961. p. 41-46. 15c.

- (Water-Supply Paper 1536, issued only as separate chapters under the general title, Ground-water hydraulics.)
1537. Ground-water levels in the United States 1956-57. Northeastern States, 1960 [1961]. 144 p. 55c.
- 1539-A. Exploratory drilling for ground water in the Mountain Iron-Virginia area, St. Louis County, Minn., by R. D. Cotter and J. E. Rogers. 1961. p. A1-A13. \$1.
- 1539-B. Jet drilling in the Fairbanks area, Alaska, by D. J. Cederstrom and G. C. Tibbitts, Jr. 1961. p. B1-B28. 15c.
- 1539-C. Ground-water reconnaissance of Winnemucca Lake Valley, Pershing and Washoe Counties, Nev., by C. P. Zones. 1961. p. C1-C18. 45c.
- 1539-D. Correlation of ground-water levels and air temperatures in the winter and spring in Minnesota, by Robert Schneider. 1961. p. D1-D14. 15c.
- 1539-F. Aquifers in melt-water channels along the southwest flank of the Des Moines lobe, Lyon County, Minn., by Robert Schneider and H. G. Rodis. 1961. p. F1-F11. 15c.
- 1539-H. Ground-water resources of Olmsted Air Force Base, Middletown, Pa., by Harold Meisler and S. M. Longwill. 1961. p. H1-H34. 20c.
- 1539-I. Evaluation of bank storage along the Columbia River between Richland and China Bar, Wash., by R. C. Newcomb and S. G. Brown. 1961. p. I1-I13. 15c.
- 1539-R. Selected bibliography on evaporation and transpiration, by T. W. Robinson and A. I. Johnson. 1961. p. R1-R25. 15c.
- (Water-Supply Paper 1539, issued only as separate chapters under the general title, Contributions to the hydrology of the United States, 1960.)
- 1540-A. Residue method for common minor elements, by Joseph Haffty. 1960. p. 1-9. 15c.
- 1540-B. Concentration method for the spectrochemical determination of minor elements in water, by W. D. Silvey. 1961. p. 11-22. 15c.
- (Water-Supply Paper 1540, issued only as separate chapters under the general title, Spectrographic analysis of natural water.)
- 1541-A. General introduction and hydrologic definitions, by W. B. Langbein and K. T. Iseri. 1960. p. 1-29. 20c.
- 1541-B. Double-mass curves, by J. K. Searcy and C. H. Hardison, with a section, Fitting curves to cyclic data, by W. B. Langbein. 1960. p. 31-66. 20c.
- 1541-C. Graphical correlation of gaging-station records, by J. K. Searcy. 1960. p. 67-100. 50c.
- (Water-Supply Paper 1541, issued only as separate chapters under the general title, Manual of hydrology, part 1, General surface-water techniques.)
- *1542-A. Flow-duration curves, by J. K. Searcy. 1959. p. 1-33.
- (Water-Supply Paper 1542, issued only as separate chapters under the general title, Manual of hydrology, part 2, Low-flow techniques.)
- 1543-A. Flood-frequency analyses, by Tate Dalrymple. 1960. p. 1-80. 30c.
- 1543-B. Storage and flood routing, by R. W. Carter and R. G. Godfrey. 1960. p. 81-104. 15c.
- (Water-Supply Paper 1543, issued only as separate chapters under the general title, Manual of hydrology, part 3, Flood-flow techniques.)
- 1544-A. Filter-press method of extracting water samples for chloride analysis, by N. J. Lusczynski. 1961. p. A1-A8. 15c.
- (Water-Supply Paper 1544, issued only as separate chapters under the general title, General ground-water techniques.)
- 1545-A. Microtime measurements in aquifer tests on open-hole artesian wells, by G. G. Wyrick and E. O. Floyd. 1961. p. A1-A11. 15c.
- 1545-B. Methods for determining the proper spacing of wells in artesian aquifers, by S. M. Lang. 1961. p. B1-B16. 15c.
- (Water-Supply Paper 1545, issued only as separate chapters under the general title, Methods of aquifer tests.)
- 1551-1569. Surface water supply of the United States, 1958. See Table 5.
1570. Quantity and quality of surface waters of Alaska, 1958, 1960, 120 p. 50c. See Tables 1 and 5.
- 1576-C. Water-resources reconnaissance of Hoopa Valley, Humboldt County, Calif., by J. L. Poole. 1961. p. C1-C18. 15c.
- (Water-Supply Paper 1576, issued only as separate chapters under the general title, Water supply of Indian reservations.)
1581. Ground-water potentialities in the Crescent Valley, Eureka and Lander Counties, Nev., by C. P. Zones. 1961. 50 p. 50c.
- 1586-A. Water quality and hydrology in the Fort Belvoir area, Virginia, 1954-55, by C. N. Durfor. 1961. p. A1-A57. 25c.
- (Water-Supply Paper 1586, issued only as separate chapters under the general title, Hydrology of tidal streams.)
1587. Water resources of the Raft River basin, Idaho-Utah, by R. L. Nace and others. 1961. 138 p. \$2.25.
1589. Geology and the availability of water in the lower Bonita Creek area, Graham County, Ariz., by L. A. Heindl and R. A. McCullough. 1961. 56 p. 50c.
- 1591-A. Urban growth and the water regimen, by John Savini and J. C. Kammerer. 1961. p. A1-A43. 50c.
- (Water-Supply Paper 1591, issued only as separate chapters under the general title, Hydrologic effects of urban growth.)
- 1592-A. Resistance coefficients and velocity distribution, smooth rectangular channel, by H. J. Tracy and C. M. Lester. 1961. p. A1-A18. 15c.
- (Water-Supply Paper 1592, issued only as separate chapters under the general title, Laboratory studies of open-channel flow.)

1593. Simplified methods for computing total sediment discharge with the modified Einstein procedure, by B. R. Colby and D. W. Hubbell, 1961, 17 p. \$1.75.
- 1594-A. Artificial recharge through a well tapping basalt aquifers, Walla Walla area, Washington, by C. E. Price, 1961, p. A1-A33, 20c.
(Water-Supply Paper 1594, issued only as separate chapters under the general title, Artificial recharge of ground water.)
1602. Effect of reforestation on streamflow in central New York, by W. J. Schneider and G. R. Ayer, 1961, 61 p. 45c.
- 1608-A. Effects of phosphate mining on the ground water of Angaur, Palau Islands, Trust Territory of the Pacific Islands, by Ted Arnow, 1961, p. A1-A39, 20c.
(Water-Supply Paper 1608, issued only as separate chapters under the general title, Contributions to the hydrology of Asia and Oceania.)
- 1610-A. Waterpower resources of the Bradley River basin, Kenai Peninsula, Alaska, by F. A. Johnson, 1961, p. A1-A25, 50c.
(Water-Supply Paper 1610, issued only as separate chapters under the general title, Waterpower resources of the United States.)
- 1619-A. Hydrogeology of a spring in a glacial terrane near Ashland, Ohio, by S. E. Norris, 1961, p. A1-A17, 15c.
(Water-Supply Paper 1619, issued only as separate chapters under the general title, Contributions to the hydrology of the United States.)
- 1621-1639. Surface water supply of the United States, 1959. See Table 5.
1640. Quantity and quality of surface waters of Alaska, 1959, 1961, 114 p. 50c. See Tables 1 and 5.
- 1701-1720. Surface water supply of the United States, 1960. See Table 5.

Table 1. - Reports containing records of quality of surface waters of the United States, 1941-59
[The area included in each part is shown on the map, p. 184.]

Report year	Volume complete prior to 1947	Price	Parts 1-4	Price	Parts 5-6	Price	Parts 7-8	Price	Parts 9-14	Price	Alaska ¹	Price
1941-----	*942	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1942-----	*950	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1943-----	*970	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1944-----	*1022	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1945-----	*1030	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1946-----	1050	\$1.25	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1947-----	1102	1.50	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1948-----	-----	-----	² 1132	\$1.50	-----	-----	³ *1133	-----	-----	-----	-----	-----
1949-----	-----	-----	² 1162	2.00	-----	-----	³ *1163	-----	-----	-----	-----	-----
1950-----	-----	-----	1186	1.50	1187	\$1.50	1188	\$1.50	*1189	-----	-----	-----
1951-----	-----	-----	1197	1.25	1198	2.00	1199	1.75	*1200	-----	-----	-----
1952-----	-----	-----	1250	1.25	1251	1.50	*1252	-----	*1253	-----	*1466	-----
1953-----	-----	-----	1290	1.25	1291	1.25	1292	1.75	*1293	-----	-----	-----
1954-----	-----	-----	1350	1.50	1351	1.00	1352	1.75	*1353	-----	-----	-----
1955-----	-----	-----	1400	1.75	1401	1.00	1402	1.75	1403	1.50	*1486	-----
1956-----	-----	-----	1450	2.00	1451	1.25	1452	1.50	*1453	-----	-----	-----
1957-----	-----	-----	1520	2.00	1521	1.25	1522	1.75	*1523	-----	1500	\$0.45
1958-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1570	.50
1959-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1640	.50

¹ Contains data on quantity of water.

² Report includes parts 1-6.

³ Report includes parts 7-14.

* Asterisk indicates report is out of print.

Table 2. - Reports containing records of water levels and artesian pressure in observation wells in the United States, 1935-57

[Asterisk (*) indicates publication out of print. The area included in each part is listed below and shown on the map]

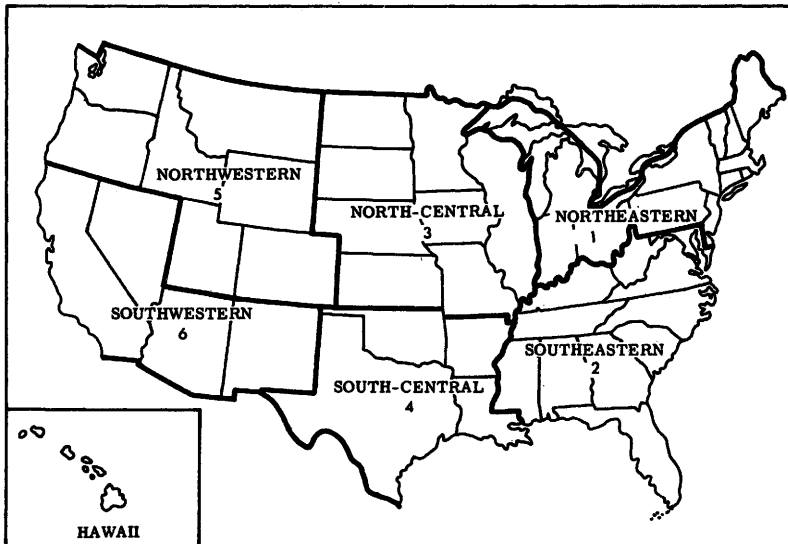
Report year	Part 1		Part 2		Part 3		Part 4		Part 5		Part 6	
	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price
1935 ¹ ---	*777	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1936 ¹ ---	*817	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1937 ¹ ---	*840	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1938 ¹ ---	*845	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1939 ¹ ---	*886	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1940---	*906	-----	*907	-----	*908	-----	*909	-----	*910	-----	*911	-----
1941---	*936	-----	*937	-----	*938	-----	*939	-----	*940	-----	*941	-----
1942---	*944	-----	*945	-----	*946	-----	*947	-----	*948	-----	*949	-----
1943---	*986	-----	*987	-----	*988	-----	*989	-----	*990	-----	*991	-----
1944---	*1016	-----	*1017	-----	*1018	-----	*1019	-----	*1020	-----	*1021	-----
1945---	*1023	-----	*1024	-----	*1025	-----	*1026	-----	*1027	-----	*1028	-----
1946---	*1071	-----	*1072	-----	*1073	-----	*1074	-----	*1075	-----	*1076	-----
1947---	*1096	-----	1097	\$0.60	1098	\$0.75	1099	\$0.45	1100	\$0.45	*1101	-----
1948---	1126	\$1.00	1127	.55	1128	.70	1129	.40	1130	.40	1131	\$0.65
1949---	1156	1.00	1157	.55	1158	1.00	1159	.55	*1160	-----	1161	.65
1950---	1165	1.00	1166	.65	1167	.50	1168	.40	1169	.35	1170	.65
1951---	1191	1.25	1192	1.00	1193	1.00	1194	.75	1195	.55	1196	1.00
1952---	1221	1.00	*1222	-----	1223	1.00	1224	.65	*1225	-----	*1226	-----
1953---	*1265	-----	1266	1.00	1267	1.00	1268	.75	1269	.65	*1270	-----
1954---	1321	1.25	1322	1.00	1323	.75	1324	1.00	1325	.60	1326	1.00
1955---	1404	1.00	*1405	-----	1406	1.00	1407	.75	1408	.60	1409	1.00
1956 ² ---	1537	.55	-----	-----	1456	.40	-----	-----	-----	-----	-----	-----
1957 ² ---			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

¹Parts were not designated before 1940.

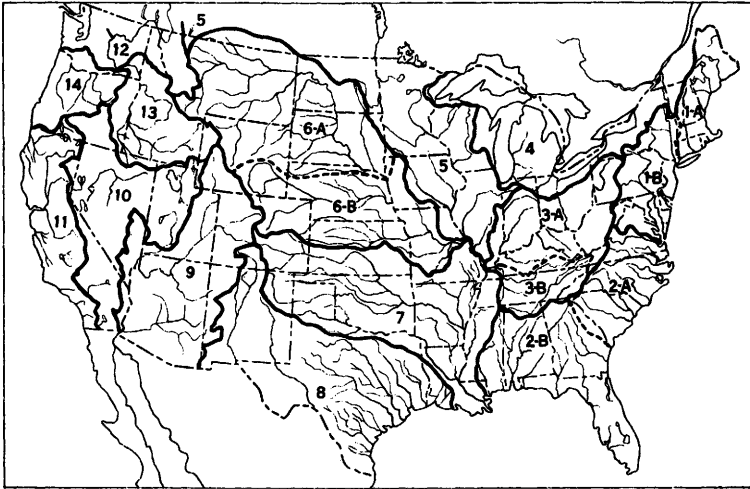
²Records of water levels are reported in Water-Supply Papers entitled, "Ground-Water Levels in the United States," in 6 parts or geographical sections of the country. Formerly an annual series, the current publication program provides for 5 years of record in 1 volume for each geographical section. The calendar years 1956 to 1960 span a transition period whereby 4 of the volumes will not contain 5 years of record. For example, Water-Supply Paper 1456 reports water levels in the North-Central States for 1956, and 1537 in the Northeastern States for 1956-57. Prior to their publication the data are made available for local use after the end of each calendar year.

Part 1. Northeastern States.
2. Southeastern States.
3. North-Central States.

4. South-Central States.
5. Northwestern States.
6. Southwestern States and Hawaii.



MAP SHOWING AREAS COVERED BY THE PARTS OF THE PERIODIC REPORTS ON WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES



MAP SHOWING AREAS COVERED BY THE PARTS OF THE PERIODIC REPORTS ON SURFACE WATER SUPPLY OF THE UNITED STATES, 1907-60, FOR 1951 AND SUBSEQUENT YEARS, PARTS 1, 2, 3, AND 6 HAVE BEEN DIVIDED INTO PARTS 1A AND 1B, 2A AND 2B, 3A AND 3B, 6A AND 6B, RESPECTIVELY. (SEE TABLES 4 AND 5.)

Table 3. - Reports containing records of stage and discharge of streams in the United States, 1901-6 [Out of print; can be consulted in many libraries. Discharge records in many of these reports are superseded by those in the compilation reports, table 6]

	1901 (No.)	1902 (No.)	1903 (No.)	1904 (No.)	1905 (No.)	1906 (No.)
Atlantic coast and eastern Gulf of Mexico:						
New England rivers - - - - -	65, 75	82	97	124	165	201
Hudson River to Delaware River, inclusive - - - - -	65, 75	82	97	125	166	202
Susquehanna River to York River, inclusive - - - - -	65, 75	82	97	126	167	203
James River to Yadkin River, inclusive - - - - -	65, 75	182, 83	197, 98	126	167	203
Santee River to Pearl River, inclusive - - - - -	65, 75	83	98	127	168	204
St. Lawrence River - - - - -	65, 75	282, 83	97	129	170	206
Hudson Bay - - - - -	66, 75	85	100	130	171	207
Mississippi River						
Ohio River - - - - -	65, 75	83	98	128	169	205
Upper Mississippi River - - - - -	65, 75	83	298, 99	3128, 130	171	207
Missouri River - - - - -	66, 75	84	99	130, 4131	172	208
Lower Mississippi River - - - - -	65, 75	383, 84	398, 99	3128, 131	3169, 173	3205, 209
Western Gulf of Mexico - - - - -	66, 75	84	99	132	174	210
Pacific coast and Great Basin:						
Colorado River - - - - -	66, 75	85	100	133	175, 5177	211, 5213
Great Basin - - - - -	66, 75, 300	85, 6300	6300, 7370	6300, 7370	6300, 7370	6300, 7370
South Pacific coast to Klamath River, inclusive - - - - -	8298, 6300	8298, 299, 6300	8298, 299, 6300	8298, 299, 6300	8298, 299, 6300	8298, 299, 6300
North Pacific coast - - - - -	66, 75, 7370	85, 7370	100, 7370	135, 7370	178, 7370	214, 7370

¹ James River.

² Lake Ontario and tributaries to St. Lawrence River proper.

³ Tributaries of Mississippi River from east.

⁴ Platte and Kansas Rivers.

⁵ Below junction with Gila River.

⁶ Great Basin and Pacific coast basins in California; supersedes earlier reports for this area.

⁷ Stations in Oregon; supersedes earlier reports for this area.

⁸ Sacramento River basin; supersedes earlier reports for this area.

⁹ San Joaquin River basin; supersedes earlier reports for this area.

Table 4. - Reports containing records of streamflow in the United States, 1907-43

[Out of print; can be consulted in many libraries. The area included in each part is given below the table and is shown on the map, p. 184.]

Report year	Water-Supply Papers containing data on numbered part of United States indicated														
	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹	14 ¹	Hawaii
1907--	241	242	243	244	245	246	247	248	249	250	252	252	252	252	---
1908--										2300 2370		3370	3370		
1909--	261	262	263	264	265	266	267	268	269	270 2300 3370	272	272	272	272	318
1910--	281	282	283	284	285	286	287	288	289	290 2300 3370	292	292	292	292	
1911--	301	302	303	304	305	306	307	308	309	310 2300	312	312	312	312	336
1912--	321	322	323	324	325	326	327	328	329	330	331	332	332	332	
1913--	351	352	353	354	355	356	357	358	359	360	361	362	362	362	373
1914--	381	382	383	384	385	386	387	388	389	390	391	392	393	393	430
1915--	401	402	403	404	405	406	407	408	409	410	411	412	413	414	
1916--	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445
1917--	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465
1918--	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485
1919--	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515
1920--															516
1921--	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535
1922--	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555
1923--	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575
1924--	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595
1925--	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615
1926--	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635
1927--	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655
1928--	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675
1929--	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695
1930--	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710
1931--	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725
1932--	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740
1933--	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755
1934--	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770
1935--	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795
1936--	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815
1937--	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835
1938--	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865
1939--	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885
1940--	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905
1941--	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935
1942--	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965
1943--	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985

- Part 1. North Atlantic slope basins (St. John River to York River).
 2. South Atlantic slope and eastern Gulf of Mexico basins (James River to Pearl River).
 3. Ohio River basin.
 4. St. Lawrence River basin.
 5. Hudson Bay and upper Mississippi River basin.
 6. Missouri River basin.

7. Lower Mississippi River basin.
 8. Western Gulf of Mexico basins.
 9. Colorado River basin.
 10. The Great Basin.
 11. Pacific slope basins in California.
 12. Pacific slope basins in Washington and upper Columbia River basin.
 13. Snake River basin.
 14. Pacific slope basins in Oregon and lower Columbia River basin.

¹Parts 13 and 14 were so designated beginning with the reports for 1935. Prior to 1935 they were included in Part 12, and from 1914 to 1934 they were designated as Parts 12-B and 12-C.

²Great Basin and Pacific coast basins in California; supersedes earlier reports for this area.

³Stations in Oregon; supersedes earlier reports for this area.

⁴Sacramento River basin; supersedes earlier reports for this area.

⁵San Joaquin River basin; supersedes earlier reports for this area.

Table 5. - Reports containing records of
[Asterisk (*) indicates publication out of print. The area

Report year	Part 1 ²		Part 2 ²		Part 3 ²		Part 4		Part 5		Part 6 ²		Part 7 ²		Part 8	
	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price
1944-	*1001	----	*1002	----	*1003	----	*1004	----	*1005	----	*1006	----	*1007	----	*1008	----
1945-	*1031	----	*1032	----	*1033	----	*1034	----	*1035	----	*1036	----	*1037	----	*1038	----
1946-	*1051	----	*1052	----	*1053	----	*1054	----	*1055	----	*1056	----	*1057	----	*1058	----
1947-	*1081	----	*1082	----	1083	\$1.75	1084	\$0.60	*1085	----	1086	\$1.75	*1087	----	1088	\$0.65
1948-	*1111	----	1112	\$1.25	*1113	----	1114	.65	1115	\$1.25	1116	1.75	*1117	----	1118	1.00
1949-	*1141	----	*1142	----	1143	1.75	*1144	----	1145	1.25	1146	1.75	1147	\$1.00	1148	1.25
1950-	*1171	----	*1172	----	1173	2.00	1174	.70	1175	1.50	1176	2.25	*1177	----	*1178	----
1951-	*1201	----	1203	.65	*1205	----	1207	1.00	*1208	----	1209	1.50	1211	1.50	1212	1.25
	*1202	----	*1204	----	1206	.60	1207	1.00	*1208	----	*1210	----	1211	1.50	1212	1.25
1952-	*1231	----	1233	1.00	1235	1.75	1237	1.25	1238	1.75	1239	1.50	1241	----	1242	1.25
	*1232	----	1234	2.00	1236	1.00	1237	1.25	1238	1.75	1240	1.50	1241	----	1242	1.25
1953-	*1271	----	1273	1.00	1275	2.00	1277	1.25	*1278	----	1279	1.50	1281	----	*1282	----
	*1272	----	1274	1.25	1276	1.00	1277	1.25	*1278	----	1280	1.50	1281	----	*1282	----
1954-	*1331	----	*1333	----	*1335	----	1337	----	*1338	----	1339	1.25	1341	1.75	1342	1.50
	*1332	----	*1334	----	1336	1.00	1337	----	*1338	----	1340	1.50	1341	1.75	1342	1.50
1955-	*1381	----	1383	1.25	*1385	----	1387	1.25	1388	1.75	1389	1.50	1391	1.50	1392	1.50
	1382	1.75	*1384	----	1386	1.00	1387	1.25	1388	1.75	1390	1.50	1391	1.50	1392	1.50
1956-	*1431	----	1433	1.25	*1435	----	1437	----	1438	1.75	1439	1.50	1441	1.75	1442	1.50
	1432	2.00	1434	1.25	1436	1.00	1437	----	1438	1.75	1440	----	1441	1.75	1442	1.50
1957-	1501	1.00	1503	1.25	1505	1.75	1507	1.25	1508	2.00	1509	1.50	1511	1.75	1512	1.75
	1502	2.00	1504	1.50	1506	1.00	1507	1.25	1508	2.00	1510	1.25	1511	1.75	1512	1.75
1958-	1551	1.75	1553	1.00	1555	1.75	1557	1.25	1558	2.00	1559	1.50	1561	1.75	1562	1.50
	*1552	----	*1554	----	1556	1.00	1557	1.25	1558	2.00	1560	2.75	1561	1.75	1562	1.50
1959-	1621	1.00	1623	1.00	1625	1.75	1627	1.50	1628	1.75	1629	1.50	1631	1.75	1632	1.75
	1622	1.75	1624	1.75	1626	1.00	1627	1.50	1628	1.75	1630	1.50	1631	1.75	1632	1.75
1960-	1701	1.00	1703	1.00	----	----	1707	1.50	----	----	1709	1.50	----	----	----	----
	----	----	----	----	1706	1.00	1707	1.50	----	----	----	----	----	----	----	----

¹Before 1961 this was an annual series, but beginning with 1961-65 a 5-year series is being used. In order to meet interim requirements, streamflow records for individual States are made available for local use after each water year ending September 30.

²For parts that were divided after 1950, A is given above, B below.

Part 1. North Atlantic slope basins (St. John River to York River).

A, Maine to Connecticut.

B, New York to York River.

2. South Atlantic slope and eastern Gulf of Mexico basins (James River to Pearl River).

A, James River to Savannah River.

B, Ogeechee River to Pearl River.

3. Ohio River basin.

A, Ohio River basin except Cumberland and Tennessee River basins.

B, Cumberland and Tennessee River basins.

4. St. Lawrence River basin.

5. Hudson Bay and upper Mississippi River basins.

6. Missouri River basin.

A, Missouri River basin above Sioux City, Iowa.

B, Missouri River basin below Sioux City, Iowa.

7. Lower Mississippi River basin.

8. Western Gulf of Mexico basins.

9. Colorado River basin.

10. The Great Basin.

11. Pacific slope basins in California.

12. Pacific slope basins in Washington and upper Columbia River basin.

13. Snake River basin.

14. Pacific slope basins in Oregon and lower Columbia River basin.

streamflow in the United States, 1944-60¹
included in each part is given below the table, p. 186]

Report year	Part 9		Part 10		Part 11		Part 12		Part 13		Part 14		Hawaii		Alaska ³	
	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price
1944-	*1009	-----	*1010	-----	*1011	-----	*1012	-----	*1013	-----	*1014	-----	*1015	-----		
1945-	*1039	-----	*1040	-----	*1041	-----	*1042	-----	*1043	-----	*1044	-----	*1045	-----		
1946-	*1059	-----	*1060	-----	*1061	-----	*1062	-----	*1063	-----	*1064	-----	1065	\$0.40		
1947-	1089	\$1.00	1090	\$0.45	*1091	-----	1092	\$0.75	1093	\$0.60	1094	\$0.55	1095	.35		
1948-	1119	1.00	1120	.50	*1121	-----	1122	1.00	1123	.60	1124	.65	1125	.35		
1949-	1149	1.00	1150	.50	*1151	-----	1152	1.00	1153	.60	*1154	-----	1155	.35		
1950-	1179	1.00	1180	.50	*1181	-----	*1182	-----	1183	.60	1184	.75	1185	.40		
1951-	*1213	-----	*1214	-----	*1215	-----	1216	1.00	*1217	-----	1218	1.00	1219	.55		
1952-	*1243	-----	*1244	-----	*1245	-----	1246	1.25	1247	1.50	1248	1.00	1249	.45	1466	
1953-	*1283	-----	*1284	-----	1285	1.75	*1286	-----	1287	1.00	1288	1.00	1289	.45		
1954-	1343	1.50	*1344	-----	1345	1.75	*1346	-----	1347	1.00	*1348	-----	*1349	-----		
1955-	1393	1.75	1394	1.00	*1395	-----	1396	1.25	1397	1.25	1398	1.00	1399	.50	1486	-----
1956-	1443	1.50	*1444	-----	*1445	-----	1446	1.25	1447	1.00	1448	1.00	1449	.60		
1957-	1513	1.75	1514	1.00	*1515	-----	1516	1.00	1517	1.00	1518	1.25	1569	1.00	1500	\$0.45
1958-	1563	1.75	*1564	-----	1565	2.25	1566	1.25	1567	1.00	1568	1.00			1570	.50
1959-	*1633	-----	*1634	-----	*1635	-----	1636	1.50	1637	1.00	1638	1.00	1639	.55	1640	.50
1960-	1713	1.75	1714	1.00	1715	2.25	1716	1.25	1717	1.00	1718	1.50	1719	.75	1720	.50

³ Contains data on quality of surface waters.

Table 6. - Compilation of records of surface waters of the United States to 1950

Part	Water-Supply Paper	Price	Part	Water-Supply Paper	Price
1-A-----	1301	\$1.75	7-----	*1311	
1-B-----	1302	2.50	8-----	1312	2.50
2-A-----	1303	1.75	9-----	*1313	-----
2-B-----	1304	1.75	10-----	1314	2.00
3-A-----	1305	2.25	11-B ¹ -----	1315A	2.00
3-B-----	1306	1.50	11-A ² -----	1315B	2.00
4-----	1307	1.75	12-----	*1316	-----
5-----	1308	3.00	13-----	*1317	-----
6-A-----	1309	2.50	14-----	1318	1.75
6-B-----	1310	2.50	Hawaii-----	1319	2.25
			Alaska ³ -----	1372	1.50

¹ Central Valley, Calif.

² Pacific slope basins in California, except Central Valley.

³ Contains data on quality of surface water.

Table 7. - Reports on quality of surface waters for irrigation, Western United States, 1951-58

Report year	No.	Price	Report year	No.	Price
1951-----	*1264	-----	1955-----	1465	\$1.00
1952-----	1362	\$0.75	1956-----	1485	.75
1953-----	1380	1.00	1957-----	1524	1.00
1954-----	1430	.75	1958-----	1575	1.00

MISCELLANEOUS REPORTS

[An asterisk (*) indicates publications out of print]

WORLD ATLAS OF COMMERCIAL GEOLOGY¹

- *World Atlas of Commercial Geology, Part I. Distribution of mineral production, 1921, 72 p.
- *World Atlas of Commercial Geology, Part II. Water power of the world, 1921, 39 p.

ADMINISTRATIVE PUBLICATIONS

[Sold by the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.]

- *Extracts from the style manual of the Government Printing Office, designed for the use of typewriter operators engaged in preparing manuscript for printing, compiled by George McLane Wood, 1922, 224 p.
- *Formulas and tables for the transformation of geodetic to plane coordinates on the Lambert and transverse Mercator projections, by J. L. Speert, 2d ed, 1943, 14 p.
- *Stadia tables for obtaining differences of elevation, by C. G. Anderson, 1937, 26 p.
- Suggestions to authors of the reports of the United States Geological Survey, 5th ed, 1958, 255 p. (cloth only) \$1.75.
- The preparation of illustrations for reports of the United States Geological Survey, with brief descriptions of processes of reproduction, by John L. Ridgway, 1920, 101 p. 70c.
- *Topographic instructions of the United States Geological Survey, 1918, 230 p., 3 pl., and 23 pages of conventional signs. (Superseded by Bulletin 788, partially by Circulars 92, 164, 357 and 368, and by the chapters listed below.)
- Topographic instructions of the United States Geological Survey.
Issued only in separate chapters as indicated below:
 - 3C3. Photogrammetric rectification, 1961, 42 p. 40c.
 - 3F4. Multiplex plotter procedures, 1960, 45 p. 45c.
 - 3F5. Kelsh plotter procedures, 1960, 29 p. 35c.
 - 3G1. Planimetric map compilation with trimetrogon photographs, 1960, 28 p. 30c.
 - 4B1-4B3. Color-separation scribing, 1961, 31 p. 40c.

SPECIAL PUBLICATIONS

[Publications listed below are available from the Geological Survey, Washington, D. C. 20242, unless wise indicated.]

- Geophysical Abstracts. Now (1964) available on subscription, \$4.25 per year, \$1.00 additional for foreign mailings (12 monthly issues and index). Single copies 35c, index 75c. Available from Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.
- A primer on water, by L. B. Leopold and W. B. Langbein, 1960, 50 p. 35c. Available from Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.
- *Map of Alaska showing known gold-bearing rocks, with descriptive text containing sketches of the geography, geology, and gold deposits and routes to the gold fields, 1898, 44 p.
- *Maps and descriptions of routes of exploration in Alaska in 1898, with general information concerning the Territory, 1899, 138 p.
- *New list of map symbols, prepared by Map Symbol Committee, E. N. Goddard, Chairman, Ernst Cloos, L. B. Pusey, and W. W. Rubey, 1947, 6 sheets, 10c.
- *Preliminary report on the Cape Nome gold region, Alaska, by F. C. Schrader and A. H. Brooks, 1900, 56 p.
- Press releases, preliminary maps, and preliminary reports released by the Geologic Division and Alaskan Branch.
 - [List 1], January 1, 1938 [to] January 1, 1945, compiled by L. S. Kent and R. P. Keroher, 1945, 72 p. [Processed.]
 - List 2, January 1, 1945 [to] January 1, 1946, compiled by W. H. Eckstein, 1947, 46 p. [Processed.]

¹A study of the world's resources and production of essential minerals was begun during World War I as a part of the task of keeping American industries supplied with raw materials. A preliminary world atlas of commercial geology was prepared in manuscript form for the use of the State Department and the Peace Commission, and the matter it contained was later revised for publication to aid in the study of the mineral industry and the commerce of the United States.

Prospecting for uranium. Published by the U. S. Atomic Energy Commission and the U. S. Geological Survey. 1951. (revised January 1957). 128 p. 75c. Available from Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Publications of the U. S. Geological Survey relating to coal. 1949. 42 p. Free on application.

*Reconnaissances in the Cape Nome and Norton Bay regions, Alaska, in 1900: A reconnaissance of the Cape Nome and adjacent gold fields of Seward Peninsula, Alaska, in 1900, by A. H. Brooks, assisted by G. B. Richardson and A. J. Collier; a reconnaissance in the Norton Bay region, Alaska, in 1900, by W. C. Mendenhall. 1901. 222 p.

*Section of Morgan formation, Pennsylvanian, at Split Mountain in Dinosaur National Monument, Uintah County, Utah, by F. T. McCann, N. D. Ramon, and L. G. Henbest. 1946. 18 p.

*The geology and mineral resources of a portion of the Copper River district, Alaska, by F. C. Schrader and A. C. Spencer. 1901. 94 p.

*The texture of Mississippian, Upper Devonian, and Lower Pennsylvanian sandstones in the Appalachian basin, by Gordon Rittenhouse and Elaine Cather. 1946. 28 p.

*The texture of Paleozoic sandstones and sandy limestones in the Appalachian basin, by Gordon Rittenhouse and Elaine Cather. 1946. 13 p.

MAPS AND CHARTS

General Information

In some commonly used scales on which maps of the United States and of the several States have been published, 1 inch on the map represents the distance on the ground as given below:

Scale:	1 inch equals	Scale:	1 inch equals
1:20,000-----	1,667 feet.	1:500,000-----	7.89 miles.
1:24,000-----	2,000 feet.	1:1,000,000-----	15.78 miles.
1:31,680-----	0.5 mile.	1:2,500,000-----	39.46 miles.
1:48,000-----	4,000 feet.	1:3,168,000-----	50 miles.
1:62,500-----	0.99 mile.	1:5,000,000-----	78.91 miles.
1:63,360-----	1 mile.	1:7,000,000-----	110.46 miles.
1:125,000-----	1.97 miles.	1:7,500,000-----	118.37 miles.
1:250,000-----	3.95 miles.	1:16,500,000-----	260.42 miles.

Ordering instructions are given on page v. The Geological Survey does not supply mounted maps. An asterisk (*) indicates the item is out of print.

GEOLOGIC MAPS

United States

Geologic map of the United States, compiled by G. W. Stose, assisted by O. A. Ljungstedt. 1932. Reprinted 1960. Scale, 1:2,500,000. 4 sheets, 27 by 47 inches. \$1.50 per quarter or \$6 per set.

State maps distributed by the Geological Survey

Geologic map of Alaska, by J. T. Dutro, Jr., and T. G. Payne. 1954. Scale, 1:2,500,000. \$2.
Colorado, by W. S. Burban, T. S. Lovering, E. N. Goddard, and E. B. Eckel. 1935. Reprinted 1959. Scale, 1:500,000. \$2.50.

District of Columbia, by N. H. Darton. 1947. Scale, 1:31,680. \$1. (Sedimentary map).

Idaho, by C. P. Ross and J. D. Forrester. 1947. Scale, 1:500,000. Reprinted 1959. \$2.50. Also available from the Idaho Bureau of Mines and Geology, Moscow, Idaho.

*Mississippi, by L. W. Stephenson. 1928. Scale, 1:1,000,000.

Montana, by C. P. Ross, D. A. Andrews, and I. J. Witkind. 1955. Scale, 1:500,000. 2 sheets, \$3.50 per set.

New Hampshire, by M. P. Billings. 1955. Scale, 1:250,000. \$2. Copies may also be purchased from the New Hampshire Planning and Development Commission, Concord, N. H.

*New Mexico,¹ by N. H. Darton. 1928. Scale, 1:500,000.

Oklahoma, by H. D. Miser. 1954. Scale, 1:500,000. Available with or without a red overprint showing roads. \$2.50. Copies may also be purchased from the Oklahoma Geological Survey, Norman, Okla.

South Dakota, by N. H. Darton. 1951. Scale, 1:500,000. \$1.50. Copies may also be purchased from the State Geological Survey, Vermillion, S. Dak.

*Texas,¹ by N. H. Darton, L. W. Stephenson, and J. A. Gardner. 1937. Scale, 1:500,000.

Wyoming, by J. D. Love, J. L. Weitz, and R. K. Hose. 1955. Scale, 1:500,000. Multicolor. \$2.50. Copies may also be purchased from the Geological Survey of Wyoming, Laramie, Wyo.

¹ These maps were issued as unnumbered parts of the Geologic Atlas.

Maps distributed by the States

Not sold by the Geological Survey, except as noted.

The following State geologic maps, in the preparation and publication of some of which the U. S. Geological Survey has cooperated, are distributed by the respective States. Requests for prices and other correspondence concerning these maps should be addressed to the offices indicated below:

Alabama - - - - -	Alabama Geological Survey, University, Ala.
Arizona - - - - -	Arizona Bureau of Mines, Tucson, Ariz.
Arkansas - - - - -	Arkansas Geological Survey, Little Rock, Ark.
*California - - - - -	Division of Mines and Geology, California Department of Conservation, San Francisco, Calif.
Connecticut - - - - -	State Geological and Natural History Survey, Middletown, Conn.
Florida - - - - -	Florida Geological Survey, Tallahassee, Fla.
Georgia - - - - -	Georgia Geological Survey, Atlanta, Ga.
Idaho ² - - - - -	Idaho Bureau of Mines and Geology, Moscow, Idaho
Illinois - - - - -	Illinois Geological Survey Division, Urbana, Ill.
Indiana - - - - -	Division of Geology, Indiana Department of Conservation, Indianapolis, Ind.
Iowa - - - - -	Iowa Geological Survey, State University, Iowa City, Iowa.
Kansas - - - - -	State Geological Survey, University of Kansas, Lawrence, Kans.
Kentucky - - - - -	Kentucky Geological Survey, Lexington, Ky.
Louisiana - - - - -	Shreveport Geological Society, P. O. Box 57, Shreveport, La.
Maine - - - - -	Department of Economic Development, Augusta, Maine.
Maryland and Delaware - -	Maryland Geological Survey, Baltimore, Md.
Michigan - - - - -	Geological Survey Division, State Department of Conservation, Lansing, Mich.
Minnesota - - - - -	Minnesota Geological Survey, University of Minnesota, Minneapolis 14, Minn.
Mississippi - - - - -	Mississippi Geological Society, P. O. Box 2253, West Jackson 7, Miss.
Missouri - - - - -	Missouri Geological Survey and Water Resources, Rolla, Mo.
Nebraska - - - - -	Nebraska Geological Survey, Lincoln, Nebr.
New Hampshire ² - - - - -	New Hampshire Planning and Development Commission, Concord, N. H.
New Jersey - - - - -	New Jersey Geological Survey, Trenton, N. J.
New York - - - - -	Assistant Director, New York State Museum, Albany, N. Y.
North Carolina - - - - -	State Department of Conservation and Development, Raleigh, N. C.
North Dakota - - - - -	North Dakota Geological Survey, Grand Forks, N. Dak.
Ohio - - - - -	Ohio Geological Survey, Columbus, Ohio.
Oklahoma ² - - - - -	Oklahoma Geological Survey, Norman Okla.
Pennsylvania - - - - -	State Geologist, Topographic and Geologic Survey, Harrisburg, Pa.
South Carolina - - - - -	Research, Planning, and Development Board, Columbia, S. C.
South Dakota ² - - - - -	State Geological Survey, Vermillion, S. Dak.
Tennessee - - - - -	Tennessee Geological Survey, Nashville, Tenn.
Virginia - - - - -	Virginia Geological Survey, University Station, Charlottesville, Va.
Washington - - - - -	Division of Mines and Geology, State Department of Conservation and Development, Olympia, Wash.
West Virginia - - - - -	West Virginia Geological Survey, Morgantown, W. Va.
Wisconsin - - - - -	Wisconsin Geological and Natural History Survey, Madison, Wis.
Wyoming ² - - - - -	Geological Survey of Wyoming, Laramie, Wyo.

Indexes to geologic mapping in the United States

The geologic map indexes outline in color the areas in the State for which geologic maps have been published. Outline patterns, in four colors, indicate the approximate scale of each geologic map. A text, printed on the margin of the same sheet, gives the source of publication, scale, date, and author of each geologic map, together with a complete list of Geological Survey reports on the State. The map indexes were compiled by Leona Boardman with assistance, for States indicated, from (a) Elaine Watson, (b) Ruth Young, (c) Annabel Brown, (d) Annabel Brown and Elaine Watson, or (e) revised by A. N. Bove, (f) revised by Bettie Smysor, (g) compiled by E. H. Cobb.

² Also available from the Geological Survey, Washington 25, D. C.

State	Year of Publication	Scale	Price
Alabama (a) - - - - -	1951	1:1,000,000	\$0.40
Alaska (g) - - - - -	1960	1:950,400	(3)
Arizona (e) - - - - -	1958	1:1,000,000	.60
Arkansas (b) - - - - -	1952	1:500,000	.65
California (2 sheets) - - - - -	1951	1:750,000	\$1 per set
Colorado - - - - -	1954	1:750,000	.60
Florida - - - - -	1952	1:1,000,000	.60
Georgia (d) - - - - -	1949	1:750,000	.35
Idaho (f) - - - - -	1959	1:750,000	.60
Illinois (b) - - - - -	1954	1:750,000	.60
Indiana (d) - - - - -	1950	1:750,000	.45
Iowa - - - - -	1948	1:750,000	.35
Kansas (b) - - - - -	1954	1:750,000	.60
Kentucky - - - - -	1952	1:750,000	.50
Louisiana - - - - -	1950	1:1,000,000	.50
Maine (a), (f) - - - - -	1959	1:750,000	.60
Maryland and Delaware - - - - -	1951	1:500,000	.40
Massachusetts, Rhode Island, and Connecticut - - - - -	1952	1:500,000	.40
Michigan - - - - -	1953	1:750,000	.60
Minnesota (b) - - - - -	1955	1:750,000	.60
Mississippi - - - - -	1950	1:1,000,000	.25
Missouri (c) - - - - -	1949	1:750,000	.30
Montana (e) - - - - -	1955	1:750,000	.60
Nebraska (c) - - - - -	1947	1:750,000	.35
Nevada - - - - -	1955	1:750,000	.60
New Hampshire and Vermont - - - - -	1952	1:500,000	.50
New Jersey - - - - -	1951	1:500,000	.40
New Mexico (c), (e) - - - - -	1958	1:750,000	.60
New York - - - - -	1952	1:750,000	.60
North Carolina (a) - - - - -	1950	1:750,000	.50
North Dakota (b) - - - - -	1954	1:750,000	.60
Ohio - - - - -	1949	1:750,000	.60
Oklahoma - - - - -	1953	1:500,000	.60
Oregon (c) - - - - -	1949	1:750,000	.25
Pennsylvania - - - - -	1952	1:500,000	.60
South Carolina - - - - -	1950	1:1,000,000	.25
South Dakota (c), (e) - - - - -	1958	1:750,000	.60
Tennessee - - - - -	1949	1:750,000	.40
Texas - - - - -	1951	1:1,000,000	.60
Utah - - - - -	1954	1:750,000	.60
Virginia (f) - - - - -	1959	1:750,000	.60
Washington - - - - -	1949	1:750,000	.35
West Virginia - - - - -	1949	1:750,000	.25
Wisconsin - - - - -	1953	1:750,000	.60
Wyoming - - - - -	1955	1:750,000	.60

Foreign Countries

Paraguay [South America]. Geology by E. B. Eckel and topographic base by G. H. Benedict 1958.
Scale, 1:1,000,000, \$1. (See Professional Paper 327.)

³Free on application to the U. S. Geological Survey, Washington, D. C. 20242.

FOLIOS OF THE GEOLOGIC ATLAS OF THE UNITED STATES¹

[An asterisk (*) indicates that the folio is out of print.]

- *1. Livingston, Mont., by J. P. Iddings and W. H. Weed. 1894. [5] p., 4 maps.
- *2. Ringgold, Ga.-Tenn., by C. W. Hayes. 1894. [5] p., 4 maps.
- *3. Placerville, Calif., by Waldemar Lindgren and H. W. Turner. 1894. 3 p., 4 maps. (See also Folio reprints 3, 5, and 11.)
- *3, 5, and 11. Reprints from Placerville, Sacramento, and Jackson folios, Calif., by Waldemar Lindgren and H. W. Turner. 1894, reprinted 1914. 9 p., 3 maps. (Contains the texts and economic-geology maps from Folios 3, 5, and 11, with errata and addenda.)
- *4. Kingston, Tenn., by C. W. Hayes. 1894. [5] p., 4 maps.
- *5. Sacramento, Calif., by Waldemar Lindgren. 1894. [3] p., 4 maps. (See also Folio reprints 3, 5, and 11.)
- *6. Chattanooga, Tenn., by C. W. Hayes. 1894. [5] p., 4 maps.
- *7. Pikes Peak, Colo., by Whitman Cross. 1894. [8] p., 5 maps.
- *8. Sewanee, Tenn., by C. W. Hayes. 1894. [5] p., 4 maps.
- *9. Anthracite-Crested Butte, Colo., by S. F. Emmons, Whitman Cross, and G. H. Eldridge. 1894. [11] p., 8 maps.
- *10. Harpers Ferry, Va.-W. Va.-Md., by Arthur Keith. 1894. [5] p., 4 maps.
- *11. Jackson, Calif., by H. W. Turner. 1894. [6] p., 4 maps. (See also Folio reprints 3, 5, and 11.)
- *12. Estillville, Ky.-Va.-Tenn., by M. R. Campbell. 1894. [7] p., 4 maps.
- *13. Fredericksburg, Va.-Md., by N. H. Darton. 1894. [6] p., 2 maps.
- *14. Staunton, Va.-W. Va., by N. H. Darton. 1894. [4] p., 4 maps.
- *15. Lassen Peak, Calif., by J. S. Diller. 1895. [4] p., 2 sheets of illus., 3 maps.
- *16. Knoxville, Tenn.-N. C., by Arthur Keith. 1895. [6] p., 4 maps.
- *17. Marysville, Calif., by Waldemar Lindgren and H. W. Turner. 1895. [2] p., 4 maps.
- *18. Smartsville, Calif., by Waldemar Lindgren and H. W. Turner. 1895. [6] p., 4 maps.
- *19. Stevenson, Ala.-Ga.-Tenn., by C. W. Hayes. 1905. [4] p., 4 maps.
- *20. Cleveland, Tenn., by C. W. Hayes. 1895. [5] p., 4 maps.
- *21. Pikesville, Tenn., by C. W. Hayes. 1895. [5] p., 4 maps.
- *22. McMinnville, Tenn., by C. W. Hayes. 1895. [3] p., 4 maps.
- *23. Nomini, Md.-Va., by N. H. Darton. 1896. [4] p., 3 maps.
- *24. Three Forks, Mont., by A. C. Peale. 1896. [7] p., 4 maps.
- *25. Loudon, Tenn., by Arthur Keith. 1896. [7] p., 4 maps.
- *26. Pocahontas, Va.-W. Va., by M. R. Campbell. 1896. [7] p., 4 maps.
- *27. Morristown, Tenn., by Arthur Keith. 1896. [7] p., 4 maps.
- *28. Piedmont, W. Va.-Md., by N. H. Darton and J. A. Taff. 1896. [7] p., 4 maps.
- *29. Nevada City special, Calif., by Waldemar Lindgren. 1896. [7] p., 9 maps.
- *30. Yellowstone National Park, Wyo., by Arnold Hague, W. H. Weed, and J. P. Iddings. 1896. [6] p., 3 sheets of illus., 8 maps.
- *31. Pyramid Peak, Calif., by Waldemar Lindgren. 1896. [8] p., 4 maps.
- *32. Franklin, W. Va.-Va., by N. H. Darton. 1896. [7] p., 4 maps.
- *33. Briceville, Tenn., by Arthur Keith. 1896. [5] p., 4 maps.
- *34. Buckhannon, W. Va., by J. A. Taff and A. H. Brooks. 1896. [5] p., 4 maps.
- *35. Gadsden, Ala., by C. W. Hayes. 1896. [5] p., 4 maps.
- *36. Pueblo, Colo., by G. K. Gilbert. 1897. [9] p., 2 sheets of illus., 5 maps.
- *37. Downieville, Calif., by H. W. Turner. 1897. [8] p., 1 sheet of illus., 4 maps.
- *38. Butte special, Mont., by W. H. Weed, S. F. Emmons, and G. W. Tower. 1897. [8] p., 3 maps.
- *39. Truckee, Calif., by Waldemar Lindgren. 1897. [8] p., 4 maps.
- *40. Wartburg, Tenn., by Arthur Keith. 1897. [4] p., 4 maps.
- *41. Sonora, Calif., by H. W. Turner and F. L. Ransome. 1897. [7] p., 4 maps.
- *42. Nueces, Tex., by R. T. Hill and T. W. Vaughan. 1898. [5] p., 1 sheet of illus., 2 maps.
- *43. Bidwell Bar, Calif., by H. W. Turner. 1898. [6] p., 1 sheet of illus., 3 maps.
- *44. Tazewell, Va.-W. Va., by M. R. Campbell. 1897. [7] p., 4 maps.
- *45. Boise, Idaho, by Waldemar Lindgren. 1898. [7] p., 4 maps.

¹Each folio is named from a city, town, or prominent natural feature within the quadrangle it covers. It includes maps showing the topography, geology, underground structure, and mineral deposits of the area and several pages of descriptive text and illustrations; also maps showing the economic geology, including oil and gas and artesian water, if the conditions in the area mapped warrant their publication. All the folios were published in a library edition, a form measuring 18½ by 22 inches. Folios 164 to 188 and a few bearing higher numbers were published also in a field edition, measuring 6 by 9 inches in which the maps are folded and placed in a pocket. The text, maps, and illustrations are the same in the library and field editions, the only difference being in the form of the publication. The folios are sold by the Geological Survey at the prices given.

All correspondence relating to folios and maps should be addressed to the Geological Survey, Washington, D. C. 20242.

- *46. Richmond, Ky., by M. R. Campbell. 1898. [4] p., 4 maps.
- *47. London, Ky., by M. R. Campbell. 1898. [4] p., 4 maps.
- *48. Tenmile district special, Colo., by S. F. Emmons. 1898. [6] p., 4 maps.
- *49. Roseburg, Oreg., by J. S. Diller. 1898. [4] p., 1 sheet of illus., 4 maps.
- *50. Holyoke, Mass.-Conn., by B. K. Emerson. 1898. [8] p., 5 maps.
- *51. Big Trees, Calif., by H. W. Turner and F. L. Ransome. 1898. [8] p., 1 sheet of illus., 3 maps.
- *52. Absaroka, Wyo. (Crandall and Ishawooa quadrangles), by Arnold Hague. 1899. [7] p., 1 sheet of illus., 4 maps.
- *53. Standingstone, Tenn., by M. R. Campbell. 1899. [6] p., 4 maps.
- *54. Tacoma, Wash., by Bailey Willis and G. O. Smith. 1899. [10] p., [4] p. of illus. and maps, 2 maps.
- *55. Fort Benton, Mont., by W. H. Weed. 1899. [9] p., 4 maps.
- *56. Little Belt Mountains, Mont., by W. H. Weed. 1899. [11] p., 4 maps.
- *57. Telluride, Colo., by Whitman Cross and C. W. Purington. 1899. [19] p., 3 sheets of illus., 4 maps.
- *58. Elmore, Colo., by R. C. Hills. 1899. [6] p., 1 sheet of illus., 5 maps.
- *59. Bristol, Va.-Tenn., by M. R. Campbell. 1899. [12] p., 4 maps.
- *60. La Plata, Colo., by Whitman Cross, A. C. Spencer, and C. W. Purington. 1899 [1901]. 14, [1] p., 2 sheets of illus., 4 maps.
- *61. Monterey, Va.-W. Va., by N. H. Darton. 1899. 9 p., 4 maps.
- *62. Menominee special, Mich., by C. R. Van Hise and W. S. Bayley. 1900. 13 p., 3 maps.
- *63. Mother Lode district, Calif., by F. L. Ransome. 1900. 11 p., 8 maps.
- *64. Uvalde, Tex., by T. W. Vaughan. 1900. 7 p., 3 maps.
- *65. Tintic special, Utah, by G. W. Tower, G. O. Smith, and S. F. Emmons. 1900. 8 p., 8 maps.
- *66. Colfax, Calif., by Waldemar Lindgren. 1900. 10 p., 4 maps.
- *67. Danville, Ill.-Ind., by M. R. Campbell and Frank Leverett. 1900. 10, [1] p., 3 maps.
- *68. Walsenburg, Colo., by R. C. Hills. 1900. 6, [2] p., 6 maps.
- *69. Huntington, W. Va.-Chio, by M. R. Campbell. 1900. 6 p., 2 sheets of illus., 3 maps.
- *70. Washington, D. C.-Md.-Va., by N. H. Darton and Arthur Keith. 1901. 7 p., 5 maps.
- *71. Spanish Peaks, Colo., by R. C. Hills. 1901. 7, [2] p., 1 sheet of illus., 6 maps.
- *72. Charleston, W. Va., by M. R. Campbell. 1901. 9, [1] p., 2 sheets of illus., 4 maps.
- *73. Coos Bay, Oreg., by J. S. Diller. 1901. 5 p., 2 sheets of illus., 4 maps.
- *74. Coalgate, Ind. T. (Okla.), by J. A. Taff. 1901. 6, [1] p., 4 maps.
- *75. Maynardville, Tenn., by Arthur Keith. 1901. 6, [1] p., 4 maps.
- *76. Austin, Tex., by R. T. Hill and T. W. Vaughan. 1902. 8, [3] p., 2 sheets of illus., 3 maps.
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- *79. Atoka, Ind. T. (Okla.), by J. A. Taff. 1902. 8, [3] p., 4 maps.
- *80. Norfolk, Va.-N. C., by N. H. Darton. 1902. 4, [1] p., 1 sheet of illus., 2 maps.
- *81. Chicago, Ill.-Ind. (Riverside, Chicago, Desplaines, and Calumet quadrangles), by W. C. Alden. 1902. 14 p., 2 sheets of illus., 12 maps.
- *82. Masontown-Unionton, Pa., by M. R. Campbell. 1902. 21 p., 3 sheets of illus., 8 maps.
- *83. New York City, N. Y.-N. J. (Paterson, Harlem, Staten Island, and Brooklyn quadrangles), by F. J. H. Merrill, N. H. Darton, Arthur Hollick, R. D. Salisbury, R. E. Dodge, Bailey Willis, and H. A. Pressey. 1902. 19 p., 2 sheets of illus., 13 maps.
- *84. Ditney, Ind., by M. L. Fuller and G. H. Ashley. 1902. 8 p., 4 sheets of illus., 3 maps.
- *85. Oelrichs, S. Dak.-Nebr., by N. H. Darton. 1902. 6, [1] p., 1 sheet of illus., 4 maps.
- *86. Ellensburg, Wash., by G. O. Smith. 1903. 7 p., 3 maps.
- *87. Camp Clarke, Nebr., by N. H. Darton. 1903. 4, [1] p., 1 sheet of illus., 2 maps.
- *88. Scotts Bluff, Nebr., by N. H. Darton. 1903. 5, [1] p., 1 sheet of illus., 2 maps.
- *89. Port Orford, Oreg., by J. S. Diller. 1903. 6 p., 4 maps.
- *90. Cranberry, N. C.-Tenn., by Arthur Keith. 1903. 9, [1] p., 4 maps.
- *91. Hartville, Wyo., by W. S. T. Smith. 1903. 6, [3] p., 1 sheet of illus., 3 maps.
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- *93. Elkland-Tioga, Pa., by M. L. Fuller and W. C. Alden. 1903. 9, [1] p., 1 sheet of illus., 8 maps.
- *94. Brownsville-Connellsville, Pa., by M. R. Campbell. 1903. 19, [1] p., 3 sheets of illus., 8 maps.
- *95. Columbia, Tenn., by C. W. Hayes and E. O. Ulrich. 1903. 6 p., 5 sheets of illus. and tables, 4 maps.
- *96. Olivet, S. Dak., by J. E. Todd. 1903. 6 p., 3 maps.
- *97. Parker, S. Dak., by J. E. Todd. 1903. 6 p., 3 maps. 25c.
- *98. Tishomingo, Ind. T. (Okla.), by J. A. Taff. 1903. 8, [1] p., 3 maps.
- *99. Mitchell, S. Dak., by J. E. Todd. 1903. 7 p., 3 maps. 25c.
- *100. Alexandria, S. Dak., by J. E. Todd and C. M. Hall. 1903. 6 p., 3 maps.
- *101. San Luis, Calif., by H. W. Fairbanks. 1904. 14, [1] p., 2 sheets of illus., 4 maps.
- *102. Indiana, Pa., by G. B. Richardson. 1904. 7 p., 3 sheets of illus., 3 maps.
- *103. Nampa, Idaho-Oreg., by Waldemar Lindgren and N. F. Drake. 1904. 5 p., 2 maps.
- *104. Silver City, Idaho, by Waldemar Lindgren and N. F. Drake. 1904. 6 p., 3 maps.
- *105. Patoka, Ind.-Ill., by M. L. Fuller and F. G. Clapp. 1904. 12, [1] p., 1 sheet of illus., 2 maps.
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- *108. Edgemont, S. Dak.-Nebr., by N. H. Darton and W. S. T. Smith. 1904. 10, [1] p., 1 sheet of illus., 4 maps.
- *109. Cottonwood Falls, Kans., by C. S. Prosser and J. W. Beede. 1904. 6 p., 2 maps.
- *110. Latrobe, Pa., by M. R. Campbell. 1904. 15, [1] p., 3 sheets of illus., 4 maps.
- *111. Globe, Ariz., by F. L. Ransome. 1905. 17, [1] p., 6 maps.

- *112. Bisbee, Ariz., by F. L. Ransome. 1904. 17, [1] p., 3 sheets of illus., 6 maps. (Reprinted with supplement, 1914. 19, [1] p., 3 sheets of illus., 6 maps.)
- *113. Huron, S. Dak., by J. E. Todd. 1904. 6 p., 3 maps.
- *114. De Smet, S. Dak., by J. E. Todd and C. M. Hall. 1904. 6 p., 3 maps, 25c.
- *115. Kittanning, Pa., by Charles Butts and Frank Leverett. 1904. 15 p., 4 sheets of illus., 3 maps.
- *116. Asheville, N. C.-Tenn., by Arthur Keith. 1904. 10, [1] p., 4 maps.
- *117. Casselton-Fargo, N. Dak.-Minn., by C. M. Hall and D. E. Willard. 1905. 7 p., 6 maps.
- *118. Greeneville, Tenn.-N. C., by Arthur Keith. 1905. 8, [1] p., 3 maps.
- *119. Fayetteville, Ark.-Mo., by G. I. Adams and E. O. Ulrich. 1905. 6 p., 2 maps.
- *120. Silverton, Colo., by Whitman Cross, Ernest Howe, and F. L. Ransome. 1905. 34, [1] p., 1 sheet of illus., 4 maps.
- *121. Waynesburg, Pa., by R. W. Stone. 1905. 12 p., 3 sheets of illus., 3 maps.
- *122. Tahlequah, Ind. T. (Okla.)-Ark., by J. A. Taff. 1905. 7 p., 3 maps.
- *123. Elders Ridge, Pa., by R. W. Stone. 1905. 10 p., 3 sheets of illus., 3 maps.
- *124. Mount Mitchell, N. C.-Tenn., by Arthur Keith. 1905. 10 p., 4 maps.
- *125. Rural Valley, Pa., by Charles Butts. 1905. 12 p., 3 sheets of illus., 3 maps.
- *126. Bradshaw Mountains, Ariz., by T. A. Jaggar, Jr., and Charles Palache. 1905. 11 p., 1 sheet of illus., 4 maps.
- *127. Sundance, Wyo.-S. Dak., by N. H. Darton. 1905. 12, [1] p., 1 sheet of illus., 5 maps.
- *128. Aladdin, Wyo.-S. Dak.-Mont., by N. H. Darton and C. C. O'Harra. 1905. 8, [1] p., 4 maps.
- *129. Clifton, Ariz., by Waldemar Lindgren. 1905. 14 p., 4 maps.
- *130. Rico, Colo., by Whitman Cross and F. L. Ransome. 1905. 20, [1] p., 1 sheet of illus., 5 maps.
- *131. Needle Mountains, Colo., by Whitman Cross, Ernest Howe, J. D. Irving, and W. H. Emmons. 1905. 14 p., 2 sheets of illus., 4 maps.
- *132. Muskogee, Ind. T. (Okla.), by J. A. Taff. 1906. 8 p., 3 maps.
- *133. Ebensburg, Pa., by Charles Butts. 1905. 10 p., 4 maps.
- *134. Beaver, Pa., by L. H. Woolsey. 1905. 16 p., 1 sheet of illus., 3 maps.
- *135. Nepesta, Colo., by C. A. Fisher. 1906. 6 p., 3 maps.
- *136. St. Marys, Md.-Va., by G. B. Shattuck and B. L. Miller. 1906. 7 p., 2 maps.
- *137. Dover, Del.-Md.-N. J., by B. L. Miller. 1906. 10 p., 2 maps.
- *138. Redding, Calif., by J. S. Diller. 1906. 14, [1] p., 3 maps.
- *139. Snoqualmie, Wash., by G. O. Smith and F. C. Calkins. 1906. 14, [1] p., 3 maps.
- *140. Milwaukee special, Wis., by W. C. Alden. 1906. 12 p., 1 sheet of illus., 2 maps.
- *141. Bald Mountain-Dayton, Wyo., by N. H. Darton and R. D. Salisbury. 1906. 15, [1] p., 2 sheets of illus., 7 maps.
- *142. Cloud Peak-Fort McKinney, Wyo., by N. H. Darton and R. D. Salisbury. 1906. 16, [1] p., 2 sheets of illus., 7 maps.
- *143. Nantahala, N. C.-Tenn., by Arthur Keith. 1907. 12 p., 4 maps.
- *144. Amity, Pa., by F. G. Clapp. 1907. 16 p., 3 maps.
- *145. Lancaster-Mineral Point, Wis.-Iowa-Ill., by U. S. Grant and E. F. Burchard. 1907. 14 p., 4 maps.
- *146. Rogersville, Pa., by F. G. Clapp. 1907. 14 p., 1 sheet of illus., 3 maps.
- *147. Pisgah, N. C.-S. C., by Arthur Keith. 1907. 8 p., 1 sheet of illus., 4 maps.
- *148. Joplin district, Mo.-Kans., by W. S. T. Smith and C. E. Siebenthal. 1907. 20 p., 1 sheet of illus., 5 maps. (Reprinted 1914.)
- *149. Penobscot Bay, Maine, by G. O. Smith, E. S. Bastin, and C. W. Brown. 1907. 14 p., 3 maps.
- *150. Devils Tower, Wyo., by N. H. Darton and C. C. O'Harra. 1907. 10 p., 4 maps.
- *151. Roan Mountain, Tenn.-N. C., by Arthur Keith. 1907. 12 p., 2 sheets of illus., 4 maps.
- *152. Patuxent, Md.-D. C., by G. B. Shattuck, B. L. Miller, and Arthur Bibbins. 1907. 12, [1] p., 3 maps.
- *153. Ouray, Colo., by Whitman Cross, Ernest Howe, and J. D. Irving. 1907. 20 p., 1 sheet of illus., 3 maps.
- *154. Winslow, Ark.-Ind. T. (Okla.), by A. H. Purdue. 1907. 6, [1] p., 2 maps.
- *155. Ann Arbor, Mich., by I. C. Russell and Frank Leverett. 1908. 15 p., 3 maps. (Reprinted after revision, 1915. 18 p., 3 maps.) (Field edition, 1908. 15 p., 3 maps.)
- *156. Elk Point, S. Dak.-Nebr.-Iowa, by J. E. Todd. 1908. 8 p., 3 maps.
- *157. Passaic, N. J.-N. Y., by N. H. Darton, W. S. Bayley, R. D. Salisbury, and H. B. Kummel. 1908. 27 p., 1 sheet of illus., 4 maps.
- *158. Rockland, Maine, by E. S. Bastin. 1908. 15 p., 5 maps.
- *159. Independence, Kans., by F. C. Schrader. 1908. 7, [3] p., 3 maps.
- *160. Accident-Grantsville, Md.-Pa.-W. Va., by G. C. Martin. 1908. 14, [1] p., 8 maps.
- *161. Franklin Furnace, N. J., by A. C. Spencer, H. B. Kummel, J. E. Wolff, R. D. Salisbury, and Charles Palache. 1908. 27 p., 6 maps.
- *162. Philadelphia, Pa.-N. J.-Del. (Norristown, Germantown, Chester, and Philadelphia quadrangles), by F. Bascom, W. B. Clark, N. H. Darton, H. B. Kummel, R. D. Salisbury, B. L. Miller, and G. N. Knapp. 1909. 24 p., 1 sheet of illus., 10 maps.
- *163. Santa Cruz, Calif., by J. C. Branner, J. F. Newsom, and Ralph Arnold. 1909. 12 p., 2 sheets of illus., 3 maps.
- *164. Belle Fourche, S. Dak., by N. H. Darton and C. C. O'Harra. 1909. 9 p., 4 maps. (Field edition, 1909. 67 p., maps.)
- *165. Aberdeen-Redfield, S. Dak. (Northville, Aberdeen, Redfield, and Byron quadrangles), by J. E. Todd. 1909. 13 p., 12 maps. (Field edition, 1909. 99 p., maps.)
- *166. El Paso, Tex., by G. B. Richardson. 1909. 11 p., 1 sheet of illus., 2 maps. (Field edition, 1909. 86 p., pls., maps.)

- *167. Trenton, N. J.-Pa., by F. Bascom, N. H. Darton, H. B. Kummel, W. B. Clark, B. L. Miller, and R. D. Salisbury. 1909. 24, [1] p., 3 maps. (Field edition. 1909. 185 p., maps.)
- *168. Jamestown-Tower, N. Dak. (Jamestown, Eckelson, and Tower quadrangles), by D. E. Willard. 1909. 10 p., 9 maps. (Field edition. 1909. 76 p., maps.)
- *169. Watkins Glen-Catatunk, N. Y., by H. S. Williams, R. S. Tarr, and E. M. Kindle. 1909. 33 p., 2 sheets of illus., 6 maps. (Field edition. 1909. 242 p., pls., maps.)
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[Out of print]

- Folios 1 and 2. Physiographic types, by Henry Gannett. 1898, 1900.
 Folio 3. Physical geography of the Texas region, by R. T. Hill. 1900.

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This series of geologic quadrangle maps of the United States continues the series of quadrangle maps begun with the folios of the Geologic Atlas of the United States, which were published from 1894 to 1945. The present series consists of geologic maps, which may be supplemented by structure sections, columnar sections, and other graphic means of presenting geologic data, and a brief explanatory text. Each map is issued in both flat and folded edition. Maps were originally unnumbered but a distinguishing prefix "GQ" and a number appear on all maps starting with GQ-26. Numbers have also been assigned to those previously issued (nos. 1-25).

- GQ-1. Pawtucket, R. I.-Mass. Bedrock geology, by A. W. Quinn, R. G. Ray, and W. L. Seymour. 1949. Lat 41°52'30" to 42°, long 71°22'30" to 71°30'. Scale, 1:31,680. Contour interval, 10 feet. 50c.
- GQ-2. Pawtucket, R. I.-Mass. Surficial geology, by N. E. Chute. 1949. Lat 41°52'30" to 42°, long 71°22'30" to 71°30'. Scale, 1:31,680. Contour interval, 10 feet. 50c.
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- GQ-9. Mount Toby, Mass. Surficial geology, by R. H. Jahns. 1951. Lat 42°22'30" to 42°30', long 72°30' to 72°37'30". Scale, 1:31,680. Contour interval, 10 feet. 50c.
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- GQ-12. Mount Moses, Nev. Geology, by H. G. Ferguson, S. W. Muller, and R. J. Roberts. 1951. Lat 40° to 40°30', long 117° to 117°30'. Scale, 1:125,000. Contour interval, 100 feet. 50c.
- GQ-13. North Scituate, R. I. Bedrock geology, by A. W. Quinn. 1951. Lat 41°45' to 41°52'30", long 71°30' to 71°37'30". Scale, 1:31,680. Contour interval, 10 feet. 50c.
- GQ-14. Dannemora, N. Y. Geology, by A. W. Postel. 1951. Lat 44°30' to 44°45', long 73°30' to 73°45'. Scale, 1:62,500. Contour interval, 20 feet. 50c.
- GQ-15. Golconda, Nev. Geology, by H. G. Ferguson, R. J. Roberts, and S. W. Muller. 1952. Lat 40°30' to 41°, long 117° to 117°30'. Scale, 1:125,000. Interval 100 feet. \$1.
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- GQ-17. East Greenwich, R. I. Bedrock geology, by A. W. Quinn. 1952. Lat 41°37'30" to 41°45', long 71°22'30" to 71°30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
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- GQ-19. Athens, Tenn. Geology, by John Rodgers. 1953. Lat 35°22'30" to 35°30', long 84°30' to 84°37'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-20. Greenfield, Mass. Bedrock geology, by M. E. Willard. 1952. Lat 42°30' to 42°37'30", long 72°30' to 72°37'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-21. Ayer, Mass. Surficial geology, by R. H. Jahns. 1953. Lat 42°30' to 42°37'30", long 71°30' to 71°37'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-22. Georgiaville, R. I. Surficial geology, by G. M. Richmond. 1953. Lat 41°52'30" to 42°, long 71°30' to 71°37'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-23. Coaldale, Nev. Geology, by H. G. Ferguson, S. W. Muller, and S. H. Cathcart. 1953. Lat 38° to 38°30', long 117°30' to 118°. Scale, 1:125,000. Contour interval, 100 feet. \$1.
- GQ-24. Pearlland, Calif. Geology, by L. F. Noble. 1953. Lat 34°30' to 34°36', long 118° to 118°06'. Scale, 1:24,000. Contour intervals, 5 and 25 feet. \$1.
- GQ-25. Galice, Oreg. Geology, by F. G. Wells and G. W. Walker. 1953. Lat 42°30' to 42°45', long 123°30' to 123°45'. Scale, 1:62,500. Contour interval, 50 feet. \$1.
- GQ-26. Bowbells, N. Dak. Geology, by R. W. Lemke and C. A. Kaye. 1953 [1954]. Lat 48°45' to 49°, long 102° to 102°15'. Scale, 1:62,500. Contour interval, 10 feet. \$1.

- GQ-27. Ahmeek, Mich. Bedrock geology, by W. S. White, H. R. Cornwall, and R. W. Swanson. 1953 [1954]. Lat 47°15' to 47°22'30", long 88°22'30" to 88°30'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-28. Carlisle, Pa. Geology, by G. W. Stose. 1953 [1954]. Lat 40° to 40°15', long 77° to 77°15'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-29. Eagleton, Mont. Geology, by R. M. Lindvall. 1953 [1954]. Lat 47°45' to 48°, long 109°45' to 110°. Scale, 1:62,500. \$1.
- GQ-30. Silver Creek, N. Y. Bedrock geology, by Wallace de Witt, Jr., and G. W. Colton. 1954. Lat 42°30' to 42°45', long 79° to 79°15'. Scale, 1:62,500. Contour interval, 10 feet. \$1.
- GQ-31. Velva, N. Dak. Geology, by R. W. Lemke. 1953 [1954]. Lat 48° to 48°15', long 100°45' to 101°. Scale, 1:62,500. Contour interval, 10 feet. \$1.
- GQ-32. Pierre, S. Dak. Geology, by D. R. Crandell. 1954. Lat 44°15' to 44°30', long 100°15' to 100°30'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-33. Bull Canyon, Colo. Geology, by F. W. Cater, Jr. 1954. Lat 38°07'30" to 38°15', long 108°45' to 108°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-34. Phoenix, Mich. Bedrock geology, by H. R. Cornwall. 1954. Lat 47°22'30" to 47°30', long 88°15' to 88°25'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-35. Bruneau Creek, Mich. Bedrock geology, by J. C. Wright and H. R. Cornwall. 1954. Lat 47°15' to 47°22'30", long 88°07'30" to 88°15'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-36. Eagle Harbor, Mich. Bedrock geology, by H. R. Cornwall and J. C. Wright. 1954. Lat 47°22'30" to 47°30', long 88°07'30" to 88°15'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-37. Hornell, N. Y. Bedrock geology, by J. F. Pepper. 1954. Lat 42°15' to 42°30', long 77°30' to 77°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-38. Starbuck, Wash. Geology, by L. M. Gard, Jr., and H. H. Waldron. 1954. Reprinted 1959. Lat 46°30' to 46°45', long 118° to 118°15'. Scale, 1:62,500. Contour interval, 40 feet. \$1.
- GQ-39. Canning, S. Dak. Geology, by D. R. Crandell. 1954. Lat 44°15' to 44°30', long 100° to 100°15'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-40. Round Mountain, Nev. Geology, by H. G. Ferguson and S. H. Cathcart. 1954. Lat 38°30' to 39°, long 117° to 117°30'. Scale, 1:125,000. Contour interval, 100 feet. \$1.
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- GQ-42. Bristol and vicinity, R. I.-Mass. Bedrock geology, by A. W. Quinn and G. H. Springer. 1954. Lat 41°37'30" to 41°45', long 71°15' to 71°22'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-43. Haas, Wash. Geology, by D. E. Trimble. 1954. Lat 46°30' to 46°45', long 118°15' to 118°30'. Scale, 1:62,500. Contour interval, 40 feet. \$1.
- GQ-44. Noonan, N. Dak. Geology, by R. C. Townsend, with a section on Ground-water resources by G. A. La Rocque, Jr. 1954. Lat 48°45' to 49°, long 103° to 103°15'. Scale, 1:62,500. Contour interval, 10 feet. \$1.
- GQ-45. Mina, Nev. Geology, by H. G. Ferguson, S. W. Muller, and S. H. Cathcart. 1954. Lat 38° to 38°30', long 118° to 118°30'. Scale, 1:125,000. Contour interval, 100 feet. \$1.
- GQ-46. Crosby, N. Dak. Geology, by R. C. Townsend, with a section on Ground-water resources by G. A. La Rocque, Jr. 1954. Lat 48°45' to 49°, long 103°15' to 103°30'. Scale, 1:62,500. Contour interval, 10 feet. \$1.
- GQ-47. Portal, N. Dak. Geology, by R. C. Townsend, with a section on Ground-water resources by G. A. La Rocque, Jr. 1954. Lat 48°45' to 49°, long 102°30' to 102°45'. Scale, 1:62,500. Contour interval, 10 feet. \$1.
- GQ-48. Hay, Wash. Geology, by H. H. Waldron and L. M. Gard, Jr. 1954. Lat 46°30' to 46°45', long 117°45' to 118°. Scale, 1:62,500. Contour interval, 40 feet. \$1.
- GQ-49. Fredonia, Kans. Geology, by H. C. Wagner. 1954 [1955]. Lat 37°30' to 37°45', long 95°45' to 96°. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-50. Valyermo and vicinity, Calif. Geology, by L. F. Noble. 1954. Lat 34°24' to 34°30', long 117°48' to 117°54'. Scale, 1:24,000. Contour intervals, 5 and 25 feet. \$1.
- GQ-51. Delaware, Mich. Bedrock geology, by H. R. Cornwall. 1954 [1955]. Lat 47°22'30" to 47°30', long 88° to 88°07'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-52. Lake Medora, Mich. Bedrock geology, by H. R. Cornwall. 1954 [1955]. Lat 47°22'30" to 47°30', long 87°52'30" to 88°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-53. Oahe, S. Dak. Geology, by D. R. Crandell. 1955. Lat 44°15' to 44°30', long 100°30' to 100°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-54. Mohawk, Mich. Bedrock geology, by E. S. Davidson, G. H. Espenshade, W. S. White, and J. C. Wright. 1955. Lat 47°15' to 47°22'30", long 88°15' to 88°22'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-55. Gateway, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38°37'30" to 38°45', long 108°52'30" to 109°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-56. Penawawa, Wash. Geology, by H. H. Waldron and L. M. Gard, Jr. 1955. Lat 46°30' to 46°45', long 117°30' to 117°45'. Scale, 1:62,500. Contour interval, 40 feet. \$1.
- GQ-57. Atkinson Creek, Colo. Geology, by E. J. McKay. 1955. Lat 38°22'30" to 38°30', long 108°37'30" to 108°45'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-58. Red Canyon, Colo. Geology, by E. J. McKay. 1955. Lat 38°22'30" to 38°30', long 108°45' to 108°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-59. Gypsum Gap, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38° to 38°07'30", long 108°37'30" to 108°45'. Scale, 1:24,000. Contour interval, 20 feet. \$1.

- GQ-60. Pine Mountain, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38°37'30" to 38°45', long 108°45' to 108°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-61. Calamity Mesa, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38°30' to 38°37'30", long 108°45' to 108°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-62. East Greenwich, R. I. Surficial geology, by J. H. Smith. 1955. Lat 40°37'30" to 41°45', long 71°22'30" to 71°30'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-63. Loon Lake, N. Y. Geology, by A. W. Postel, C. L. Dodson, and L. D. Carswell. 1956. Lat 44°30' to 44°45', long 74° to 74°15'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-64. Horse Range Mesa, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38° to 38°07'30", long 108°52'30" to 109°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-65. Naturita NW, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38°07'30" to 38°15', long 108°37'30" to 108°45'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-66. Joe Davis Hill, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 37°52'30" to 38°, long 108°45' to 108°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-67. Wolf Point, Mont. Geology, by R. B. Colton. 1955. Lat 48° to 48°15', long 105°30' to 105°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-68. Egnar, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 37°52'30" to 38°, long 108°52'30" to 109°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-69. Hamm Canyon, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38° to 38°07'30", long 108°45' to 108°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-70. Bristol and vicinity, R. I.-Mass. Surficial geology, by J. H. Smith. 1955. Lat 41°37'30" to 41°45', long 71°15' to 71°22'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-71. Davis Mesa, Colo. Geology, by F. W. Cater, Jr. 1955. Lat 38°15' to 38°22'30", long 108°45' to 108°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-72. Paradox, Colo. Geology, by C. F. Withington. 1955. Lat 38°15' to 38°22'30", long 108°52'30" to 109°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-73. Manitou Island, Mich. Bedrock geology, by H. R. Cornwall and W. S. White. 1955. Lat 47°22'30" to 47°30', long 87°35' to 87°45'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-74. Fort Wilkins, Mich. Bedrock geology, by H. R. Cornwall. 1955. Lat 47°22'30" to 47°30', long 87°45' to 87°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-75. Flaming Gorge, Utah-Wyo. Geology, by W. R. Hansen. 1955. Lat 40°52'30" to 41°, long 109°30' to 109°37'30". Scale, 1:24,000. Contour interval, 40 feet. \$1.
- GQ-76. Shooks Gap, Tenn. Geology, by J. M. Cattermole. 1955 [1956]. Lat 35°52'30" to 36°, long 83°45' to 83°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-77. Anderson Mesa, Colo. Geology, by F. W. Cater, Jr. 1955 [1956]. Lat 38°07'30" to 38°15', long 108°52'30" to 109°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-78. Uravan, Colo. Geology, by F. W. Cater, Jr., A. P. Butler, Jr., and E. J. McKay. 1955. Lat 38°15' to 38°22'30", long 108°37'30" to 108°45'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-79. Montpelier, Vt. Bedrock geology, by W. M. Cady. 1956. Lat 44°15' to 44°30', long 72°30' to 72°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-80. Williamsburg, Mass. Surficial geology, by Kenneth Segerstrom. 1955 [1956]. Lat 42°22'30" to 42°30', long 72°37'30" to 72°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-81. Juanita Arch, Colo. Geology, by E. M. Shoemaker. 1955. Lat 38°30' to 38°37'30", long 108°52'30" to 109°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-82. Colrain, Mass.-Vt. Surficial geology, by Kenneth Segerstrom. 1955 [1956]. Lat 42°37'30" to 42°45', long 72°37'30" to 72°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-83. Roc Creek, Colo. Geology, by E. M. Shoemaker. 1956. Lat 38°22'30" to 38°30', long 108°52'30" to 109°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-84. Providence, R. I. Surficial geology, by J. H. Smith. 1956. Lat 41°45' to 41°52'30", long 71°22'30" to 71°30'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-85. Williamsburg, Mass. Bedrock geology, by M. E. Willard. 1956. Lat 42°22'30" to 42°30', long 72°37'30" to 72°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-86. Colrain, Mass.-Vt. Bedrock geology, by Kenneth Segerstrom. 1956. Lat 42°37'30" to 42°45', long 72°37'30" to 72°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-87. Shelburne Falls, Mass. Bedrock geology, by Kenneth Segerstrom. 1956. Lat 42°30' to 42°37'30", long 72°37'30" to 72°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-88. Hayward, Calif. Geology, by G. D. Robinson. 1956. Lat 37°37'30" to 37°45', long 122° to 122°07'30". Scale, 1:24,000. Contour interval, 25 feet. \$1.
- GQ-89. Medford, Oreg.-Calif. Geology, by F. G. Wells. 1956. Lat 42° to 42°30', long 122°30' to 123°. Scale, 1:96,000. Contour interval, 100 feet. \$1.
- GQ-90. Bernardston, Mass.-Vt. Bedrock geology of the Massachusetts portion of the quadrangle, by Robert Balk. 1956. Lat 42°37'30" to 42°45', long 72°30' to 72°37'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-91. Narragansett Pier, R. I. Bedrock geology, by D. R. Nichols. 1956. Lat 41°22'30" to 41°30', long 71°22'30" to 71°30'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-92. Northfield, Mass.-N. H.-Vt. Bedrock geology of the Massachusetts portion, by Robert Balk. 1956. Lat 42°37'30" to 42°45', long 72°22'30" to 72°30'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-93. Millers Falls, Mass. Bedrock geology, by Robert Balk. 1956. Lat 42°30' to 42°37'30", long 72°22'30" to 72°30'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-94. Crompton, R. I. Surficial geology, by J. H. Smith. 1956. Lat 41°37'30" to 41°45', long 71°30' to 71°37'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.

- GQ-95. Ubehebe Peak, Calif. Geology, by J. F. McAllister. 1956. Lat 36°30' to 36°45', long 117°30' to 117°45'. Scale, 1:62,500. Contour interval, 40 feet. \$1.
- GQ-96. Eden quadrangle, N. Y. Bedrock geology, by Wallace de Witt, Jr. 1956. Lat 42°37'30" to 42°45', long 78°52'30" to 79°. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-97. Hamburg quadrangle, N. Y. Bedrock geology, by G. W. Colton. 1956. Lat 42°37'30" to 42°45', long 78°45' to 78°52'30". Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-98. Carlsbad Caverns East, N. Mex. Geology, by P. T. Hayes, with a chapter on The geologic development of the Carlsbad Caverns, by B. T. Gale. 1957. Lat 32° to 32°15', long 104°15' to 104°30'. Scale, 1:62,500. Contour interval, 25 feet. \$1.
- GQ-99. Casa Diablo Mountain, Calif. Geology, by C. D. Rinehart and D. C. Ross. 1957. Lat 37°30' to 37°45', long 118°30' to 118°45'. Scale, 1:62,500. Contour interval, 40 feet. \$1.
- GQ-100. Juneau (B-3), Alaska. Geology, by Fred Barker. 1957. Lat 58°15' to 58°30', long 134°40' to 135°. Scale, 1:63,360. Contour interval, 100 feet. \$1.
- GQ-101. Clay Basin, Utah. Geology, by W. R. Hansen. 1957. Lat 40°52'30" to 41°, long 109°07'30" to 109°15'. Scale, 1:24,000. Contour interval, 40 feet. \$1.
- GQ-102. Hyde Park, Vt. Bedrock geology, by A. L. Albee. 1957. Lat 44°30' to 44°45', long 72°30' to 72°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-103. Golden, Colo. Bedrock geology, by Richard Van Horn. 1957. Lat 39°45' to 39°52'30", long 105°07'30" to 105°15'. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-104. Portland, Oreg.-Wash. Geology, by D. E. Trimble. 1957. Lat 45°30' to 45°45', long 122°30' to 122°45'. Scale, 1:62,500. Contour interval, 25 feet. \$1.
- GQ-105. Hope Valley, R. I. Bedrock geology, by G. E. Moore, Jr. 1958. Lat 41°30' to 41°37'30", long 71°37'30" to 71°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-106. Slocum, R. I. Surficial geology, by W. R. Power, Jr. 1957. Lat 41°30' to 41°37'30", long 71°30' to 71°37'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-107. Lawrence, Mass.-N. H. Surficial geology, by R. O. Castle. 1958. Lat 42°37'30" to 42°45', long 71°07'30" to 71°15'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-108. Cheshire, Mass. Bedrock geology, by Norman Herz. 1958. Lat 42°30' to 42°37'30", long 73°07'30" to 73°15'. Scale, 1:31,680. Contour intervals, 10 and 20 feet. \$1.
- GQ-109. Bedford, Wyo. Geology, by W. W. Rubey. 1958. Lat 42°45' to 43°, long 110°45' to 111°. Scale, 1:62,500. Contour interval, 100 feet. \$1.
- GQ-110. Fairbanks (D-2), Alaska. Geology, by T. L. Péwé. 1958. Lat 64°45' to 65°, long 147°30' to 148°. Scale, 1:63,360. Contour interval, 50 feet. \$1.
- GQ-111. Duffield, Va. Geology, by L. D. Harris and R. L. Miller. 1958. Lat 36°37'30" to 36°45', long 82°45' to 82°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-112. Carlsbad Caverns West, N. Mex.-Tex. Geology, by P. T. Hayes and R. L. Koogle. 1958 [1959]. Lat 32° to 32°15', long 104°30' to 104°45'. Scale, 1:62,500. Contour interval, 50 feet. \$1.
- GQ-113. Epes, Ala. Geology, by W. H. Monroe and J. L. Hunt. 1958. Lat 32°30' to 32°45', long 88° to 88°15'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-114. Slocum, R. I. Bedrock geology, by W. R. Power, Jr. 1959. Lat 41°30' to 41°37'30", long 71°30' to 71°37'30". Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-115. Knoxville, Tenn. Geology, by J. M. Cattermole. 1958. Lat 35°52'30" to 36°, long 83°52'30" to 84°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-116. Shelburne Falls, Mass. Surficial geology, by Kenneth Segerstrom. 1959. Lat 42°30' to 42°37'30", long 72°37'30" to 72°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-117. Carolina and Quonochontaug, R. I. Bedrock geology, by G. E. Moore, Jr. 1959. Lat 41°22'30" to 41°30', long 71°37'30" to 71°45'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-118. Providence, R. I. Bedrock geology, by A. W. Quinn. 1959. Lat 41°45' to 41°52'30", long 71°22'30" to 71°30'. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-119. New Britain, Conn. Surficial geology, by H. E. Simpson. 1959. Lat 41°37'30" to 41°45', long 72°45' to 72°52'30". Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-120. Poland, Maine. Surficial geology, by J. B. Hanley. 1959. Lat 44° to 44°15', long 70°15' to 70°30'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-121. Roxbury, Conn. Bedrock geology, by R. M. Gates. 1959 [1960]. Lat 41°30' to 41°37'30", long 73°15' to 73°22'30". Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-122. Wilmington, Mass. Surficial geology, by R. O. Castle. 1959. Lat 42°30' to 42°37'30", long 71°07'30" to 71°15'. Scale, 1:31,680. Contour interval, 10 feet. \$1.
- GQ-123. Nicholville, N. Y. Geology, by A. W. Postel, A. E. Nelson, and D. R. Wiesner. 1959. Lat 44°30' to 44°45', long 74°30' to 74°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-124. Fairbanks (D-1), Alaska. Geology, by J. R. Williams, T. L. Péwé, and R. A. Paige. 1959. Lat 64°45' to 65°, long 147° to 147°30". Scale, 1:63,360. Contour interval, 50 feet. \$1.
- GQ-125. Buckley, Wash. Geology, by D. R. Crandell and L. M. Gard, Jr. 1959. Lat 47°07'30" to 47°15', long 122° to 122°07'30". Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-126. Bearden, Tenn. Geology, by J. M. Cattermole. 1960. Lat 35°52'30" to 36°, long 84° to 84°07'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-127. Bridgewater, Mass. Geology, by J. H. Hartshorn. 1960. Lat 41°52'30" to 42°, long 70°52'30" to 71°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-128. Haunted Canyon, Ariz. Geology, by D. W. Peterson. 1960. Lat 33°22'30" to 33°30', long 111° to 111°07'30". Scale, 1:24,000. Contour interval, 40 feet. \$1.
- GQ-129. Pysht, Wash. Geology, by H. D. Gower. 1960. Lat 48° to 48°15', long 124° to 124°15'. Scale, 1:62,500. Contour interval, 80 feet. \$1.
- GQ-130. Wildwood, Tenn. Geology, by R. B. Neuman. 1960 [1961]. Lat 35°45' to 35°52'30", long 83°45' to 83°52'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.

- GQ-131. Blockhouse, Tenn. Geology, by R. B. Neuman and R. L. Wilson. 1960 [1961]. Lat 35°37'30" to 35°45', long 83°52'30" to 84°. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-132. Timpanogos Cave, Utah. Geology, by A. A. Baker and M. D. Crittenden, Jr. 1961. Lat 40°22'30" to 40°30', long 111°37'30" to 111°45'. Scale, 1:24,000. Contour interval, 40 feet. \$1.
- GQ-133. Frenchtown, N.J.-Pa. Geology, by A. A. Drake, Jr., D. B. McLaughlin, and R. E. Davis. 1961. Lat 40°30' to 40°37'30", long 75° to 75°07'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-134. Avon, Conn. Geology, by R. W. Schnabel. 1960. Lat 41°45' to 41°52'30", long 72°45' to 72°52'30". Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-135. Geology of the Vaughn quadrangle, Montana, by E. K. Maughan. 1961. Lat 47°30' to 47°45', long 111°30' to 111°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-136. Surficial geology of the Wickford quadrangle, Rhode Island, by J. P. Schafer. 1961. Lat 41°30' to 41°37'30", long 71°22'30" to 71°30'. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-137. Windsor Locks, Conn. Surficial geology, by R. B. Colton. 1960 [1961]. Lat 41°52'30" to 42°, long 72°37'30" to 72°45'. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-138. Uncasville, Conn. Surficial geology, by Richard Goldsmith. 1960 [1961]. Lat 41°22'30" to 41°30' long 72° to 72°07'30". Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-139. Bedrock geology of the North Adams quadrangle, Massachusetts-Vermont, by Norman Herz. 1961. Lat 42°37'30" to 42°45', long 73° to 73°07'30". Contour interval, 20 feet. \$1.
- GQ-140. Surficial geology of the Narragansett Pier quadrangle, Rhode Island, by J. P. Schafer. 1961. Lat 41°22'30" to 41°30', long 71°22'30" to 71°30'. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-141. Geology of the Boulter Peak quadrangle, Utah, by A. E. Disbrow. 1961. Lat 40° to 40°07'30", long 112°07'30" to 112°15'. Scale, 1:24,000. Contour interval, 25 feet. \$1.
- GQ-142. Geology of the Valdez (A-5) quadrangle, Alaska, by H. W. Coulter and E. B. Coulter. 1961. Lat 61° to 61°15', long 145°30' to 145°52'30". Scale, 1:63,360. Contour interval, 100 feet. \$1.
- GQ-143. Surficial geology of the North Scituate quadrangle, Rhode Island, by C. S. Robinson. 1961. Lat 41°45' to 41°52'30", long 71°30' to 71°37'30". Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-144. Geologic map of the Norwich quadrangle, Connecticut, by G. L. Snyder. 1961. Lat 41°30' to 41°37'30", long 72° to 72°07'30". Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-145. Surficial geology of the Bristol quadrangle, Connecticut, by H. E. Simpson. 1961. Lat 41°37'30" to 41°45', long 72°52'30" to 73°. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-146. Surficial geology of the Southington quadrangle, Connecticut, by A. M. La Sala, Jr. 1961. Lat 41°30' to 41°37'30", long 72°52'30" to 73°. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-149. Geology of the Altoona quadrangle, Kansas, by H. C. Wagner. 1961. Lat 37°30' to 37°45', long 95°30' to 95°45'. Scale, 1:62,500. Contour interval, 20 feet. \$1.
- GQ-151. Bedrock geology of the Louisville quadrangle, Colorado, by F. D. Spencer. 1961. Lat 39°52'30" to 40°, long 105°07'30" to 105°15'. Scale, 1:24,000. Contour interval, 10 feet. \$1.
- GQ-155. Geology of the Monroe quadrangle, Utah, by Eugene Callaghan and R. L. Parker. 1961. Lat 38°30' to 38°45', long 112° to 112°15'. Scale, 1:62,500. Contour interval, 50 feet. \$1.
- GQ-157. Geology of the Bare Mountain quadrangle, Nevada, by H. R. Cornwall and F. J. Kleinhampl. 1961. Lat 36°45' to 37°, long 116°30' to 116°45'. Scale, 1:62,500. Contour interval, 40 feet. \$1.
- GQ-158. Geology of the Poverty Bay quadrangle, Washington, by H. H. Waldron. 1961. Lat 47°15' to 47°22'30", long 122°15' to 122°22'30". Scale, 1:24,000. Contour interval, 25 feet. \$1.
- GQ-169. Geology of the Haldeman quadrangle, Kentucky, by S. H. Patterson and J. W. Hosterman. 1961. Lat 38°07'30" to 38°15', long 83°15' to 83°22'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-170. Geology of the Wrigley quadrangle, Kentucky, by J. W. Hosterman, S. H. Patterson, and J. W. Huddle. 1961. Lat 38° to 38°07'30", long 83°15' to 83°22'30". Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-172. Geology of the Ewing quadrangle, Kentucky and Virginia, by K. J. Englund, H. L. Smith, L. D. Harris, and J. G. Stephens. 1961. Lat 36°37'30" to 36°45', long 83°22'30" to 83°30'. Scale, 1:24,000. Contour interval, 20 feet. \$1.
- GQ-173. Geology of the Austin quadrangle, Kentucky, by S. L. Moore. 1961. Lat 36°45' to 36°52'30", long 86° to 86°07'30". Contour interval, 20 feet. \$1.

MISCELLANEOUS GEOLOGIC INVESTIGATIONS MAPS¹

[Distinguishing prefix "I"]

- I-1. Geologic map of Canal Zone and adjoining parts of Panama, compiled by W. P. Woodring. 1955. Scale, 1:75,000. \$1.
- *I-84. Mesozoic and Cenozoic tectonic elements of Alaska, by T. G. Payne. 1955. Reprinted 1959. Scale, 1:5,000,000. (Superseded by Bulletin 1094.)
- I-129. Geology of the Kenilworth quadrangle, Montana, by R. M. Lindvall. 1956. Lat 48° to 48°15', long 110°15' to 110°30'. Scale, 1:62,500. 75c.
- I-130. Geology of the Big Sandy quadrangle, Montana, by R. M. Lindvall. 1956. Lat 48° to 48°15', long 110° to 110°15'. Scale, 1:62,500. 75c.
- I-155. Geology of the Cartersville and Hathaway quadrangles, Montana, by J. Fred Smith, Jr. 1956. Lat 46°15' to 46°30', long 106° to 106°30'. Scale, 1:62,500. 50c.
- I-156. Geology of the Manila quadrangle, Utah-Wyoming, by W. R. Hansen and M. G. Bonilla. 1956. Lat 40°52'30" to 41°, long 109°37'30" to 109°45'. Approximate scale, 1:24,000. 75c.
- I-167. Geologic map of the Malone quadrangle, N. Y., by A. W. Postel, D. R. Wiesnet, and A. E. Nelson. 1956. Lat 44°45' to 45°, long 74°15' to 74°30'. Scale, 1:62,500. 50c.
- I-168. Geologic map of the Chateaugay quadrangle, N. Y., by A. E. Nelson, D. R. Wiesnet, L. D. Carswell, and A. W. Postel. 1956. Lat 44°45' to 45°, long 74° to 74°15'. Scale, 1:62,500. 50c.
- I-175. Paleotectonic maps, Jurassic system, by E. D. McKee and others, with a separate section on Paleogeography, by R. W. Imlay. 1956. Scale, 1:5,000,000. 6 p., 9 pls., 2 charts. \$5.
- I-197. Geologic map and structure sections along part of the lower Yukon River, Alaska, by W. W. Patton, Jr., and R. S. Bickel. 1956. Lat 64°30' to 65°, long 156° to 158°. Approximate scale, 1:200,000 for the map and 4 times the geologic map scale for the structure sections. 50c.
- I-201 B. Geographic map of the Jawf-Sakah quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1960 [1961]. Lat 28° to 32°, long 39° to 42° E. Scale, 1:500,000. \$1.
- I-202 B. Geographic map of the Darb Zubaydah quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1960. Lat 28° to 32°, long 42° to 45° E. Scale, 1:500,000. \$1.
- I-203 A. Geology of the Wadi Al Batin quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1959 [1960]. Lat 28° to 32°, long 45° to 48° E. Scale, 1:500,000. \$1. [The geology shown is within the borders of the Kingdom of Saudi Arabia and the Neutral Zones.]
- I-203 B. Geographic map of the Wadi Al Batin quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1959. Lat 28° to 32°, long 45° to 48° E. Scale, 1:500,000. \$1.
- I-204 B. Geographic map of the northwestern Hijaz quadrangle, Kingdom of Saudi Arabia, by G. F. Brown, R. O. Jackson, and R. G. Bogue. 1959. Lat 24° to 28°, long 35° to 39° E. Scale, 1:500,000. \$1.
- I-205 B. Geographic map of the northeastern Hijaz quadrangle, Kingdom of Saudi Arabia, by G. F. Brown and R. O. Jackson. 1959. Lat 24° to 28°, long 39° to 42° E. Scale, 1:500,000. \$1.
- I-206 B. Geology of the Wadi Ar Rimah quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp, L. F. Ramirez, and G. F. Brown. 1961. Lat 24° to 28°, long 42° to 45° E. Scale, 1:500,000. \$1.
- I-207 A. Geology of the northern Tuwayq quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1958. Lat 24° to 28°, long 45° to 48° E. Scale, 1:500,000. \$1.
- I-207 B. Geographic map of the northern Tuwayq quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1957. Lat 24° to 28°, long 45° to 48° E. Scale, 1:500,000. \$1.
- I-208 A. Geology of the western Persian Gulf quadrangle, Kingdom of Saudi Arabia, by Max Steineke, T. F. Harriss, K. R. Parsons, and E. L. Berg. 1958. Lat 24° to 28°, long 48° to 51° E. Scale, 1:500,000. \$1.
- I-208 B. Geographic map of the western Persian Gulf quadrangle, Kingdom of Saudi Arabia, by Max Steineke, T. F. Harriss, K. R. Parsons, and E. L. Berg. 1958. Lat 24° to 28°, long 48° to 51° E. Scale, 1:500,000. \$1.
- I-209 A. Geology of the central Persian Gulf quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1961. Lat 24° to 28°, long 51° to 54° E. Scale, 1:500,000. \$1.
- I-209 B. Geographic map of the central Persian Gulf quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez. 1959. Lat 24° to 28°, long 51° to 54° E. Scale, 1:500,000. \$1.
- I-210 B. Geographic map of the southern Hijaz quadrangle, Kingdom of Saudi Arabia, by G. F. Brown and R. O. Jackson. 1958. Lat 20° to 24°, long 38° to 42° E. Scale, 1:500,000. \$1.
- I-212 A. Geology of the southern Tuwayq quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp, R. D. Gierhart, G. F. Brown, and R. O. Jackson. 1956. Lat 20° to 24°, long 45° to 48° E. Scale, 1:500,000. \$1.
- I-212 B. Geographic map of the southern Tuwayq quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp, R. D. Gierhart, G. F. Brown, and R. O. Jackson. 1956. Lat 20° to 24°, long 45° to 48° E. Scale, 1:500,000. \$1.

¹Missing numbers in the regular numerical sequence of this series, such as I-2—I-83, I-85—I-128, I-131—I-154, I-157—I-166, represent photogeologic maps, which have all been listed together at the end of this section.

- 1-213 A. Geology of the northwestern Rub' Al Khali quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez, 1959. Lat 20° to 24°, long 48° to 51° E. Scale, 1:500,000. \$1.
- 1-213 B. Geographic map of the northwestern Rub' Al Khali quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez, 1959. Lat 20° to 24°, long 48° to 51° E. Scale, 1:500,000. \$1.
- 1-214 A. Geology of the northeastern Rub' Al Khali quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez, 1961. Lat 20° to 24°, long 51° to 54° E. Scale, 1:500,000. \$1.
- 1-214 B. Geographic map of the northeastern Rub' Al Khali quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez, 1959. Lat 20° to 24°, long 51° to 54° E. Scale, 1:500,000. \$1.
- 1-216 A. Geology of the Tihamat Ash Sham quadrangle, Kingdom of Saudi Arabia, by G. F. Brown and R. O. Jackson, 1958 [1959]. Lat 16° to 20°, long 39° to 42° E. Scale, 1:500,000. Available in two editions, with and without shaded-relief base. \$1.
- 1-216 B. Geographic map of the Tihamat Ash Sham quadrangle, Kingdom of Saudi Arabia, by G. F. Brown and R. O. Jackson, 1958. Lat 16° to 20°, long 39° to 42° E. Scale, 1:500,000. \$1.
- 1-217 A. Geology of the Asir quadrangle, Kingdom of Saudi Arabia, by G. F. Brown and R. O. Jackson, 1959. Lat 16° to 20°, long 42° to 45° E. Scale, 1:500,000. Available in one edition only, shaded-relief base. \$1.
- 1-217 B. Geographic map of the Asir quadrangle, Kingdom of Saudi Arabia, by G. F. Brown and R. O. Jackson, 1958. Lat 16° to 20°, long 42° to 45° E. Scale, 1:500,000. \$1.
- 1-223. Geologic reconnaissance in the Yukon-Kuskokwim delta region, Alaska, by W. L. Coonrad, 1957. Lat 59°30' to 62°45', long 162° to 168°. Scale, 1:500,000. 75c.
- *1-224. Preliminary geologic map of the northwestern part of New Mexico, by C. H. Dane and G. O. Bachman, 1957. Lat 34° to 37°, long 106° to 109°. Scale, 1:380,160.
- 1-225. Geologic and structure contour map of the Fort Peck Indian Reservation and vicinity, Montana, by R. B. Colton and A. F. Bateman, Jr. 1956. Lat 48° to 48°30', long 104°30' to 106°30'. Scale, 1:125,000. 75c.
- 1-226. Geologic map and structure sections of the Shaktolik River area, Alaska, by W. W. Patton, Jr., and R. S. Bickel, 1956. Lat 64°30' to 64°45', long 159°30' to 160°30'. Scale, 1:80,000. 50c.
- 1-230. Map of Salt Chuk area, Prince of Wales Island, Alaska, showing linear features as seen on aerial photographs, by C. L. Pillmore and Kathleen McQueen, 1956. Scale, 1:12,000. Contour interval, 500 feet. 50c.
- 1-231. Map of Hollis area, Prince of Wales Island, Alaska, showing linear features as seen on aerial photographs, part 1, by C. L. Pillmore and Kathleen McQueen, 1956. Scale, 1:12,000. Contour interval, 500 feet. 50c.
- 1-232. Map of Hollis area, Prince of Wales Island, Alaska, showing linear features as seen on aerial photographs, part 2, by C. L. Pillmore and Kathleen McQueen, 1956. Scale, 1:12,000. Contour interval, 500 feet. 50c.
- 1-234. Preliminary general geologic map of the Laredo quadrangle, Bearpaw Mountains, Montana, by W. T. Pecora, I. J. Witkind, and D. B. Stewart, 1957. Lat 48°15' to 48°30', long 109°45' to 110°. Scale 1:31,680. 75c.
- 1-235. Preliminary geologic map of the Centennial Mountain quadrangle, Bearpaw Mountains, Mont., by D. B. Stewart, W. T. Pecora, D. B. Engstrom, and H. R. Dixon, 1957. Lat 48° to 48°15', long 109°45' to 110°. Scale, 1:31,680. 75c.
- 1-236. Preliminary geologic map of the Shambo quadrangle, Bearpaw Mountains, Mont., by J. H. Kerr, W. T. Pecora, D. B. Stewart, and H. R. Dixon, 1957. Lat 48°15' to 48°30', long 109°30' to 109°45'. Scale, 1:31,680. 75c.
- 1-237. Preliminary geologic map of the Warrick quadrangle, Bearpaw Mountains, Mont., by W. T. Pecora and others, 1957. Lat 48° to 48°15', long 109°30' to 109°45'. Scale, 1:31,680. 75c.
- 1-239. Areal and engineering geology of the Oakland West quadrangle, California, by D. H. Radbruch, 1957. Lat 37°45' to 37°52'30", long 122°15' to 122°22'30". Scale 1:24,000. Contour interval, 5 feet. \$1.
- 1-243. Reconnaissance geologic map of the Kateel River quadrangle, Alaska, by J. T. Cass, 1957 [1958]. Lat 65° to 66°, long 156° to 159°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-249. Preliminary geologic map of the Nulato and Kateel Rivers area, Alaska, by R. S. Bickel and W. W. Patton, Jr. 1957. Lat 64°15' to 65°30', long 158° to 159°30'. Scale, 1:125,000. 50c.
- 1-256. Preliminary geologic map of the southeastern part of New Mexico, by C. H. Dane and G. O. Bachman, 1958. Lat 32° to 34°, long 103° to 106°. Scale, 1:380,160. 75c.
- 1-264. Engineering geology of Islais Creek basin, San Francisco, Calif., by D. H. Radbruch and Julius Schlocker, 1958. Lat 37°43'45" to 37°45'45", long 122°22'30" to 122°25'. Scale, 1:12,000. Contour interval, 25 feet. 75c.
- 1-269. Ground conditions and surficial geology of the Kenai-Kasilof area, Kenai Peninsula, south-central Alaska, by Thor N. V. Karlstrom, 1958. Lat 60°25' to 60°35', long 151° to 151°20'. Scale, 1:63,360. Contour interval, 50 feet. 50c.
- 1-270 B. Arabian Peninsula, by G. F. Brown and others, 1958. Lat 11°30' to 32°, long 33°30' to 61°30' E. Scale, 1:2,000,000. \$1.50.
- 1-271. Glacial features and surficial deposits of the Malaspina district, Alaska, by George Plafker and D. J. Miller, 1958 [1959]. Lat 59°30' to 60°20', long 139°30' to 141°22'30". Scale, 1:125,000. 75c.
- 1-272. Geology of the San Francisco North quadrangle, California, by J. Schlocker, M. G. Bonilla, and D. H. Radbruch, 1958. Lat 37°45' to 37°52'30", long 122°22'30" to 122°30'. Scale, 1:24,000. Contour interval, 25 feet. \$1.
- 1-273. Map of a part of Prince William Sound area, Alaska, showing linear geologic features as shown on aerial photographs, by W. H. Condon and J. T. Cass, 1958. Lat 59°45' to 61°, long 147° to 149°. Scale, 1:125,000. Contour interval, 200 feet. 50c.

- *1-276. Progress map of the geology of the Juneau quadrangle, Alaska, by E. H. Lathram, R. A. Loney, W. H. Condon, and H. C. Berg. 1958. Lat 58° to 59°, long 134° to 136°. Scale, 1:250,000. Superseded by map 1-303.
- 1-284. Preliminary map of landslides in the Pacific Palisades area, city of Los Angeles, Calif., by J. T. McGill. 1959. Scale, 1:4,800. Contour interval, 5 feet. 50c.
- 1-285. Geology of the Bethel quadrangle, Alaska, by J. M. Hoare and W. L. Coonrad. 1959 [1960]. Lat 60° to 61°, long 159° to 162°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. \$1.
- 1-286. Reconnaissance geologic map of the Norton Bay quadrangle, Alaska, by J. T. Cass. 1959. Lat 64° to 65°, long 159° to 162°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-287. Reconnaissance geologic map of the Candle quadrangle, Alaska, by J. T. Cass. 1959. Lat 65° to 66°, long 159° to 162°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-288. Reconnaissance geologic map of the Unalakleet quadrangle, Alaska, by J. T. Cass. 1959. Lat 63° to 64°, long 159° to 162°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-289. Reconnaissance geologic map of the Ruby quadrangle, Alaska, by J. T. Cass. 1959. Lat 64° to 65°, long 153° to 156°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-290. Reconnaissance geologic map of the Melozitna quadrangle, Alaska, by J. T. Cass. 1959. Lat 65° to 66°, long 153° to 156°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-291. Reconnaissance geologic map of the Nulato quadrangle, Alaska, by J. T. Cass. 1959. Lat 64° to 65°, long 156° to 159°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-292. Geology of the Russian Mission quadrangle, Alaska, by J. M. Hoare and W. L. Coonrad. 1959 [1960]. Lat 61° to 62°, long 159° to 162°. Scale, 1:250,000. Contour intervals, 200 and 1,000 feet. 75c.
- 1-296. Geologic map of the Bonner quadrangle, Montana, by W. H. Nelson and J. P. Dobell. 1959. Lat 46°45' to 47°, long 113°45' to 114°. Scale, 1:62,500. 2 sheets. 75c per set.
- 1-297. Geology of the western part of the Big Delta (D-6) quadrangle, Alaska, by J. R. Williams. 1959. Lat 64°45' to 65°, long 146°30' to 147°. Scale, 1:63,360. 75c.
- 1-298. Former shoreline features along the east side of San Francisco Bay, Calif., by D. H. Radbruch. 1959. Lat 37°42'30" to 37°52'30", long 122°12'30" to 122°20'. Scale, 1:48,000. Contour intervals, 5 and 25 feet. 50c.
- 1-299. Epigenetic uranium deposits in the United States, by W. I. Finch, I. S. Parrish, and G. W. Walker. 1959 [1960]. Scale, 1:5,000,000. 3 sheets. \$1 per set.
- 1-300. Paleotectonic maps, Triassic System, by E. D. McKee and others. 1959 [1960]. 33 p., 9 pls., 32 figs. Scale, 1:5,000,000 for pls. 1-6, 8, \$5.
- 1-303. Progress map of the geology of the Juneau quadrangle, Alaska, by E. H. Lathram, R. A. Loney, W. H. Condon, and H. C. Berg. 1959. Lat 58° to 59°, long 134° to 136°. Scale, 1:250,000. Contour interval, 1,000 feet. 50c. Supersedes Map 1-276.
- 1-307. Engineering and surficial geology of the Nenana-Rex area, Alaska, by Reuben Kachadoorian. 1960. Lat 64°12'30" to 64°35', long 148°40' to 149°20'. Scale, 1:63,360. Contour interval, 50 feet. 75c.
- 1-308. Engineering geology of the Katalla area, Alaska, by Reuben Kachadoorian. 1960. Lat 60° to 60°30', long 144° to 144°45'. Scale, 1:63,360. Contour interval, 100 feet. \$1.
- 1-309. Geologic map of the igneous and metamorphic rocks of Colorado showing location of uranium deposits, compiled by E. A. Merewether. 1960. Lat 37° to 41°, long 102° to 109°. Scale, 1:500,000. \$1.
- 1-310. Geologic map of the igneous and metamorphic rocks of Wyoming showing location of uranium deposits, compiled by E. A. Merewether. 1960. Lat 41° to 45°, long 104° to 111°. Scale, 1:500,000. \$1.
- 1-311. Geologic map of the igneous and metamorphic rocks of Montana showing location of uranium deposits, compiled by E. A. Merewether. 1960. Lat 45° to 49°, long 104° to 109° (east half); lat 45° to 49°, long 110° to 115° (west half). Scale, 1:500,000. 2 sheets. \$1.50 per set.
- 1-312. Generalized geologic map of the Nelchina area, Alaska, showing igneous rocks and larger faults, by Arthur Grantz. 1960. Lat 61°45' to about 62°19'20", long 147° to about 148°08'. Scale, 1:96,000. Contour interval, 200 feet. 50c.
- 1-313. Geologic map of Talkeetna Mountains (A-2) quadrangle, Alaska, and the contiguous area to the north and northwest, by Arthur Grantz. 1960. Lat 62° to 62°20', long 147°30' to 148°20'. Scale, 1:48,000. 50c.
- 1-314. Geologic map of Talkeetna Mountains (A-1) quadrangle, and the south third of Talkeetna Mountains (B-1) quadrangle, Alaska, by Arthur Grantz. 1960. Lat 62° to 62°20', long 147° to 147°30'. Scale, 1:48,000. Contour interval, 100 feet. 50c.
- 1-316. Glacial map of Ohio, by R. P. Goldthwait, G. W. White, and J. L. Forsyth. 1961. Scale, 1:500,000. 75c.
- 1-318. Geology of the Central Aguirre quadrangle, Puerto Rico, by H. L. Berryhill, Jr. 1960 [1961]. Lat 17°52'30" to 18°, long 66°07'30" to 66°15'. Scale, 1:20,000. Contour interval, 10 meters. \$1.
- 1-319. Geology of the Cayey quadrangle, Puerto Rico, by H. L. Berryhill, Jr., and Lynn Glover. 3d. 1960 [1961]. Lat 18° to 18°07'30", long 66°07'30" to 66°15'. Scale, 1:20,000. Contour interval, 10 meters. \$1.25.
- 1-320. Geology of the Comerio quadrangle, Puerto Rico, by M. H. Pease, Jr., and R. P. Briggs. 1960 [1961]. Lat 18°07'30" to 18°15', long 66°07'30" to 66°15'. Scale, 1:20,000. Contour interval, 10 meters. \$1.25.
- 1-321. Geologic map of the Hagemeister Island quadrangle, Alaska, by J. M. Hoare and W. L. Coonrad. 1961. Lat 58° to 59°, long 160° to 162°30'. Scale, 1:250,000. \$1.
- 1-322. Geology of the Willow Creek Butte quadrangle, Utah-Colorado, by W. R. Hansen. 1961. Lat 40°52'30" to 41°, long 109° to 109°07'30". Scale, 1:24,000. Contour interval, 40 feet. 75c.
- 1-323. Progress map of the geology of Admiralty Island, Alaska, by E. H. Lathram, R. A. Loney, H. C. Berg, and J. S. Pomeroy. 1960. Lat 57° to 58°, long 134° to 134°30'. Scale, 1:250,000. Contour interval, 200 feet. 50c.

- 1-324. Geologic map of the Dutch John Mountain and Goslin Mountain quadrangles, Utah-Wyoming, by W. R. Hansen. 1961. Lat 40°52'30" to 41°, long 109°15' to 109°30'. Scale, 1:24,000. Contour interval, 40 feet. 75c.
- 1-325. Geologic map of Oregon west of the 121st meridian, Prepared under the direction of F. G. Wells and compiled by D. L. Peck. 1961. Scale, 1:500,000. \$2.
- 1-326. Preliminary geologic map showing iron and copper prospects in the Juncos quadrangle, Puerto Rico, by C. H. Broedel. 1961. Lat 18°07'30" to 18°15', long 65°52'30" to 66°. Scale, 1:20,000. Contour interval, 10 meters. \$1.
- 1-327. Glacial map of Montana east of the Rocky Mountains, by R. B. Colton, R. W. Lemke, and R. M. Lindvall. 1961. Lat 47° to 49°, long 104° to 113°. Scale, 1:500,000. \$1.50.
- 1-328. Preliminary geologic map of the Climax stock and vicinity, Nye County, Nev., by F. N. Houser and F. G. Poole. 1960. Scale, 1:4,800. 2 sheets. \$1.50 per set.
- 1-329. Geology of the Huntsville quadrangle, Alabama, by T. H. Sanford, Jr., G. T. Malmberg, and L. R. West. 1961. Lat 34°37'30" to 34°45', long 86°30' to 86°37'30". Scale, 1:24,000. Contour interval, 20 feet. 75c.
- 1-330. Geology of the Moses Lake North quadrangle, Washington, by M. J. Grolier and B. L. Foxworthy. 1961. Lat 47°07'30" to 47°15', long 119°15' to 119°22'30". Scale, 1:24,000. Contour interval, 10 feet. 75c.
- 1-332. Geologic map of a part of southwestern Wyoming and adjacent States, by W. H. Bradley. 1961. Scale, 1:250,000. 75c.
- 1-333. Preliminary geologic map of the Indian Hills quadrangle, Jefferson County, Colo., by G. R. Scott. 1961. Lat 39°30' to 39°37'30", long 105°07'30" to 105°15'. Scale, 1:24,000. Contour interval, 40 feet. 50c.
- 1-335. Preliminary report on the geology of the Coamo quadrangle, Puerto Rico, by Lynn Glover, 3d. 1961. Lat 18° to 18°07'30", long 66°15' to 66°22'30". Scale, 1:20,000. Contour interval, 10 meters. \$1.25.
- 1-337. Preliminary geologic map of the Salinas quadrangle, Puerto Rico, by Lynn Glover, 3d. 1961. Lat 17°52'30" to 18°, long 66°15' to 66°22'30". Scale, 1:20,000. Contour interval, 10 meters. 50c.
- 1-339. Geologic map of the Goodnews quadrangle, Alaska, by J. M. Hoare and W. L. Coonrad. 1961. Lat 59° to 60°, long 159° to 162°. Scale, 1:250,000. \$1.
- 1-340. Geologic map and section of the Fairbanks D-3 quadrangle, Alaska, by T. L. Péwé and N. R. Rivard. 1961. Lat 64°45' to 65°, long 148° to 148°30'. Scale, 1:63,360. Contour interval, 50 feet. 50c.
- 1-342. Geologic map and cross sections of the Anchorage (D-2) quadrangle and northeasternmost part of the Anchorage (D-3) quadrangle, Alaska, by Arthur Grantz. 1961. Lat 61°45' to 62°, long 147°22'30" to 147°45'. Scale, 1:48,000. Contour interval, 100 feet. 50c.
- 1-343. Geologic map of the north two-thirds of Anchorage (D-1) quadrangle, Alaska, by Arthur Grantz. 1961. Lat 61°45' to 62°, long 147° to 147°22'30". Scale, 1:48,000. Contour interval, 100 feet. 50c.
- 1-344. Preliminary geologic map of the southwestern part of New Mexico, by C. H. Dane and G. O. Bachman. 1961. Lat 32° to 34°, long 106° to 109°. Scale, 1:380,160. \$1.25.
- 1-346. Geology of the Franklin and part of the Hamburg quadrangles, New Jersey, by A. F. Buddington and D. R. Baker. 1961. Lat 41° to 41°07'30", long 74°30' to 74°37'30". Scale, 1:24,000. Contour interval, 20 feet. 50c.
- 1-351. Engineer special study of the surface of the moon, by R. J. Hackman and A. C. Mason. 1961. Set of 4 sheets. Sheet 1, Generalized photogeologic map of the moon; sheet 2, Lunar rays; sheet 3, Physiographic divisions of the moon; and sheet 4, Description and evaluation of the physiographic regions. Approximate scale, 1:3,800,000. \$1.50 per set.
- The following maps are photogeologic maps. Each covers a 7½-minute quadrangle at the scale of 1:24,000, unless otherwise noted. 50c each.
- 1-2. Carlisle-13, San Juan and Garfield Counties, Utah, by J. N. Platt. 1954 [1955]. Lat 38° to 38°07'30", long 109°52'30" to 110°.
- 1-3. Tidwell-12, Emery County, Utah, by C. F. Miller. 1954 [1955]. Lat 38°37'30" to 38°45', long 110°22'30" to 110°30'.
- 1-4. Desert Lake-8, San Juan and Garfield Counties, Utah, by P. P. Orkild. 1954 [1955]. Lat 39°15' to 39°22'30", long 110°30' to 110°37'30".
- 1-5. Woodside-5, Emery County, Utah, by P. P. Orkild. 1955. Lat 39°15' to 39°22'30", long 110°22'30" to 110°30'.
- 1-6. Carlisle-14, San Juan County, Utah, by R. J. Hackman. 1955. Lat 38° to 38°07'30", long 109°45' to 109°52'30'.
- 1-7. Elk Ridge-2, San Juan County, Utah, by R. J. Hackman. 1955. Lat 37°52'30" to 38°, long 109°37'30" to 109°45'.
- 1-8. Elk Ridge-14, San Juan County, Utah, by C. F. Miller. 1955. Lat 37°30' to 37°37'30", long 109°45' to 109°52'30".
- 1-9--1-11. Emery-2, -7, and -10, Emery County, Utah. 1955.
- 1-9. Emery-2, by J. S. Detterman. Lat 38°52'30" to 39°, long 111°07'30" to 111°15'.
- 1-10. Emery-7, by H. S. Bennett. Lat 38°45' to 38°52'30", long 111°07'30" to 111°15'.
- 1-11. Emery-10, by H. S. Bennett. Lat 38°37'30" to 38°45', long 111°07'30" to 111°15'.
- 1-12. Tidwell-7, Emery and Grand Counties, Utah, by V. H. Sable. 1955. Lat 38°45' to 38°52'30", long 110°07'30" to 110°15'.
- 1-13. Straight Cliffs-3, Kane County, Utah, by B. H. Kent. 1955. Lat 37°22'30" to 37°30', long 111°15' to 111°22'30".
- 1-14. Kaiparowits Peak-8, Garfield County, Utah, by J. S. Detterman. 1955. Lat 37°45' to 37°52'30", long 111°30' to 111°37'30".

- I-15. Kaiparowits Peak-9, Garfield County, Utah, by J. S. Detterman. 1955. Lat 37°37'30" to 37°45', long 111°30' to 111°37'30".
- I-16. Orange Cliffs-16, San Juan and Garfield Counties, Utah, by J. N. Platt. 1955. Lat 38° to 38°07'30", long 110° to 110°07'30".
- I-17--I-27. Circle Cliffs, 1-11. Garfield County, Utah, 1955.
- I-17. Circle Cliffs-1, by J. S. Detterman. Lat 37°52'30" to 38°, long 111° to 111°07'30".
- I-18. Circle Cliffs-2, by R. J. Hackman. Lat 37°52'30" to 38°, long 111°07'30" to 111°15'.
- I-19. Circle Cliffs-3, by J. S. Detterman. Lat 37°52'30" to 38°, long 111°15' to 111°22'30".
- I-20. Circle Cliffs-4, by J. S. Detterman. Lat 37°52'30" to 38°, long 111°22'30" to 111°30".
- I-21. Circle Cliffs-5, by J. S. Detterman. Lat 37°45' to 37°52'30", long 111°22'30" to 111°30".
- I-22. Circle Cliffs-6, by R. J. Hackman. Lat 37°45' to 37°52'30", long 111°15' to 111°22'30".
- I-23. Circle Cliffs-7, by R. J. Hackman. Lat 37°45' to 37°52'30", long 111°07'30" to 111°15'.
- I-24. Circle Cliffs-8, by J. S. Detterman. Lat 37°45' to 37°52'30", long 111° to 111°07'30".
- I-25. Circle Cliffs-9, by J. S. Detterman. Lat 37°37'30" to 37°45', long 111° to 111°07'30".
- I-26. Circle Cliffs-10, by R. J. Hackman. Lat 37°37'30" to 37°45', long 111°07'30" to 111°15'.
- I-27. Circle Cliffs-11, by R. J. Hackman. Lat 37°37'30" to 37°45', long 111°15' to 111°22'30".
- I-28--I-31. Circle Cliffs, 12-16, Garfield and Kane Counties, Utah, 1955.
- I-28. Circle Cliffs-13, by B. H. Kent. Lat 37°30' to 37°37'30", long 111°22'30" to 111°30".
- I-29. Circle Cliffs-14, by R. J. Hackman. Lat 37°30' to 37°37'30", long 111°15' to 111°22'30".
- I-30. Circle Cliffs-15, by R. J. Hackman. Lat 37°30' to 37°37'30", long 111°07'30" to 111°15'.
- I-31. Circle Cliffs-16, by R. J. Hackman. Lat 37°30' to 37°37'30", long 111° to 111°07'30".
- I-32. Elk Ridge-7, San Juan County, Utah, by R. J. Hackman. 1955. Lat 37°45' to 37°52'30", long 109°37'30" to 109°45'.
- I-33. White Canyon-1, San Juan and Garfield Counties, Utah, by J. C. Reed, Jr. 1955. Lat 37°52'30" to 38°, long 110° to 110°07'30".
- I-34. Notom-15, Garfield County, Utah, by R. J. Hackman and G. E. Tolbert. 1955. Lat 38° to 38°07'30", long 110°07'30" to 111°15'.
- I-35. Elk Ridge-15, San Juan County, Utah, by H. S. Bennett. 1955. Lat 37°30' to 37°37'30", long 109°37'30" to 109°45'.
- I-36. White Canyon-2, San Juan and Garfield Counties, Utah, by J. C. Reed, Jr. 1955. Lat 37°52'30" to 38°, long 110°07'30" to 110°15'.
- I-37--I-40. Straight Cliffs-2, -9, -7, and -1. Kane County, Utah, 1955.
- I-37. Straight Cliffs-2, by J. S. Detterman. Lat 37°22'30" to 37°30', long 111°07'30" to 111°15'.
- I-38. Straight Cliffs-9, by J. C. Reed, Jr. Lat 37°07'30" to 37°15', long 111° to 111°07'30".
- I-39. Straight Cliffs-7, by B. H. Kent. Lat 37°15' to 37°22'30", long 111°07'30" to 111°15'.
- I-40. Straight Cliffs-1, by V. H. Sable. Lat 37°22'30" to 37°30', long 111° to 111°07'30".
- I-41--I-45. Navajo Mountain-6, -3, -4, -5, and -12. Kane and San Juan Counties, Utah, 1955.
- I-41. Navajo Mountain-6, by J. S. Detterman. Lat 37°15' to 37°22'30", long 110°45' to 110°52'30".
- I-42. Navajo Mountain-3, by R. J. Hackman. Lat 37°22'30" to 37°30', long 110°45' to 110°52'30".
- I-43. Navajo Mountain-4, Kane County, Utah, by J. S. Detterman. Lat 37°22'30" to 37°30', long 110°52'30" to 111°.
- I-44. Navajo Mountain-5, by H. S. Bennett. Lat 37°15' to 37°22'30", long 110°52'30" to 111°.
- I-45. Navajo Mountain-12, by H. S. Bennett. Lat 37°07'30" to 37°15', long 110°52'30" to 111°.
- I-46--I-50. Mt. Pennell-5, -11, -12, -13, and -14. Garfield County, Utah, 1955.
- I-46. Mt. Pennell-5, by R. J. Hackman. Lat 37°45' to 37°52'30", long 110°52'30" to 111°.
- I-47. Mt. Pennell-11, by J. S. Detterman. Lat 37°37'30" to 37°45', long 110°45' to 110°52'30".
- I-48. Mt. Pennell-12, by J. S. Detterman. Lat 37°37'30" to 37°45', long 110°52'30" to 111°.
- I-49. Mt. Pennell-13, Garfield and Kane Counties, Utah, by J. S. Detterman. Lat 37°30' to 37°37'30", long 110°52'30" to 111°.
- I-50. Mt. Pennell-14, Garfield and Kane Counties, Utah, by R. J. Hackman. Lat 37°30' to 37°37'30", long 110°45' to 110°52'30".
- I-51. Clay Hills-1, San Juan County, Utah, by C. H. Marshall. 1955. Lat 37°22'30" to 37°30', long 110° to 110°07'30".
- I-52. Circle Cliffs-12, Garfield County, Utah, by R. J. Hackman. 1955. Lat 37°37'30" to 37°45', long 111°22'30" to 111°30".
- I-53. Bluff-6, San Juan County, Utah, by P. P. Orkild. 1955. Lat 37°15' to 37°22'30", long 109°45' to 109°52'30".
- I-54. Bluff-11, San Juan County, Utah, by C. F. Miller. 1955. Lat 37°07'30" to 37°15', long 109°45' to 109°52'30".
- I-55. Elk Ridge-10, San Juan County, Utah, by H. S. Bennett. 1955. Lat 37°37'30" to 37°45', long 109°37'30" to 109°45'.
- I-56. Elk Ridge-11, San Juan County, Utah, by J. C. Reed, Jr. 1955. Lat 37°37'30" to 37°45', long 109°45' to 109°52'30".
- I-57. Moab-5, Grand County, Utah, by J. S. Detterman. 1955. Lat 38°45' to 38°52'30", long 109°52'30" to 110°.
- I-58. Clay Hills-8, San Juan County, Utah, by C. H. Marshall. 1955. Lat 37°15' to 37°22'30", long 110° to 110°07'30".
- I-59--I-61. Bluff-4, -5, and -8. San Juan County, Utah, 1955.
- I-59. Bluff-4, by J. N. Platt. Lat 37°22'30" to 37°30', long 109°52'30" to 110°.
- I-60. Bluff-5, by P. P. Orkild. Lat 37°15' to 37°22'30", long 109°52'30" to 110°.
- I-61. Bluff-8, by C. F. Miller. Lat 37°15' to 37°22'30", long 109°30' to 109°37'30".

- I-62. Clay Hills-7, San Juan County, Utah, by C. H. Marshall, 1955. Lat 37°15' to 37°22'30", long 110°07'30" to 110°15'.
- I-63. Elk Ridge-16, San Juan County, Utah, by C. F. Miller, 1955. Lat 37°30' to 37°37'30", long 109°30' to 109°37'30".
- I-64. Bluff-1, San Juan County, Utah, by C. F. Miller, 1955. Lat 37°22'30" to 37°30', long 109°30' to 109°37'30".
- I-65. Clay Hills-11, San Juan County, Utah, by C. H. Marshall, 1955. Lat 37°07'30" to 37°15', long 110°15' to 110°22'30".
- I-66. Navajo Mountain-2, Kane and San Juan Counties, Utah, by H. S. Bennett, 1955. Lat 37°22'30" to 37°30', long 110°37'30" to 110°45'.
- I-67--1-76. Carlisle, 2-7, 10-12, 15, San Juan County, Utah, 1955.
- I-67. Carlisle-2, by J. S. Detterman, Lat 38°22'30" to 38°30', long 109°37'30" to 109°45'.
- I-68. Carlisle-3, by C. E. Bates, Lat 38°22'30" to 38°30', long 109°45' to 109°52'30".
- I-69. Carlisle-4, Wayne and San Juan Counties, Utah, by V. H. Sable, Lat 38°22'30" to 38°30', long 109°52'30" to 110°.
- I-70. Carlisle-5, Wayne and San Juan Counties, Utah, by V. H. Sable, Lat 38°15' to 38°22'30", long 109°52'30" to 110°.
- I-71. Carlisle-6, by C. E. Bates, Lat 38°15' to 38°22'30", long 109°45' to 109°52'30".
- I-72. Carlisle-7, by V. H. Sable, Lat 38°15' to 38°22'30", long 109°37'30" to 109°45'.
- I-73. Carlisle-10, by J. S. Detterman, Lat 38°07'30" to 38°15', long 109°37'30" to 109°45'.
- I-74. Carlisle-11, by J. N. Platt, Lat 38°07'30" to 38°15', long 109°45' to 109°52'30".
- I-75. Carlisle-12, Wayne, San Juan, and Garfield Counties, Utah, by J. N. Platt, Lat 38°07'30" to 38°15', long 109°52'30" to 110°.
- I-76. Carlisle-15, by R. J. Hackman, Lat 38° to 38°07'30", long 109°37'30" to 109°45'.
- I-77. Navajo Mountain-7, Kane and San Juan Counties, Utah, by H. S. Bennett, 1955. Lat 37°15' to 37°22'30", long 110°37'30" to 110°45'.
- I-78. Clay Hills-10, San Juan County, Utah, by C. H. Marshall, 1955. Lat 37°07'30" to 37°15', long 110°07'30" to 110°15'.
- I-79. Clay Hills-9, San Juan County, Utah, by P. P. Orkild, 1955. Lat 37°07'30" to 37°15', long 110° to 110°07'30".
- I-80. Bluff-12, San Juan County, Utah, by P. P. Orkild, 1955. Lat 37°07'30" to 37°15', long 109°52'30" to 110°.
- I-81. Straight Cliffs-8, Kane County, Utah, by B. H. Kent, 1955. Lat 37°15' to 37°22'30", long 111° to 111°07'30".
- I-82. Elk Ridge-1, San Juan County, Utah, by C. F. Miller, 1955. Lat 37°52'30" to 38°, long 109°30' to 109°37'30".
- I-83, I-85, I-86. Moab-16, -4, and -6, Grand County, Utah, 1955.
- I-83. Moab-16, by W. R. Hemphill, Lat 38°30' to 38°37'30", long 109°30' to 109°37'30".
- I-85. Moab-4, by J. S. Detterman, Lat 38°52'30" to 39°, long 109°52'30" to 110°.
- I-86. Moab-6, by J. S. Detterman, Lat 38°45' to 38°52'30", long 109°45' to 109°52'30".
- I-87. Tidwell-1, Grand County, Utah, by V. H. Sable, 1955. Lat 38°52'30" to 39°, long 110° to 110°07'30".
- I-88. Tidwell-3, Emery County, Utah, by C. H. Marshall, 1955. Lat 38°52'30" to 39°, long 110°15' to 110°22'30".
- I-89. Tidwell-8, Grand and Emery Counties, Utah, by V. H. Sable, 1955. Lat 38°45' to 38°52'30", long 110° to 110°07'30".
- I-90--1-97. Aneth, 1-8, San Juan County, Utah, by R. J. Hackman, 1955.
- I-90. Aneth-1, San Juan County, Utah, and Montezuma County, Colo. Lat 37°22'30" to 37°30', long 109° to 109°07'30".
- I-91. Aneth-2, Lat 37°22'30" to 37°30', long 109°07'30" to 109°15'.
- I-92. Aneth-3, Lat 37°22'30" to 37°30', long 109°15' to 109°22'30".
- I-93. Aneth-4, Lat 37°22'30" to 37°30', long 109°22'30" to 109°30'.
- I-94. Aneth-5, Lat 37°15' to 37°22'30", long 109°22'30" to 109°30'.
- I-95. Aneth-6, Lat 37°15' to 37°22'30", long 109°15' to 109°22'30".
- I-96. Aneth-7, Lat 37°15' to 37°22'30", long 109°07'30" to 109°15'.
- I-97. Aneth-8, San Juan County, Utah, and Montezuma County, Colo. Lat 37°15' to 37°22'30", long 109° to 109°07'30".
- I-98. Elk Ridge-6, San Juan County, Utah, by J. S. Detterman and J. C. Reed, Jr. 1955. Lat 37°45' to 37°52'30", long 109°45' to 109°52'30".
- I-99--1-106. Desert Lake, 1-2, 6-7, 9-12, Emery County, Utah, 1955.
- I-99. Desert Lake-1, Emery and Carbon Counties, Utah, by J. S. Detterman, Lat 39°22'30" to 39°30', long 110°30' to 110°37'30".
- I-100. Desert Lake-2, Emery and Carbon Counties, Utah, by C. F. Miller, Lat 39°22'30" to 39°30', long 110°37'30" to 110°45'.
- I-101. Desert Lake-6, by C. F. Miller, Lat 39°15' to 39°22'30", long 110°45' to 110°52'30".
- I-102. Desert Lake-7, by W. H. Condon and C. F. Miller, Lat 39°15' to 39°22'30", long 110°37'30" to 110°45'.
- I-103. Desert Lake-9, by J. T. Cass, Lat 39°07'30" to 39°15', long 110°30' to 110°37'30".
- I-104. Desert Lake-10, by W. H. Condon, Lat 39°07'30" to 39°15', long 110°37'30" to 110°45'.
- I-105. Desert Lake-11, by B. H. Kent, Lat 39°07'30" to 39°15', long 110°45' to 110°52'30".
- I-106. Desert Lake-12, by C. F. Miller, Lat 39°07'30" to 39°15', long 110°52'30" to 111°.
- I-107. Moab-11, Grand County, Utah, by C. E. Bates, 1955. Lat 38°37'30" to 38°45', long 109°45' to 109°52'30".

- I-108--I-115 (except I-110 and I-111). Tidwell-6,-15,-4,-5,-9, and -16. Emery County, Utah, 1955.
- I-108. Tidwell-6, by H. S. Bennett. Lat 38°45' to 38°52'30", long 110°15' to 110°22'30".
- I-109. Tidwell-15, by V. H. Sable. Lat 38°30' to 38°37'30", long 110°07'30" to 110°15'.
- I-112. Tidwell-4, by P. P. Orkild. Lat 38°52'30" to 39°, long 110°22'30" to 110°30".
- I-113. Tidwell-5, by P. P. Orkild. Lat 38°45' to 38°52'30", long 110°22'30" to 110°30".
- I-114. Tidwell-9, Emery and Grand Counties, Utah, by C. E. Bates and V. H. Sable. Lat 38°37'30" to 38°45', long 110° to 110°07'30".
- I-115. Tidwell-16, Emery and Grand Counties, Utah, by P. P. Orkild. Lat 38°30' to 38°37'30", long 110° to 110°07'30".
- I-110. Woodside-4, Emery and Carbon Counties, Utah, by V. H. Sable, 1955. Lat 39°22'30" to 39°30', long 110°22'30" to 110°30".
- I-111. Woodside-12, Emery County, Utah, by P. P. Orkild, 1955. Lat 39°07'30" to 39°15', long 110°22'30" to 110°30".
- I-116--I-119. Moab, 10-14. Grand County, Utah, 1955.
- I-116. Moab-10, by C. E. Bates. Lat 38°37'30" to 38°45', long 109°37'30" to 109°45'.
- I-117. Moab-12, by V. H. Sable. Lat 38°37'30" to 38°45', long 109°52'30" to 110°.
- I-118. Moab-13, Grand and Emery Counties, Utah, by W. E. Bergquist. Lat 38°30' to 38°37'30", long 109°52'30" to 110°.
- I-119. Moab-14, by V. H. Sable. Lat 38°30' to 38°37'30", long 109°45' to 109°52'30".
- I-120--I-122. Desert Lake, 14-16. Emery County, Utah, 1956.
- I-120. Desert Lake-14, by B. H. Kent. Lat 39° to 39°07'30", long 110°45' to 110°52'30".
- I-121. Desert Lake-15, by W. R. Hemphill and C. R. Lewis. Lat 39° to 39°07'30", long 110°37'30" to 110°45'.
- I-122. Desert Lake-16, by C. H. Marshall. Lat 39° to 39°07'30", long 110°30' to 110°37'30".
- I-123. Woodside-13, Emery County, Utah, by P. P. Orkild, 1956. Lat 39° to 39°07'30", long 110°22'30" to 110°30".
- I-124. Castle Dale-16, Emery County, Utah, by J. S. Detterman, 1956. Lat 39° to 39°07'30", long 111° to 111°07'30".
- I-125--I-127. Elk Ridge-3,-8, and -9. San Juan County, Utah, 1956.
- I-125. Elk Ridge-3, by C. L. Pillmore and J. C. Reed, Jr. Lat 37°52'30" to 38°, long 109°45' to 109°52'30".
- I-126. Elk Ridge-8, by C. F. Miller. Lat 37°45' to 37°52'30", long 109°30' to 109°37'30".
- I-127. Elk Ridge-9, by C. F. Miller. Lat 37°37'30" to 37°45', long 109°30" to 109°37'30".
- I-128. Moab-15, Grand County, Utah, by V. H. Sable, 1956. Lat 38°30' to 38°37'30", long 109°37'30" to 109°45'.
- I-131. Springdale SE, Kane County, Utah, by C. L. Pillmore, 1956. Lat 37° to 37°07'30", long 112°45' to 112°52'30".
- I-132. Springdale SW, Kane and Washington Counties, Utah, and Mohave County, Ariz., by C. L. Pillmore, 1956. Lat 37° to 37°07'30", long 112°52'30" to 113°.
- I-133. Fredonia NW, Mohave County, Ariz., by W. R. Hemphill, 1956. Lat 36°52'30" to 37°, long 112°37'30" to 112°45'.
- I-134--I-136. Kaiparowits Peak-1,-2, and -7, Garfield County, Utah, by J. S. Detterman, 1956.
- I-134. Kaiparowits Peak-1. Lat 37°52'30" to 38°, long 111°30' to 111°37'30".
- I-135. Kaiparowits Peak-2. Lat 37°52'30" to 38°, long 111°37'30" to 111°45'.
- I-136. Kaiparowits Peak-7. Lat 37°45' to 37°52'30", long 111°37'30" to 111°45'.
- I-137. Kanab SE, Kane County, Utah, and Mohave and Coconino Counties, Ariz., by J. S. Detterman, 1956. Lat 37° to 37°07'30", long 112°30' to 112°37'30".
- I-138. Kanab SW, Kane County, Utah, and Mohave County, Ariz., by C. L. Pillmore, 1956. Lat 37° to 37°07'30", long 112°37'30" to 112°45'.
- I-139. Shinarump NW, Coconino County, Ariz., by R. H. Morris, 1956. Lat 36°52'30" to 37°, long 112°22'30" to 112°30".
- I-140--I-142. Short Creek SW, NW, and NE. Mohave County, Ariz., 1956.
- I-140. Short Creek SW, by C. H. Marshall. Lat 36°45' to 36°52'30", long 112°52'30" to 113°.
- I-141. Short Creek NW, by C. H. Marshall and C. L. Pillmore. Lat 36°52'30" to 37°, long 112°52'30" to 113°.
- I-142. Short Creek NE, by C. L. Pillmore. Lat 36°52'30" to 37°, long 112°45' to 112°52'30".
- I-143. Heaton Knolls NW, Mohave County, Ariz., by C. H. Marshall, 1956. Lat 36°37'30" to 36°45', long 112°52'30" to 113°.
- I-144--I-146. Lost Spring Mountain SE, NE, and NW, Mohave County, Ariz., by C. H. Marshall, 1956.
- I-144. Lost Spring Mountain SE. Lat 36°45' to 36°52'30", long 113° to 113°07'30".
- I-145. Lost Spring Mountain NE. Lat 36°52'30" to 37°, long 113° to 113°07'30".
- I-146. Lost Spring Mountain NW. Lat 36°52'30" to 37°, long 113°07'30" to 113°15'.
- I-147. Virgin SW, Washington County, Utah, by C. H. Marshall, 1956. Lat 37° to 37°07'30", long 113°07'30" to 113°15'.
- I-148. Springdale NE, Kane County, Utah, by C. L. Pillmore, 1956. Lat 37°07'30" to 37°15', long 112°45' to 112°52'30".
- I-149. Virgin NW, Washington County, Utah, by C. H. Marshall, 1956. Lat 37°07'30" to 37°15', long 113°07'30" to 113°15'.
- I-150. White Canyon-8, San Juan County, Utah, by P. P. Orkild, 1956. Lat 37°45' to 37°52'30", long 110° to 110°07'30".
- I-151. Elk Ridge-4, San Juan County, Utah, by J. S. Detterman and J. N. Platt, 1956. Lat 37°52'30" to 38°, long 109°52'30" to 110°.

- 1-152. Elk Ridge-5, San Juan County, Utah, by V. H. Sable. 1956. Lat 37°45' to 37°52'30", long 109°52'30" to 110°.
- 1-153. Short Creek SE, Mohave County, Ariz., by C. H. Marshall. 1956. Lat 36°45' to 36°52'30", long 112°45' to 112°52'30".
- 1-154. Desert Lake-13, Emery County, Utah, by C. H. Marshall. 1956. Lat 39° to 39°07'30", long 110°52'30" to 111°.
- 1-157--1-159. Mount Peale, 9-11. San Juan County, Utah. 1956.
- 1-157. Mount Peale-9, San Juan County, Utah, and Montrose and San Miguel Counties, Colo., by R. J. Hackman. Lat 38°07'30" to 38°15', long 109° to 109°07'30".
- 1-158. Mount Peale-10, by R. J. Hackman. Lat 38°07'30" to 38°15', long 109°07'30" to 109°15'.
- 1-159. Mount Peale-11, by R. J. Hackman and G. E. Tolbert. Lat 38°07'30" to 38°15', long 109°15' to 109°22'30".
- 1-160. Fredonia SW, Mohave County, Ariz., by C. H. Marshall. 1956. Lat 36°45' to 36°52'30", long 112°37'30" to 112°45'.
- 1-161. Virgin NE, Washington County, Utah, by C. H. Marshall. 1956. Lat 37°07'30" to 37°15', long 113° to 113°07'30".
- 1-162. Tidwell-2, Emery and Grand Counties, Utah, by V. H. Sable. 1956. Lat 38°52'30" to 39°, long 110°07'30" to 110°15'.
- 1-163. White Canyon-7, San Juan County, Utah, by P. P. Orkild. 1956. Lat 37°45' to 37°52'30", long 110°07'30" to 110°15'.
- 1-164. Johnson SW, Kane County, Utah, and Coconino County, Ariz., by J. S. Detterman. 1956. Lat 37° to 37°07'30", long 112°22'30" to 112°30".
- 1-165. Mount Peale-1, San Juan County, Utah, and Montrose County, Colo., by R. J. Hackman. 1956. Lat 38°22'30" to 38°30', long 109° to 109°07'30".
- 1-166. Emery-1, Emery County, Utah, by P. P. Orkild. 1956. Lat 38°52'30" to 39°, long 111° to 111°07'30".
- 1-169. Lees Ferry SE, Coconino County, Ariz., by Kathleen McQueen. 1956. Lat 36°45' to 36°52'30", long 111°30' to 111°37'30".
- 1-170. White Canyon-4, San Juan and Garfield Counties, Utah, by P. P. Orkild. 1956. Lat 37°52'30" to 38°, long 110°22'30" to 110°30'.
- 1-171. Paria Plateau SW, Coconino County, Ariz., by J. P. Minard. 1956. Lat 36°45' to 36°52'30", long 111°52'30" to 112°.
- 1-172--1-176. Mount Peale-4, -6, -8, and -16, San Juan County, Utah, by R. J. Hackman. 1956.
- 1-172. Mount Peale-4. Lat 38°22'30" to 38°30', long 109°22'30" to 109°30'.
- 1-173. Mount Peale-6. Lat 38°15' to 38°22'30", long 109°15' to 109°22'30".
- 1-174. Mount Peale-8, San Juan County, Utah, and Montrose County, Colo. Lat 38°15' to 38°22'30", long 109° to 109°07'30". [1-175 is not a photogeologic map.]
- 1-176. Mount Peale-16, San Juan County, Utah, and San Miguel County, Colo. Lat 38° to 38°07'30", long 109° to 109°07'30".
- 1-177. Emery-8, Emery County, Utah, by W. H. Condon. 1956. Lat 38°45' to 38°52'30", long 111° to 111°07'30".
- 1-178. Orange Cliffs-13, Garfield County, Utah, by R. G. Ray. 1956. Lat 38° to 38°07'30", long 110°22'30" to 110°30'.
- 1-179. Virgin SE, Washington County, Utah, and Mohave County, Ariz., by C. L. Pillmore. 1956. Lat 37° to 37°07'30", long 113° to 113°07'30".
- 1-180. Carlisle-1, San Juan County, Utah, by G. E. Tolbert. 1956. Lat 38°22'30" to 38°30', long 109°30' to 109°37'30".
- 1-181. Bluff-3, San Juan County, Utah, by C. H. Marshall. 1956. Lat 37°22'30" to 37°30', long 109°45' to 109°52'30".
- 1-182. Paria Plateau NW, Coconino County, Ariz., by J. P. Minard. 1956. Lat 36°52'30" to 37°, long 111°52'30" to 112°.
- 1-183. Mount Peale-7, San Juan County, Utah, by R. J. Hackman. 1956. Lat 38°15' to 38°22'30", long 109°07'30" to 109°15'.
- 1-184. Navajo Mountain-13, Kane and San Juan Counties, Utah, and Coconino County, Ariz., by R. J. Hackman. 1956. Lat 37° to 37°07'30", long 110°52'30" to 111°.
- 1-185. Navajo Mountain-15, San Juan County, Utah, and Navajo County, Ariz., by R. J. Hackman. 1956. Lat 37° to 37°07'30", long 110°37'30" to 110°45'.
- 1-186. Tidwell-10, Emery County, Utah, by A. B. Olson. 1956. Lat 38°37'30" to 38°45', long 110°07'30" to 110°15'.
- 1-187. Orange Cliffs-11, Wayne and Garfield Counties, Utah, by R. G. Ray. 1956. Lat 38°07'30" to 38°15', long 110°15' to 110°22'30".
- 1-188. Orderville Canyon NW, Kane and Washington Counties, Utah, by C. L. Pillmore. 1956. Lat 37°22'30" to 37°30', long 112°52'30" to 113°.
- 1-189. Lees Ferry SW, Coconino County, Ariz., by J. S. Detterman. 1956. Lat 36°45' to 36°52'30", long 111°37'30" to 111°45'.
- 1-190. Emmett Wash NE, Coconino County, Ariz., by J. S. Detterman. 1956. Lat 36°37'30" to 36°45', long 111°45' to 111°52'30".
- 1-191. Paria Plateau SE, Coconino County, Ariz., by C. H. Marshall. 1956. Lat 36°45' to 36°52'30", long 111°45' to 111°52'30".
- 1-192. Emmett Wash NW, Coconino County, Ariz., by J. P. Minard. 1956. Lat 36°37'30" to 36°45', long 111°52'30" to 112°.
- 1-193. Tanner Wash NW, Coconino County, Ariz., by J. P. Minard. 1956. Lat 36°37'30" to 36°45', long 111°37'30" to 111°45'.

- 1-194. Jacob Lake NE, Coconino County, Ariz., by C. H. Marshall, 1956. Lat 36°37'30" to 36°45', long 112° to 112°07'30".
- 1-195. White Canyon-3, San Juan and Garfield Counties, Utah, by P. P. Orkild, 1956. Lat 37°52'30" to 38°, long 110°15' to 110°22'30".
- 1-196. Lees Ferry NW, Coconino County, Ariz., by Kathleen McQueen, 1957. Lat 36°52'30" to 37°, long 111°37'30" to 111°45'.
- 1-198. House Rock Spring NE, Coconino County, Ariz., by J. P. Minard, 1956. Lat 36°52'30" to 37°, long 112° to 112°07'30".
- 1-199. House Rock Spring SE, Coconino County, Ariz., by Kathleen McQueen, 1956. Lat 36°45' to 36°52'30", long 112° to 112°07'30".
- 1-221. Navajo Mountain-8, San Juan County, Utah, by A. B. Olson, 1957. Lat 37°15' to 37°22'30", long 110°30' to 110°37'30".
- 1-222. Lees Ferry NE, Coconino County, Ariz., by Kathleen McQueen, 1957. Lat 36°52'30" to 37°, long 111°30' to 111°37'30".
- 1-227. Tidwell-11, Emery County, Utah, by A. B. Olson, 1956. Lat 38°37'30" to 38°45', long 110°15' to 110°22'30".
- 1-228. Paria Plateau NE, Coconino County, Ariz., by Kathleen McQueen, 1956. Lat 36°52'30" to 37°, long 111°45' to 111°52'30".
- 1-229. Navajo Mountain-1, San Juan County, Utah, by A. B. Olson, 1956. Lat 37°22'30" to 37°30', long 110°30' to 110°37'30".
- 1-233. Navajo Mountain-10, San Juan County, Utah, by R. J. Hackman, 1957. Lat 37°07'30" to 37°15', long 110°37'30" to 110°45'.
- 1-238. Navajo Mountain-14, San Juan County, Utah, and Coconino County, Ariz., by R. J. Hackman, 1957. Lat 37° to 37°07'30", long 110°45' to 110°52'30".
- 1-240--1-242. Mount Peale-5, -12, and -13, San Juan County, Utah, by G. E. Tolbert, 1957.
- 1-240. Mount Peale-5. Lat 38°15' to 38°22'30", long 109°22'30" to 109°30'.
- 1-241. Mount Peale-12. Lat 38°07'30" to 38°15', long 109°22'30" to 109°30'.
- 1-242. Mount Peale-13. Lat 38° to 38°07'30", long 109°22'30" to 109°30'.
- 1-244. Buckskin Gulch SW, Kane County, Utah, and Coconino County, Ariz., by R. J. Hackman, 1957. Lat 37° to 37°07'30", long 112°07'30" to 112°15'.
- 1-245. Johnson NE, Kane County, Utah, by R. J. Hackman, 1957. Lat 37°07'30" to 37°15', long 112°15' to 112°22'30".
- 1-246. Desert Lake-3, Emery and Carbon Counties, Utah, by C. H. Marshall, 1957. Lat 39°22'30" to 39°30', long 110°45' to 110°52'30".
- 1-247. Fredonia NE, Coconino and Mohave Counties, Ariz., by R. H. Morris, 1957. Lat 36°52'30" to 37°, long 112°30' to 112°37'30".
- 1-248. Johnson SE, Kane County, Utah, and Coconino County, Ariz., by J. S. Dettelman and R. J. Hackman, 1957. Lat 37° to 37°07'30", long 112°15' to 112°22'30".
- 1-250. Mount Ellen-5, Wayne County, Utah, by W. R. Hemphill, 1958. Lat 38°15' to 38°22'30", long 110°52'30" to 111°.
- 1-251. Buckskin Gulch NW, Kane County, Utah, by R. J. Hackman, 1957. Lat 37°07'30" to 37°15', long 112°07'30" to 112°15'.
- 1-252. Hurricane Cliffs-2 NE, Mohave County, Ariz., by C. H. Marshall, 1957. Lat 36°52'30" to 37°, long 113°15' to 113°22'30".
- 1-253. House Rock Spring NW, Coconino County, Ariz., by J. P. Minard, 1957. Lat 36°52'30" to 37°, long 112°07'30" to 112°15'.
- 1-254. House Rock Spring SW, Coconino County, Ariz., by J. S. Pomeroy, 1957. Lat 36°45' to 36°52'30", long 112°07'30" to 112°15'.
- 1-255. Shinarump NE, Coconino County, Ariz., by Kathleen McQueen, 1957. Lat 36°52'30" to 37°, long 112°15' to 112°22'30".
- 1-257. Rainbow Point SW, Kane County, Utah, by P. P. Orkild, 1957. Lat 37°15' to 37°22'30", long 112°07'30" to 112°15'.
- 1-258. Rainbow Point SE, Kane County, Utah, by J. S. Pomeroy, 1957. Lat 37°15' to 37°22'30", long 112° to 112°07'30".
- 1-259. Buckskin Gulch NE, Kane County, Utah, by R. J. Hackman, 1957. Lat 37°07'30" to 37°15', long 112° to 112°07'30".
- 1-260. Buckskin Gulch SE, Kane County, Utah, and Coconino County, Ariz., by J. P. Minard, 1957. Lat 37° to 37°07'30", long 112° to 112°07'30".
- 1-261. Emery-15, Emery County, Utah, by D. Bunnag and G. Moustafa, 1957. Lat 38°30' to 38°37'30", long 111°07'30" to 111°15'.
- 1-262. Notom-8, Wayne County, Utah, by W. R. Hemphill, 1957. Lat 38°15' to 38°22'30", long 111° to 111°07'30".
- 1-263--1-268 (except 264 and 267). Paria SW, SE, NE, and NW, Kane County, Utah.
- 1-263. Paria SW, Kane County, Utah, and Coconino County, Ariz., by A. B. Olson, 1957. Lat 37° to 37°07'30", long 111°52'30" to 112°.
- 1-265. Paria SE, Kane County, Utah, and Coconino County, Ariz., by Kathleen McQueen, 1958. Lat 37° to 37°07'30", long 111°45' to 111°52'30".
- 1-266. Paria NE, by Kathleen McQueen, 1958. Lat 37°07'30" to 37°15', long 111°45' to 111°52'30".
- 1-268. Paria NW, by Kathleen McQueen and R. G. Ray, 1958. Lat 37°07'30" to 37°15', long 111°52'30" to 112°.
- 1-267. Johnson NW, Kane County, Utah, by J. S. Pomeroy, 1958. Lat 37°07'30" to 37°15', long 112°22'30" to 112°30'.

- 1-274. Escalante Forks, Mesa, Montrose, and Delta Counties, Colo., by R. J. Hackman. 1958. Lat 38°30' to 38°45', long 108°15' to 108°30'. Scale, 1:62,500.
- 1-275. Cockscomb SE, Kane County, Utah, by W. L. McIntosh. 1958. Lat 37°15' to 37°22'30", long 111°45' to 111°52'30".
- 1-277. Iris SE and Doyleville SW, Saguache County, Colo., by Kathleen McQueen. 1958. Lat 38°15' to 38°22'30", long 106°37'30" to 106°52'30". Scale, 1:31,680.
- 1-278--1-279. Coach Creek SE and NE, Grand County, Utah, and Mesa County, Colo., by R. J. Hackman. 1959.
 1-278. Coach Creek SE. Lat 38°45' to 38°52'30", long 109° to 109°07'30".
 1-279. Coach Creek NE. Lat 38°52'30" to 39°, long 109° to 109°07'30".
- 1-280. Mount Ellen-4, Wayne County, Utah, by W. R. Hemphill. 1959. Lat 38°22'30" to 38°30', long 110°52'30" to 111°.
- 1-281. Yellow Jacket, Montezuma and Dolores Counties, Colo., by R. J. Hackman. 1959. Lat 37°30' to 37°45', long 108°30' to 108°45'. Scale, 1:62,500.
- 1-282. Delta, Montrose and Delta Counties, Colo., by C. H. Marshall. 1959. Lat 38°30' to 38°45', long 108° to 108°15'. Scale, 1:62,500.
- 1-283. Norwood-1, Montrose and Ouray Counties, Colo., by C. H. Marshall. 1959. Lat 38°15' to 38°30', long 108° to 108°15'. Scale, 1:62,500.
- 1-293. Hurricane Cliffs-2 NW, Mohave County, Ariz., by J. S. Pomeroy. 1959. Lat 36°52'30" to 37°, long 113°22'30" to 113°30'.
- 1-294. Notom-1, Wayne County, Utah, by W. R. Hemphill. 1959. Lat 38°22'30" to 38°30', long 111° to 111°07'30".
- 1-295. Desert Lake-4, Emery and Carbon Counties, Utah, by C. H. Marshall. 1959. Lat 39°22'30" to 39°30', long 110°52'30" to 111°.
- 1-301. Flat Top Mountain NE, Carbon County, Wyo., by A. B. Olson. 1959 [1960]. Lat 40°07'30" to 41°15', long 107°45' to 107°52'30".
- 1-302. Notom-2, Wayne County, Utah, by W. R. Hemphill. 1959 [1960]. Lat 38°22'30" to 38°30', long 111°07'30" to 111°15'.
- 1-304--1-305. Crooks Creek SE and SW, Fremont and Sweetwater Counties, Wyo., by C. H. Marshall. 1959 [1960].
 1-304. Crooks Creek SE. Lat 42°15' to 42°22'30", long 107°45' to 107°52'30".
 1-305. Crooks Creek SW. Lat 42°15' to 42°22'30", long 107°52'30" to 108°.
- 1-306. Split Rock SW, Fremont and Sweetwater Counties, Wyo., by C. H. Marshall. 1959 [1960]. Lat 42°15' to 42°22'30", long 107°37'30" to 107°45'.
- 1-315. Chaco Canyon-2, McKinley County, N. Mex., by A. N. Kover. 1960. Lat 35°45' to 36°, long 107°45' to 108°. Scale, 1:62,500.
- 1-317. Cabezon-3, McKinley and Sandoval Counties, N. Mex., by A. F. Holzle. 1960. Lat 35°30' to 35°45', long 107°15' to 107°30'. Scale, 1:62,500.
- 1-351. Engineer special study of the surface of the moon, by R. J. Hackman and A. C. Mason. 1961. Set of 4 sheets. Sheet 1, Generalized photogeologic map of the moon; sheet 2, Lunar rays; sheet 3, Physiographic divisions of the moon; and sheet 4, Description and evaluation of the physiographic regions. Scale, 1:3,800,000. Each sheet 39 by 52½ inches. Price per set, \$1.50.

MINERAL RESOURCES MAPS AND CHARTS

United States

Coal Maps

[Asterisk (*) indicates map out of print.]

- *Coal fields of the United States, prepared by Paul Averitt, 1942. Scale, 1:2,500,000. 2 sheets.
Coal fields of the United States: Sheet 1, prepared by J. V. A. Trumbull, 1959 [1960]. Scale, 1:500,000. \$1.50; Sheet 2, Alaska, prepared by F. F. Barnes, 1961. Scale, 1:5,000,000. \$1.

Oil and Gas Maps

- *Oil and gas fields of the United States, by Paul Averitt, Jane Hanna, and J. T. Carlton, 1946. Scale, 1:2,500,000. 2 sheets.
*Oil and gas fields of the United States, by G. V. Cohee, S. W. Welch, and Sophie Drakoulis, 1951. Scale, 1:2,500,000. 2 sheets.
Oil and gas fields of the United States, compiled by A. C. Coe, L. C. Conant, and Sophie Drakoulis, 1955 [1956]. Scale, 1:2,500,000. 2 sheets. \$2 per set.

States

Oil and Gas Maps

- Oil and gas fields of California, compiled by G. B. Richardson, assisted by Jane Hanna, 1939. Scale, 1:500,000. 50c.
*Map of Kansas showing oil and gas fields and geologic ages of the producing formations in the fields, prepared by O. C. Postley, assisted by Jane Hanna, 1940. Scale, 1:500,000.
Oil and gas fields of the State of Louisiana, prepared by O. C. Postley, assisted by Jane Hanna, 1939. Scale, 1:500,000. 50c.
Oil and gas fields of the State of Oklahoma, prepared by G. B. Richardson, assisted by Jane Hanna, 1939. Scale, 1:500,000. 50c.
*Oil and gas fields of the State of Texas, prepared by G. B. Richardson, assisted by Jane Hanna, 1938. Scale, 1:750,000.
*Map of Wyoming showing test wells for oil and gas, anticlinal axes, oil and gas fields, pipelines, unit areas, and land district boundaries, prepared by E. K. Keefer, J. D. Love, R. M. Larsen, and M. W. Allen, 1949. Scale, 1:500,000. 2 sheets.
See also Oil and Gas Maps OM-116, 130, 159, 170, 175, 198, 200, 201, and 207.

MISSOURI BASIN STUDIES

The maps listed below are the result of geologic mapping and mineral-resource investigations conducted by the Geological Survey as a part of the program of the Department of the Interior for study and development of the Missouri River Basin.

1. Mineral resources of the Missouri Valley region, compiled by D. H. Dow, D. M. Larrabee, and S. E. Clabaugh, 1945-46. Set of 4 parts. Part 1, Metallic mineral resources; part 2, Nonmetallic mineral resources; part 3, Fuel resources; part 4, Construction materials. Scale, 1:250,000. 40c a sheet, or \$1.50 a set. [Reprinted 1957.]
2. Preliminary map showing sand and gravel deposits of Colorado, compiled by Helen Varnes and D. M. Larrabee, 1946. Scale, 1:500,000. 50c.
3. Preliminary map showing sand and gravel deposits of North Dakota, compiled by D. M. Larrabee, L. C. Huff, and C. Ahlman, 1946. Scale, 1:500,000. 35c.
4. Preliminary map showing sand and gravel deposits of South Dakota, compiled by D. M. Larrabee, 1946. Scale, 1:500,000. 35c.
5. Preliminary map showing sand and gravel deposits of Wyoming, compiled by D. M. Larrabee and A. F. Shride, 1946. Scale, 1:500,000. 50c.
6. Preliminary map showing sand and gravel deposits of Montana, compiled by D. M. Larrabee and A. F. Shride, 1946. Scale, 1:500,000. 2 sheets. 70c a set.
7. Preliminary map showing sand and gravel deposits of Nebraska, compiled by R. A. Weeks and D. M. Larrabee, 1948. Scale, 1:750,000. 55c.
- *8. Map showing mineral deposits of Colorado, compiled by R. P. Fischer, Wilbur Burbank, Helen Cannon, and others, 1946. Scale, 1:1,000,000. [Reprinted 1956.]
9. Map showing construction materials and nonmetallic mineral resources of Wyoming, compiled by S. E. Clabaugh, D. M. Larrabee, W. R. Griffiths, and others, 1946. Scale, 1:500,000. 70c.
10. Map showing construction materials and nonmetallic mineral resources of Colorado, compiled by D. M. Larrabee, S. E. Clabaugh, W. R. Griffiths, and others, 1947. Scale, 1:500,000. 80c.

11. Map showing construction materials and nonmetallic mineral resources of Montana, compiled by M. M. Knechtel, D. M. Larrabee, E. C. Fischer, and others, 1948. Scale, 1:750,000. 2 sheets, 90c per set.
12. Map showing construction materials and nonmetallic mineral resources of South Dakota, compiled by R. P. Bryson, E. L. Fox, D. M. Larrabee, and others. 1947. Scale, 1:500,000. 60c.
13. Map showing metallic mineral deposits of South Dakota, compiled by R. P. Fischer. 1947. Scale, 1:1,000,000. 25c.
14. Map showing construction materials and nonmetallic mineral resources of North Dakota, compiled by A. F. Shride, E. C. Fischer, D. M. Larrabee, and others. 1947. Scale, 1:500,000. 50c.
15. Map showing construction materials and nonmetallic mineral resources of Nebraska, compiled by R. W. Richards, R. A. Weeks, and D. M. Larrabee. 1948. Scale, 1:750,000. 40c.
16. Map showing metallic mineral deposits of Montana, compiled by F. M. Chace, Fred Cater, Virginia Byers, and others. 1947. Scale, 1:1,000,000. 30c.
17. Map showing metallic mineral deposits of Wyoming, compiled by R. P. Fischer, A. B. Griggs, Helen Cannon, and M. H. Krieger. 1947. Scale, 1:1,000,000. 20c.
18. Map showing metallic mineral deposits of Missouri, compiled by V. S. Neuschel and E. T. McKnight. 1948. Scale, 1:1,000,000. 20c.
20. Reconnaissance map showing locations of possible sources of riprap in western North Dakota and in northwestern South Dakota, by P. E. Truesdell and G. S. Hilton. 1947. Scale, 1:500,000. 50c.

TENNESSEE RIVER BASIN

- Tennessee River Basin (base map). 1933. Lat 34° to 38°, long 81° to 89°30'. Scale, 1:500,000. \$1.
 Tennessee River Basin (hydraulic map). 1933. Lat 34° to 38°, long 81° to 89°30'. Scale, 1:500,000. \$1.50.
 *Tennessee River Basin (mineral resources map). 1933. Lat 34° to 38°, long 81° to 89°30'. Scale, 1:500,000.

OIL AND GAS INVESTIGATIONS

Maps

Nos. 1-109 of this series are "preliminary maps." Oil and gas investigations maps from 110 on carry the distinguishing prefix "CM."

- *1. Geology of the Black Knob Ridge area, Atoka County, Okla., by T. A. Hendricks. 1943. Scale, 1 inch to 2/3 mile [1:42,240]. [Superseded by map 66.]
2. Sierra Diablo region, Hudspeth and Culberson Counties, Tex., by P. B. King and J. B. Knight. 1944. Lat 31°05' to 31°35', long 104°45' to 105°15'. Scale, 1:62,500. 40c.
- *3. Structure contour map of the Big Horn Basin, Wyoming and Montana, by D. A. Andrews, W. G. Pierce, and J. J. Kirby. 1944. Scale, 1 inch to 3 miles [1:190,080]. [Superseded by map 74.]
4. Oil and gas possibilities of the plains adjacent to the Little Rocky Mountains, Mont., by M. M. Knechtel. 1944. Scale, 1:48,000. 30c.
- *5. Map of the Second Berea sand in Gallia, Meigs, Athens, Morgan, and Muskingum Counties, Ohio, by J. F. Pepper, D. F. Demarest, R. D. Holt, and others. 1944. Lat 38°45' to 40°15', long 81°30' to 82°15'. Scale, 1 inch to 3 miles [1:190,080]. [Superseded by map 79.]
6. Reconnaissance geologic map of the Quitman fault zone, Clarke and Wayne Counties, Miss., and Choctaw County, Ala., by H. A. Tourtelot. 1944. Scale, 1 inch to 1½ miles [1:95,040]. 25c.
- *7. Structure contour map of the exposed rocks in the Rangely anticline, Rio Blanco and Moffat Counties, Colo., by C. R. Thomas and others. 1944. Scale, 1 inch to ½ mile [1:31,680]. Contour interval, 100 feet. [Superseded in part by map 67.]
- *8. Geology of a part of the upper Pecos River and Rio Galisteo region, New Mexico, by C. B. Read and D. A. Andrews. 1944. Scale, 1 inch to 1½ miles [1:95,040]. [Superseded by map 21.]
- *9. Map of the First Berea sand in southeastern Ohio and western West Virginia, by J. F. Pepper, Paul Averitt, D. F. Demarest, and others. 1944. Lat 39°00' to 40°15', long 81°30' to 83°30'. Scale, 1 inch to 3 miles [1:190,080]. [See Professional Paper 259.]
10. Map showing thickness and general character of the Cretaceous deposits in the western interior of the United States, by J. B. Reeside, Jr. 1944. Scale, 1 inch to 220 miles [1:13,939,200]. 25c.
11. Geology and oil and gas possibilities of south-central Michigan, by G. V. Cohee. 1944. Scale, 1 inch to 10 miles [1:633,600]. 25c.
12. Geologic map and structure sections of the Batesville district, Independence County, Ark., by Mackenzie Gordon, Jr., and D. M. Kinney. 1944. Lat 35°45'00" to 35°48'45", long 91°37'30" to 91°45'00". Scale, 1:20,000. 40c.
13. Geologic and structure contour map of the Maverick Springs area, Fremont County, Wyo., by D. A. Andrews. 1944. Scale, 1:48,000. 40c.
14. Geologic map of Santa Maria district, Santa Barbara County, Calif., by W. P. Woodring, M. N. Bramlette, K. E. Lohman, and R. P. Bryson. 1944 [1945]. Lat 34°50' to 35°00', long 120°30' to 120°40'. Scale, 1 inch to 2,000 feet [1:24,000]. 6 sheets, \$3 a set. (See Professional Paper 222.)
15. Geologic map of the Dougherty asphalt area, Murray County, Okla., by J. M. Gorman and G. M. Flint, Jr. 1944. Scale, 1 inch to 300 feet [1:3,600]. Contour interval, 20 feet. 25c.
16. Geology of the bituminous sandstone deposits near Edna, San Luis Obispo County, Calif., by B. M. Page, M. D. Williams, E. L. Henrickson, and others. 1944. Scale, 1 inch to 2,000 feet [1:24,000]. 60c.
17. Maps and sections of the Berea sandstone in eastern Michigan, by G. V. Cohee and L. B. Underwood. 1944. Scale, 1 inch to 20 miles [1:1,267,200]. 35c.

18. Geologic map of southern Guadalupe Mountains, Hudspeth and Culberson Counties, Tex., by P. B. King, 1944. Lat 31°45' to 32°00', long 104°40' to 105°00'. Scale, 1 inch to 4,000 feet [1:48,000]. 40c.
- *19. Map of Wyoming showing test wells for oil and gas, anticlinal axes, and oil and gas fields, by H. H. R. Sharkey, J. D. Love, and Jewell Kirby. 1945. Lat 41° to 45°, long 104° to 111°. Scale, 1:500,000. [Superseded by maps 107 and 175.]
- *20. Geology of the Rose Hill oil field, Lee County, Va., by R. L. Miller and J. O. Fuller. 1945. Lat 36° 37'30" to 36°40'00", long 83°20' to 83°27'30". Scale, 1:18,000. [Superseded by map 76.]
21. Geologic map and stratigraphic sections of Permian and Pennsylvanian rocks of parts of San Miguel, Santa Fe, Sandoval, Bernalillo, Torrance, and Valencia Counties, north-central New Mexico, by C. B. Read, R. H. Wilpolt, D. A. Andrews, and others. 1944 [1945]. Scale, 1 inch to 3 miles [1:190,080]. 60c. [Supersedes map 8.]
22. Geologic map of the Sulphur asphalt area, Murray County, Okla., by J. M. Gorman, G. M. Flint, Jr., C. E. Decker, and W. E. Ham. 1944 [1945]. Scale, 1 inch to 300 feet [1:3,600]. Contour interval, 10 feet. 40c.
23. Stratigraphy and oil possibilities of Puente and San Jose Hills, Calif., by A. O. Woodford, J. S. Shelton, and T. G. Moran. 1944 [1945]. Lat 33°55' to 34°05', long 117°40' to 117°55'. Scale, 1 inch to 2,000 feet [1:24,000]. 60c.
24. Stratigraphy as related to oil possibilities of the Salinas Valley, California, by M. N. Bramlette and S. N. Daviess. 1945. Scale, 1 inch to 2 miles [1:126,720]. 35c.
- *25. Geologic map of Montana, by D. A. Andrews, G. S. Lambert, and G. W. Stose. 1944 [1945]. Scale, 1:500,000. 2 sheets. [Superseded by Geologic Map of Montana, 1955.]
26. Geology of Santa Rosa Hills, eastern Purisima Hills district, Santa Barbara County, Calif., by W. P. Woodring, J. S. Loofbourou, Jr., and M. N. Bramlette. 1945. Lat 34°35' to 34°40', long 120°10' to 120°20'. Scale, 1 inch to 4,000 feet [1:48,000]. 35c.
27. Geology of the bituminous sandstone deposits near Santa Cruz, Santa Cruz County, Calif., by B. M. Page, M. D. Williams, E. L. Henrickson, and others. 1945. Scale, 1 inch to 300 feet [1:3,600]. Contour interval, 20 feet. 60c.
- *28. Geology and oil and gas possibilities of the Devonian Sylvania and Bois Blanc formations in Michigan, by K. K. Landes. 1945. Scale, 1 inch to 16 miles [1:1,013,760].
- *29. Map of the Berea sand of southeastern Ohio, northern West Virginia, and southwestern Pennsylvania, by J. F. Pepper, D. F. Demarest, R. D. Holt, and others. 1945. Lat 38°45' to 40°15', long 79°45' to 81°30'. Scale, 1 inch to 3 miles [1:190,080]. [See Professional Paper 259.]
30. Southeastern part of the Midway-Sunset oil field, Kern County, Calif., by W. T. Woodward. 1945 [1947]. Scale, 1 inch to 2,000 feet [1:24,000]. 50c.
31. Geology and oil possibilities at the northwest end of the Wind River Mountains, Sublette County, Wyo., by G. M. Richmond. 1945. Lat 43°10' to 43°20', long 109°50' to 110°00'. Scale, 1 inch to 1 mile [1:63,360]. [Reprinted 1957.] 60c.
32. Geology of the Washakie Basin, Sweetwater and Carbon Counties, Wyo., and Moffat County, Colo., by W. H. Bradley. 1945. Lat 40°45' to 41°45', long 108°00' to 108°30'. Scale, 1 inch to 3 miles [1:190,080]. [Reprinted 1954.] 40c.
- *33. Structure contour map of the Powder River Basin, Wyoming and Montana, by W. G. Pierce and Roselle Girard. 1945. Lat 43° to 45°, long 104°30' to 107°00'. Scale, 1 inch to 4 miles [1:253,440]. [Superseded by OM-133.]
34. Geology of oil-impregnated diatomaceous rock near Casmalia, Santa Barbara County, Calif., by M. D. Williams and C. N. Holmes. 1945. Scale, 1 inch to 300 feet [1:3,600]. Contour interval, 20 feet. 40c.
35. Asphalt and bituminous sandstone deposits of part of the McKittrick district, Kern County, Calif., by B. M. Page, Eiler Henrickson, M. D. Williams, and T. G. Moran. 1945. Scale, 1 inch to 250 feet [1:3,000]. 50c.
36. Geology of Hueco Mountains, El Paso and Hudspeth Counties, Tex., by P. B. King, R. E. King, and J. B. Knight. 1945. Lat 31°40' to 32°00', long 105°45' to 106°10'. Scale, 1 inch to 1 mile [1:63,360]. [Reprinted 1955.] 2 sheets. 75c a set.
37. Geologic map of Tuscaloosa and Cottondale quadrangles, Alabama, showing areal geology and structure of Upper Cretaceous formations, by L. C. Conant, D. H. Eargle, W. H. Monroe, and J. H. Morris. 1945. Lat 33°00' to 33°15', long 87°15' to 87°45'. Scale, 1 inch to 1 mile [1:63,360]. 55c.
38. Lithology and thickness of the Dundee formation and the Rogers City limestone in the Michigan basin, by G. V. Cohee and L. B. Underwood. 1945. Scales, 1 inch to 16 miles [1:1,013,760] and 1 inch to 25 miles [1:1,584,000]. 40c.
- *39. Map of the Berea sand of northern Ohio, by J. F. Pepper, D. F. Demarest, Wallace de Witt, Jr., and others. 1945. Lat 40°15' to 41°45', long 81°00' to 82°45'. Scale, 1 inch to 3 miles [1:190,080]. 2 sheets. [See Professional Paper 259.]
- *40. The Salina and Bass Island rocks in the Michigan basin, by K. K. Landes. 1945. Scale, 1 inch to 23 miles [1:1,457,280].
- *41. Structure contour maps of the Rangely anticline, Rio Blanco and Moffat Counties, Colo., by C. R. Thomas and others. 1945. Scale, 1 inch to ½ mile [1:31,680]. [Superseded by map 67.]
42. Geology of northwestern Oregon west of Willamette River and north of latitude 45°15', by W. C. Warren, Hans Norbistrath, and R. M. Grivetti. 1945. Lat 45°15' to 46°00', long 123°00' to 123°45'. Scale, 1 inch to about 2.3 miles [1:145,728]. Contour interval, 300 feet. 70c.
43. Maps showing thickness and general distribution of Mesozoic and Paleozoic rocks in south-central Montana, by C. P. Rogers, Jr., L. S. Gardner, and H. D. Hadley. 1945. Lat 45° to 47°, long 108° to 111°. Scale, 1 inch to 21 miles [1:1,330,560]. 40c.

44. Geology and asphalt deposits of north-central Guadalupe County, N. Mex., by J. M. Gorman and R. C. Robeck. 1946. Lat 35°00' to 35°15', long 104°30' to 105°05'. Scale, 1 inch to 1 mile [1:63,360]. 60c.
45. Geologic map of the Tertiary formations of Alabama, by F. S. MacNeil. 1946. Lat 31° to 33°, long 85° to 88°. Scale, 1:500,000. 40c.
46. Magnetic maps of Worcester County and part of Wicomico County, Md., by J. R. Balsley, Jr., M. S. Walton, D. L. Rossman, and others. 1946. Lat 38°00' to 38°25', long 75°00' to 75°45'. Scale, 1 inch to 2 miles [1:126,720]. 30c.
47. Geology of the Lucero uplift, Valencia, Socorro, and Bernalillo Counties, N. Mex., by V. C. Kelley and G. H. Wood. 1946. Lat 34°15' to 35°00', long 107°00' to 107°15'. Scale, 1 inch to 1 mile [1:63,360]. [Reprinted.] 60c.
48. Structural development of the Forest City basin of Missouri, Kansas, Iowa, and Nebraska, by Wallace Lee and others. 1946. Scale, 1 inch to 12 miles [1:760,320]. 7 sheets. \$2 a set.
49. Map of the Berea and Murrysburg sands of northeastern Ohio, western Pennsylvania, and northernmost West Virginia, by D. F. Demarest. 1946. Lat 40°15' to 41°45', long 79°00' to 81°00'. Scale, 1 inch to 3 miles [1:190,080]. 60c. [See Professional Paper 259.]
50. Geologic map of the Aliceville, Mantua, and Eutaw quadrangles, Alabama, showing pre-Selma Upper Cretaceous formations, by D. H. Eargle, W. H. Monroe, and J. H. Morris. 1946. Lat 32°45' to 33°15', long 87°45' to 88°00'. Scale, 1 inch to 2 miles [1:126,720]. 50c.
51. Geologic map of the southeastern part of the Wind River Basin and adjacent areas in central Wyoming, by C. J. Hares and others. 1946. Scale, 1 inch to 2 miles [1:126,720]. [Reprinted 1955.] 50c.
52. Maps of northeastern Oklahoma and parts of adjacent States showing the thickness and subsurface distribution of Lower Ordovician and Upper Cambrian rocks below the Simpson group, by H. A. Ireland and J. H. Warren. 1946. Lat 36° to 37°, long 94° to 96°. Scale, 1 inch to 8 miles [1:506,880]. 60c.
53. Geologic and structure contour map of Sage Creek dome, Fremont County, Wyo., by H. H. R. Sharkey, Alfred Zapp, C. O. Johnson, and others. 1946. Scale, 1 inch to ½ mile [1:31,680]. 50c.
54. Geologic maps of a part of the Las Vegas Basin and of the foothills of the Sangre de Cristo Mountains, San Miguel and Mora Counties, N. Mex., by S. A. Northrup, H. H. Sullwold, Jr., A. J. MacAlpin, and C. P. Rogers, Jr. 1946. Lat 35°20' to 35°40', long 104°40' to 105°10'. Scales, 1 inch to 3 miles [1:190,080] and 1 inch to 2/3 mile [1:42,240]. 60c.
55. Areal geologic map of the Green River Desert-Cataract Canyon region, Emery, Wayne, and Garfield Counties, Utah, by A. A. Baker. 1946. Scale, 1 inch to 2 miles [1:126,720]. 40c. (See also Bulletin 951.)
56. Geology of the Bargee area, Fremont County, Wyo., by M. D. Williams and H. H. R. Sharkey. 1946. Scales, 1 inch to 1 mile [1:63,360] and 1 inch to 2,000 feet [1:24,000]. 40c.
57. Geology of the Nacimiento Mountains, San Pedro Mountain, and adjacent plateaus in parts of Sandoval and Rio Arriba Counties, N. Mex., by G. H. Wood and S. A. Northrup. 1946. Lat 35°20' to 36°15', long 106°45' to 107°00'. Scale, 1 inch to 1½ miles [1:95,040]. 60c.
- *58. The distribution of several types of Berea sand in West Virginia, eastern Ohio, and western Pennsylvania, by Gordon Rittenhouse. 1946. Scale, 1 inch to 16 miles [1:1,013,760]. [See Professional Paper 259.]
59. Map of the Berea sand of southern West Virginia, by C. W. Merrels, 2d. 1946. Lat 37°15' to 38°45', long 79°30' to 81°45'. Scale, 1 inch to 3 miles [1:190,080]. 50c. [See Professional Paper 259.]
60. Geologic map of the southern part of the Wind River Basin and adjacent areas in central Wyoming, by C. J. Hares and others. 1946. Scale, 1 inch to 2 miles [1:126,720]. [Reprinted 1955.] 50c.
61. Geologic map and stratigraphic sections of Paleozoic rocks of Joyita Hills, Los Pinos Mountains, and northern Chupadera Mesa, Valencia, Torrance, and Socorro Counties, N. Mex., by R. H. Wilpolt, A. J. MacAlpin, R. L. Bates, and Georges Vorbe. 1946. Lat 34°15' to 34°30', long 106°00' to 106°55'. Scale, 1 inch to 1 mile [1:63,360]. 65c.
62. Geology of northwestern Quay County, N. Mex., by Ernest Dobrovolny, C. H. Summerson, and R. L. Bates. 1947. Scale, about 1 inch to 1 mile [1:62,500]. 2 sheets. 75c a set.
63. Geology of northeast margin of San Gabriel Basin, Los Angeles County, Calif., by J. S. Shelton. 1946. Lat 34°08' to 34°10', long 117°46' to 118°00'. Scale, 1 inch to 2,000 feet [1:24,000]. 60c.
64. Pre-Selma Upper Cretaceous stratigraphy in the McCrary, McShan, Gordo, Samantha, and Seales quadrangles, Alabama and Mississippi, by L. C. Conant and D. H. Eargle. 1947. Lat 33°15' to 33°30', long 87°15' to 87°45'. Scale, 1 inch to 1 mile [1:63,360]. 70c.
65. Geology of the outcropping formations of the Jackson area, Mississippi, by W. H. Monroe. 1947. Lat 32°15' to 32°30', long 89°45' to 90°15'. Scale, 1 inch to 1 mile [1:63,360]. 50c.
66. Geology of the western part of the Ouachita Mountains, Okla., by T. A. Hendricks, L. S. Gardner, M. M. Knechtel, and Paul Averitt. 1947. Scale, 1 inch to 2/3 mile [1:42,240]. 3 sheets. \$1 a set. [Supersedes map 1.]
67. Subsurface maps of the Rangely anticline, Rio Blanco County, Colo., by N. W. Bass. 1946. Scale, 1 inch to ½ mile [1:31,680]. 25c. [Supersedes maps 7 and 41.]
68. Structure contour map of the surface rocks of the Model anticline, Las Animas County, Colo., by N. W. Bass. 1947. Scale, 1 inch to 2/3 mile [1:42,240]. Contour interval, 25 feet. 25c.
- *69. Map of the Berea sand of southern Ohio, eastern Kentucky, and southwestern West Virginia, by J. F. Pepper, D. F. Demarest, C. W. Merrels, 2d, and Wallace de Witt, Jr. 1946. Lat 37°15' to 38°45', long 81°45' to 83°30'. Scale, 1 inch to 3 miles [1:190,080]. [See Professional Paper 259.]
70. Geologic map of eastern and southern Utah, compiled by D. A. Andrews and C. B. Hunt. 1948. Lat 37° to 42°, long 109° to 114°. Scale, 1:500,000. [Reprinted 1956.] 50c.
71. Geologic map of the Big Horn Basin, Wyoming and Montana, showing terrace deposits and physiographic features, by D. A. Andrews, W. G. Pierce, and D. H. Eargle. 1947. Lat 44° to 45°, long 108° to 109°. Scale, 1 inch to 2 miles [1:126,720]. 50c.

72. Geologic map of the Tertiary and Quaternary formations of Georgia, by F. S. MacNeil. 1947. Lat 31° to 33°, long 81° to 85°. Scale, 1 inch to 8 miles [1:506,880]. 40c.
- *73. Map of Colorado showing dry holes and oil and gas fields, by F. K. Demok, H. R. Castor, and N. W. Bass. 1947. Lat 37° to 41°, long 102° to 109°. Scale, 1:500,000. [Superseded by map OM-116.]
74. Structure contour map of the Big Horn Basin, Wyoming and Montana, by W. G. Pierce, D. A. Andrews, and J. K. Keroher. 1947. Lat 44° to 45°, long 107°30' to 109°00'. Scale, 1 inch to 3 miles [1:190,080]. 50c. [Supersedes map 3.]
75. Pre-Tertiary geology of the Duchesne River area, Wasatch and Duchesne Counties, Utah, by J. W. Huddle and F. T. McCann. 1947. Lat 40°22'30" to 40°30'00", long 110°45' to 111°00'. Scale, 1 inch to 1 mile [1:63,360]. 60c.
76. Geologic and structure contour maps of the Rose Hill oil field, Lee County, Va., by R. L. Miller and J. O. Fuller. 1947. Lat 36°37'30" to 36°40'00", long 83°20'00" to 83°27'30". Scale, 1 inch to 1,500 feet [1:18,000]. 2 sheets. \$1 per set.
77. Geologic and structure contour map of the Basin-Greybull area, Big Horn County, Wyo., by W. G. Pierce. 1948. Lat 44°15' to 44°30', long 107°45' to 108°00'. Scale, 1 inch to 4,000 feet [1:48,000]. 60c.
78. Geology and oil possibilities of the eastern side of San Juan Basin, Rio Arriba County, N. Mex., by C. H. Dane. 1948. Scale, 1 inch to 1 mile [1:63,360]. [Reprinted 1957.] \$1.
79. Map of the First and Second Berea sands of southeastern Ohio and western West Virginia, by Wallace de Witt, Jr., D. F. Demarest, and others. 1947. Lat 38°45' to 40°15', long 81°30' to 83°00'. Scale, 1 inch to 3 miles [1:190,080]. 60c. [See Professional Paper 259.]
80. Rocks of Permian(?) age in the Colorado River Valley, north-central Texas, by R. C. Moore. 1949. Lat 31°25' to 31°50', long 99°15' to 100°00'. Scale, 1 inch to 1 mile [1:63,360]. [Reprinted 1958.] 2 sheets, \$1 per set.
81. Geology of the southern part of Archuleta County, Colo., by G. H. Wood, V. C. Kelley, and A. J. MacAlpin. 1948. Lat 37°00' to 37°15', long 106°45' to 107°30'. Scale, 1 inch to 1 mile [1:63,360]. \$1.
82. Pre-Tertiary geology of the Whitecliffs River-Ashley Creek area, Uintah County, Utah, by D. M. Kinney and J. F. Rominger. 1947. Lat 40°30' to 40°45', long 109°30' to 110°00'. Scale, 1 inch to 1 mile [1:63,360]. 60c.
83. Geology of the northwestern Puente Hills, Los Angeles County, Calif., by S. N. Daviess and A. O. Woodford. 1949. Lat 33°58' to 34°00', long 117°56' to 118°02'. Scale, 1 inch to 2,000 feet [1:24,000]. 2 sheets, \$1 per set.
84. Geology of the Worland-Hyattsville area, Big Horn and Washakie Counties, Wyo., by C. P. Rogers, Jr., P. W. Richards, L. C. Conant, and others. 1948. Lat 44°00' to 44°15', long 107°30' to 108°00'. Scale, 1 inch to 4,000 feet [1:48,000]. 90c.
85. Tertiary geology of the coastal plains of Puerto Rico, by A. D. Zapp, H. R. Bergquist, and C. R. Thomas. 1948. Lat 18°17'30" to 18°30'00", long 65°45'00" to 67°15'00". Scale, 1:60,000. [Reprinted 1956.] 2 sheets, \$1 per set.
86. Geology of the bituminous sandstone deposits near Sunnyside, Carbon County, Utah, by C. N. Holmes, B. M. Page, and Paul Averitt. 1948. Lat 39°15' to 39°40', long 110°20' to 110°25'. Scale, 1 inch to 2,000 feet [1:24,000]. [Reprinted 1955.] 50c.
87. Geology of the Lothair area, Liberty County, Mont., by C. E. Erdmann. 1948. Scale, 1 inch to 4,000 feet [1:48,000]. 60c.
- *88. Geology of the Newport-Waldport area, Lincoln and Lane Counties, Oreg., by H. E. Vokes, Hans Norbierath, and P. D. Snively, Jr. 1949. Lat 44°15' to 44°45', long 123°45' to 124°10'. Scale, 1:62,500.
89. Map of the Berea and Murrysville sands of southeastern Ohio, northern West Virginia, and southwestern Pennsylvania, by J. F. Pepper, D. F. Demarest, R. D. Holt, and others. 1948. Lat 38°45' to 40°15', long 79°30' to 81°30'. Scale, 1 inch to 3 miles [1:190,080]. 60c. [See Professional Paper 259.]
90. Regional geologic map of parts of Culberson and Hudspeth Counties, Tex., by P. B. King. 1949. Lat 31° to 32°, long 104°00' to 105°30'. Scale, 1:150,000. [Reprinted 1960]. 75c.
91. Geology of the Boysen area, central Wyoming, by H. A. Tourtelot and R. M. Thompson. 1948. Lat 43°15' to 43°30', long 108°00' to 108°30'. Scale, 1 inch to 4,000 feet [1:48,000]. [Reprinted 1955.] 2 sheets, \$1 per set.
92. Geology of the Glendo area, Wyo., by J. D. Love, N. M. Denson, and Theodore Botinelly. 1949. Scale, 1 inch to 4,000 feet [1:48,000]. 2 sheets. 80c per set.
- *93. Geology of the Egnar-Gypsum Valley area, San Miguel and Montrose Counties, Colo., by W. L. Stokes and D. A. Phoenix. 1948. Lat 38°00' to 38°15', long 108°37'30" to 108°52'30". Scale, 1 inch to 4,000 feet [1:48,000].
94. Geology of Naval Oil Shale Reserves 1 and 3, Garfield County, Colo., by D. C. Duncan and N. M. Denson. 1949. Lat 39°27'30" to 39°37'30", long 107°50' to 108°07'30". Scale, 1 inch to ½ mile [1:31,680]. Contour interval, 100 feet. 2 sheets, \$1 per set.
95. Geology of the Iniskin Peninsula, Alaska, by C. E. Kirschner and D. L. Minard. 1949. Lat 59°40' to 59°50', long 153°00' to 153°25'. Scale, 1 inch to 4,000 feet [1:48,000]. 75c.
96. Stratigraphy and geologic structure in the Piedra River Canyon, Archuleta County, Colo., by C. B. Read, G. H. Wood, A. A. Wanek, and Pedro Verastegui Mackee. 1949. Scale, 1 inch to about ½ mile [1:48,000]. 80c.
97. Geology of the coastal area from Cape Kiwanda to Cape Foulweather, Oreg., by P. D. Snively, Jr. and H. E. Vokes. 1949. Lat 44°45' to 45°15', long 123°45' to 124°55'. Scale, 1:62,500. 50c.
98. Geology of the Woodbine formation of Cooke, Grayson, and Fannin Counties, Tex., by H. R. Bergquist. 1949. Scale, 1:63,360. 2 sheets. \$1 per set.
99. Map of the Berea sand of northern Ohio, by Wallace de Witt, Jr. 1949. Lat 40°15' to 41°30', long 81°00' to 83°00'. Scale, 1 inch to 3 miles [1:190,080]. 50c. [See Professional Paper 259.]

- *100. Early Silurian rocks of the northern Appalachian Basin, by Gordon Rittenhouse. 1949. Lat 37° to 44°, long 75° to 84°. Scale, 1 inch to about 40 miles [1:2,500,000].
- 101. Pre-Pennsylvanian geology of southwestern Kansas, southeastern Colorado, and the Oklahoma Panhandle, by J. C. Maher and J. B. Collins. 1949. Scale, 1 inch to 16 miles [1:1,013,760]. 4 sheets. \$1 per set.
- 102. Geology of the Hartville uplift, eastern Wyoming, by N. M. Denson and Theodore Botinelly. 1949. Scale, 1:48,000. 2 sheets. \$1 per set.
- 103. Geology of the Mush Creek and Osage oil fields and vicinity, Weston County, Wyo., by C. E. Dobbins and C. H. Horn. 1949. Scale, 1 inch to 2 miles [1:126,720]. 50c.
- 104. Geology of the Jonesville district, Lee County, Va., by R. L. Miller and W. P. Brosgé. 1950. Lat 36°37'30" to 36°45', long 83°00' to 83°15'. Scale, 1 inch to ½ mile [1:31,680]. 2 sheets. \$1 per set. (See also Bulletin 990.)
- 105. Geologic map of the Selma group in eastern Alabama, by D. H. Eargle. 1950. Scale, 1 inch to about 4 miles [1:250,000]. 50c.
- 106. Geology of the Button Butte-Forestgrove area, Fergus County, Mont., by L. S. Gardner. 1950. Lat 46°45' to 47°00', long 108°45' to 109°15'. Scale, 1:63,360. 60c.
- *107. Map of Wyoming showing test wells for oil and gas, anticlinal axes, oil and gas fields, pipelines, unit areas, and land district boundaries, compiled by E. K. Keefer, J. D. Love, R. M. Larsen, and M. W. Allen. 1949. Lat 41° to 45°, long 104° to 111°. Scale, 1:500,000. 2 sheets. [Superseded by map OM-175.]
- 108. Geology of the Hobson area, central Montana, by J. D. Vine and W. J. Hail, Jr. 1950. Lat 46°50' to 47°10', long 109°40' to 110°00'. Scale, 1 inch to 1 mile [1:63,360]. 50c.
- 109. Geology and coal resources of the Durango area, La Plata and Montezuma Counties, Colo., by A. D. Zapp. 1949. Lat 37°12'30" to 37°20', long 107°40' to 108°10'. Scale, 1 inch to ¼ mile [1:31,680]. 2 sheets. \$1 per set.
- OM-110. Geology of the southern and southwestern border area of the Willamette Valley, Oreg., by H. E. Vokes, P. D. Snively, Jr., and D. A. Myers. 1951. Lat 43°45' to 44°15', long 123°00' to 123°30'. Scale, 1:62,500. 60c.
- OM-111. Geology of the Hardin area, Big Horn and Yellowstone Counties, Mont., by P. W. Richards and C. P. Rogers, Jr. 1951. Lat 45°15' to 45°45', long 107°30' to 108°00'. Scale, 1:63,360. 2 sheets. \$1 per set.
- OM-112. Geology of the Lander area, central Wyoming, by R. M. Thompson, M. L. Troyer, V. L. White, and G. N. Pipiringos. 1950. Lat 42°40' to 43°10', long 108°30' to 109°10'. Scale, 1:63,360. [Reprinted 1957]. 2 sheets. \$1 per set.
- *OM-113. Tertiary stratigraphy of the western part of the Beaver Divide area, Fremont County, Wyo., by F. B. Van Houten. 1950. Scale, 1:31,680. [Superseded by map OM-140.]
- OM-114. Geology of DeBeque oil-shale area, Garfield and Mesa Counties, Colo., by F. R. Waldron, J. R. Donnell, and J. C. Wright. 1951. Lat 39°20' to 39°35', long 108°05' to 108°30'. Scale, 1:62,500. 2 sheets. \$1.25 per set.
- OM-115. Geology of the Moon Lake area, Duchesne County, Utah, by J. W. Huddle, W. J. Mapel, and F. T. McCann. 1951. Lat 40°22'30" to 40°37'30", long 110°15' to 110°45'. Scale, 1:63,360. 50c.
- OM-116. Map of Colorado showing test wells for oil and gas, pipelines, oil, and gas fields, and areas of pre-Cambrian rocks, compiled by F. K. Walker and N. W. Bass. 1951. Lat 37° to 41°, long 102° to 109°. Scale, 1:500,000. 2 sheets. \$1 per set. [Supersedes map 73.]
- OM-117. The floor of the Los Angeles basin, Los Angeles, Orange, and San Bernardino Counties, Calif., by J. E. Schoellhamer and A. O. Woodford. 1951. Lat 33°40' to 34°10', long 117°42' to 118°32'. Scales, 1 inch to 1 mile [1:63,360] and 1 inch to 2 miles [1:126,720]. 2 sheets. 75c per set.
- OM-118. Geologic map of the Spread Creek-Gros Ventre River area, Teton County, Wyo., by J. D. Love, W. R. Keefer, D. C. Duncan, H. R. Bergquist, and R. K. Hose. 1951. Scale, 1:48,000. 2 sheets. \$1 per set.
- OM-119. Geology of the eastern part of the Piceance Creek basin, Rio Blanco and Garfield Counties, Colo., by D. C. Duncan and Carl Belser. 1950. Lat 39°45'00" to 39°52'30", long 107°52'30" to 108°22'30". Scale, 1:96,000. 50c.
- OM-120. Geology of Dove Creek area, Dolores and Montezuma Counties, Colo., by E. A. Finley. 1951. Scale, 1:48,000. [Reprinted 1955.] 50c.
- OM-121. Geology of the region from Socorro and San Antonio east to Chupadera Mesa, Socorro County, N. Mex., by R. H. Wilpolt and A. A. Wanek. 1951. Lat 33°45' to 34°15', long 106°02' to 106°55'. Scale, 1:63,360. 2 sheets. 80c per set.
- OM-122. Geologic map of the Powder River basin and adjacent areas, Wyoming, by J. D. Love and J. L. Weitz. 1951. Lat 43° to 45°, long 104°30' to 107°45'. Scale, 1 inch to 5 miles [1:316,800]. 50c.
- OM-123. Geology of the Uinta River and Brush Creek-Diamond Mountain areas, Duchesne and Uintah Counties, Utah, by D. M. Kinney. 1951. Lat 43°30' to 43°45', long 110°00' to 110°15'. Scale, 1:63,360. [Reprinted 1957.] 75c. (See also Bulletin 1007.)
- OM-124. Geology of the Badwater area, central Wyoming, by H. A. Tourtelot. 1953. Lat 43°15' to 43°30', long 107°30' to 108°00'. Scale, 1:48,000. 2 sheets. \$1 per set.
- OM-125. Bituminous sandstone deposits of Point Arena, Mendocino County, Calif., by C. N. Holmes, B. M. Page, and D. C. Duncan. 1951. Scale, 1 inch to 1,200 feet [1:14,400]. Contour interval, 100 feet. 50c.
- OM-126. Geology of the Arctic slope of Alaska, by T. G. Payne and others. 1952. Lat 68° to 71°, long 144° to 166°. Scale, 1:1,000,000. 3 sheets. \$1.50 per set.
- OM-127. Geology of the Riverton area, central Wyoming, by R. M. Thompson and V. L. White. 1954. Lat 42°45' to 43°00', long 108°15' to 108°45'. Scale, 1:63,360. 2 sheets. \$1 per set.

- OM-128. Geology of a part of Tumeay and Panoche Hills, Fresno County, Calif., by J. E. Schoellhamer and D. M. Kinney, 1953. Scale, 1:24,000. 60c.
- OM-129. Geology of the Spirit Mountain quadrangle, northwestern Oregon, by E. M. Baldwin and A. E. Roberts. Lat 45°00' to 45°15', long 123°30' to 123°45'. Scale, 1:48,000. 60c.
- *OM-130. Map of Montana showing oil and gas fields and test wells for oil and gas, compiled by J. D. Vine and C. E. Erdmann, 1952. Lat 45° to 49°, long 104° to 110°. Scale, 1:500,000. 2 adjoining sheets. [Superseded by map OM-170.]
- OM-131. Geologic map of the Henry Mountains region, Utah, by C. B. Hunt and others, 1952. Scale, 1:125,000. \$1. (See Professional Paper 228.)
- OM-132. Geology of the Gilbert area, Searcy County, Ark., by J. C. Maher and R. J. Lantz, 1953. Lat 35°56' to 36°00', long 92°40' to 92°45'. Scale, 1:12,000. 40c.
- OM-133. Structure contour map of the Powder River Basin, Wyoming and Montana, by W. G. Pierce and R. M. Girard, 1945. Revised by A. D. Zapp, 1951 [1952]. Lat 43° to 45°, long 104°30' to 107°00'. Scale, 1 inch to 5 miles [1:316,800]. 75c. [Supersedes map 33.]
- OM-134. Geology of the Cathedral Bluffs oil-shale area, Rio Blanco and Garfield Counties, Colo., by J. R. Donnell, W. B. Cashion, and J. H. Brown, Jr., 1953. Lat 39°37'30" to 40°00', long 108°30' to 108°37'30". Scale, 1:62,500. 50c.
- OM-135. Permian and Pennsylvanian rocks of southeastern Colorado and adjacent areas, by J. C. Maher and J. B. Collins, 1953. Lat 37° to 39°, long 102° to 105°. Scale, 1 inch to 18 miles [1:143,180]. 75c.
- OM-136. Map of the northern part of the Appalachian Basin showing locations of selected deep wells, compiled by G. M. Everhart, 1953. Lat 37° to 44°, long 73° to 87°. Scale, 1:1,000,000. 75c.
- OM-137. Geology of a part of northwestern Mora County, N. Mex., by G. O. Bachman, 1953. Lat 36°00' to 36°15', long 105°00' to 105°15'. Scale, 1:148,000. 50c.
- OM-138. Geology of the Ignacio area, Ignacio and Pagosa Springs quadrangles, La Plata and Archuleta Counties, Colo., by Harley Barnes, 1953. Lat 37°15' to 37°20', long 107°25' to 107°40'. Scale, 1:63,360. 50c.
- OM-139. Geology of the Stanford area, Judith Basin and Fergus Counties, Mont., by J. D. Vine and W. D. Johnson, Jr., 1954. Lat 47°00' to 47°20', long 109°40' to 110°30'. Scale, 1:63,360. 50c.
- OM-140. Geology of the Long Creek-Beaver Divide area, Fremont County, Wyo., by F. B. Van Houten, 1954. Lat 42°35' to 42°50', long 108°00' to 108°15'. Scale, 1:48,000. 2 sheets. 75c per set. [Supersedes map OM-113.]
- OM-141. Geology and stratigraphy of Koehler and Mount Laughlin quadrangles and parts of Abbott and Springer quadrangles, eastern Colfax County, N. Mex., by G. H. Wood, Jr., S. A. Northrop, and R. L. Griggs, 1953. Lat 36°15' to 36°45', long 104°00' to 104°45'. Scale, 1:63,360. 2 sheets. \$1 per set.
- OM-142. Geology of the Crazy Woman Creek area, Johnson County, Wyo., by R. K. Hose, 1954. Lat 44°00' to 44°15', long 106°35' to 106°50'. Scale, 1:48,000. 2 sheets. 75c per set. (See also Bulletin 1027-B.)
- OM-143. Preliminary report on the geology of the Scurry Reef in Scurry County, Tex., by H. E. Rothrock, R. E. Bergenback, D. A. Myers, P. T. Stafford, and R. T. Terriere, 1953. Scale, 1:48,000. 50c.
- OM-144. Geology and fuel resources of the Upper Cretaceous rocks of the Barker dome-Fruitland area, San Juan County, N. Mex., by P. T. Hayes and A. D. Zapp, 1955. Lat 36°45' to 37°00', long 108°10' to 108°35'. Scale, 1:62,500. 2 sheets. 50c per set.
- OM-145. Geology of the Kaibito and Moenkopi Plateaus and parts of the Painted Desert, Coconino County, Ariz., by A. A. Wanek and J. G. Stephens, 1953. Lat 35°45' to 37°00', long 110°45' to 111°45'. Scale, 1:150,000. 2 sheets. 50c per set.
- OM-146. Geology of the La Veta area, Huerfano County, Colo., by R. B. Johnson and J. G. Stephens, 1954. Lat 37°30'30" to 37°45'00", long 104°55'00" to 105°07'30". Scale, 1:31,680. 50c.
- OM-147. Preliminary geologic map of the Beautiful Mountain anticline, San Juan County, N. Mex., by E. C. Beaumont, 1954. Lat 36°15' to 36°37'30", long 108° to 109°. Scale, 1:48,000. 50c.
- OM-148. Geologic map of the Square Buttes district, Oliver and Mercer Counties, N. Dak., by W. D. Johnson, Jr. and R. P. Kunkel, 1954. Lat 47°00' to 47°15', long 101°00' to 101°45'. Scale, 1:63,360. 50c.
- OM-149. Geology and fuel resources of the Red Mesa area, La Plata and Montezuma Counties, Colo., by Harley Barnes, E. H. Baltz, Jr., and P. T. Hayes, 1954. Lat 37°00' to 37°20', long 107°52'30" to 108°20'. Scale, 1:62,500. 50c.
- OM-150. Geology of the west-central border area of the Willamette Valley, Oregon, by H. E. Vokes, D. A. Myers, and Linn Hoover, 1954. Lat 44°15' to 44°45', long 123°15' to 123°30'. Scale, 1:62,500. 50c.
- OM-151. Geology of the Steamboat Butte-Pilot Butte area, Fremont County, Wyo., by J. F. Murphy and R. W. Roberts, 1954. Lat 43°07'30" to 43°22'30", long 108°45' to 109°00'. Scale, 1:48,000. 50c.
- OM-152. Geologic map of the Mesa Verde area, Montezuma County, Colo., by A. A. Wanek, 1954. Lat 37°00' to 37°20', long 108°20' to 108°45'. Scale, 1:63,360. 50c. (See also Bulletin 1072-M.)
- OM-153. Geology of the Boranza-Dragon oil-shale area, Uintah County, Utah, and Rio Blanco County, Colo., by W. B. Cashion and J. H. Brown, Jr., 1956. Scale, 1:62,500. 2 sheets. 75c per set.
- OM-154. Geologic map of the northern Santa Ana Mountains, Orange and Riverside Counties, Calif., by J. E. Schoellhamer, D. M. Kinney, R. F. Yerkes, and J. G. Vedder, 1954. Lat 33°42'30" to 33°52'30", long 117°37'30" to 117°52'30". Scale, 1:24,000. Contour intervals, 5 and 20 feet. 75c.
- OM-155. Geology of the Sheridan and McMinnville quadrangles, Oregon, by E. M. Baldwin, R. D. Brown, Jr., J. E. Gair, and M. H. Pease, Jr., 1955. Lat 45°00' to 45°15', long 123°00' to 123°30'. Scale, 1:62,500. Contour intervals, 25 and 100 feet. 50c.

- OM-156. Structure and stratigraphy of the outcropping Pennsylvanian rocks in the White Oak quadrangle, Magoffin and Morgan Counties, Ky., by W. L. Adkison. 1954. Lat 37°45' to 37°52'30", long 83°07'30" to 83°15'00". Scale, 1:24,000. 50c. (See also Bulletin 1047-A.)
- OM-157. Tectonic map of a part of the upper Rio Grande area, New Mexico, by V. C. Kelley. 1954. Lat 33°50' to 36°30', long 105°30' to 107°10'. Scale, 1:190,080. 50c.
- OM-158. Map showing geologic structure of the southern part of the San Juan Basin, including parts of San Juan, McKinley, Sandoval, Valencia, and Bernalillo Counties, N. Mex., compiled by C. B. Hunt and C. H. Dane. 1954. Scale, 1:126,720. 50c.
- *OM-159. Map of New Mexico showing test wells for oil and gas, oil and gas fields, and pipelines, compiled by G. H. Dixon, D. H. Baltz, and T. F. Stipp of the U. S. Geological Survey, and R. A. Bieberman of the New Mexico Bureau of Mines and Mineral Resources. 1955. Lat 32° to 37°, long 103° to 109°. Scale, 1:500,000. (Superseded by Map OM-207.)
- OM-160. Geology of the Carrizo Mountains area in northeastern Arizona and northwestern New Mexico, by J. D. Strobell, Jr. 1956. Lat 36°30' to 37°00', long 109°00' to 109°30'. Scale, 1:48,000. 2 sheets. \$1 per set.
- OM-161. Geologic map of the Walsenburg area, Huerfano County, Colo., by R. B. Johnson and J. G. Stephens. 1955. Lat 37°30' to 37°45', long 104°40' to 104°55'. Scale, 1:31,680. 50c. (See also Bulletin 1042-O.)
- OM-162. Geology of the Marys Peak and Alsea quadrangles, Oregon, by E. M. Baldwin. 1955. Lat 44°15' to 44°45', long 123°30' to 123°45'. Scale, 1:62,500. 50c.
- OM-163. Structure and stratigraphy of the outcropping Pennsylvanian rocks in the Tiptop quadrangle, Breathitt, Magoffin, and Knott Counties, Ky., by S. W. Welch. 1955. Lat 37°30' to 37°37'30", long 83°00' to 83°07'30". Scale, 1:24,000. 50c. (See also Bulletin 1042-P.)
- OM-164. Geologic and structure map of the Sussex and Meadow Creek oilfields and vicinity, Johnson and Natrona Counties, Wyo., by G. H. Horn. 1955. Scale, 1:31,680. 50c.
- OM-165. Structure contour map of the base of Mississippian rocks in the Williston basin and adjoining areas of Montana, North Dakota, South Dakota, and Wyoming, by R. P. Kunkel. 1954 [1955]. Lat 43° to 49°, long 98° to 109°. Scale, 1:1,000,000. 50c.
- OM-166. Geologic map of the Du Noir area, Fremont County, Wyo., by W. R. Keefer. 1955 [1956]. Lat 43°30' to 43°45', long 109°30' to 109°50'. Scale, 1:48,000. 50c. (See also Professional Paper 294-E.)
- OM-167. Preliminary geologic map of the northwestern part of the Epes quadrangle, Sumter and Greene Counties, Ala., by W. H. Monroe. 1955. Lat 32°30' to 32°45', long 88°05' to 88°15'. Scale, 1:31,680. 50c.
- OM-168. Preliminary map showing geologic structure of the Monument Valley-Navajo Mountain region, San Juan County, Utah, by A. A. Baker, L. W. Clark, L. A. Kelley, L. G. Snow, and R. M. Larsen. 1954. Scale, 1:126,720. [Reprinted 1957]. 50c. (See also Bulletin 865.)
- OM-169. Preliminary map showing geologic structure of parts of Grand and San Juan Counties, Utah, by A. A. Baker, C. H. Dane, and E. T. McKnight. 1954. Scale, 1:126,720. 50c.
- OM-170. Map of Montana showing oil and gas fields and test wells for oil and gas, compiled by J. D. Vine and C. E. Erdmann. 1952. Revised by H. R. Smith. 1954 [1956]. Lat 45° to 49°, long 104° to 116°. Scale, 1:500,000. 2 sheets. \$1 per set. [Supersedes map OM-130.]
- OM-171. Stratigraphy and photogeology of the southwestern part of Uinta Basin, Duchesne and Uintah Counties, Utah, by R. G. Ray, B. H. Kent, and C. H. Dane. 1956. Lat 39°50' to 40°10', long 109°55' to 110°45'. Scale, 1:63,360. 2 sheets. \$1.50 per set.
- OM-172. Geology of the Shotgun Butte area, Fremont County, Wyo., by M. L. Troyer and W. R. Keefer. 1955 [1956]. Lat 43°15' to 43°30', long 108°30' to 108°45'. Scale, 1:48,000. 50c.
- *OM-173. Structure and stratigraphy of the Pennsylvanian rocks exposed in the Seitz quadrangle, Breathitt, Magoffin, Morgan, and Wolfe Counties, Ky., by M. J. Bergin. 1956. Lat 37°37'30" to 37°45'00", long 83°07'30" to 83°15'00". Scale, 1:24,000.
- OM-174. Geology of the Trinidad-Aguilar area, Las Animas and Huerfano Counties, Colo., by R. L. Harbour and G. H. Dixon. 1956. Lat 37°10'00" to 37°30'00", long 104°30'00" to 104°45'00". Scale, 1:31,680. 50c. (See also Bulletin 1072-G.)
- OM-175. Map of Wyoming showing test wells for oil and gas, anticlines, oil and gas fields, and pipelines, compiled by L. W. McGrew. 1955 [1956]. Lat 41° to 45°, long 104° to 111°. Scale, 1:500,000. 75c. [Supersedes map 107.]
- OM-176. Preliminary structure contour map of the Colorado Plains, by E. A. Finley, C. E. Dobbin, and E. E. Richardson. 1955 [1956]. Lat 37° to 41°, long 102° to 105°. Scale, 1:500,000. 50c.
- OM-177. Preliminary structure contour map of a part of southeastern New Mexico showing oil and gas development, by T. F. Stipp and L. B. Haigler. 1956 [1957]. Scale, 1:126,720. 75c.
- OM-178A. Structure contour map of the Montana Plains, by C. E. Dobbin and C. E. Erdmann. 1955. Lat 45° to 49°, long 104° to 114°. Scale, 1:500,000. 50c.
- OM-178B. Structure contour map of the Montana Plains, by C. E. Dobbin and C. E. Erdmann. 1955. Lat 45° to 49°, long 104° to 114°. Scale, 1:1,000,000. 25c.
- OM-179. Structure contour map on top of the middle member of the Piper formation of Middle Jurassic age in the Williston basin and adjacent areas in Montana, North Dakota, and South Dakota, by D. T. Sandberg. 1959. Lat 45° to 49°, long 109° to 110°. Scale, 1:760,320. 75c.
- OM-180. Geologic map of the eastern Beaver Divide-Gas Hills area, Fremont and Natrona Counties, Wyo., by F. B. Van Houten and J. L. Weitz. 1956. Lat 42°40' to 42°50', long 107°30' to 109°00". Scale, 1:63,360. 50c.
- OM-181. Geology of the Sheldon-Little Dome area, Fremont County, Wyo., by J. F. Murphy, N. C. Privrasky, and G. A. Moerlein. 1956. Lat 43°22'30" to 43°30'00", long 108°52'30" to 109°07'30". Scale, 1:48,000. 50c.

- OM-182. Structure contour map of the Tensleep sandstone in the Big Horn Basin, Wyo. and Mont., by A. D. Zapp. 1956. Lat 43°30' to 45°00', long 107°30' to 109°00'. Scale, 1:250,000. 50c.
- OM-183. Preliminary geologic map of the northern part of the Raton Mesa region and Huerfano Park in parts of Las Animas, Huerfano, and Custer Counties, Colo., by R. B. Johnson, G. H. Wood, Jr., and R. L. Harbour. 1958. Lat 37°30'00" to 37°52'30", long 104°37'30" to 105°22'30". Scale, 1:63,360. 2 sheets. \$1.50 per set. (See also Bulletin 1071-D).
- OM-184. Index map of central midcontinent region giving lines of sections that show detailed lithology of Paleozoic and Mesozoic rocks, by Jeannette Fox and M. G. Sheldon. 1957. Lat 33° to 46°, long 89° to 106°. Scale, 1:2,500,000. 50c.
- OM-185. Geologic and structure map of the southeastern part of the Powder River Basin, Wyo., by C. E. Dobbins, W. B. Kramer, and G. H. Horn. 1957. Lat 43° to 44°, long 104°30' to 105°00'. Scale, 1:125,000. 75c.
- OM-186. Geologic map of the lower Siuslaw River area, Oregon, by E. M. Baldwin. 1956. Lat 43°45' to 44°15', long 123°30' to 124°15'. Scale, 1:62,500. Contour interval, 50 feet. 50c.
- OM-187. Geology of the southeastern part of the Robinson Mountains, Yakutat district, Alaska, by D. J. Miller. 1957. Lat 59°55' to 60°15', long 141°22'30" to 142°30'00". Scale, 1:63,360. 2 sheets. Contour interval, 100 feet. \$1.50 per set.
- OM-188. Geology of the Doty-Minot Peak area, Washington, by M. H. Pcase, Jr. and Linn Hoover. 1957. Lat 46°30' to 47°00', long 123°10' to 123°30'. Scale, 1:62,500. Contour intervals, 40 and 80 feet. 75c.
- OM-189. Reconnaissance geology of the Malaspina district, Alaska, by George Plafker and D. J. Miller. 1957. Lat 59°30' to 60°20', long 139°30' to 141°22'30". Scale, 1:125,000. 75c.
- OM-190. Preliminary geologic map of western San Juan Basin, San Juan and McKinley Counties, N. Mex., by R. B. O'Sullivan and E. C. Beaumont. 1957. Lat 35°30' to 37°00', long 108°15' to 109°00'. Scale, 1:125,000. 75c.
- OM-191. Geologic and structure contour map of the northern and western flanks of the Black Hills, Wyo., Mont., and S. Dak., by W. J. Mapel, C. S. Robinson, and P. K. Theobald. 1959. Lat 44°15' to 44°30', long 104°30' to 105°30'. Scale, 1:96,000. 2 sheets. \$1.50 per set.
- OM-192. Preliminary geologic map of the Waldron quadrangle and adjacent areas, Scott County, Ark., by J. A. Reinemund and Walter Danilchik. 1957. Lat 34°45' to 35°00', long 94°00' to 94°15'. Scale, 1:48,000. Contour interval, 20 feet. 75c.
- OM-193. Geologic map of the San Joaquin Hills-San Juan Capistrano area, Orange County, Calif., by J. G. Vedder, R. F. Yerkes, and J. E. Schoellhamer. 1957. Lat 33°30' to 33°40', long 117°37'30" to 117°55'00". Scale, 1:24,000. Contour intervals, 5, 10, and 20 feet. 75c.
- OM-194. Geologic and structure contour map of the Tisdale anticline and vicinity, Johnson and Natrona Counties, Wyo., by E. E. Richardson. 1957. Scale, 1:31,680. 50c.
- OM-195. Geologic map of the eastern Puente Hills, Los Angeles basin, California, by D. L. Durham and R. F. Yerkes. 1959. Lat 33°52'30" to 34°00'00", long 117°37'30" to 117°52'30". Scale, 1:24,000. Contour interval, 25 feet. 75c.
- OM-196. Geologic map of a part of the Ventura basin, Los Angeles County, Calif., by E. L. Winterer and D. L. Durham. 1958. Lat 34°20' to 34°26', long 118°28' to 118°42'. Scale, 1:24,000. Contour intervals, 5 and 25 feet. 75c.
- OM-197. Preliminary map showing geologic structure of parts of Emery, Wayne, and Garfield Counties, Utah, by A. A. Baker and others. 1957. Scale, 1:126,720. Contour intervals, 50 and 100 feet. 50c. [Originally printed in 1933; format revision only.]
- OM-198. Map of Nebraska showing areal distribution of pre-Pennsylvanian rocks, anticlines and basins, oil and gas fields, pipelines, and unsuccessful test wells, by E. C. Reed, R. F. Svoboda, G. E. Prichard, and Jeannette Fox. 1958. Lat 40° to 43°, long 96° to 104°. Scale, 1:500,000. \$1.
- OM-199. Geologic map of the Lewistown area, Fergus County, Mont., by L. S. Gardner. 1959. Scale, 1:63,360. 75c.
- OM-200. Map of Mississippi showing oil and gas fields, unsuccessful test wells, salt domes, and pipelines, by H. M. Beikman and Sophie Drakoulis. 1958. Lat 31° to 35°, long 89° to 91°. Scale, 1:500,000. 75c. (See also Bulletin 1072-A).
- OM-201. Map of Arizona showing oil, gas, and exploratory wells, pipelines, and areas of igneous and metamorphic rocks, by T. F. Stipp and H. M. Beikman. 1959. Scale, 1:500,000. \$1.50.
- OM-202. The Big Horn dolomite and correlative formations in southern Montana and northern Wyoming, by P. W. Richards and C. L. Nieschmidt. 1961. Lat 44° to 46°, long 105° to 111°. Scale, 1 inch to about 12 miles [1:750,000]. 2 sheets. 75c per set.
- OM-203. Geology of the Port Angeles-Lake Crescent area, Clallam County, Wash., by R. D. Brown, Jr., H. G. Gower, and P. D. Snively, Jr. 1960 [1961]. Lat 48° to 48°15', long 123°15' to 124°00'. Scale, 1:62,500. 75c.
- OM-204. Geologic map of the lower Umpqua River area, Oregon, by E. M. Baldwin. 1961. Lat 43°30' to 43°45', long 123°30' to 124°15'. Scale, 1:62,500. Contour interval, 80 feet. 75c.
- OM-206. Geologic and structure map of the North Fork oil field, Kaycee dome, and vicinity, Johnson County, Wyo., by E. E. Richardson. 1961. Lat 43°40' to approximately 43°50', long 106°35' to 106°52'. Scale, 1:24,000. 75c.
- OM-207. Map of New Mexico showing oil and gas fields, unsuccessful test wells, Precambrian rocks, and pipelines, by S. D. Vlissides and R. A. Bieberman. 1961. Lat 32° to 37°, long 103° to 109°. Scale, 1:500,000. \$1.50.
- OM-209. Preliminary structure contour map on top of salt in the Paradox member of the Hermosa formation in the salt anticline region, Colorado and Utah, by D. P. Elston and E. M. Shoemaker. 1961. Lat 37°45' to 39°, long 108° to 110°. Scale, 1:250,000. 50c.
- OM-210. Geologic map of the Lodoga quadrangle, Glenn and Colusa Counties, Calif., by R. D. Brown, Jr. and E. I. Rich. 1961. Lat 39°15' to 39°30', long 122°15' to 122°30'. Scale, 1:48,000. Contour interval, 50 feet. 50c.

CHARTS

Nos. 1-39 of this series are "preliminary charts." As of February 20, 1950, the designation "preliminary" was dropped; oil and gas investigations charts from 40 on carry the distinguishing prefix "OC."

1. Eocene formations and fossils of Coalinga anticline, California, by Ralph Stewart. 1944. 10c.
2. Stratigraphic distribution of Pennsylvanian Fusulinidae in a part of the Sierra Nacimiento of Sandoval and Rio Arriba Counties, N. Mex., by L. G. Henbest and C. B. Read. 1944. Vertical scale, 1 inch to 50 feet [1:600]. 25c.
3. Correlation of Lower Cretaceous formations of the Coastal Plain of Texas, Louisiana and Arkansas, by Ralph W. Imlay. 1944. Vertical scale, 1 inch to 400 feet [1:4,800]. 50c.
- *4. Thickness and character of the Traverse group and Dundee formation in southwestern Michigan, by G. V. Cohee. 1944.
5. Correlation and subdivision of subsurface Lower Ordovician and Upper Cambrian rocks in northeastern Oklahoma, by H. A. Ireland and others. 1944. Horizontal scale, 1 inch to 4 miles [1:253,440]. 35c.
6. Tertiary and late Upper Cretaceous stratigraphy of west border of San Joaquin Valley, north of Panoche Creek, Fresno, Merced, and Stanislaus Counties, Calif., by Ralph Stewart, W. P. Popenoe, and P. D. Snively, Jr. 1944. Horizontal and vertical scales, 1 inch to 4,000 feet [1:48,000]. 50c.
7. Correlation of basal Permian and older rocks in southwestern Colorado, northwestern New Mexico, northeastern Arizona, and southeastern Utah, by N. W. Bass. 1944. 40c.
8. Correlation of subsurface Lower Cretaceous formations of east and south Texas, by R. W. Imlay. 1945. Vertical scale, 1 inch to about 400 feet [1:4,800]. 50c.
9. Sections and maps of Lower Ordovician and Cambrian rocks in the Michigan basin, Michigan and adjoining areas, by G. V. Cohee. 1945. Vertical scale, 1 inch to 200 feet [1:2,400]. [Reprinted 1957.] 40c.
10. Late Paleozoic stratigraphy and oil and gas possibilities of central and northeastern Arizona, by J. W. Huddle and Ernest Dobrovoiny. 1945. 40c.
- *11. Geology and oil and gas possibilities of Trenton and Black River limestones of the Michigan basin, Michigan and adjacent areas, by G. V. Cohee. 1945. Vertical scale, 1 inch to 200 feet [1:2,400]. Horizontal scale, 1 inch to 75 miles [1:4,752,000].
12. Paleocene and Eocene stratigraphy of the northwestern Santa Ana Mountains, Orange County, Calif., by W. P. Woodring and W. P. Popenoe. 1945. Vertical scale, 1 inch to 150 feet [1:1,800]. 40c.
13. Stratigraphic sections and thickness maps of Lower Cretaceous and non-marine Jurassic rocks of central Wyoming, by J. D. Love, R. M. Thompson, C. O. Johnson, and others. 1945. Vertical scale, 1 inch to 400 feet [1:4,800]. [Reprinted 1955.] 40c.
14. Stratigraphic sections and thickness maps of Jurassic rocks in central Wyoming, by J. D. Love, H. A. Tourtelot, C. O. Johnson, and others. 1945. Vertical scale, 1 inch to 100 feet [1:1,200]. 40c.
15. Mississippian and Devonian stratigraphy of northwestern Montana, by L. L. Sloss and W. M. Laird. 1945. 30c.
16. Mesozoic and Paleozoic stratigraphy in northwestern Colorado and northeastern Utah, by C. R. Thomas, F. T. McCann, and N. D. Ramon. 1945. Vertical scale, 1 inch to 200 feet [1:2,400]. Horizontal scale, 1 inch to about 11 miles [1:696,960]. [Reprinted 1957.] 2 sheets. 75c per set.
17. Stratigraphic sections and thickness maps of Triassic rocks in central Wyoming, by J. D. Love, C. O. Johnson, H. L. Nace, and others. 1945. Vertical scale, 1 inch to 100 feet [1:1,200]. [Reprinted 1955.] 40c.
18. Columnar sections of Mesozoic and Paleozoic rocks in the mountains of south-central Montana, by L. S. Gardner, T. A. Hendricks, H. D. Hadley, and C. P. Rogers, Jr. 1945. Vertical scale, 1 inch to 125 feet [1:1,500]. 40c.
19. Subsurface stratigraphy of Lower Mesozoic and Upper Paleozoic formations in the basin area of south-central Montana, by H. D. Hadley, L. S. Gardner, and C. P. Rogers, Jr. 1945. Vertical scale, 1 inch to 120 feet [1:1,440]. 40c.
20. Correlation of the pre-Selma Upper Cretaceous formations between Tuscaloosa County, Ala., and Neshoba County, Miss., by D. H. Eargle. 1946. 30c.
21. The stratigraphic relationship of the Berea, Corry, and Cussewago sandstones in northeastern Ohio and northwestern Pennsylvania, by Wallace de Witt, Jr. 1946. Vertical scale, 1 inch to about 22 feet [1:264]. 40c.
22. Tertiary stratigraphy and its bearing on oil and gas possibilities in the northeastern part of the Wind River Basin, Wyoming, by H. A. Tourtelot and others. 1946. Vertical scale, 1 inch to 50 feet [1:600]. 40c.
23. Correlation of the outcropping Upper Cretaceous formations in Alabama and Texas, by W. H. Monroe. 1946. [Reprinted 1958.] 20c.
24. Stratigraphic relations of Eocene, Paleocene, and latest Cretaceous formations of eastern side of San Juan Basin, New Mexico, by C. H. Dane. 1946. Vertical scale, 1 inch to 100 feet [1:1,200]. 35c.
25. Devonian stratigraphy of central and northwestern Montana, by L. L. Sloss and W. M. Laird. 1946. Vertical scale, 1 inch to 100 feet [1:1,200]. 35c.
26. Regional subsurface stratigraphy, structure, and correlation of middle and early Upper Cretaceous rocks in Alabama, Georgia, and north Florida, by P. L. Applin and E. R. Applin. 1947. 3 sheets. 90c per set.
27. The Tertiary stratigraphy and its bearing on oil and gas possibilities in the Jackson Hole area, northwestern Wyoming, by J. D. Love. 1947. Vertical scale, 1 inch to 200 feet [1:2,400]. 60c.
- *28. Lithology and thickness of the Traverse group in the Michigan basin, by G. V. Cohee. 1947. Vertical scale, 1 inch to 80 feet [1:960]. Horizontal scale, 1 inch to 10 miles [1:633,600].
29. Correlation chart for the outcropping Tertiary formations of the eastern Gulf Coastal Plain, by F. S. MacNeil. 1947. [Reprinted 1955.] 20c.

30. Stratigraphy of the Wasatch Mountains in the vicinity of Provo, Utah, by A. A. Baker. 1947. Vertical scale, 1 inch to 500 feet [1:6,000]. 50c.
31. Profiles showing geology along highways in the vicinity of Tuscaloosa, Ala., by D. H. Eargle. 1947. 50c.
32. Marine Jurassic formations of Montana, by R. W. Imlay, L. S. Gardner, C. P. Rogers, Jr., and H. D. Hadley. 1948. Vertical scale, 1 inch to 100 feet [1:1,200]. 50c.
33. Thickness and lithology of Upper Ordovician and Lower and Middle Silurian rocks in the Michigan basin, by G. V. Cohee. 1948. 2 sheets. 75c per set.
34. Lower Tertiary stratigraphy of Mount Diablo, Marysville Buttes, and west border of lower Central Valley of California, by Ralph Stewart. 1949. Vertical scale, 1 inch to 200 feet [1:2,400]. 2 sheets. \$1 per set.
35. Correlation of pre-Selma Upper Cretaceous rocks in northeastern Mississippi and northwestern Alabama, by D. H. Eargle. 1948. Vertical scale, 1 inch to 150 feet [1:1,800]. 50c.
36. Stratigraphic sections of pre-Cody Upper Cretaceous rocks in central Wyoming, by R. M. Thompson, J. D. Love, and H. A. Tourtelot. 1949. 2 sheets. Vertical scale, 1 inch to 100 feet [1:1,200]. 2 sheets. 75c per set.
37. Stratigraphy of the Upper Devonian Wiscoy sandstone and the equivalent Hanover shale in western and central New York, by J. F. Pepper and Wallace de Witt, Jr. 1950. 2 sheets. 60c per set.
38. Upper Mississippian rocks of southwestern Virginia, southern West Virginia, and eastern Kentucky, by R. H. Wilpolt and D. W. Marden. 1949. 3 sheets. \$1 per set. (See Bulletin 1072-K.)
39. Pre-Pennsylvanian rocks along the Front Range of Colorado, by J. C. Maher. 1950. Horizontal scale, 1 inch to 3 miles [1:190,080], and 1 inch to 12 miles [1:760,320]. 50c.
- OC-40. Subsurface stratigraphy of Paleozoic rocks in southeastern Montana and adjacent parts of Wyoming and South Dakota, by Constance Leatherock. 1950. Vertical, 1 inch to 300 feet [1:3,600]. 50c.
- OC-41. Thickness and lithology of Upper Devonian and Carboniferous rocks in Michigan, by G. V. Cohee, Carol Macha, and Margery Holk. 1951. 5 sheets. \$1 per set.
- OC-42. Subsurface geologic cross sections of Mesozoic rocks in northeastern Colorado, by R. W. Blair. 1951. Horizontal scale, 1 inch to 10 miles [1:633,600]. 2 sheets. 50c per set.
- OC-43. Stratigraphic sections of Cretaceous rocks in northeastern Teton County, Wyo., by J. D. Love, R. K. Hose, J. L. Weitz, D. C. Duncan, and H. R. Bergquist. 1951. Vertical scale, 1 inch to 300 feet [1:3,600]. 2 sheets. 75c per set.
- OC-44. Stratigraphy and paleontology of Paleozoic rocks, Hartville area, eastern Wyoming, by J. D. Love, L. G. Henbest, and N. M. Denson. 1953. Vertical scale, 1 inch to 40 feet [1:480]. 2 sheets. \$1 per set.
- OC-45. The stratigraphy of the Perrysburg formation of Late Devonian age in western and west-central New York, by J. F. Pepper and Wallace de Witt, Jr. 1951. 40c.
- OC-46. Correlation of Permian and Pennsylvanian rocks from western Kansas to the Front Range of Colorado, by J. C. Maher and J. B. Collins. 1952. Vertical scale, 1 inch to 200 feet [1:2,400]. Horizontal scale, 1 inch to about 6 miles [1:375,000]. 3 sheets. [Reprinted.] \$1 per set.
- OC-47. Subsurface cross sections of pre-Pennsylvanian rocks from Morton County, Kans., to Gray County, Tex., by J. B. Collins. 1952. Horizontal scale, 1 inch to 6 miles [1:380,160]. 40c.
- OC-48. Stratigraphy of the outcropping Pennsylvanian rocks of the Fredonia quadrangle, Kansas, by H. C. Wagner and L. D. Harris. 1953. Vertical scale, 1 inch to 40 feet [1:480]. Horizontal scale, 1 inch to 4,000 feet [1:48,000]. 50c.
- OC-49. The Cody shale and younger Cretaceous and Paleocene rocks in the Wind River Basin, Fremont County, Wyo., by K. A. Yenne and G. N. Pipiringos. 1954. Vertical scale, 1 inch to 300 feet [1:3,600]. 50c.
- OC-50. Subsurface stratigraphy of the Heath shale and Amsden formation in central Montana, by C. L. Nieschmidt. 1953. Vertical scale, 1 inch to 100 feet [1:1,200]. 50c.
- OC-51. Correlation of pre-Atoka rocks in the Arkansas Valley, Arkansas, by J. C. Maher and R. J. Lantz. 1953. Horizontal scale, 1 inch to 6 miles [1:380,160]. 50c.
- OC-52. Stratigraphic and facies relationships of the upper part of the Green River formation and the lower part of the Uinta formation in Duchesne, Uintah, and Wasatch Counties, Utah, by C. H. Dane. 1955. Vertical scale, 1 inch to about 50 feet [1:600]. Horizontal scale, 1 inch to about 2 miles [1:125,000]. 2 sheets. 75c per set.
- OC-53. Zonation of the late Paleozoic Horseshoe Atoll in Scurry and southern Kent Counties, Tex., by P. T. Stafford. 1955. Vertical scale, 1 inch to about 140 feet [1:1,680]. Horizontal scale, 1 inch to about 650 feet [1:7,800]. 50c. (See also Professional Paper 315-A.)
- OC-54. Stratigraphy of the Sonyea formation of Late Devonian age in western and west-central New York, by G. W. Colton and Wallace de Witt, Jr. 1958. Vertical scale, 1 inch to 20 feet [1:240]. 50c.
- OC-55. Stratigraphy of the West Falls formation of Late Devonian age in western and west-central New York, by J. F. Pepper, Wallace de Witt, Jr., and G. W. Colton. 1956. Vertical scale, 1 inch to 50 feet [1:600]. 50c.
- OC-56. Stratigraphy of the Upper Cretaceous and lower Tertiary rocks of the Shotgun Butte area, Fremont County, Wyo., by W. R. Keefer and M. L. Troyer. 1956. Vertical scale, 1 inch to 250 feet [1:3,000]. 50c.
- OC-57. Stratigraphy and foraminiferal zonation in some of the Tertiary rocks of southwestern Washington, by W. W. Rau. 1958. Vertical scale, 1 inch to 300 feet [1:3,600]. 2 sheets. 75c per set.
- OC-58. Stratigraphy of Upper Mississippian rocks above the Tuscumbia limestone in northern Alabama and northeastern Mississippi, by S. W. Welch. 1958. Vertical scale, 1 inch to 40 feet [1:480]. 50c.

- OC-59. Stratigraphy of Paleozoic rocks in northwestern Colorado, by W. E. Hallgarth. 1959 [1960]. Vertical scale, 1 inch to 200 feet [1:2,400]. 50c.
- OC-60. Stratigraphy of the Dakota group along the northern Front Range foothills, Colorado, by K. M. Waagé. 1959. Vertical scale, 1 inch to 20 feet [1:240]. 50c.
- OC-61. Subsurface cross section of Paleozoic rocks from Barber County, Kans., to Caddo County, Okla., by W. L. Adkison. 1960. Vertical scale, 1 inch to 200 feet [1:2,400]. Horizontal scale, 1 inch to 6 miles [1:380,160]. 2 sheets, 75c per set.
- OC-62. Mississippian rocks of the northern part of the Black Warrior basin, Alabama and Mississippi, by S. W. Welch. 1959 [1960]. Vertical scale, 1 inch to 100 feet [1:1,200]. 50c.

COAL INVESTIGATIONS

Early maps in this series are unnumbered. As of February 20, 1950, they are numbered consecutively, with the distinguishing prefix "C".

MAPS AND CHARTS

[Asterisk (*) indicates map is out of print.]

- Coal maps of five areas in southeastern Oklahoma. 1935. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. \$1 each map. (See also Bulletin 874):
- Howe district, Le Flore and Latimer Counties, by T. A. Hendricks and others.
 - Lehigh district, Coal and Atoka Counties, by T. A. Hendricks and others.
 - McAlester district, Pittsburg and Latimer Counties, by T. A. Hendricks and others.
 - *Stigler-Poteau district, Pittsburg, Haskell, and Le Flore Counties, by W. T. Thom and Pat Rose.
 - Wilburton district, Latimer County, by T. A. Hendricks and others.
- Geologic map of the Lehigh district, Coal, Atoka, and Pittsburg Counties, Okla., by M. M. Knechtel and others. 1935. Scale, 1 inch to 1 mile [1:63,360]. 25c.
- The Mount Pleasant coal field, Sanpete County, Utah, by D. C. Duncan. 1944. Scale, 1 inch to 3,000 feet [1:36,000]. Free on application to the Geological Survey, Washington, D. C. 20242.
- *Willow Creek coal area, Lincoln County, Wyo., by D. A. Andrews. 1944. Scale, 1 inch to 4,000 feet [1:48,000].
- Northern Le Flore County, Okla., by M. M. Knechtel. 1944. Scale, 1 inch to 4,000 feet [1:48,000]. 50c.
- The coal fields of King County, Wash., by W. C. Warren, H. Norbirsath, R. M. Grivetti, and S. P. Brown. 1945. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. 50c.
- Coal deposits on Sand and Lookout Mountains, Dade and Walker Counties, Ga., by V. H. Johnson. 1946. Scale, 1 inch to 4,000 feet [1:48,000]. [Reprinted 1959.] 55c.
- Geology of the Paonia coal field, Delta and Gunnison Counties, Colo., by V. H. Johnson. 1948. Scale, 1 inch to 4,000 feet [1:48,000]. 50c.
- Geology of the Coal City and Fairview Basins, Coosa coal field, St. Clair County, Ala., by H. E. Rothrock. 1948. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. 2 sheets, \$1 per set.
- Geology of the Deep River coal field, Chatham, Lee, and Moore Counties, N. C., by J. A. Reinemund. 1949. Scale, 1:24,000, 2 sheets, 60c per set. (See also Professional Paper 246.)
- C-1. Geology and coal deposits of the Jasonville quadrangle, Clay, Greene, and Sullivan Counties, Ind., by C. E. Wier. 1950. Scale, 1:24,000. \$1.
- C-2. Coal resources of Montana, by J. X. Combo, C. N. Holmes, and H. R. Christner. 1950. Scale, 1:500,000. 2 sheets, \$1 per set.
- C-3. Geology of anthracite in the west-central part of the Mount Carmel quadrangle, Pa., by H. E. Rothrock, H. C. Wagner, and B. R. Haley. 1950. Scale, 1:6,000. 3 sheets, \$1.50 per set.
- C-4. Geology and coal resources of the Stonewall-Tercio area, Las Animas County, Colo., by G. H. Wood, R. B. Johnson, and others. 1951. Scale, 1:31,680. 2 sheets, \$1 per set.
- C-5. The Fire Clay and Whitesburg coals in the Hyden quadrangle, Leslie, Clay, and Perry Counties, Ky., by J. E. Johnston and W. E. Heck. 1950. Scale, 1:62,500. \$1.
- C-6. Coal resources map of Wyoming, by H. L. Berryhill, Jr., D. M. Brown, R. N. Burns, and J. X. Combo. 1951. Scale, 1:500,000. \$1.
- C-7. Geology of anthracite in the southwestern part of the Mount Carmel quadrangle, Pa., by H. E. Rothrock, H. C. Wagner, B. R. Haley, and H. H. Arndt. 1951. Scale, 1:6,000. 3 sheets, \$1.50 per set.
- C-8. Geology of the eastern part of the Centralia-Chehalis coal district, Lewis and Thurston Counties, Wash., by P. D. Snively, Jr., A. E. Roberts, Linn Hoover, Jr., and M. H. Pease, Jr. 1951. Scale, 1:31,680. 2 sheets, 75c per set. (See also Bulletin 1053.)
- C-9. Geology and coal deposits of the Linton quadrangle, Greene and Sullivan Counties, Ind., by C. E. Wier. 1951. Scale, 1:24,000. \$1.50.
- C-10. Geology of anthracite in the east-central part of the Mount Carmel quadrangle, Pa., by H. E. Rothrock, H. C. Wagner, B. R. Haley, and H. H. Arndt. 1951. Scale, 1:6,000. 3 sheets, \$1.50 per set.
- C-11. Geology and coal deposits of the Dugger quadrangle, Sullivan County, Ind., by F. E. Kottlowski. 1954. Scale, 1:24,000. \$1.50.
- C-12. Geology of anthracite in the southeastern part of the Mount Carmel quadrangle, Pa., by H. E. Rothrock, H. C. Wagner, B. R. Haley, and H. H. Arndt. 1953. Scale, 1:6,000. 3 sheets, \$1.50 per set.

- C-13. Geology of anthracite in the western part of the Ashland quadrangle, Pennsylvania, by B. R. Haley, H. H. Arndt, H. E. Rothrock, and H. C. Wagner. 1953. Scale, 1:12,000. 2 sheets. \$1.50 per set.
- C-14. Geology of anthracite in the eastern part of Ashland quadrangle, Pennsylvania, by B. R. Haley, H. H. Arndt, H. E. Rothrock, and H. C. Wagner. 1954. Scale, 1:12,000. 2 sheets. \$1 per set.
- C-15. Principal coal beds in the Buckhorn quadrangle, Breathitt, Leslie, and Perry Counties, Ky., by P. T. Stafford and K. J. Englund. 1953. Scale, 1:63,360. \$1.
- C-16. Geology and coal deposits of the Hymera quadrangle, Sullivan County, Ind., by C. E. Wier. 1954. Scale, 1:24,000. \$2.
- C-17. Geology and coal deposits of the Shelburn quadrangle, Sullivan County, Ind., by Courtney Waddell. 1954. Scale, 1:24,000. \$1.50.
- C-18. Coal beds of the Troublesome quadrangle, Breathitt, Knott, and Perry Counties, Ky., by A. D. Williamson and W. L. Adkison. 1953. Scale, 1:62,500. \$1.25.
- C-19. Geology of anthracite in the eastern part of the Shenandoah quadrangle, Pennsylvania, by T. M. Kehn and H. C. Wagner. 1955 [1956]. Scale, 1:12,000. 2 sheets. \$1 per set.
- C-20. Coal resources of the La Veta area, Huerfano County, Colo., by R. B. Johnson and J. G. Stephens. 1954. Scale, 1:31,680. 50c.
- C-21. Geology of anthracite in the western part of the Shenandoah quadrangle, Pennsylvania, by Walter Danilchik, H. E. Rothrock, and H. C. Wagner. 1955. Scale, 1:12,000. 2 sheets. \$1 per set.
- C-22. Preliminary coal map of the Cornettsville quadrangle, Perry, Knott, Letcher, Harlan, and Leslie Counties, Ky., by J. E. Johnston, P. T. Stafford, and S. W. Welch. 1955. Scale, 1:62,500. 2 sheets. \$1 per set.
- C-23. Geology and coal resources of the Lake De Smet area, Johnson County, Wyo., by W. J. Mapel. 1954 [1955]. Scale, 1:48,000. 50c. (See also Bulletin 1078.)
- C-24. Geology of the northern part of the Girard coal field, Richland County, Mont., by G. E. Prichard and E. R. Landis. 1955. Scale, 1:48,000. 2 sheets. 75c per set.
- C-25. Geology of anthracite in the western part of the Delano quadrangle, Pennsylvania, by J. A. Maxwell and H. E. Rothrock. 1955 [1956]. Scale, 1:12,000. 2 sheets. \$1 per set.
- C-26. Geology and coal resources of the Gulnare, Cuchara Pass, and Stonewall area, Huerfano and Las Animas Counties, Colo., by G. H. Wood, Jr., R. B. Johnson, and G. H. Dixon. 1956. Scale, 1:31,680. 2 sheets. 75c per set.
- C-27. Geology and coal deposits of the Seelyville quadrangle, Vigo County, Ind., by H. C. Hutchinson. 1958. Lat 39°22'30" to 39°30', long 87°15' to 87°22'30". Scale, 1:24,000. \$1.
- C-28. Geology and coal deposits of the Coal City quadrangle, Greene, Clay and Owen Counties, Ind., by F. E. Kottlowski. 1959 [1960]. Lat 39°07'30" to 39°15', long 87° to 87°07'30". Scale, 1:24,000. \$1.
- C-29. Preliminary geologic map of the Ship Rock and Hogback quadrangles, San Juan County, N. Mex., by E. C. Beaumont. 1955. Scale, 1:48,000. 50c.
- C-30. Preliminary geologic map of the Toadlena quadrangle, San Juan County, N. Mex., by D. L. Ziegler. 1955. Scale, 1:62,500. 50c.
- C-31. Preliminary geologic map of the Naschitti quadrangle, San Juan and McKinley Counties, N. Mex., by R. B. O'Sullivan. 1955. Scale, 1:62,500. 50c.
- C-32. Preliminary geologic map of the Kirtland quadrangle, San Juan County, N. Mex., by E. C. Beaumont and R. B. O'Sullivan. 1955. Scale, 1:62,500. 50c.
- C-33. Uraniferous coal beds in parts of North Dakota, South Dakota, and Montana, by N. M. Denson and others. 1955. Scales, 1:31,680 and 1:63,360. 50c.
- C-34. Geologic map of Cave Hills and Table Mountain area, Harding County, S. Dak., by N. M. Denson, G. O. Bachman, and H. D. Zeller. 1955. Scale, 1:63,360. 50c.
- C-35. Geologic map of the Slim Buttes area, Harding County, S. Dak., by N. M. Denson, G. O. Bachman, and H. D. Zeller. 1955. Scale, 1:63,360. 50c.
- C-36. Geologic map of the southern part of the Slim Buttes area, Harding County, S. Dak., by G. W. Moore and J. R. Gill. 1955. Scale, 1:31,680. 50c.
- C-37. Geologic map of the Bar H area, Slim Buttes, Harding County, S. Dak., by H. D. Zeller. 1955. Scale, 1:20,000. 50c.
- C-38. Preliminary geologic map of the Chalky Buttes area, Slope County, N. Dak., by G. W. Moore, R. E. Melin, and R. C. Kepferle. 1956. Scale, 1:31,680. 50c.
- C-39. Geology and coal resources of the Pioneer quadrangle, Scott and Campbell Counties, Tenn., by K. J. Englund. 1957. Scale, 1:24,000. 75c.
- C-40. Geology and coal resources of the Ivydell quadrangle, Campbell County, Tenn., by K. J. Englund. 1958. Scale, 1:24,000. 75c.
- C-41. Geology and coal deposits of the Switz City quadrangle, Greene County, Ind., by F. E. Kottlowski. 1960. Lat 39° to 39°07'30", long 87° to 87°07'30". Scale, 1:24,000. \$1.
- C-42. Coal resources of the Campton quadrangle, Wolfe, Lee, and Breathitt Counties, Ky., by R. P. Briggs. 1957. Scale, 1:24,000. 75c.
- C-43. Geology of the northern half of the Minersville quadrangle and a part of the northern half of the Tremont quadrangle, Schuylkill County, Pa., by G. H. Wood, Jr., J. P. Trexler, Andy Yelenosky, and Julian Soren. 1958. Scale, 1:12,000. 2 sheets. \$1.50 per set.
- C-44. Geology and coal deposits of the Terre Haute and Dennison quadrangles, Vigo County, Ind., by S. A. Friedman. 1961. Lat 39°22'30" to 39°30', long 87°22'30" to 87°30'. Scale, 1:24,000. \$2.
- C-49. Geology and fuels resources of the Orderville-Glendale area, Kane County, Utah, by W. B. Cashion. 1961. Scale, 1:62,500. \$1.

MINERAL INVESTIGATIONS

During World War II and the years immediately preceding it, information was needed quickly concerning the extent and mode of occurrences of domestic deposits of strategic minerals. In order to avoid delays attendant upon formal publication, maps were issued in preliminary form, and accompanying texts were mimeographed. The editions were limited, and many of the maps and reports are no longer available for sale. Some have been superseded by reports and maps in the regular publications of the Geological Survey. Others may be consulted in open files of the Survey, as indicated in Circulars 56, 64, 149, 227, 283, 337, 364, 379, 401, 403, 412, 428, 448, and 463. Circulars 56 and 64 include lists of preliminary reports and maps available for limited distribution. As of February 20, 1950, the series of preliminary maps was superseded by two series of numbered maps--Mineral Investigations Field Studies and Mineral Investigations Resource. These maps may be supplemented by sections, diagrams, charts or tables, and a short text printed at the side of the map; they carry the distinguishing prefix "MF" or "MR" and are primarily interim reports on continuing projects.

PRELIMINARY STRATEGIC MAPS
[Asterisk (*) indicates maps out of print]

- 3-163. Geologic map of the Gouverneur talc district, New York, by James Gilluly. 1945. Scale, 1:48,000. 50c.
- 3-173. Geologic map of the Gateway area, Mesa County, Colo., and adjoining part of Grand County, Utah, by W. L. Stokes, R. T. Russell, R. P. Fischer, and A. P. Butler, Jr. 1945. Scale, 1 inch to 1 mile [1:63,360]. 25c.
- *3-180. Geologic map of the San Manuel area, Arizona, showing approximate outline of ore body, by G. M. Schwartz, D. H. Kupfer, E. E. Gould, and N. P. Peterson. 1945. 5 sheets. Scale, 1 inch to 200 feet [1:2,400]. (See plate 1 of Professional Paper 256.)
- 3-181. Geology of the Crystal Falls-Alpha iron-bearing district, Iron County, Mich., by F. J. Pettijohn and L. D. Clark. 1946. Scale, 1 inch to 12,000 feet [1:144,000]. 50c.
- 3-195. The Midway and Wilcox stratigraphy of Alabama and Mississippi, by F. S. MacNeil. 1946. Scale, 1 inch to 6 miles [1:380,160]. 50c.
- 3-197. High-alumina clays of the Santa Ana Mountain region, California, by C. R. Stauffer. 1945 [1946]. Scale, 1 inch to 1 mile [1:63,360]. 25c.
- 3-198. Map of Permian phosphate deposits of Montana, Wyoming, Idaho, and Utah, by P. S. Clabaugh. 1946. Scale, 1 inch to 16 miles [1:1,013,760]. [Reprinted 1954]. 30c.
- 3-211. Geologic and topographic map, eastern Gallinas Mountains, Lincoln County, N. Mex., by V. C. Kelley. 1947. Scale, 1 inch to $\frac{1}{2}$ mile [1:15,840]. [Reprinted 1956.] 30c.
- *3-212. Iron-ore deposits of the Western United States, by C. E. Dutton and M. S. Carr. 1947. Scale, 1:5,000,000.
- 3-213. Magnetic survey and geology of the Ice Lake-Chicagon Creek area, Iron County, Mich., by H. L. James, L. D. Clark, and L. E. Smith. 1947. 6 plates. \$1.10.
- 3-226. Vanadium region of southwestern Colorado and southeastern Utah, by R. P. Fischer. 1944. Scale, 1 inch to nearly 3 miles [1:187,500]. 30c.
- The Arkansas bauxite district, Saline and Pulaski Counties, by R. P. Bryson and Mackenzie Gordon, Jr. 1944. Scale, 1:48,000. 50c. (See also Professional Paper 299.)
- *Harry workings, New Almaden mine, Santa Clara County, Calif., by R. E. Brown and others. 1944. Scale, 1:480. 3 plates.
- Zinc-lead deposits in part of the Picher field, Ottawa County, Okla., and Cherokee County, Kans., by E. T. McKnight, R. P. Fischer, and others. 1944. 6 sheets. Scale, 1 inch to 500 feet [1:6,000]. \$2 per set.
- Geologic and topographic map of the eastern part of the Matanuska Valley coal field, Alaska, by Ralph Tuck, T. N. Scott, F. F. Barnes, and F. M. Byers, Jr. 1945. Scale, 1 inch to 500 feet [1:6,000]. 50c.
- *Geologic and topographic map and sections of the Katalla area, Alaska, by D. J. Miller, D. L. Rossman, and C. A. Hickox. 1945. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680].
- Geologic map of the Yellow Pine district, Valley County, Idaho, by D. E. White. 1945. Scale, 1:48,000. 20c.
- Geology and oil possibilities of the southwestern part of the Wide Bay anticline, Alaska, by L. B. Kellum, S. N. Daviss, and C. M. Swinney. 1945. Sections and geol. map (scale, 1:48,000). 60c per set. (Accompanying 17 p. pamphlet is out of print.)
- Surface geology of the Pine Creek area, Shoshone County, Idaho, by V. E. Nelson, J. F. Smith, Jr., and others. 1945. Scale, 1 inch to 1,000 feet [1:12,000]. 60c.
- Geologic map of Fort Knox and vicinity, by L. L. Ray, A. P. Butler, Jr., and C. S. Denny. 1946. Scale, 1:50,000. 25c.

FIELD STUDIES MAPS

[Distinguishing prefix, "MF"]

- MF-1. Geologic map of the central part of the Batesville manganese district, Independence and Izard Counties, Ark., by J. A. Straczek and D. M. Kinney. 1950 [1951]. Lat 35°47'30" to 30°55', long 91°32'30" to 91°50'. Scale, 1:31,680. Contour interval, 20 feet. 50c.
- MF-2. Geologic map of the western Kentucky fluorspar district, by Stuart Weller and A. H. Sutton. 1951. Lat 37° to 37°30', long 88° to 88°30'. Scale, 1:62,500. Contour interval, 20 feet. 50c.

- MF-3. Geologic structure map of the Beetown lead-zinc area, Grant County, Wis., by A. V. Heyl, Jr., E. J. Lyons, and J. J. Theiler. 1952. Scale, 1:12,000. 40c.
- MF-4. Geologic map of bastnaesite deposits of the Birthday claims, San Bernardino County, Calif., by W. N. Sharp and L. C. Pray. 1952. Scale, 1:600. Contour interval, 5 feet. 75c.
- MF-5. Manganese, iron, and barite deposits of the James River-Roanoke River district, Virginia, by G. H. Espenshade. 1952. Lat 37°05' to 37°45', long 78°40' to 79°25'. Scale, 1:96,000. 75c.
- MF-6. Magnetite deposits and magnetic anomalies of the Brandy Brook and Silver Pond belts, St. Lawrence County, N. Y., by B. F. Leonard. 1952. 35c.
- MF-7. Geologic map of the Barnes Hill talc prospect, Waterbury, Vt., by A. H. Chidester, G. W. Stewart, and D. C. Morris. 1952. Scale, 1:1,200. Contour interval, 5 feet. 40c.
- MF-8. Geologic map of the Rousseau talc prospect, Cambridge, Vt., by A. H. Chidester, G. W. Stewart, and D. C. Morris. 1952. Scale, 1:1,200. 40c.
- MF-9. Geologic map of the Lake Valley manganese district, Sierra County, N. Mex., by S. C. Creasey and A. E. Granger. 1953. Scale, 1:2,400. Contour interval, 10 feet. 50c.
- MF-10. Magnetite deposits and magnetic anomalies of the Spruce Mountain tract, St. Lawrence County, N. Y., by B. F. Leonard. 1953. Scale, 1:6,000. 50c.
- MF-11. Geology of the talc deposits, Sterling Pond area, Stowe, Vt., by A. H. Chidester. 1953. Scale, 1:75,000. Contour interval, 10 feet. 50c.
- MF-12. Geologic map of the Pando area, Eagle and Summit Counties, Colo., by Ogden Tweto. 1953. [1954]. Lat 39°25' to 39°30', long 106°12'30" to 106°22'30". Scale, 1:14,400. Contour interval, 50 feet. \$2.50.
- MF-13. Geology of the Nainitate fluorspar district, Colorado, by T. A. Steven. 1954. Scale, 1:24,000. 2 sheets. \$1.50 per set. (See also Bulletin 1082-F).
- MF-14. Geology and iron ore deposits of the Granite Mountain area, Iron County, Utah, by J. Hoover Mackin. 1954. Lat 37°42' to 37°45', long 113°12'30" to 113°17'30". Scale, 1:12,000. Contour interval, 20 feet. \$1.
- MF-15. Geology and zinc-lead-barite deposits in the area east of Cuba City, Wis., by A. F. Agnew, A. E. Flint, and R. P. Crumpton. 1954. Scale, 1:12,000. 75c.
- MF-16. Preliminary geologic map showing the distribution of uranium deposits and principal ore-bearing formations of the Colorado Plateau region, compiled by W. I. Finch. 1955. Lat 35° to 40°, long 107° to 113°. Scale, 1:500,000. 50c.
- MF-17--MF-32. Preliminary geologic maps. Scale, 1:24,000. 25c each.
- MF-17. Red Canyon quadrangle, Colorado, by E. J. McKay. 1954. Lat 38°22'30" to 38°30', long 108°45' to 108°52'30". [See GQ-58.]
- MF-18. Atkinson Creek quadrangle, Colorado, by E. J. McKay and D. A. Jobin. 1954. Lat 38°22'30" to 38°30', long 108°37'30" to 108°45'. [See GQ-57.]
- MF-19. Gypsum Gap quadrangle, Colorado, by F. W. Cater, Jr. 1954 [1955]. Lat 38° to 38°07'30", long 108°37'30" to 108°45'. [See GQ-59.]
- MF-20. Pine Mountain quadrangle, Colorado, by F. W. Cater, Jr. 1954. Lat 38°37'30" to 38°45', long 108°45' to 108°52'30". [See GQ-60.]
- MF-21. Hamm Canyon quadrangle, Colorado, by F. W. Cater, Jr. 1955. Lat 38° to 38°07'30", long 108°45' to 108°52'30". [See GQ-69.]
- MF-22. Paradox quadrangle, Colorado, by C. F. Withington. 1955. Lat 38°15' to 38°22'30", long 108°52'30" to 109°. [See GQ-72.]
- MF-23. Roc Creek quadrangle, Colorado, by E. M. Shoemaker. 1955. Lat 38°22'30" to 38°30', long 108°52'30" to 109°. 50c. [See GQ-83.]
- MF-24. Uravan quadrangle, Colorado, by F. W. Cater, Jr., and E. J. McKay. 1955. Lat 38°15' to 38°22'30", long 108°37'30" to 108°45'. 50c. [See GQ-78.]
- MF-25. Anderson Mesa quadrangle, Colorado, by F. W. Cater, Jr. 1955. Lat 38°07'30" to 38°15', long 108°52'30" to 109°. 50c. [See GQ-77.]
- MF-26. Egnar quadrangle, Colorado, by F. W. Cater, Jr. 1955. Lat 37°52'30" to 38°, long 108°52'30" to 109°. [See GQ-68.]
- MF-27. Joe Davis Hill quadrangle, Colorado, by F. W. Cater, Jr. 1955. Lat 37°52'30" to 38°, long 108°45' to 108°52'30". [See GQ-66.]
- MF-28. Juanita Arch quadrangle, Colorado, by E. M. Shoemaker. 1955. Lat 38°30' to 38°37'30", long 108°52'30" to 109°. 50c. [See GQ-81.]
- MF-29. Horse Range Mesa quadrangle, Colorado, by F. W. Cater, Jr. 1954 [1955]. Lat 38° to 38°07'30", long 108°52'30" to 109°. [See GQ-64.]
- MF-30. Naturita NW quadrangle, Colorado, by F. W. Cater, Jr. 1955. Lat 38°07'30" to 38°15', long 108°37'30", to 108°45'. [See GQ-65.]
- MF-31. Davis Mesa quadrangle, Colorado, by F. W. Cater, Jr., and E. J. McKay. 1955. Lat 38°15' to 38°22'30", long 108°45' to 108°52'30". [See GQ-71.]
- MF-32. Calamity Mesa quadrangle, Colorado, by F. W. Cater, Jr. 1955. Lat 38°30' to 38°37'30", long 108°45' to 108°52'30". [See GQ-61.]
- MF-33. Geology and zinc-lead deposits in the Durango area, Dubuque County, Iowa, by A. E. Flint and C. E. Brown. 1955. Scale, 1:12,000. 50c.
- MF-34. Geologic map of the Tennessee Pass area, Eagle and Lake Counties, Colo., by Ogden Tweto. 1956. Lat 39°20' to 39°25', long 106°15' to 106°22'30". Scale, 1:14,400. Contour interval, 50 feet. \$3.50.
- MF-35. Geologic map of the Gabbs magnesite and brucite deposits, Nye County, Nev., by C. J. Vitaliano and Eugene Callaghan. 1956. Scale, 1:2,400. Contour interval, 10 feet. \$1.75.
- MF-36. Bentonite deposits of the northern Black Hills district, Montana-Wyoming, and South Dakota, by M. M. Knechtel and S. H. Patterson. 1955 [1956]. Scale, 1:48,000. 2 sheets. \$1.50 per set.

- MF-37. Geologic and radiometric maps of the McKinley Mountain area, Wet Mountains, Colorado, by Q. D. Singewald and others. 1955. Lat 38°14' to 38°16', long 105°17' to 105°22'. Scale, 1:7,200. Contour interval, 100 feet. 4 sheets. \$1 per set.
- MF-38. Preliminary geologic map of southwestern Oregon west of meridian 122° west and south of parallel 43° north, by F. G. Wells. 1955. Lat 42° to 43°, long 122° to 124°20'. Scale, 1:250,000. 50c.
- MF-39. Map showing distribution and occurrences of uranium deposits in part of the Edgemont mining district, Fall River County, S. Dak., by W. A. Braddock. 1955. Lat 43°17'30" to 43°25', long 103°37'30" to 103°52'30". Scale, 1:48,000. 50c.
- MF-40. Zinc and lead deposits of the Sinsinawa River area, Grant County, Wis., by J. W. Allingham, A. E. Flint, and A. F. Agnew. 1955. Scale, 1:12,000. 50c.
- MF-41. Preliminary geologic map of the Paris-Bloomington vanadium area, Bear Lake County, Idaho, by V. E. McKelvey and J. D. Strobell, Jr. 1955. Scales, 1:12,000 and 1:4,800. Contour interval, 20 feet. 4 sheets. 60c per set.
- MF-42. Geology and zinc-lead deposits in the Couler Valley area, Dubuque County, Iowa, by C. E. Brown, L. G. Collins, and Percy Crosby. 1955. Scale, 1:12,000. 50c.
- MF-43. Geologic map of the Chassell quadrangle, Michigan, by W. S. White. 1956. Lat 47° to 47°07'30", long 88°30' to 88°37'30". Scale, 1:24,000. 50c.
- MF-44. Geologic map of the Triangle Apegmatite, Custer County, S. Dak., by A. J. Lang, Jr. 1955 [1956]. Scale, 1:600. Contour interval, 10 feet. 50c.
- MF-45. Preliminary geologic map of the Allens Ranch quadrangle, Utah, by P. D. Proctor and others. 1956. Lat 40° to 40°07'30", long 112° to 112°07'30". Scale, 1:12,000. 50c.
- MF-46. Geologic map of the Hancock quadrangle, Michigan, by H. R. Cornwall and J. C. Wright. 1956. Lat 47°07'30" to 45°15', long 88°30' to 88°37'30". Scale, 1:24,000. Contour interval, 20 feet. 50c.
- MF-47. Geologic map of the Laurium quadrangle, Michigan, by H. R. Cornwall and J. C. Wright. 1956. Lat 47°07'30" to 47°05', long 88°22'30" to 88°30". Scale, 1:24,000. Contour interval, 20 feet. 50c.
- MF-48. Geologic map of the South Range quadrangle, Michigan, by W. S. White and J. C. Wright. 1956. Lat 47° to 47°07'30", long 88°37'30" to 88°45". Scale, 1:24,000. Contour interval, 20 feet. 50c.
- MF-49. Preliminary geologic map of the Aldrich Mountain quadrangle, Oregon, by T. P. Thayer. 1956. Lat 44°15' to 44°30', long 119°15' to 119°30'. Scale, 1:62,500. 50c.
- MF-50. Preliminary geologic map of the Mt. Vernon quadrangle, Oregon, by T. P. Thayer. 1956. Lat 44°15' to 44°30', long 119° to 119°15'. Scale, 1:62,500. 50c.
- MF-51. Preliminary geologic map of the John Day quadrangle, Oregon, by T. P. Thayer. 1956. Lat 44°15' to 44°30', long 118°45' to 119°. Scale, 1:62,500. 50c.
- MF-52. Geology of Gabbs and vicinity, Nye County, Nev., by C. J. Vitaliano, Eugene Callaghan, and N. L. Silberling. 1957. Lat 38°50' to 39°00', long 117°50' to 117°55'. Scale, 1:24,000. Contour interval, 40 feet. \$1.
- MF-53. Map of bedrock geology of Magnet Cove igneous area, Hot Spring County, Ark., by R. L. Erickson and L. V. Blade. 1956. Scale, 1:6,000. 50c.
- MF-54. Uranium and vanadium deposits of the Colorado Plateau that produced more than 1,000 tons of ore through June 30, 1955, by R. T. Chew, 3d. 1956. Lat 35° to 40°, long 107° to 113'. Scale, 1:750,000. 50c.
- MF-55--MF-78 (except MF-76). Preliminary geologic maps. Scale, 1:7,200. Contour interval, 10 feet. 50c each.
- MF-55. Northwest part of the Edgemont NE quadrangle, Custer and Fall River Counties, S. Dak., by G. B. Gott and R. W. Schnabel. 1956. Lat 43°27'30" to 43°30', long 103°48'45" to 103°52'30".
- MF-56. Northeast part of the Edgemont NE quadrangle, Custer and Fall River Counties, S. Dak., by G. B. Gott and R. W. Schnabel. 1956. Lat 43°27'30" to 43°30', long 103°45' to 103°48'45".
- MF-57. East-central part of the Edgemont NE quadrangle, Fall River County, S. Dak., by G. B. Gott and R. W. Schnabel. 1956. Lat 43°25' to 43°27'45", long 103°45' to 103°48'45".
- MF-58. West-central part of the Edgemont NE quadrangle, Fall River County, S. Dak., by G. B. Gott and R. W. Schnabel. 1956. Lat 43°25' to 43°27'45", long 103°48'45" to 103°52'30".
- MF-59. Southwest part of the Edgemont NE quadrangle, Fall River County, S. Dak., by G. B. Gott and R. W. Schnabel. 1956. Lat 43°22'30" to 43°25', long 103°48'45" to 103°52'30".
- MF-60. Southeast part of the Edgemont NE quadrangle, Fall River County, S. Dak., by G. B. Gott and R. W. Schnabel. 1956. Lat 43°22'30" to 43°25', long 103°45' to 103°48'45".
- MF-61. Northwest part of the Flint Hill quadrangle, Fall River County, S. Dak., by Henry Bell and E. V. Post. 1957. Lat 43°20' to 43°22'30", long 103°41'15" to 103°45'.
- MF-62. Northeast part of the Flint Hill quadrangle, Fall River County, S. Dak., by Henry Bell and E. V. Post. 1957. Lat 43°20' to 43°22'30", long 103°37'30" to 103°41'15".
- MF-63. East-central part of the Flint Hill quadrangle, Fall River County, S. Dak., by Henry Bell and E. V. Post. 1957. Lat 43°17'30" to 43°20', long 103°37'30" to 103°41'15".
- MF-64. West-central part of the Flint Hill quadrangle, Fall River County, S. Dak., by Henry Bell and E. V. Post. 1957. Lat 43°17'30" to 43°20', long 103°41'15" to 103°45'.
- MF-65. Southwest part of the Flint Hill quadrangle, Fall River County, S. Dak., by Henry Bell and E. V. Post. 1957. Lat 43°15' to 43°17'30", long 103°41'15" to 103°45'.
- MF-66. Southeast part of the Flint Hill quadrangle, Fall River County, S. Dak., by Henry Bell and E. V. Post. 1957. Lat 43°15' to 43°17'30", long 103°37'30" to 103°41'15".
- MF-67. West-central part of the Minnekahta quadrangle, Fall River County, S. Dak., by V. R. Wilmarth and R. D. Smith. 1957. Lat 43°25' to 43°27'30", long 103°41'15" to 103°45'.
- MF-68. East-central part of the Minnekahta quadrangle, Fall River County, S. Dak., by V. R. Wilmarth and R. D. Smith. 1957. Lat 43°25' to 43°27'30", long 103°37'30" to 103°41'15".
- MF-69. Southeast part of the Minnekahta quadrangle, Fall River County, S. Dak., by V. R. Wilmarth and R. D. Smith. 1957. Lat 43°22'30" to 43°25', long 103°37'30" to 103°41'15".

- MF-70. Southwest part of the Minnekahta quadrangle, Fall River County, S. Dak., by V. R. Wilmarth and R. D. Smith, 1957. Lat 43°22'30" to 43°25', long 103°41'15" to 103°45'.
- MF-71. West-central part of the Burdock quadrangle, Fall River County, S. Dak., by R. W. Schnabel and L. J. Charlesworth, Jr. 1958. Lat 43°25' to 43°27'30", long 103°57'30" to 104°.
- MF-72. Northeast part of the Burdock quadrangle, Fall River and Custer Counties, S. Dak., by R. W. Schnabel and L. J. Charlesworth, Jr. 1958. Lat 43°27'30" to 43°30', long 103°52'30" to 103°55'.
- MF-73. Northwest part of the Burdock quadrangle, Fall River and Custer Counties, S. Dak., by R. W. Schnabel and L. J. Charlesworth, Jr. 1958. Lat 43°27'30" to 43°30', long 103°57'30" to 104°.
- MF-74. East-central part of the Burdock quadrangle, Fall River County, S. Dak., by R. W. Schnabel, 1958. Lat 43°25' to 43°27'30", long 103°52'30" to 103°55'.
- MF-75. Southeast part of the Burdock quadrangle, Fall River and Custer Counties, S. Dak., by R. W. Schnabel and L. J. Charlesworth, Jr. 1958. Lat 43°22'30" to 43°25', long 103°52'30" to 103°55'.
- MF-77. Northeast part of the Dewey quadrangle, Custer County, S. Dak., and Weston County, Wyo., by D. A. Brobst, 1958. Lat 43°35' to 43°37'30", long 104° to 104°02'30". Contour interval, 20 feet.
- MF-78. East-central part of the Dewey quadrangle, Custer County, S. Dak., by D. A. Brobst, 1958. Lat 43°32'30" to 43°35', long 104°00' to 104°02'30". Contour interval, 20 feet.
- MF-76. Geologic map of the Lancaster quadrangle, Los Angeles County, Calif., by T. W. Dibblee, Jr. 1960 [1961]. Lat 34°30' to 34°45', long 118° to 118°15'. Scale, 1:62,500. Contour interval, 40 feet. 50c.
- MF-79. Geologic map of the Bouquet Reservoir quadrangle, Los Angeles County, Calif., by T. W. Dibblee, Jr. 1961. Lat 34°30' to 34°45', long 118°15' to 118°30'. Scale, 1:62,500. Contour interval, 80 feet. 50c.
- MF-80. Preliminary geologic map of Lyon, Douglas, Ormsby, and part of Washoe Counties, Nev., by J. G. Moore. 1961. Lat 38°30' to 39°30', long 118°45' to 120°. Scale, 1:200,000. Contour interval, 200 feet. 50c.
- MF-81. Preliminary geologic map of the Pinal Ranch quadrangle, Arizona, by N. P. Peterson. 1961. Lat 33°15' to 33°22'30", long 110°52'30" to 111°. Scale, 1:24,000. Contour interval, 25 feet. 50c.
- MF-82. Reconnaissance geologic map of the Izee and Logdell quadrangles, Oregon, by R. E. Wallace and J. A. Calkins, 1956. Lat 44° to 44°15', long 119° to 119°30'. Scale, 1:62,500. 50c.
- MF-83. Preliminary geologic map of the Gas Hills uranium district, Fremont and Natrona Counties, Wyo., by H. D. Zeller, P. E. Soister, and H. J. Hyden. 1956. Lat 42°45' to 42°52'30", long 107°30' to 107°45'. Scale, 1:31,680. 2 sheets. 75c per set.
- MF-84--MF-96. Preliminary geologic maps. Scale, 1:24,000. Contour interval, 40 feet. 50c each.
- MF-84. Boot Mesa NW quadrangle, Arizona-Utah, by I. J. Witkind and others. 1957. Lat 36°52'30" to 37°, long 110°22'30" to 110°30'.
- MF-85. Boot Mesa NE quadrangle, Arizona-Utah, by I. J. Witkind and others. 1957. Lat 36°52'30" to 37°, long 110°15' to 110°22'30'.
- MF-86. Boot Mesa SE quadrangle, Arizona, by I. J. Witkind and others. 1957. Lat 36°45' to 36°52'30", long 110°15' to 110°22'30'.
- MF-87. Boot Mesa SW quadrangle, Arizona, by I. J. Witkind and others. 1957. Lat 36°45' to 36°52'30", long 110°22'30" to 110°30'.
- MF-88. Agathla Peak NW quadrangle, Arizona-Utah, by I. J. Witkind and others. 1957. Lat 36°52'30" to 37°, long 110°07'30" to 110°15'.
- MF-89. Agathla Peak NE quadrangle, Arizona-Utah, by I. J. Witkind and others. 1957. Lat 36°52'30" to 37°, long 110° to 110°07'30'.
- MF-90. Agathla Peak SE quadrangle, Arizona, by I. J. Witkind and others. 1957. Lat 36°45' to 36°52'30", long 110° to 110°07'30'.
- MF-91. Agathla Peak SW quadrangle, Arizona, by I. J. Witkind and others. 1957. Lat 36°45' to 36°52'30", long 110°07'30" to 110°15'.
- MF-92. Dinnehotso NW quadrangle, Arizona-Utah, by I. J. Witkind and others. 1956 [1957]. Lat 36°52'30" to 37°, long 109°52'30" to 110°.
- MF-93. Dinnehotso NE quadrangle, Arizona-Utah, by I. J. Witkind and others. 1956 [1957]. Lat 36°52'30" to 37°, long 109°52'30" to 110°.
- MF-94. Dinnehotso SE quadrangle, Arizona, by I. J. Witkind and others. 1956 [1957]. Lat 36°45' to 36°52'30", long 109°45' to 109°52'30'.
- MF-95. Dinnehotso SW quadrangle, Arizona, by I. J. Witkind and others. 1956 [1957]. Lat 36°45' to 36°52'30", long 109°52'30" to 110°.
- MF-96. Placerville quadrangle, Colorado, by A. L. Bush, C. S. Bromfield, and C. T. Pierson. 1956. Lat 38° to 38°07'30", long 108° to 108°07'30'.
- MF-97. Geology of the Bakersville-Plumtree area, Spruce Pine district, North Carolina, by J. L. Kulp and D. A. Brobst, 1956. Approx. coordinates, Lat 35°57'30" to 36°02'30", long 82° to 82°10'. Scale, 1:24,000. Contour interval, 500 feet. 50c.
- MF-98. Preliminary geologic map of the Pumpkin Buttes area, Campbell and Johnson Counties, Wyo., showing location of uranium occurrences, by W. N. Sharp and A. M. White. 1957. Lat 43°50' to 44°, long 105°45'00" to 106°07'30". Scale, 1:24,000. Contour interval, 20 feet. 3 sheets. \$1 per set.
- MF-99. Bedrock geology at the south-central part of the North Range, Cuyuna district, Minnesota, by R. G. Schmidt and C. E. Dutton. 1957. Scale, 1:7,200. 3 sheets. 75c per set.
- MF-100--MF-115. Preliminary geologic maps, by J. F. Smith, Jr., L. C. Huff, E. N. Hinrichs, and R. G. Luedke. 1957. Scale, 1:24,000. Contour interval, 40 feet. 50c each.
- MF-100. Loa 1 NE quadrangle, Utah. Lat 38°22'30" to 38°30', long 111°30' to 111°37'30'.
- MF-101. Loa 1 SE quadrangle, Utah. Lat 38°15' to 38°22'30", long 111°30' to 111°37'30'.
- MF-102. Loa 4 NE quadrangle, Utah. Lat 38°07'30" to 38°15', long 111°30' to 111°37'30'.

- MF-103. Notom 1 SW quadrangle, Utah, Lat 38°15' to 38°22'30", long 111°07'30" to 111°15'.
 MF-104. Notom 2 NE quadrangle, Utah, Lat 38°22'30" to 38°30', long 111°15' to 111°22'30".
 MF-105. Notom 2 NW quadrangle, Utah, Lat 38°22'30" to 38°30', long 111°22'30" to 111°30'.
 MF-106. Notom 2 SW quadrangle, Utah, Lat 38°15' to 38°22'30", long 111°22'30" to 111°30'.
 MF-107. Notom 2 SE quadrangle, Utah, Lat 38°15' to 38°22'30", long 111°15' to 111°22'30".
 MF-108. Notom 3 NE quadrangle, Utah, Lat 38°07'30" to 38°15', long 111°15' to 111°22'30".
 MF-109. Notom 3 NW quadrangle, Utah, Lat 38°07'30" to 38°15', long 111°22'30" to 111°30'.
 MF-110. Notom 3 SW quadrangle, Utah, Lat 38° to 38°07'30", long 111°22'30" to 111°30'.
 MF-111. Notom 3 SE quadrangle, Utah, Lat 38° to 38°07'30", long 111°15' to 111°22'30".
 MF-112. Notom 4 NE quadrangle, Utah, Lat 38°07'30" to 38°15', long 111° to 111°07'30".
 MF-113. Notom 4 NW quadrangle, Utah, Lat 38°07'30" to 38°15', long 111°07'30" to 111°15'.
 MF-114. Notom 4 SW quadrangle, Utah, Lat 38° to 38°07'30", long 111°07'30" to 111°15'.
 MF-115. Notom 4 SE quadrangle, Utah, Lat 38° to 38°07'30", long 111° to 111°07'30".
 MF-116. Geology and zinc-lead deposits in the Catfish Creek area, Dubuque County, Iowa, by C. E. Brown, J. W. Whitlow, and Percy Crosby. 1957. Scale, 1:12,000. 50c.
 MF-117. Preliminary geologic map and sections of the magnesite belt, Stevens County, Wash., by Ian Campbell and J. S. Loofbourrow. 1957. Scale, 1:36,000. Contour interval, 100 feet. 50c.
 MF-118. Preliminary geologic map of the Snowdrift Mountain quadrangle, Caribou County, Idaho, by E. R. Cressman. 1957. Lat 42°30' to 42°37'30", long 111°07'30" to 111°15'. Scale, 1:24,000. Contour interval, 20 feet. 50c.
 MF-119. Geologic map of anorthosite areas, southern part of Laramie Range, Wyo., by W. H. Newhouse and A. F. Hagner. 1957. Lat 41°20' to 41°55', long 105°12' to 105°30'. Scale, 1:63,360. 50c.
 MF-120. Uranium deposits and principal ore-bearing formations of the central Cordilleran foreland region, by T. L. Finnell and I. S. Parrish. 1958. Lat 40° to 48°, long 101° to 111°. Approximate scale, 1:750,000. 2 sheets, 75c per set. (See also Bulletin 1087-1.)
 MF-121. Preliminary geologic map of the Hulett Creek uranium mining area, Crook County, Wyo., by C. S. Robinson and H. D. Goode. 1957. Scale, 1 inch to 500 feet [1:6,000]. Contour interval, 10 feet. 50c.
 MF-122--MF-124. Preliminary geologic maps. 1957. Scale, 1:24,000. Contour interval, 40 feet. 50c each.
 MF-122. Sections of the western part of the Gateway district, Mesa County, Colo., and Grand County, Utah, by L. J. Eicher, D. C. Hedlund, and G. A. Miller. Lat 38°36'15" to 38°45', long 109° to 109°10'.
 MF-123. Mount Peale 1 SE quadrangle, Montrose County, Colo., and San Juan County, Utah, by W. D. Carter and J. L. Gualtieri. Lat 38°15' to 38°22'30", long 109° to 109°07'30".
 MF-124. Mount Peale 1 SW quadrangle, San Juan County, Utah, by W. D. Carter and J. L. Gualtieri. Lat 38°15' to 38°22'30", long 109°07'30" to 109°15'.
 MF-125--MF-130. Preliminary tectonic maps, showing distribution of uranium deposits, compiled by F. W. Osterwald and B. A. Dean. Scale, 1:500,000. 50c each.
 MF-125. Western North Dakota. 1957. Lat 46° to 49°, long 101° to 104°. 2 sheets, 50c per set.
 MF-126. Eastern Montana. 1958. Lat 47° to 49°, long 105° to 107°. 2 sheets, 50c per set.
 MF-127. Wyoming east of the overthrust belt. 1958. Lat 41° to 45°, long 104° to 111°. 2 sheets, 50c per set.
 MF-128. Western South Dakota. 1957. Lat 43° to 45°55', long 101° to 104°. 2 sheets, 50c per set.
 MF-129. Western Nebraska and northwestern Kansas. 1958. Lat 42° to 43°, long 101° to 104°. 2 sheets, 50c per set.
 MF-130. Northern Colorado and northeastern Utah. 1958. Lat 40° to 41°, long 107° to 111°. 2 sheets, 50c per set.
 MF-131--MF-135. Preliminary geologic maps. 1957. Scale, 1:24,000. (Except as otherwise indicated,) 50c each.
 MF-131. Fivemile Pass quadrangle, Tooele and Utah Counties, Utah, by A. E. Disbrow. Lat 40°07'30" to 40°15', long 112°07'30" to 112°15'. Contour interval, 25 feet.
 MF-132. Sentinel Peak NW quadrangle, Montezuma County, Colo., by E. B. Ekren and F. N. Houser. Lat 37°07'30" to 37°15', long 108°52'30" to 109°. 2 sheets, 50c per set.
 MF-133. Laguna 4 NW quadrangle, Bernalillo, Sandoval, and Valencia Counties, N. Mex., by R. H. Moench and W. P. Puffett. Lat 35°07'30" to 35°15', long 107°07'30" to 107°15'. 2 sheets, 50c per set.
 MF-134. Laguna 4 SW quadrangle, Bernalillo and Valencia Counties, N. Mex., by R. H. Moench and W. P. Puffett. Lat 35° to 35°07'30", long 107°07'30" to 107°15'. 2 sheets, 50c per set.
 MF-135. Part of the Turtle Lake quadrangle, Lincoln and Stevens Counties, Wash., by G. E. Becraft and P. L. Weis. Lat 47°45' to 48°, long 118° to 118°15'. Scale, 1:48,000. Contour interval, 40 feet.
 MF-136. Geologic map and sections of the Pioche Hills, Lincoln County, Nev., by C. F. Park, Jr., Paul Gemmill, and C. M. Tschanz. 1958. Scale, 1:12,000. Contour interval, 25 feet. 50c.
 MF-137. Preliminary geologic map of the Leadpoint quadrangle, Stevens County, Wash., by R. G. Yates and J. F. Robertson. 1958. Lat 48°52'30" to 49°, long 117°30' to 117°37'30". Scale, 1:24,000. Contour interval, 40 feet. 50c.
 MF-138. Geologic map of Clark County, Nev., by Ben Bowyer, E. H. Pampeyan, and C. R. Longwell. 1958. Lat 35° to 36°45', long 114°45' to 115°45'. Scale, 1:200,000. Contour interval, 500 feet. 50c.
 MF-139--MF-158. Preliminary geologic maps. Scale, 1:24,000. Contour interval, 40 feet. 50c each.
 MF-139. Mount Peale 1 NE quadrangle, San Juan County, Utah, and Montrose County, Colo., by W. D. Carter, J. L. Gualtieri, and E. M. Shoemaker. 1958. Lat 38°22'30" to 38°30', long 109° to 109°07'30".
 MF-140. Mount Peale 1 NW quadrangle, San Juan County, Utah, by W. D. Carter and J. L. Gualtieri. 1958. Lat 38°22'30" to 38°30', long 109°07'30" to 109°15'.

- MF-141. and sections of the Mount Peale 2 NE quadrangle, San Juan County, Utah, by G. W. Weir and W. P. Puffett, 1960 [1961]. Lat 38°22'30" to 38°30', long 109°15' to 109°22'30".
- MF-142. Mount Peale 2 SW quadrangle, San Juan County, Utah, by G. W. Weir and V. C. Kennedy, 1958. Lat 38°15' to 38°22'30", long 109°22'30" to 109°30'.
- MF-143. and section of the Mount Peale 2 SE quadrangle, San Juan County, Utah, by G. W. Weir, C. L. Dodson, and W. P. Puffett, 1960. Lat 38°15' to 38°22'30", long 109°15' to 109°22'30".
- MF-144. Mount Peale 3 NW quadrangle, San Juan County, Utah, by G. W. Weir and C. L. Dodson, 1958. Lat 38°07'30" to 38°15', long 109°22'30" to 109°30".
- MF-145. Mount Peale 3 NE quadrangle, San Juan County, Utah, by G. W. Weir and C. L. Dodson, 1958. Lat 38°07'30" to 38°15', long 109°15' to 109°22'30".
- MF-146. Mount Peale 3 SW quadrangle, San Juan County, Utah, by G. W. Weir and C. L. Dodson, 1958. Lat 38° to 38°07'30", long 109°22'30" to 109°30'.
- MF-147. Mount Peale 3 SE quadrangle, San Juan County, Utah, by G. W. Weir and C. L. Dodson, 1958. Lat 38° to 38°07'30", long 109°15' to 109°22'30".
- MF-148. Mount Peale 4 SW quadrangle, San Juan County, Utah, by G. W. Weir and C. L. Dodson, 1958. Lat 38° to 38°07'30", long 109°07'30" to 109°15'.
- MF-149. Mount Peale 4 SE quadrangle, San Juan County, Utah, and San Miguel County, Colo., by G. W. Weir and W. P. Puffett, 1960 [1961]. Lat 38° to 38°07'30", long 109° to 109°07'30".
- MF-150. and section of the Mount Peale 4 NE quadrangle, San Juan County, Utah, and Montrose and San Miguel Counties, Colo., by G. W. Weir, W. D. Carter, W. P. Puffett, and J. L. Gualtieri, 1960 [1961]. Lat 38°07'30" to 38°15', long 109° to 109°07'30".
- MF-151. and section of the Mount Peale 4 NW quadrangle, San Juan County, Utah, by G. W. Weir, W. P. Puffett, and C. L. Dodson, 1961. Lat 38°07'30" to 38°15', long 109°07'30" to 109°15'.
- MF-152. and section of the Mount Peale 2 NW quadrangle, San Juan County, Utah, by G. W. Weir, V. C. Kennedy, W. P. Puffett, and C. L. Dodson, 1961. Lat 38°22'30" to 38°30' long 109°22'30" to 109°30'.
- MF-153. Circle Cliffs 1 NE quadrangle, Garfield County, Utah, by E. S. Davidson and R. A. Cadigan, 1959. Lat 37°52'30" to 38°, long 111° to 111°07'30".
- MF-154. Circle Cliffs 1 NW quadrangle, Garfield County, Utah, by L. D. Carswell and E. S. Davidson, 1958. Lat 37°52'30" to 38°, long 111°07'30" to 111°15'.
- MF-155. Circle Cliffs 1 SW quadrangle, Garfield County, Utah, by L. D. Carswell, E. S. Davidson, and G. A. Miller, 1958. Lat 37°45' to 37°52'30", long 111°07'30" to 111°15'.
- MF-156. Circle Cliffs 1 SE quadrangle, Garfield County, Utah, by E. S. Davidson, D. A. Brew, and L. D. Carswell, 1958. Lat 37°45' to 37°52'30", long 111° to 111°07'30".
- MF-157. Circle Cliffs 2 NE quadrangle, Garfield County, Utah, by G. A. Miller and R. A. Cadigan, 1958. Lat 37°52'30" to 38°, long 111°15' to 111°22'30".
- MF-158. Circle Cliffs 4 NE quadrangle, Garfield County, Utah, by E. S. Davidson, D. A. Brew, and L. D. Carswell, 1958. Lat 37°37'30" to 37°45', long 111° to 111°07'30".
- MF-159. Reconnaissance geologic map of the Cedar Mountains, Grant and Luna Counties, N. Mex., by C. S. Bromfield and C. T. Wrucke, 1961. Approx. coordinates, Lat 31°47' to 32°, long 108° to 108°15'. Scale, 1:62,500. Contour intervals, 10, 25, 100, and 200 feet. 50c.
- MF-160. Reconnaissance geologic map of part of the southern Peloncillo Mountains, Hidalgo County, N. Mex., by C. T. Wrucke and C. S. Bromfield, 1961. Lat 31°30' to 31°45', long 108°50' to 109°. Scale, 1:62,500. Contour intervals, 25 and 80 feet. 50c.
- MF-161. Preliminary geologic map and sections of the Osgood Mountains quadrangle, Humboldt County, Nev., by P. E. Hotz and Ronald Willden, 1960 [1961]. Lat 41° to 41°15', long 117°15' to 117°30'. Scale, 1:48,000. Contour interval, 50 feet. 50c.
- MF-162--MF-168. Preliminary geologic maps. Scale, 1:24,000. Contour interval, 40 feet. 50c each.
- MF-162. Verdure 2 NW quadrangle, San Juan County, Utah, by I. J. Witkind, 1958. Lat 37°52'30" to 38°, long 109°22'30" to 109°30'.
- MF-163. Verdure 2 SE quadrangle, San Juan County, Utah, by L. C. Huff and F. G. Lesure, 1958. Lat 37°45' to 37°52'30", long 109°15' to 109°22'30".
- MF-164. Verdure 1 SW quadrangle, San Juan County, Utah, by L. C. Huff and F. G. Lesure, 1958. Lat 37°45' to 37°52'30", long 109°07'30" to 109°15'.
- MF-165. Verdure 3 NE quadrangle, San Juan County, Utah, by F. G. Lesure, L. C. Huff, and Frederick Stugard, Jr., 1958. Lat 37°37'30" to 37°45', long 109°15' to 109°22'30".
- MF-166. Verdure 4 NW quadrangle, San Juan County, Utah, by L. C. Huff and F. G. Lesure, 1958. Lat 37°37'30" to 37°45', long 109°07'30" to 109°15'.
- MF-167. Verdure 3 SE quadrangle, San Juan County, Utah, by L. C. Huff and F. G. Lesure, 1958. Lat 37°30' to 37°37'30", long 109°15' to 109°22'30".
- MF-168. Verdure 4 SW quadrangle, San Juan County, Utah, by F. G. Lesure and Frederick Stugard, Jr., 1958. Lat 37°30' to 37°37'30", long 109°07'30" to 109°15'.
- MF-169. Exploration for uranium-vanadium deposits by the U. S. Geological Survey in the Club Mesa area, Uravan district, Montrose County, Colo., by R. L. Boardman, L. R. Litsey, and H. E. Bowers, 1958. Scale, 1:7,200. Contour interval, 100 feet. 75c.
- MF-170. Geologic map of the Castle Butte quadrangle, Kern County, Calif., by T. W. Dibblee, Jr., 1958. Lat 35° to 35°15', long 117°45' to 118°. Scale, 1:62,500. Contour interval, 25 feet. 50c.
- MF-171--MF-176. Preliminary geologic maps (except MF-174). Scale, 1:24,000. Contour interval, 40 feet. 50c each.
- MF-171. Northern half of the Jefferson City quadrangle, Jefferson and Lewis and Clark Counties, Mont., by G. E. Becraft, 1960 [1961]. Lat 46°22' to 46°30', long 112° to 112°15'.
- MF-172. Southern half of the Jefferson City quadrangle, Jefferson County, Mont., by G. E. Becraft, 1960 [1961]. Lat 46°15' to 46°22', long 112° to 112°15'.

- MF-173. Orange Cliffs 3 NE quadrangle, Wayne and Garfield Counties, Utah, by F. A. McKeown, C. C. Hawley, and P. P. Orkild. 1958. Lat 38°07'30" to 38°15', long 110°15' to 110°22'30".
- MF-176. Gray Head quadrangle, San Miguel County, Colo., by A. L. Bush, C. S. Bromfield, O. T. Marsh, and R. B. Taylor. 1961. Lat 37°52'30" to 38°, long 107°52'30" to 108°.
- MF-174. Reconnaissance geologic map of the Deer Lodge quadrangle, Powell, Deer Lodge, and Jefferson Counties, Mont., by E. T. Ruppel. 1961. Lat 46°15' to 46°30', long 112°30' to 112°45'. Scale, 1:48,000. 50c.
- MF-177. Preliminary geologic map and sections of the Bullfrog quadrangle, Nevada-California, by H. R. Cornwall and F. J. Kleinhampl. 1961. Lat 36°45' to 37°, long 116°45' to 117°. Scale, 1:48,000. Contour interval, 40 feet. 50c.
- MF-178. Preliminary geologic map of Eureka County, Nevada, by R. E. Lehner, K. M. Tagg, M. M. Bell, and R. J. Roberts. 1961. Approx. coordinates, Lat 39°9'30" to 41°, long 115°54'20" to 116°35'40". Scale, 1:200,000. Contour interval, 200 feet. 50c.
- MF-179. Preliminary map of bedrock geology of the Ralston Buttes quadrangle, Jefferson County, Colo., by D. M. Sheridan, C. H. Maxwell, A. L. Albee, and Richard Van Horn. 1958. Lat 39°45' to 39°52'30", long 105°15' to 105°22'30". Scale, 1:24,000. Contour interval, 50 feet. 50c.
- MF-180. Preliminary geologic map of the southwest part of the Clifton quadrangle, Weston County, Wyo., by N. P. Cuppels and F. R. Conwell. 1958. Lat 43°37'30" to 43°40', long 104°03'45" to 104°07'30". Scale, 1:7,200. Contour interval, 20 feet. 50c.
- MF-181. Bedrock geology of the southwestern part of the North Range, Cuyuna district, Minnesota, by R. G. Schmidt. 1958. Scale, 1:7,200. 3 sheets. \$1 per set.
- MF-182. Bedrock geology of the northern and eastern parts of the North Range, Cuyuna district, Minnesota, by R. G. Schmidt. 1959. Scale, 1:7,200. 5 sheets. \$1.50 per set.
- MF-183--MF-201. Preliminary geologic maps. Scale, 1:24,000. Contour interval, 40 feet. 50c each.
- MF-183. Northwest quarter of the Boulder quadrangle, Montana, by G. E. Becraft, and D. M. Pinckney. 1961. Lat 46°07'30" to 46°15', long 112°07'30" to 112°15'.
- MF-184. Clay Hills 2 NE quadrangle, San Juan County, Utah, by T. E. Mullens. 1958. Lat 37°22'30" to 37°30', long 110°15' to 110°22'30".
- MF-185. Clay Hills 2 NW quadrangle, San Juan County, Utah, by T. E. Mullens. 1959. Lat 37°22'30" to 37°30', long 110°22'30" to 110°30'.
- MF-186. Clay Hills 2 SW quadrangle, San Juan County, Utah, by T. E. Mullens. 1959. Lat 37°15' to 37°22'30", long 110°22'30" to 110°30'.
- MF-187. Southwest quarter of the Boulder quadrangle, Montana, by D. M. Pinckney and G. E. Becraft. 1961. Lat 46° to 46°07'30", long 112°07'30" to 112°15'.
- MF-188. House Rock Spring NE quadrangle, Coconino County, Ariz., by J. D. Wells. 1958. Lat 36°52'30" to 37°, long 112° to 112°07'30".
- MF-189. House Rock Spring SE quadrangle, Coconino County, Ariz., by J. D. Wells. 1959. Lat 36°45' to 36°52'30", long 112° to 112°07'30".
- MF-190. Elk Ridge 2 NE quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1958 [1959]. Lat 37°52'30" to 38°, long 109°45' to 109°52'30".
- MF-191. Elk Ridge 2 NW quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1958 [1959]. Lat 37°52'30" to 38°, long 109°52'30" to 110°.
- MF-192. Elk Ridge 2 SW quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1958 [1959]. Lat 37°45' to 37°52'30", long 109°52'30" to 110°.
- MF-193. Elk Ridge 2 SE quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1958 [1959]. Lat 37°45' to 37°52'30", long 109°45' to 109°52'30".
- MF-194. Elk Ridge 3 NE quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1959. Lat 37°37'30" to 37°45', long 109°45' to 109°52'30".
- MF-195. Elk Ridge 3 NW quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1958 [1959]. Lat 37°37'30" to 37°45', long 109°52'30" to 110°.
- MF-196. Paria Plateau SE quadrangle, Coconino County, Ariz., by R. G. Petersen. 1961. Lat 36°45' to 36°52'30", long 111°45' to 111°52'30".
- MF-197. Emmett Wash NW quadrangle, Coconino County, Ariz., by R. G. Petersen and J. D. Wells. 1960 [1961]. Lat 36°37'30" to 36°45', long 111°52'30" to 112°.
- MF-198. Elk Ridge 4 SW quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1959. Lat 37°30' to 37°37'30", long 109°37'30" to 109°45'.
- MF-199. Elk Ridge 4 NW quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. Lat 37°37'30" to 37°45', long 109°37'30" to 109°45'.
- MF-200. Elk Ridge 1 SW quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1959. Lat 37°45' to 37°52'30", long 109°37'30" to 109°45'.
- MF-201. Elk Ridge 1 NW quadrangle, San Juan County, Utah, by R. Q. Lewis, Sr. and R. H. Campbell. 1958 [1959]. Lat 37°52'30" to 38°, long 109°37'30" to 109°45'.
- MF-202. Geologic map of part of the Beaver quadrangle, Utah, by Eugene Callaghan and R. L. Parker. 1961. Lat 38°19' to 38°30', long 112°30' to 112°38'. Scale, 1:62,500. Contour interval, 50 feet. 50c.
- MF-203. Preliminary geologic map of the Slick Rock district, San Miguel and Dolores Counties, Colo., by D. R. Shawe, G. C. Simmons, and W. B. Rogers. 1961. Lat 37°45' to 38°07'30", long 108°37'30" to 109°. Scale, 1:48,000. Contour interval, 200 feet. 50c. (See also Bulletin 1107-B).
- MF-204. Geologic map of the Boron quadrangle, Kern and Bernardino Counties, Calif., by T. W. Dibblee, Jr. 1958. Lat 35° to 35°15', long 117°30' to 117°45'. Scale, 1:62,500. Contour interval, 20 feet. 50c.
- MF-206. Preliminary geologic map of Lincoln County, Nev., by C. M. Tschanz and E. H. Pampeyan. 1961. Scale, 1:200,000. Contour interval, 200 feet. 2 sheets. \$1 per set.

- MF-207--MF-212. Preliminary geologic and structure maps. 1959. Scale, 1:7,200. Contour interval, 10 feet, 50c each.
- MF-207. Northwest part of the Cascade Springs quadrangle, Fall River County, S. Dak., by E. V. Post and N. P. Cuppels. Lat 43°20' to 43°22'30", long 103°33'45" to 103°37'30".
- MF-208. Northeast part of the Cascade Springs quadrangle, Fall River County, S. Dak., by E. V. Post and D. W. Lane. Lat 43°20' to 43°22'30", long 103°30' to 103°33'45".
- MF-209. West-central part of the Cascade Springs quadrangle, Fall River County, S. Dak., by E. V. Post and N. P. Cuppels. Lat 43°17'30" to 43°20', long 103°33'45" to 103°37'30".
- MF-210. East-central part of the Cascade Springs quadrangle, Fall River County, S. Dak., by E. V. Post and D. W. Lane. Lat 43°17'30" to 43°20', long 103°30' to 103°33'45".
- MF-211. Southwest part of the Cascade Springs quadrangle, Fall River County, S. Dak., by E. V. Post. Lat 43°15' to 43°17'30", long 103°33'45" to 103°37'30".
- MF-212. Southeast part of the Cascade Springs quadrangle, Fall River County, S. Dak., by E. V. Post. Lat 43°15' to 43°17'30", long 103°30' to 103°33'45".
- MF-213. Reconnaissance geologic map of southeastern Cochise County, Ariz., by J. R. Cooper. 1959. Lat 31°15' to 32°, long 109° to 109°45'. Scale, 1:125,000. Contour interval, 100 feet, 50c.
- MF-214--MF-217. Preliminary geologic maps, 1959. Scale, 1:24,000. Contour interval, 40 feet, 50c each.
- MF-214. Paria Plateau NE quadrangle, Coconino County, Ariz., by R. G. Petersen and D. A. Phoenix. Lat 36°52'30" to 37°, long 111°45' to 111°52'30".
- MF-215. Emmett Wash NE quadrangle, Coconino County, Ariz., by R. G. Petersen. Lat 36°37'30" to 36°45', long 111°45' to 111°52'30".
- MF-216. Moqui SW quadrangle, Montezuma County, Colo., by F. N. Houser and E. B. Ekren. Lat 37°15' to 37°22'30", long 108°52'30" to 109°.
- MF-217. Cortez SW quadrangle, Montezuma County, Colo., by E. B. Ekren and F. N. Houser. Lat 37°15' to 37°22'30", long 108°37'30" to 108°45'.
- MF-218. Diagrammatic restored section of the Inyan Kara group, Morrison formation, and Unkpapa sandstone of the western side of the Black Hills, Wyoming and South Dakota, by W. J. Mapel and G. B. Gott. 1959. Scale, 1:253,440, 50c.
- MF-219. Preliminary geologic map of the Mojave quadrangle, California, by T. W. Dibblee, Jr. 1959. Lat 35° to 35°15', long 118° to 118°15'. Scale, 1:62,500. Contour interval, 100 feet, 50c.
- MF-220. Preliminary geologic map of the Buffalo Mountain quadrangle, Nevada, by R. E. Wallace, N. J. Silberling, W. P. Irwin, and D. B. Tatlock. 1959. Lat 40° to 40°15', long 118° to 118°15'. Scale, 1:48,000. Contour interval, 40 feet, 50c.
- MF-221. Preliminary geologic map of the Moqui SE quadrangle, Montezuma County, Colo., by E. B. Ekren and F. N. Houser. 1959. Lat 37°15' to 37°22'30", long 108°45' to 108°52'30". Scale, 1:24,000, 50c.
- MF-222. Geologic map of the Alpine Butte quadrangle, California, by T. W. Dibblee, Jr. 1959. Lat 34°30' to 34°45', long 117°45' to 118°. Scale, 1:62,500. Contour interval, 100 feet, 50c.
- MF-223. Preliminary geologic map of the Little Cone quadrangle, San Miguel County, Colo., by A. L. Bush, O. T. Marsh, and R. B. Taylor. 1959. Lat 37°52'30" to 38°, long 108° to 108°07'30". Scale, 1:24,000. Contour interval, 40 feet, 50c.
- MF-224. Preliminary geologic map of the Sentinel Peak NE quadrangle, Montezuma County, Colo., by E. B. Ekren and F. N. Houser. 1959. Lat 37°07'30" to 37°15', long 108°45' to 108°52'30". Scale, 1:24,000, 50c.
- MF-225. Geologic map of the Iron River-Crystal Falls district, Iron County, Mich., by H. L. James, C. E. Dutton, F. J. Pettijohn and K. L. Wier. 1959 [1960]. Lat 46° to 46°07'30", long 88°30' to 88°45'. Scale, 1:24,000, 3 sheets. \$1 per set.
- MF-226. Geologic map of the Hawes quadrangle, San Bernardino County, Calif., by T. W. Dibblee, Jr. 1960. Lat 34°45' to 35°, long 117°15' to 117°30'. Scale, 1:62,500. Contour interval, 20 feet, 50c.
- MF-227. Preliminary geologic map of the Shadow Mountains quadrangle, Los Angeles and San Bernardino Counties, Calif., by T. W. Dibblee, Jr. 1960. Lat 34°30' to 34°45', long 117°30' to 117°45'. Scale, 1:62,500. Contour interval, 25 feet, 50c.
- MF-228. Preliminary geologic map of the NW¼ Mayer quadrangle, Yavapai County, Ariz., by C. A. Anderson. 1959. Lat 34°22'30" to 34°30', long 112°07'30" to 112°15'. Scale, 1:24,000. Contour interval, 50 feet, 50c.
- MF-229. Preliminary geologic map of the Victorville quadrangle, California, by T. W. Dibblee, Jr. 1960. Lat 34°30' to 34°45', long 117°15' to 117°30'. Scale, 1:62,500. Contour interval, 40 feet, 50c.
- MF-230. Geologic and alteration maps of the East Tintic district, Utah, by T. S. Lovering and others. 1960. Lat 39°55' to 40°, long 112° to 112°05'30". Scale, 1:9,600. Contour interval, 25 feet, 2 sheets. \$1.50 per set.
- MF-231. Reconnaissance map of the Willcox, Fisher Hills, Cochise and Dos Cabezas quadrangles, Cochise and Graham Counties, Ariz., by J. R. Cooper. 1960. Lat 32° to 32°30', long 109°30' to 110°. Scale, 1:62,500. Contour interval, 50 feet, 50c.
- MF-232. Preliminary geologic map of the Apple Valley quadrangle, California, by T. W. Dibblee, Jr. 1960. Lat 34°30' to 34°45', long 117° to 117°15'. Scale, 1:62,500. Contour interval, 40 feet, 50c.
- MF-233. Geologic map of the Barstow quadrangle, San Bernardino County, Calif., by T. W. Dibblee, Jr. 1960. Lat 34°45' to 35°, long 117° to 117°15'. Scale, 1:62,500. Contour interval, 40 feet, 50c.
- MF-234. Geochemical and heavy-mineral reconnaissance of the Concord quadrangle, Cabarrus County, N. C., by Henry Bell, 3d and W. C. Overstreet. 1960. Lat 35°22'30" to 35°30', long 80°30' to 80°37'30". Scale, 1:24,000, 50c.
- MF-235. Geochemical and heavy-mineral reconnaissance of the Concord SE quadrangle, Cabarrus County, N. C., by W. C. Overstreet and Henry Bell, 3d. 1960. Lat 35°15' to 35°22'30", long 80°30' to 80°37'30". Scale, 1:24,000, 50c.

- MF-236. Preliminary geologic map of Humboldt County, Nev., by Ronald Wildden. 1961. Lat 40°45' to 42°, long 117° to 119°15'. Scale, 1:200,000. Contour interval, 200 feet. \$1.
- MF-237. Preliminary geologic map of the Deep Lake quadrangle, Stevens and Pend Orielle Counties, Wash., by R. G. Yates and A. E. Ford. 1960. Lat 48°45' to 48°52'30", long 117°30' to 117°37'30". Scale, 1:24,000. Contour interval, 40 feet. 50c.
- MF-238. Reconnaissance geologic map of parts of the San Pedro and Aravaipa Valleys, south-central Arizona, by S. C. Creasy, E. D. Jackson, and R. A. Gulbrandsen. 1961. Lat 32°15' to 33°15', long 110° to 111°. Scale, 1:125,000. Contour interval, 200 feet. 50c.
- MF-239. Preliminary geologic map of the Bare Mountain quadrangle, Nye County, Nev., by H. R. Cornwall and F. J. Kleinhampl. 1960. Lat 36°45' to 37°, long 116°30' to 116°45'. Scale, 1:48,000. Contour interval, 40 feet. 50c.
- MF-240. Preliminary geologic map and sections of the north end of the Oquirrh Range (Mills Junction, Garfield, and Magna 7½-minute quadrangles), Tooele and Salt Lake Counties, Utah, by E. W. Tooker and R. J. Roberts. 1961. Lat 40°37'30" to 40°45', long 112° to 112°20'. Scale, 1:24,000. Contour intervals, 10, 20, and 40 feet. 50c.

RESOURCE MAPS

[Distinguishing prefix, "MR"]

- MR-1. Geologic environment map of alumina resources of the Columbia Basin, by I. G. Sohn. 1952. Scale, 1:1,500,000. 80c.
- MR-2. The uranium deposits of the United States, compiled by R. W. Schnabel. 1955. Scale, 1:5,000,000. 50c.
- MR-3. Potash occurrences in the United States, by M. F. Byrd. 1955. Scale, 1:5,000,000. 50c.
- MR-4. Mineral deposits and occurrences in Massachusetts and Rhode Island, exclusive of clay, sand and gravel, and peat, compiled by N. C. Pearre. 1956. Scale, 1:500,000. 50c.
- MR-5. Mineral deposits and occurrences in Vermont, exclusive of clay, sand and gravel, and peat, compiled by N. C. Pearre and J. A. Calkins. 1957. Scale, 1:500,000. 50c.
- MR-6. Mineral deposits and occurrences in New Hampshire, exclusive of clay, sand and gravel, and peat, compiled by N. C. Pearre and J. A. Calkins. 1957. Scale, 1:500,000. 50c.
- MR-7. Mineral deposits and occurrences in Connecticut, exclusive of clay, sand and gravel, and peat, compiled by N. C. Pearre. 1957. Scale, 1:500,000. 50c.
- MR-8. Chromite, cobalt, nickel, and platinum occurrences in Alaska, by E. H. Cobb. 1960. Scale, 1:2,500,000. 50c.
- MR-9. Copper, lead, and zinc occurrences in Alaska, by E. H. Cobb. 1960. Scale, 1:2,500,000. 50c.
- MR-10. Molybdenum, tin, and tungsten occurrences in Alaska, by E. H. Cobb. 1960. Scale, 1:2,500,000. 50c.
- MR-11. Antimony, bismuth, and mercury occurrences in Alaska, by E. H. Cobb. 1960. Scale, 1:2,500,000. 50c.
- MR-12. Mineral deposits of Maryland, excluding fuels, sand, and gravel, compiled by N. C. Pearre. 1961. Scale, 1:250,000. 60c.

GENERAL MINERAL RESOURCE MAPS

[Asterisk (*) indicates map out of print]

- *Geologic map of Kettleman Hills, Calif., and generalized stratigraphic sections of exposed formations, by W. P. Woodring and others. 1934 [1940]. Scale, 1:31,680. (See Professional Paper 195.)
- Preliminary map showing geologic structure of the Quinton-Scipio district, Pittsburg, Haskell, and Latimer Counties, Okla., by C. H. Dane and others. 1935. Scale, 1 inch to 1 mile [1:63,360]. 25c.
- Osage County, Okla., and adjacent areas. 3 maps (4 sheets), with accompanying text. 1935. 15 pages. \$3.50.
- Geologic and structure contour map of the Cedar Creek anticline, Dawson, Prairie, Wilboux, and Fallon Counties, Mont., and Bowman County, N. Dak., by C. E. Dobbin and R. M. Larsen. 1936. Scale, 1 inch to 1 mile [1:63,360]. 2 sheets. 25c per set.
- Preliminary geologic map of west slope of Mosquito Range in the vicinity of Leadville, Colo., by C. H. Behre, Jr., E. N. Goddard, and A. E. Sandberg. 1939. Scale, 1:12,000. \$1.
- Preliminary map showing geologic structure of part of Rio Arriba County, N. Mex., by C. H. Dane and R. P. Bryson. 1938. Scale, 1:62,500. 25c.
- Preliminary map showing structure of Byron-Frannie area, Big Horn and Park Counties, Wyo., by D. A. Andrews, C. E. Dobbin, and others. 1938. Scale, 1:63,360. 15c.
- *Boulder County tungsten district, Colorado, by T. S. Lovering, E. B. Eckel, and Ogden Tweto:
 *Beaver Creek area. 1942.
 *Nederland area. 1942.
- Geologic map and sections of the Oregon Basin anticline, Park County, Wyo., by W. B. Kramer, J. M. Cattermole, and B. F. Curtis. 1943. Scale, 1 inch to 1 mile [1:63,360]. Free on application to the Geological Survey, Washington 25, D. C.
- Geologic map and sections of Lance Creek oil and gas field and vicinity, Niobrara County, Wyo., by W. B. Kramer, C. E. Dobbin, and Robert McMillan. 1943. Scale, 1 inch to 1 mile [1:63,360]. 75c.
- *Geologic and structure map of the Elk Basin oil and gas field and vicinity, Park County, Wyo., and Carbon County, Mont., by C. E. Dobbin, W. B. Kramer, J. C. Miller, and Harvey French. 1945. Scale, 1 inch to ½ mile [1:31,680].
- Geologic and structure contour map of the Clay Basin gas field and vicinity, Daggett County, Utah, and Sweetwater County, Wyo., by C. E. Dobbin and Robert Davison. 1945. Scale, 1 inch to ½ mile [1:31,680]. 15c.

- Geologic and structure map of the Little Buffalo Basin oil and gas field and vicinity, Park and Hot Springs Counties, Wyo., by T. F. Stipp and H. F. French. 1945. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. 15c.
- Preliminary geologic map of the Comstock lode district, Nev., by F. C. Calkins and T. P. Thayer. 1945. Scale, 1:24,000. 75c.
- *Geologic and structure contour map of Garland and Byron anticlines, Big Horn and Park Counties, Wyo., by C. E. Dobbin, J. C. Miller, and K. L. Walter. 1946. Scale, 1 inch to $\frac{3}{4}$ mile [1:47,520].
- Structure contour map of the Montana plains, by C. E. Dobbin and C. E. Erdmann. 1946. Scale, 1 inch to 10 miles [1:633,600]. 25c. [Superseded by OM-178.]
- Preliminary structure contour map of the Cut Bank-West Kevin border districts, Glacier, Toole, and Pondera Counties, Mont., by C. E. Erdmann, N. A. Davis, William Beer, and J. W. Nordquist. 1946. Scale, 1 inch to 2 miles [1:126,720]. 25c.
- Map of the areal and structural geology of T.35N., R.4W., Toole County, Montana, showing high gravity pool, Kevin-Sunburst oil field and part of Cut Bank gas field, by C. E. Erdmann, A. B. Cozzens, J. T. Gist, and J. W. Nordquist. 1946. Scale, 1:63,360. 2 sheets. 10c per sheet.
- Map of the areal and structural geology of T.35N., R.3W., Toole County, Montana, showing oil pools in West Kevin district, Kevin-Sunburst oil field, by C. E. Erdmann, J. T. Gist, J. W. Nordquist, and G. W. Beer. 1947. Scale, 1:63,360. 2 sheets. 10c per sheet.
- Map of the areal and structural geology of T.35N., R.3W., Toole County, Montana, showing Thorpe pool and north end of West Kevin district, Kevin-Sunburst oil field, by C. E. Erdmann, J. T. Gist, and J. W. Nordquist. 1947. Scale, 1:63,360. 2 sheets. 10c per sheet.
- Geologic and structure contour map of the Mush Creek area, Weston County, Wyo., by G. H. Horn and J. Alliger. 1947. Scale, 1 inch to 5,000 feet [1:60,000]. 10c.
- Geologic map of the Front Range mineral belt, Colorado, by T. S. Lovering and E. N. Goddard. 1950 [1951]. Scale, 1:62,500. 2 sheets. \$2 per set (Issued as plate 2 of Professional Paper 223.)
- *Veins, faults, and mines of the Front Range mineral belt, Colorado, by T. S. Lovering and E. N. Goddard. 1950 [1951]. Scale, 1:62,500. 2 sheets. (Issued as plate 3 of Professional Paper 223.)
- Geologic map of North Dakota southwest of the Missouri River, by W. E. Benson. 1951. Scale, 1:500,000. 25c.
- Structure contour map of the Knife River area, North Dakota, by W. E. Benson and others. 1951. Scale, 1:106,000. 25c.
- Systematic microchemical analysis, by F. M. Chace. 1951. 15c.
- Sedimentary formations of Washington, D. C., and vicinity, by N. H. Darton. 1947. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. \$1.
- *Paleocene deposits of the Rocky Mountains and Plains, by R. W. Brown. Preliminary map. 1949. Scale, 1:1,000,000.
- Structure sections of the Santa Maria district, Santa Barbara County, Calif., by W. P. Woodring, M. N. Bramlette, K. E. Lohman, and R. P. Bryson. 1950. Scale, 1:24,000. 50c. (Issued as plate 2 of Professional Paper 222.)
- Geologic map of the Santa Maria district, Santa Barbara County, Calif., by W. P. Woodring, M. N. Bramlette, K. E. Lohman, and R. P. Bryson. 1950. Scale, 1:24,000. 5 sheets. \$1.50 per set. (Issued as plate 1 of Professional Paper 222.)
- *Chart correlating various grain-size definitions of sedimentary materials, by P. E. Truesdell and D. J. Varnes. 1950 [1951].
- Interpreting geologic maps for engineering purposes--Hollidaysburg quadrangle, Pennsylvania. Prepared by Engineering Geology and Ground Water Branches. 1953 [1954]. Six maps, bound with covers. Lat 40°15' to 40°30', long 78°15' to 78°30'. Scale, 1:62,500. Contour interval, 20 feet. \$1.75 per set.

GEOPHYSICAL INVESTIGATIONS¹

[Distinguishing prefix "GP" used since 1950.]

1. Aeromagnetic map showing total intensity 1000 feet above the surface of part of the Oswegatchie quadrangle, St. Lawrence County, N. Y., by H. E. Hawkes, Jr., J. R. Balsley, Jr., and others. 1946. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. Contour intervals, 100 and 500 gammas. 40c.
2. Aeromagnetic survey at three levels over Benson Mines, St. Lawrence County, N. Y., by H. E. Hawkes, Jr., J. R. Balsley, Jr., and others. 1946. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. Contour interval, 100 gammas. 35c.

*The airborne magnetometer, by J. R. Balsley, Jr. 1946. 8 p., 3 plates.

*Preliminary report on an experimental aeromagnetic survey in northwestern Indiana, by H. R. Joesting and J. R. Henderson, Jr. 1948. 11 p., 2 plates.

Aeromagnetic survey of parts of Baraga, Iron, and Houghton Counties, Mich., with preliminary geologic interpretation by J. R. Balsley, Jr., H. L. James, and K. L. Wier. 1949. Horizontal scale, 1 inch to 3 miles [1:190,080]. Vertical scale, 1 inch to about 600 gammas. 30c.

Total intensity aeromagnetic maps and accompanying magnetic profiles, by J. R. Henderson, Jr., M. E. Hill, and J. L. Meuschke. 1949. Scale, 1 inch to 1 mile [1:63,360] (map), 1 inch to 2 miles [1:126,720] (profiles). Contour interval 50 gammas. 35c for each set.

Southern part of Beltrami County, Minn. 3 sheets.

Central part of Cass County, Minn. 2 sheets.

Northern part of Cass County, Minn. 2 sheets.

Southern part of Cass County, Minn. 2 sheets.

Northern part of Crow Wing County and part of Cass County, Minn. 2 sheets.

Southern part of Crow Wing County, Minn. 2 sheets.

Part of Hubbard County, Minn. 2 sheets.

Western part of Itasca County, Minn. 2 sheets.

Eastern part of Morrison County, Minn. 2 sheets.

Western part of Morrison County, Minn. 2 sheets.

Todd County, Minn., by J. R. Balsley, Jr., M. E. Hill, and J. L. Meuschke. 2 sheets.

Wadena County and part of Hubbard County, Minn., by J. R. Balsley, Jr., M. E. Hill, and J. L. Meuschke. 2 sheets.

Total intensity aeromagnetic maps, by W. J. Dempsey and R. T. Duffner. 1949. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. Contour interval, 50 gammas. 20c each.

Coldwater quadrangle, Missouri. Lat 37°15' to 37°30', long 90°15' to 90°30'.

Des Arc quadrangle, Missouri. Lat 37°15' to 37°30', long 90°30' to 90°45'.

De Soto quadrangle, Missouri. Lat 38° to 38°15', long 90°30' to 90°45'.

Farmington quadrangle and part of Crystal City quadrangle, Missouri. Lat 37°45' to 38°05', long 90°15' to 90°30'.

Fredericktown quadrangle, Missouri. Lat 37°30' to 37°45', long 90°15' to 90°30'.

Ironton quadrangle, Missouri. Lat 37°30' to 37°45', long 90°30' to 90°45'.

Richwoods quadrangle, Missouri. Lat 38° to 38°15', long 90°45' to 91°.

St. Clair quadrangle, Missouri. Lat 38°15' to 38°25', long 90°45' to 91°.

Total intensity aeromagnetic maps, by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. 1949. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 10 gammas. 15c each.

Benton County, Ind.

Fulton County, Ind.

Jasper County, Ind.

Lake County, Ind.

La Porte County, Ind.

Newton County, Ind.

Pulaski County, Ind. Contour intervals, 10 and 50 gammas.

St. Joseph County, Ind.

Starke County, Ind.

White County, Ind.

Total intensity aeromagnetic map of Posey County, Ind., by J. R. Henderson, Jr. and J. L. Meuschke. 1949. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 10 gammas. 15c.

*Airborne radioactivity survey of parts of Marquette, Dickinson, and Baraga Counties, Mich., by J. R. Balsley, Jr., F. J. Davis, R. A. Nelson, P. W. Reinhardt, and F. W. Stead. 1950. Scale, 1 inch to 2 miles [1:126,720].

¹This series includes maps showing the results of field studies by one or more geophysical methods. Except for numbers 1 and 2, maps were originally unnumbered. Since Feb. 20, 1950, the maps have been numbered consecutively and have carried the distinguishing prefix "GP." Maps 5, 6, and 19 were not published.

- Total intensity aeromagnetic maps, by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. 1950. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 10 gammas, 15c each.
Cass County, Ind.
Elkhart County, Ind. Contour intervals, 10 and 50 gammas.
Marshall County, Ind.
- GP-7--GP-45. Total intensity aeromagnetic maps, by J. R. Henderson, Jr. and J. L. Meuschke. 1950. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 10 gammas, 15c each. (Except where otherwise indicated.)
GP-7. Daviess County, Ind.
GP-8. Dubois County, Ind.
GP-9. Martin County, Ind.
GP-10. Pike County, Ind.
GP-11. Spencer County, Ind.
GP-12. Warrick County, Ind.
GP-13. Potosi quadrangle, Missouri, by W. J. Dempsey, R. T. Duffner, Fred Keller, Jr., and J. R. Henderson, Jr. Lat 37°45' to 38°, long 90°45' to 91°. Contour interval, 50 gammas, 20c.
GP-14. Bonne Terre quadrangle, Missouri, by W. J. Dempsey, R. T. Duffner, Fred Keller, Jr., and J. R. Henderson, Jr. Lat 37°45' to 38°, long 90°30' to 90°45'. Contour interval, 50 gammas, 20c.
GP-15. Parts of Guadalupe and De Baca Counties, N. Mex. (R. 21 E.-R. 26 E. and T. 3 N.-T. 6 N.), by W. J. Dempsey and M. E. Hill. [Reprinted 1960.] 20c.
GP-16. Parts of Guadalupe and De Baca Counties, N. Mex. (R. 16 E.-R. 21 E. and T. 3 N.-T. 6 N.), by W. J. Dempsey and M. E. Hill. 20c.
GP-17. Parts of San Miguel and Guadalupe Counties, N. Mex. (R. 21 E.-R. 25 E. and T. 6 N.-T. 12 N.), by W. J. Dempsey and M. E. Hill. 20c.
GP-18. Parts of San Miguel and Guadalupe Counties, N. Mex. (R. 16 E.-R. 21 E. and T. 6 N.-T. 10 N. and part of Anton Chico grant), by W. J. Dempsey and M. E. Hill. 20c.
GP-20. Adams County, Ind.
GP-21. Allen County, Ind. Contour intervals, 10 and 50 gammas.
GP-22. Carroll County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner.
GP-23. De Kalb County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner.
GP-24. Howard County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner.
GP-25. Huntington County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas.
GP-26. Kosciusko County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas.
GP-27. Lagrange County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas.
GP-28. Miami County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas.
GP-29. Noble County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas, 15c.
GP-30. Porter County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner.
GP-31. Steuben County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner.
GP-32. Wabash County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner.
GP-33. Wells County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas.
GP-34. Whitley County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas.
GP-35. Boone County, Ind.
GP-36. Clinton County, Ind.
GP-37. Gibson County, Ind.
GP-38. Hendricks County, Ind.
GP-39. Montgomery County, Ind.
GP-40. Perry County, Ind.
GP-41. Putnam County, Ind.
GP-42. Tippecanoe County, Ind.
GP-43. Vanderburgh County, Ind.
GP-44. Vermillion County, Ind.
GP-45. Warren County, Ind.
- GP-46--GP-51. Total intensity aeromagnetic map and accompanying aeromagnetic profiles, by J. R. Balsley, Jr., M. E. Hill, and J. L. Meuschke. 1951. Scale, 1 inch to 1 mile [1:63,360]. Contour intervals, 50 and 250 gammas, 2 sheets, 35c for each set.
GP-46. Parts of Clearwater, Polk, and Red Lake Counties, Minn.
GP-47. Parts of Clearwater and Mahanomen Counties, Minn.
GP-48. Part of Becker County, Minn. Contour intervals, 50, 250, and 1,000 gammas, 3 sheets.
GP-49. Northern part of Otter Tail County, Minn. Contour intervals, 50, 250, and 1,000 gammas.
GP-50. Southern part of Otter Tail County, Minn.
GP-51. Douglas County and part of Grant County, Minn. Contour interval, 50 gammas.
- GP-52. Total intensity aeromagnetic map of Blackford County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. 1951. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 10 gammas, 15c.
- GP-53--GP-90. Total intensity aeromagnetic maps, by J. R. Henderson, Jr., and J. L. Meuschke. 1951. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 10 gammas, 15c each.

- GP-53. Brown County, Ind.
 GP-54. Clark County, Ind.
 GP-55. Crawford County, Ind.
 GP-56. Decatur County, Ind.
 GP-57. Delaware County, Ind.
 GP-58. Floyd County, Ind.
 GP-59. Grant County, Ind., by W. J. Dempsey, J. R. Henderson, Jr., and R. T. Duffner. Contour intervals, 10 and 50 gammas.
 GP-60. Hamilton County, Ind. Contour intervals, 10 and 50 gammas.
 GP-61. Hancock County, Ind. Contour intervals, 10 and 50 gammas.
 GP-62. Harrison County, Ind. Contour intervals, 10 and 50 gammas.
 GP-63. Henry County, Ind.
 GP-64. Jefferson County, Ind.
 GP-65. Jennings County, Ind.
 GP-66. Lawrence County, Ind.
 GP-67. Madison County, Ind.
 GP-68. Morgan County, Ind.
 GP-69. Orange County, Ind.
 GP-70. Owen County, Ind.
 GP-71. Parke County, Ind.
 GP-72. Ripley County, Ind.
 GP-73. Scott County, Ind.
 GP-74. Shelby County, Ind.
 GP-75. Tipton County, Ind.
 GP-76. Washington County, Ind.
 GP-77. Berryman quadrangle, Missouri, by W. J. Dempsey and J. L. Meuschke. Lat 37°45' to 38°, long 91° to 91°15'. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. Contour interval, 50 gammas.
 GP-78. Sullivan quadrangle and part of Union quadrangle, Missouri, by W. J. Dempsey and J. L. Meuschke. 1951. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. Contour intervals, 50 and 250 gammas.
 GP-79. Part of Marquand quadrangle, Missouri, by W. J. Dempsey and J. L. Meuschke. Contour interval, 50 gammas.
 GP-80. Part of Higdon quadrangle, Missouri, by W. J. Dempsey and J. L. Meuschke. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. Contour interval, 50 gammas.
 GP-81. Part of Weingarten quadrangle, Missouri, by W. J. Dempsey and J. L. Meuschke. Scale, 1 inch to $\frac{1}{2}$ mile [1:31,680]. Contour interval, 50 gammas.
 GP-82. Bartholomew County, Ind.
 GP-83. Dearborn County, Ind.
 GP-84. Fayette County, Ind.
 GP-85. Jackson County, Ind.
 GP-86. Jay County, Ind.
 GP-87. Monroe County, Ind.
 GP-88. Ohio County, Ind.
 GP-89. Rush County, Ind.
 GP-90. Switzerland County, Ind.
 GP-91--GP-102. Total intensity aeromagnetic and geologic map [and accompanying aeromagnetic profiles], by J. L. Meuschke and J. R. Henderson, Jr. Scale, 1 inch to 1 mile [1:63,360]. Contour intervals, 50 and 250 gammas. 2 sheets. 70c for each set.
 GP-91. Part of southeastern St. Louis County, Minn. 1952.
 GP-92. East-central St. Louis County, Minn. 1952. Contour intervals, 50, 250, and 1,000 gammas.
 GP-93. Part of northeastern St. Louis County, Minn. 1952. Contour intervals, 50, 250, 500, and 1,000 gammas.
 GP-94. Part of southwestern St. Louis County, Minn. 1952. Contour interval, 50 gammas.
 GP-95. West-central St. Louis County, Minn. 1952.
 GP-96. Part of northwestern St. Louis County, Minn. 1952. Contour interval, 50 gammas.
 GP-97. Northeastern Itasca and southeastern Koochiching Counties, Minn. 1953 [1954]. Contour intervals, 50, 250, and 500 gammas.
 GP-98. East-central Itasca County, Minn. 1953. Contour intervals, 50, 250, 500, 1,000 and 5,000 gammas.
 GP-99. Southeastern Itasca County, Minn. 1953.
 GP-100. Northern Aitkin County, Minn. 1953.
 GP-101. Southern Aitkin County and northern Mille Lacs County, Minn. 1953 [1954].
 GP-102. Parts of Kanabec, Mille Lacs, and Pine Counties, Minn. 1953. Contour interval, 50 gammas.
 GP-103--GP-114. Total intensity aeromagnetic maps, by J. R. Henderson, Jr., and J. L. Meuschke. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 10 gammas. 15c each.
 GP-103. Clay County, Ind. 1952.
 GP-104. Fountain County, Ind. 1951 [1952].
 GP-105. Franklin County, Ind. 1951 [1952].
 GP-106. Green County, Ind. 1951 [1952].
 GP-107. Johnson County, Ind. 1951 [1952].
 GP-108. Knox County and part of Lawrence County, Ind. 1951 [1952].
 GP-109. Marion County, Ind. 1951 [1952].

- GP-110. Randolph County, Ind. 1951 [1952]. Contour intervals, 10 and 50 gammas.
 *GP-111. Sullivan County, Ind. 1951 [1952].
 GP-112. Union County, Ind. 1951 [1952].
 GP-113. Vigo County, Ind., by J. R. Henderson, Jr., J. L. Meuschke, and D. Stuart. 1951 [1952].
 GP-114. Wayne County, Ind. 1951 [1952]. Contour intervals, 10 and 50 gammas.
 GP-115. Aeromagnetic survey of part of Dickinson County, Mich., with preliminary geologic interpretation, by K. L. Wier, J. R. Balsley, Jr., and W. P. Pratt. 1952 [1953]. Horizontal scale, 1 inch to 3 miles [1:190,080]. Vertical scale, 1 inch to about 600 gammas. 70c.
 GP-116. Aeromagnetic survey and geologic reconnaissance of part of Piscataquis County, Me., by J. R. Balsley, Jr. and E. P. Kaiser. 1954. Scale, 1 inch to about a mile [1:62,500]. Contour interval, 20 gammas. 75c.
 GP-117. Total aeromagnetic intensity and geologic map of Stark, Childswold, and part of Russell quadrangles, New York: Aeromagnetic survey, by J. R. Balsley, Jr., M. E. Hill, and H. E. Hawkes; geology, by A. F. Buddington and B. F. Leonard. 1954 [1955]. Lat 44°15' to 44°30', long 74°30' to 75°10'. Scale, 1 inch to 1 mile [1:63,360]. Contour interval, 100 gammas. 75c.
 GP-118. Aeromagnetic survey and geologic map of the Cranberry Lake quadrangle, New York: Aeromagnetic survey, by J. R. Balsley, Jr., M. E. Hill, and H. E. Hawkes; geology, by A. F. Buddington and B. F. Leonard. 1954. Lat 44° to 44°15', long 74°45' to 75°. Scale, 1 inch to about 1 mile [1:62,500]. Contour interval, 100 gammas. 60c.
 GP-119--GP-127. Airborne radioactivity surveys. Scale, 1 inch to about 1 mile [1:62,500]. 50c each.
 GP-119. Folkston area, Charlton County, Ga., and Nassau County, Fla., by R. M. Moxham. 1954.
 GP-120. Painted Desert area, Coconino and Navajo Counties, Ariz., by J. L. Meuschke. 1955.
 GP-121. Fort Myers area, Charlotte and Lee Counties, Fla., by J. L. Meuschke. 1954 [1955].
 GP-122. Gardner area, DeSoto, Hardee, Manatee, and Sarasota Counties, Fla., by J. L. Meuschke. 1955.
 GP-123. Edisto Island area, Berkeley, Charleston, Colleton, and Dorchester Counties, S. C., by J. L. Meuschke. 1955.
 GP-124. Pinto-Chinle area, Apache County, Ariz., by J. L. Meuschke. 1955.
 GP-125. Part of Moffat County, Colo., north of 40°45', by R. W. Johnson. 1955.
 GP-126. Part of Moffat County, Colo., south of 40°45', by R. W. Johnson. 1955.
 GP-127. Myton area, Duchesne and Uintah Counties, Utah, by R. W. Johnson. 1955.
 GP-128--GP-134. Aeromagnetic and geologic maps, by J. L. Meuschke, K. G. Books, J. R. Henderson, Jr., and G. M. Schwartz. 1957. Scale, 1 inch to 1 mile [1:63,360]. \$1 each.
 GP-128. Northern Lake of the Woods and northeastern Roseau Counties, Minn.
 GP-129. Northern Beltrami and southern Lake of the Woods Counties, Minn.
 GP-130. North-central Beltrami and northeastern Clearwater Counties, Minn.
 GP-131. Northwestern Koochiching County, Minn.
 GP-132. Southwestern Koochiching County, Minn.
 GP-133. Northeastern Koochiching County, Minn.
 GP-134. Southeastern Koochiching County, Minn.
 GP-135. Reconnaissance total intensity aeromagnetic map of the southern part of Prince of Wales Island, Alaska, by D. L. Rossman, J. R. Henderson, Jr., and M. S. Walton, Jr. 1956. Scale, 1:126,720. Contour interval, 100 gammas. 50c.
 GP-136. Aeromagnetic map of the Alton quadrangle, New Hampshire, by R. W. Bromery, G. L. Zandle, and others. 1956. Lat 43°15' to 43°30', long 71° to 71°15'. Scale, 1:62,500. Contour intervals, 20 and 100 gammas. 50c.
 GP-137. Aeromagnetic map of the Berwick quadrangle, Maine and New Hampshire, by R. W. Bromery, G. L. Zandle, and others. 1956. Lat 43°15' to 43°30', long 70°45' to 71°. Scale, 1:62,500. Contour intervals, 20 and 100 gammas. 50c.
 GP-138. Aeromagnetic map of Umbagog Lake and vicinity, New Hampshire, by R. W. Bromery, J. R. Kirby, J. L. Vargo, and others. 1957. Scale, 1:62,500. Contour intervals, 50 and 250 gammas. 50c.
 GP-139. Aeromagnetic map of Berlin and vicinity, New Hampshire, by R. W. Bromery, J. R. Kirby, J. L. Vargo, and others. 1957. Scale, 1:62,500. Contour intervals, 50 and 250 gammas. 50c.
 GP-140--GP-148. Aeromagnetic maps, by K. G. Books, G. M. Schwartz, J. L. Meuschke, and W. J. Dempsey. 1958. Scale, 1:63,360. Contour intervals, to and 250 gammas. 2 sheets, \$1 for each set.
 GP-140. Eastern Roseau County, Minn.
 GP-141. Western Roseau County, Minn.
 GP-142. Kittson County, Minn.
 GP-143. Eastern Marshall and northwestern Beltrami Counties, Minn.
 GP-144. Central Marshall and western Pennington Counties, Minn.
 GP-145. Western Marshall and northwestern Polk Counties, Minn.
 GP-146. Parts of Pennington, Red Lake, Beltrami, Clearwater, and Polk Counties, Minn.
 GP-147. Western Red Lake and central Polk Counties, Minn.
 GP-148. Western Polk County, Minn.
 GP-149. Simple Bouguer gravity and generalized geologic map of the northwestern part of the Los Angeles basin, California, by T. H. McCulloh. 1957. Scale, 1:48,000. 75c.
 GP-150--GP-153. Aeromagnetic maps, by J. R. Balsley, Jr., F. P. Gilbert, G. B. Mangan, and others. 1957. Scale, 1:31,680. Contour intervals, 20 and 100 gammas. 50c each.
 GP-150. Laredo quadrangle, Bearpaw Mountains, Mont. Lat 48°15' to 48°30', long 109°45' to 110°.
 GP-151. Shambo quadrangle, Bearpaw Mountains, Mont. Lat 48°15' to 48°30', long 109°30' to 109°45'.

- GP-152. Part of the Centennial Mountain quadrangle, Bearpaw Mountains, Mont. Lat 48° to 48°15', long 109°45' to 110°. Contour intervals, 20, 100, and 200 gammas.
- GP-153. Part of the Warrick quadrangle, Bearpaw Mountains, Mont. Lat 48° to 48°15', long 109°30' to 109°45'. Contour intervals, 20, 100, and 200 gammas.
- GP-154. Aeromagnetic map of the Jo-Mary Mountain area, Piscataquis and Penobscot Counties, Maine, by J. R. Balsley, Jr., Jean Blanchett, J. R. Kirby, and others. 1957. Lat 45°30' to 45°50', long 68°50' to 69°07'. Scale, 1:62,500. Contour intervals, 20 and 100 gammas. 50c.
- GP-155. Aeromagnetic map of the Harrington Lake quadrangle, Piscataquis County, Maine, by J. R. Balsley, Jr., Jean Blanchett, J. R. Kirby, and others. 1957. Lat 45°45' to 46°, long 69° to 69°15'. Scale, 1:62,500. Contour intervals, 20 and 100 gammas. 50c.
- GP-156. Aeromagnetic map of the Copper River basin, Alaska, by G. E. Andreason, W. J. Dempsey, J. R. Henderson, Jr., and F. P. Gilbert. 1958. Lat 61°45' to 63°, long 145° to 147°30'. Scale, 1:125,000. Contour intervals, 20 and 100 gammas. 75c.
- GP-157--GP-172. Aeromagnetic maps, by J. R. Henderson, Jr., Natalie S. Tyson, May Wilson, and others. 1957. Scale, 1:31,680. Contour intervals, 50 and 250 gammas. 50c each.
- GP-157. Warwick quadrangle, Orange County, N. Y. 1958 [1957]. Lat 41°15' to 41°22'30", long 74°15' to 74°22'30".
- GP-158. Part of the Hamburg quadrangle, Sussex County, N. J., by J. R. Henderson, Jr., Natalie S. Tyson, and others. Lat 41°07'30" to 41°15', long 74°30' to 74°37'30".
- GP-159. Wawayanda and part of the Pine Island quadrangles, Sussex and Passaic Counties, N. J., and Orange County, N. Y., by J. R. Henderson, Jr., Natalie S. Tyson, and others. Lat 41°07'30" to 41°20', long 74°22'30" to 74°30".
- GP-160. Greenwood Lake quadrangle, Passaic County, N. J., and Orange County, N. Y. Lat 41°07'30" to 41°15', long 74°15' to 74°22'30".
- GP-161. Part of the Newton east quadrangle, Sussex County, N. J., by J. R. Henderson, Jr., Natalie S. Tyson, and others. Lat 41° to 41°07'30", long 74°37'30" to 74°45".
- GP-162. Franklin quadrangle, Sussex and Morris Counties, N. J., by J. R. Henderson, Jr., Natalie S. Tyson, and others. Lat 41° to 41°07'30", long 74°30' to 74°37'30". Contour intervals, 50, 250, and 1,000 gammas.
- GP-163. Newfoundland quadrangle, Passaic, Morris, and Sussex Counties, N. J., by J. R. Henderson, Jr., Natalie S. Tyson, and others. Lat 41° to 41°07'30", long 74°22'30" to 74°30".
- GP-164. Wanaque quadrangle, Passaic and Bergen Counties, N. J. 1958 [1957]. Lat 41° to 41°07'30", long 74°15' to 74°22'30".
- GP-165. Stanhope quadrangle, Sussex and Morris Counties, N. J., by J. R. Henderson, Jr., Natalie S. Tyson, and others. 1958 [1957]. Lat 40°52'30" to 41°, long 74°37'30" to 74°45".
- GP-166. Dover quadrangle, Morris County, N. J. 1958 [1957]. Lat 40°52'30" to 41°, long 74°30' to 74°37'30".
- GP-167. Boonton quadrangle, Morris County, N. J., by J. R. Henderson, Jr., Natalie S. Tyson, and others. 1958 [1957]. Lat 40°52'30" to 41°, long 74°22'30" to 74°30".
- GP-168. Pompton Plains quadrangle, Morris, Passaic, and Essex Counties, N. J. 1958 [1957]. Lat 40°52'30" to 41°, long 74°15' to 74°22'30".
- GP-169. Chester quadrangle, Morris County, N. J. 1958 [1957]. Lat 40°45' to 40°52'30", long 74°37'30" to 74°45".
- GP-170. Mendham quadrangle, Morris County, N. J., by J. R. Henderson, Jr., Natalie S. Tyson, and others. 1958 [1957]. Lat 40°45' to 40°52'30", long 74°30' to 74°37'30".
- GP-171. Morristown quadrangle, Morris County, N. J. 1958 [1957]. Lat 40°45' to 40°52'30", long 74°22'30" to 74°30".
- GP-172. Caldwell quadrangle, Essex and Morris Counties, N. J. 1958 [1957]. Lat 40°45' to 40°52'30", long 74°15' to 74°22'30".
- GP-173--GP-175. Aeromagnetic maps, by J. R. Henderson, Jr., Natalie S. Tyson, Sybil Gilchrist, and others. 1958. Scale, 1:31,680. Contour intervals, 50 and 250 gammas. 50c each.
- GP-173. Gladstone quadrangle, Somerset, Morris, and Hunterdon Counties, N. J. 1958 [1957]. Lat 40°37'30" to 40°45', long 74°37'30" to 74°45".
- GP-174. Bernardsville and part of the Bound Brook quadrangles, Middlesex, Somerset, and Morris Counties, N. J. Lat 40°32'30" to 40°45', long 74°30' to 74°37'30".
- GP-175. Chatham and parts of the Roselle and Plainfield quadrangles, Morris, Union, Essex, and Somerset Counties, N. J. Lat 40°37'30" to 40°45', long 74°15' to 74°30".
- GP-176--GP-189. Aeromagnetic maps, by J. R. Henderson, Jr., Natalie S. Tyson, E. F. McGowan and others. 1958. Scale, 1:62,500. Contour interval, 50 gammas. 50c each.
- GP-176. Grayland quadrangle, Grays Harbor and Pacific Counties, Wash. Lat 46°45' to 47°, long 124° to 124°15'.
- GP-177. Aberdeen quadrangle, Grays Harbor and Pacific Counties, Wash. Lat 46°45' to 47°, long 123°45' to 124°.
- GP-178. Montesano quadrangle, Grays Harbor and Pacific Counties, Wash. Lat 46°45' to 47°, long 123°30' to 123°45'.
- GP-179. Malone quadrangle, Grays Harbor, Pacific, and Lewis Counties, Wash. Lat 46°45' to 47°, long 123°15' to 123°30".
- GP-180. Rochester quadrangle, Thurston, Grays Harbor, and Lewis Counties, Wash. Lat 46°45' to 47°, long 123° to 123°15'. Contour intervals, 50 and 250 gammas.

- GP-181. Tenino quadrangle, Thurston and Lewis Counties, Wash. Lat 46°45' to 47°, long 122°45' to 123°.
- GP-182. Part of the Yelm quadrangle, Thurston and Lewis Counties, Wash., by J. R. Henderson, Jr., Natalie S. Tyson, S. A. Gilchrist, and others. Lat 46°45' to 47°, long 122°30' to 122°45'.
- GP-183. Cape Shoalwater quadrangle, Pacific County, Wash. Lat 46°30' to 46°45', long 124° to 124°15'.
- GP-184. South Bend quadrangle, Pacific County, Wash. Lat 46°30' to 46°45', long 123°45' to 124°.
- GP-185. Willapa quadrangle, Pacific County, Wash. Lat 46°30' to 46°45', long 123°30' to 123°45'.
- GP-186. Pe Ell quadrangle, Pacific and Lewis Counties, Wash. Lat 46°30' to 46°45', long 123°15' to 123°30'. Contour intervals, 50 and 250 gammas.
- GP-187. Adna quadrangle, Lewis County, Wash. Lat 46°30' to 46°45', long 123° to 123°15'.
- GP-188. Centralia quadrangle, Lewis County, Wash. Lat 46°30' to 46°45', long 122°45' to 123°.
- GP-189. Onalaska quadrangle, Lewis County, Wash., by J. R. Henderson, Jr., Natalie S. Tyson, S. A. Gilchrist, and others. Lat 46°30' to 46°45', long 122°30' to 122°45'.
- GP-190--GP-193. Aeromagnetic and geologic maps, by J. R. Balsley, Jr., A. F. Buddington, and others. 1959. Scale, 1:62,500. Contour intervals, 100 and 500 gammas, 75c each. (Except where otherwise indicated.)
- GP-190. Santa Clara quadrangle and part of the St. Regis quadrangle, Franklin County, N. Y. Lat 44°25' to 44°45', long 74°15' to 74°30'.
- GP-191. Loon Lake quadrangle and part of the Chateaugay quadrangle, Franklin County, N. Y., by J. R. Balsley, Jr., A. W. Postel, and others. Lat 44°30' to 44°53'20", long 74° to 74°15'.
- GP-192. Oswegatchie quadrangle, St. Lawrence, Herkimer, and Lewis Counties, N. Y. Lat 44° to 44°15', long 75° to 75°15'. 50c each.
- GP-193. Tupper Lake quadrangle, St. Lawrence, Hamilton, and Franklin Counties, N. Y. Lat 44° to 44°15', long 74°30' to 74°45'. 50c each.
- GP-194--GP-196. Aeromagnetic maps, by R. W. Bromery, F. P. Gilbert, and others. 1958. Scale, 1:62,500. Contour intervals, 10 and 50 gammas. 50c each.
- GP-194. Littleton and vicinity, New Hampshire and Vermont. Lat 44° to 44°25', long 71°35' to 72°.
- GP-195. Woodsville and vicinity, New Hampshire and Vermont. Lat 44° to 44°25', long 72° to 72°15'.
- GP-196. Lake Tarleton and vicinity, New Hampshire and Vermont. Lat 43°50' to 44°, long 71°50' to 72°15'.
- GP-197. Aeromagnetic map of the Kerby and part of the Grants Pass quadrangles, Josephine and Curry Counties, Oreg., by J. R. Balsley, Jr., R. W. Bromery, E. W. Remington, and others. 1960. Lat 42° to 42°30', long 123°25' to 124°. Scale, 1:96,000. Contour intervals, 50 and 250 gammas. 50c.
- GP-198. Airborne radioactivity and geologic map of the Coastal Plain area, southeast Texas, by R. M. Moxham and D. H. Eargle. 1961. Lat 28° to 29°45', long 97° to 99°15'. Scale, 1:250,000. 75c.
- GP-200--GP-210. Aeromagnetic maps, by R. W. Bromery, G. L. Zandle, and others. 1959. Scale, 1:24,000. Contour interval, 50 gammas. 50c each.
- GP-200. Valley Forge quadrangle, Chester, Montgomery, and Delaware Counties, Pa. Lat 40° to 40°07'30", long 75°22'30" to 75°30'.
- GP-201. Part of the Norristown quadrangle, Philadelphia, Chester, Delaware, and Montgomery Counties, Pa. Lat 40° to 40°07'30", long 75°15' to 75°22'30".
- GP-202. Malvern quadrangle, Chester County, Pa., by R. W. Bromery, B. L. Bennett, and others. Lat 40° to 40°07'30", long 75°30' to 75°37'30".
- GP-203. Part of the West Chester quadrangle, Chester and Delaware Counties, Pa. Lat 39°52'30" to 40°, long 75°30' to 75°37'30".
- GP-204. Part of the Media quadrangle, Chester and Delaware Counties, Pa. Lat 39°52'30" to 40°, long 75°22'30" to 75°30'.
- GP-205. East Greenville quadrangle, Berks, Lehigh, and Montgomery Counties, Pa. Lat 40°22'30" to 40°30', long 75°30' to 75°37'30". Contour intervals, 50 and 250 gammas.
- GP-206. Milford Square quadrangle, Bucks, Lehigh, and Montgomery Counties, Pa. Lat 40°22'30" to 40°30', long 75°22'30" to 75°30'.
- GP-207. Sassamansville quadrangle, Montgomery and Berks Counties, Pa. Lat 40°15' to 40°22'30", long 75°30' to 75°37'30".
- GP-208. Perkiomenville quadrangle, Montgomery and Bucks Counties, Pa. Lat 40°15' to 40°22'30", long 75°22'30" to 75°30'.
- GP-209. Phoenixville quadrangle, Chester and Montgomery Counties, Pa., by R. W. Bromery, B. L. Bennett, and others. Lat 40°07'30" to 40°15', long 75°30' to 75°37'30".
- GP-210. Collegeville quadrangle, Montgomery County, Pa. 1960. Lat 40°07'30" to 40°15', long 75°22'30" to 75°30'. Contour interval, 25 gammas.
- GP-211. Reconnaissance airborne magnetometer survey off southern California, by R. W. Bromery, K. O. Emery, and J. R. Balsley, Jr. 1960. Lat 31°20' to 34°30', long 117° to 121°. Scale, 1 inch to about 15 miles [about 1:937,500]. Contour intervals, 50 and 250 gammas. 50c.
- GP-213. Aeromagnetic map of the Allentown quadrangle, Northampton, Lehigh, and Bucks Counties, Pa., by R. W. Bromery, B. L. Bennett, and others. 1959. Lat 40°30' to 40°45', long 75°15' to 75°30'. Scale, 1:24,000. Contour intervals, 50 and 250 gammas. 75c.
- GP-214--GP-222. Aeromagnetic maps, by R. W. Bromery, G. L. Zandle, and others. 1959. Scale, 1:24,000. Contour interval, 50 gammas. 50c each.
- GP-214. Quakertown quadrangle, Bucks County, Pa. Lat 40°22'30" to 40°30', long 75°15' to 75°22'30".
- GP-215. Buckingham quadrangle, Bucks County, Pa., by R. W. Bromery, J. R. Henderson, Jr., G. L. Zandle, and others. Lat 40°15' to 40°22'30", long 75° to 75°07'30".

- GP-216. Parts of the Lambertville and Stockton quadrangles, Bucks County, Pa., and Hunterdon and Mercer Counties, N. J., by R. W. Bromery, J. R. Henderson, Jr., B. L. Bennett, and others. Lat 40°15' to 40°25', long 74°52'30" to 75°.
- GP-217. Safe Harbor quadrangle, Lancaster and York Counties, Pa. Lat 39°52'30" to 40°, long 76°22'30" to 76°30'.
- GP-218. Conestoga quadrangle, Lancaster County, Pa. Lat 39°52'30" to 40°, long 76°15' to 76°22'30".
- GP-219. Quarryville quadrangle, Lancaster County, Pa. Lat 39°52'30" to 40°, long 76°07'30" to 76°15'.
- GP-220. Morgantown quadrangle, Berks, Lancaster, and Chester Counties, Pa. Lat 40°07'30" to 40°15', long 75°52'30" to 76°.
- GP-221. Elverson quadrangle, Berks and Chester Counties, Pa., by R. W. Bromery, J. R. Henderson, Jr., G. L. Zandle, and others. Lat 40°07'30" to 40°15', long 75°45' to 75°52'30". Contour intervals, 50 and 250 gammas.
- GP-222. Pottstown quadrangle, Berks, Chester, and Montgomery Counties, Pa. 1960. Lat 40°07'30" to 40°15', long 75°37'30" to 75°45'.
- GP-223--GP-238. Aeromagnetic maps, by R. W. Bromery, J. R. Henderson, Jr., G. L. Zandle, and others. 1960. Scale, 1:24,000. Contour interval, 50 gammas. 50c each.
- GP-223. Wagontown quadrangle, Chester County, Pa. Lat 40° to 40°07'30", long 75°45' to 75°52'30".
- GP-224. Downingtown quadrangle, Chester County, Pa., by R. W. Bromery, G. L. Zandle, and others. Lat 40° to 40°07'30", long 75°37'30" to 75°45'.
- GP-225. Part of the Coatesville quadrangle, Chester County, Pa. Lat 39°52'30" to 40°, long 75°45' to 75°52'30".
- GP-226. Part of the Unionville quadrangle, Chester County, Pa., by R. W. Bromery, G. L. Zandle, and others. Lat 39°52'30" to 40°, long 75°37'30" to 75°45'.
- GP-227. Temple quadrangle, Berks County, Pa. Lat 40°22'30" to 40°30', long 75°52'30" to 76°.
- GP-228. Fleetwood quadrangle, Berks County, Pa. Lat 40°22'30" to 40°30', long 75°45' to 75°52'30".
- GP-229. Manatawny quadrangle, Berks County, Pa., by R. W. Bromery, G. L. Zandle, and others. Lat 40°22'30" to 40°30', long 75°37'30" to 75°45'. Contour intervals, 50 and 250 gammas.
- GP-230. Reading quadrangle, Berks County, Pa. Lat 40°15' to 40°22'30", long 75°52'30" to 76°.
- GP-231. Birdsboro quadrangle, Berks County, Pa. Lat 40°15' to 40°22'30", long 75°45' to 75°52'30".
- GP-232. Boyertown quadrangle, Berks and Montgomery Counties, Pa., by R. W. Bromery, G. L. Zandle, and others. Lat 40°15' to 40°22'30", long 75°37'30" to 75°45'.
- GP-233. Honey Brook quadrangle, Chester and Lancaster Counties, Pa. Lat 40° to 40°07'30", long 75°52'30" to 76°.
- GP-234. Parkesburg quadrangle, Chester and Lancaster Counties, Pa. Lat 39°52'30" to 40°, long 75°52'30" to 76°.
- GP-235. Part of the Easton quadrangle, Northampton County, Pa., and Warren County, N. J. Lat 40°37'30" to 40°45', long 75°07'30" to 75°15'.
- GP-236. Part of the Riegelsville quadrangle, Bucks and Northampton Counties, Pa., and Hunterdon and Warren Counties, N. J. Lat 40°30' to 40°37'30", long 75°07'30" to 75°15'.
- GP-237. Part of the Hatboro quadrangle, Bucks, Montgomery, and Philadelphia Counties, Pa. Lat 40°07'30" to 40°15', long 75° to 75°07'30".
- GP-238. Langhorne quadrangle, Bucks County, Pa. 1960. Lat 40°07'30" to 40°15', long 74°52'30" to 75°.
- GP-239--GP-245. Aeromagnetic maps, by R. W. Bromery, G. L. Zandle, and others. 1961. Scale, 1:24,000. Contour interval, 50 gammas. 50c each.
- GP-239. Womelsdorf quadrangle, Berks, Lebanon, and Lancaster Counties, Pa. Lat 40°15' to 40°22'30", long 76°07'30" to 76°15'.
- GP-240. Sinking Spring quadrangle, Berks and Lancaster Counties, Pa. Lat 40°15' to 40°22'30", long 76° to 76°07'30".
- GP-241. Ephrata quadrangle, Lancaster County, Pa. Lat 40°07'30" to 40°15', long 76°07'30" to 76°15'.
- GP-242. Terre Hill quadrangle, Lancaster and Berks Counties, Pa. Lat 40°07'30" to 40°15', long 76° to 76°07'30".
- GP-243. Leola quadrangle, Lancaster County, Pa. Lat 40° to 40°07'30", long 76°07'30" to 76°15'.
- GP-244. New Holland quadrangle, Lancaster County, Pa. Lat 40° to 40°07'30", long 76° to 76°07'30".
- GP-245. Gap quadrangle, Lancaster County, Pa. Lat 39°52'30" to 40°, long 76° to 76°07'30".
- GP-246--GP-253. Preliminary aeroradioactivity and geologic maps, by D. H. Eargle, J. V. A. Trumbull, and R. M. Moxham. 1961. Scale, 1:31,680. Contour interval, 50 feet. 50c each.
- GP-246. Floresville SE quadrangle, Karnes and Wilson Counties, Tex. Lat 29° to 29°07'30", long 98° to 98°07'30".
- GP-247. Stockdale SW quadrangle, Karnes and Wilson Counties, Tex., by J. V. A. Trumbull, D. H. Eargle, and R. M. Moxham. Lat 29° to 29°07'30", long 97°52'30" to 98°.
- GP-248. Stockdale SE quadrangle, Karnes, De Witt, and Wilson Counties, Tex. Lat 29° to 29°07'30", long 97°45' to 97°52'30".
- GP-249. Falls City NW quadrangle, Atascosa, Karnes, and Wilson Counties, Tex., by R. D. Brown, Jr., D. H. Eargle, and R. M. Moxham. Lat 28°52'30" to 29°, long 98°07'30" to 98°15'.
- GP-250. Falls City NE quadrangle, Karnes and Wilson Counties, Tex., by R. D. Brown, Jr., D. H. Eargle, and R. M. Moxham. Lat 28°52'30" to 29°, long 98° to 98°07'30". Contour interval, 20 feet.

- GP-251. Karnes City NW quadrangle, Karnes County, Tex. Lat 28°52'30" to 29°, long 97°52'30" to 98°. Contour interval, 20 feet.
- GP-252. Falls City SW quadrangle, Atascosa, Karnes, and Live Oak Counties, Tex., by D. H. Eargle, R. D. Brown, Jr., and R. M. Moxham. Lat 28°45' to 28°52'30", long 98°07'30" to 98°15'. Contour interval, 20 feet.
- GP-253. Falls City SE quadrangle, Atascosa, Karnes, and Live Oak Counties, Tex., by D. H. Eargle and R. M. Moxham. Lat 28°45' to 28°52'30", long 98° to 98°07'30". Contour interval, 20 feet.
- GP-254--GP-283. Aeromagnetic maps, by R. W. Bromery, G. L. Zandle, and others. 1961. Scale, 1:24,000. Contour interval, 50 gammas, 50c each.
- GP-254. Lebanon quadrangle, Lebanon County, Pa. Lat 40°15' to 40°22'30", long 76°22'30" to 76°30'.
- GP-255. Richland quadrangle, Lebanon and Lancaster Counties, Pa. Lat 40°15' to 40°22'30", long 76°15' to 76°22'30". Contour interval, 25 gammas.
- GP-256. Manheim quadrangle, Lancaster and Lebanon Counties, Pa. Lat 40°07'30" to 40°15', long 76°22'30" to 76°30'. Contour interval, 25 gammas.
- GP-257. Lititz quadrangle, Lancaster and Lebanon Counties, Pa. Lat 40°07'30" to 40°15', long 76°15' to 76°22'30". Contour interval, 25 gammas.
- GP-258. Columbia east quadrangle, Lancaster County, Pa. Lat 40° to 40°07'30", long 76°22'30" to 76°30'. Contour interval, 25 gammas.
- GP-259. Lancaster quadrangle, Lancaster County, Pa. Lat 40° to 40°07'30", long 76°15' to 76°22'30". Contour intervals, 25 and 125 gammas.
- GP-260. Part of the Bedminster quadrangle, Bucks County, Pa. 1960. Lat 40°22'30" to 40°30', long 75°07'30" to 75°15'. Contour interval, 25 gammas.
- GP-261. Part of the Lumberville quadrangle, Bucks County, Pa., and Hunterdon County, N. J. 1960. Lat 40°22'30" to 40°30', long 75° to 75°07'30".
- GP-262. Telford quadrangle, Montgomery and Bucks Counties, Pa. 1960. Lat 40°15' to 40°22'30", long 75°15' to 75°22'30". Contour interval, 25 gammas.
- GP-263. Part of the Doylestown quadrangle, Bucks and Montgomery Counties, Pa. 1960. Lat 40°15' to 40°22'30", long 75°07'30" to 75°15'. Contour interval, 25 gammas.
- GP-264. Lansdale quadrangle, Montgomery County, Pa. 1960. Lat 40°07'30" to 40°15', long 75°15' to 75°22'30". Contour interval, 25 gammas.
- GP-265. Part of the Ambler quadrangle, Montgomery and Bucks Counties, Pa. 1960. Lat 40°07'30" to 40°15', long 75°07'30" to 75°15'. Contour interval, 25 gammas.
- GP-266. Part of the Alburtis quadrangle, Lehigh, Berks, and Northampton Counties, Pa. Lat 40°30' to 40°45', long 75°30' to 75°45'.
- GP-267. Part of the Hummelstown quadrangle, Dauphin County, Pa. Lat 40°15' to 40°22'30", long 76°37'30" to 76°45'.
- GP-268. Part of the Palmyra quadrangle, Dauphin and Lebanon Counties, Pa. Lat 40°15' to 40°22'30", long 76°30' to 76°37'30".
- GP-269. Middletown quadrangle, Dauphin, Lancaster, Lebanon, and York Counties, Pa., by R. W. Bromery, N. C. Natof, and others. Lat 40° to 40°15', long 76°30' to 76°45'.
- GP-270. York quadrangle, York County, Pa. Lat 39°52'30" to 40°, long 76°37'30" to 76°45'.
- GP-271. Red Lion quadrangle, York County, Pa. Lat 39°52'30" to 40°, long 76°30' to 76°37'30".
- GP-272. Glen Rock and part of the New Freedom quadrangles, York County, Pa. Lat 39°42'30" to 39°52'30", long 76°37'30" to 76°45'.
- GP-273. Part of the Bernville quadrangle, Berks County, Pa. Lat 40°22'30" to 40°30', long 76° to 76°07'30". Contour interval, 25 gammas.
- GP-274. Part of the Mechanicsburg quadrangle, Cumberland and York Counties, Pa. Lat 40°07'30" to 40°15', long 77° to 77°07'30".
- GP-275. New Cumberland quadrangle, Cumberland, Dauphin, and York Counties, Pa. Lat 40° to 40°15', long 76°45' to 77°.
- GP-276. Part of the Mount Holly Springs quadrangle, Adams, Cumberland and York Counties, Pa. Lat 40° to 40°07'30", long 77°07'30" to 77°15'.
- GP-277. Part of the Dillsburg quadrangle, Adams, York, and Cumberland Counties, Pa. Lat 40° to 40°07'30", long 77° to 77°07'30".
- GP-278. Part of the Arendtsville quadrangle, Adams and Cumberland Counties, Pa. Lat 39°52'30" to 40°, long 77°15' to 77°22'30".
- GP-279. Biglerville quadrangle, Adams County, Pa. Lat 39°52'30" to 40°, long 77°07'30" to 77°15'.
- GP-280. Hampton quadrangle, Adams and York Counties, Pa. Lat 39°52'30" to 40°, long 77° to 77°07'30".
- GP-281. Abbottstown quadrangle, Adams and York Counties, Pa. Lat 39°52'30" to 40°, long 76°52'30" to 77°.
- GP-282. West York quadrangle, York County, Pa. Lat 39°52'30" to 40°, long 76°45' to 76°52'30".
- GP-283. Part of the Fairfield quadrangle and part of the Emmitsburg quadrangle, Adams County, Pa., and Frederick County, Md., by R. W. Bromery, B. L. White, and others. Lat 39°42'30" to 39°52'30", long 77°15' to 77°22'30".
- GP-284--GP-287. Aeromagnetic maps, by R. W. Bromery, N. C. Natof, and others. 1961. Scale, 1:24,000. Contour interval, 50 gammas, 50c each.
- GP-284. Gettysburg quadrangle and part of the Taneytown quadrangle, Adams County, Pa. Lat 39°42'30" to 39°52'30", long 77°07'30" to 77°15'.
- GP-285. McSherrytown quadrangle and part of the Littlestown quadrangle, Adams County, Pa. Lat 39°42'30" to 39°52'30", long 77° to 77°07'30".

- GP-286. Hanover quadrangle and part of the Manchester quadrangle, Adams and York Counties, Pa. Lat $39^{\circ}42'30''$ to $39^{\circ}52'30''$; long $76^{\circ}52'30''$ to 77° .
- GP-287. Seven Valleys quadrangle and part of the Lineboro quadrangle, York County, Pa. Lat $39^{\circ}42'30''$ to $39^{\circ}52'30''$, long $76^{\circ}45'$ to $76^{\circ}52'30''$.
- GP-306. Natural gamma aeroradioactivity of the Savannah River Plant area, South Carolina and Georgia, by R. G. Schmidt. 1961. Scale, 1:250,000. 50c.
- GP-307. Aeroradioactivity of the Hanford Plant area, Washington and Oregon, by R. G. Schmidt. 1961. Scale, 1:250,000. 50c.

HYDROLOGIC INVESTIGATIONS ATLASES

[Maps or charts on one or more sheets, giving information obtained from hydrologic investigations. Distinguishing prefix "HA".]

- HA-1. Hydrology of the San Bernardino and eastern San Gabriel Mountains, California, by H. C. Troxell and others. 1954. 13 pls., incl. maps and diag. \$3.50.
- HA-2. Areas of principal ground-water investigations in the Arkansas, White, and Red River basins, by S. W. Lohman and V. M. Burtis. 1953 [1954]. Lat 31° to 39°, long 91° to 106°. Scale, 1:2,500,000. 40c.
- HA-3. General availability of ground water and depth to water level in the Arkansas, White, and Red River basins, by S. W. Lohman, V. M. Burtis, and others. 1953 [1954]. Lat 31° to 39°, long 91° to 106°. Scale, 1:2,500,000. 25c.
- HA-4. Configuration of the water table in Nebraska, by R. L. Schreurs. 1954. Scale, 1 inch to 20 miles [1:1,267,200]. 25c.
- HA-5. Map of the Louisville area, Kentucky, showing contours on the bedrock surface, compiled by L. M. MacCary. 1955. Lat 38°04' to 38°21', long 85°38' to 85°55'. Scale, 1 inch to about 4,700 feet [1:55,400]. Contour interval, 10 feet. 50c.
- HA-6. Reconnaissance of the geology and ground-water resources of southern Sioux County, Nebr., by Edward Bradley, with a section on The chemical quality of the ground water, by F. H. Rainwater. 1956. 50c.
- HA-7. Average annual runoff and precipitation in the New England-New York area, by C. E. Knox and T. J. Nordenson. 1955. Lat 41° to 46°, long 70° to 77°15'. Scale, 1 inch to about 16 miles [1:1,000,000]. 75c.
- HA-8. Availability of ground water for domestic use in Jefferson County, Ky., by L. M. MacCary. 1956. Lat 38°00' to 38°22'00", long 82°25' to 85°55'. Scale, 1 inch to about 1½ miles [1:93,750]. 75c.
- HA-9. Ground-water resources of part of Weld, Logan, and Morgan Counties, Colo., by L. J. Bjorklund, with a section on The chemical quality of the ground water, by F. H. Rainwater. 1957 [1958]. 75c.
- HA-10. Summary of occurrence of ground water in Kentucky, by G. E. Hendrickson. 1958. Scale, 1:750,000. 3 p. 75c.
- HA-11. Precipitation, water loss, and runoff in the Delaware River basin and New Jersey, by A. G. Hely, T. J. Nordenson, and others. 1961. 11 p. \$1.50.
- HA-12. Ground-water reconnaissance of the North Loup Division of the lower Platte River basin, Nebraska, by C. F. Keech and M. P. Carlson. 1959. 11 p. \$1.
- HA-14. Floods of the Kansas River, Topeka, Kansas, in 1935 and 1951. 1959. Lat 39° to 39°07'30", long 95°37'30" to 95°45'. Scale, 1:24,000. Contour interval, 10 feet. 75c.
- HA-15. ¹Availability of ground water in Boone, Campbell, Grant, Kenton, and Pendleton Counties, Ky., (County group 15), by W. N. Palmquist, Jr., and F. R. Hall. 1960. Lat 38°30' to 39°05', long 84°15' to 84°50'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-16. Availability of ground water in Bracken, Harrison, Mason, Nicholas, and Robertson Counties, Ky., (County group 16), by W. N. Palmquist, Jr., and F. R. Hall. 1960. Lat 38°15' to 38°50', long 83°40' to 84°30'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-17. Availability of ground water in Lewis and Rowan Counties, Ky., (County group 17), by W. N. Palmquist, Jr., and F. R. Hall. 1960. Lat 38°05' to 38°40', long 83°05' to 83°40'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-18. Availability of ground water in Bath, Fleming, and Montgomery Counties, Ky., (County group 18), by F. R. Hall and W. N. Palmquist, Jr. 1960. Lat 37°55' to 38°30', long 83°30' to 84°05'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-19. Availability of ground water in Clark, Estill, Madison, and Powell Counties, Ky., (County group 19), by F. R. Hall and W. N. Palmquist, Jr. 1960. Lat 37°35' to 38°05', long 83°40' to 84°30'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-20. Availability of ground water in Boyle, Garrard, Lincoln, and Mercer Counties, Ky., (County group 20), by W. N. Palmquist, Jr., and F. R. Hall. 1960. Lat 37°15' to 38°, long 84°20' to 85°. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-21. Availability of ground water in Marion, Nelson, and Washington Counties, Ky., (County group 21), by F. R. Hall and W. N. Palmquist, Jr. 1960. Lat 37°25' to 37°55', long 85°05' to 85°40'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-22. Availability of ground water in Bullitt, Jefferson, and Oldham Counties, Ky., (County group 22), by W. N. Palmquist, Jr., and F. R. Hall. 1960. Lat 37°50' to 38°30', long 85°20' to 85°55'. Scale, 1:125,000. 3 sheets. \$1 per set.

¹Hydrologic Investigations Atlases HA-15 to HA-25, scale 1:125,000, include geologic maps and maps showing the availability of ground water in the Blue Grass region, Kentucky. U. S. Geological Survey Water-Supply Paper 1533 contains a text description and illustrations providing further information on the occurrence and quality of the ground water in the Blue Grass region.

- HA-23. Availability of ground water in Carroll, Gallatin, Henry, Owen, and Trimble Counties, Ky., (County group 23), by F. R. Hall and W. N. Palmquist, Jr. 1960. Lat 38°25' to 38°50', long 84°35' to 85°25'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-24. Availability of ground water in Anderson, Franklin, Shelby, Spencer, and Woodford Counties, Ky., (County group 24), by F. R. Hall, and W. N. Palmquist, Jr. 1960. Lat 37°55' to 38°20', long 84°40' to 85°30'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-25. Availability of ground water in Bourbon, Fayette, Jessamine, and Scott Counties, Ky., (County group 25), by W. N. Palmquist, Jr., and F. R. Hall. 1960. Lat 37°45' to 38°25', long 84° to 84°40'. Scale, 1:125,000. 3 sheets. \$1 per set.
- HA-39. Floods in the Little Calumet River basin near Chicago Heights, Illinois, in 1954 and 1957. 1960 [1961]. Lat 41°30' to 41°37'30", long 87°30' to 87°37'30". Scale, 1:24,000. Contour interval, 5 feet. 75c.
- HA-40. Floods on the Kokosing River, Dry Creek, and Center Run, at Mount Vernon, Ohio, in 1959. 1961. Scale, 3 inches to about 1 mile [1:21,120.] 50c.
- HA-42. Geologic map of White Sands Missile Range headquarters area, Dona Ana County, New Mexico, showing location of wells, contours on the water table, and location of proposed dams, reservoirs and recharge-discharge wells, by E. H. Herrick. 1961. Scale, 1:31,680. Contour interval, 100 feet. 50c.
- HA-43. Floods at Springfield, Ohio, in 1913 and 1959. 1961. Lat 39°52'30" to 40°, long 83°45' to 83°52'30". Scale, 1:24,000. Contour interval, 10 feet. 75c.

TOPOGRAPHIC MAPS NATIONAL TOPOGRAPHIC MAP SERIES

Quadrangle Maps

The National Topographic Map Series is a term used to designate collectively the several quadrangle map series of the United States, its Territories and possessions. Each individual series is intended to fulfill a specific type of map requirement and is classified generally according to its publication scale. Large-scale maps (1:20,000, 1:24,000, 1:30,000, and 1:31,680) are especially suitable for densely settled areas and other areas where detailed map information is needed for engineering planning and similar purposes. Medium-scale maps (1:62,500 and 1:63,360) are considered adequate for general use where detailed planning is not contemplated. Small-scale maps (1:125,000, 1:250,000, and 1:1,000,000) cover large areas on a single sheet and are useful in planning statewide and nationwide projects. A few special maps are published on other scales. The contour interval differs according to the scale of the map and the relief of the country. Under the general plan adopted in 1882 for the production of a standard series of topographic maps each map covers a quadrangle area bounded by lines of latitude and longitude, by which the location of any point on the surface of the earth is readily determined. Maps with these standard boundaries are usually referred to as quadrangle maps. These maps and their essential specifications as to size are given in the following table:

Series	Scale	1 inch equals	Quadrangle size (lat-long)	Quadrangle size (sq mi)	Paper size
United States:					
7½-minute.	1:24,000	2,000 ft	7½' x 7½'	49-70	22 x 27 23 x 27
7½-minute.	1:31,680	0.50 mile	7½' x 7½'	49-68	17 x 21
15-minute.	1:62,500	0.98 mile	15' x 15'	197-282	17 x 21 19 x 21
1:63,360 (Alaska)	1:63,360	1.00 mile	15' x 20'-30'	207-281	17 x 21 18 x 21
30-minute.	1:125,000	1.97 miles	30' x 30'	789-1,082	17 x 21
1-degree	1:250,000	3.94 miles	1° x 1°	3,173-4,335	17 x 21
1:250,000	1:250,000	3.94 miles	1° x 2°	6,346-8,669	22 x 29 22 x 32 22 x 34
Reconnaissance (Alaska)	1:250,000	3.94 miles	1° x 2°-3°	4,580-7,310	23 x 30
1:250,000 (Alaska)	1:250,000	3.94 miles	1° x 2°-3°	4,580-7,310	23 x 30
1:250,000 (Hawaii)	1:250,000	3.94 miles	1° x 1°30'-1°35'	6,730-7,104	24 x 29
1:1,000,000	1:1,000,000	15.78 miles	4° x 6°	73,734-102,759	27 x 27
1:1,000,000	1:1,000,000	15.78 miles	4° x 12°	78,960-122,066	26 x 30
Puerto Rico:					
7½-minute.	1:20,000	0.31 mile	7½' x 7½'	71	31 x 36
7½-minute.	1:30,000	0.47 mile	7½' x 7½'	71	20 x 22
Virgin Islands:					
1:24,000	1:24,000	2,000 ft	7½' x 6'	56	20 x 27
7½-minute.	1:24,000	2,000 ft	7½' x 7½'	71	23 x 27

Each quadrangle is designated by the name of a city, town, or prominent feature within it, and on the margins of the map are printed the names of adjoining quadrangle maps that have been published.

The maps are generally printed in three or more colors. The cultural features, such as roads, railroads, cities, and towns, as well as the lettering, are in black; the water features are in blue; and the features of relief, such as hills, mountains, and valleys, are shown by contour lines in brown. Additional information, such as woodland, is shown in green; highway classification, urban areas, and United States land lines are shown in red. Copies with the woodland overprint are supplied where available unless non-woodland copies are specifically requested. A topographic map index for each State and a folder describing topographic maps and symbols are available on request.

METROPOLITAN AREA MAPS

In some metropolitan areas several topographic quadrangle maps have been combined to form a single-sheet map. The maps published before 1962, with the price of each map, are listed on pages 251-252.

SHADED-RELIEF MAPS

Certain topographic quadrangle maps showing physiographic features of special interest have been published in a shaded-relief edition. Also, selected maps of the 1:250,000 scale series, state maps, and some national parks and monuments maps are published in a shaded-relief edition. The shading accentuates the physical features, thereby giving the map the appearance of a model of the surface. Maps for which a shaded-relief edition is available, and their prices, are listed on the indexes to topographic mapping in each state. State maps and maps of national parks and monuments for which this edition has been published are listed on pages 252-255.

UNITED STATES 1:250,000 SCALE SERIES

The maps in this series are published generally in units of one degree in latitude by two or three degrees in longitude, and cover areas of from 4,580 to 8,669 square miles, depending upon the latitude of the individual areas. The contour interval ranges from 25 feet in areas where the terrain is flat to 500 feet in some mountainous areas. (The physical features are further accentuated on most of the Alaska maps in this series by the addition of shaded relief.) Copies with a woodland overprint are supplied where available unless maps without this information are specifically requested. The maps in this series are 50 cents each. An index is available on request.

UNITED STATES 1:1,000,000 SCALE SERIES

The maps in this series are published in units of four degrees of latitude by six degrees of longitude (twelve degrees for Alaska). The area covered by each map ranges from 73,734 to 122,066 square miles, depending on the latitude.

Two editions of some of these maps are available. The initial edition of 14 maps was published as the United States contribution to the International Map of the World (IMW) and was prepared by the Geological Survey in accordance with standard specifications for that series. The preparation of new maps strictly in accord therewith has been discontinued for the present; however, a second edition is being published based on a series of 1:1,000,000 scale maps compiled by the Army Map Service for military use. The maps of the second edition, distributed by the Geological Survey for civil use, usually contain more recent information than maps of the IMW series. Although they do not conform to the IMW specifications in all respects, the maps of the second edition will satisfy the same general purposes. In both editions, each map is numbered in accordance with the designation system adopted for the IMW series and is named for one of the principal localities or natural features within its area.

The maps show the principal cities and towns, railroads, and political boundaries in black; the roads in red; the water features in blue (water depths in blue on the IMW series only); and topographic features by brown contour lines and gradient tints. Contour intervals vary from 50 meters where the terrain is relatively flat to 500 meters in mountainous regions. The price of each map is \$1. An index is available on request.

ALASKA

Areas of particular economic importance in Alaska are covered by topographic maps published at the scale of 1:63,360. Unlike the "15-minute" quadrangle series published for the other States, those of Alaska are published in units of either 15 minutes of latitude by 20 minutes of longitude, or 15 minutes of latitude by 30 minutes of longitude. These maps are 30 cents each.

HAWAII

Single sheet maps at 1:62,500 scale are available for Kauai, Oahu, Niihau, Molokai, Kahoolawe, and Maui Islands. Twenty-two 15-minute quadrangles covering Hawaii Island have been published at 1:62,500 scale. A new series of topographic maps of the Hawaiian Islands at the scale of 1:24,000 is in preparation; maps of Oahu, Molokai, and Maui at this scale have been completed. The price of the maps of Hawaii ranges from 30 to 75 cents each.

PUERTO RICO

Puerto Rico has been completely mapped and the maps published at 1:20,000 scale. Sixty-five quadrangles cover Puerto Rico and Culebra Islands. The maps are 30 cents each. The single-sheet map of Vieques Island is 50 cents.

VIRGIN ISLANDS

The Virgin Islands have also been completely mapped and the maps have been published at 1:24,000 scale. Eight maps are required to cover the island group. The maps are 30 cents each.

AERIAL PHOTOGRAPHS

Aerial photographs are obtained by the Geological Survey in connection with its geologic and topographic mapping activities. These photographs range in scale from 1:15,000 to 1:60,000, the scale being governed by the contour interval, the nature of the terrain, and the type of stereoplotting equipment to be used.

Reproductions of these photographs at contact print size (9 x 9 inches) or enlargements up to four diameters (36 x 36 inches) are available at moderate prices. Puerto Rico, the Virgin Islands, and American Samoa have been photographed by various agencies of the Federal Government (see Status Maps, p. 256).

Aerial mosaics of some areas are prepared for special investigations. The areas for which they are available for sale to the public by various Federal Government agencies are shown on the status map described on p. 256.

ANTARCTICA RECONNAISSANCE SERIES

These are shaded-relief maps of certain areas in Antarctica, prepared from aerial photography flown by the U. S. Navy. The maps, which are published at the scale of 1:250,000, carry a basic contour interval of 200 meters, and are 26 by 30 inches.

Shaded-relief maps at the scale of 1:500,000, showing coastal areas of Wilkes Land, are also available. They carry a basic contour interval of 1,000 feet, with supplemental 500-foot contours in some areas, and are 25 by 33 inches. Price of each Antarctic map is 50 cents.

GEODETTIC CONTROL DIAGRAMS

The Geological Survey in cooperation with the Coast and Geodetic Survey is publishing a series of geodetic control diagrams on a planimetric base of the 1:250,000 scale maps. The diagrams show the location of level, and transit-traverse lines, electronic distance measurements, and triangulation stations established by the Two agencies. The work of the Geological Survey is shown in red and that of the Coast and Geodetic Survey in black. The price of each diagram is 50 cents.

INDEXES TO PUBLISHED QUADRANGLE MAPS

Index maps of each State, and of Puerto Rico and the Virgin Islands, showing the areas covered by published topographic maps, may be obtained free on request to the Geological Survey, Washington, D. C. 20242. The text of the index map contains a brief description of the topographic quadrangle map series, special maps of areas within the State, and maps of the United States published at various scales. Also included are a list of map reference libraries where the published maps of the Geological Survey may be consulted, and a list of the local agents from whom topographic maps may be purchased.

Further information concerning maps and related material may be obtained from the Map Information Office, Geological Survey, Washington, D. C. 20242.

LIST OF TOPOGRAPHIC MAPS

[Asterisk (*) indicates map out of print]

UNITED STATES

Contour Maps

Scale, 1:7,000,000. 30c.

Shaded Relief Maps

*Scale, 1:3,168,000.

*Scale, 1:7,000,000.

STATES

Contour Maps

Altitude shown by brown lines. See following table for "New Series" of contour maps.

*Colorado. Scale, 1:500,000.

*Connecticut. Scale, 1:125,000.

*Massachusetts-Rhode Island. Scale, 1:250,000.

*Texas. Scale, 1:500,000. 4 sheets.

Shaded Relief Maps

Relative altitude shown by brown shading. See following table for "New Series" of relief maps.

*Arizona. Scale, 1:500,000.

Idaho. Scale, 1:760,320. 75c.

*Kentucky. Scale, 1:500,000.

*Ohio. Scale, 1:380,160.

Elevation Map

Reconnaissance and elevation of southeastern New Mexico, by W. B. Lang, shows hachures in brown and spot elevations in red. Scale, 1:253,440. \$1.50.

Base Maps

Show counties, principal cities and towns, railroads and streams. See following table for State base maps showing additional features.

Scale, 1:1,000,000. California, 50c; Texas, 75c; all others, 20c.

Scale, 1:500,000. See following table (p. 250.)

Scale: 1:500,000	Base only	Base with high-ways	Topo-graphic (base, highways and contours)	Shaded relief on modified base	Size in inches, overall
Alabama ¹ - - - - -	\$0.50	- - - -	- - - -	- - - -	30 x 46
Arizona - - - - -	1.00	- - - -	² 2.00	2.00	44 x 56
Arkansas ¹ - - - - -	.50	- - - -	- - - -	- - - -	34 x 39
California:					
North half - - - - -	1.00	- - - -	2.00	- - - -	46 x 64
South half - - - - -	1.00	- - - -	2.00	- - - -	46 x 64
Colorado - - - - -	1.00	- - - -	² 2.00	2.00	44 x 53
Florida ¹ - - - - -	.50	- - - -	- - - -	- - - -	44 x 60
Georgia ¹ - - - - -	.50	- - - -	- - - -	- - - -	34 x 41
Idaho ¹ - - - - -	.50	- - - -	- - - -	- - - -	44 x 64
Illinois - - - - -	1.00	- - - -	2.00	- - - -	32 x 53
Indiana - - - - -	1.00	\$2.00	- - - -	- - - -	27 x 42
Iowa - - - - -	1.00	2.00	- - - -	- - - -	32 x 46
Kansas ¹ - - - - -	.50	- - - -	- - - -	- - - -	34 x 56
Kentucky - - - - -	1.00	- - - -	² 2.00	2.00	27 x 56
Louisiana ¹ - - - - -	.50	- - - -	- - - -	- - - -	40 x 44
Maine - - - - -	1.00	- - - -	² 2.00	2.00	30 x 44
Maryland-Delaware-District of Columbia - - - - -	.75	- - - -	³ 1.50	1.50	23 x 36
Massachusetts-Rhode Island-Connecticut - - - - -	.75	- - - -	³ 1.50	1.50	24 x 32
Michigan (two sheets) ¹ - - - - - set - - - - -	1.00	- - - -	- - - -	- - - -	52 x 66
Minnesota (two sheets) ¹ - - - - - set - - - - -	.50	- - - -	- - - -	- - - -	50 x 60
Mississippi - - - - -	1.00	2.00	- - - -	- - - -	31 x 52
Missouri - - - - -	1.00	- - - -	2.00	2.00	47 x 54
Montana (two sheets) ¹ - - - - - set - - - - -	.50	- - - -	- - - -	- - - -	47 x 47
Nebraska ¹ - - - - -	.50	- - - -	- - - -	- - - -	31 x 59
Nevada ¹ - - - - -	.50	- - - -	- - - -	- - - -	44 x 64
New Hampshire-Vermont - - - - -	.75	- - - -	1.50	1.50	22 x 28
New Jersey - - - - -	.75	- - - -	³ 1.50	1.50	23 x 28
New Mexico - - - - -	1.00	- - - -	2.00	- - - -	52 x 54
New York - - - - -	1.00	- - - -	2.00	2.00	44 x 56
North Carolina - - - - -	1.00	- - - -	² 2.00	2.00	29 x 66
North Dakota ¹ - - - - -	.50	- - - -	- - - -	- - - -	32 x 50
Ohio - - - - -	1.00	- - - -	2.00	2.00	34 x 47
Oklahoma - - - - -	1.00	2.00	- - - -	- - - -	35 x 54
Oregon - - - - -	1.00	² 2.00	- - - -	- - - -	44 x 55
Pennsylvania - - - - -	1.00	- - - -	² 2.00	2.00	29 x 44
South Carolina ¹ - - - - -	.50	- - - -	- - - -	- - - -	32 x 39
South Dakota ¹ - - - - -	.50	- - - -	- - - -	- - - -	34 x 52
Tennessee - - - - -	1.00	- - - -	² 2.00	2.00	19 x 65
Texas (four sheets) ¹ - - - - - set - - - - -	2.00	- - - -	- - - -	- - - -	44 x 54
Utah - - - - -	1.00	- - - -	² 2.00	2.00	41 x 50
Virginia - - - - -	1.00	- - - -	² 2.00	2.00	30 x 64
Washington ¹ - - - - -	.50	- - - -	- - - -	- - - -	37 x 52
West Virginia ¹ - - - - -	.50	- - - -	- - - -	- - - -	33 x 38
Wisconsin (two sheets) ¹ - - - - -	.50	- - - -	- - - -	- - - -	43 x 45
Wyoming - - - - -	1.00	2.00	- - - -	- - - -	41 x 52

¹ "Old Series" State base maps; prepared during the period 1910-1932. All others listed in this table are "New Series" maps compiled since 1948.

² Also show urban areas, national parks, national forests, and Indian reservations.

³ Topographic with shaded relief.

METROPOLITAN AREA MAPS

[Metropolitan area maps are composed of several quadrangle maps of the National Topographic Map Series covering selected cities and adjacent areas. Except as noted, they are published at the scale of 1:24,000 - 1 inch equals 2000 feet. The size is given in inches. Each map is printed in five colors and shows all features that appear on the standard quadrangles. The date shown is the latest survey date of the quadrangles included in the area map. Indexes to topographic maps published for each State, Puerto Rico, and the Virgin Islands indicate the area included in the metropolitan maps.]

- Albuquerque and vicinity, N. Mex. 1960. (41 x 45). \$1.50.
- Atlanta and vicinity, Ga. 1955. (50 x 56). \$1.50.
- Austin and vicinity, Tex. 1955. (27 x 37). \$1.
- Baton Rouge and vicinity, La. 1954. (37 x 44). \$1.50
- Bridgeport and vicinity, Conn. 1951. (30 x 50). \$1.
- Buffalo and vicinity, N. Y. 1948. (39 x 45). \$1.50.
- Champaign-Urbana and vicinity, Ill. 1950. (22 x 27). 30c.
- Chattanooga and vicinity, Tenn.-Ga. 1958. (42 x 47). \$1.50.
- Chicago and vicinity, Ill.-Ind.:
 - Sheet 1 (Evanston). 1953. (48 x 72). \$1.50.
 - Sheet 2 (Chicago Loop). 1953. (48 x 72). \$1.50.
 - Sheet 3 (Blue Island). 1953. (48 x 72). \$1.50.
- Cincinnati and vicinity, Ohio-Ky. 1955. (50 x 72). \$1.50.
- Cleveland and vicinity, Ohio. 1953. (50 x 72). \$1.50.
- Columbus and vicinity, Ohio. 1955. (39 x 53). \$1.50.
- Davenport, Rock Island, Moline, and vicinity, Ill.-Iowa. 1953. (39 x 46). \$1.50.
- Dayton and vicinity, Ohio. 1955. (50 x 48). \$1.50.
- Denver and vicinity, Colo. 1957. (50 x 69). \$1.50.
- Detroit and vicinity, Mich.-Ont.:
 - North half. 1955. (46 x 72). \$1.50.
 - South half. 1955. (46 x 72). \$1.50.
- Duluth, Superior, and vicinity, Minn.-Wis. 1954. (36 x 54). \$1.50.
- Fort Worth and vicinity, Texas. 1955. (42 x 53). \$1.50.
- Gary and vicinity, Ind.-Ill. 1953. (46 x 58). \$1.50.
- Hartford, New Britain, and vicinity, Conn. 1953. (47 x 53). \$1.50.
- Honolulu and vicinity, Hawaii. 1954. (50 x 70). \$1.50.
- Houston and vicinity, Tex. 1955. (50 x 65). \$1.50.
- Indianapolis and vicinity, Ind. 1946. (38 x 47). \$1.
- Juneau and vicinity, Alaska. 1948. (28 x 30). 50c.
- Knoxville and vicinity, Tenn. 1953. (28 x 33). \$1.
- Little Rock and vicinity, Ark. 1954. (35 x 40). \$1.50.
- Long Beach and vicinity, Calif. 1951. (43 x 72). \$1.50.
- Los Angeles and vicinity, Calif.:
 - (East), Calif. 1953. (50 x 72). \$1.50.
 - (West), Calif. 1953. (50 x 72). \$1.50.
- Louisville and vicinity, Ky.-Ind. 1955. (41 x 46). \$1.50.
- Madison and vicinity, Wis. 1959. (38 x 45). \$1.50.
- Minneapolis, St. Paul, and vicinity, Minn. 1952. (46 x 56). \$1.50.
- New Haven and vicinity, Conn. 1954. (38 x 59). \$1.50.
- New Orleans and vicinity, La. 1952. (47 x 48). \$1.50.
- New York and vicinity (8 sheets):
 - Brooklyn, N.Y.-N.J. 1957. (39 x 54). \$1.50.
 - Harlem, N.Y.-N.J. 1956. (39 x 54). \$1.50.
 - Hempstead, N.Y. 1955. (39 x 54). \$1.50.
 - Oyster Bay, N.Y.-Conn. 1955. (39 x 54). \$1.50.
 - Paterson, N.J.-N.Y. 1955. (39 x 54). \$1.50.
 - Plainfield, N.J.-N.Y. 1956. (39 x 54). \$1.50.
 - Sandy Hook, N.J.-N.Y. 1954. (44 x 54). \$1.50.
 - Staten Island, N.Y.-N.J. 1955. (39 x 54). \$1.50.
- Norfolk, Portsmouth, Newport News, and vicinity, Va. 1955. (50 x 72). \$1.50.
- Oakland and vicinity, Calif. 1947. (42 x 72). \$1.50.
- Peoria and vicinity, Ill. 1949. (30 x 39). \$1.
- Philadelphia and vicinity, Pa.-N.J.:
 - (East), Pa.-N.J. 1955 (44 x 72). \$1.50.
 - (West), Pa.-N.J. 1956. (44 x 72). \$1.50
- Portland, Vancouver, and vicinity, Oreg.-Wash. 1954. (50 x 70). \$1.50.
- Rochester and vicinity, N.Y. 1952. (46 x 55). \$1.50.
- Salt Lake City and vicinity, Utah. 1952. (34 x 46). \$1.
- San Diego and vicinity, Calif. 1953. (49 x 70). \$1.50.
- San Francisco and vicinity, Calif. 1954. (42 x 72). \$1.50.
- San Juan and vicinity, Puerto Rico. 1957. Scale, 1:20,000. (48 x 57). \$1.50.
- Seattle and vicinity, Wash. 1950. (42 x 70). \$1.50.
- Shreveport and vicinity, La. 1960. (43 x 54). \$1.50.
- Spokane and vicinity, Wash. 1950. (36 x 40). \$1.
- Toledo and vicinity, Ohio-Mich. 1952. (45 x 45). \$1.50.

Washington and vicinity, D.C.-Md.-Va. 1956. (50 x 72). \$1.50.
 Wilkes-Barre, Pittston, and vicinity, Pa. 1950. (38 x 46). \$1.50.
 Wilmington and vicinity, N.J.-Del.-Pa. 1955. (50 x 70). \$1.50.
 Worcester and vicinity, Mass. 1953. (38 x 46). \$1.50.
 Youngstown and vicinity, Ohio-Pa. 1954. (38 x 44). \$1.50.

SPECIAL TOPOGRAPHIC MAPS¹

Acadia National Park and vicinity, Maine, by G. M. Wood. 1939-56 [1959]. Scale, 1:24,000. Revised. Contour or shaded-relief edition, \$1.50 each.
 Airlie, Oreg. 1922. Scale, 1:31,680. 30c.
 Alta Basin and vicinity, Colo. 1936. Scale, 1:12,000. 30c.
 Asher, Okla. 1906. Scale, 1:48,000. 30c.
 Aspen and vicinity, Colo. 1891. Scale, 1:9,600. 30c.
 Austin area, Reese River mining district, Nev. 1937. Scale, 1:4,800. 30c.
 Bakersfield, Calif. 1904. Scale, 1:62,500. 30c.
 Bandelier National Monument, N. Mex. 1953 [1959]. Scale, 1:24,000. Contour or shaded-relief edition, \$1.50 each.
 Barnes Bridge, Texas. 1910. Scale, 1:31,680. 30c.
 Big Bar and vicinity, Calif. 1911. Scale, 1:250,000. 30c.
 Bingham mining map, Utah. 1900. Scale, 1:20,000. 30c.
 Bisbee and vicinity, Ariz. 1902. Scale, 1:12,000. 30c.
 Black Canyon of the Gunnison National Monument, Colo. 1934-50. Scale, 1:24,000. Contour or shaded-relief edition, 50c each.
 Bonanza and vicinity, Colo. 1920. Scale, 1:12,000. 30c.
 Breckenridge (special), Colo. 1908. Scale, 1:24,000. 30c.
 Bridge Canyon, Ariz. 1926. Scale, 1:62,500. 30c.
 Bright Angel quadrangle, Ariz., by F. E. Matthes. 1903. Scale, 1:48,000. 30c.
 Bryce Canyon National Park, Utah. 1932. Scale, 1:31,680. Contour or shaded-relief edition, 75c each.
 Bull Valley district, Utah. 1938. Scale, 1:48,000. 30c.
 Butte (special), Mont. 1895-1903. Scale, 1:15,000. 50c.
 *Camp Custer, Mich., by Frank Leverett. 1918. Scale, 1:62,500.
 *Camp Devens and vicinity, Mass., by W. W. Atwood. 1918. Scale, 1:62,500.
 Camp Dodge, Iowa, by J. H. Lees and W. C. Alden. 1917. Scale, 1:62,500. 30c.
 Camp Gordon and vicinity, Ga., by F. E. Matthes. 1918. Scale, 1:125,000. 30c.
 Camp Grant, Ill. 1917. Scale, 1:62,500. 50c.
 *Camp McClellan, Ala., by F. E. Matthes. 1918. Scale, 1:125,000.
 Camp Albert L. Mills, N. Y., by W. C. Alden. 1897-1918. Scale, 1:62,500. 30c.
 *Camp Pike, Ark., by L. W. Stephenson and H. D. Miser. 1918. Scale, 1:125,000.
 *Camp Sherman, Ohio, by M. R. Campbell. 1918. Scale, 1:62,500.
 Camp Taylor and vicinity, Ky., by Charles Butts. 1918. Scale, 1:62,500. 30c.
 *Camp Upton, N. Y., by W. C. Alden. 1918. Scale, 1:62,500.
 Canyon de Chelly National Monument, Ariz. 1938. Scale, 1:48,000. 50c.
 Carlsbad Caverns National Park, N. Mex. 1934. Scale, 1:24,000. 30c.
 Cartersville mining district, Ga. 1941. Scale, 1:62,500. 30c.
 Cedar Breaks National Monument, Utah. 1936. Scale, 1:15,840. 30c.
 Central City (special), Colo. 1904. Scale, 1:12,000. 30c.
 Central Owens Valley, Calif. 1911. Scale, 1:125,000. 50c.
 Central Valley, Calif. 1957. Scale, 1:250,000.
 Delta area, \$1.
 North area, \$1.
 South area, \$1.
 Charlottesville and vicinity, Va. 1935. Scale, 1:31,680. 30c.
 Chickamauga and Chattanooga National Military Park (Chickamauga Battlefield), Ga. 1934. Scale, 1:9,600. 50c.
 Chisos Mountains, Texas. 1903. Scale, 1:125,000. 50c.
 Coeur d'Alene district, Idaho-Mont. 1901. Scale, 1:62,500. 30c.
 Colonial National Historical Park (Yorktown Battlefield), Va. 1931. Scale, 1:9,600. 50c.
 Colorado National Monument, Colo. 1934 [1958]. Scale, 1:31,680. Contour or shaded-relief edition, 30c each.
 Crater Lake National Park and vicinity, Oreg., by F. E. Matthes. 1933-1956 [1959]. Scale, 1:62,500. Revised. Contour or shaded-relief edition, 75c each.
 Craters of the Moon National Monument, Idaho, by W. C. Alden. Surveyed 1925 and 1930; revised 1957 [1960]. Scale, 1:31,680. Contour or shaded-relief edition, 50c each.
 Creede and vicinity, Colo. 1910. Scale, 1:24,000. 30c.
 Culebra and adjacent islands, Puerto Rico. 1938. Scale, 1:30,000. 30c.
 Custer Battlefield National Monument, Mont. 1891. Scale, 1:24,000. 30c.

¹Maps listed with author's name have descriptive text on reverse. Also included here are topographic maps covering most of the national parks, monuments, and historic sites, published by the Geological Survey as a matter of particular interest to tourists. In addition to those shown on the special maps listed, many other parks, monuments, and historic sites appear on the standard topographic quadrangle maps and are listed on the index circulars.

- Dahlonega district, Ga. 1905. Scale, 1:36,000. 30c.
- Delaware Water Gap, Pa.-N. J., by G. W. Stose. 1942. Scale, 1:62,500. 30c.
- Denver Mountain Area, Colorado, by Ogden Tweto. 1950. Scale, 1:190,080. Contour edition, 50c. Shaded-relief edition, 75c.
- Denver Mountain Parks, Colo. 1903-23. Scale, 1:62,500. 50c.
- Devils Tower National Monument, Wyo. 1933-49. Scale, 1:4,800. Contour or shaded-relief edition. 30c each.
- Dinosaur National Monument, Utah-Colo. 1941 [1950-51]. Scale, 1:62,500. Contour or shaded-relief edition. \$1 each.
- Dry Creek area, Idaho. 1946. Scale, 1:24,000. 30c.
- Elk Basin, Wyo.-Mont. 1944. Scale, 1:15,840. 75c.
- Ely, Nev. 1910. Scale, 1:30,000. 30c.
- Ely Range, Nev. 1916. Scale, 1:48,000. 30c.
- Eureka mining district, Nev. 1931. Scale, 1:24,000. 30c.
- Fossil and vicinity, Wyo. 1939. Scale, 1:62,500. 30c.
- *Fredericksburg-Spotsylvania Battlefield National Monument, Va. Scale, 1:24,000.
- Franklin D. Roosevelt National Historic Site, N. Y. 1946. Scale, 1:960. 50c.
- Frisco (special), Utah. 1909. Scale, 1:62,500. 30c.
- Genesee, Calif. 1891. Scale, 1:31,680. 30c.
- Gilmore mining district, Idaho. 1931. Scale, 1:48,000. 30c.
- Glacier National Park part of Waterton-Glacier International Peace Park, Mont. 1900-1938. Scale, 1:125,000. 50c.
- Gold Hill mining area, Colo. 1938. Scale, 1:12,000. 30c.
- Goldfield (special), Nev. 1905. Scale, 1:24,000. 30c.
- Goodsprings, Nev.-Calif. Scale, 1:62,500. 30c.
- Grand Canyon National Monument, Ariz. 1936. Scale, 1:48,000. 50c.
- Grand Canyon National Park, Ariz. 1902-23. Scale, 1:48,000.
East half. 50c.
West half. 50c.
- Grand Teton National Park, Wyo., by F. M. Fryxell. 1934-48. Scale, 1:62,500. Contour or shaded-relief edition. \$1 each.
- Great Sand Dunes National Monument, Colo. 1938. Scale, 1:24,000. 50c.
- Great Smoky Mountains National Park, N.C.-Tenn. 1931. Scale, 1:62,500.
East half. 50c.
West half. 50c.
- Great Smoky Mountains National Park and vicinity, N.C.-Tenn., by P. B. King and Arthur Stupka. 1949. Scale, 1:125,000. Contour or shaded-relief edition. 75c each.
- Grimes Pass and vicinity, Idaho. 1933. Scale, 1:24,000. 50c.
- *Guilford Courthouse Battlefield National Military Park, [N. C.] Scale, 1:1,200.
- Hannibal and vicinity, Mo.-Ill. 1936. Scale, 1:62,500. 30c.
- *Hawaii National Park, Kilauea-Mauna Loa section. 1921-26. Scale, 1:62,500.
- Hawaii National Park, Maui section (Island of Maui). 1922-25. Scale, 1:62,500. 75c.
- Hinsdale (special), Mont. 1904. Scale, 1:62,500. 30c.
- Hot Springs and vicinity, Ark. 1911. Scale, 1:62,500. 30c.
- Howth, Texas. Scale, 1:31,680. 30c.
- Idaho Springs (special), Colo. 1904. Scale, 1:12,000. 30c.
- Independence Pass and vicinity, Colo. 1932. Scale, 1:48,000. 30c.
- Indio, Calif. Scale, 1:125,000. 30c.
- Iniskin-Chinitna Peninsula, Alaska. 1921. Scale, 1:62,500. 30c.
- Isle Royale National Park, Mich. 1957. Scale, 1:62,500. Contour or shaded-relief edition. \$1.50 each.
- Island of Vieques, Puerto Rico. 1943-49. Scale, 1:30,000. 50c.
- Joplin district, Mo.-Kans.-Okla. 1900. Scale, 1:62,500. 50c.
- Kauai (Island), Hawaii. 1910. Scale, 1:62,500. 75c.
- Kellogg and vicinity, Idaho. 1937. Scale, 1:24,000. 30c.
- *Kelly Field and Camp Travis, Tex., by L. W. Stephenson. 1904. Scale, 1:62,500.
- Kern River Oil Field, Calif. 1912. Scale, 1:12,000.
North half. 50c.
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South. 2 sheets. 50c each.
- Kotsina-Kuskulana district, Alaska. 1913. Scale, 1:62,500. 30c.
- La Barge, Wyo. 1936. Scale, 1:96,000. 30c.
- Lanai (Island), Hawaii. 1923. Scale, 1:62,500. 30c.
- *Langley Field, Va., by L. W. Stephenson. 1907. Scale, 1:62,500.
- Lassen Volcanic National Park and vicinity, Calif. 1957. Scale, 1:62,500. 50c.
- Leadville mining district, Colo. 1911. Scale, 1:9,600. 50c.
- Leadville No. 4, Colo. 1927-34. Scale, 1:48,000. 30c.
- Lincoln National Forest, N. Mex. 1911. Scale, 1:250,000. 30c.
- Little Eightmile mining district, Idaho. 1931. Scale, 1:48,000. 30c.
- Lonesome (special), Mont. 1904. Scale, 1:62,500. 30c.
- Lordsburg, N. Mex. 1932. Scale, 1:62,500. 30c.

- Magdalena district, N. Mex. 1910-29. Scale, 1:12,000. 50c.
 Mammoth Cave National Park, Ky. 1930. Scale, 1:31,680. 50c.
 Manhattan and vicinity, Nev. 1914. Scale, 1:24,000. 30c.
 Marysville, Mont. 1899. Scale, 1:31,250. 30c.
 Marysville Buttes and vicinity, Calif. Scale, 1:62,500. 30c.
 Maui (Island), Hawaii. 1922-25. Scale, 1:62,500. 75c.
 Mesa Verde National Park, Colo. 1911. Scale, 1:31,250. 50c.
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 *Morristown National Historical Park, N. J. Scale, 1:9,600.
 Mount Baker, Wash. 1909. Scale, 1:250,000. 30c.
 Mount Hood and vicinity, Oreg.-Wash. 1911. Scale, 1:125,000. 30c.
 Mount McKinley National Park, Alaska. 1898-1951. Scale, 1:250,000. Contour or shaded-relief edition. 50c each.
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 Mullan and vicinity, Idaho. 1939. Scale, 1:24,000. 30c.
 National Bison Range, Mont. 1929. Scale, 1:31,680. 30c.
 Naval Petroleum Reserve No. 1, Calif. 1927. Scale, 1:31,680. 50c.
 Needles, Ariz.-Calif. 1903. Scale, 1:125,000. 30c.
 Niagara Gorge, N.Y.-Canada. 1912. Scale, 1:12,000. 50c.
 Niagara River and vicinity, N.Y.-Canada, by G. K. Gilbert. 1900. Scale, 1:62,500. 50c.
 Niihau (Island), Hawaii. 1926. Scale, 1:62,500. 30c.
 Nisqually Glacier, Wash. 1951 and 1956. Scale, 1:12,000. 30c.
 Nisqually Glacier (lower portion), Wash. 1931, 1936, 1941, and 1946. Scale, 1:9,600. 1 sheet, 30c.
 North West part of Prague, Okla. 1906. Scale, 1:48,000. 30c.
 Oahu (Island), Hawaii. 1954. Scale, 1:62,500. Contour or shaded-relief edition. 75c each.
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 Owens Lake and vicinity, Calif. 1911. Scale, 1:125,000. 50c.
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 Petrified Forest National Monument, Ariz. 1934. Scale, 1:62,500. 30c.
 Picture Gorge, Oreg. 1925. Scale, 1:48,000. 30c.
 Pikes Peak and vicinity, Colo., by A. H. Koschmann. 1948-56 [1957]. Scale, 1:62,500. Contour or shaded-relief edition. 75c each.
 Platinum and vicinity, Alaska. 1937. Scale, 1:62,500. 30c.
 Platoro mining area, Colo. 1936. Scale, 1:12,000. 30c.
 Pottsville and vicinity, Idaho-Mont. 1939. Scale, 1:24,000. 30c.
 Ray and vicinity, Ariz. 1910. Scale, 1:12,000. 30c.
 Reconnaissance and elevation map of southeastern New Mexico. Scale, 1:253,440. \$1.50.
 Rico district, Colo. 1898. Scale, 1:23,600. 30c.
 Rico mining district, Colo. 1930. Scale, 1:12,000. 30c.
 Rochester mining district, Nev. 1916. Scale, 1:24,000. 30c.
 Rock Run and vicinity, Ala.-Ga. 1941. Scale, 1:24,000. 50c.
 Rockwall, Texas. 1909. Scale, 1:31,680. 30c.
 Rocky Mountain National Park, Colo. 1954. Scale, 1:125,000. 30c.
 Saco (special), Mont. 1903. Scale, 1:62,500. 30c.
 Sacramento Valley, Calif. 1910. Scale, 1:250,000. 50c.
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 Salton Sink, Calif. 1908. Scale, 1:500,000. 30c.
 San Antonio, Texas, by L. W. Stephenson. 1903. Scale, 1:62,500. 50c.
 Scotts Bluff National Monument, Nebr. 1938. Scale, 1:15,840. 30c.
 Seattle, Wash. (Land classification). Scale, 1:125,000. 30c.
 Sequoia and Kings Canyon National Parks, Calif. 1901-1937 [1946]. Scale, 1:125,000. Contour or shaded-relief edition. \$1 each.
 Shenandoah National Park, Va. 1930. Scale, 1:62,500.
 North half. 50c.
 South half. 50c.
 Shiloh National Military Park, Tenn. 1934. Scale, 1:9,600. 30c.
 Silver Plume (special), Colo. 1904. Scale, 1:12,000. 30c.
 Smelterville and vicinity, Idaho. 1937. Scale, 1:24,000. 30c.
 Snowmass Mountain and vicinity, Colo. 1930. Scale, 1:31,680. 30c.
 Squaw Butte Ranch, Oreg. 1936. Scale, 1:24,000. 30c.
 Sugarloaf-St. Kevin mining districts, Colo. 1930. Scale, 1:24,000. 30c.
 Summitville mining area, Colo. 1936. Scale, 1:12,000. 30c.
 Superior coal district, Wyo. 1943. Scale, 1:24,000. 50c.
 Superior mining district, Wyo. 1940. Scale, 1:24,000. 30c.
 Tacoma, Wash. (Land classification). Scale, 1:125,000. 30c.
 Taos and vicinity, N. Mex. 1936. Scale, 1:125,000. 30c.
 Taylorsville, Calif. 1891. Scale, 1:31,680. 30c.
 Tenmile district, Colo. 1882. Scale, 1:31,680. 30c.
 Tenmile mining district, Colo. Scale 1:12,000.
 North half. 1927-40. 50c.
 South half. 1927-39. 50c.

Tennessee River Basin (base map). Scale, 1:500,000. \$1.
 Tennessee River Basin (hydraulic map). 1933. Scale, 1:500,000. \$1.50.
 Terlingua district, Texas. 1902. Scale, 1:50,000. 30c.
 Tintic mining district, Utah. 1897-1911. Scale, 1:9,600. 50c.
 Tintic (special), Utah. 1897. Scale, 1:62,500. 30c.
 Tinton and vicinity, Wyo.-S. Dak. 1939. Scale, 1:24,000. 30c.
 Tombstone and vicinity, Ariz. 1907. Scale, 1:6,000. 30c.
 Tombstone district, Ariz. 1905. Scale, 1:24,000. 30c.
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 Valdez and vicinity, Alaska. Scale, 1:62,500. Contour or shaded-relief edition. 50c. each.
 Vanderbilt Mansion National Historic Site, N. Y. 1946. Scale, 1:3,600. 30c.
 Vicksburg National Military Park, Miss. 1935. Scale, 1:9,600. 50c.
 Willow Creek district, Wyo. 1943. Scale, 1:24,000. 30c.
 Wind Cave National Park and vicinity, S. Dak. 1957. Scale, 1:24,000. \$1.50.
 Yellowstone National Park, Wyo.-Mont.-Idaho. 1885-1921 [1960]. Scale, 1:125,000. 50c.
 Yerington district, Nev. 1914. Scale, 1:24,000. 30c.
 Yosemite National Park, Calif. 1909-47. Scale, 1:125,000. 50c.
 Yosemite Valley, Calif., by F. E. Matthes. 1958. Scale, 1:24,000. Contour edition, 1958, 50c. Shaded-relief edition, 1946, 50c.
 Zion National Park (Kolob section), Utah. 1938-57. Scale, 1:31,680. 75c.
 Zion National Park (Zion Canyon section), Utah. 1932-57. Scale, 1:30,680. \$1.

SPECIAL SETS

Set of 100 topographic maps illustrating specified physiographic features. 1955. \$30 per set.
 Set of 25 topographic maps illustrating specified physiographic features. 1955. \$7.50 per set.

MISCELLANEOUS MAPS AND CHARTS

UNITED STATES

Status Maps

The following Geological Survey index maps, scale 1:500,000, are distributed without charge.
Asterisk (*) indicates map is out of print.

Status of aerial mosaics in the United States (Jan. 1961). Shows areas in the United States for which mosaics have been prepared from aerial photographs, scale of the negatives, dates of photography, and agencies from which reproductions may be obtained. The text on back of map gives detailed explanation and the names and addresses of the reporting agencies and firms.

Status of aerial photography in the United States (Jan. 1961). Shows areas that have been mapped by aerial photographs. The agencies holding the films are given only if reproductions are available for purchase. The text on back of map gives detailed explanation and the names and addresses of the reporting agencies and firms.

*Status of geologic mapping in the United States, territories, and possessions (sixth edition, 1956). Shows by color patterns the areas of published geologic maps on scales of 1 inch to 1 mile or larger and additional areas of published maps on scales between 1 inch to 1 mile and 1 inch to ½ mile; areas in which geologic mapping has been completed but not published or released for public inspection; and areas in which geologic mapping is in progress.

*Status of geologic mapping in Alaska (fifth edition, 1956). Shows by color patterns the areas of published geologic maps on scales larger than 1:100,000 and from 1:100,000 to 1:250,000. These maps are available to the public in bulletins, mimeographed reports, or on open file for consultation. Also shown are areas in which mapping has been completed but not yet published and areas in which mapping is in progress.

*Status of horizontal control in the United States (second edition, 1952). Shows by line and color pattern areas covered by triangulation and transit-traverse surveys. An accompanying text gives a brief explanation, together with a list of state control index maps and information on how they may be obtained.

Status of topographic mapping in the United States (July 1961). Shows topographic and planimetric quadrangle maps published, at scales ranging from 1:24,000 to 1:125,000, by the Geological Survey and other Federal agencies. A general appraisal of the adequacy of these maps is indicated by color patterns.

*Status of vertical control in the United States (second edition, 1952). Shows routes of all level lines reported to date. An accompanying text gives an explanation, together with a list of state control index maps and information on how they may be obtained.

Base Maps

Scale, 1:2,500,000. 1961. 2 sheets. A new wall map showing State and county boundaries and names, State capitals and county seats in black, water features in blue. State boundaries are accentuated by green overprint. Available with or without a buff background to distinguish the conterminous United States from adjoining countries. Insets show Alaska and Hawaii, and the Canal Zone, Puerto Rico and the Virgin Islands. \$1.50 per set. Supersedes the 1959 United States base map at same scale.

Scale, 1:7,000,000. Shows State boundaries, principal cities, and lettering in black; water features in blue. 20 by 30 inches, 30c.

Scale, 1:11,875,000. Shows State boundaries, principal cities, and lettering in black; water features in blue. 13 by 19 inches, 20c.

Scale, 1:16,500,000. Shows State boundaries, principal cities, and lettering in black; water features in blue. 9½ by 13 inches, 10c.

Outline Maps

[All 27 by 42 inches]

Scale, 1:5,000,000. Shows only State boundaries and names, in black, 50c.

Scale, 1:5,000,000. Shows State boundaries and names in black; county boundaries and water features in blue, 50c.

Scale, 1:5,000,000. State and county boundaries with names, in black; water features in blue, 50c.

Scale, 1:5,000,000. State and county boundaries, names, and water features, in black, 50c.

Physical Divisions

Physical divisions of the United States. Scale, 1:7,000,000. 28 by 32 inches. 30c.

ALASKA BASE MAPS

All maps show railroads, highways, settlements, streams, lakes, mountain ranges, islands, and adjacent parts of Canada. All except map C show glaciers. Both the base and contour editions of map B show judicial divisions and the base edition of map E shows judicial divisions and airfields.

Map A. Scale, 1:5,000,000. 1947. 17 by 24 inches. 30c.

Map B. Scale, 1:1,584,000. 1955. 2 sheets, each 36 by 51 inches. Base or contour edition, each \$1.50 per set.

Map C. Scale, 1:12,000,000. 1940. 10 by 15 inches. 10c.

Map E. Scale, 1:2,500,000. 1954. 34 by 48 inches. Base edition, 75c; shaded-relief edition, \$1.

PUERTO RICO BASE MAPS

Scale, 1:120,000. Printed in Spanish. 1951. 32 by 66 inches. Base edition, 75c; contour edition, \$1.

Scale, 1:240,000. Printed in Spanish. 1952. 22 by 54 inches. Base edition, 75c; contour edition, \$1; contour and shaded-relief edition, \$1.50.

LAND-CLASSIFICATION MAPS

These maps show present and potential agricultural use of land in the public-land States. Each map is accompanied by a descriptive text setting forth the influence of the physical features on the use of the land for crop production and grazing. Asterisk (*) indicates map out of print.

*Central Great Plains, in 5 sheets: Sheet 1, northwestern Nebraska, by E. R. Greenslet, 34 p.; sheet 2, western Kansas and southwestern Nebraska, by J. Q. Peterson, R. E. Morgan, and E. R. Greenslet, 36 p.; sheet 3, southeastern Wyoming, by J. F. Deeds, Depue Falck, E. R. Greenslet, R. E. Morgan, and W. L. Hopper, 39 p.; sheet 4, northeastern Colorado, and sheet 5, southeastern Colorado, by Depue Falck, E. R. Greenslet, and R. E. Morgan, 110 p.

*Northern Great Plains, in 8 sheets, by A. E. Aldous and J. F. Deeds, 136 p.: Sheet 1, northwestern North Dakota and northeastern Montana; sheet 2, northeastern, north-central, and east-central Montana; sheet 3, north-central and central Montana; sheet 4, central and south-central Montana; sheet 5, southeastern Montana; sheet 6, southwestern North Dakota and northwestern South Dakota; sheet 7, southwestern South Dakota; sheet 8, northeastern Wyoming.

*Utah, in 1 sheet, compiled by J. F. Deeds and Depue Falck, 14 p.

*Western Colorado, in 2 sheets, by L. R. Brooks, J. F. Deeds, Depue Falck, E. R. Greenslet, G. M. Kerr, and J. Q. Peterson, 53 p.: Northwest Colorado; Southwest Colorado.

*Western Wyoming, in 2 sheets, by J. F. Deeds, Depue Falck, E. R. Greenslet, G. M. Kerr, R. E. Morgan, and J. Q. Peterson, text not published: Northwest Wyoming; Southwest Wyoming.

RIVER SURVEYS

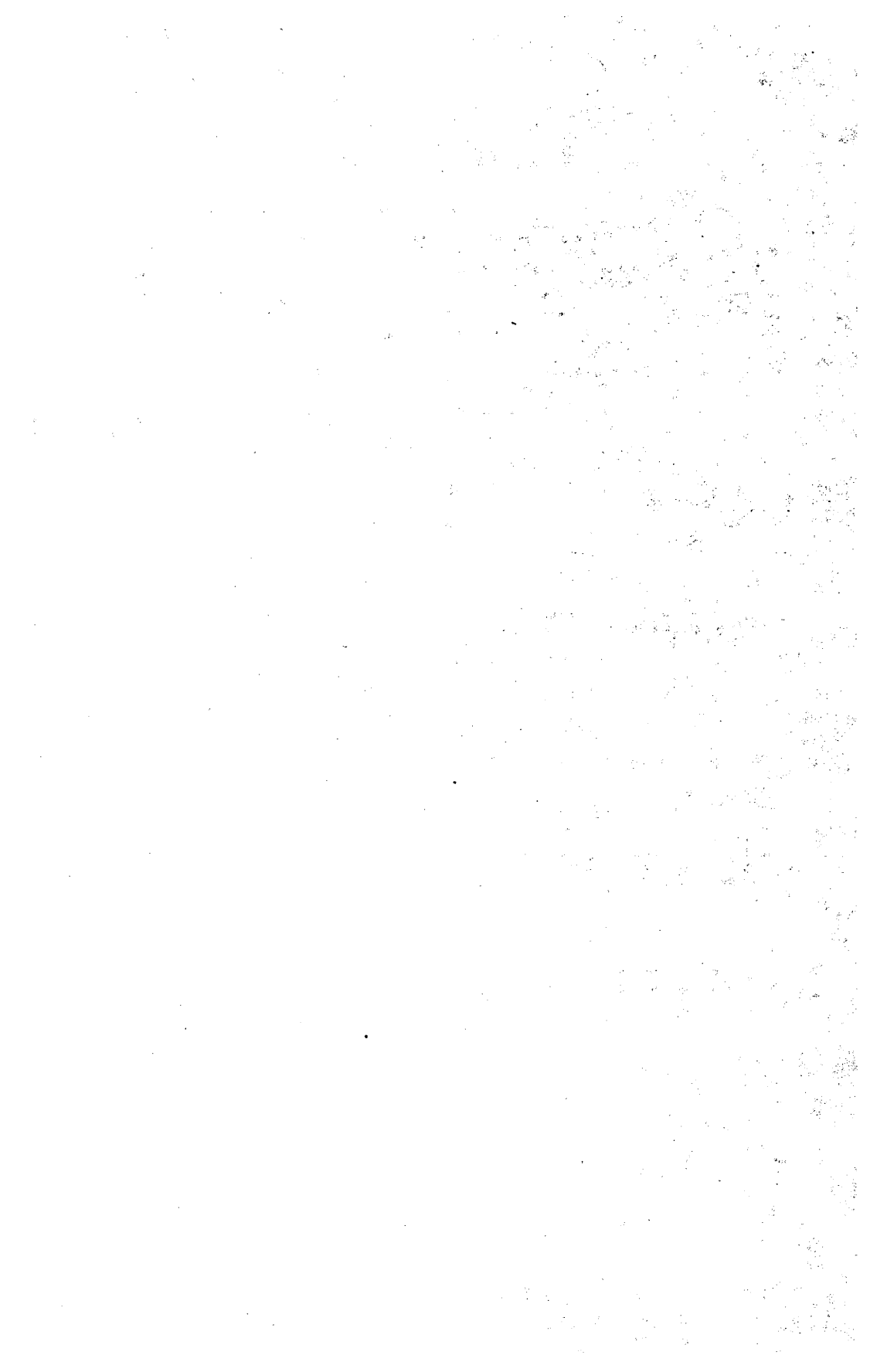
River-survey maps show course and fall of the stream, configuration of the valley floor and adjacent slopes, and location of towns, scattered houses, irrigation ditches, roads, and other cultural features.

If the valley is less than a mile wide the topography is shown to 100 feet or more above the water surface; if the valley is flat and wide, topography is shown for a strip of 1 to 2 miles. Potential reservoir sites are mapped to the probable flow line of the reservoir. The usual scale is 1:31,680 or 1:24,000, and the normal contour interval is 20 feet on land and 5 feet on the water surface. Many maps include proposed dam sites on a larger scale and a profile of the stream.

Most of the maps are printed in black and white, some show the contours in brown, and a few show the streams in blue. The standard-size sheet is 22 by 28 inches.

As these river-survey maps were prepared largely in connection with the classification of the public lands, most of them show areas in the Western States. The maps published cover more than 20,000 miles of river channel. An index of river surveys, published in 1926 as Water-Supply Paper 558, has been superseded by Water-Supply Paper 995.

Published river-survey maps, except those out of stock, are shown on the index circulars for topographic quadrangle maps. The price is 30 cents per sheet.



FINDING LISTS

These lists are not a complete index of Geological Survey publications but simply a general directory derived mainly from titles. Some publications on water have been indexed more fully for content and area. Two finding lists are given, one a subject-geographic list and the other a geographic list with detailed locality breakdown. For example, to find information on a mineral commodity or on the water resources, paleontology, or stratigraphy of a given State or country, consult the subject-geographic list; to find information on a specific locality within a State or country, use the separate geographic list. Geologic maps are indexed only in the separate geographic list. Data from "Mineral Resources of the United States," 1882-1923, have been indexed as annual resource data under specific mineral commodities in the subject-geographic list. A finding list of authors starts on p. 431.

SUBJECT-GEOGRAPHIC LIST

Abbreviations used

A	Annual Report	Map 3-	Mineral Investigations Preliminary Map
AP	Administrative publication	MR-	Mineral Investigations Resource Map
B	Bulletin	MRUS	Mineral Resources of the United States
C	Circular; Map C-, Coal Investigations Map	OC-	Oil and Gas Chart
GF	Geologic Folio	OM-	Oil and Gas Map
GP-	Geophysical Investigations Map	P	Professional Paper
GQ-	Geologic Quadrangle Map	p.	page number listing publications having no series designation
HA-	Hydrologic Investigations Atlas	R	Regulations
I-	Miscellaneous Geologic Investigations Map	SP	Special publication
M	Monograph	W	Water-Supply Paper
MB-	Missouri River basin map		
MF-	Mineral Investigations Field Studies Map		

Abrasive materials

annual resource data, 1883-1923, see MRUS
p. 98-131.

United States B 666-K

Abstracts

apatite and related phosphates

synthesis C 135

engineering geology C 259

geochemical prospecting B 1000-A, G,
1098-B

geophysics B 887, 895, 909, 915, 925,
932, 939, 957, 959, 966, 976,
981, 991, 1002, 1022, 1033,
1048, 1066, 1086, 1106,
1116-A-E, 1146-A, B

Acadia National Park, Maine,

map p. 252

Aerial mosaics. See index maps.

Aerial photographs

availability p. 248

in geologic interpretation

and mapping P 373

Aerial photography. See also index maps.

Alaska, southeast B 797-E

map compilation B 788-F

Aeromagnetic, aeroradioactivity

maps. See geographic

listing for specific areas;

see also map listing, p. 236-244

Age determination. See Geochronology.

Agriculture C 415

Alabama

base map p. 250

brick-making, sand-lime B 315-G

cement resources B 225-j

clay B 315-I

Alabama--Continued

coal. See Coal.

cobalt B 950-J

dolomite B 315-G, 470-K

floods C 342,

W 1227-A

fluxes B 400, 470-K

fuels B 400

gas. See Gas.

geologic map index p. 192

geologic maps OM-45; 191

geology. See geographic list-
ing for specific areas.

gold. See Gold.

iron. See Iron.

leveling B 441, 517

limestone B 315-G

manganese B 940-J

marble B 470-G

mica P 248-G

oil B 661-H

paleontology

Eutaw formation P 274-J

Foraminifera P 189-D,

197-B

paleobotany, Cretaceous

physiography, Chattanooga

district A 19 II a

stratigraphy

Chattanooga shale B 1087-E

Cretaceous B 43; C 267;

OC-20, 23, 26, 35;

OM-37, 50, 64, 105

Eocene P 140-E

Midway and Wilcox Map 3-195

(p. 226)

Alabama--Continued

stratigraphy--Continued

- Mississippian OC-58, 62
- Paleozoic B 781-A
- Selma group OM-105
- Tertiary B 43; OM-45
- triangulation and traverse B 644-A
- uranium, Chattanooga shale B 1087-E
- water, ground
 - artesian pressure table, p. 183
 - water levels table, p. 183
- water, surface
 - quality W 236; table, p. 182
- streamflow records
 - tables, p. 184-187
 - compilation table 6
 - daily, by years tables 4 and 5
 - index C 382, 383
- water resources
 - Birmingham area C 254
 - Mobile area C 373
 - power W 107

See also Gulf Coastal plain;
Southeastern States;
Southern States.

Alabama River, Tertiary and

Cretaceous strata B 43

Alaska

- aerial photography B 797-E
- aeromagnetic maps. See
geographic listing for
specific areas;
see also map listing,
p. 236-244.
- altitudes B 169
- antimony B 649m 936-N, 1024-H
- barite B 592-D
- base maps p. 257
- beach placers, Kodiak Island B 692-E
- boundary with Canada,
 - geologic investigations B 520-K
- cement raw materials, Windy
Creek B 1039-D
- chromite. See Chromite.
- clay B 963-E
- climate P 45
- coal. See Coal.
- construction materials B 345-B, 682,
1039-A-D
- copper. See Copper.
- core tests from wells, Naval
Petroleum Reserve
No. 4 region P 305-A-K
- diatomaceous earth, Kenai
region B 1030-B
- earth temperature, effect of
drilling B 1083-C
- earthquakes, Yakutat Bay P 69
- electrochemical, electrometal-
lurgical industries,
mineral resources
for C 252
- engineering geology
 - Alaska Railroad P 293-B
 - Cordova region, dam and
reservoir site C 136

Alaska--Continued

engineering geology--Continued

- Katalla area I-308
- Nenana-Rex area I-307
- Sitka region, damsite and
tunnel C 147
- eolian deposits, Matanuska
Valley B 1121-C
- exploration routes SP
- faults, Nelchina area I-312
- frost action, Seward Peninsula B 974-C
- garnets B 963-C
- geochemical exploration,
 - antimony B 1024-H
- geographic names
 - A 21 II j;
 - B 187, 299
 - P 45, 192; SP
p. 192
- geography and geology
- geologic map index
- geology. See Geographic
listing for specific
areas.
- petroleum provinces B 1094
- geomorphology, Kuskokwim
region B 1071-G
- glacial geology C 289; P 170-A
- Broad Pass region B 608
- Malaspina district I-271
- Yakutat Bay P 64
- glaciers
 - Black Rapids B 926-B
 - Chamberlin Glacier area P 414-C
 - Glacier Bay A 16 I c
 - Kenai Peninsula B 526
 - Prince William Sound B 526; P 98-C
- gold. See Gold; Alaska, mineral
resources; Alaska,
mining.
- graphite B 692-G
- ground conditions, surficial
geology, Kenai-Kasilof
area I-269
- gypsum B 824-E, 989-B, C
- haydite B 1039-C
- hydrochemistry, Chamberlin
Glacier area P 414-C
- igneous rocks
 - Broad Pass region B 608
 - Chitina Valley B 675
 - Matanuska Valley B 791
 - Mount McKinley region P 70
 - Nelchina area I-312
 - Nutzotin Mountains B 933-B
- industrial sites, potential,
Lynn Canal area C 280
- iron B 442-C, 622-I, 1090
- land surveys B 480-A
- lead B 783-D, 998-B, C
- lignite, A 17 I e
- See also Coal.
- linear features, maps I-230-232, 273
- magnetite B 1024-D
- marble B 542-B, 592-B, 682
- marl B 1039-A
- mercury B 2-H
- metalliferous lodes, geology B 480-C
- mineral resources
(general) B 213, 225, 284, 314-A,
345-A, 379-A, 394, 442-A

Alaska--Continued

mineral resources--Continued
(general)--Continued

480-A, 520-A, 542-A, 592-A,
622-A, 642-A, 662-A, 669-P,
692-A, 712-A, 714-A, 722-A,
739-A, 755-A, 773-A, 783-A,
792-A, 797-A, 710-A, 813-A,
824-A, 836-A, 844-A, 857-A,
864-A, 868-A, 880-A, 897-A,
910-A, 917-A, 926-A, 933-A,
943-A, 947-A

Alaska Peninsula B 467, 857-D
Alaska Railroad region B 755-C
844-b, 849; C 18

Alatna-Noatak region B 520-L
Aleutian Islands B 857-D
Aniakchak district B 797-F
Bonnifield region B 314-L, 480-H, 501
Bremner River region B 520-C
Canada-Alaska boundary
region B 520-K
Cape Yaktag placers B 259
Chandalar region B 532, 810-B
Chichagof Island B 692-B, 936-I, 1058-E
Chisana district B 622-F, 630
Chistochina district B 480-E, 498
Chitina Valley B 755-B
Chulitna River region B 692-D, 849-E
Circle region B 314-K
Controller Bay region B 335
Copper River region B 345-C, 374,
622-D, 642-C, 755-B, 824-B,
844-C, 868-C, 880-B, 943-B,
C; SP

Curry district B 857-C
Douglas Island B 259
Ellamar district B 542-D
Eureka region B 849-F
Fairbanks region, See Alaska,
mining; Gold,
Goodnews Bay region B 714-E
Hot Springs district B 844-D
Iditarod region B 622-H
Iliamna region B 442-E
index B 1139
Iron Creek B 314-H, 379-F
Jumbo basin P 251
Kaiyuh Hills B 868-D
Kamishak Bay region B 773-D
Kantishna district B 314-L, 662-E,
836-D, 849-F, 936-N

Kenai Peninsula B 379-C,
442-D, 587, 642-E, 712-D,
742, 864-B, 931-G

Ketchikan district B 347
Kobuk Valley B 480-J, 536
Kodiak Island region B 542-E, 692-E,
868-B, 880-C

Kuskokwim region B 642-H,
739-D, 754, 864-C; C 279;
P 268

Kuskulana district B 622-D
Lake Clark region B 442-E,
622-H, 824-C
C 252

Lynn Canal area B 542-C
McKinley Lake district B 542-C
Matanuska B 314-F, 592-H

Alaska--Continued

mineral resources--Continued

Mount Eielson district B 849-D
Mount McKinley National
Park B 836-D
Mount Wrangell region P 15
Nabesna district B 379-D, 417
Nation district B 836-E
Nelchina Valley B 592-H
Nixon Fork country B 783-D
Nizina district B 448, 947-F
Noatak region B 520-L, 536
northern B 783-E
northwestern B 797-D, 815
Nulato region B 442-H
Portage Pass region B 926-D
Portland Canal region B 714-B, 722-C
Prince William Sound B 284, 443
Rampart region B 520-I, 844-D
Reid Inlet area, Glacier
Bay B 1058-B
Ruby region B 520-J, 592-J,
642-H, 754,
864-C

Seward Peninsula B 314-G, H, I,
328, 345-E, 379-F,
433, 442-F, 722-F
B 797-C, 810-B

Sheenjek district B 504
Sitka district B 797-B
Skwentna district B 824-B
Slana district B 259, 284,
314-C, D, 773-B, 783, 800,
947-D, 963-A, 1058-A

southwestern B 379-C
Squirrel River region B 480-J
Susitna region B 480-E, 498
Talkeetna Basin B 314-F, 327
Talkeetna Mountains B 692-D
Taral district B 520-C
Tatonduk district B 836-E
Valdez Creek district B 498, 849-H
Willow Creek mining dis-
trict B 1004

Wrangell district B 347, 739-B
Yakataga district B 259, 592-E
Yukon-Koyukuk region B 592-D, 631
Yukon-Kuskokwim region B 739-D

See also specific mineral com-
modities; Radioactive
deposits.

mining
(general) B 213, 225, 259, 263,
284, 314-A, 345-A, 379-A,
442-A, 480-B, 520-A, 542-A,
592-A, 622-A, 642-A,
662-A, 692-A, 712-A,
714-A, 722-A, 739-A,
755-A, 773-A, 783-A, 792-A,
797-A, 810-A, 813-A, 824-A,
836-A, 844-A, 857-A, 864-A,
868-A, 880-A, 897-A, 910-A,
917-A, 926-A, 933-A; W 314

Chistochina region B 379-D
Chitina district B 379-D, 442-D,
542-C, 622-D,
714-C

Alaska--Continued

mining--Continued

- Circle district B 520-H, 824-D
 Copper River region B 662-C
 Fairbanks district B 520-H, 525,
 542-F, 592-J, 622-G,
 662-H, 692-F, 849-B
 Fortymile district B 813-C
 Hot Springs district B 622-G, 692-F
 Juneau region B 622-C
 Kenai Peninsula B 692-C
 Ketchikan district B 592-B, 662-B,
 692-B, 714-B
 Kotsina Valley B 379-D
 northwestern B 712-G
 Prince William Sound B 442-D, 592-G,
 622-E, 6422-D,
 662-C, 6992-C
 Seventymile district B 520-H
 Seward Peninsula B 442-I, 520-M,
 592-L, 622-I, 662-I,
 714-F; W 314
 southeastern B 379-B, 442-C,
 480-D, 642-B
 Tatlanika and Totatlanika
 Basins B 836-D
 Valdez Creek region B 379-D, 592-H
 Wrangell district B 662-B
 Yukon-Tanana region B 480-G, 592-J
 molybdenum B 692-F,
 926-C, 947-B
 nickel. See Nickel.
 oceanography, Rat Islands
 region B 1028-G
 oil. See Oil.
 paleontology
 ammonites P 249-B, 354-D
 bibliography B 1021-H
 brachiopods P 233-C
 Cenozoic megafossils P 294-C
 cephalopods P 283
 Foraminifera P 236-A, B,
 294-F
 gastropods P 334-D
 micropaleontology, Naval
 Petroleum Reserve
 No. 4 P 305-A-H
 mollusks P 274-D
 paleobotany
 Cretaceous P 159
 Jurassic P 85-D
 Tertiary P 182
 pelecypods P 334-E
 Pliocene and Pleistocene P 125-C
 peat B 379-A,
 442-B
 pegmatite, southeastern B 1024-G
 permafrost
 Dunbar area C 42
 Fairbanks region B 989-F
 relation to ground water P 264-F
 phosphate, northern P 302-A
 photointerpretation, Alaska
 Highway terrain B 963-D
 physiography
 Amchitka Island, sub-
 marine B 1028-P
 Yakutat Bay P 64

Alaska--Continued

- platinum. See Platinum.
 public lands surveys B 480-A
 pyrite B 1024-E
 Quaternary geology
 Broad Pass region B 608
 Nabesna-White River
 district B 417
 Nenana River Valley,
 Alaska Range P 293-A
 radioactive deposits. See Radio-
 active deposits.
 railway routes B 284, 520-A
 sedimentation, Chamberlin
 Glacier area P 414-C
 silver B 783-C, D
See also Gold; Alaska,
 mineral resources;
 Alaska, mining.
 stratigraphy
 Cretaceous P 159
 Mesozoic B 776
 Paleozoic P 303-A, B
 Tertiary B 917-D; P 182
 structural geology
 Rat Islands, ocean floor B 1028-G
 Shaktolik River area I-226
 Yukon River, lower I-197
 sulfur B 692-E
 surveying and mapping C 101
 tectonic map, Mesozoic and
 Cenozoic elements I-84
 test wells, Naval Petroleum
 Reserve No. 4 P 305-A-K
 C 202, 248
 thorium
 tin. See Tin.
 tungsten B 442-F, 1024-F, I
 uranium. See Radioactive deposits.
 vegetation, Arctic Slope P 302-B
 vegetation patterns, Seward
 Peninsula B 974-C
 volcanic ash falls B 1028-N
 volcanism
 Aleutian arc B 974-B
 Yukon Basin, upper P 95-D
 volcanoes B 1028-A-T;
 C 318
 water, ground
 artesian pressure table, p. 183
 Matanuska Valley C 268; W 1494
 permafrost C 275; P 264-F
 summary of development C 169
 water levels table, p. 183
 water, quality
 public supplies W 1460-A;
 table 1, p. 182
 water, surface
 southeastern B 836-C
 streamflow records tables, p. 187
 compilation table 6
 daily, by years table 5
 index C 396
 water resources
 Circle district B 520-H; W 228
 Eagle district B 520-H; W 345-F
 Fairbanks district B 337, 345-D,
 520-H; W 218,
 228

Alaska--Continued

- water resources--Continued
 Fortymile, Seventymile,
 and Salchaket dis-
 tricts B 520-H
 Kougarak region B 345-E; W 218
 Nome region B 314-J, 345-E;
 W 196, 218
 Rampart district W 228
 Seward Peninsula B 379-F, 442-I;
 W 314
 springs, mineral W 418
 Yukon-Tanana region B 379-E,
 442-F, 480-G, 542-F;
 W 218, 228, 342, 345-F
- waterpower investigations
 Kenai Peninsula, Bradley
 River basin W 1610-A
 south-central B 592-F; W 372
 southeastern B 442-C, 642-B,
 662-B, 692-B, 712-B,
 714-B, 722-B; W 372
- waterpower sites
 Kenai Peninsula B 1031-A
 Lynn Canal area C 280
 waves, Lituya Bay P 354-C
 well construction, Fairbanks
 area W 1539-B
 well drilling, dissipation of
 temperature effect B 1083-C
 zeunerite, Seward Peninsula C 214
 zinc B 998-A-C
- Alberta. See Canada.
 Algae. See under Paleontology.
 Algonkian formations, corre-
 lation B 86
 Alkalic rocks, Colorado
 Iron Hill P 197-A
 Alkalinity, silicate minerals,
 methods of mea-
 suring B 9; P 185-A
 Allegheny region, Onondaga
 fauna B 508
 Allophane P 185-G
 Alloys, method of making B 60
 Alluvial channels
 flow studies P 282-D, F;
 W 1498-A, C
 shape in relation to sediment
 type P 352-B
 surges W 1369-C
 Alluvial fills, New Mexico,
 Gallup region W 1110-A
 Alteration. See Metamorphism;
 Ore deposits.
 Altimetry, instrumental im-
 provements C 405
 Altitudes
 Alaska B 169
 barometric measurement A 2 g
 Canada B 6
 stadia tables for obtaining
 differences AP
 United States B 5, 72, 76, 160,
 274, 689, 817
- Alum
 annual resource data MRUS 1882,
 1883-84, 1886

Alum--Continued

- Nevada B 225-m, 750-E
 New Mexico, Gila River
 deposits B 315-E
 Alum Bluff group P 98-E, 142
 Alumina, Columbia Basin MR-1
 Aluminum. See also Bauxite,
 annual resource data, 1882-1923,
 see MRUS p. 98-131,
 determination in phosphate
 rock B 992
 Dominican Republic B 953-C
 Haiti B 954-C
 separation from titanium B 27
 United States B 666-O
 See also Aluminum, annual
 resource data.
- Alunite
 Arizona B 540-I
 Colorado B 530-d
 Nevada B 540-I
 Utah, Marysville and Beaver
 regions B 511, 620-K,
 886-D
 Alunite-jarosite group B 262
 Amboy clays M 26
 Amidophosphoric acid B 113
 Ammonia MRUS 1907,
 1908, 1912
- Ammonites. See under Paleontology.
 Amsden formation OC-50
 Analcite
 constitution B 167
 Utah, Colorado, Wyoming P 158-A
 Analyses. See particular sub-
 stances.
 Analysis, microchemical p. 235
 Analytical methods B 148, 176;
 C 22
- Andalusite
 bibliography B 1019-N
 United States, southeastern P 336
 Anhydrite, United States,
 Puerto Rico,
 bibliography B 1105
 Anhydrite cap rock P 175-D
 Animas formation P 134
 Annelids, Marshall Islands P 260-Q
 Annelids. See also under
 Paleontology.
 Anomalies, total-intensity,
 analysis B 1052-D
 Anorthosite, Wyoming, Laramie
 Range MF-119
 Anthracite. See Coal.
 Anticlines and synclines
 California, Coalinga anti-
 cline OC-1
 Colorado
 Granby anticline B 822-B
 Model anticline OM-68
 North and South McCallum
 anticlines C 5
 Rangely anticline OM-7, 41, 67
 Maine, Moose River syncli-
 norium B 1111-E
 Midcontinent oil and gas
 field P 128-E

Anticlines and synclines--Continued

- Montana
 Blackfeet Indian Reservation B 641-J
 Cedar Creek anticline, map p. 234
 Ingomar anticline B 786-A
 Musselshell Valley B 691-F
 Nebraska OM-198
 New Mexico, Beautiful Mountain anticline OM-147
 North Dakota
 Cedar Creek anticline p. 234
 Nesson anticline B 691-G
 Ohio, Clinton sand near Wooster B 621-H
 Oklahoma
 Billings region B 641-E
 Cotton and Jefferson Counties B 602
 Utah
 Farnham anticline B 711-A
 Salt Valley anticline B 863
 Wyoming
 Big Horn Basin, anticlines B 656
 Big Sand Draw anticline, gas B 711-E
 central B 641-I
 Garland and Byron anticlines, map p. 235
 maps OM-19, 107, 175; p. 213
 Maverick Springs region, anticlines B 711-H
 Oregon Basin anticline, map p. 234
 Tisdale anticline, map OM-194
 Antimony
 Alaska B 649
 southeastern B 1024-H
 Stampede Creek area, Kantishna district B 936-N
 annual resource data, 1882-1923, see MRUS, p. 98-131.
 Arkansas B 340-D
 California
 Stayton district B 931-Q
 Wildrose Canyon area B 922-K
 Idaho
 Stibnite region B 969-F
 Yellow Pine district B 780-D, 922-I
 Mexico
 El Antimonio district B 962-B
 Huizhuco B 946-B
 San José mines, Wadley B 946-E
 Soyatal district B 960-B
 Tejocotes region B 953-A
 Nevada, Arabia district B 660-H
 Utah, southern B 340-D
 Apatite
 rare-earth-bearing, New York B 1046-B
 synthesis, abstracts C 135
 uranium-bearing, geochemistry P 314-D
- Appalachian Basin
 Bedford shale and Berea sandstone P 259
 deep wells, locations OM-136
 Mississippian, Upper Devonian, Lower Pennsylvanian sandstones, texture SP
 Paleozoic sandstones, sandy limestones, texture SP
 Silurian rocks OM-100
 Appalachian region
 coal A 22 III d,e; B 65
 B 213-d, 455; P 179
 copper MRUS 1895 III
 P 72
 forests P 37
 geomorphology and forest ecology P 347
 B 293; MRUS 1894
 hydrography W 62, 63
 Pennsylvanian plants P 197-C
 tin B 293
 See also particular States.
 Appalachian structure, mechanics A 13 II c
 Arabia. See Saudi Arabia.
 Arabian Peninsula, map I-270-B
 Arachnids. See under Paleontology.
 Archean formations B 86
 Arizona P 98-I
 Northwestern States A 5 d
 Areas, United States, States, Territories B 302, 689, 817
 Argentina, tungsten B 954-A
 Arizona
 alunite B 540-I
 Archean complex, Grand Canyon P 98-I
 p. 250
 base map B 1082-D
 beryllium C 111
 carnotite B 540-T
 celestite B 213-j
 cement materials B 225-g, 431-B
 coal
 copper. See Copper; Mining districts.
 desert watering places W 490-C, D, 498, 499
 B 64
 dumortierite
 erosion and sedimentation, Papago country B 730-B
 floods W 147
 forests P 22, 23
 geochemical prospecting, Jerome area B 1000-C
 p. 191
 geologic map index p. 192
 geology. See geographic listing for specific areas.
 geophysical investigations, Doney Park-Black Bill Park area C 233

Arizona--Continued

gold. See Gold.
 gypsum B 223
 igneous rocks OM-201
 Precambrian, Grand Canyon A 14 II i
 western B 352
 iron B 821-C
 irrigation W 2
 isopach mapping by photo-
 geologic methods,
 Monument Valley
 area B 1043-D
 laccoliths A 14 II d
 leveling B 463, 573
 manganese. See Manganese.
 marble B 380-I
 mercury. See Mercury.
 metamorphic rocks OM-201
 mineral resources
 Bagdad area P 278
 Bisbee region GF-112; P 21
 Boulder Dam region B 871
 Bradshaw Mountains
 quadrangle B 782; GF-126
 Castle Dome area B 971
 Jerome region B 782; P 308
 Kofa Mountains B 620-H
 Mohave County, Cerbat
 Range, Black Moun-
 tains, Grand Wash
 Cliffs B 340-A, 397
 San Carlos Indian Reserva-
 tion B 1027-N
 Santa Rita Mountains and
 Patagonia Moun-
 tains B 582
 Shinumo quadrangle, Grand
 Canyon district B 549
 Sierrita Mountains, Pima
 County B 725-J
 Yuma County B 451
 See also specific mineral
 commodities;
 Mining districts.
 minerals, Clifton-Morenci
 district B 262
 molybdenum B 430-D
 nitrate B 820
 oil OC-10;
 OM-201
 paleontology
 Edentata and Proboscidea P 140-B
 Lagomorpha and Rodentia P 131-E
 pegmatites, beryl-bearing B 1082-D
 photogeologic maps. See map
 listing, p. 206-212
 radioactive deposits. See Radio-
 active deposits.
 radioactivity surveys GP-120, 124
 p. 249
 shaded-relief map B 735-E, 750-B;
 MRUS 1912 I
 silver B 735-E, 750-B;
 MRUS 1912 I
 stratigraphy
 Devonian P 233-D
 House Rock Valley area B 1081-D
 Jurassic P 183, 291

Arizona--Continued

stratigraphy--Continued
 Mississippian P 233-D
 northwestern P 129-D
 Paleozoic OC-10; P 98-K,
 131-B, 266
 Permian and older rocks OC-7; P 374-H
 Triassic P 291
 structural geology, House
 Rock Valley area B 1081-D
 Tertiary history, Grand Can-
 yon district M 2
 triangulation B 644-B, 709-M
 tungsten B 380-D, 430-D,
 940-I
 uranium-vanadium. See Radioactive
 deposits; Vanadium.
 volcanic field, San Franciscan P 76
 water, ground
 artesian pressure table, p. 183
 Avra-Altar Valley W 796-E
 Doney Park-Black Bill
 Park area C 233
 Douglas basin W 1354
 Gila Valley W 104, 450-A,
 498, 796-F
 Grand Canyon National Park,
 south rim W 1475-C
 Holbrook region W 836-B
 Papago country W 499
 Paradise Valley W 375-B
 Salt River Valley W 136
 San Carlos Valley W 450-A
 San Simon Valley W 425-A, 796-F
 water levels table, p. 183
 wells W 57, 104, 136,
 149
 water, surface
 Colorado River W 395, 556,
 636-A, B, 638-D
 for irrigation W 2; table 7,
 p. 187
 power W 44, 395, 556
 quality W 274, 636-A, B,
 638-D, 1104;
 tables 1 and 7
 p. 182, 187
 reservoirs, stock water C 110
 sedimentation, Little
 Colorado River
 basin W 1110-D
 streamflow records, tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 389
 water resources
 Chuska Mountains area C 308
 Navajo country W 380
 storage W 33, 73
 Sulphur Spring Valley W 320
 water use, by riparian vege-
 tation C 434; W 1103
 See also Southwestern States;
 Western States.
 Arkadelphia marl P 221-A

- Arkansas**
 antimony B 340-D
 asphalt B 213-h, 691-J
 base map p. 250
 bauxite A 21 III d; P 299;
 p. 226
 chalk A 22 III o
 clay B 285-L, 351
 coal. *See* Coal.
 diamonds B 540-U, 735-I
 fuller's earth B 530-e
 gas B 541-B
 geologic map p. 191
 geologic map index p. 192
 geology. *See* geographic listing
 for specific areas.
 gravel B 690-B
 lead A 22 II b;
 B 213-e, 853; P 24
 leveling B 458, 636
 manganese. *See* Manganese.
 mercury B 886-C, 936-H
 meteorites, Johnson County B 55
 mineral resources, Arkansas
 coal field B 847-E
 niobium B 1015-B
 oil B 691-J, 736-H
 paleontology
 Arkansas coal field B 326
 Batesville sandstone B 593
 Boone formation B 595, 598;
 P 154-B
 Foraminifera P 221-A
 Moorefield shale B 439
 paleobotany, Stanley shale,
 Jackfork sandstone P 186-C
 periodotite B 540-U, 735-H, I
 phosphates B 315-P
 physiography, Ozark region A 22 II b
 quartz crystals B 973-E
 slate B 225-I, 430-F
 stratigraphy
 Cretaceous OC-3; P 122-A,
 154-F
 El Dorado oil field B 736-H
 northern P 24
 Paleozoic C 160
 pre-Atoka rocks OC-51; P 314-H
 St. Peter sandstone, Everton
 formation C 249
 structural geology
 Batesville district OM-12
 Fort Smith-Poteau gas
 field B 541-B
 B 1015-B
 titanium B 644-H
 triangulation, traverse P 154-F
 volcanic rocks, water-laid
 water, ground P 46; W 145,
 399
 artesian pressure table, p. 183
 Columbia County C 241
 quality W 364
 water levels table, p. 183
 wells W 57, 102, 114,
 145, 149, 160
 water, surface
 quality W 236;
 table, p. 182
 streamflow records tables, p. 184-
 187
- Arkansas--Continued**
 water, surface--Continued
 streamflow records--Continued
 compilation table 6
 daily, by years tables 4 and 5
 index C 387
 water resources GF-215; W 102,
 114, 145, 557
 Eureka Springs-Harrison GF-202
 Ozark region W 110
 springs W 145
 Winslow quadrangle W 145
 zinc A 22 II 6;
 B 213-e, 853;
 P 24
See also Gulf Coastal Plain;
 Southern States.
 Arkansas River, floods W 487
 Arkansas River basin, ground
 water HA-2,3
 Arsenic
 annual resource data, 1882-1885,
 1901-1923, *see* MRUS, p. 98-101,
 107-131.
 United States B 666-U
 Virginia B 470-E
 Artesian pressure. *See under* Water.
 Artesian water. *See* Water, artesian.
 Artesian wells. *See* Wells, artesian.
 Arthropods. *See under* Paleontology.
 Asbestos
 annual resource data, 1882-1923, *see*
 MRUS, p. 98-131.
 bibliography B 1019-L
 United States B 470-K, 666-H
 Ash. *See* Volcanic ash.
 Asphalt
 annual resource data, 1882-1923. *See*
 MRUS, p. 98-131.
 Arkansas
 Pike County B 213-h
 southwestern B 691-J
 California, McKittrick
 district OM-35
 Indiana, southwestern B 213-h
 Nevada, northeastern B 380-H
 New Mexico, Guadalupe
 County OM-44
 Oklahoma
 Dougherty area OM-15
 southeastern B 380-H
 Sulphur area OM-22
 Texas, western MRUS 1896
 United States A 22 I b;
 B 213-h, 1070-C
See also Asphalt, annual resource data.
 Utah
 ozokerite B 285-H, 641-A
 Salt Lake basin B 260-j
 Sunnyside region OM-86
 uintaite (gilsonite) A 17 I f
 Vernal area B 822-C
 West Virginia A 22 I b
 Astronomical work, 1889-1890 B 70
 Astrophyllite, analyses B 90
 Atlantic Coast, Triassic coal
 field A 22 III b
 Atlantic Coastal Plain
 artesian waters B 138; W 258
 Cretaceous-Eocene contact P 90-J

Atlantic Coastal Plain--Continued

- Eocene deposits 141
- Foraminifera B 676; P 175-A
- hafnium, zirconium B 1082-A
- mollusks, Quaternary B 24
- monazite B 1042-L
- peat, Dismal Swamp B 711-C

Atlantic Ocean, deep-sea cores,
geology and biology,
Newfoundland-Ireland P 196Atlantic Slope basins, water resources.
See particular States; see also
tables, p. 182-187.

- Augitic rocks, minerals B 1
- Austin chalk B 186-G
- Australia, mining laws B 505
- Autunite, South Dakota,
Lawrence County C 286
- Bacteria, iron-depositing P 113
- Bandelier National Monument,
N. Mex., map p. 252

Barite

- Alaska B 592-D
- annual resource data, 1882-1923,
see MRUS, p. 98-131.
- bibliography B 1019-C
- Brazil B 960-A
- Georgia, Cartersville region B 340-M; P 224
- Pennsylvania B 225-o
- United States B 1019-C,
1072-B
- Virginia, James River-Roanoke
River district MF-5
- Wisconsin, Cuba City region MF-15

Barium

- annual resource data, 1916-1923,
see MRUS, p. 122-131.

- United States B 666-W

- Barnett formation P 243-F

Barometric measurement of

- heights A 2 g

- Barstow formation P 254-C

Basalt

- anomalous remanent magnet-
ization B 1083-E
- Hawaii B 994
- primary quartz in B 66
- Basin and Range province P 197-D
- Basin Range structure P 153
- Bass Islands dolomite OM-40

Bastnaesite, California,
San Bernardino

- County MF-4
- Batesville sandstone B 593

Batholiths

- Idaho, comparison with
southern California
batholith B 1070-A
- Mesozoic, western North America
lead-alpha ages B 1070-B
- uranium distribution B 1070-C

Bauxite

- annual resource data, 1893, 1894, 1897-
1923, see MRUS, p. 102-103,
105-131.
- Arkansas A 21 III d;
P 299; p. 226
- bibliography B 999

Bauxite--Continued

- Georgia, northwestern C 193
- Mississippi, northeastern B 750-G
- United States B 666-O

See also Bauxite, annual re-
source data.

- Beach sands, Puerto Rico B 1042-I

- Bear River basin, Idaho, profile
surveys W 350

- Bear River formation B 128; P 98-G

- Beaverdam Creek basin, Md.,
hydrologic budget W 1472

- Beckwith formation P 98-G

- Bedford shale, geology P 259

- Belgium, iron and associated
industries B 703

- Belt Series P 294-D

- "Bend Series" P 129-A

- Bentonite, Montana, Wyoming,
South Dakota B 260-m,
285-L, 1023;
C 150; MF-36

- Berea sand B 198, 346
621-N, O; OM-5,
9, 29, 39, 49, 58,
59, 69, 79, 89, 99
- Berea sandstone OC-21; OM-17;
P 259

Bermuda, mollusks, Quaternary

- and Recent B 24

Beryl, in pegmatites

- Arizona and Nevada B 1082-D
- Idaho and Montana P 229
- South Dakota B 1072-I; P 297-A

Beryllium

- Colorado B 982-D
- in coals B 1084-K
- in ores, determination B 950
- New Mexico B 945-C
- nonsegitates, United States P 318
- North Carolina C 309
- quantitative analysis C 427

Bibliography

- Alaskan Paleozoic paleon-
tology B 1021-H

- andalusite B 1019-N

- anhydrite, United States and
Puerto Rico B 1105

- apatite C 135

- asbestos B 1019-L

- barite B 1019-C

- bauxite B 999

- biochemistry, iron in water W 1459-F

- bituminous substances, uran-
iferous and radio-
active B 1059-D

- black shales, marine,
uranium-bearing B 1059-F

- brachiopods B 87

- bryozoans B 173

- clay and ceramic arts B 143

- coal C 86

- uranium-bearing B 1059-A

- copper C 178

- crustaceans, Paleozoic,
1698-1889 B 63

- dumortierite B 1019-N

Bibliography--Continued

- energy resources, U. S.,
 world C 447
 erosion W 797
 evaporation and transpiration W 1539-R
 evaporation suppression P 272-C
 geochemical prospecting B 1000-A, G;
 C 28
 gypsum, United States and
 Puerto Rico B 1105
 Hayden, King, Powell, Wheeler
 surveys B 222
 insects, fossil B 69
 invertebrates, Mesozoic,
 North America B 102
 iron ores B 1019-D
 kyanite B 1019-N
 lead C 242
 limestone, high-calcium B 1019-I
 magnesium B 1019-E
 mercury B 1019-A
 nickel B 1019-K
 niobium B 1029-A
 North America, geology B 127, 746, 747,
 823, 937, 938, 949, 952, 958,
 968, 977, 985, 1025, 1035, 1049,
 1054, 1065, 1075, 1095, 1115
 phosphate B 1018, 1059-B;
 C 135
 phosphorites, uranium-bearing
 B 1059-B
 platinum B 694
 pyrite C 157
 pyrophyllite B 1019-N
 rare earths B 1019-F
 salt B 1019-J
 sediment movement W 797
 selenium B 1019-M
 silica, high-grade B 1019-H
 sulfur C 157
 tantalum B 1029-A
 thorium B 1019-F
 titanium B 1019-G; C 87
 topaz B 1019-N
 trace elements and related
 reports B 1019-B; C 281
 U. S. Geological Survey open-file
 maps and reports C 56, 64, 149,
 227, 263, 337, 364, 379,
 401, 403, 412, 428, 448
 uranium B 1019-B, 1059,
 1107-A; C 281
 vertebrates, fossil B 179
 waterpower resources C 200
 water resources C 190, 455; W 119, 120,
 163, 280, 340, 427,
 836-D, 837, 992, 1459-F,
 1477, 1492, 1539-R
 C 242
 zinc
 Big Blue River basin, Nebr.,
 geology, ground
 water W 1474
 Big Wood River basin, Idaho,
 water resources C 192; W 1478,
 1479
 Bighorn dolomite OM-202
 Bikini Atoll, See Marshall Islands.
 Biochemical literature, iron in
 water W 1459-F
- Birds. See under Paleontology.
 Bismuth
 annual resource data, 1882-1886, 1901-1923,
 see MRUS, p. 98-101, 107-131.
 colorimetric determinations B 1036-I
 United States B 666-U
 Bituminous sandstone
 California
 Edna region OM-16
 McKittrick district OM-35
 Point Arena OM-125
 Santa Cruz County OM-27
 Utah
 Sunnyside region OM-86
 Vernal region B 822-C
 Bituminous substances, uraniferous
 and radioactive B 1059-D
 See also Asphalt.
 Black Canyon of the Gunnison
 National Monument,
 Colo., map p. 252
 Black Hills, See South Dakota; Wyoming.
 Black River limestone OC-11
 Black sands
 from placer mines B 285-C
 Pacific slope MRUS 1905
 Washington B 805-A
 Black shales
 oil-bearing B 641-L;
 P 356-A
 uranium-bearing B 1030-F
 1059-F;
 P 356-A, C
 Blacksmith Fork, Utah, profile
 surveys W 420
 Bleaching clay. See Clay.
 Bois Blanc formation OM-28
 Boise River drainage basin,
 Idaho, discharge and
 sediment loads W 1048
 Boone formation B 595, 598;
 P 154-B
 Borate
 California
 Kramer district B 785-C;
 P 158-I
 Ventura County B 540-O
 Borate minerals
 analyses B 55, 1036-K
 Borax
 annual resource data, 1882-1916, see
 MRUS p. 98-123.
 California
 Death Valley and Mohave
 Desert B 200
 B 213-I
 eastern
 Owens, Searles, Panamint
 basins B 580-L
 MRUS 1911 II
 Ryan B 540-N
 Saline Valley B 735-B
 Nevada
 Boric acid, separation and esti-
 mation B 42
 Borings. See Wells.
 Borosilicates, analyses B 55
 Botanical prospecting. See Geobotanical
 prospecting.

- Boundaries, United States, Territories B 13, 171, 174, 226, 302, 689, 817
- Brachiopods. See under Paleontology.
- Brandywine Creek, Pa., natural channel P 271
- Brazil
- barite B 960-A
 - iron B 946-A
 - magnesite B 962-C, 975-C
 - manganese B 935-E, 946-A, 964-A
 - mica B 964-C
 - nickel B 935-E
- Brines, evaporation P 95-E, 98-A
- See also Potash; Salt; Sodium compounds.
- British Columbia. See Canada.
- Bromine
- annual resource data, 1882-1923. See MRUS p. 99-131.
 - United States B 666-F
- Brownstone, Pennsylvania MRUS 1896
- Brucite, Nevada MF-35
- Bryce Canyon National Park, Utah, map p. 252
- Bryn Mawr gravel P 132-H
- Bryozoans. See under Paleontology.
- Buda limestone B 205
- Building materials. See Construction materials.
- Byram marl P 129-E
- Cadmium
- annual resource data, 1908-1922, see MRUS, p. 113-130.
- Calamine, constitution B 167
- Calcite
- Mexico B 954-D
 - Montana, Park and Sweet Grass Counties B 1042-M
 - ratio to dolomite in mineral mixtures B 1111-D
- Calcium carbonate
- in ground water, saturation W 1535-D
 - in marine sediments, relation of salinity P 186-N
- Calcium chloride
- annual resource data, 1913-1923, see MRUS, p. 118-131.
 - United States B 666-F
- California
- antimony B 922-K, 931-Q
 - asphalt OM-35
 - base map p. 250
 - bastnaesite MF-4
 - bituminous sandstone OM-16, 27, 35, 125
 - borate B 540-O, 785-C; P 158-I
 - borax. See Borax.
 - brines, evaporation, Searles Lake P 98-A
 - cassiterite B 620-P
 - celestite B 540-T
 - chromite. See Chromite.
 - clays, high-alumina Map 3-197 (p. 226)
 - coal B 285-F, 316-F, 431-B
 - colemanite B 785-D
- California--Continued
- copper. See Copper.
 - core logs, Mohave Desert region B 1045-A-F
 - desert watering places W 224, 490-A, B, 497
 - diatomaceous deposits B 315-O; OM-34
 - droughts W 1366
 - earthquakes B 68, 95, 112, 114, 129, 147, 155, 161, 324
 - engineering geology
 - Islais Creek basin, San Francisco 1-264
 - Oakland West quadrangle 1-239
 - floods W 147, 162, 426, 796-C, 843, 844, 1137-E, F, 1260-D, 1320-D
 - forests A 19 V i, 20 V f, 21 V f; P 8
 - geologic history, Yosemite Valley P 160
 - geologic map p. 191
 - geologic map index p. 192
 - geologic names B 826
 - geology. See geographic list--ing for specific areas.
 - geomorphology and glacial geology, San Joaquin Basin, Sierra Nevada P 329
 - gold. See Gold.
 - gravels, Tertiary, Sierra Nevada P 73
 - gravity survey, Mohave Desert P 316-D
 - gypsum B 223, 403, 430-F
 - hydrography W 81
 - hydrology
 - Long Beach-Santa Ana area W
 - Mohave Desert W 578
 - Salton Sea region W 497
 - San Bernardino and San Gabriel Mountains HA-1
 - San Bernardino Valley W 142
 - iron. See Iron.
 - irrigation
 - Bakersfield area W 17
 - Fresno area W 18
 - Merced area W 19
 - Morgan Hill area W 400-E
 - Sacramento Valley W 375-A
 - southern W 59, 60, 137, 138, 139, 219
 - landslides, Los Angeles 1-284
 - lava flows, Sierra Nevada B 89
 - lead B 580-A
 - leveling B 342, 481, 766
 - limestone B 213-i
 - magnesite B 285-J, 355, 540-S
 - manganese B 710-E, 931-S
 - marble B 540-K
 - mercury. See Mercury.
 - metacinnabarite, New Almaden B 78
 - mineral resources
 - Gasquet quadrangle B 995-C
 - Inyo and White Mountains B 540-B
 - Ivanpah quadrangle P 275

California--Continued

Kern River area B 1087-F
 Los Burros district B 735-J
 New Almaden mine, Santa Clara County, map p. 226
 Redding region B 213-d, f, 225-d; GF-138
 West Shasta district P 285
See also specific mineral commodities.
 mining debris, Sierra Nevada P 105
 mining districts, north-eastern B 594
 molybdenum B 340-D, 640-D
 Mother Lode system GF-63; P 157
 Neocene rivers, Sierra Nevada B 213-b
 nickel B 640-D
 nitrate B 724, 820
 oil. See Oil; Oil shale.
 paleontology
 arthropods P 294-G
 birds, Manix Lake P 264-J
 Cenozoic B 15
 Coalinga district B 396; OC-1
 corals P 98-T
 Cretaceous B 22
 diatoms P 189-C
 echinoids P 190
 Eocene OC-1
 Foraminifera B 268, 513; P 240-A, B, 294-M
 Jurassic P 175-B
 Kettleman Hills P 189-C, 195
 Mesozoic B 15
 mollusks P 190, 254-C
 Palos Verdes Hills P 207
 pectens P 47
 Santa Maria district P 222
 physiography, Klamath Mountains B 196
 potash B 540-N; MRUS 1912 II
 power systems W 493
 Quaternary history, Mono Valley A 8 I b
 radioactivity studies, Rock Corral area B 1021-C
 rare earths, Mountain Pass district P 261
 reservoir sites, Sierra Nevada C 85
 salines B 380-L, 540-N, 580-L
 salt industry B 225-I
 shorelines, former, San Francisco Bay 1-298
 silver A 14 II e; B 580-A; MRUS 1912 I
 slate B 225-i
 stratigraphy B 19
 Cretaceous OC-6
 Eocene OC-1, 12
 Inyo Mountains B 1061-A; P 110
 Kettleman Hills P 195; p. 234
 Monterey shale P 212
 Paleocene OC-12
 Tertiary OC-6, 34; P 73

California--Continued

strontianite B 660-I
 structural geology
 Kettleman Hills P 195
 Santa Maria district, map p. 235
 triangulation B 644-C, 709-M
 tungsten. See Tungsten.
 uranium B 1087-F; C313
 volcanic eruption, northern B 79
 volcanic rocks, El Modeno area P 274-L
 water, ground
 artesian pressure table, p. 183
 coastal plain, southern W 137, 138, 139
 Colusa County W 1535-A
 contaminated W 1136
 Cuyama Valley W 1110-B
 Del Norte County W 1254
 Fresno County W 1360-G
 Humboldt County W 1470
 Indio region W 225
 Kern County W 1457
 Kings County W 1360-G, 1457
 Lake County W 1297, 1535-A
 Lanfair Valley W 450-B
 Long Beach-Santa Ana area W 1109, 1136, 1147
 Los Angeles River basin W 112
 Mohave Desert region W 490-B, 578
 Mokelumne area W 619, 780
 Morgan Hill area W 400-E
 Napa County W 1495
 Niles cone area W 345-H
 Pahrump, Mesquite, and Ivanpah Valleys W 450-C
 Sacramento Valley W 375-A, 495
 Salton Sea region W 490-A, 497
 San Bernardino Valley W 142, 468
 San Diego County W 446, 468
 San Jacinto and Temecula Basins W 429
 San Joaquin Valley W 222, 398, 1469
 Santa Clara Valley W 519
 Santa Maria Valley W 1000
 Santa Ynez basin W 1107, 1467
 Siskiyou County W 1462, 1484, 1491
 Sonoma County W 1427, 1495
 southern W 137-139, 146, 219
 Torrance-Santa Monica area W 1461
 underflow tests W 112
 water levels W 213, 429, 468, 1068; table, p. 183
see also California, irrigation,
 water, surface W 213
 Colorado River, utilization W 395
 floods. See California, floods
 for irrigation, quality table 7, p. 187
 gazetteers W 295-297

California--Continued

- water, surface--Continued
 geochemistry, southern
 Coast Ranges W 1535-B
 Great Basin W 637-A
 Kern River W 46
 Mokelumne area W 619
 Pacific slope basins W 636-E, 637-A
 power W 493, 1329
 quality W 237, 274, 1535-A, B;
 table, p. 182
 river surveys W 44, 558, 995
 Sacramento River basin W 295, 597-E
 San Francisco Bay area W 637-A
 San Joaquin River basin W 296, 636-D
 Santa Maria Valley area W 1000
 storage W 45, 58, 68, 86
 streamflow records
 compilation table 6
 daily, by years tables 4 and 5
 index C 389-391
 Yuba River W 46
 water resources
 Antelope Valley W 278
 Camp Irwin, test-well
 drilling W 1460-F
 Owens Valley W 181, 294
 quality W 364
 Salinas Valley W 89
 San Francisco Bay area C 378; GF-193
 Santa Barbara County W 116, 1068, 1107,
 1108, 1467
 Santa Maria Valley W 100, 1000
 Solano County W 1464
 South Coastal basin C 105
 southeastern desert W 224
 southern C 399, 404, 416,
 429; W 213, 1366
 springs W 278, 338, 557, 1535-A
 See also California, hydrology.
 zinc P 285
See also Pacific Coast; Sierra
 Nevada; Western States.
 Californite B 262
 Calvert formation P 98-F
 Cambrian formations
 classification A 7 e
 correlation B 81; P 186-L
 Michigan B 23; OC-9
 Missouri, Texas, upper
 Mississippi Valley P 186-L
 North America A 12 I d
 Oklahoma OC-5; OM-52
 Pennsylvania B 134; P 98-B
 See also names of formations.
 Cambrian fossils
 Great Basin P 264-D
 Nevada P 334-C
 North America B 10, 30
 See also Paleontology.
 Cameras B 657
 Canada B 657
 altitudes B 6
 boundary with Alaska, geo-
 logic investiga-
 tions B 520-K
 chromic iron MRUS 1895
 floods, Winnipeg River basin W 1137-B

Canada--Continued

- gold, Maritime Provinces MRUS 189
 iron ores, British Columbia B 285-E
 Mowry shale, Cretaceous P 355
 nickel ore
 platiniferous B 64
 Sudbury MRUS 1888
 Saskatchewan Glacier, Alta.,
 mode of flow P 351
 silver, Cobalt region B 735-E
 streamflow measurements tables 5 and 6,
 pt. 5, p. 186, 187
 volcanic eruption, ancient,
 Yukon Basin P 95-D
 Canadian River basin, N. Mex.,
 floods W 842
 Canal Zone
 Foraminifera, Eocene and
 Oligocene P 244
 geologic map I-1
 Madden Dam project,
 Alhajuela B 821-B
 slides, mechanics P 98-N
 Tertiary mollusks P 306-A, B
 Caney shale B 377
 Canyon de Chelly National Monu-
 ment, Ariz., map p. 252
 Carbon black, annual resource data, 1913,
 1920-1923, see MRUS,
 p. 119, 127-131.
 Carbon dioxide MRUS 1905
 Colorado, Jackson County C 5
 determination, volumetric
 method B 950
 Gulf of Mexico P 120-A
 Carbonaceous rocks, uranium-
 bearing B 1055, 1059-A; C 313,
 349
 See also Black shales.
 Carbonate of soda MRUS 1882
 Carbonate rocks, analysis B 305, 422, 700
 Carboniferous formations
 Colorado P 16
 correlation B 80
 Kansas B 211
 Michigan OC-41
 See also names of formations.
 Carboniferous fossils
 Colorado P 16
 Idaho P 152
 Kansas B 211
 Missouri B 98; M 37; P 203
 North America B 153
 Ohio, Pennsylvania P 193-C
 United States M 42
 See also Paleontology.
 Carlile formation P 254-E
 Carlsbad Caverns National Park,
 N. Mex., maps GQ-98, 112;
 p. 252
 Carnotite
 Arizona-New Mexico C 111
 Colorado B 262, 315-C,
 340-D, 750-D
 Colorado Plateau B 988-B
 Pennsylvania B 580-H
 South Dakota B 1009-I; C 175
 Utah B 530-c, 750-D

- Carnotite--Continued
See also Radioactive deposits;
 Vanadium.
- Carolina Bays, relation to shape
 of eddies P 254-I
- Cascade Range
 metalliferous mineral de-
 posits B 893
 structure, age, paleobotany A 20 III a
- Cassiterite
 Alaska B 442-F
 California, San Diego County B 620-P
- Castle Hayne marl P 143
- Catahoula sandstone P 98-M
- Catalogs
 invertebrates, Mesozoic B 102
 plants, Mesozoic and Ceno-
 zoic B 152, 696, 924
- Cedar Breaks National Monument,
 Utah, map p. 252
- Celestite, Arizona-California B 540-T
- Cement, See Construction materials.
- Cenozoic formations, Arizona B 1121-H
See also names of formations.
- Cenozoic fossils
 Alaska P 294-C
 Atlantic Coastal Plain,
 Bermuda B 24
 California B 15; P 240-A
 Great Plains P 337
 North America B 361, 696, 924
 North Carolina P 234-A
 United States M 54; P 321
See also Paleontology.
- Cenozoic geology, Colorado
 Plateau P 279
- Cenozoic history
 Montana, North Dakota P 326
 Utah, central P 205-D
- Central America
 hydrography A 22 IV b
 mineral deposits B 1034
- Cephalopods. See under Paleontology.
- Ceramic arts, bibliography B 143
- Cerussite, Colorado, Custer
 County B 580-C
 MRUS 1883-84
- Chalk
 Arkansas A 22 III o
 Chapman sandstone P 89
 Chappel limestone P 294-J
 Chattanooga shale B 1087-E;
 P 286, 357
- Chehalis River basin, Wash.
 floods W 968-B
- Chelan River basin, Wash.,
 profile surveys W 376
- Chemistry. See Geochemistry.
- Chert, Tennessee, manganese-,
 iron-bearing B 928-D
- Chesapeake Bay
 erosion and sedimentation P 90-B
 water, salinity P 154-C
- Cheyenne River basin
 sediment resources W 1531-B
 stock-water reservoirs C 223;
 W 1531-A
- Cheyenne sandstone P 129-I
- Chickamauga and Chattanooga
 National Military
 Park, Ga., map p. 252
- Chile
 mercury B 964-E
 tungsten B 960-C
- Chlorite group, Tschermak's
 theory B 113
- Chromic iron
 annual resource data, 1889-1891,
 1895-1918, see MRUS,
 p. 101, 103-125.
- Canada MRUS 1895
- Cuba MRUS 1918 I
- Chromite
 Alaska B 692-D
 Baranof Island B 936-G
 Kenai Peninsula B 712-D, 742,
 931-G
- analysis B 1084-B
- California
 Del Puerto area B 430-D
 Glenn County B 945-A
 Klamath Mountains B 725-A
 North Elder Creek area B 945-G
 Pilliken area B 922-O
 San Luis Obispo County B 945-B
 Seiad quadrangle B 922-J
 Siskiyou County B 948-B
- Cuba B 935-A, 954-B
- magnetic exploration B 973-A
- Maryland, Pennsylvania,
 Delaware B 725-B, 1082-K
- Montana
 Red Lodge region B 945-F
 Stillwater County B 725-A, 922-N
 Sweet Grass County B 725-A, 948-C
 1015-D
- North Carolina B 725-B
- Oregon
 Briggs Creek and Sourdough
 areas B 922-P
 eastern B 725-A
 Grant County B 922-D
 Klamath Mountains B 725-A
 southern coast B 945-E
 United States B 666-A
 Washington B 725-A
- Chromium
 alloys MRUS 1894
 annual resource data, 1882-1923,
see MRUS, p. 98-131.
 colorimetric estimation B 167
 separation from vanadium B 950
- Chromograph C 63
- determination of cobalt C 125
- Chugwater formation P 98-O
- Cinnabar. See Mercury.
- Cisterns W 255, 380,
 499, 518, 599
- Citronelle formation P 98-L
- Claiborne group P 120-C
- Clark Fork basin, Mont.-Idaho-
 Wash., profile sur-
 veys W 346
- Clay
 adsorbent B 928-C
- Alabama, Birmingham dis-
 trict B 315-I
- Alaska, Healy Creek B 963-E
- annual resource data, 1882-1923,
see MRUS, p. 98-131.
- Arkansas B 351

Clay--Continued

- Arkansas--Continued
 Garland County B 285-L
 bibliography B 143
 bleaching C 3
 California, Santa Ana Moun-
 tains Map 3-197
 (p. 226)
 colloid matter in B 388
 Colorado
 Calhan region B 470-G
 Durango-Gallup coal field B 315-I
 south-central B 993
 Columbia Basin C 158
 Delaware B 530-e
 dispersion characteristics P 334-G
 Europe MRUS 1897
 Florida B 380-K
 Georgia, central B 315-I
 Idaho B 1091
 Illinois, Murphysboro quad-
 rangle B 470-G;
 GF-185
 Kansas, Independence quad-
 rangle B 260-m, 296
 Kentucky B 285-L
 Louisiana B 660-E
 Maine
 Penobscot Bay region B 285-L
 Portland region B 530-e
 Massachusetts
 Cape Cod B 285-L
 Clinton region B 430-F
 southeastern A 17 I g
 Mississippi, northwestern B 213-k
 Missouri, St. Louis district B 315-I
 Montana
 Belt region B 340-I
 northeastern B 540-K
 New Mexico, Gallup-Durango
 coal field B 315-I
 Oregon, Hobart Butte high-
 alumina deposit C 143
 Pennsylvania
 Cambria County, Clarion
 quadrangle, South
 Mountain B 315-I
 central B 285-L
 Ohio Valley B 225-k
 Rhode Island A 17 I g
 Tennessee B 213-k, 285-L
 Texas B 470-G
 United States B 666-T, 708,
 901; P 11
 See also Clay, annual resourcw data.
 Washington B 260-m, 1091
 See also Bentonite; Kaolin;
 Montmorillonite.
- Clayrocks
 refractory, Dakota group,
 Colorado B 1102
 Cleavage, rock B 239, 241
 Climate
 Alaska P 45
 drought in relation to W 820
 Missouri River basin C 98
 See also Paleoclimatology.
 Clinton sand B 621 H, 1003-A

Coal

- Alabama
 Birmingham district B 285-F
 Cahaba field B 316-A,
 431-B
 Coosa coal field, map p. 224
 Warrior basin B 260-I
 Alaska A 17 I e, 22 III I;
 B 284, 314 B,
 442-A, J;
 MRUS 1909 II;
 p. 213
 Anthracite Ridge district B 849-A, 861
 Bering River region B 250, 259, 284;
 C 146
 Cape Lisburne B 259, 278
 Herendeen Bay B 284
 Homer district B 1058-F
 Jarvis Creek field B 989-G
 Kachemak Bay region B 277
 Matanuska Valley B 284, 289,
 480-F, 500, 692-D, 712-E,
 714-D, 791, 880-D, 1016,
 1058-D; C 154
 Moose Creek area B 857-E
 Nenana field B 664; C 310
 south-central B 963-E
 southwestern B 259
 Yukon basin B 213-g, 218
 analyses B 471-J, 531-M,
 541-K, 621-P
 annual resource data, 1882-1923, see
 MRUS, p. 98-131.
 anthracite A 22 III C; B 378;
 MRUS 1882,
 1883-84
 constitution diagrams B 995-A
 Appalachian region A 22 III d, e; B 65
 Arizona
 Black Mesa field and Pine-
 dale region B 431-B
 Deer Creek field B 225-g
 Arkansas B 316-B, 326, 847-E, 1072-P
 Camden field A 21 I f
 bibliography B 1059-A; C 86
 boghead, origin P 132-I
 California
 Mount Diablo Range B 285-F
 San Benito County B 431-B
 Stone Canyon B 316-F
 cannel B 659
 classification, ranks P 48, 100-A
 coking C 90
 Colorado B 1072-C; C 258
 Anthracite-Crested Butte
 district GF-9
 Axial and Monument Butte
 quadrangle B 757
 Book Cliffs field B 316-E, 371, 851
 Canon City field and
 Denver Basin B 381-C
 Colorado Springs field B 381-C; GF-203
 Durango-Gallup field B 285-F, 316-E, F,
 341-C; OM-109
 Grand Mesa B 341-C, 510
 Gulnare, Cuchara Pass,
 Stonewall areas Map C-26
 Gunnison Valley B 471-H

Coal--Continued

Colorado--Continued

La Veta area Map C-20
 Mancos region B 691-K
 Meeker quadrangle B 812-C
 North Park B 596
 northwestern B 316-E, 341-C, 415
 Paonia field, map p. 224
 South Park B 381-C
 Starkville-Weston area B 1051
 Stonewall-Tercio area Map C-4, 26
 Trinidad-Aguilar area B 381-C, 1072-G,
 1112-E

Walsenberg area B 1042-O; GF-68
 West Elk Mountains B 510
 Yampa field B 285-F, 297, 748

geochemistry

beryllium content B 1084-K
 minor elements B 1036-H, 1117-A

Georgia, Sand and Lookout
Mountains, map

p. 224

Idaho

Boise County B 531-H
 eastern B 716-F
 Fall Creek area B 1055; C 212
 Orofino field B 621-I
 southeastern B 680
 Teton Basin field B 541-I

Illinois

Saline-Gallatin field B 316-B

Indiana

Coal City quadrangle B 381-A; C 266
 Dugger quadrangle Map C-28
 Hymers quadrangle Map C-11
 Jasonville quadrangle Map C-16
 Jasonville quadrangle Map C-1
 Linton quadrangle Map C-9
 Seelyville quadrangle Map C-27
 Shelburn quadrangle Map C-17
 Switz City quadrangle Map C-41
 Terre Haute and Dennison
 quadrangles Map C-44

Kentucky

Big Stone Gap field B 111
 Buckhorn quadrangle Map C-15
 Campton quadrangle Map C-42
 Cannel City quadrangle B 1020
 Cornettsville quadrangle Map C-22
 Cumberland Gap field B 225-g; P 49
 Elkhorn field B 316-A
 Hyden quadrangle Map C-5
 Kenova quadrangle B 285-F, 349; GF-184
 Pike County B 876
 Pound quadrangle B 541-F
 Russell Fork basin B 348
 Tiptop quadrangle B 1042-P
 Troublesome quadrangle Map C-18
 White Oak quadrangle B 1047-A

Korea

B 1041-A-E

Mexico, Santa Clara district

B 962-A

Michigan

C 77

Missouri, northeastern

B 541-F

Montana

C 53; Map C-2

Big Horn County B 541-H, 749, 806-B,
 812-A, 856

Blaine County B 541-H

Carbon County B 285-F, 316-C,
 341-A, B,
 641-G, 822-A

Coal--Continued

Montana--Continued

Cascade County B 316-C, 356,
 641-H
 Chouteau County B 381-A, 471-E,
 541-H
 Crow Indian Reservation B 856
 Custer County B 316-C, 341-A,
 531-F, 831-B
 847-B, 906-C,
 995-E

Custer National Forest B 381-A
 Dawson County B 316-C, 531-F, 847-C
 Fergus County B 341-A, 390
 Gallatin County B 471-E; GF-1
 McCone County B 905
 Meagher County B 341-A
 Musselshell County B 341-A, 381-A,
 431-B, 647

Musselshell-Judith region B 541-H
 Park County B 341-A, 471-E;
 GF-1

Powder River County B 831-B, 973-B,
 995-E, 1072-J

Richland County B 847-C;
 Map C-24

Rosebud County B 316-C, 531-F, 749,
 806-B, 812-A, 831-B,
 847-B, 995-I, 1072-J

southwestern B 531-G

Stillwater County B 641-G

Sweet Grass County B 341-A,
 471-E; GF-1

Teton County B 621-K

Treasure County B 812-A

uranium-bearing B 1046-G, 1055-F;
 C 251; Map C-33

Yellowstone County B 341-A, 381-A,
 431-B, 541-H, 647

Nevada, Esmeralda County B 225-g, 531-K

New Mexico C 89

Carthage field B 381-C

Cerillos field B 531-J

Durango-Gallup field B 285-F,
 315-I, 316-F

Engle field B 285-F

Fort Stanton Reservation

region B 316-F

Gallup-San Mateo region B 341-C

Gallup-Zuni Basin B 767

Monero region B 341-C

Raton field B 752

San Juan Basin B 341-C,
 860-A-C

San Juan County B 716-G

San Mateo-Cuba region B 381-C

Santa Fe and San Miguel

Counties B 381-C

Sierra Blanca field B 541-J

Tijeras field B 471-H

Una del Gato field B 316-F

White Mountain region B 225-g

North Carolina

Dan River B 471-B

Deep River coal field P 246; p. 224

North Dakota

Minot region B 906-B

Square Buttes field B 1076; OM-148

Coal--Continued

North Dakota--Continued

uranium-bearing B 1055-C, E;
Map C-33

See also Lignite.

Ohio B 65; P 100-B
Kenova quadrangle B 285-F, 349; GF-184
Pittsburgh (No. 8) bed,
reserves C 363

Summerfield and Woods-
field quadrangles

Oklahoma B 720
B 260-I, 1042-J;
Maps, p. 224

Choctaw field A 21 II e

Henryetta mining district B 1015-F

Howe-Wilburton district B 874-D

McAlester-Lehigh field A 19 III e;

B 874-A, B

Quinton-Scripto district B 874-C

Oregon C 362

Coos Bay field A 19 III C;

B 431-B, 982-B

Eden Ridge field B 541-I

Rouge River Valley and

Willow Creek B 341-C

oxygen in B 382

Pacific Coast A 22 III k

Pennsylvania

anthracite A 22 III c;
Map C-3, 7, 10,
12, 13, 14, 19,
21, 25, 43; P 143

Barnesboro-Patton field B 225-g; GF-189

bituminous field B 65, 213-g

Broad Top field P 150-E

Burgettstown quadrangle B 260-I; GF-177

Clarion quadrangle B 316-A; GF-178

Clearfield, Punxsutawney,

and Glen Campbell

fields B 285-F

Elders Ridge field B 225-g

Foxburg quadrangle B 454

Johnstown region B 316-A

New Kensington quadrangle B 829

Wilmore Basin, Cambria

County B 225-g

Philippine Islands MRUS 1905

purchase under Government
specifications B 339, 378, 428

resins in P 85-E

Rhode Island B 101, 541-F,
615

Rocky Mountains A 22 III j

smoke prevention B 334, 373

South Dakota

Black Hills region B 499

uranium-bearing B 1055-B, C, D;
Map C-33

See also Lignite.

Tennessee

Bon Air-Clifty area B 641-K

Cumberland Gap field B 225-g

Ivydell quadrangle Map C-40

Pioneer quadrangle Map C-39

tests B 325, 336, 362, 363, 366, 368,
402, 403, 412; P 48

Texas

Rio Grande, San Carlos
fields B 164

Coal--Continued

Texas--Continued

Santo Tomas cannel coal B 691-I

United States A 22 III a-I;

B 394, 471-J, 659

666-M, 1136; C 94,

293; maps, p. 213

See also Coal, annual resource data.

U. S. Geological Survey pub-

lications on SP

uranium-bearing B 1055, 1059-A; C 212,
251, 343; Map C-33

Utah

Blacktail (Tabby) Moun-

tain field B 471-I

Book Cliffs field B 285-F, 316-E

371-852

Castle Valley B 628

Coalville field B 581-E

Harmony, Colob, and

Kanab fields B 341-C

Iron County field B 316-E

Lost Creek field B 691-L

northeastern B 341-C, 415

Pleasant Valley district B 316-E

Salina Canyon district B 796-C

Sanpete County B 285-F, 541-J;

p. 224

Thompson region B 541-J

Vernal field, Deep Creek

district B 471-I

Wasatch Plateau field B 819

Weber River field B 285-F

Virginia C 171

Big Stone Gap field B 111

Dante B 316-A

Pocket district B 341-C

Pound quadrangle B 541-F

Powell Mountain field B 431-B, 541-F

Russell Fork basin B 316-A, 348

Washington A 22 III k; B 474

Centralia-Chehalis dis-

trict B 1053; Map C-8

Clallam County B 260-I

Cowlitz River valley B 531-L

Glacier field B 541-I

King County, map p. 224

Portland, Oreg., region B 260-I

Puget Sound region A 18 III c

Toledo-Castle Rock dis-

trict B 1062

West Virginia B 65

Abram Creek-Stony River

coal field B 711-F

Buckhannon region GF-34

Charleston region GF-72

Harrison region B 716-H

Kanawha Valley MRUS 1883-84

Kenova quadrangle B 285-F, 349; GF-184

Meadow Branch field B 225-g

Nicholas quadrangle B 260-I

Piedmont region GF-28

Pocahontas region GF-26

Potomac and Roaring

Creek fields A 14 II 1

Raleigh region GF-77

Tazewell region GF-44

Wyoming A 22 III j; C 81; Map C-6

Coal--Continued

Wyoming--Continued

- Bald Mountain-Dayton region GF-141
 Big Horn Basin B 225-g, 285-F, 341-B, 381-B; P 53
 Black Hills B 260-I, 499
 Campbell County B 471-F, 1050
 Carbon County B 316-D, 804
 Cloud Peak-Fort McKinney region GF-142
 Converse County B 471-F
 Fremont County B 471-G; C 152
 Gillette field B 796-A
 Glenrock and Great Basin Divide fields B 341-B
 Johnson County B 471-F, 531-I, 1078; C 228; Map C-23
 Lander field and Laramie Basin B 316-D
 Little Snake River field B 341-B, 381-B
 Minturn district B 796-A
 Natrona County B 471-F, G
 Newcastle region GF-107
 Oregon Basin, Meeteetse, and Grass Creek Basin quadrangles P 145
 Park County B 921-B
 Powder River field B 381-B
 Pumpkin Buttes field B 806-A
 Sheridan County B 341-B, 1050, 1078
 southwestern P 56
 Sundance region GF-127
 Sweetwater County B 341-B, 381-B, 1055-G
 Uinta County B 285-F, 316-D
 western B 680
 Willow Creek area, map p. 224
See also Fuel resources; Fuel-testing plants; Producer-gas plant.
- Coal ash
 field determination B 621-A
 germanium content C 272
 minor elements B 1036-H
- Coal beds
 field description and sampling B 1111-B
- Coal briquets B 316-G, 343, 366, 385, 403, 412; MRUS 1909 II; P 48 III
See also Fuel-testing plants.
- Coal lands, valuation B 424
- Coal mining
 accidents B 333
 explosions B 369, 383, 425
 explosives B 423
 regulations R
 West Virginia, Kanawha Valley MRUS 1883-84
- Coal-testing plant. See Fuel-testing plants.
- Coastal Plain. See Atlantic Coastal Plain; Gulf Coastal Plain.
- Cobalt
 Alabama B 940-J
 annual resource data, 1882-1923, see MRUS, p. 98-131,
 Brazil B 935-E
 determination in soils and rocks C 125
 New Mexico, Black Hawk

Cobalt--Continued

- New Mexico, Black Hawk district B 1009-K
 Tennessee B 940-J
- Cochrane problem, Pleistocene chronology B 1021-J
 OC-49; P 150-A, 254-E
- Cody shale
- Coke
 annual resource data, 1883-1923, see MRUS, p. 99-131,
 tests B 336
- Colemanite
 California, Shoshone region B 785-D
 Nevada, Clark County B 735-B
 origin P 85-A
 Colombia, mineral resources B 964-B
- Colonial National Historical Park (Yorktown Battle-field), Va., map p. 252
- Colorado
 alkalic rocks, Iron Hill P 197-A
 alunitite B 530-c
 analcite P 158-A
 base map p. 250
 beryllium B 982-D
 carbon dioxide C 5
 carnotite. See Carnotite.
 cement materials B 380-J
 cerussite B 580-C
 chemical elements, Salt Wash member, Morrison formation B 1084-E
 clay B 315-I, 470-G, 993
 clayrocks, Dakota group B 1102
 coal. See Coal.
 construction materials MB-10
 contour map p. 249
 copper. See Copper.
 dike rocks, Apishapa quadrangle P 90-C
 drainage history, Yampa and Green Rivers P 90-K
 engineering geology, Wray area B 1001
- faults
 Front Range mineral belt, map p. 235
 London fault B 911
 ferberite B 583
 floods W 147, 162, 997, 1455-A
 fluorspar B 1082-F
 forests A 20 V b, c
 fuel resources B 1027-D, 1072-M; OM-149
 gas B 751-G, 796-B
 gazetteer B 291
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for specific areas.
 geophysical investigations
 Lisbon Valley area P 316-C
 Urvan area P 316-A
 glacial deposits, Eocene P 95-B
 gold. See Gold; see also Colorado, mineral resources.
 granite B 540-K
 granitic rocks, Northgate district P 274-M

Colorado--Continued

gypsum B 223, 285-K, 470-G
 hydrologic reconnaissance,
 Green River C 129
 igneous rocks I-309
 iron B 380-E
 irrigation C 295; W 9
 laccoliths A 14 II d
 land-classification maps p. 257
 landslides B 685; C 31;
 P 67
 leveling B 486, 565
 limonite, radioactive B 1046-N
 manganese B 715-D
 meerschau P 158-A
 metamorphic rocks I-309
 metamorphism, Northgate
 district P 274-M
 mica B 530-i
 mineral resources MB-8, 10
 Aspen district B 750-C, 785-A; M 31
 Beaver-Tarryall area B 928-A
 Blue River area B 970
 Bonanza district P 169
 Boulder County P 94, 245
 Breckenridge district P 75, 176
 Carson Camp, Hinsdale
 County B 470-B
 Clear Creek County B 1032; C 345;
 P 94, 319
 Creede district B 530-a, 718,
 811-B
 Cripple Creek district A 16 II a;
 B 254, 260-b,
 955-B; P 54
 Custer County A 17 II c
 Front Range P 223
 Garfield quadrangle P 289
 Georgetown quadrangle and
 Empire district P 63
 Gilpin County B 620-M, 1032;
 P 94
 La Plata district GF-60; P 219
 Lake City region B 478
 Larimer County B 1032
 Leadville district A 2 d; B 320,
 681, 779; M 12; P 148
 London fault region B 911
 Montezuma quadrangle P 178
 Mosquito Range P 235
 Rico region A 22 II c;
 GF-130
 Silverton region B 182, 315-A; GF-120
 Snowmass Mountain area B 884
 Summitville district P 343
 Telluride district A 18 III f;
 GF-57
 See also Mining districts; specific
 mineral commodities.
 minerals B 20, 60, 262, 1114
 mines, Front Range mineral
 belt, map p. 235
 mining, history P 138
 molybdenum B 846-C
 monazite B 1032-F
 nickel B 931-O
 oil, See Oil; Oil shale,

Colorado--Continued

paleontology P 16
 Carboniferous P 98-H, 106,
 131-H, 254-B
 Cretaceous A 20 II c; B 391
 Devonian P 131-F, 168
 Green River formation
 See also Green River Formation,
 insects A 8 I d; B 93;
 M 40
 mollusks P 254-B
 paleobotany P 134
 Animas formation P 221-D
 Cretaceous P 155
 Denver formation P 98-H
 Fox Hills sandstone P 130
 Laramie formation P 274-H
 palmlike plants P 185-D
 Pottsville age P 131-G
 Tertiary P 101
 Raton Mesa B 1011; P 227, 265
 pegmatites B 1011; P 227, 265
 peneplains, Front Range and
 Rocky Mountain
 National Park B 730-A
 photogeologic maps. See map
 listing, p. 206-212.
 physiography, Quaternary
 geology, San Juan
 Mountains P 166
 pitchblende B 1030-G; C 186;
 P 90
 Pleistocene geology, Leadville
 quadrangle B 386
 Pleistocene-Recent deposits,
 Denver area B 996-C
 Precambrian rocks OM-116
 radioactive deposits, See Radioactive
 deposits.
 radioactivity survey, Moffat
 County GP-125, 126
 rare-earth minerals B 1027-O
 reservoir sites A 13 III d
 Arkansas River basin B 685
 San Juan Mountains MB-2
 sand and gravel deposits MB-2
 silver, See Silver; see also Colorado,
 mineral resources.
 stratigraphy P 149
 Carboniferous P 16
 Cretaceous P 95-C, 134, 186-K, 332
 Dakota group B 1102; OC-60; P 274-B
 Green River and Wasatch
 formations P 132-F
 Jurassic P 183
 Mesozoic and Paleozoic OC-16
 oil-bearing sands B 751-A
 Paleozoic OC-59; P 185-B
 Pennsylvanian OC-46; OM-135
 Permian and older rocks OC-7, 46; OM-135
 pre-Pennsylvanian rocks OC-39; OM-101
 Tertiary P 134, 332
 structural geology B 225-h
 Boulder oil field B 822-B
 Granby anticline OM-68
 Model anticline

Colorado--Continued

- structural geology--Continued
 North and South McCallum anticlines C 5
 Paradox member, Hermosa formation OM-209
 Piedra River Canyon OM-96
 plains area OM-176
 Rangely anticline OM-7, 41, 67
 sulfur B 530-h
 tectonic map showing uranium distribution MF-130
 Tertiary geology, Piceance Creek basin B 1082-L
 thorium B 1027-I, 1072-H; C 290
 triangulation B 644-D, 709-P
 tungsten B 583, 922-F; P 245; p. 234
 uranium. See Radioactive deposits.
 vanadium. See Vanadium.
 volcanic ash, Durango region B 285-O
 water, ground
 Arkansas Valley A 17 II f; P 52
 artesian pressure table, p. 183
 Baca County W 1256
 Colorado Springs region GF-203
 Denver Basin M 27
 Kansas River basin C 295
 Logan and Morgan Counties HA-9
 quality W 1367, 1378
 San Luis Valley W 240, 1379
 water levels table, p. 183
 Weld County HA-9; W 1367
 wells W 57, 149, 240
 See also Colorado, irrigation.
 water, surface
 Colorado River W 74, 395, 617
 power C 292; W 395, 396, 556
 quality W 274; table 1, p. 182
 quality for irrigation table 7, p. 187
 river surveys W 44, 93, 396, 556
 streamflow records tables, p. 184-187,
 compilation table 6
 daily, by years tables 4 and 5
 index C 386-389
 water resources W 74
 Apishapa region GF-186
 eastern A 16 II f
 Green River C 129
 springs GF-203; W 240
 wolframite B 583
 xenotime B 1032-F
 zinc B 681, 779; P 148
See also Rocky Mountains; Western States.
 Colorado group P 106, 132-B, 239
 Colorado National Monument, map p. 252
 Colorado Plateau
 carnotite B 988-B
 Cenozoic geology P 279
 copper in red beds B 260-f
 directional resistivity measurements B 1083-B
 ore-bearing formations MF-16

Colorado Plateau--Continued

- radioactive deposits. See Radioactive deposits.
 rock formations P 132-A
 stratigraphy
 Morrison and related formations B 1009-E
 Triassic and associated formations B 1046-Q
 uranium. See Radioactive deposits.
 vanadium. See Vanadium.
See also Arizona, Colorado, New Mexico, and Utah.
 Colorado River
 suspended sediment W 636-B, 9j8
 utilization W 395, 617, 618
 water, surface
 quality W 596-B, 636-A, 638-D, table, p. 182
 waterpower and flood control W 556
 Colorado River basin
 floods W 162, 967-A, 997, 1260-A
 profile surveys W 44, 396
 streamflow records tables, p. 184-187
 index C 389
 See also Arizona; Colorado; New Mexico; Utah; Wyoming.
 Columbia River basin
 alumina resources MR-1
 bank storage evaluation W 1539-I
 damsites W 866
 floods W 1080
 industrial clays C 158
 profile surveys W 44, 346
 runoff, 1928-45 C 36
 water, surface
 quality table, p. 182
 streamflow records tables p. 184-187
 index C 392, 394
 supply tables, p. 187
 See also Idaho; Montana; Oregon; Washington.
 Columbite MRUS 1904, 1905
 Comanche series P 211
 Concrete beams, strength B 344
 Conglomerates, Mexico P 264-H
 Connecticut
 base map p. 250
 contour map p. 249
 flood-flow formula C 365
 floods W 162, 836-A, 867
 gabbros and associated rocks B 492
 geographic dictionary B 117
 geologic map p. 191
 geology. See geographic listing for specific areas.
 granite B 484
 leveling B 881
 limestone B 744
 mineral resources MR-7
 paleontology, Triassic A 21 III a; M14
 pegmatites B 1042-Q

Connecticut--Continued
 stratigraphy, Triassic A 18 II a, 21 III a
 structural geology, Triassic formation A 7 f
 superpower survey P 123
 tungsten A 22 II a;
 B 213-c
 water, ground W 102, 114,
 232, 537
 artesian pressure table, p. 183
 Connecticut Valley W 110
 Hartford, Stamford, Salisbury,
 Willimantic and Say-
 brook areas W 374
 Meriden area W 449
 New Haven area W 537, 540
 Norwalk, Suffield, and
 Glastonbury W 470
 Pomperaug Basin W 597-B
 Southington-Granby area W 466
 water levels table, p. 183
 Waterbury area W 397
 wells W 57, 102, 110,
 114, 149
 water, surface
 power P 123
 quality W 236;
 table, p. 182
 stream measurements tables 3-5,
 p. 184-186
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 381
 See also Eastern States; New England
 States; Northeastern States.
 Connecticut River, floods W 836-A, 867
 Connecticut Valley
 fishes and plants, Triassic M 14
 geology, floods W 996
 Triassic formation, structure A 7 f
 Conodonts. *See under* Paleontology.
 Conservation
 mineral resources B 394
 superpower system, Boston-
 Washington P 123
 through engineering B 705
 water resources C 402, 414-A-D;
 W 234
 Constitution diagrams, Penn-
 sylvania anthra-
 cite B 995-A
 Construction materials B 430-F
 Alabama, cement B 225-j
 Alaska B 345-B, 542-B,
 682, 1039-A-D
 annual resource data, 1882-1888,
 1907, *see* MRUS p. 98-101,
 112-113,
 Arizona, cement B 213-j
 cement B 331; W 93
 Colorado B 381-J; MB-10
 dimension-stone deposits B 1109
 fire losses B 418
 Idaho, tuffs and sandstones B 811-E
 Illinois, concrete materials,
 Chicago district B 340-H

Construction materials--Continued
 Iowa, portland cement mate-
 rials, Dubuque
 region B 315-F
 Kansas B 1061; C 15, 20,
 24, 25, 27, 30,
 38, 40, 51, 79, 88,
 106, 118, 132, 179
 Massachusetts, road-building
 stones A 16 II c
 Michigan, portland cement
 industry A 22 III n
 Minnesota B 430-F, 663
 Mississippi, cement resources,
 northeastern B 260-1
 Montana B 380-J; C 4;
 MB-11
 Nebraska B 430-F; MB-15
 Nevada, marble, White Pine
 County B 340-G
 New Jersey, cement rock B 225-j
 New York, portland cement B 260-1
 North Dakota MB-14, 20
 Oregon B 387
 Pennsylvania
 brownstone MRUS 1896
 cement rock, Lehigh
 district B 225-j
 South Dakota, maps MB-12, 20
 Tennessee, cement resources,
 Cumberland Gap
 district B 285-I
 tests B 329, 370
 Texas
 Austin region B 430-F
 El Paso region, portland
 cement B 340-H
 United States
 cement B 243, 260-I,
 522, 666-S
 fire tax, waste B 418
 road-building A 16 II c
 Virginia, cement resources B 225-j,
 285-I, 260-1
 Washington
 cement resources B 285-I
 Wyoming
 map MB-9
 portland cement B 315-F
 Continental shelves, North and
 South America,
 geology, mineral
 resources B 1067
 Copper
 Alaska
 Admiralty Island B 936-O
 Baranof Island B 936-M
 Chichagof Island B 936-I
 Chitina district B 520-D
 Copper River region B 943-C
 Ketchikan district B 998-C
 Knight Island district B 662-C, 947-E
 Kotsina-Kuskulana dis-
 trict B 947-G
 Kuskokwim region,
 mineral resources B 622-H
 Latouche district B 662-C
 Maclaren River region C 332

Copper--Continued

- Alaska--Continued
 Mount Wrangell region B 213-d; P 15
 Nizina district B 947-
 Petersburg district B 998-A
 Port Valdez district B 622-E
 Prince of Wales Island B 345-B,
 1090
 Prince William Sound B 284, 345-C,
 379-C, 773-C,
 963-B
 Tanana River A 21 II g
 Wales district B 998-C
 White River district A 21 II g
See also Alaska, Mineral
 resources,
 annual resource data, 1882-1923, see
 MRUS, p. 98-131.
 Appalachian region B 213-d, 455
 Ducktown type, origin P 179
 Arizona
 Bisbee B 213-d;
 GF-112; P 21
 Christmas mine B 1027-H
 Clifton district B 213-d;
 GF-29; P 43
 cupola smelting MRUS 1883-84
 Globe district GF-111; P 12
 Helvetia mining dis-
 trict B 1027-F
 Miami region P 115
 Morenci district P 43
 Ray region GF-217; P 115
 San Manuel deposit P 256
 Superior region B 540-D
 Turquoise district B 530-b
 White Mesa district B 540-D
See also Mining districts,
 bibliography C 178
 California
 Redding region B 213-d, 225-d;
 GF-138
 Shasta County B 430-B; P 285
 Colorado
 Chaffee, Fremont, and
 Jefferson Counties B 340-B
 Garo deposit B 1087-A
 Montrose County B 285-B
 Pearl region B 213-d
 Unaweep district B 480-B
 Colorado Plateau B 260-f
 geochemistry
 coprecipitation effects W 1459-E
 deposition from ascend-
 ing solutions B 778
 rapid determination in
 soil and rocks B 1036-A
 Georgia B 225-d; GF-187
 Idaho C 219
 Bear River Range B 470-D
 Fort Hall district B 340-C
 Montpelier region B 430-B
 St. Joe River basin B 285-B
 Salmon region B 774
 Lake Superior region A 3 c; M 5, 52
 Mexico, Boleo district P 273
 Michigan P 144
 Mississippi Valley, upper B 1015-G

Copper--Continued

- Missouri B 260-f, 267
 Montana, Butte district B 213-d; GF-38;
 MRUS 1883-84;
 P 74
 Nevada, Yerington district B 380-B; P 114
See also Mining districts.
 New Hampshire, Milan mine B 432
 New Jersey, Griggstown de-
 posit B 225-d
 New Mexico C 219
 Burro Mountains region B 470-C
 Coyote district B 1030-L; C 334
 Tyrone district P 122
See also Mining districts.
 Oregon
 Keating region B 830-A
 Squaw Creek and Silver
 Peak districts,
 Almeda mine C 2
 organic precipitation B 795-C
 Pennsylvania, South Mountain B 430-B
 Puerto Rico, Juncos quad-
 rangle 1-326
 smelting B 26
 United States B 394, 666-Q
See also Copper, annual resource
 data,
 uranium-bearing B 1030-L;
 C 334
 Utah C 219
 Bear River Range B 470-D
 Bingham district B 213-d, 260-f;
 P 38
 Cactus mine B 260-f
 Ophir B 690-A
 rare minerals B 55
See also Mining districts.
 Vermont B 225-d
 Virginia, Luray region B 285-B
 Wyoming C 219
 Encampment district B 213-d; P 25
 Hartville uplift B 315-B
 Copper industry, water re-
 quirements W 1330-E
 Copper ores, potash in B 620-J
 Copperas MRUS 1882,
 1883-84, 1886
 Corals. See under Paleontology.
 Cordilleran Foreland, central, tec-
 tonic pattern,
 uranium B 1087-I
 Cores
 Alaska, Naval Petroleum Re-
 serve No. 4 region P 305-A-K
 Atlantic Ocean, Newfoundland
 to Ireland P 196
 California, Mohave Desert
 region B 1045-A-E
 Mississippi, Stone County C 298
 natural-state, dielectric con-
 stant, electrical
 resistivity B 1052-H
 New Mexico-Texas potash
 field, mineralogy B 833
 Correlation papers
 Archean and Algonkian B 86
 Cambrian B 81

Correlation papers--Continued

- Cretaceous B 82
 Devonian-Carboniferous B 80
 Eocene B 83
 Neocene B 84
 Newark system B 85
 Corry sandstone OC-21
 Corundum
 Appalachian region MRUS 1895
 Montana B 969-B, 983
 North Carolina, Buck Creek
 peridotite B 948-E
 origin B 42
 United States B 180, 269
 See also Abrasive materials.
 Costa Rica, manganese B 710-C, 935-H
 Crater Lake National Park, Oreg.
 geology, petrography P 3
 map p. 252
 Craters of the Moon National
 Monument, Idaho,
 map p. 252
 Cretaceous formations
 Alabama B 43; C 267; OC-20,
 23, 26, 35; OM-37,
 50, 64, 105
 Alaska P 159
 Arkansas P 154-F, 221-A
 Atlantic Coastal Plain P 90-J
 California OC-6
 Canada P 355
 Colorado B 1102; OC-60;
 P 95-C, 106, 134,
 186-K, 274-B,
 332
 correlation B 82
 Europe and North America A 16 I d
 Florida OC-26
 Georgia B 1014; OC-26
 Gulf Coastal Plain B 43; OC-3;
 P 81, 90-J
 Idaho P 98-G
 Mississippi OC-20, 35; OM-64
 Montana B 105, 1023;
 P 90-G, I, 125-B
 New Mexico OC-24; OM-144;
 P 95-C, 98-Q, R, S,
 134, 193-F
 Oklahoma P 154-F
 Pacific Coast A 17 I h
 South Dakota A 19 II e
 B 1081-B; MF-218;
 P 165-A
 Southeastern States P 140-F
 Texas A 21 VII; OC-3,
 8, 23; OM-98;
 P 154-F, 186-G
 United States OM-10; P 355
 Utah P 332
 Virginia A 15 c; B 145
 Wyoming A 19 II e;
 B 1023, 1081-B;
 MF-218; OC-13,
 36, 43, 49, 56;
 P 154-D, 165-A
 See also names of formations.

Cretaceous fossils

- Alabama P 112, 274-J
 Alaska P 159, 354-D

Cretaceous fossils--Continued

- Arkansas P 221-A
 Bear River Formation B 128
 California B 22
 Colorado P 98-H, 106, 130,
 131-H, 155, 221-D,
 254-B
 Colorado group P 132-B, 239
 Dakota group M 17
 Georgia P 84, 274-J
 Gulf Coastal Plain P 81, 112,
 186-A, 206
 Haiti P 214-A
 Kansas P 129-I
 Laramie formation A 6 f; B 34,
 37; P 130
 Mississippi P 210-E, 331-A
 Missouri P 274-E
 Montana B 163; P 103,
 132-B, 233-A,
 243-D
 New Jersey B 88; M 9, 18;
 P 264-B
 New Mexico P 98-Q, R, S,
 119
 New York and New
 England M 50
 North America B 152, 696, 924;
 P 98-J, 120-I,
 254-A
 North Carolina P 81
 North Dakota P 128-A
 Pacific coast A 17 I h; B 133;
 P 334-F
 Potomac group B 56; M 15
 South Carolina P 81, 84
 South Dakota A 19 II 3;
 P 185-F, 254-E
 Tennessee P 136, 137, 331-A
 Texas B 151; P 129-G,
 193-A, 210-E, 242,
 243-E, 274-C
 United States M 39; P 151, 154-I,
 170-B, 334-F
 Utah P 210-C, 254-B
 Wyoming A 19 II e;
 P 108-F, 131-H,
 150-A, 158-H,
 233-A, 254-B, E
 See also Paleontology.
 Crinoids. See under Paleontology.
 Crustaceans. See under Paleontology.
 Cryolite, annual resource data, 1882-1923,
 see MRUS p. 98-123.
 Crystal cavities, New Jersey
 zeolite region B 832
 Crystal River, Colo., waterpower
 resources C 292
 Crystallography. See Mineralogy;
 X-ray investigations.
 Cuba
 chromite B 935-A, 955-B;
 MRUS 1918
 gazetteer B 192
 hydrology W 110
 iron B 340-E;
 MRUS 1918
 manganese B 213-f, 935-B, F, G,
 1057

- Cuba--Continued
oil tungsten B 78
B 935-D
- Culverts. See Hydraulics.
- Cumberland River basin, surface-water records, index C 383
W 371, 596-A, 868-A
- Current meters W 371, 596-A, 868-A
- See also Stream measurements.
- Cussewago sandstone OC-21
- Custer Battlefield National Monument, Mont., map p. 252
- Dakota sandstone B 1102; M 17; OC-60; P 131-H, 274-B; W 520-E, 597-C, 889-A
- Dams, failure, floods W 147
- Damsites
- Alaska
- Cordova region C 136
- Sitka region C 147
- Canal Zone
- Madden Dam project, Alhajuela B 821-B
geology W 597-A
W 866-A
- Idaho, Kootenai River W 866-A-C
- Montana, Kootenai and Flat-head Rivers W 40
- Texas, Austin W 40
- Debris, transport by running water P 86, 189-E
- Delaware
- base map p. 250
- chromite B 1082-K
- clay B 530-e
- Eocene deposits B 141
- gabbros and associated rocks B 59
- gazetteer B 230
- geologic map p. 191
- geologic map index p. 192
- geology. See geographic listing for specific areas.
- leveling B 434
- mineral resources, Piedmont Upland B 1082-K
P 123
- superpower survey B 709-A
- triangulation and traverse W 114
- water, ground B 138; table, p. 183
- artesian pressure table, p. 183
- W 57, 149
- water, surface
- quality table, p. 182
- streamflow records tables, p. 184-187
- compilation table 6
- daily, by years tables 4 and 5
- index C 381
- water resources
- Delaware River basin C 190
- West Chester region GF-223
- See also Atlantic Coastal Plain; Eastern States.
- Delaware River chemical characteristics of water W 1262
- Delaware River basin precipitation, water loss, runoff HA-11
- water resources, index to records C 190, 381
- See also particular States.
- Denudation W 234
- Denver and Rio Grande Western Route, guidebook B 707
- Denver Basin, Laramie flora P 130
- Denver formation P 155
- Descloizites, analyses B 64
- Desert watering places, California, Arizona W 490, 497, 498, 499
- Detroit River group C 133
- Devils Lake basin, N. Dak., surface water, quality W 1295
- Devils Tower National Monument, Wyo., geology and maps GF-150; p. 253
- Devonian formations
- Alabama, Georgia, Tennessee B 1087-E
- Appalachian basin SP
- Arizona P 233-D
- correlation B 80
- Michigan OC-4, 28, 41; OM-28, 38
- Montana OC-15, 25
- New York B 120, 899-A; OC-37, 45, 54, 55
- Pennsylvania B 120; P 108-K
- Virginia, West Virginia P 158-C
- See also names of formations.
- Devonian fossils B 210, 244
- Allegheny region B 508
- Colorado A 20 II c; B 391
- Maine B 1111-A; P 89
- New Albany shale P 185-H, 186-E
- New Hampshire P 334-B
- New York B 3, 16, 41, 206; P 79
- Ohio P 193-C
- Pennsylvania B 3; P 193-C
- See also Paleontology.
- Diamonds. See Gemstones.
- Diatomaceous deposits
- Alaska B 1039-B
- California B 315-O; OM-34
- Diatoms. See under Paleontology.
- Dike rocks
- Colorado, Apishapa quadrangle P 90-C
- Dikes
- lamprophyre, Utah P 120-E
- trap, Lake Champlain region B 107
- Dimension-stone deposits B 1109
- Dinosaur National Monument, Colo.-Utah SP; p. 253
- Dinosaurs. See Paleontology, reptiles.
- Discharge measurements tables, p. 184-187
- Discoasters. See under Paleontology.

- Dismal Swamp, Virginia-North Carolina A 101 b; B 711-C
- District of Columbia
base map p. 250
geology B 967; GF-70, 152; P 217
leveling B 434
map p. 252
sedimentary formations, map p. 235
superpower survey P 123
traverse B 644-K
water, ground
quality W 364
springs, mineral W 114
water levels and artesian pressure W 907, 937
wells W 57, 114, 149, 364
water, surface, power P 123
- Divining rod. *See* Dowsing.
- Dolomite
Alabama B 315-G, 470-K
Nevada B 973-C
ratio to calcite in mineral mixtures B 1111-D
Vermont, eastern B 589
Washington, Marble region B 1027-C
- Dolores formation P 274-H
- Dominican Republic
aluminous lateritic soil B 953-C
mineral resources B 964-D
- Dosewallips River, Wash., water resources C 109
- Drainage
gravity, relation to specific yield P 402-A
See also Hydrology.
waterlogged lands, Montana W 1487
- Drainage basins
topographic characteristics W 968-C
water loss W 846
- Drainage changes
Ohio, West Virginia, Kentucky M 41; P 13
Washington B 40
- Drainage history
Yampa and Green Rivers P 90-K
- Driftless Area A 6 c
- Drilling, deep. *See* Wells.
- Dripping Spring quartzite, uranium B 1046-P
- Droughts
bibliography W 680, 820
California, southern 1944-51 C 200 W 1366
- Drumlins
Wisconsin, southeastern B 273
- Duckabush River, Wash., water resources C 109
- Dumortierite
bibliography B 262
New York and Arizona B 1019-N B 64
- Dundee formation OC-4; OM-38
- Dunderberg shale P 334-C
- Eagle Ford shale P 274-C
- Eagle sandstone P 125-B, 151
- Earth crust
composition C 285; P 127
nickel content P 205-A
- Earth movement, Great Lakes region A 18 II h
- Earth scientists, opportunities and responsibilities in nuclear age C 430
- Earth temperature
determinations B 701
measurement, northern Alaska P 305-B, K
- Earthquakes
Alaska, Yakutat Bay P 69
California B 68, 95, 112, 114, 129, 147, 155, 161
San Francisco earth-quake, 1906 B 324
Missouri, New Madrid B 494
Montana P 147-B
South Carolina, Charleston A 9 b
Eastern sandstone B 23
- Eastern States
clay B 708; P 11
coal A 22 III b-f
echinoids, Cenozoic P 321
Foraminifera B 676; P 175-A
greensand deposits B 660-B
hydrology W 102, 110, 114, 145
iron MRUS 1886
oil in black shales B 641-L
potash salts B 530-B
rutile B 580-O
silica resources B 1072-L
swamps, seacoast A 6 e
- Echinoderms. *See under* Paleontology.
- Echinoids. *See under* Paleontology.
- Economic geology. *See* particular mineral commodities; mineral resources under individual States.
- Eddies, shape, relation to Carolina Bays P 254-I
- Edwards limestone W 773-B
- El Salvador, ground water W 1079-D
- Electrolysis in metallurgy MRUS 1882
- Elevation. *See* Altitudes.
- Embar formation P 98-O
- Energy resources, U. S. and world, bibliography C 447
- Engineering geology
abstracts C 259
Alaska
Alaska Railroad P 293-B
Cordova region C 136
Katalla area I-308
Nenana-Rex area I-307
Sitka region C 147
- California
Islais Creek basin, San Francisco I-264
Oakland West quad-range I-239
- Colorado
reservoir sites, San Juan Mountains B 685
Wray area B 1001
- Idaho, damsites, Kootenai River W 866-A
- interpreting geologic maps p. 235

Engineering geology--Continued

- Massachusetts, highway and
foundation sites C 426
- Montana, damsites, Kootenai
and Flathead
Rivers W 866-A-C
- Nebraska, Wray area B 1001
- reservoir and damsites A 12 II a,
13 III e; W 597-A

Eniwetok Atoll, See Marshall Islands.

Eocene formations

- Alabama Map 3-195
(p. 226);
P 140-E
- Atlantic Coastal Plain B 141; P 90-J
- California OC-1, 12
- Colorado P 95-B, 132-F
- correlation B 83
- Georgia P 120-C
- Gulf Coastal Plain P 90-J, 95-F
- Mississippi Map 3-195
(p. 226);
P 140-E
- New Mexico OC-24
- North Carolina P 143
- Pacific coast A 17 I h
- Texas P 243-C
- Utah OC-52
- Wyoming P 132-F, 140-D,
274-A

See also names of formations.

Eocene fossils

- California OC-1
- Colorado P 98-H, 130,
131-F, 155, 168
- Georgia P 84
- Green River formation P 131-F,
154-G, J, 165-B,
168, 185-C
- Gulf Coastal Plain B 193-B
- Kentucky P 156, 193-E
- Mariana Islands P 280-G
- Marshall Islands P 260-W
- Mississippi P 108-E
- New Mexico P 119
- North America, western B 18
- North Carolina P 143
- South Carolina P 84
- Tennessee P 156
- Texas P 125-A, 131-D,
132-E, 193-E
- United States, southeastern P 91, 156, 181

See also Paleontology.

Eocene glacial deposits, Colorado P 95-B

Eolian deposits, Alaska,
Matanuska Valley B 1121-CErie Basin, glacial geology,
drainage features M 41

Erosion

- alluvial channels P 352-B
- Appalachian region P 72
- Arizona, Papago country B 730-B
- bibliography W 797
- by solution and fill B 760-C
- Chesapeake Bay, Choptank
River area P 90-B
- in ephemeral-stream
channels P 352-C

Erosion--Continued

- Mexico, Parícutin B 965-A, 1104-A
- Mississippi embayment,
Eocene P 95-F
- New Mexico, pedestal rocks B 790-A
- semiarid C 437; P 352-A-C
- Southwestern States, pedestal
rocks B 760-A
- Wyoming
- Fivemile Creek P 352-A
- Wind River Range W 1535-E
- Esmeralda formation A 21 II c
- Europe
- clay MRUS 1897, 1899
- Cretaceous formations,
analogies with North
America A 16 I d
- iron B 703, 706
- Eutaw formation P 274-J
- Evaporation
- brines P 95-E, 98-A
- effect of salinity on P 272-A
- effect of powerplant
heat P 272-B
- Lake Hefner studies P 269
- Lake Mead studies P 298
- selected drainage basins W 846
- suppression, literature
review P 272-C
- Evaporation and transpiration
bibliography W 1539-R
- Everton formation C 249
- Evolution, of matter P 132-D
- Explosions. See Coal mining.
- Factory wastes. See Industrial wastes.
- Farms, water supply W 255
- Faults and faulting
- Alabama, Quitman fault zone OM-6
- Alaska, Nelchina area I-312
- Basin Range structure P 153
- Colorado
- Front Range mineral belt,
map P 235
- London fault B 911
- Illinois, Hardin County B 942
- Midcontinent oil and gas
field P 128-C
- Mississippi, Quitman fault
zone OM-6
- Montana, Highwood Mountains
area B 806-E
- Oregon, Cracker Creek gold
district B 380-A
- Fayetteville shale, Wedington
sandstone mem-
ber P 186-B
- Feldspar
- annual resource data, 1883-1923,
see MRUS, p. 99-131
- Maine, New York B 315-L
- United States B 420
- Ferberite
- Colorado B 583
- Ferns. See under Paleontology,
paleobotany.
- Fertilizers, annual resource data,
1882-1894, see MRUS,
p. 98-103.

Fertilizers--Continued

- See also Greensand; Marl;
Phosphate; Potash.
- Fiji, Foraminifera, upper Eocene and
Oligocene P 374-A
- Filtration, method B 27
- Fire clay. See Clay.
- Fire tax B 418
- Fish. See under Paleontology.
- Flathead River, Mont.,
damsites W 866-B, C
streamflow records, evalua-
tion C 182
P 108-J
- Flaxville gravel
- Flint. See Quartz.
- Flood plains
formation P 282-C
planning, hydraulic and hydro-
logic aspects W 1526
- Floods W 234
- Alabama C 342; W 1227-A
- Arizona W 147
- Arkansas River W 487
- bibliography C 200; W 162
- California W 147, 162, 426,
796-C, 843, 844,
1137-E, F,
1260-D, 1320-D
- Colorado W 147, 162,
997, 1455-A
- Colorado River basin W 162, 556,
967-A, 1260-A
- Columbia River basin W 1080
- Connecticut C 365; W 162,
836-A, 867
- dam and reservoir failure W 147
- frequency analyses W 1543-A
- Georgia C 100; W 1227-A
- Gila basin W 162
- Hawaii W 1137-C
- hurricane, 1938, New
England W 867
- Illinois HA-39; W 334,
1370-B
- Indiana C 407, 440;
W 147, 334,
1370-B
- Iowa W 162, 1320-A,
1370-A
- James River W 800
- Kansas C 151; HA-14
W 96, 147, 1139
- Kansas River W 796-B
- Kentucky W 334, 967-B
- Little Colorado River W 162
- Louisiana and adjacent
states W 1320-C
- Maine W 967-C
- Manitoba W 1137-B
- Maryland C 204
- Massachusetts W 867, 996
- Michigan W 147, 162
- Minnesota W 162, 1137-G,
1260-C
- Mississippi River basin W 96, 838,
1137-G, 1260-C
- Missouri C 151, 370;
W 162, 1139
- Missouri River basin W 1137-A,
1260-B, 1320-B

Floods--Continued

- Montana W 1320-B
- Nebraska W 1137-D
- Nevada W 1137-H, 1260-E
- New England C 155; W 636-C,
798, 867
- New England to North
Carolina W 1420
- New Jersey W 88,92
- New Mexico HA-42; W 147, 162,
842, 1455-A
- New York C 155, 454; W 147,
162, 773-E, 867,
915, 1227-C
- North Atlantic States W 966
- North Dakota W 1137-A
- Northeastern States C 377
- Ohio C 418; HA-40,
43; W 869
- Ohio River basin W 147, 162, 334,
800, 838
- Oklahoma W 147, 1227-B
- Oregon W 96, 968-A,
1137-E, 1320-D
- Pennsylvania C 204; W 147, 162,
915, 1134-B
- Potomac River W 800
- Puerto Rico, eastern C 451
- Red River of the North W 1137-B, 1260-C
- Republican River W 796-B
- Rocky Mountains W 520-G
- South Carolina W 96
- South Dakota W 147, 162,
1137-A
- Southeastern States C 452; W 1066
- storage and routing W 1543-B
- Tennessee W 1227-A
- Texas C 32,99; W 162, 488,
796-G, 816, 914, 1046,
1227-B, 1260-A, 1320-C
- United States W 96, 147, 162, 771,
799, 1137-I, 1227-D,
1260-F, 1320-E,
1370-C
- Utah W 994, 1260-E
- Washington C 191; W 968-B,
1527
- West Virginia W 334, 1134-A
- Western States C 380
- Winnipeg River basin W 1137-B
- Florida
base map p. 250
clay B 380-K
fuller's earth B 213-k;
MRUS 1901
- geologic map p. 191
- geologic map index p. 192
- geology W 319
- See also geographic list-
ing for specific areas.
- leveling B 516
- paleontology
Foraminifera P 108-G, 128-B
mollusks P 142
Pliocene P 170-D
- phosphate. See Phosphate.
- radioactivity, Ocala region B 1046-J
- radioactivity surveys
Fort Myers area GP-121
Gardner area GP-122

Florida--Continued

radioactivity surveys--Continued

- Nassau County GP-119
phosphate C 230
shorelines, Pleistocene P 221-F
stratigraphy
Cretaceous OC-26
De Soto and Hardee
Counties B 1030-B
Hernando-Hardee
County area B 1074-C
pre-Mesozoic C 91
Tertiary B 1092
traverse B 709-B
water, ground W 114, 319
artesian W 773-C
artesian pressure table, p. 183
water, surface
river surveys W 44
streamflow record tables, p. 184-187,
table 6
daily, by years tables 4 and 5
index C 382
water resources
quality W 596-G;
table, p. 182
springs W 102, 557

See also Atlantic Coastal Plain;
Gulf Coastal Plain;
Southeastern States;
Southern States.

- Fluorimeter B 1036-M;
C 311, 330
Fluorimetric methods, deter-
minations B 992; C 199
Fluorspar
annual resource data, 1882-1923, see
MRUS, p. 98-131.
Colorado, Northgate district B 1082-F
Idaho, Lemhi County B 1015-A
Illinois B 886-B
Hardin County B 942
southern B 225-o, 255
Kentucky, western B 213-e, 886-B,
1012-A-F,
1042-S; MF-2;
P 36
Montana B 955-E
New Mexico
Burro Mountains region B 973-F
Deming region B 470-K
Texas, Eagle Mountains B 987
United States B 666-CC
See also Fluorspar, annual
resource data.
Utah B 1005
Thomas Range district B 1069
Fluxes
Alabama B 400, 470-K
Folds, nonparallel P 314-E
Foraminifera. See under Paleontology.
Forests
Appalachian region P 37
Arizona P 22, 23
California A 19 V 1,
20 V f, 21 V f;
P 8

Forests--Continued

- Colorado A 20 V b, c
Idaho A 19 V e, f, j,
20 V e
Minnesota A 21 V 1
Montana A 20 V d, 21 V b;
P 29, 30
Nebraska A 19 V k
New Mexico P 33, 39
Oklahoma A 21 V h
Oregon A 21 V e; P 4, 9
South Dakota A 19 V b
United States A 19 V a, 20 V a,
21 V a
Washington A 19 V g, h,
21 V c, d;
P 5, 6, 7
A 19 V b-d
P 210-B
Wyoming
Forkston coal
Formations. See particular
formations; Geologic
names.
Fort Union beds P 108-D
Fox Hills sandstone P 98-H, 158-B
Colgate member P 189-1
France, Alsace, potash B 715-B
Franklin D. Roosevelt National
Historic Site, N. Y.,
map p. 253
Franklin limestone A 18 II e
Fredericksburg-Spotsylvania
Battlefield National
Monument, Va., map p. 253
Frenchman River valley, Nebr.,
geology, ground
water C 19; W 1360-H
P 108-F, 158-H
P 98-Q, S
Fuel resources
Alabama, Birmingham dis-
trict B 400
Colorado
Mesa Verde area B 1072-M
Red Mesa area OM-149
Routt and Moffat
Counties B 1027-D
New Mexico
Barker dome-Fruitland
area OM-144
San Juan basin B 860-A-C
Oklahoma, Coal field,
southern B 874
Utah, Orderville-Glendale
area Map C-49
See also Coal; Gas; Lignite; Oil;
Peat.
Fuel-testing plants
operations B 261, 290,
332; P 48
tests B 316-G, 323,
325, 336, 343,
362, 368, 385
Fuller's earth
annual resource data, 1895-1923, see
MRUS, p. 103-131.
Arkansas B 530-e
diffusion of oil through B 475
Florida, Georgia B 213-k;
MRUS 1901

Fuller's earth--Continued
 Massachusetts B 430-F
 properties, tests B 315-I
 Gabbro
 Connecticut, Preston area B 492
 Delaware B 59
 Maryland, Baltimore region B 28
 Gadolinite MRUS 1904,
 1905
 Gages, automatic, for measuring
 streamflow W 375-F
 Gaging, relation to hydraulics W 375-C
 Gaging stations
 equipment W 371, 868, 888
 records, graphical cor-
 relation W 1541-C
See also particular States (water,
 surface).
 Ganister, Pennsylvania, Blair
 County B 380-J
 Gardiners clay P 254-G
 Garnet. See Gemstones.
 Gas
 Alabama
 Fayette field B 471-A
 Hachetigbee anticline B 661-H
 annual resource data, 1886-1923, see
 MRUS, p. 100-131.
 Arizona OC-10; OM-201
 Arkansas, Fort Smith-Poteau
 field B 541-B
 California p. 213
 carbon black from MRUS 1913 II
 Colorado OM-73, 116
 Moffat County B 751-G
 northeastern B 796-B
 Gulf Coastal Plain B 184, 429
 helium-bearing P 121
 Idaho, Payette area B 431-A
 in mines, explosions B 383
 Indiana A 11 I c
 southwestern B 213-h
 Trenton limestone A 8 II A
 Kansas
 fields, map p. 213
 Independence quad-
 range B 260-j, 296;
 GF-159
 Kentucky
 eastern B 1072-K
 Knox County B 471-A
 Menifee field B 531-A
 Wayne and McCreary
 Counties B 579
 Louisiana B 429, 541-A;
 p. 213
 Caddo field B 619
 De Soto-Red River field B 661-C
 Michigan
 Michigan basin OC-11
 south-central OM-11
 Sylvania and Bois Blanc
 formations OM-28
 Midcontinent oil and gas
 field, structural
 features P 128-C
 Mississippi
 fields, test wells, salt
 domes, pipelines OM-200

Gas--Continued
 Mississippi--Continued
 Vicksburg-Jackson area B 641-D,
 831-A
 Mississippi River mouths B 541-A
 Montana C 172; OM-130,
 170
 Bearpaw Mountain re-
 gion B 751-C
 Big Horn County B 856
 Birch Creek-Sun River
 area B 691-E
 Crow Indian Reserva-
 tion B 736-B, 856
 Elk basin field and
 vicinity, map p. 234
 Huntley field B 711-G
 Kevin-Sunburst field,
 Sweetgrass arch B 812-B
 Lake Basin field B 691-D
 north-central B 641-C
 Nebraska, fields, pipelines, test
 wells OM-198
 New Mexico
 Alamosa Creek valley B 716-A
 fields, test wells, pipe-
 lines OM-159, 207
 southeastern OM-177
 well records C 333
 New York, southwestern B 899
 North Dakota B 431-A
 Ohio
 Cadiz quadrangle B 541-A
 Cleveland field B 661-A, 818
 Clinton sands B 621-H,
 1003-A
 Steubenville quadrangle B 318
 Trenton limestone A 8 II a
 Oklahoma B 629;
 map, p. 213
 Bristow quadrangle B 661-B, 759
 Cushing field B 658
 Duncan field B 621-D
 Foraker quadrangle B 641-B
 Fort Smith-Poteau
 field, Glenn Pool B 541-B
 Jefferson County B 726-F
 Lawton field B 621-G
 Loco field B 621-C
 Madill area B 736-A
 north-central B 531-B
 Osage County B 900
 Osage Reservation B 686
 Pawhuska quadrangle B 691-C
 Pershing field B 751-B
 Oregon, Vale, Harney Valley B 431-A
 Pennsylvania
 Burgettstown quadrangle B 318
 Carnegie quadrangle B 456
 Claysville quadrangle B 318
 Foxburg quadrangle B 454
 Greene County B 225-h, 304
 Hyner pool, Clinton
 County B 225-h
 New Kensington quad-
 range B 829
 producer. See Fuel-testing plants;
 Producer-gas plants.
 radioactive, transport B 1052-I

Gas--Continued

- Texas B 184;
map, p. 213
Caddo field B 619
Corsicana field B 661-F
Denison area B 736-A
northern B 629, 716-D
Palo Pinto County B 621-E
United States B 394;
maps p. 213
See also Gas, annual resource data,
U. S. Geological Survey studies,
reserves C 14
- Utah
Clay basin field and
vicinity, map p. 234
Farnham anticline B 711-A
Green River region B 541-D
Moab district B 471-A
Salt Lake City region B 260-J
San Rafael Swell B 806-C
Virginia, southwestern B 1027-L,
1072-K
- Washington, Olympic Penin-
sula B 581-B
waters associated with B 695
West Virginia
southern B 1072-K
Steubenville quadrangle B 318
- Wyoming
Baxter Basin field B 781-B
Bell Springs district B 796-D
Big Horn Basin B 340-F,
621-L; P 53
- Clay Basin field and
vicinity, map p. 234
Douglas field B 541-C
Elk basin field and vicinity,
map p. 234
Fremont County B 711-E, H
Lance Creek field B 716-E;
map, p. 234
- Little Buffalo Basin field
and vicinity, map p. 235
Lost Soldier-Ferris dis-
trict B 756
maps OM-19, 107,
175; p. 213
Rock Creek field B 806-D
Shoshone River section B 541-C
Sweetwater County B 751-G,
781-B
- See also Fuel resources; Oil,
Gas fields, geologic structures,
definition C 419
Gas regulations, production on pub-
lic lands R
Gasoline, from natural gas MRUS 1920 II
Gastropods, See under Paleontology.
- Gazetteers
Colorado B 291
Connecticut B 117
Cuba B 192
Delaware B 230
Indian Territory (Okla.) B 248
Kansas B 154
Maryland B 231
Massachusetts B 116
New Jersey B 118

Gazetteers--Continued

- Puerto Rico B 183
Rhode Island B 115
Texas B 190, 224;
W 448
- Utah B 166
Virginia B 232
West Virginia B 233
- Gemstones
annual resource data, 1882-1921,
see MRUS, p. 98-129,
beryl, Montana P 229
corundum (ruby, sapphire),
United States B 269
diamonds, Arkansas B 540-U, 735-I
garnet, Alaska B 963-C
jade, analyses B 60
opal, Nevada C 142
topaz
bibliography B 1019-N
Maine B 27
Rocky Mountains B 20
turquoise, New Mexico B 42
- Geobotanical prospecting
Colorado plateau B 1030-M,
1085-A, B, C
C 124
molybdenum B 1009-M; C 264
New Mexico
zinc
in peat B 1000-D
in plants, field deter-
mination C 41
- Geochemical prospecting
abstracts, bibliography B 1000-A, G,
1098-G; C 28
Alaska, antimony B 1024-H
Arizona, Jerome area B 1000-C
chromatographic, uranium B 1036-L
colorimetric determinations,
bismuth B 1036-I
fluorimeter, uranium B 1036-M
Idaho, Coeur d'Alene dis-
trict B 1098-A; C 168
methods C 127, 161
Nevada, Eureka district B 1000-H
Nigeria, Nyeba lead-zinc
district B 1000-B
North Carolina, Cabarrus
County MF-234, 235
principles B 1000-F
radioactivity in modern
stream gravels B 1030-E
tungsten, using heavy-mineral
concentrates C 411
Utah, Capitol Reef area B 1015-H
Wisconsin, southwestern,
lead-zinc B 1000-E
- See also Geochemistry.
- Geochemistry
amidophosphoric acid B 113
analcite, calamine, consti-
tution B 167
beryllium, in ores, determi-
nation B 950
bismuth, colorimetric determi-
nations in rocks B 1036-I
borate minerals, thermal
analysis B 1036-K

Geochemistry--Continued

- carbon dioxide, volumetric method determination B 950
- chemical analysis, probable error B 992
- chloronitrides of phosphorous, and metaphosphimic acids B 167
- chromium
 - colorimetric estimation B 167
 - separation from vanadium B 950
- coal B 1036-H, 1084-K, 1117-A
- Colorado Plateau uranium ores P 320
- constant-feed direct-current arc B 1084-J
- copper
 - coprecipitation effects B 1459-E
 - deposition from ascending solutions B 778
 - rapid determination in soil and rocks B 1036-A, B 770
- data of
 - desclizites, analyses B 64
 - elements, abundance B 78; C 285
- germanium
 - in coal ash C 272
 - rapid determination in coal, soil, rocks B 1036-B
- hafnium-zirconium ratio in minerals and rocks B 1021-A
- in zircon, determination B 1036-F
- igneous rocks, analyses P 14, 18, 28, 99
- interaction, minerals and water solutions B 312
- iron
 - in plants W 1459-G
 - in water W 1459-A-E, H
 - bibliography, biochemical W 1459-F
- jade, analyses B 60
- lead in igneous rocks, spectrophotometric determination B 1084-F
- mackintoshite B 113
- marine sediments, calcium carbonate content P 186-N
- meteorites B 60
- micas and related minerals B 78, 113, 950; P 354-B, E
- mineral analysis, determination water B 78
- mineral relations, photographic technique B 992
- nickel, in earth's crust P 205-A
- niobium (columbium)-titanium association C 225
- oil-field waters, California B 653
- oil shale, estimation oil yield B 992
- pectolite, pyrophyllite, constitution B 167
- petroleum-coke ashes, analysis B 950

Geochemistry--Continued

- phosphate rock, fluorimetric determination B 992
- aluminum B 992
- phosphorous, determination in rocks containing vanadium B 992
- Pierre shale, minor elements P 391-A, B
- potassium salts, gamma-ray studies B 950
- rare earths, fractional precipitation B 1036-N
- rock analysis, separation elements B 78
- roscoelite, composition B 950
- rowlandite B 113
- selenium
 - in deep-sea cores, North Atlantic P 196-F
 - in epithermal deposits B 1112-A
 - in volcanic rocks B 1084-C
- silicate minerals, internal structure B 950
- silicate rocks
 - chemical, spectrochemical, and modal analysis B 980
 - determination sodium, potassium B 992
 - rapid analysis B 1036-C
- silicates
 - action ammonium chloride B 113
 - action silver nitrate and thallous nitrate B 262
 - alkaline reaction B 167
 - benzyl B 113
 - chemical structure B 60
 - constitution B 78
 - solubility in water B 167
- silicic acid B 90
- silicic ethers B 113
- silver
 - colloidal B 113
 - determination in soils and rocks B 992
 - hydrosol B 113
- solids B 64
- spectrochemical analysis, methods B 1084-G, H, I
- spectrographic-microphotometric scanning B 1036-E
- spectrography, measure for powders used B 950
- strontium, in natural water C 420; W 1496-A, B
- thoria B 113
- thorium and uranous sulfates B 90
- thorium minerals, X-ray powder data B 1036-G
- titanium, estimation B 167
- tourmaline B 55, 167
- tungsten, determination methods B 950; C 119
- U. S. Geological Survey research, 1883-1900 B 9, 27, 42, 55, 60, 78, 90, 113, 167

Geochemistry--Continued

- uraninite B 78, 90
 - uranium
 - Colorado Plateau P 320
 - field determination B 1036-J, L, M
 - in apatite P 314-D
 - in black shales B 1084-D;
 - P 356-C
 - in phosphorite B 1084-D;
 - P 314-D
 - in water B 1036-J,
 - 1087-G
 - Phosphoria formation B 1084-D
 - uranium dioxide B 113
 - uranium minerals, X-ray powder data B 1036-G
 - uranium series, natural radioactive disequilibrium B 1084-A
 - vanadium
 - determination methods B 950
 - separation from chromium B 950
 - volumetric estimation B 167
 - water
 - ammonia content W 1535-A
 - calcium-ion concentration W 1535-D
 - carbon dioxide content, Gulf of Mexico P 120-A
 - Chamberlin Glacier area, Alaska P 414-C
 - chemical erosion W 1535-B, E, F
 - interpretation analyses B 479
 - ion activity W 1535-C
 - iron W 1459-A-H
 - strontium C 420;
 - W 1426-A, B
 - uranium B 1036-J,
 - 1087-G
 - zinc
 - in peat, relation to Lockport dolomite B 1000-D
 - in plants, determination C 41
 - in spring waters B 113
 - See also Earth crust; Geochemical prospecting; Mineralogy.
- Geochronology
- Cochrane problem, late Pleistocene chronology B 1021-J
 - igneous rocks, lead-alpha method B 1097-A, B
 - lead-isotope ages, tables for calculation P 334-A
 - uranium ores, Colorado Plateau C 271
- Geographic names. See geographic listing.
- Geographic tables and formulas B 50, 214, 234, 650, 809
- Geologic maps and mapping. See geographic listing for specific areas; see also Index maps; Mapping.
- Geologic names
- California B 826
 - North America B 191, 896,
 - 1056-A, B

Geologic time classification,
U. S. Geological
Survey B 769Geological Survey. See U. S. Geological
Survey.

Geological surveys

early, index B 222

State B 465

Geologists, training C 73

Geology

economic. See particular mineral commodities; mineral resources under individual States.

engineering. See Engineering geology.

glacial. See Glacial geology.

interpretation by vegetation B 1061-E

Geomorphology

Carolina Bays P 254-I

drainage basins, channels, flow characteristics, streams, central Pennsylvania P 282-F

ephemeral streams P 282-A

erosion and silt movement, bibliography W 797

landform analysis, application in studies semiarid erosion C 437

pebbles, shapes B 730-C; P 131-C

pedestal rocks B 760-A, D,
- 790-A

river channels

- hydraulic geometry, physiographic implications P 252
- irregular, flow resistance P 282-D
- patterns P 282-B
- river flood plains, formation P 282-C
- river meanders P 282-E
- streambed, force required to move particles P 189-E
- streambed mapping C 450
- transportation of particles by running water P 86

See geographic listing for specific areas; see also Erosion; Physiography.

Geophysical abstracts p. v, B 887, 895, 909, 915, 925, 932, 939, 957, 959, 966, 976, 981, 991, 1002, 1022, 1048, 1066, 1086, 1106, 1116, 1146-A, B, p. 188

Geophysical investigations

- Arizona
 - Doney Park-Black Bill Park area C 233
 - Painted Desert area, radioactivity survey GP-120
 - Pinto-Chinle area, radioactivity survey GP-124
- Bikini and nearby atolls, Marshall Islands P 260-J, K, L
- California
 - Mojave Desert, gravity survey P 316-D

Geophysical investigations--Continued

- California--Continued
 Rock Corral area, radio-activity studies B 1021-C
- Colorado
 Lisbon Valley area P 316-C
 Moffat County, radio-activity survey GP-125, 126
 Uravan area P 316-A
- Colorado Plateau, directional resistivity measurements, uranium exploration B 1083-B
- Florida
 Fort Myers area, radio-activity survey GP-121
 Gardner area, radio-activity survey GP-122
 Nassau County, radio-activity survey GP-119
 phosphate, radio-activity survey C 230
- Georgia, Savannah River Plant area, aeroradio-activity GP-306
- Illinois, Hardin County, fluorspar areas B 942
- Indiana, aeromagnetic survey P 316-B
- Massachusetts, seismic method, subsurface exploration C 426
- Michigan
 Iron County, magnetic surveys C 26, 55; Map 3-213 (p. 226)
- Marquette, Dickinson, and Baraga Counties, radioactivity survey p. 236
- Montana, Medicine Lake, electrical resistivity survey C 97
- New York, St. Lawrence County, magnetic anomalies MF-6, 10
- Ohio, preglacial Teays Valley W 1460-E
- Oregon, Ochoco quicksilver district B 940-C
- South Carolina, radioactivity surveys GP-123, 306
- Utah
 Lisbon Valley area P 316-C
 Myton area, radio-activity GP-127
 Wasatch Front, gravity surveys P 316-E
- Washington, Hanford Plant area, aeroradioactivity GP-307
- Wisconsin
 Antigo region, resistivity C 181
 Ripon-Fond du Lac area, resistivity C 69
- See also map listing, p. 236-244
- Geophysics
 apparent resistivity, single uniform overburden P 365

Geophysics--Continued

- borehole methods for analyzing specific capacity, aquifer wells W 1536-A
- caliper-log, gamma-ray-log, other diamond-drillhole data, comparison B 1052-G
- dissipation temperature effect, well drilling, Arctic Alaska B 1083-C
- earth-resistivity curves, two-layer B 927-A
- electric activity in ore deposits B 548
- electrical properties sandstones, Morrison formation B 1052-J
- equation of continuity B 1052-I
- gamma-ray studies, potassium salts B 950
- gamma rays from thick uranium sources B 1052-A
- gravity anomalies, interpretation P 85-C
- heat conduction in permafrost B 1052-B, 1083-A
- luminescence, infrared, minerals B 1052-C
- magnetic-doublet theory in analysis total-intensity anomalies B 1052-D
- pulse-transient behavior, brine-saturated sandstones B 1083-D
- radioactivity in stream gravels as prospecting method B 1030-E
- radon in mountain streams, physical behavior, control B 1052-E
- remanent magnetization, anomalous, basalt B 1083-E
- scintillation counters B 1052-F
- See also Earthquakes; Geophysical investigations.
- Georgia
 barite B 340-M; P 224
 base map p. 250
 bauxite C 193
 clay B 315-I
 coal, map p. 224
 cobalt B 940-J
 copper B 225-d; GF-187
 floods C 100; W 1227-A
 fuller's earth B 213-k; MRUS 1901
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for specific areas.
 gold B 213-b, 293
 graphite B 340-M
 iron. See Iron.
 leveling B 441, 635

- Georgia--Continued
 manganese B 213-f, 940-J;
 P 224
 mica P 248-E, F
 mineral resources, Carters-
 ville district P 224
 ocher B 213-n
 paleontology
 Eutaw formation B 274-J
 Foraminifera P 108-G
 paleobotany, Cretaceous,
 Eocene P 84, 112
 physiography, Chattanooga
 district A 19 II a
 B 213-b
 pyrite
 radioactivity, Savannah
 River Plant area GP-306
 radioactivity surveys,
 Charlton County GP-119
 shorelines, Pleistocene P 221-F
 stratigraphy
 Chattanooga shale B 1087-E
 Claiborne group and
 Jackson formation P 120-C
 Cretaceous B 1014; OC-26
 Quaternary OM-72
 Tertiary OM-72; P 120-C
 tin B 293
 traverse B 709-C
 uranium, Chattanooga shale B 1087-E
 water, ground W 114
 artesian pressure table, p. 183
 Coastal Plain W 341
 fluctuation, mosquito
 breeding, in lime-
 stone sinks W 1110-E
 quality W 160, 341, 912
 Quitman area W 110
 water levels table, p. 183
 wells W 57, 102, 149
 water, surface
 quality W 236, 889-E,
 912; table 1,
 p. 182
 river surveys W 44, 115, 197
 streamflow records
 tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 382
 water resources W 197
 Atlanta metropolitan
 area C 148
 springs W 102, 114,
 145, 557, 819
See also Appalachian region; Atlantic
 Coastal Plain; Gulf Coastal
 Plain; Southeastern States;
 Southern States;
 Geothermal data, United States B 701
 Germanium
 in coal ash C 272
 rapid determination in coal,
 soil, rocks B 1036-B
 Gila River basin, floods W 162
 Gilsonite A 17 I f;
 MRUS 1896
- Glacial geology
 Alaska C 289; P 170-A
 Broad Pass region B 608
 Malaspina district I-271
 Yakutat Bay P 64
 Colorado, Eocene deposits P 95-B
 Delavan lobe, Lake Michigan
 glacier P 34
 Driftless Area, upper Missis-
 sippi Valley A 6 c
 Erie and Ohio basins M 41
 glacial boundary, Pennsylv-
 ania, Kentucky,
 Ohio, Indiana, and
 Illinois B 58
 Idaho P 158-G, 231
 Illinois glacial lobe M 38
 Lake Agassiz B 39; M 25
 Lake Superior region P 154-A
 Massachusetts, Mystic Lakes-
 Fresh Pond area B 1061-F
 Missouri Coteau B 144
 Montana
 eastern I-327; P 174
 western P 231
 Yellowstone Valley B 104
 Montana lobe of Keewatin
 ice sheet P 50
 North Dakota P 174
 Ohio
 map I-316
 Wisconsin deposits,
 classification B 1121-A
 Ohio River basin M 41
 Pennsylvania, Illinoian out-
 wash B 1121-B
 rock scoring A 7 b
 Utah, Uinta and Wasatch
 Mountains P 61
 Washington, drainage changes B 40
 Wyoming
 Big Horn Mountains A 21 II b
 northeastern P 174
See also Moraines; Pleistocene
 geology; Quaternary
 geology.
 Glacier National Park, Mont.
 geology and scenery B 600
 map p. 253
 stromatolites, Belt Series P 294-D
 Glaciers
 Alaska
 Black Rapids B 926-B
 Glacier Bay A 16 I c
 Kenai Peninsula B 526
 Prince William Sound B 526; P 98-C
 Alberta, Saskatchewan Glacier,
 mode of flow P 351
 United States A 5 f
 Washington, Nisqually
 Glacier P 387-A; p. 254
 Glass-making materials
 annual resource data, 1883-84,
 1902-1911, 1915, see
 MRUS, p. 98, 108-117,
 121-122,
 Indiana, Kentucky, Ohio B 315-K

Glass-making materials--Continued

Mississippi basin; West

Virginia B 285-N

Globigerina ooze, Sylvania

Guyot P 260-W

Glossaries, uranium- and thorium-

bearing minerals B 1009-F

C 74, 194

Gold

Alabama

B 340-A

Talladega County

B 640-I

Alaska

B 345-A, 622-A,
857-B, 910-C,
917-C; SP

Anvik-Andreafski

region B 622-F

Birch Creek region

B 251, 442-F

Cape Nome region

SP

Chandalar region

B442-G, 773-E

Chisana district

B 592-I

Chistochina district

B 213-b, 498,
692-C

Eagle-Circle district

B 520-H, 897-C

Fairbanks region

B 225-b, 251, 379-E,
442-F, 520-H, 525,
542-F, 592-J, 622-G,
622-H, 692-F, 849-B

Fortymile region

B 251, 345-D,
520-H, 897-C

Fourth of July Creek

region B 520-G

Glenn Creek district

B 213-b

Gold Hill district

B 379-E

Hot Springs district

B 844-D

Iditarod region

B 480-I, 542-G

Innoko district

B 379-E, 410,
480-I, 542-GG

Juneau belt

B 225-b, 287,
662-B, 714-B

Kahiltna Valley

B 692-D

Koyukuk region

B 442-G

Kuskokwim district

B 622-H, 722-E

Mulchatna region

B 442-E

Nabesna district

B 933-B

Nelchina Valley

B 622-D

Nenana coal field

B 662-G

Porcupine district

B 225-b, 236,
662-B, 699

Port Wells district

B 592-G

Prince William Sound

B 379-C

Rampart region

B 259, 280,
337, 844-D

Ruby region

B 379-E, 520-J,
542-G, 592-J, 864-C

Seventymile district

B 520-H

Seward Peninsula

B 225-b, 247,
284, 314-H, 328,
379-F, 692-G;
SP

Seward-Sunrise region,

Kenai Peninsula

B 520-E

Shumagin Islands

B 259

southeastern

B 284, 314-C,
345-B

southern

A 18 III a

Squirrel River region

B 480-J

Susitna region

B 622-D

Tanana region

B 345-D, 442-F

Gold--Continued

Alaska--Continued

Tanana region

480-G, 542-F,
592-J

Tolovana district

B662-D, 712-F

Tolstoi district

B 692-F

Turnagain Arm region

B 259, 277

Unalaska Island

B 259

Valdez district

B 520-D, 622-E

Willow Creek region B 480-F, 592-H, 607,
642-F, 692-D, 712-E,
714-D, 849-C, 864-B,
933-C, 1004

Woodchopper Creek

region B 520-G

Yentna district

B 520-F, 773-A

Yukon basin

A 18 III b; B 284

See also local districts.

Yukon-Tanana region

B 345-D, 442-F,

480-G, 542-F,

592-J

See also Alaska, mineral resources.annual resource data, 1882-1923, see

MRUS, p. 98-131.

Appalachian region

B 293;
MRUS 1894

Arizona

dry placers

MRUS 1912 I

Greaterville

B 430-A

Mohave County

B 340-A

Oatman district

B 743

Quartzsite region

B 620-C

California

Alleghany district

B 580-I; P 172

dry placers

MRUS 1912 I

eastern

B 235-A

Grass Valley district

A 17 II a; P 194

Indian Valley district

B 260-b

Mother Lode district

GF-63; P 157

Nevada City district

A 17 II a; GF-29

Ophir

A 14 II e

Randsburg quadrangle

B 430-A

Trinity County

B 430-A, 530-a,
540-A

Trinity River basin

B 470-B

Canada, Maritime provinces

MRUS 1894

colloidal sulfides

B 90

Colorado

Bear Creek

B 285-A

Creede district

B 530-a

Cripple Creek district

A 16 II a; B 254,
260-b, 955-B; P 54

Durango quadrangle

B 260-b

Georgetown district

B 260-b; P 63

Gunnison County

B 380-A

Hahns Peak field

B 285-A

Idaho Springs district

B 285-A

Lake City region

B 260-b, 478

Lay region

B 340-A

Ouray district

B 260-b; GF-153

Park County

B 955-D

Silverton region

B 182, 285-A,
315-A; GF-120

fallacies concerning deposits A 4 d

Georgia, Dahlonga district B 213-b, 293

Idaho

Bitterroot Range and Clear-

water Mountains B 213-b; P 27

Gold--Continued

Idaho--Continued

De Lamar district A 20 III b
 Loon Creek district B 530-a
 northern B 285-A
 St. Joe-Clearwater region B 530-a
 St. Joe River basin B 470-B
 Silver City district A 20 III b;
 GF-104

Snake River B 620-L
 Stibnite region B 969-F
 Kansas, western B 202
 Maine B 225-b
 Maryland, Great Falls region B 260-b

Montana

Bitterroot Range B 213-b, P 27
 Elkhorn district B 470-B
 Libby region C 7
 Little Rocky Mountains B 340-A
 Marysville district B 213-b
 northwestern B 285-A, 470-B
 Philipsburg quadrangle B 315-A;
 GF-196; P 78
 Pioneer district B 978-C

Nevada

Antelope district B 530-a
 Comstock Lode A 2 e; B 17,
 735-C; M 3, 4
 dry placers MRUS 1912 I
 Goldfield district B225-b, 260-b,
 303; P 66
 Hornsilver district B 380-A
 Horse Canyon C 10
 Osceola district B 340-A
 Ramsey, Talaposa, and
 White Horse dis-
 tricts B 470-B
 Round Mountain district B 380-A, 725-I
 southern B 620-A
 southwestern B 285-A
 Tonopah district B 213-b, 219,
 225-b, 260-b;
 P 42, 104

New Mexico

Aztec mine, Baldy B 620-N
 dry placers MRUS 1912 I
 Pinos Altos B 470-B

Oklahoma, Wichita Mountains

Oregon

beach placers C 8
 Blue Mountains A 22 II e
 Cracker Creek district B 380-A
 Riddle quadrangle B 340-A
 southwestern mines and
 Douglas County B 830-B

Sumpter and Granite dis-
tricts

B 430-A
 P 213

Piedmont, southern

South Africa, Witwatersrand

banket MRUS 1896

South Dakota, Black Hills

United States

B 225-b; C 351
 B 260-b, 394

See also Gold, annual

Utah

resource data.
 Annie Laurie mine B 285-A
 La Sal Mountains B 530-a
 Park City district B 213-b, 225-b,
 260-b; P 77

Gold--Continued

Vermont B 225-b
 Green Mountains MRUS 1894
 Washington
 central B 213-b
 coast B 260-b, 805-A
 Mount Vernon region B 931-D
 northeastern B 315-A, 550

Wyoming

Atlantic district and North
 Laramie Mountains B 626
 Black Hills P 26
 Uinta County and Snake
 River region B 315-A
 Wind and Big Horn Rivers B 580-G

See also Mining districts.

Gold and silver conversion

tables B 2
 Gold ores, potash in B 620-J
 Gold pan, geologic tool B 1071-A
 Gold telluride ores, assay
 methods B 253

Goodrich quartzite

Grahamite, Oklahoma

Grand Canyon National Park,

Ariz.
 guidebook, Santa Fe Route B 613
 map p. 253
 Paleozoic formations P 131-B
 physical geology A 2 b
 Tertiary history M 2
 water supply, South rim W 1475-C
 Grand Teton National Park, Wyo.,
 map p. 253

Granite

albite, replacement origin,
 Oregon P 175-C
 Atlantic States, southeastern B 426
 Colorado, Gunnison region B 540-K
 Connecticut B 484
 Maine B 313
 Penobscot Bay quad-
 range B 250-k; GF-149

Maryland

Massachusetts

New England

New Hampshire

Rhode Island

Vermont

Granite quarries, rock bursts

Granitic rocks

Middle Atlantic Piedmont

Plateau

origin, Colorado, Northgate

district

Graphite

Alaska, Seward Peninsula

annual resource data, 1882-1923,

see MRUS, p. 98-131.

Georgia, Cartersville region

Maine

Montana, Dillon region

New Mexico, Raton area

New York, Adirondacks

Pennsylvania, mining his-
tory

United States

MRUS 1919 II

B 666-L 1082-E

See also Graphite, annual

resource data.

- Graphite--Continued
 Utah, Brigham region B 430-J
 Wyoming, Haystack Hills B 315-M
- Gravel
 terrace, Great Plains P 108-J
 Tertiary, California P 73
 See also Sand and gravel.
- Gravity, anomalies of P 85-C
 Gravity surveys, See Geophysical investigations.
- Great Basin
 mollusks, Quaternary and Recent B 11
 Quaternary lakes A 2 c, 3d; B11, 540-N; M 1, 11; P 257-A
 P 264-D
 trilobites, Cambrian P 264-D
 water resources, See under particular States; see also tables, p. 182-187.
- Great Britain, manganese MRUS 1887
- Great Lakes region
 earth movements A 18 II h
 history, Pleistocene geology B 53
- Great Plains
 coal, geochemistry B 1036-H, 1117-A
 Flaxville gravel, other terrace gravels P 108-J
 geology, central P 32
 High Plains, utilization A 21 IV c, 22 IV c
 irrigation W 5
 land-classification maps p. 257
 mollusks, Cenozoic P 337
 Paleocene deposits, map p. 235
 structure, central B 691-A
 uranium, in black shale, in water B 1030-H, 1087-G
 water resources A 16 II f; P 32; W 560-B
See also under particular States.
- Great Sand Dunes National Monument, Colo., map p. 253
- Great Smoky Mountains National Park, Tenn.-N.C., map p. 253
- Green Mountains
 geology A 16 I e; B 195; M 23
 gold MRUS 1894
- Green River
 drainage history P 90-K
 hydrologic reconnaissance C 129
 utilization W 618
- Green River basin, water resources, See under Utah; Wyoming.
- Green River epoch, varves and climate P 158-E
- Green River formation
 analcite and meerschaum beds P 158-A
 fossils P 131-F, 154-G, J, 165-B, 168, 185-C
 oil shale P 132-F, 168
- Green River formation--Continued
 shore phases P 140-D
 stratigraphy OC-52; P 132-F
 Greenhorn formation P 254-E
 Greensand B 660-B; MRUS 1901
 New Jersey B 727; M 9, 18
 United States, eastern B 660-B
 Greenschists, Rhode Island B 311
 Greenstone schists, Michigan B 62
 Grinding materials, See Abrasive materials.
- Ground water. See Water, ground; see also particular States.
- Guadalupe group P 58
 Guadalupe River basin, Texas, floods W 1260-A
- Guidebooks
 Denver and Rio Grande Western Route B 707
 Montana, Glacier National Park B 600
 Northern Pacific Route, Yellowstone Park B 611
 Overland Route, Yellowstone Park B 612
 Santa Fe Route, Grand Canyon B 613
 Shasta Route and Coast Line B 614
 Southern Pacific lines B 845
- Guilford Courthouse Battlefield National Military Park, N. C. p. 253
- Gulf Coastal Plain
 Citronelle formation P 98-L
 gas. See Gas.
 oil. See Oil.
 paleontology
 annelids P 193-B
Exogyra P 81
 Foraminifera P 206, 232
 gastropods P 193-B
 Ostreidae P 186-A
 paleobotany
 Alum Bluff formation P 98-E
 Citronelle formation P 98-L
 Cretaceous P 112
Venericardia planicosta group P 189-F
 Woodbine age biofacies P 264-I
- stratigraphy
 Cretaceous B 413; OC-3; P 81
 Cretaceous-Eocene contact P 90-J
 Eocene erosion intervals P 95-F
 Tertiary B 43; OC-29
 See also Alabama; Arkansas; Florida; Georgia; Louisiana; Mississippi; Texas.
- Gulf of Mexico
 carbon dioxide in water P 120 A
 Foraminifera P 254-F, 274-G
- Gulf of Mexico basins
 streamflow records tables, p. 182, 184-187
 index C 382, 388
- Gypsum
 Alaska

- Gypsum--Continued
- Alaska--Continued
- Chichagof Island B 824-E,
989-B
- Sheep Mountain B 989-C
- annual resource data, 1883-1923,
see MRUS, p. 99-131.
- California B 223, 413,
430-F
- Colorado
- Eagle County B 470-G
- Uncompahgre region B 285-K
- Iowa B 580-E
- New Mexico B 223, 315-H
- Puerto Rico, bibliography B 1105
- Texas, Trans-Pecos B 260-n
- United States B 223, 666-E,
See also Gypsum, annual resource data.
- Utah
- San Rafael Swell B 530-e
- Nephi B 225-1
- Virginia, southwestern B 213-1, 530-e
- Wyoming
- Big Horn Mountains B 640-H
- Laramie district B 285-K; GF-173
B 64
- Gyrolite
- Hafnium, Atlantic States,
southeastern B 1082-A
- Hafnium-zirconium ratio
in minerals and rocks B 1021-A
- in zircon B 1036-F
- Haiti
- aluminous lateritic soil B 954-C
- ammonites, Cretaceous P 214-A
- manganese B 953-B
- Halloysite P 185-G
- Hamilton formation B 206
- Hamma Hamma River, Wash.,
water resources C 109
- Handbooks, See Manuals, handbooks, etc.
- Hanover shale OC-37
- Harbors, geologic history A 13 II b
- Hardpan soils, Maryland,
southern P 267-B
- Hawaii
- basaltic rocks B 994
- flood, Waimea area W 1137-C
- lavas P 88
- leveling B 561
- mineral resources MRUS 1897
- petrography P 214-D
- selenium B 1084-C
- volcanoes A 4 b; B 974-A, D;
996-B, D,
1021-B, D, 1061-B
- water, ground
- artesian pressure table, p. 183
- artesian wells W 596-A
- Kau district W 616
- Oahu, southern C 435
- water levels table, p. 183
- water, surface
- streamflow records tables, p. 184-
187
- compilation table 6
- daily, by years tables 4 and 5
- index C 395
- supply W 1639
- Hawaii--Continued
- water resources--Continued
- quality W 1460-A
- Hawaii National Park, maps p. 253
- Hayden survey, publications B 222
- Haydite, Alaska B 1039-C
- Heat
- conduction in permafrost B 1052-B
- dissipation in reservoirs and
lakes C 282
- periodic flow in stratified
medium B 1083-A
- Heath shale OC-50
- Heavy-mineral reconnaissance,
North Carolina MF-234, 235
- Helderberg group P 108-K, 158-C
- Helium, in natural gas P 121
- Hematite
- metallic paint ingredient B 315-N
- North Carolina B 735-F
- Henry Mountains, Utah, geology
and geography P 228
- Henrys Fork, Idaho, profile
surveys W 420
- Hermosa formation, Paradox
member OM-209
- Hot springs. See Springs.
- Hudson Bay basin, water resources.
See tables, p. 182-187.
- Hydraulic conversion tables W 425-C
- Hydraulic-mining debris, Sierra
Nevada P 105
- Hydraulics
- energy loss with pipe enlarge-
ment W 1369-B
- ground-water
- permeability determin-
ation W 679-A, 887
- specific yield determin-
ation
- from pumping tests W 1636-C
- geophysical methods W 1536-A
- unconfined aquifer, water
levels near discharge
wells W 1536-B
- relation of stream gaging to W 375-C
- river studies P 252; W 1369-A
- alluvial channels
- depth-discharge rela-
tions W 1498-C, D
- flume studies, bed
roughness W 1498-A
- channel patterns P 282-B
- discharge computation W 375-E, F
- at channel constrict-
ions C 284
- at culverts C 376
- effects of ice W 187, 337
- ephemeral streams P 282-A
- flood plains, formation P 282-C
- geomorphic relations P 282-F
- irregular channels, flow
resistance P 282-D
- meanders P 282-B, E
- prismatic channels, stage-
fall-discharge rela-
tions W 1164
- rectangular channels, re-
sistance, velocity W 1592-A

- Hydraulics--Continued
 river studies--Continued
 surges, natural channels W 1369-C
 sonic depth sounder C 450
 Hydrochemistry, Alaska, Chamber-
 lin Glacier area P 414-C
 Hydrographic manual, U. S.
 Geological Survey W 94
 See also Stream measurement.
 Hydrography. See Hydrology.
 Hydrology
 bibliography C 200, 455; W 119,
 120, 163, 280, 340,
 427, 836-D, 837,
 992, 1477, 1492,
 1539-R
 fluid movement, dispersion,
 diffusion in porous
 media P 411-A, B
 ground-water
 definitions W 494
 principles of occurrence W 489
 Indiana lakes W 1363
 minor elements in water,
 spectrochemical
 determination W 1540-A, B
 surface-water techniques
 correlation of records W 1541-C
 definitions W 1541-A
 double-mass curves W 1541-B
 flood-frequency analysis W 1543-A
 flow-duration curves W 1542-A
 storage, flood routing W 1543-B
 tidal streams W 1586-A
 urban growth, effects of W 1591-A
 See also Current meters; Floods; Gaging
 stations; Hydraulics; Rainfall;
 Rivers; Runoff; Wells. Regional
 papers are listed under partic-
 ular States and river basins.
 Hydrometric data. See Streamflow records.
 Hydromica, New Jersey B 167
 Ice, effects on streamflow W 187, 337
 Idaho
 antimony B 780-D,
 922-I, 969-F
 base map p. 250
 batholith B 1070-A
 beryl P 229
 boundaries B 170, 466
 building stone B 811-E
 cinnabar B 715-E
 clay B 1091
 coal. See Coal.
 copper. See Copper.
 damsites, Kootenai River W 866-A
 fluorspar B 1015-A
 forests A 19 V e, f, j,
 20 V e
 gas B 431-A
 geochemical prospecting,
 Coeur d'Alene dis-
 trict B 1098-A; C 168
 geologic map p. 191
 geologic map index p. 192
 geology A 16 II b
 See geographic listing for
 specific areas.
 Idaho--Continued
 glacial geology P 158-G, 231
 gold. See Gold; see also Idaho, mineral
 resources, B 982-E
 iron B 982-E
 lead. See Lead.
 leveling B 487, 567
 lignite B 531-H
 manganese B 795-H
 mercury B 715-E, 780-D,
 1042-D
 metamorphism, Pend Oreille
 district P 158-F
 mica B 530-i; P 229
 mineral resources
 Ammon quadrangle P 238
 Bayhorse region B 877
 Boise Basin A 18 III e;
 B 640-E, 846-D,
 944-C; GF-45
 Casto quadrangle B 854
 Coeur d'Alene region B 260-g; P 62
 Custer County B 539
 Elmore County B 1042-K
 Fort Hall Indian Reserva-
 tion B 713
 Idaho County C 9
 Lemhi County B 528
 Loon Creek district B 530-a
 Mackay region P 97
 Mullan region B 540-E
 northern B 285-A
 Paradise Valley quad-
 rangle P 238
 Pine Creek district B 710-A
 Portneuf quadrangle B 803
 St. Joe-Clearwater region B 530-a
 Sawtooth quadrangle B 580-K
 Shoshone County B 732
 southeastern P 152
 Wood River region B 814
 See also Mining districts; specific
 mineral commodities.
 mining, history B 821-A
 molybdenum B 750-F
 monazite B 430-D
 nitrate B 620-B
 oil B 431-A
 oil shale B 711-B
 paleontology
 Bear River formation B 128
 brachiopods P 294-L
 Carboniferous P 152
 Idaho formation P 132-G
 paleobotany
 Latah formation P 140-A
 Miocene P 185-E
 Payette formation A 18 III e
 Park City formation B 436
 Triassic P 152
 pegmatites P 229
 phosphate. See Phosphate.
 Phosphoria formation C 208, 262, 301
 304, 305, 327
 physiography P 231
 radioactive deposits. See Radioactive
 deposits.
 salt B 430-I

Idaho--Continued

- shaded-relief map p. 249
 silver. See Silver.
 stratigraphy
 Beckwith and Bear River
 formations P 98-G
 Triassic P 254-H
 sulfur B 470-J
 Tertiary geology, Goose Creek
 district B 1055-H
 thorium B 988-H
 triangulation B 644-D, 709-D
 tungsten B 528, 931-A,
 969-F
 uranium. See Radioactive deposits.
 vanadium MF-41
 water, ground
 artesian pressure table, p. 183
 Big Wood River-Silver Creek
 area W 1478
 Minidoka project, North
 Side Pumping Divi-
 sion C 371
 Moscow region W 1460-H
 Owyhee County W 1460-D
 Portneuf district B 803
 relation to Mountain Home
 project alternate
 plan W 1376
 Snake River Plain B 199; W 774,
 775
 Snake River valley,
 springs W 1463
 southwestern artesian
 basins W 78
 Spokane Valley, fluctua-
 tions W 889-B
 Twin Falls-Pocatello
 area W 1460-C
 water levels table, p. 183
 wells B 199; W 57,
 149, 775
 water, surface
 Boise River W 1048
 Coeur d'Alene Lake area W 500-A
 quality table, p. 182
 for irrigation table 7, p. 187
 river surveys W 44, 346, 347,
 350, 420
 streamflow records tables, p. 184-
 187
 Big Wood River basin,
 evaluation C 192; W 1479
 compilation table 6
 daily, by years tables 4 and 5
 index C 392, 393
 water-loving plants, Malad
 Valley W 1412
 water resources
 Island Park area W 818
 Mud Lake basin W 560-D, 818
 Nez Perce County W 53, 54
 power P 152; W 44,
 346, 347, 350,
 420, 520-C
 Snake River Basin, utili-
 zation B 713; W 657
 springs P 152; W 557,
 818, 1463

Idaho--Continued

- See also Rocky Mountains;
 Western States.
 Idaho batholith, comparison with
 southern California
 batholith B 1070-A
 Idaho formation P 132-G
 Igneous fusion in relation to
 pressure B 103
 Igneous rocks
 age determination B 1097-A, B
 Alaska
 Broad Pass region B 608
 Chitina Valley B 675
 Matanuska Valley B 791
 Mount McKinley region P 70
 Nelchina area I-312
 Nutzotin Mountains B 933-B
 analyses, classification P 14, 18, 28, 99
 Arizona OM-201
 Grand Canyon, Precam-
 brian A 14 II i
 western B 352
 Colorado I-309
 Connecticut, Preston area B 492
 Delaware B 59
 lead content, spectrophoto-
 metric determina-
 tion B 1084-F
 Maryland, Baltimore region B 28
 Massachusetts, Essex County B 704
 Minnesota, Pigeon Point B 109
 Montana
 Highwood Mountains B 237
 Little Belt Mountains A 20 III c
 Marysville mining district P 57
 Stillwater complex B 1071-H; P 358
 uranium deposits, map I-311
 Nevada, crystallization,
 Washoe B 17
 Paraguay P 327
 Texas, San Carlos coal field B 164
 uranium geology, bibliography B 1059-E
 Wisconsin, syenite complex,
 Wausau B 1042-B
 Wyoming, Yellowstone National
 Park A 7 c, 12 I e
See also Volcanic rocks.
 Illinois
 base map p. 250
 clay B 470-G; GF-185
 coal B 213-g, 316-B
 concrete materials B 340-H
 floods HA-39; W 334,
 1370-B
 fluorspar B 225-o, 255,
 886-B, 942
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing
 for specific area.
 geophysical survey, Hardin
 County B 942
 glacial boundary B 58
 glacial geology, Illinois
 glacial lobe M 38
 lead. See Lead, Illinois; Lead,
 Mississippi Valley.
 leveling B 421, 493, 553,
 672, 930

Illinois--Continued

- mineral resources
 - Hardin and Brussels quad-rangles P 218
 - Peoria quadrangle B 506
 - St. Louis quadrangle B 438
 - See also specific mineral commodities.
- sewage, Chicago W 194
- stone B 213-I
- stratigraphy, Ordovician P 274-K
- traverse B 644-E, 709-E
- water, ground
 - artesian pressure table, p. 183
 - quality W 364
 - southeastern W 164
 - water levels table, p. 183
 - wells A 17 II h; W 57, 114, 149, 164, 364
- water, surface
 - pollution W 194
 - quality W 239; table, p. 182
 - river profiles W 44
 - streamflow records tables, p. 184-187
 - compilation table 6
 - daily, by years tables 4 and 5
 - index C 383-385
- water resources
 - A 17 II h;
 - GF-67, 81, 105
 - C 216; W 114
- St. Louis area
- zinc. See Zinc.
- Illinois glacial lobe M 38
- Illinois River, pollution by
 - Chicago sewage W 194
- Illustrations, preparation AP
- Ilmenite, New York, Lake San-ford B 940-D
- Ilsemanite, Utah B 750-A
- Index maps
 - aerial mosaics, aerial photography, geologic and topographic mapping, horizontal and vertical control, in United States and Territories p. 256
 - midcontinent region, central, lithology Paleozoic and Mesozoic rocks OM-184
 - topographic maps, United States, Puerto Rico, Virgin Islands p. 249
- Indexes
 - Alaska, mineral deposits B 1139
 - insects, fossil B 71
 - invertebrates, North American Carboniferous B 153
 - plants, fossil, generic names B 1013
 - stratigraphy, North America P 71
 - surface-water records, United States C 381-396
- India, irrigation A 12 II c; W 87
- Indian Territory. See Oklahoma.
- Indiana

Indiana--Continued

- aeromagnetic maps. See geographic listing for specific areas; see also map listing, p. 236-244.
- aeromagnetic survey P 316-B
- asphalt B 213-h
- base map p. 250
- coal. See Coal.
- floods C 407, 440; W 147, 334, 1370-B
- gas
 - A 8 II a,
 - 11 I c; B 213-h
- geologic map p. 191
- geologic map index p. 192
- geology. See geographic listing for specific areas.
- glacial boundary B 58
- glass sand B 315-K
- lakes, hydrology W 1363
- leveling B 555
- limestone B 430-F, 811-C; MRUS 1896
- oil
 - A 8 II a;
 - B 213-h
- Pleistocene geology M 53
- sandstones MRUS 1895
- traverse B 644-F
- water, ground
 - artesian pressure table, p. 183
 - north-central W 254
 - water levels table, p. 183
 - wells A 18 IV b; W 21, 26, 57, 114, 149, 254
- water, surface
 - quality W 236; table, p. 182
 - river profiles W 44
 - streamflow records tables, p. 184-187
 - compilation table 6
 - daily, by years tables 4 and 5
 - index C 383-385
- water resources
 - A 18 IV b
 - Indianapolis area C 366
 - Louisville area C 276
- Induced infiltration W 1360-B
- Industrial wastes, water pollution
 - W 113, 121, 179, 186, 189, 192, 193, 226, 235, 239, 254, 259, 273, 339
- Insects. See under Paleontology.
- Internal-combustion engines,
 - fuel tests B 392
- Invertebrates, marine, inorganic constituents P 102, 124
- See also under Paleontology.
- Inyan Kara group B 1081-B; MF-218
- Iodine, annual resource data, 1883-1891, see MRUS, p. 99-102.
- Ion activity, calculation and use W 1535-C
- Iowa
 - base map p. 250
 - cement materials B 315-F

Iowa--Continued

- floods W 162,1320-A,
1370-A
- geologic map p. 191
- geologic map index p. 192
- geology. See geographic listing for
specific areas.
- gypsum B 223, 580-E
- lead. See Lead, Iowa; Lead, Mis-
sissippi Valley.
- leveling B 460, 569
- Quaternary geology A 11 I b; P 161
- stratigraphy, Ordovician P 274-K
- structural geology, Forest
City basin OM-48
- traverse B 644-G, 709-G
- water, ground W 114, 145, 293
- artesian pressure
quality table, p. 183
- water levels W 293, 364
- wells table, p. 183
- W 57, 149
- water, surface
- gazetteer W 345-I
- quality W 236;
- table, p. 182
- W 44
- river profiles tables, p. 184-
187
- streamflow records
- compilation table 6
- daily, by years tables 4 and 5
- index C 385, 386
- zinc. See Zinc.

Iridium

- annual resource data, 1882-1886. See
MRUS, p. 98-100.

Iron

- Alabama MRUS 1882
- Birmingham district B 315-D,
340-E, 400
- Brookwood district B 260-h
- Chattanooga region B 380-E
- Columbia-Montevallo
district B 470-F
- Greasy Cove C 1
- northern B 285-E, 540-G
- Russellville district and
Talladega County B 315-D
- Alaska
- Haines region B 442-C
- Nome region B 622-I
- Prince of Wales Island B 1090
- annual resource data, 1882-1923, see
MRUS, p. 98-131.
- Arizona, Canyon Creek area B 821-C
- Brazil B 946-A
- British Columbia B 285-E
- California
- Eagle Mountains B 503
- Redding region B 213-f
- western, central, and San
Bernardino County B 430-E
- Canada MRUS 1895
- chromic, annual resource data, 1889-
1891, 1895-1918, see MRUS,
p. 101, 103-125.
- See also Chromite.
- Colorado, Taylor Peak and Whitepine
deposits B 380-E

Iron--Continued

- Cuba B 340-E;
MRUS 1918
- deposition by bacteria P 113
- Europe B 703, 706
- Georgia
- Cartersville district B 213-f; P 224
- Chattanooga region B 380-E
- Ellijay region B 340-E; GF-187
- northwestern' B 540-G
- Idaho, Iron Mountain dis-
trict B 982-E
- in natural water, chemistry W 1459-A-H
- in plants W 1459-G
- Kentucky, Bath County B 285-E
- Lake Superior region A 21 III c;
B 213-f, 225-f
- Louisiana, Bossier, Caddo,
and Webster Par-
ishes B 620-G
- manganiferous B 666-EE;
MRUS 1916 I
- See also Manganese.
- meteoric B 42
- Michigan MRUS 1911 I
- Crystal Falls district and
Sturgeon River tongue
- A 19 III a; M 36;
Map 3-181
- Marquette district A 15 e; M 28
- Menominee district GF-62; M 46
- Penokee series A 10 I c; M 19
- See also Iron, Lake Superior
region.
- Minnesota
- Cuyuna district B 660-A
- Mesabi district M 43
- Vermillion district M 45
- See also Iron, Lake Superior
region.
- Montana, Stanford region B 715-F
- Nevada, Dayton region B 430-E
- New Mexico, Hanover region B 380-E
- New York, Adirondacks A 19 III d
- North Carolina
- Cranberry district B 213-f; GF-90
- western B 735-F, G
- Oregon, Portland region B 260-h
- Pennsylvania, Dillsburg,
brown ore B 430-E
- Puerto Rico B 1082-C; I-326
- Tennessee
- Chattanooga region B 380-E
- Cranberry district B 213-f; GF-90
- eastern B 540-G
- western B 795-D
- Texas
- Cass, Marion, Morris, and
Cherokee Counties B 620-E
- eastern B 902
- Llano County B 430-E
- northeastern B 260-h
- United States B 285-E, 394,
666-V, EE,
1082-C;
Map 3-212
- See also Iron, annual re-
source data.

Iron--Continued

- Utah
Granite Mountain area MF-14
Iron Springs district B 338
southern, and Uinta Mountains B 225-f
- Virginia
Appalachian region B 380-E
James River-Roanoke River district MF-5
Oriskany and Clinton ores; New River-Cripple Creek district B 285-E
- Washington
Blewett deposit, Chelan County B 969-D
Cle Elum River deposit, Kittitas County B 978-B
- Wisconsin
eastern B 540-H
Penokee series A 10 I c; M 19
See also Iron, Lake Superior region.
- Wyoming
Carbon County B 811-D
Hartville range and Iron Mountain B 315-D
See also Hematite; Limonite; Magnetite; Mining districts.
- Iron and steel industry, annual resource data, 1882-1923, see MRUS, p. 99-131.
- Iron and steel slags, utilization B 213-f
- Iron carburets, properties B 14, 35
- Iron-depositing bacteria P 113
- Iron ore, bibliography W 1019-D
- Iron wastes, pollution by W 186
- Irrigation W 43
- Arizona, Phoenix region W 2
- California
Bakersfield area W 17
Fresno area W 18
Merced area W 19
Morgan Hill area W 400-E
Sacramento Valley W 375-A
southern W 59, 60, 137, 138, 139, 219
- Colorado
Greeley region W 9
Kansas River basin C 295
- Great Plains W 5
- India A 12 II c; W 87
- Kansas, Wichita region W 345-A
- laws W 93
- Louisiana W 101
- Montana
Jefferson River basin B 580-B
Little Bitterroot Valley W 400-B
Madison River basin W 560-A
- Navajo country W 380
- Nebraska
Box Butte County C 166
Lodgepole Valley W 425-B
- Nevada, Steptoe Valley W 467
- New Mexico
Carlsbad project W 580-A
Mesilla Valley W 10
Roswell artesian basin W 639
- North Dakota, relation of lignite to W 117

Irrigation--Continued

- Oklahoma
Enid region W 345-B
Gage region W 500-B
Oklahoma City region W 345-D
Oregon, Owyhee project W 597-A
reservoirs A 18 IV d; B 580-A
sewage W 3, 22
- South Dakota
Angostura project C 54
eastern A 18 IV c
Texas W 13, 71
United States A 10 II, 11 II, 12 II, 13 III; W 146, 1430, 1465, 1485
See also table 7, p. 187.
- windmills W 8
- Wyoming
Kaycee project, Johnson County W 1360-E
Lodgepole Valley W 425-B
Shoshone project W 1418
See also Pumping systems.
- Isle Royale National Park, Mich., map p. 253
Jackfork sandstone P 186-C
Jackson formation P 120-C
Jade, analyses B 60
James River, floods W 800
Jefferson River basin, Mont., waterpower and irrigation W 580-B
- Jewel Cave National Monument, S. Dak., geology, ground water W 1475-D
- John Day River basin, Oreg., profile surveys W 377
- Josephinite B 113
- Judith River formation B 257; P 90-I, 125-B
- Jurassic formations
Colorado Plateau region B 1009-E
Idaho P 98-G
Montana OC-32; OM-179
Navajo country P 291
New Mexico B 1030-J; P 183
North and South Dakota MF-218; OM-179
Texas B 266
Utah, Arizona, Colorado P 183
Wyoming MF-218; OC-13, 14
See also names of formations.
- Jurassic fossils
Alaska P 85-D, 236-B, 249-B, 274-D
California P 175-B
North America B 29; P 118
South Dakota P 243-A
Texas B 266
United States, western P 214-B, 233-B, 243-A, 249-A
See also Paleontology.
- Jurassic system, paleotectonic maps, paleogeography I-175
- Kaibab limestone P 150-C

Kanawha River basin, W. Va.,
Va., N. C.

W 536

Kansas

- base map p. 250
- clay B 260-m, 296
- construction materials B 1060; C 15, 21, 24, 25, 27, 30, 38, 40, 51, 79, 88, 106, 118, 132, 179
- floods C 151; HA-14; W 96, 147, 1139
- gas B 260-j, 296; GF-159; p. 213
- gazetteer B 154
- geologic map p. 191
- geologic map index p. 192
- geology. See geographic listing for specific areas.
- gold and silver, tests B 202
- gypsum B 223
- irrigation W 345-A
- latitudes and longitudes B 49
- lead B 213-e, 606; p. 226
- leveling B 473, 571, 889
- mineral resources
 - Independence quadrangle B 260-j, l, m, 296
 - Iola quadrangle B 238
 - See also specific mineral commodities.
- oil. See Oil.
- paleontology
 - Carboniferous B 211
 - paleobotany
 - Cheyenne sandstone P 129-I
 - Pennsylvanian P 254-D
- radioactive deposits. See Radioactive deposits.
- stratigraphy
 - Carboniferous B 211
 - Paleozoic OC-61
 - Pennsylvanian OC-46, 48
 - Permian OC-46
 - pre-Pennsylvanian OC-47; OM-101
- structural geology, Forest City basin OM-48
- tectonic map showing uranium MF-129
- traverse B 644-L, 709-G
- water, ground
 - artesian pressure table, p. 183
 - for irrigation, Wichita district W 345-A
 - quality W 273
 - southwestern W 6
 - underflow
 - Arkansas Valley W 153
 - St. Francis district W 258
 - water levels table, p. 183
 - wells W 57, 145, 149
- water, surface
 - floods HA-14
 - quality W 236, 273, 274; table, p. 182
 - for irrigation table 7, p. 187
 - river profiles W 44
 - streamflow records tables, p. 184-187

Kansas--Continued

- water, surface--Continued
 - compilation table 6
 - daily, by years tables 4 and 5
 - index C 386, 387
- water resources
 - Kansas City area C 273
 - northwestern A 16 II f
 - southeastern, stream pollution W 273
- zinc B 213-e, 606; p. 226
- See also Great Plains.
- Kansas River, floods W 796-B
- Kansas River basin, irrigation wells C 295
- Kaolin
 - Europe MRUS 1897
 - minerals P 165-E
- Katmai National Monument, Alaska, eruption
 - Trident Volcano C 318
- Keewatin ice sheet, Montana lobe P 50
- Kelsh plotter, procedures C 357; p. 188
- Kemp clay P 193-A
- Kennebec River basin, Maine, water resources W 198
- Kentucky
 - alluvial deposits W 1411
 - base map p. 250
 - Berea sand, map OM-69
 - clay B 285-L
 - coal. See Coal.
 - drainage features M 41; P 13
 - floods W 334, 967-B
 - fluorspar. See Fluorspar.
 - gas. See Gas.
 - geologic map p. 191
 - geologic map index p. 192
 - geology. See geographic listing for specific areas.
 - glacial boundary B 58
 - glacial geology M 41; P 13
 - glass sand B 315-K
 - iron B 285-E
 - lead B 213-e; P 36
 - leveling B 554, 673, 709-H
 - limestone B 430-F
 - meteorites, Allen County B 55
 - mineral resources
 - Cumberland Gap coal field P 49
 - Kenova quadrangle B 349; GF-184
 - See also specific mineral commodities.
 - oil. See Oil.
 - paleobotany, Wilcox group P 156, 193-E
 - peridotite B 38
 - shaded-relief map p. 249
 - stratigraphy
 - Mississippian B 1072-K; OC-38; OM-69
 - Pennsylvanian OM-156, 163, 173
 - structural geology
 - Seitz quadrangle OM-173
 - Tiptop quadrangle OM-163

Kentucky--Continued

- structural geology--Continued
 White Oak quadrangle OM-156
 triangulation and traverse B 644-H, 709-H
 water, ground
 artesian pressure table, p. 183
 Blue Grass region C 299; HA-5, 8,
 15-25; W 1533
 Covington-Newport alluvial
 area C 240
 Henderson area W 1356
 Hopkinsville quadrangle W 1328
 Jefferson County HA-8
 Louisville region HA-5; W 1360-B
 Ohio Valley W 1411
 Paducah area W 1417
 Paintsville area W 1257
 Prestonsburg quadrangle W 1359
 quality W 233
 summary HA-10
 water levels table, p. 183
 wells W 57, 149, 364
 western W 164
 water, surface
 quality table, p. 182
 W 236
 river profiles W 44
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 383, 387
 water resources
 Louisville area C 276
 springs W 114, 233
 public and industrial
 utility C 197
 Blue Grass region C 299; W 233
 Eastern Coal Field
 region C 369
 Jackson Purchase
 region C 287
 Mississippi Plateau C 341
 Western Coal Field
 region C 339
 southeastern W 110
 zinc B 213-e; P 36
See also Appalachian region;
 Southern States.
 Kern River, Calif., physical char-
 acteristics W 46
 Keweenaw series B 23
 King survey, publications B 222
 Kings Canyon National Park,
 Calif., map p. 254
 Kirtland formation P 98-Q, S
 Kiskiminetas River basin, Pa.-
 Md., floods C 204
 Klamath Mountains, topographic
 development B 196
 Knoxville beds B 133
 Kootenai formation B 340-I
 Kootenai River, Idaho, Mont.,
 damsites W 866-A
 Korea, coalfields B 1041-A-E
 Kyanite
 bibliography B 1019-N
 United States, southeastern P 336

- Laccoliths
 Black Hills A 21 III b
 Colorado, Utah, Arizona A 14 II d
 Montana P 57
 Lafayette formation A 12 I c
 Lake Agassiz, glacial B 39; M 25
 Lake Bonneville A 2 c; M 1;
 P 257-A
 Lake Champlain, pollution W 121
 Lake Hefner, Okla., water-loss
 investigations P 269, 270
 Lake Lahontan
 geologic history A 3 d; M 11
 thinolite B 12
 Lake Mead
 first 14 years C 346
 sedimentation P 295
 water-loss investigations P 298
 Lake Michigan glacier,
 Delevan lobe P 34
 Lake Superior region
 copper A 3 c; M 5, 52
 Eastern sandstone and
 Keweenaw series,
 junction B 23
 M 52
 geology A 21 III c;
 iron B 213-f, 225-f
 moraines and shorelines P 154-A
 Precambrian rocks P 184
See also States bordering lake.
 Lakes
 Indiana, hydrology W 1363
 Quaternary, Great Basin, See Lake
 Bonneville, Lake Lahontan.
 use for heat dissipation C 282
 utility for water-loss studies C 103
See also names of lakes.
 Lakeshores, topography A 5 b
 Lamprophyre dikes, Utah P 120-E
 Lance formation P 158-B,
 185-F
 Cannonball marine member P 128-A
 Land classification, waterpower
 and storage sites C 400
 Land-classification maps p. 257
 Landform analysis, in studies of
 semiarid erosion C 437
 Lands, See Public lands.
 Landslides
 California, Los Angeles I-284
 Colorado
 San Juan Mountains B 685; P 67
 southwestern C 31
 Panama Canal P 98-N
 Laramie formation A 6 f; B 34, 37,
 105; P 130
 Lassen Volcanic National Park,
 Calif., map p. 253
 Latah formation P 140-A,
 154-H
 Lavas
 Arizona, Grand Canyon A 14 II i
 California B 79, 89
 Hawaii P 88
 Washington P 140-A
 Lawsonite B 262
 Lead

Lead--Continued

Alaska

Ketchikan and Wales dis-

tricts

B 998-C

Ruby region

B 783-D

Wrangell district

B 998-B

annual resource data, 1882-1923,

see MRUS, p. 98-131

Arkansas, northern

A 22 II b;

B 213-e, 853;

P 24

bibliography

C 242

California, Darwin district

B 580-A

Idaho

Bear River Range

B 470-D

Clark Fork district

B 944-B

Coeur d'Alene district

B 260-g; P 62

Dome district

B 540-E

Illinois

B 225-e, 294;

P 274-K

Galena-Elizabeth

GF-200

northwestern

B 246

in igneous rocks, spectropho-

tometric determina-

tion

B 1084-F

Iowa

C 231; P 274-K

Catfish Creek area

MF-116

Couler Valley area

MF-42

Dubuque County

B 1027-K

Durango area

MF-33

Galena-Elizabeth

GF-200

Kansas

Joplin district

B 213-e, 606

Picher field, map

p. 226

Kentucky, western

B 213-e; P 36

Mississippi Valley, upper

B 294, 1015-G,

1123; P 309

Missouri

Joplin district

B 203-e, 606;

GF-148

Ozark region

A 22 II b

southeastern

B 132

Montana, Bearpaw Mountains

B 430-C

Nevada

Arabia district

B 660-H

Eureka district

A 3 e, 4 c; M 7,

20

Goodsprings (Yellow Pine)

district

B 540-F, 1010;

P 162

New Mexico

B 380-C

See also Mining districts.

New York, Shawangunk mine

B 978-D

Nigeria, Nyeba district

B 1000-B

Oklahoma

Joplin region

B 606

northeastern

B 340-C

Picher field

p. 226

Ozark region

A 22 II b

Peru, Cordillera Blanca,

Cordillera

Huayhuash

B 1017

United States

B 394, 666-AA

See also Lead, annual resource data.

Utah, Bear River Range

B 470-D

Washington

B 470-D

See also Mining districts;

Washington, Mineral

resources.

Lead--Continued

Wisconsin

B 294; C 131,

231; P 274-K

Beetown area

MF-3

Cuba City region

MF-15

Dodgeville region

B 260-g

geochemical studies

B 1000-E

Lancaster-Mineral Point

GF-145

Sinsinawa River area

MF-40

Lead slags

MRUS-1883-84

Leveling, methods

B 788-D

See also United States; particular States.

Lignite

Alaska

A 17 I e

Idaho, Cassia County

B 531-H

Missouri Valley

B 225-g

Montana

B 285-F; C 251

eastern, and Custer,

Dawson, and

Valley Counties

B 471-D

Ekalaka field

B 751-F

1055-F

Fort Peck Indian Reserva-

tion field

B 381-A

Plentywood region

B 541-H

Scooby field

B 541-H,

751-E

Sentinel Butte field

B 341-A

Wibaux area

B 995-C

Yellowstone River region

B 995-H

North Dakota

B 285-F; C 226

Bowman County

B 1015-E,

1055-C

Cannonball River field

B 541-C

Fort Berthold Indian

Reservation

B 381-A,

471-C, 726-D

Marmarth field

B 775

New Salem field

B 726-A

relation to irrigation

W 117

Sentinel Butte field

B 341-A

Slope County

B 1015-E

Standing Rock and Cheyenne

Indian Reservations

C 78

Washburn field

B 381-A

Wibaux area

B 995-G

Williston field

B 531-E

Potomac formation

B 56

South Dakota

C 159

Great Sioux Reservation

B 21

northwestern

B 627, 1055-B

Standing Rock and Cheyenne

River Indian Reser-

vations

C 78

uranium-bearing

B 1055-B-F

Lime

annual resource data, 1905-1923, see

MRUS, p. 110-131.

United States

B 666-R

Lime industry, Maine

B 285-J

Lime-secreting algae

P 170-E

Limestone

Alabama

B 315-G

California, Redding region

B 213-I

high-calcium, bibliography

B 1019-I

Indiana

B 811-C

Bedford-Bloomington

B 430-F;

MRUS 1896

Limestone--Continued

- Kentucky B 430-F
 Massachusetts, New York, and Connecticut B 744
 Pennsylvania, southwestern sandy, Appalachian Basin, texture SP
 United States B 666-R
 water in, pollution W 258
 West Virginia, Berkeley County B 225-o
- Limnite
 New York, New England B 260-h
 Oregon, Scappose B 982-C
 radioactive, Colorado, Utah, Wyoming B 1046-N
- Lincoln National Forest, N. Mex., map p. 253
- Liquids
 compressibility B 92
 subsidence of particles B 36, 60
 thermodynamics B 96
- Lithium
 annual resource data, 1900-1905, 1909, 1916, 1919, see MRUS, p. 106-111, 114-115, 122-123, 125-127
 North America B 666-X, 1027-G
 See also Spodumene.
- Lithium micas, composition P 354-E
- Lithographic stone
 annual resource data, 1882-1884, 1886, 1889-90, 1896, 1900, see MRUS, p. 98-99, 100, 101, 104-105, 106-107,
- Little Colorado River basin
 flood W 162
 sedimentation in reservoirs W 1110-D
- Littleton formation P 334-B
- Livingston formation B 105
- Lockport dolomite B 1000-D
- Lodo formation P 240-A, B
- Loess-mantled slopes, origin of steps B 1071-C
- Logan River, Utah, profile surveys W 420
- Louisiana
 base map p. 250
 clay B 660-E
 floods W 1320-C
 gas. See Gas.
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for specific areas.
 iron B 620-G
 irrigation W 101
 leveling B 458, 634
 mud lumps, Mississippi River mouths B 541-A; P 85-B
 oil. See Oil.
 paleontology B 142
 Foraminifera P 128-E
 salt MRUS 1882
 stratigraphy, Cretaceous OC-3
 traverse 644-I
 water, ground
 artesian pressure table, p. 183
 Baton Rouge area W 1296

Louisiana--Continued

- water, ground--Continued
 Calcasieu Parish W 1488
 Natchitoches area W 968-D
 northern P 46
 southern W 101
 water levels table, p. 183
 wells W 57, 149
- water, surface
 quality W 236;
 table, p. 182
 river profiles W 44
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 382, 387
- water resources
 New Orleans area C 374
 southwestern W 1364
 springs B 32; W 114
- See also Gulf Coastal Plain; Southern States.
- Louisiana limestone P 203
- Luminescence, infrared, minerals B 1052-C
- Luxembourg, iron industries B 703
- Mackintoshite, composition B 113
- Madison group B 1071-F
- Madison River basin, Mont., waterpower and irrigation W 560-A
- Magnesite
 annual resource data, 1891, 1894, 1901-1921, see MRUS, p. 101-103, 107-129,
 Brazil B 962-C, 975-C
 California B 285-J, 355,
 540-S
 Nevada B 540-S
 Gabbs deposits MF-35
 United States
 See also Magnesite, annual resource data.
 Washington, Stevens County MF-117
- Magnesium
 annual resource data, 1886, 1915, 1917-1923, see MRUS, p. 100, 121-131,
 Nevada, Currant Creek district B 978-A
 United States, geology, bibliography B 1019-E
- Magnetic declination, United States A 171 b
- Magnetic-doublet theory, total-intensity anomalies, analysis B 1052-D
- Magnetite
 Alaska, Tuxedni Bay B 1024-D
 electric smelting from black sands MRUS 1905
 Montana, titaniferous, Black-foot Indian Reservation B 540-H
 New Jersey B 995-F
 Dover district B 982-G; P 287
 Jersey Highlands B 955-A
 Ringwood area B 982-F

Magnetite--Continued

- New York
 Adirondacks, titaniferous A 19 III d
 Clinton County P 237
 Jersey Highlands B 955-A
 Lake Sanford area B 940-D
 St. Lawrence County MF-6, 10
 Sterling Lake B 982-F
 North Carolina, western B 735-G
 Pennsylvania
 Boyertown B 995-D
 Cornwall type B 315-D, 359
 Dillsburg B 969-A
 Tennessee, eastern B 735-G
 Mahoning River basin, Ohio,
 water resources C 177
- Maine
 aeromagnetic maps. See geographic list-
 ing for specific areas; see also
 map listing, p. 236-244.
 base map p. 250
 clay B 285-L, 530-e
 feldspar B 315-L, 445
 floods W 967-C
 gem stones B 27, 445
 geologic map p. 191
 geologic map index p. 192
 geology P 165
See also geographic listing for
 specific areas.
 glacial geology
 gravels and associated de-
 posits M 34
 Newington moraine P 108-B
 gold B 225-b
 granite B 260-k, 313;
 GF-149, 158
 graphite B 285-O
 leveling B 437, 633
 lime industry B 285-J
 manganese B 940-E
 mica B 445
 mineral resources B 432
 West Pembroke B 315-C
See also specific mineral
 commodities.
 minerals, Litchfield B 42
 molybdenum B 260-d, 340-D
 paleontology
 Chapman and Moose River
 sandstones P 89
 corals B 1111-A
 Paleozoic B 165
 peat B 376; GF-192
 pegmatites B 445
 quartz B 225-b, 315-L,
 445
 slate B 285-M
 stratigraphy
 Moose River synclorium B 1111-E
 southwestern P 108-1
 triangulation and traverse B 644-J, 709-1
 water, ground
 artesian pressure table, p. 183
 Augusta, glacial gravels W 145
 *quality W 102, 223,
 258, 364

Maine--Continued

- water, ground--Continued
 southern W 223
 water levels table, p. 183
 wells W 57, 102, 114,
 149, 223, 258
 W 145
 York region
 water, surface
 gazetteer W 198, 279
 Kennebec River basin W 198
 Penobscot River basin W 279
 power W 44, 69, 198,
 279
 quality W 198, 236;
 table, p. 182
 W 44
 river profiles W 198, 279
 storage
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 381
 water resources
 pollution W 198
 springs A 14 II b;
 W 102, 114,
 223, 258
- See also Appalachian region; Eastern
 States; New England States.
- Malone formation B 266
 Mammals. See under Paleontology.
 Mammoth Cave National Park, Ky.,
 map p. 254
- Manganese
 Alabama B 940-J
 annual resource data, 1882-1923, see
 MRUS, p. 98-131.
 Arizona B 710-D
 Artillery Mountains
 region B 936-R, 961
 Lake Mead region B 948-D
 Arkansas
 Batesville district B 715-G, 734,
 920-A; MF-1
 Caddo Gap and De Queen
 quadrangles B 660-C
- Brazil
 Amapá B 964-A
 Golaz B 935-E
 Mato Grosso B 946-A
- California
 Paymaster mining district B 931-S
 southeastern B 710-E
 Colorado B 715-D
 Costa Rica B 710-C,
 935-H
 Cuba B 213-f,
 935-B, F, G,
 1057
 Georgia
 Cartersville district B 213-f; P 224
 Great Britain MRUS 1887
 Haiti B 953-B
 Idaho, Bannock County B 795-H
 Maine, Aroostook County B 940-E
 Maryland B 640-C
 Mexico B 954-F

Manganese--Continued

Mexico--Continued

Lucifer district B 960-F

Talamantes district B 954-E

Montana B 725-C

Butte B 690-E

Madison County B 690-F

Philipsburg B 922-G

Nevada B 710-F

Lake Mead region B 948-D

Nevada district B 931-M

Three Kids district B 936-L

New Jersey

Franklin Furnace B 213-e

New Mexico B 710-B

Lake Valley district MF-9

Little Florida Mountains B 922-C

Oklahoma, Bromide region B 725-E

Oregon B 725-C

Panama B 710-C, 1034

Spain MRUS 1887

Tennessee B 940-J

eastern B 737

Perry and Lewis

Counties B 928-D

United States B 427,

666-C, EE

See also Manganese, annual resource data.

Utah B 725-C

Drum Mountains B 1082-H

southeastern B 979-B

western B 979-A

Virginia B 640-C

Elkton area B 940-B

Flat Top and Round Moun-

tain districts B 940-H

James River-Roanoke

River district B 1008; MF-5

Lyndhurst-Vesuvius dis-

trict B 940-F

Shenandoah Valley B 660-J

Sweet Springs district B 940-G

Washington B 725-C

Lake Crescent, Hump-

tulips B 795-A

Olympic Peninsula B 931-R

West Virginia, Sweet Springs

district B 940-G

Wyoming B 715-C

See also Mining districts.

Manuals, handbooks, etc.

hydrographic manual, U. S.

Geological Survey

hydrology W 94

topographic instructions W 1541-A, B, C

B 788; C 92, 164;

p. 188

Manzano group B 389

Mapping

geographic tables and

formulas B 50, 214, 234,

650, 809

geologic, by graphic locator

map symbols, list C 12

photogeologic procedures SP

topographic instructions B 1043-A, D

B 788; C 92,

164; p. 188

Mapping--Continued

transformation geodetic to plane

coordinates on Lambert

and transverse Mercator

projections AP

Marble

Alabama, Shelby County B 470-G

Alaska, southeastern B 542-B,

592-B, 682

Arizona, Chiricahua Moun-

tains B 380-I

California, Barstow region B 540-K

Nevada, White Pine County B 340-G

Tennessee B 213-i

Vermont B 521, 589

Marcasite B 186

Mariana Islands, Saipan, geology,

petrology, soils,

paleontology P 253, 280

Marianna limestone P 129-F

Maritime Provinces. See Canada.

Marl

Alaska, Knik Arm area MRUS 1882,

1883-84, 1901

B 1039-A

Marsh gas, Utah, Moab district B 471-A

Marshall Islands, Bikini and near-

by atolls, geology,

oceanography, geo-

physics, paleon-

tology P 260

Maryland

base map p. 250

chromite B 725-B, 1082-K

floods C 204

gazetteer B 231

geologic map p. 291

geologic map index p. 192

geology. See geographic listing for

specific areas.

gold B 260-b

granite A 15 g

gravel B 906-A

hardpan soils P 267-B

leveling B 434, 563

manganese B 640-C

mineral resources

map MR-12

Piedmont Upland B 1082-K

See also specific mineral

commodities.

paleontology

paleobotany, Pocono for-

mation and Price

sandstone P 263

Pleistocene P 150-F

sand B 906-A

stratigraphy, Eocene B 141

triangulation and traverse B 644-K, 709-A

water, ground

artesian pressure table, p. 183

water levels table, p. 183

wells B 298; W 57,

114, 149

water, surface

power P 123; W 44

quality W 236;

table, p. 182

Maryland--Continued

- water, surface
 - river profiles P 294-B; W 44
 - streamflow records table, p. 184-187
 - compilation table 6
 - daily, by years tables 4 and 5
 - index C 381, 383
- water resources
 - Accident, Grantsville, Frostburg, and Flintstone quadrangles W 110
 - Beaverdam Creek basin W 1472
 - Pawpaw and Hancock quadrangles W 145
 - springs W 110, 114, 115
- See also Allegheny region; Appalachian region; Atlantic Coastal Plain; Eastern States; Piedmont.

Massachusetts

- base map p. 250
- clay A 17 I g; B 285-L, 430-F
- construction materials A 16 II c
- contour map p. 249
- engineering geology, highway and foundation sites C 426
- floods W 867, 996
- fuller's earth B 430-F
- geographic dictionary B 116
- geologic map index p. 192
- geology B 597
- See also geographic listing for specific areas.
- glacial geology
 - Mystic Lakes-Fresh Pond area B 1061-F
 - Newington moraine P 108-B
- granite B 354, 470-G
- hydrology, summary W 1105
- leveling B 882
- limestone B 744
- mineral resources
 - Hudson and Maynard quadrangles B 1038
 - map MR-4
 - See also specific mineral commodities.
- mineralogy B 126
- paleontology, Triassic fish and plants M 14
- physical features, central B 760-B
- physiography, Taconic B 272
- seismic method, subsurface exploration C 426
- sewage purification, Boston W 185
- structural geology
 - Connecticut Valley A 7 f
 - Green Mountains A 16 I e; B 195
 - Monument Mountain, Great Barrington A 14 II k
- superpower survey P 123
- water, ground
 - artesian pressure table, p. 183
 - quality W 102

Massachusetts--Continued

- water, ground--Continued
 - Taconic quadrangle W 110
 - water levels table, p. 183
 - wells W 57, 102, 110, 114, 149; table, p. 183
- water, surface
 - gazetteer W 415
 - power P 123; W 44
 - quality W 144, 236; table, p. 182
 - river profiles W 44
 - streamflow records tables, p. 184-187
 - compilation table 6
 - daily, by years tables 4 and 5
 - index C 381
- water resources
 - springs W 102
 - mineral W 114
- See also Eastern States; New England States.
- Matter, evolution and disintegration P 132-D
- Maury formation P 286
- Medina group B 899-B
- Medusae. See under Paleontology.
- Meerschaum
 - New Mexico B 340-M
 - Utah, Colorado, Wyoming P 158-A
- Mercury
 - Alaska, Kuskokwim region B 622-H
 - annual resource data, 1882-1923, see MRUS, p. 98-123.
- Arizona
 - Mazatzal Mountains B 430-D
 - Phoenix Mountains B 620-F, 1042-R
- Arkansas
 - Pike County B 936-H
 - southwestern B 886-C
- bibliography B 1019-A
- California
 - B 931-B; MRUS 1883-84
 - Coso district B 936-Q
 - Del Puerto area B 936-D
 - Mayacmas and Sulphur Bank districts B 922-L
 - Mount Diablo district B 922-B
 - Parkfield district B 936-F
 - San Luis Obispo and Monterey Counties B 922-R
 - Stayton district B 931-Q
- Chile B 964-E
- Idaho
 - Weiser region B 1042-D
 - Yellow Pine district B 715-E, 780-D
- Mexico
 - Canoas B 975-B
 - Cuarenta district B 946-F
 - Huahuaxtla district B 960-E
 - Huitzuco B 946-B
- Nevada
 - B 931-B
 - Bottle Creek district B 922-A
 - Buckskin Peak B 922-E

- Mercury--Continued
 Nevada--Continued
 Opalite district B 931-N
 Pilot Mountains B 795-E, 973-D
 western B 620-D
 Wild Horse district B 931-K
 Oregon B 931-B
 Bonanza-Nonpareil district B 955-F
 Horse Heaven mining district B 969-E
 Ochoco district B 940-C
 Opalite district B 931-N
 southwestern B 850
 Steens and Pueblo Mountains B 931-J, 995-B
 Pacific slope A 8 II c; M 13
 Peru
 Huancavelica district B 975-A
 Texas, Terlingua district B 405; P 312
 United States B 666-FF
 See also Mercury, annual resource data.
- Mesozoic formations
 Alaska B 776
 Colorado OC-16
 Midcontinent region, index map, sections OM-184
 Montana OC-18, 19; OM-43; P 120-F
 Utah OC-16
 Wyoming P 120-F
See also names of formations.
- Mesozoic fossils B 4
 California B 15
 North America B 102, 696, 924; P 294-A
 North Carolina P 234-B
 United States A 20 II e, B 97; M 48, 54
 Virginia M 6
See also Paleontology.
- Mesozoic history, Utah, central P 205-D
- Metacinnabarite, California, New Almaden B 78
- Metallic paint. See Mineral paint.
- Metallurgy, electrolysis MRUS 1882
- Metals. See names of metals; Secondary metals.
- Metamorphic rocks
 Arizona OM-201
 Colorado I-309
 Minnesota, southwestern B 157
 Montana, uranium, location I-311
 Paraguay P 327
 uranium geology, bibliography B 1059-E
- Metamorphism M 47
 Colorado, Northgate district P 274-M
 Idaho, Pend Oreille district P 158-F
 Michigan, Menominee and Marquette regions B 62
 Montana, Marysville mining district P 57
- Meteorites
 analyses B 78, 90
 Arkansas-Kentucky B 60
 B 55
- Meteorites--Continued
 Mexico B 64
 Tennessee, Hamblen County B 113
 Methow River basin, Wash., profile surveys W 376
- Mexico
 antimony. See Antimony.
 calcite B 954-D
 coal B 962-A
 conglomerates, Tertiary P 264-H
 copper P 273
 erosion studies, Parícutin B 965-A, 1104-A
 manganese B 954-E, F, 960-F
 mercury B 946-B, F, 960-E, 975-B
 meteorite B 64
 mineral resources
 Boleo copper district P 273
 Zimapán mining district P 284
 petrology, Parícutin B 965-C
 phosphate B 1037-A
 tin B 935-C, 960-D, 962-D
 tungsten B 946-C, D
 volcanoes, Parícutin area B 965-B-D
 B 55, 64, 620-J
- Mica P 248-G
 Alabama
 annual resource data, 1882-1923, see MRUS, p. 98-131.
 Brazil B 964-C
 calculating analyses B 950
 Colorado B 530-i
 constitution B 78, 113
 Georgia
 Hartwell district P 248-E
 Thomaston-Barnesville district and outlying deposits P 248-F
 Idaho B 530-i; P 229
 lithium B 42, 113; P 354-E
 mineralogy B 950
 New Hampshire B 931-P
 New Jersey, hydromica B 167
 New Mexico B 530-i
 North Carolina B 430-J
 Ridgeway-Sandy Ridge district P 248-C
 Shelby-Hickory and outlying deposits P 248-D
 Spruce Pine district B 936-A
 Piedmont, southeastern P 248-A-G
 potassium, correlation B 1036-D
 South Carolina, Hartwell and outlying districts P 248-E
 South Dakota B 380-N
 Southeastern States, commercial muscovite P 225
 trioctahedral, composition P 354-B
 United States B 580-F, 666-X, 740
 See also Mica, annual resource data.
- Virginia
 Amelia district P 248-B
 Ridgeway-Sandy Ridge and outlying deposit P 248-C

- Mica--Continued
Wyoming
Hartville uplift B 315-M
- Michigan
aeromagnetic maps. See geographic listing for specific areas; see also map listing, p. 236-244.
- base map p. 250
cement industry A 22 III n
coal C 77
copper A 3 c; M 5, 52; P 144
floods W 147, 162
gas OC-11; OM-11, 28
geologic map p. 191
geologic map index p. 192
geology. See geographic listing for specific areas.
- Goodrich quartzite, geology, monazite B 1030-F
greenstone schist areas B 62
gypsum B 2223
iron. See Iron.
leveling B 461, 559, 919
magnetic surveys, Iron County C 26, 55; Map 3-213 (p. 226)
- metamorphism, Menominee and Marquette regions B 62
monazite B 1030-F
oil OC-11; OM-11, 28
Pleistocene geology M 53
stratigraphy OM-17
Berea sandstone OC-9
Cambrian
Devonian and Carboniferous OC-41
Dundee formation OC-4; OM-38
Eastern sandstone and Keweenaw series B 23
Ordovician OC-9, 33
pre-Keweenaw P 314-C
Rogers City limestone OM-38
Salina and Bass Islands rocks OM-40
Silurian OC-33
Sylvania and Bois Blanc formations OM-28
Traverse group OC-4, 28
traverse B 644-F, 709
water, ground
artesian pressure table, p. 183
Lower Peninsula W 30, 31, 102, 114, 145, 182, 183
mineral waters B 32; W 31, 102, 114
Northern Peninsula W 160
quality W 102, 160, 182, 183
water levels table, p. 183
wells W 30, 31, 102, 114, 145, 149, 160, 182, 183
- Michigan--Continued
water, ground--Continued
Ypsilanti area W 1078
water, surface
bibliography and gaging stations W 340-D
quality W 236; table, p. 182
streamflow records tables, p. 184-187
compilation table 6
daily, by years tables 4 and 5
index C 384
water resources
Detroit area C 185
Grand Rapids area C 323
springs W 31, 102, 114
See also Lake Superior region.
- Microbiology, in solution and transport of iron W 1459-H
- Microchemical analysis, systematic p. 235
- Microscopic determination
nonopaque minerals B 679, 848
ore minerals B 825, 914
- Microscopic studies, uraniferous coal deposits C 343
- Midcontinent oil and gas field, structural features P 128-C
- Midcontinent region, index map, Paleozoic and Mesozoic rocks OM-184
- Middle Atlantic Piedmont Plateau, granitic rocks A 15 f
- Middle Atlantic States, public water supplies, industrial utility C 283
- Middle Loup River, Nebr., sediment transportation W 1476
Map 3-195 (p. 226)
- Midway formation
- Military geology, use, World War I P 128-D
- Milk River, Mont., water supply W 491
- Mine-water problems, east Tennessee zinc district C 71
- Mineral analysis, apparatus for water determination B 78
- Mineral fragments in rocks, secondary enlargements B 8
- Mineral grains, spectrographic identification C 234
- Mineral leasing, regulations R
- Mineral paint B 315-N, 430-G
annual resource data, 1883-1914, see MRUS, p. 99-120.
Georgia B 213-n
Pennsylvania B 315-N, 430-G, 470-1
B 78
- Mineral resin, Montana
- Mineral resources (General)
bibliography B 1019
conservation B 394
international control MRUS 1917 1
public interest in MRUS 1915 1
- Mineral springs. See Springs.

Mineral waters
 annual resource data, 1883-1923, see
 MRUS, p. 99-131.

United States A 14 II b

Mineral wax B 285-N, 641-A

Mineralogical methods, prospec-
 ting C 127

Mineralogy, U. S. Geological Sur-
 vey research,
 analyses B 9, 27, 42,
 55, 60, 64, 78,
 90, 113, 167,
 220, 262, 419,
 490, 509, 591,
 610

See also names of minerals and mineral
 groups; Geochemistry.

Minerals
 accessory, in igneous rocks, lead-
 alpha age determin-
 ations B 1097-B

interaction with water solu-
 tions B 312

luminescence, infrared B 1052-C

nonopaque, microscopic deter-
 mination B 679, 848

ore, microscopic determin-
 ation B 825, 914

thermal dehydration curves B 197-E

useful, United States B 585, 624;
 MRUS 1882,
 1887

See also names of minerals and
 mineral groups; Geochemistry.

Mining, ground water, rights C 347

Mining debris, Sierra Nevada P 105

Mining districts

Alaska

Chichagof B 929

Chistochina district B 498

Ketchikan B 347, 662-B;
 P 1

Porcupine B 225-b

Sitka B 504

Valdez Creek B 498, 847-H,
 897-B

Willow Creek B 1004

Wrangell B 347, 662-B

Arizona

Ajo P 209

Aravaipa B 763

Banner B 771

Grand Gulch B 580-D

Pima B 1112-C

Saddle Mountain B 771

Stanley B 763

Wallapai B 978-E

California, northeastern B 594

Colorado

Aspen B 750-C,
 785-A; M 31

Bonanza P 169

Breckenridge P 75, 176

Front Range mineral belt B 1032-E; p. 235

Leadville P 148

Platoro, map p. 254

Rico GF-130; p. 254

Slick Rock MF-203

Mining districts--Continued

Colorado--Continued

Sugar Loaf and St. Kevin B 1027-E

Summitville P 343; p. 254

Tenmile GF-48; p. 254

Georgia, Cartersville B 213-f, n,
 340-M; P 224;
 p. 252

Idaho

Boise Ridge A 18 III e

Coeur d'Alene B 1098-A;
 C 168; P 62

Fort Hall B 340-B

Gilmore p. 253

Idaho Basin A 18 III e

Little Eightmile p. 253

Mexico, Zimapan P 284

Montana

Castle Mountain B 139

Dillon quadrangle region B 574

Dunkleberg B 660-G

Elkhorn A 22 II d;
 B 470-B; P 292

Helena B 527, 842

Marysville B 213-b; P 57

New World (Cooke City) B 811-A

Nevada

Antelope B 530-a

Bullfrog B 303, 407

Cedar Mountain B 725-H

Charleston B 741

Clifford B 640-F

Comstock Lode A 2 e; B 17,
 735-C; M 3, 4

Contact B 497, 847-A

eastern B 648

Elk Mountain B 497

Elko and Eureka Counties B 408

Ellendale B 640-F

Ely P 96

Eureka A 3 e, 4 c;
 B 1000-H; M 7,
 20; p. 253

Gilbert B 795-F

Golden Arrow B 640-F

Goldfield B 225-b, 260-b,
 303; P 66

Goodsprings (Yellow Pine) B 1010; P 162

Humboldt County B 414

Jarbidge B 497, 741

Lander County B 408

McCoy C 10

Manhattan B 303, 640-J,
 723

National B 601, 922-E

northwestern B 594

Pioche P 158-D, 171

Reese River B 997; p. 252

Rochester B 580-M, 762;
 p. 254

southern B 303

Tonopah B 213-b, 219,
 225-b, 260-b;
 P 42, 104; p. 255

Yellow Pine (Goodsprings) B 540-F, 1010;
 P 162

Yerington B 380-B; P 114;
 p. 255

Mining districts--Continued

- New Jersey
 Dover magnetite B 982-G; P 287
 Franklin B 213-e,
 GF-161; P 180
- New Mexico
 Central district, Bayard
 area B 870
 Lordsburg B 885
 Magdalena P 200
 Mogollon B 715-L, 787
 Santa Rita B 859
 Tres Hermanas B 380-C
 Oklahoma, Henryetta B 1015-F
- Oregon
 Blue River A 20 III a
 Bohemia A 20 III a;
 B 380-A
 eastern B 846-A
 South Dakota, Edgemont MF-39
 Tennessee, Ducktown B 470-C; P 139
 Texas, Shafter B 928-B
 United States, western B 507;
 MRUS 1907 I
- Utah
 Bingham B 213-d, 260-f;
 P 38
 Cottonwood-American
 Fork B 620-I; P 201
 Gold Hill P 177
 Mercur A 16 II d
 Park City B 213-b, 225-b,
 260-b; P 77
 Promontory B 640-A
 San Francisco, adjacent
 districts P 80
 Tintic A 19 III f;
 GF-65; P 107
- Washington
 Conconully and Ruby B 640-B
 Metaline B 470-D; P 202
 Republic B 550
 Wyoming, Superior, map p. 254
See also particular mineral
 commodities.
- Mining history
 Colorado P 138
 Comstock lode M 4
 Pennsylvania, graphite MRUS 1919 II
 Utah A 19 III f;
 B 620-I; P 107
See also MRUS p. 98-131.
- Mining laws MRUS 1883-84,
 1886
 Australia and New Zealand B 505
- Mining regulations, public lands R
- Minnesota
 aeromagnetic maps. See geographic listing
 for specific areas; see also map
 listing, p. 236-244.
 base map p. 250
 construction materials B 430-F, 663
 eruptive and sedimentary rocks,
 Pigeon Point B 109
 floods W 162, 1137-G
 forests A 21 V i
 geologic map p. 191
 geologic map index p. 192

Minnesota--Continued

- geology. See geographic listing for
 specific areas.
 gneisses, gabbro schists and
 associated rocks B 157
 iron B 660-A;
 M 43, 45
 leveling B 453, 560
 Quaternary geology P 161
 traverse B 644-E
 water, ground GF-117, 201,
 210; W 256
- aquifers in melt-water
 channels, Des Moines
 lobe W 1539-F
 artesian pressure table, p. 183
 exploratory drilling W 1539-A
 Lyon County C 423, 444;
 W 102, 1539-F
 W 102
 quality table, p. 183
 water levels
 water levels and air tem-
 peratures, corre-
 lation W 1539-D
 W 57, 102,
 149, 256
- wells
- water, surface
 pollution W 193
 power W 44
 quality W 193, 236;
 table, p. 182
- river profiles
 streamflow records tables, p. 184-
 187
 table 6
 tables 4 and 5
 C 385, 386
- compilation
 daily, by years
 index C 385, 386
- water resources
 Minneapolis-St. Paul area C 274
 springs W 102
See also Lake Superior region.
- Minor elements, in coal, Great
 Plains B 1036-H,
 1117-A
- Miocene formations
 California B 268; P 212
 294-M
 North Carolina P 143
 Washington P 140-A
 Wyoming B 1121-I
See also names of formations.
- Miocene fossils
 Atlantic Coastal Plain B 676; P 175-A
 California B 268; P 254-C,
 294-M
 Calvert formation P 98-F
 Catahoula sandstone P 98-M
 Florida P 98-E, 128-B,
 142
 Idaho A 18 III e;
 P 140-A, 185-E
 M 24
 New Jersey B 18
 North America, western P 143,
 199-A, B
 P 59
 Oregon P 199-A, B
 Virginia P 140-A,
 154-H, 170-C
 Washington

Miocene fossils--Continued

See also Paleontology; Tertiary fossils.

Mississippi

base map p. 250
 bauxite B 750-G
 cement materials B 260-I
 clay B 213-k
 cored section, Stone County C 298
 faults, Quitman zone OM-6
 floods W 1320-C
 gas B 641-D,
 831-A; OM-200
 geologic map p. 191
 geologic map index p. 192
 geology, mineral resources B 283

See also geographic listing for
 specific areas.

leveling B 458, 639
 oil B 641-D;
 OM-200
 paleontology
 Cretaceous P 210-E
 Foraminifera P 129-E, 241
 gastropods P 331-A
 paleobotany, Cretaceous P 112
 Wilcox group P 108-E
 pipelines OM-200
 Pliocene history P 108-H
 salt domes OM-200
 stratigraphy
 Byram marl P 129-E
 Cretaceous OC-20, 35;
 OM-64
 Eocene P 140-E
 Midway and Wilcox Map 3-195
 (p. 226)
 Mississippian OC-58, 62
 Paleozoic B 781-A
 test wells B 1072-A;
 OM-200
 traverse B 644-I
 water, ground W 159, 576
 artesian pressure table, p. 183
 quality B 32; W 159,
 364, 576
 water levels table, p. 183
 wells W 102, 149, 159
 water, surface
 irrigation withdrawals, ef-
 fect on stage of
 Lake Washington W 1460-I
 power W 44, 107
 quality W 236, 364;
 table, p. 182
 stream measurements W 107
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 382, 387
 water resources
 springs W 114

See also Gulf Coastal Plain; Southeastern
 States; Southern States.

Mississippi embayment, Eocene

erosion P 95-F

Mississippi River

floods W 96, 838,

Mississippi River--Continued

floods--Continued

mud lumps, gas 1137-G, 1260-C
 pollution by Chicago sewage B 541-A; P 85-B
 W 194

Mississippi River basin

glass sand B 285-N
 water resources, See under particular
 States; see also tables,
 p. 184-187.

Mississippi Valley

Cambrian sections, correla-

tion P 186-L
 Driftless Area A 6 c
 lead, zinc, copper, geology B 294,
 1015-G; P 309
 map p. 254

Mississippian formations

Alabama OC-58, 62
 Appalachian basin P 259; SP
 Arizona P 233-D
 Kentucky B 1072-K;
 OC-38; OM-69
 OM-17
 Michigan OC-58, 62
 Mississippi P 203
 Missouri OC-15, 50;
 Montana OM-165
 North and South Dakota OM-165
 Texas P 129-A, 146
 Virginia, West Virginia B 1072-K;
 OC-38
 Wyoming OM-165

See also names of formations.

Mississippian fossils

Alaska P 283
 Arkansas B 595, 598;
 P 154-B

Maryland, West Virginia,
 Virginia

P 263
 Missouri P 203
 Oklahoma B 377
 Pennsylvania P 150-E, 263
 Texas P 146, 243-F,
 294-J
 Williston basin B 1071-F

See also Paleontology.

Missouri

aeromagnetic maps. See geographic listing
 for specific areas; see also map
 listing, p. 236-244.

base map p. 250
 clay B 315-I
 coal B 541-F
 copper B 260-f, 267
 earthquake, New Madrid B 494
 floods C 151, 370;
 W 162, 1139
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for
 specific areas.

latitudes and longitudes B 49

lead, See Lead.

leveling B 459, 568,
 898

mineral resources

metallic MB-18

Missouri--Continued

- mineral resources--Continued
 St. Louis quadrangle B 438
See also specific mineral commodities.
 paleontology
 Cretaceous P 274-E
 Louisiana limestone P 203
 paleobotany, Carboniferous B 98; M 37
 stratigraphy
 Cambrian P 186-L
 Louisiana limestone P 203
 structural geology, Forest City basin OM-48
 traverse B 644-G,
 709-G, 916
 tripoli B 340
 water, ground W 102, 114, 195
 artesian pressure table, p. 183
 Decaturville dome W 110
 Joplin district W 145
 Ozark region W 110, 145
 quality W 102, 145, 195, 364
 water levels table, p. 182
 wells W 57, 102, 145, 149, 195, 364
 water, surface
 quality W 236;
 table, p. 182
 river profiles, power W 44
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 385-387
 water resources
 Kansas City area C 273
 St. Louis area C 216
 springs W 102, 110, 145, 557
 zinc. See Zinc.
 Missouri Coteau, moraines B 144
 Missouri River
 discharge C 108
 profile surveys W 367
 Missouri River basin
 climate and precipitation-runoff relation C 98
 discharge and runoff C 37
 floods W 1137-A,
 1260-B
 gaging-station records W 1077
 water resources, See particular States; see also tables, p. 184-187.
 Missouri Valley
 lignite B 225-g
 mineral resources, map MB-1
 Mobile River, Ala., salinity C 373
 Mollusks. See under Paleontology.
 Molybdenum B 761
 Alaska B 926-C
 Healy River B 692-F
 southeastern B 947-B
 annual resource data, 1882, 1899-1923, see MRUS, p. 98, 106-131.

Molybdenum--Continued

- Arizona, Santa Rita and Patagonia Mountains B 430-D
 California B 340-D
 Ramona region B 640-D
 Colorado, Climax deposit B 846-C
 geochemistry B 167
 Idaho, Rocky Bar district B 750-F
 in plants, determination C 124
 Maine B 260-d, 340-D
 Utah B 340-D
 Monazite
 annual resource data, 1894, 1901-1911, see MRUS, p. 102-103, 107-117.
 Colorado, Central City district B 1032-F
 Idaho B 430-D
 Michigan B 1030-F
 North and South Carolina B 340-D
 Southeastern States B 1042-L;
 C 237
 United States B 666-X
 See also Monazite, annual resource data.
 Monongahela basin, erosion P 72
 Montana
 aeromagnetic maps. See geographic listing for specific areas; see also map listing, p. 236-244.
 base map p. 250
 bentonite B 1023; C 150;
 MF-36
 beryl P 229
 calcite B 1042-M
 Cenozoic history P 326
 chromite. See Chromite.
 clay B 340-I, 540-K
 coal. See Coal; Lignite.
 construction materials B 380-J; C 4;
 MB-11
 copper. B 213-d; GF-38;
 MRUS 1883-84;
 P 74
 corundum B 969-B, 983
 damsites, Kootenai and Flat-head Rivers W 866-A-C
 P 147-B
 earthquakes
 electrical resistivity survey, Medicine Lake C 97
 faulting, Highwood Mountains area B 806-E
 floods W 1320-B
 fluorspar B 955-E
 forests A 20 V d,
 21 V b; P 29, 30
 gas. See Gas.
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for specific areas.
 glacial geology
 eastern I-327; P 174
 Yellowstone Valley B 104
 western P 231
 gold. See Gold.
 graphite B 470-K, 574
 gypsum B 223
 igneous rocks I-311
 Highwood Mountains B 237

Montana--Continued
 igneous rocks--Continued
 Little Belt Mountains
 Marysville mining district
 Stillwater complex
 iron
 irrigation
 lead
 leveling
 lignite, See Lignite.
 manganese
 metamorphic rocks
 metamorphism, Marysville
 mining district
 mica
 mineral resources
 Butte district
 Carbon, Big Horn, Yellow-
 stone, and Stillwater
 Counties
 Chouteau, Hill, and Liberty
 Counties
 Dillon quadrangle region
 Elkhorn Mountains
 Garnet Range
 Helena mining region
 Judith Mountains
 Libby quadrangle
 Philipsburg quadrangle
 St. Regis-Superior area
 Saltese region
 See also specific mineral
 commodities; Mining districts.
 mineral-vein formation, Boulder
 Hot Springs
 minerals
 nitrate
 oil, See Oil; Oil shale.
 paleontology
 ammonites
 Colorado group
 corals
 mollusks
 Ordovician
 ostracodes
 paleobotany, Montana
 Formation
 reptiles
 stromatolites
 pegmatites
 petrography
 Elkhorn mining district
 Highwood Mountains
 Little Belt Mountains
 phosphate, See Phosphate.
 physiography
 Big Horn Basin
 Quaternary geology, Smoke
 Creek-Medicine Lake-
 Grenora area
 radioactive deposits, See Radioactive
 deposits

Montana--Continued
 resin, mineral, Livingston
 sand and gravel, map
 sedimentation, Powder River
 drainage basin
 shale, carbonaceous
 silver
 Stillwater complex
 stone, ornamental
 stratigraphy
 Bighorn dolomite and
 correlative forma-
 tions
 Cretaceous
 Devonian
 Heath shale and Amsden
 formation
 Jurassic
 Laramie and Livingston
 formations
 Little Rocky Mountains
 Mesozoic
 Mississippian
 Montana group
 Paleozoic
 Phosphoria formation
 Triassic
 structural geology
 Big Horn Basin
 Black Hills
 Blackfeet Indian Reserva-
 tion, anticlines
 Cedar Creek anticline,
 map
 Cut Bank-West Kevin dis-
 tricts, map
 Elk basin oil and gas field,
 map
 Fort Peck Indian Reserva-
 tion
 Ingomar anticline
 Musselshell Valley, anti-
 clines
 plains area, maps
 Powder River Basin
 Tensleep sandstone
 Toole County, maps
 Williston basin area
 tectonic map showing uranium
 terrace deposits, Big Horn
 Basin
 test wells
 thorium
 triangulation
 uranium, See Radioactive deposits.
 vermiculite
 water, ground
 artesian pressure

B 78
 MB-6
 C 170
 C 251
 B 315-A;
 GF-196; P 78
 B 922-N,
 1015-D,
 1071-H; P 358
 C 4
 P 149
 OM-202
 P 125-B
 OC-15, 25
 OC-50
 OC-32
 B 105
 B 1072-N
 OC-18, 19;
 OM-43;
 P 120-F
 OC-15
 P 90-G, I
 B 110; OC-18,
 19, 40; OM-43;
 P 120-F
 B 1027-A;
 C 209, 260,
 302, 303, 326
 P 254-H
 OM-3, 74
 OM-191
 B 641-J
 p. 234
 p. 235
 p. 234
 I-225
 B 786-A
 B 691-F
 OM-178-A, B;
 p. 235
 OM-33, 133
 OM-182
 p. 235
 OM-165, 179
 MF-126
 OM-71
 OM-130, 170
 B 988-H
 B 644-D, 709-D
 B 805-B
 table, p. 183

- Montana--Continued
- water, ground--Continued
- Buffalo Rapids irrigation project C 198; W 1424
- Butte W 345-G
- Golden Valley County W 518
- Helena Valley C 83
- Little Bighorn River valley W 1487
- Little Bitterroot Valley W 400-B
- Lower Marias irrigation project W 1460-B
- Missouri River valley W 1263
- Musselshell County W 518
- quality C 83, 93; W 364, 520-D, 539, 560-B, 600, 1263, 1355, 1360-C, 1424
- Rosebud County W 600
- Townsend Valley W 539, 1360-C
- water levels table, p. 183
- wells W 57, 149, 221, 345-G
- Yellowstone and Treasure Counties W 599
- Yellowstone River valley C 93; W 1355
- water, surface
- Flathead River basin, streamflow records C 182
- Jefferson River basin W 580-B
- Powder River Basin, sedimentation C 170
- power W 44, 346, 367, 560-A, 580-B
- quality C 170; W 274, 520-D; table, p. 182
- for irrigation table 7, p. 187
- river profile surveys W 44, 346, 367
- streamflow records tables, p. 184-187
- compilation table 6
- daily, by years tables 4 and 5
- index C 386, 392
- water resources GF-24, 55, 56, 128
- Big Horn County and Crow Indian Reservation B 856
- Flathead Lake area, effect of storage W 849-B
- Gallatin Valley W 1482
- Great Falls region W 221
- springs B 32, 749, 751-C, E, F; P 77; W 557, 679-B
- See also Irrigation.
- zinc B 430-C
- See also Rocky Mountains; Western States.
- Montana group B 163; P 90-C, I
- Montana lobe, Keewatin ice sheet P 50
- Monterey shale B 268; P 212, 294-M
- Montmorillonite P 197-F, 205-B
- Moon, surface, engineer study I-351
- Moonstone formation B 1121-I
- Moorefield shale B 439
- Moose River sandstone P 89
- Moraines
- Lake Superior basin P 154-A
- Missouri Coteau B 144
- New England, Newington moraine P 108-B
- South Dakota B 158
- terminal, second glacial epoch A 3 f
- See also Glacial geology.
- Moreau River basin, S. Dak., quality of water and sedimentation C 270
- Morgan formation SP
- Morrison formation B 1009-E, 1030-J, 1052-J, 1112-B; MF-218; P 233-B
- Salt Wash member B 1084-E
- Morristown National Historical Park, N. J., map p. 254
- Mosby sandstone P 243-D
- Mount McKinley National Park, Alaska
- geology B 836-D
- map p. 254
- Mount Rainier National Park, Wash., map p. 254
- Mowry shale P 154-D, 355
- Mud lumps, Mississippi River mouths B 541-A; P 85-B
- Muds, Nevada, Columbus Marsh P 95-A
- Multiplex plotter procedures T3F4 (p. 188)
- Murrysville sand OM-49, 89
- Muscovite. See Mica.
- Muskingum River basin, Ohio
- floods W 869
- natural features, economic development W 91
- Myriapods. See under Paleontology.
- Narragansett basin, geology M 33
- National Bison Range, Mont., map p. 254
- National parks, monuments, and historic sites, maps p. 252-255
- See also names of individual parks and monuments.
- Natural gas. See Gas.
- Nautiloids. See under Paleontology.
- Navajo Country P 93, 291; W 380
- Naval Oil Shale Reserves Nos. 1 and 3, Colo. OM-94
- Naval Oil Shale Reserve No. 2, Utah B 1072-O
- Naval Petroleum Reserve No. 1, Calif. B 835
- Naval Petroleum Reserve No. 3, Wyo. P 163
- Naval Petroleum Reserve No. 4, Alaska P 301, 302-A, B, 303-A-D, 305-A-K
- Nebraska
- base map p. 250
- construction materials B 430-F; MB-15

Nebraska--Continued

engineering geology, Wray area B 1001
 floods W 1137-D
 forests A 19 V k
 gas OM-198
 geologic map index p. 192
 geology. See geographic listing for specific areas.
 irrigation C 166; W 425-B
 land-classification map p. 257
 leveling B 473, 572
 mineral resources, non-metallic MB-15
 oil OM-198
 paleontology, titanotheres M 55
 pipelines OM-198
 potash B 715-I
 pre-Pennsylvanian rocks OM-198
 sand and gravel, map MB-7
 structural geology
 anticlines and basins OM-198
 Forest City basin OM-48
 tectonic map showing uranium MF-129
 test wells OM-198
 traverse B 644-L, 709-G
 uranium B 1046-R;
 MF-129
 water, ground
 artesian pressure table, p. 183
 Big Blue River basin W 1474
 Box Butte County C 166; W 969
 Brown and Cherry Counties, Ainsworth unit W 1371
 Buffalo County W 1358
 Clay County W 1468
 Dutch Flats area C 126
 Elkhorn River basin W 1360-I
 Frenchman River valley, hydrology C 19; W 1360-H
 Grand Island W 836-E
 Keith County W 848
 Little Blue River basin W 1489
 Lodgepole Creek basin W 1410
 Lodgepole Valley, irrigation W 425-B
 Loup River basin W 1493
 Niobrara River basin W 1368
 Platte River basin C 20, 139;
 W 679-A, 779, 848, 1378, 1489
 Platte River basin, lower
 Middle Loup division W 1258
 North Loup division HA-12
 Prairie Creek unit W 1327
 Ponca Creek basin W 1460-G
 Pumpkin Creek area C 156
 quality C 19, 20, 126, 156, 166; HA-6;
 W 1258, 1327, 1358, 1360-I, 1368, 1371, 1378, 1410, 1468, 1474, 1489, 1493
 Republican River Valley C 19;
 W 1360-H, 1489
 Scotts Bluff County W 943

Nebraska--Continued

water, ground
 Sioux County HA-6
 south-central W 779
 South Platte River valley W 184, 1378
 southeastern W 12
 water levels table, p. 183
 water table, configuration HA-4
 wells B 131; W 29, 61, 149, 215, 216
 water, surface
 Middle Loup River, sediment transportation W 1476
 Niobrara River, fluvial sediments C 67, 205
 power W 44, 216, 248
 quality C 107; W 236;
 table, p. 182
 for irrigation table 7, p. 187
 river profiles W 44
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 386
 Whitehead watershed and reservoirs, fluvial sediment C 406
 water-bearing materials, permeability determination, Thiem method W 679-A
 water resources
 Missouri River valley W 215
 Patrick and Goshen Hole quadrangles W 70
 Republican River valley region W 216
 southwestern A 16 II f
 western A 19 IV c; P 17
 windmills W 29
 See also Great Plains.
 Neocene formations, correlation B 84
 Nevada
 alum B 225-m, 750-E
 alunite B 540-I
 antimony B 660-H
 asphalt B 380-H
 base map p. 250
 beryl B 1082-D
 borax B 735-B
 brucite MR-35
 coal B 225-g, 531-K
 colemanite B 735-B
 Comstock Lode A 2 e; B 17, 735-C; M 3, 4
 copper B 380-B; P 114
 desert watering places W 224
 dolomite B 973-C
 floods W 1137-H, 1260-E
 geochemical prospecting B 1000-H
 geologic map index p. 192
 geology B 208
 See also geographic listing for specific areas.

Nevada--Continued

gold. See Gold; Mining districts.
 igneous rocks B 17
 iron B 430-E
 irrigation W 467
See also Nevada-Water, ground.
 Lake Lahontan, Quaternary lake A 3 d; M 11
 lead. See Lead.
 leveling B 488, 654
 magnesite B 540-S; MF-35
 magnesium-mineral resources B 978-A
 manganese. See Manganese.
 marble B 340-G
 mercury. See Mercury.
 mineral resources
 Boulder Dam region B 871
 Bullfrog district B 303, 407
 Ely P 96
 Goldfield district B 225-b, 260-b, 303; P 66
 B 540-F, 1010; P 162
 Goodsprings district P 275
 Osceola district B 340-A
 Ramsey, Talapoosa, and White Horse districts W 470-B
 Reese River district B 997
 Silver Peak region B 225-b, g, m; P 55
 southern B 303
See also specific mineral commodities; Mining districts.
 mining and miners, Comstock M 4
 muds, Columbus Marsh P 95-A
 oil B 381-D
 opal C 142
 paleontology
 Eureka district M 8; P 334-C
 Triassic, Union district P 322
 palladium B 620-A
 pegmatites, beryl-bearing B 1082-D
 petrography, Pioche district P 158-D
 platinum B 430-D, 620-A
 potash B 540-N
 power systems W 493
 radioactive deposits. See Radioactive deposits.
 salines B 530-g
 sedimentation, Lake Mead P 295
 silver. See Silver; Mining districts.
 stratigraphy
 Eureka district P 276
 pre-Tertiary, Union district P 322
 structural geology, Hawthorne and Tonopah quadrangles P 216
 sulfur B 225-m
 Tertiary geology, Goose Creek district B 1055-H
 tin B 640-G, 931-C, L
 triangulation B 644-M, 709-M

Nevada--Continued

tungsten. See Tungsten.
 uranium. See Radioactive deposits.
 water, ground
 Big Smoky and adjacent valleys W 375-D, 423
 Crescent Valley W 1581
 Las Vegas area W 849-D
 Pahrump, Mesquite, and Ivanpah Valleys W 450-C
 quality W 364
 Reese and Humboldt River basins W 425-D
 Smith Valley W 1228
 southeastern W 365
 southwestern desert W 224
 Steptoe Valley W 467
 wells W 61, 149, 375, 849-D, 1228
 Winnemucca Lake Valley W 1539-C
 water, surface
 Carson River basin W 1329-A
 Lake Mead
 sedimentation C 346
 water-loss investigations P 298
 quality W 364; table, p. 182
 for irrigation table 7, p. 187
 river profiles W 44
 storage C 346; W 68
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 389, 390, 393
 water resources W 493, 1329-A
 power B 308, 798; P 42, 73; W 224, 365, 423, 450-C, 467, 557, 679-B
 springs
 zinc. See Zinc; Mining districts.
See also Great Basin; Sierra Nevada; Western States.
 New Albany shale P 185-H, 186-E
 New England States
 Cretaceous flora M 50
 floods C 155; W 636-C, 798, 867, 1420
 gold MRUS 1894
 granite B 738
See also particular States.
 limonite B 260-h
 pegmatite investigations P 255
 water, ground W 102, 110, 258
 water, surface
 runoff and precipitation HA-7
 streamflow records tables, p. 184-187
 water resources
 industrial utility C 288; W 1299
 power W 44, 69, 198, 279
 quality W 79, 144, 198, 258
See also particular States.
 New Hampshire

New Hampshire--Continued

- aeromagnetic maps. See geographic listing for specific areas; see also map listing, p. 236-244.
- base map p. 250
- geologic map p. 190, 191
- geologic map index p. 192
- geology. See geographic listing for specific areas.
- glacial geology
- Canaan area B 1061-C
- Newington moraine P 108-B
- granite B 354, 430-F
- leveling B 437
- Milan mine B 432
- mineral deposits, map MR-6
- paleontology, Littleton formation P 334-B
- pegmatites, mica-bearing B 931-P
- stratigraphy, southeastern P 108-I
- triangulation B 709-I
- water, ground
- artesian pressure table, p. 183
- Portsmouth region W 145
- quality W 102
- water levels table, p. 183
- wells W 61, 102, 114, 149
- water, surface
- quality table, p. 182
- river profiles; power W 44
- streamflow records tables, p. 184-187
- compilation table 6
- daily, by years tables 4 and 5
- index C 381
- water resources
- springs B 32; W 102, 114
- See also Eastern States; New England States.

New Jersey

- aeromagnetic maps. See geographic listing for specific areas; see also map listing, p. 236-244.
- base map p. 250
- cement rock B 225-j
- copper B 225-d
- crystal cavities, zeolite region B 832
- floods W 88, 92
- geographic dictionary B 118
- geologic map p. 191
- geologic map index p. 192
- geology. See geographic listing for specific areas.
- greensand B 727; M 9, 18
- hydromica B 167
- magnetite. See magnetite.
- manganese B 213-e
- mineral resources, Delaware
- Water Gap and Eastern quadrangles B 920
- See also specific mineral commodities.
- minerals, Franklin and Sterling Hill P 180
- Newark system, trap rock B 67

New Jersey--Continued

- paleontology
- brachiopods and lamelli-branches M 9
- crustaceans and mollusks M 24
- fish M 14
- Foraminifera B 88
- Gastropods and cephalopods M 18
- Raritan formation M 9, 18; P 264-B
- potash B 727
- Precambrian geology B 920
- radioactive rare-earth deposit B 1082-B
- shaded-relief map p. 250
- stratigraphy, Franklin limestone A 18 II e
- triangulation, traverse B 644-N
- water, ground
- artesian pressure table, p. 183
- water levels table, p. 183
- wells B 138, 264, 298; W 114, 149
- water, surface
- Delaware River, chemical characteristics W 1262
- power P 123
- precipitation, water loss, runoff HA-11
- quality W 236, 596-E; table, p. 182
- streamflow records tables, p. 184-187
- compilation table 6
- daily, by years tables 4 and 5
- index C 381
- water resources W 110
- springs B 32; W 114
- zinc B 213-e
- See also Atlantic Coastal Plain; Eastern States.

New Mexico

- aeromagnetic maps. See geographic listing for specific areas; see also map listing, p. 236-244.
- alluvial fills, Gallup region W 1110-A
- alum B 315-E
- asphalt OM-44
- base map p. 250
- beryllium B 945-C
- carnotite C 111
- clay B 315-I
- coal. See Coal.
- cobalt B 1009-K
- copper. See Copper.
- elevations, southeastern, map p. 249
- floods HA-42; W 147, 162, 842, 1455-A
- fluorspar B 470-K, 973-F
- forests P 33, 39
- fuel resources B 860-A-C; OM-144
- gas. See Gas.
- geography and hydrography, Navajo country W 380
- geologic map p. 191
- geologic map index p. 192

New Mexico--Continued

- geology B 794
See geographic listing for specific areas.
 gold, See Gold.
 graphite B 530-I
 gypsum B 223, 315-H
 igneous geology and structure, Mount Taylor volcanic field P 189-B
 iron B 380-E
See also Mining districts.
 irrigation W 10, 580-A, 639
 latitudes and longitudes B 49
 lead B 380-C
 leveling B 464; 638
 manganese B 710-B, 922-C; MF-9
 meerschaum B 340-M
 mica B 530-I
 mineral resources B 285-A; P 68
 Bayard area B 870
 Little Hatchet Mountains P 208
See also specific mineral commodities; Mining districts.
 mineralogy of drill cores, potash field B 833
 nickel B 1009-K
 nitrate B 820
 oil, See Oil.
 paleontology
 Fusulinidae OC-2
 Raton Mesa P 101
 reptiles P 119
 San Juan County P 98-P,Q,R,S, 119
 pedestal rocks, Socorro County B 790-A
 pipelines OM-159, 207
 potash B 780-B, 833
 Precambrian rocks OM-207
 radioactive deposits, See Radioactive deposits.
 reconnaissance, southeastern, map p. 249
 salt B 260-n, 780-B
 silver, See Silver; Mining districts.
 stratigraphy
 Chaco River Valley P 98-P
 Colfax County OM-141
 Cretaceous OC-24; OM-144; P 95-C, 98-Q, R, S, 134, 193-F
 P 183
 Jurassic B 389
 Manzano group B 1030-J
 Morrison formation OM-61; P 108-C
 Paleozoic OC-7; OM-21; P 374-H
 Permian and older rocks
 "Red Beds," associated formations B 794
 Tertiary P 134; OC-24
 Triassic and Jurassic P 291
 structural geology B 726-E
 Beautiful Mountain anticline OM-147

New Mexico--Continued

- structural geology--Continued
 Lucero uplift OM-47
 Mount Taylor volcanic field P 189-B
 Rio Arriba County p. 234
 San Juan Basin OM-158
 southeastern OM-177
 tectonic map, upper Rio Grande OM-157
 test wells OM-159, 207
 tin B 725-G, 922-M
 triangulation B 644-B, 709-O
 tungsten B 945-C
 turquoise B 42
 uranium, See Radioactive deposits.
 vanadium B 530-c
 volcanic rocks B 66; P 189-B
 water, ground
 Animas, Hachita, Playas, and San Luis basins W 422
 artesian pressure table, p. 183
 Estancia Valley W 260, 275
 Fort Wingate Indian School area C 360
 Gallup area C 443
 Hueco Bolson W 1426
 Luna County B 618; W 345-O
 Mesilla and Rincon Valleys W 1230
 Mimbres Valley W 637-B
 Navajo Country C 308; W 380
 quality W 260, 275, 343, 364, 422, 639
 Rio Grande Valley W 141, 188
 Roswell artesian basin W 158, 596-A, 639
 San Simon Valley W 425-A
 Sandoval County W 620
 Tularosa Basin W 343
 water levels table, p. 183
 wells W 149, 158, 343, 596-A, 620, 639
 water, quality
 Conchas Reservoir W 1110-C
 water, surface
 Colorado River, utilization W 395
 floodwater conservation, White Sands Missile Range HA-42
 power W 44, 395, 396, 421
 quality W 274, 343, 1535-F; table, p. 182
 for irrigation table 7, p. 187
 river profile surveys W 44, 396, 421
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 387-389

New Mexico--Continued
 water resources
 Chuska Mountains area C 308
 Cornfield Wash, hydrology W 1475-B
 springs W 557
 See also Irrigation.
 watertightness
 Carlsbad irrigation project W 580-A
 zinc B 380-C
See also Colorado Plateau; Great
 Plains; Southwestern
 States; Western States.

New York
 aeromagnetic maps. See geographic
 listing for specific areas;
 see also map listing,
 p. 236-244.
 apatite, rare-earth-bearing B 1046-B
 base map p. 250
 cement, portland B 260-1
 dumortierite B 64
 feldspar B 315-L
 floods C 155, 454; W 147,
 162, 773-E, 867,
 915, 1227-C
 gas B 899
 geochemical relations, zinc-
 bearing peat to
 Lockport dolomite B 1000-D
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for
 specific areas.
 graphite B 225-o
 gypsum B 223
 ilmenite B 940-D
 iron ore, titaniferous A 19 III d
 lead B 978-D
 leveling B 281, 514,
 671
 limestone B 744
 limonite B 260-h
 magnetic anomalies, St.
 Lawrence County MF-6, 10
 magnetite. See Magnetite.
 mineral resources B 1072-F
 Watkins Glen district B 260-n
 See also specific mineral com-
 modities
 paleontology
 bryozoans B 292
 Devonian B 3, 16, 41
 diatoms P 189-H
 Foraminifera P 254-G
 Hamilton formation B 206
 paleobotany, Cretaceous M 50
 Tropidoleptus zones P 79
 physiography, Taconic B 272
 pyrite B 260-o
 quartz B 315-L
 reforestation, effect on
 streamflow W 1602
 Rensselaer grit plateau A 13' II e
 salt B 260-n
 slate A 19 III b
 stratigraphy
 Devonian B 120; OC-37,
 45, 54, 55

New York--Continued
 stratigraphy--Continued
 Gardiners clay (Pleis-
 tocene) P 254-G
 structural geology
 eastern A 16 I e; B 195
 southwestern B 899
 talc Map 3-163
 (p. 226)
 trap dikes, Lake Champlain
 region B 107
 traverse, triangulation B 644-N, 709-J
 uranium B 1074-E
 vanadium B 940-D
 water, ground
 artesian pressure table, p. 183
 Brooklyn C 167
 Catatonk area GF-169; W 145
 Ithaca W 110
 Long Island P 44; W 155,
 537
 quality W 102, 110, 145
 Tully region W 145
 water levels W 155;
 table, p. 183
 wells W 61, 102, 110,
 114, 145, 149,
 155
 water, surface
 pollution W 72, 121
 power W 25, 44; P 123
 quality W 72, 121, 144,
 236, 315;
 table, p. 182
 river profiles W 44
 storage W 25
 streamflow records tables, p. 184-
 187
 table 6
 daily, by years tables 4 and 5
 index C 381, 384
 water resources W 24, 25
 Buffalo-Niagara Falls
 region C 173
 Fort Ticonderoga quad-
 rangle W 110
 normal chlorine distri-
 bution W 144
 Rochester area C 246
 runoff and precipitation
 springs HA-7
 B 32; P 82;
 W 102, 114,
 145, 679-B
 Taconic quadrangle W 110
 Watkins Glen quadrangle GF-169; W 110
 zinc B 978-D
 zinc-bearing peat, geochemical
 relationship to Lock-
 port dolomite B 1000-D
 New Zealand, mining laws B 505
 Newark system
 Connecticut A 21 III a
 correlation B 85
 New Jersey B 67
 Niagara falls, recession B 306; GF-190
 Nicaragua, hydrography A 20 IV b
 Nickel
 Alaska B 897-D
 Admiralty Island B 936-O

Nickel--Continued

- Alaska--Continued
 Baranof Island B 936-M
 Bohemia Basin, Yakobi Island B 931-F
 Chichagof Island B 936-I
 Copper River region B 712-C, 943-C
 southeastern B 947-C
 annual resource data, 1882-1923,
 see MRUS, p. 98-123.
 bibliography B 1019-K
 Brazil, Goiaz B 935-E
 Canada B 64
 Ontario, Sudbury MRUS 1888
 Colorado, Gold Hill B 931-O
 in earth's crust P 205-A
 New Mexico, Black Hawk district B 1009-K
 Oregon B 60
 Nickel Mountain B 315-C
 Riddle region B 931-I
 United States B 666-U
 See also Nickel, annual resource data.
 Washington
 Blewett deposit, Chelan County B 969-D
 Cle Elum River deposit, Kittitas County B 978-B
 Mount Vernon region B 931-D
 Nigeria, geochemical prospecting,
 Nyebe lead-zinc district B 1000-B
 Niobium
 Arkansas B 1015-B
 bibliography B 1029-A
 geochemical association with titanium C 225
 Niobrara limestone B 380-J
 Niobrara River, Nebr., sedi-
 ments C 67, 205
 Nitrate deposits B 523
 Arizona, New Mexico B 820
 California, southeastern B 724, 820
 Idaho and Oregon B 620-B
 Montana, Melrose region B 540-Q
 United States B 523, 666-Z, 838
 North America
 continental shelf, geology,
 mineral resources B 1067
 geologic map P 71
 geologic names B 191, 896,
 1056-A, B
 geology, bibliography B 127, 746, 747,
 823, 937, 938, 949,
 952, 958, 968, 977,
 985, 1025, 1035,
 1049, 1054, 1065,
 1075, 1095, 1115
 lithium resources B 666-X, 1027-G
 Mesozoic batholiths,
 uranium distri-
 bution B 1070-C
 paleontology
 ammonites M 42; P 118, 167
 Cambrian B 10, 30
 cephalopods P 40
 Coleoptera M 40

North America--Continued

- paleontology--Continued
 corals P 98-J
 crustaceans B 63
 dinosaurs A 16 I b
 echinoids P 264-E
 Felidae P 243-G
 fish M 16; P 120-I
 Foraminifera P 128-E, 333
 invertebrates B 29, 102, 141,
 153; P 83
 mammals B 361
 mollusks A 3 g; B 18, 34
 Ostreidae A 4 e
 paleobotany B 152, 696, 924;
 M 35; P 294-A
 Precambrian geology A 16 I f; B 360
 stratigraphy
 Cambrian A 12 I d
 Cretaceous, analogies
 with Europe A 16 I d
 index P 71
 Tertiary horizons, correla-
 tion with Europe A 18 II c
 vegetation, northwestern B 1061-E
 See also United States; Canada; Mexico;
 particular States.
 North Atlantic Ocean, deep sea
 cores P 196
 North Atlantic States, floods W 966
 North Carolina
 base map p. 250
 beryllium C 309
 chromium B 725-B
 coal B 471-B; P 246;
 p. 224
 corundum B 948-E
 deep wells, Atlantic Coast P 186-I
 floods W 1420
 geochemical and heavy-mineral
 reconnaissance,
 Cabarrus County MF-234, 235
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for
 specific areas.
 iron. See Hematite; Iron; Magnetite.
 leveling B 441, 646
 mica B 430-J, 936-A;
 P 248-A, C, D
 minerals B 74
 monazite B 340-D
 muscovite. See Mica.
 paleontology
 Castle Hayne and Trent
 marls P 143
 Exogyra P 81
 Foraminifera, diatoms P 189-G
 mollusks P 189-G,
 199-A, B
 ostracodes P 234-A, B
 paleobotany, Pleistocene P 140--C
 Pliocene, Pleistocene P 150-F
 peat B 711-C
 pegmatites C 309;
 P 248-A, C, D
 See also Mica.
 physiography, Carolina Bays P 254-I

North Carolina--Continued

- quartz crystals B 1072-D
 spodumene B 936-J; C 309
 stratigraphy, Castle Hayne and Trent marls P 143
 swamps, Dismal Swamp A 101 b; B 711-C
 talc B 213-o; GF-143
 tin. See Tin.
 triangulation and traverse tungsten B 644-A, 709-R
 water, ground B 948-A
 artesian pressure table, p. 183
 Elizabeth City area W 773-A
 springs, mineral W 114
 water levels table, p. 183
 wells B 138, 298;
 P 186-I; W 61,
 114, 149
 water, surface
 quality W 236;
 table, p. 182
 river profiles W 44, 115
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 383
 water resources
 Cowee and Pisgah quad-
 rangles W 110
 Neuse River basin W 1414
 New-Kanawha River basin W 536
 power GF-222; W 44,
 115
 Yadkin-Pee Dee River
 basin W 1415
See also Appalachian region; Atlantic
 Coastal Plain; Piedmont;
 Southeastern States; Southern
 States.
- North Dakota
 anticlines B 691-G; p. 234
 base map p. 250
 Cenozoic history P 326
 coal. See Coal; Lignite.
 construction materials MB-14, 20
 floods W 1137-A
 gas B 431-A
 geologic map index p. 192
 geologic maps p. 191, 235
 geology. See geographic listing for
 specific areas.
 glacial geology P 174
 irrigation W 117
 land-classification maps p. 257
 leveling B 469
 lignite. See Lignite.
 mineral resources, non-
 metallic MB-14
 See also specific mineral com-
 modities.
 paleontology, titanotheres M 55
 physiography P 174
 Quaternary geology
 eastern P 161
 Smoke Creek-Medicine Lake-
 Grenora area B 1073
 sand and gravel deposits MB-3

North Dakota--Continued

- structural geology
 Cedar Creek anticline,
 map p. 234
 p. 235
 Knife River area, map B 691-G
 Nesson anticline OM-165, 179
 Williston basin area MF-125
 tectonic map showing uranium
 traverse B 644-E
 uranium. See Radioactive deposits.
 water, ground W 598
 artesian A 17 II g;
 W 520-E
 artesian pressure table, p. 183
 Dakota sandstone W 520-E, 889-A
 Dickinson area C 34
 Edgeley quadrangle B 801; W 520-E
 Ellendale-Jamestown
 area W 889-A
 Fort Berthold Indian
 Reservation W 1259
 Heart River irrigation
 project C 34
 La Moure quadrangle B 801
 water levels table, p. 183
 wells W 149
 water, surface
 power W 44
 quality W 274;
 table 1, p. 182
 W 1295
 Devils Lake basin
 for irrigation table 7, p. 187
 river profiles W 44
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 385, 386
 water resources
 Jamestown-Tower region GF-168
 quality C 34; W 274,
 1259
 saline W 1428
 See also Great Plains.
 North Horn formation P 210-C
 Northeastern States, floods,
 1955 C 377
 Northern Pacific Route, guide-
 book B 611
 Northwestern States
 Archean formations A 5 d
 vegetation, as aid in inter-
 preting geology B 1061-E
 Nuclear age, opportunities and
 responsibilities of
 earth scientists C 430
 Ocala limestone P 95-I
 Oceanography
 Alaska, Rat Islands region B 1028-G
 Marshall Islands P 260-B-I, R
 Ocher
 Georgia B 213-n
 Pennsylvania, eastern B 430-G
 See also Mineral paint.
 Octoraro schist P 98-B
 Ohio
 base map p. 250
 Berea sand. See Berea sand.

- Ohio--Continued
- Clinton sands B 621-H,
1003-A
- coal. See Coal.
- Corry and Cussewago sand-
stones OC-21
- drainage features M 41; P 13
- floods C 418; HA-40,
43; W 869
- See also Ohio River basin.
- gas. See Gas.
- geologic map p. 191
- geologic map index p. 192
- geology. See geographic listing for
specific areas.
- geophysical study, preglacial
Teays Valley W 1460-E
- glacial boundary B 58
- glacial geology B 1121-A;
1-316; M41;
P 13
- glass sand B 315-K
- hydrogeology, spring, glacial
terrane, Ashland
area W 1619-A
- leveling B 411, 476,
518, 651
- mineral resources
- Cleveland district B 818
- Kenova quadrangle B 349; GF-184
- Summerfield and Woods-
field quadrangles B 720
- See also specific mineral com-
modities.
- Murrysville sand OM-49, 89
- oil. See Oil.
- paleontology, linguloid
shells P 193-C
- shaded-relief map p. 249
- stratigraphy
- Berea, Corry, and Cusse-
wago sandstones OC-21
- bituminous coal field B 65
- structural geology
- anticlines in Clinton sand B 621-H
- Berea oil sand B 346, 621-N, O
- oil fields, eastern B 213-h
- traverse and triangulation B 552
- water, ground A 18 IV b,
19 IV b
- artesian pressure table, p. 183
- Cincinnati area W 999
- southwestern W 259
- water levels table, p. 183
- wells W 114, 149
- water, surface
- power W 44
- quality W 236;
table 1, p. 182
- river profiles W 44
- streamflow records tables, p. 184-
187
- compilation table 6
- daily, by years tables 4 and 5
- index C 383, 384
- water resources W 91
- springs, mineral W 114
- Wheeling-Stuebenville
area C 340
- Ohio--Continued
- water resources--Continued
- Youngstown area C 177
- See also Appalachian region.
- Ohio River
- floods W 147, 162,
334, 800, 838
- profiles W 44
- sedimentation W 838
- water flow time, Pittsburgh
to Cincinnati C 439
- Ohio River basin
- glacial geology, drainage
features M 41; P 13
- water resources. See particular
States; see also tables,
p. 182-187
- Ohio Valley
- deep channel and alluvial de-
posits W 1411
- Oil
- Alabama, Hachetigbee anti-
cline B 661-H
- Alaska B 225-h, 259,
719
- Alaska Peninsula B 773-D
- Cold Bay B 739-C,
755-D,
773-D, 783-C
- Controller Bay B 314-E
- Iniskin Bay B 739-D
- Naval Petroleum Reserve
No. 4 P 301,305-A-K
- Nenana coal field B 739-C
- Pacific Coast B 250
- petroleum provinces,
possible B 1094
- annual resource data, 1882-1923, see
MRUS, p. 98-131.
- Arizona OC-10; OM-201
- Arkansas
- El Dorado field B 736-H
- southwestern B 691-J
- California B 213-h; p. 213
- Barstow-Kramer region B 541-E
- Bitterwater Valley B 581-D
- Cantua-Panoche region B 431-A
- Coalinga district B 357,398, 603
- Contra Costa County B 340-F
- Cuyama Valley B 621-M
- Elk Hills B 835
- Kern County B 721
- Kern River oil field, map p. 253
- Kettleman Hills P 195
- Los Angeles district B 285-G, 309,
753
- McKittrick-Sunset region B 406
- Naval Petroleum Reserve
No. 1 B 835
- Parkfield area B 691-H
- Priest and Peachtree
Valleys B 581-D
- Puente Hills B 309, 768;
OM-23, 83,
195
- Salinas Valley area B 691-H;
OM-24
- San Joaquin Valley B 471-A, 603,
653, 812-D

Oil--Continued

California--Continued

San Jose Hills OM-23
 Santa Clara district B 309
 Santa Maria district B 321
 Simi Valley B 691-M
 Summerland district B 321
 Sunset-Midway oil field OM-30; P 116,
 117
 Ventura County B 753
 Waltham Valley B 581-D
 Colorado B 751-A;
 OM-73, 116
 Boulder field B 213-h, 225-h,
 381-D
 De Beque field B 531-C
 Florence field B 260-j, 381-D
 Jackson County C 5
 Moffat County B 751-G
 northeastern B 796-B
 Rangely district B 350
See also Oil shale,
 fractionation by diffusion B 365, 475
 Gulf Coastal Plain B 184, 429
 Idaho, Payette area B 431-A
See also Oil shale.

Indiana

southwestern B 213-h
 Trenton limestone A 8 II a

Kansas

analyses of crude B 381-D
 fields, radioactivity B 988-E
 Independence quadrangle B 260-j, 296;
 GF-159
 map p. 213

Kentucky

Allen County, adjoining
 counties B 688
 Campton pool and Knox
 County B 471-A
 B 1072-K
 eastern B 661-D
 Irvine field B 531-A
 Ragland field
 Wayne and McCreary
 Counties B 579

Louisiana

B 429; p. 213
 Caddo field B 619
 De Soto-Red River field B 661-C
 Gulf Coastal Plain B 212, 213-h,
 260-j, 282

Michigan

Michigan basin OC-11
 south-central OM-11
 Sylvania and Bois Blanc
 formations OM-28

Midcontinent oil and gas field,

structural features P 128-C

Mississippi

OM-200
 Vicksburg-Jackson area B 641-D

Montana

C 172, 355;
 OM-130, 170

Bearpaw Mountains region B 751-C
 Big Horn County B 856
 Birch Creek-Sun River
 area B 691-E
 Blackfeet Indian Reserva-
 tion B 641-J
 Bowdoin dome B 661-E

Oil--Continued

Montana--Continued

Cat Creek and Devils
 Basin B 786-B
 Crow Indian Reservation B 736-B, 856
 Elk basin field and vicinity,
 map p. 234
 Highwood Mountains area B 806-E
 Huntley field B 711-G
 Kevin-Sunburst field B 812-B
 Lake Basin field B 691-D
 Little Rocky Mountains
 region B 736-F
 north-central B 641-C
 Porcupine dome B 621-F
 Upper Stillwater Basin B 641-G
See also Oil shale,
 Nebraska OM-198
 Nevada, Reno region and Lyon
 County B 381-D
 New Mexico OM-159, 207
 Alamosa Creek valley B 716-A
 Dayton region B 541-D
 southeastern OM-177
 well records C 333

Ohio

Cadiz quadrangle B 198, 541-A
 Clinton sand B 621-H,
 1003-A
 eastern B 213-h
 Flushing quadrangle B 346
 Steubenville quadrangle B 318
 Summerfield quadrangle B 621-N
 Trenton limestone A 8 II a
 Woodsfield quadrangle B 621-O
See also Berea sand,

Oklahoma

analyses B 381-D
 Billings region B 641-E
 Bristow quadrangle B 661-B, 759
 Cement field B 726-B
 Cushing field B 658
 Foraker quadrangle B 641-B
 Glenn pool B 541-B
 Grandfield district B 547
 Healdton field B 621-B
 Jefferson County B 602, 726-F
 Lawton field B 621-G
 Madill area B 381-D, 736-A
 map p. 213
 Muskogee field B 260-j
 north-central B 531-B
 Osage County B 886-A, 900
 Osage Reservation B 686
 Pawhuska quadrangle B 691-C
 Pershing field B 751-B

Oregon

northwestern B 590
 Vale B 431-A
 origin B 401; P 186-H

Pennsylvania

Burgettstown and Claysville
 quadrangles B 318
 Carnegie quadrangle B 456
 Foxburg quadrangle B 454
 Gaines field A 22 III m
 Greene County B 225-h,
 285-G, 304

Oil--Continued

Pennsylvania--Continued

New Kensington quadrangle B 829

See also Berea sand, regulations, production on public lands

Texas

B 184;
map, p. 213
Caddo field B 619
Coastal Plain B 212, 213-h,
260-j, 282
Corsicana field B 661-F
Denison area B 736-A
Palo Pinto County B 621-E
Quanah region B 621-J
Ranger district B 726-G,
736-C, E
salt domes B 661-G,
736-G

Trans-Pecos B 260-n
United States B 934, 666-DD
eastern, in black shales B 641-L
maps p. 213
See also Oil, annual resource data.

Utah

Farnham anticline B 711-A
Green River region B 541-D
Moab district B 841
Salt Lake basin B 260-j
San Juan field B 431-A,
471-A, 751-D
San Rafael Swell B 806-C
southern B 340-F
Washington County B 726-C

Virginia

Jonesville district B 990; OM-104
Rose Hill field OM-20, 76
southwestern B 1027-L,
1072-K

Washington

Olympic Peninsula B 581-B
waters associated with B 693

West Virginia

southern B 1072-K
Steubenville quadrangle B 318
See also Berea sand,

Wyoming

B 751-A
Baxter Basin B 702
Bell Springs district B 796-D
Big Horn Basin B 285-F,
621-L, 656;
P 53
Big Muddy dome B 581-C
central B 641-I
Douglas field B 541-C
Elk basin field and vicinity,
map p. 234
Hanna and Carbon basins B 804
Labarge field B 340-F
Lance Creek field B 716-E;
map, p. 234
Lander field B 452
Little Buffalo Basin field
and vicinity, map p. 235
Lost Soldier-Ferris dis-
trict B 756

Oil--Continued

Wyoming--Continued

maps OM-19, 107,
175; p. 213
Maverick Springs B 711-H
Moorcroft field B 581-C
Mule Creek field B 716-C

Mush Creek and Osage
fields and vicinity OM-103;
p. 235

Naval Petroleum Reserve
No. 3 P 163

North Fork field, Kaycee
dome and vicinity OM-206

Oregon Basin, Meetetse,
Grass Creek Basin
quadrangles P 145

Osage field B 736-D
Park County B 921-B
Powder River field B 471-A
Rock Creek field B 806-D
Salt Creek field B 452, 670;
P 163

Shoshone River section
southwestern B 541-C
Sweetwater County P 56

Teapot dome B 702, 751-G
Thermopolis region P 163

Upton-Thornton field B 711-D
Wind River Mountains B 716-B

See also Oil shale.

Oil fields, geologic structures,
definition C 419

Oil industry, United States C 11

Oil lands

royalties AP
withdrawals and restor-
ations B 623

Oil shale

California P 154-E

Colorado

Bonanza-Dragon area OM-153
Cathedral Bluffs area OM-134
De Beque area OM-114
Green River formation P 132-F, 168

Naval Oil Shale Reserves
1 and 3, Garfield
County OM-94

northwestern B 581-A,
641-F
Piceance Creek basin B 1042-H,
1082-L;
OM-119

distillation, dry B 691-B

Green River formation P 132-F, 168

Idaho, southeastern B 711-B

Montana

Beaverhead County B 661-I
western B 711-B

regulations, mining on public
lands R

Rocky Mountain region B 729

United States, eastern B 641-L
uranium content P 356-A

Utah

Bonanza-Dragon area OM-153
Green River formation P 168

- Oil shale--Continued
 Utah--Continued
 Naval Oil-Shale Reserve
 No. 2
 northern B 1072-O
 B 581-A,
 641-F, 711-B
 Uinta Basin B 691-B
 Wyoming B 641-F,
 711-B; P 132-F
 B 992; P 356-A
 yield W 113
 Oil wells, waste disposal P 98-Q
 Ojo Alamo formation
 Okinawa
 brachiopods P 314-A
 echinoids P 264-C
 gastropods P 339
 Oklahoma
 asphalt B 380-H;
 OM-15, 22
 p. 250
 base map
 coal. See Coal.
 floods W 147, 1227-B
 forests A 21 V h
 fuel resources B 874
 gas. See Gas.
 gazetteer B 248
 geologic map p. 191
 geologic map index p. 192
 geology W 148
 See geographic listing for
 specific areas.
 gold B 225-b
 grahamite B 380-H
 irrigation W 345-B, D,
 500-B
 lead A 22 II b;
 B 340-C, 606;
 p. 226
 B 564
 B 725-E
 leveling
 manganese
 mineral resources, Wichita
 Mountains P 31
 See also specific mineral
 commodities.
 oil. See Oil.
 paleontology
 Caney shale B 377
 McAlester-Lehigh coal
 field A 19 III e
 paleobotany, Stanley shale,
 Jackfork sandstone P 186-C
 Wewoka formation B 544
 physiographic provinces and
 sections, western B 730-D
 stratigraphy
 Cambrian and Ordovician OC-5; OM-52
 Cretaceous P 154-F
 Paleozoic OC-61
 structural geology
 Billings region B 641-E
 Bristow quadrangle B 661-B
 Cotton County B 602
 Cushing oil and gas field B 658
 Fort Smith-Poteau gas
 field B 541-B
 Jefferson County B 602, 726-F
 Madill area B 736-A
 Osage Reservation B 686
- Oklahoma--Continued
 structural geology--Continued
 Pawhuska quadrangle B 691-C
 Quinton-Scipio district,
 map p. 234
 traverse B 644-L,
 709-G
 triangulation B 175
 volcanic rocks, water-laid P 154-F
 water ground
 artesian pressure table, p. *183
 Ellis County W 500-B
 Enid region W 345-B,
 520-B
 Oklahoma City region W 345-D
 water levels table, p. 183
 wells W 148, 149
 water, surface
 quality W 274;
 table 1, p. 182
 table 7, p. 187
 tables, p. 184-
 187
 for irrigation
 streamflow records
 table 6
 daily, by years tables 4 and 5
 index C 387
 water-loss investigations,
 Lake Hefner C 229; P 269,
 270
 water resources W 148
 quality C 361; W 148,
 364
 See also Oklahoma, irrigation.
 zinc A 22 II b;
 B 340-C, 606;
 p. 226
 See also Great Plains.
- Oligocene formations
 correlation B 84
 Mississippi P 129-E
 See also names of formations.
- Oligocene fossils
 Alabama P 221-H, 243-H
 Mississippi P 189-D, 197-B
 Mississippi P 129-E, 241
 Vicksburg group P 133, 241
 See also Paleontology; Tertiary fossils.
- Onondaga limestone B 508
 Ontario. See Canada.
 Oolites, Green River formation P 154-G
 Oolitic limestone, uranium-bearing
 ing B 1030-K
 C 142
- Opal, Nevada
 Open-file maps and reports. See under
 U. S. Geological Survey.
- Ordovician formations
 Arkansas C 249
 Michigan OC-9, 33
 Montana OM-202
 New York B 899-B
 Oklahoma OC-5; OM-52
 Pennsylvania P 98-B
 Tennessee P 274-F
 Wisconsin, Illinois, Iowa P 274-K
 Wyoming OM-202
 See also names of formations.
- Ordovician fossils
 Idaho P 294-L
 Montana B 1021-M

Ordovician fossils--Continued

- United States, western B 1021-F
See also Paleontology.
- Ore, analyses B 9
- Ore deposits
 electric activity B 548
 enrichment B 529, 625
 origin B 795-C; P 113
See also Mining districts; particular metals.
- Ore-forming compounds, fractional precipitation B 609
- Ore minerals, microscopic determination B 825, 914
- Oregon
 aeromagnetic map, Kerby and Grants Pass quadrangles GP-197
 aeroradioactivity, Hanford Plant area GP-307
 base map p. 250
 beach placers C 8
 chromite. See Chromite.
 clay, high-alumina C 143
 coal. See Coal.
 construction materials B 387
 copper B 830-A; C 2
See also Mining districts.
- floods W 96, 968-A, 1137-E, 1320-D
 A 21 V; P 4, 9
- gas B 431-A
 geologic map index p. 192
 geology. See geographic listing for specific areas.
- geophysical surveys, Ochoco quicksilver district B 940-
 gold. See Gold; Mining districts.
- granite, origin P 175-C
 iron B 260-h
 irrigation, Owyhee project W 597-A
 leveling B 462, 556
 limonite B 982-C
 manganese B 725-C
See also Mining districts.
- mercury. See Mercury; Mining districts.
- mineral resources
 Baker quadrangle B 879
 Cascade Range B 893
 eastern B 875
 Gasquet quadrangle B 995-C
 Grants Pass quadrangle, bordering districts B 380-A
 southwestern B 546
 Takilma-Waldo and Blue Creek districts B 846-B
See also specific mineral commodities; Mining districts.
- nickel B 60, 315-C, 931-I
 B 620-B
 B 431-A, 590
- nitrate B 620-B
- oil B 431-A, 590
- paleontology
 crinoids P 233-E
 Miocene P 59
 paleobotany
 Cascade Range, lavas A 20 III a
 John Day basin B 204
 Spotted Ridge formation P 274-I

Oregon--Continued

- physiography, Klamath Mountains B 196
 power systems W 493
 pumice C 128
 silver. See Mining districts.
 structural geology, Cascade Range A 20 III a
 triangulation and traverse B 644-O, 709-K
- uranium in carbonaceous rocks C 313
- water, ground
 artesian pressure table, p. 183
 Dalles region W 659-B
 Harney Basin W 231, 841
 Malheur County W 1475-E
 southeastern, artesian basins W 78
 water levels table, p. 183
 wells W 61, 78, 149
 Willamette Valley W 890
- water, surface
 quality W 274, 363, 364; 364; table 1, p. 182
 for irrigation table 7, p. 187
 river profile surveys W 44, 348, 349, 377, 378, 379
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 390, 391, 393, 394
- Rogue River basin, evaluation C 187
- water resources
 central B 252; W 220
 Deschutes River basin W 344, 637-D
 Harney Basin W 231
 McKenzie River valley W 597-D, 637-C
 Portland area C 372
 power W 44, 344, 348, 349, 377, 378, 379, 493, 520-C, 636-F, 637-C, D, 638-B
- springs B 32; W 557, 597-D, 679-B, 841
- utilization, Snake River basin W 657
See also Columbia River basin; Pacific Coast; Western States.
- Organosols B 113
 Oriskany sandstone B 899-A
 Ostracodes. See under Paleontology.
- Ouray limestone A 20 II c; B 391
 Overland Route, guidebook B 612
 Owl Creek formation P 274-E, 331-A
 Oxygen, in coal, effect B 382
 Ozokerite, Utah B 285-H, 641-A
- Pacific Coast
 ammonites P 334-F
 coal fields A 22 III k
 Cretaceous paleontology B 133
 Eocene and Upper Cretaceous, faunal relations A 17 I h

Pacific Coast--Continued
 invertebrates B 51
 mineralogy B 61
 topography, Tertiary A 14 II g
 Pacific Coast Line, guidebook B 614
 Pacific slope
 black sands MRUS 1905
 mercury A 8 II c; M 13
 Pacific Slope basins
 floods W 771
 water resources, See particular States;
see also tables, p. 182-187.
 Paint, metallic, See Mineral paint; Ocher.
 Palau Islands
 effects phosphate mining on
 ground water,
 Angaur W 1608-A
 Foraminifera P 221-B
 Paleobotany, See under Paleontology.
 Paleocene formations
 California OC-12
 New Mexico OC-24
 Rocky Mountains and Plains,
 map p. 235
 Wyoming OC-49
See also names of formations.
 Paleocene fossils
 Gulf Coastal region P 232
 Montana P 214-C
 Utah P 210-C
See also Paleontology.
 Paleoclimatology, Green River
 epoch P 158-E
 Paleogeography, Jurassic I-175
 Paleontology
 Alaska P 305-A - H
 bibliography B 1021-H
 Cenozoic megafossils P 294-C
 algae, See under paleobotany.
 ammonites
Barroisiceras, Cretaceous P 170-B
Carboniferous, North
 America M 42
Cardioceratidae, Jurassic P 118
Cenomanian, Montana P 243-D
Cretaceous
 Alaska P 354-D
 Haiti P 214-A
 Pacific Coast States P 334-F
Jurassic
 Alaska P 249-B
 western interior United
 States P 249-A
Metaplaenticeras and
Placenticas P 147-A
pseudoceratites, Creta-
 ceous M 44
scaphites, Cretaceous P 150-B
Triassic, North America P 167
 annelids
 marine, Marshall Islands P 260-Q
Tubulostium, Eocene P 193-B
 arachnids
 index B 71
 systematic review B 31
 arthropods
 Miocene, Mojave Desert P 294-G

Paleontology--Continued
 arthropods--Continued
See also arachnids, crustaceans, insects,
 myriapods, ostracodes,
 trilobites.
 Batesville sandstone, Arkansas B 593
 Bear River formation B 128
 birds
 California P 264-J
 with teeth A 3 b
 Boone formation, Arkansas B 595, 598;
 P 154-B
 brachiopods
 Cambrian M 51
 linguloid, Devonian and
 Carboniferous P 193-C
 Raritan clay and greensand
 marl, New Jersey M 9
 Recent, Bikini P 260-G
 Saturday Mountain forma-
 tion, Idaho P 294-L
 Silurian, Alaska P 233-C
 synopsis B 87
 Tertiary and Pleistocene,
 Okinawa P 314-A
 Tropidoleptus zones,
 Devonian P 79
 bryozoans
 Rochester shale B 292
 synopsis B 173
 California
 Coalinga district B 396; OC-1
 Mesozoic and Cenozoic B 15
 Palos Verdes Hills P 207
 Santa Maria district P 222
 Cambrian, North America B 10, 30
 Caney shale, Oklahoma B 377
 Carboniferous
 Kansas B 211
 North America B 153
 Castle Hayne marl, North
 Carolina P 143
 Cenozoic
 Alaska P 294-C
 California B 15
 cephalopods
 Cody shale, Wyoming P 150-A
 Eagle sandstone, western
 interior United
 States P 151
 Mississippian, Alaska P 283
 Raritan clays and greensand
 marls, New Jersey M 18
 scaphitoid, Colorado
 group P 239
 Triassic, America P 40
See also ammonites and
 nautiloids.
 Chapman sandstone, Maine P 89
 Colorado formation B 106
 Colorado group, Montana P 132-B
 conodonts
 Barnett formation, Texas P 243-F
 Chappel limestone, Texas P 294-J
 corals
 Bikini P 260-P

Paleontology--Continued

corals--Continued

- Buda limestone B 205
 Eocene, Oligocene and
 Cretaceous (?),
 United States M 39
 Madison group, Williston
 basin B 1071-
Micrabacia, Cretaceous P 98-J
 Ordovician and Silurian,
 western United
 States B 1021-F
 Recent, Marshall Islands
 reef P 260-I
 biologic economy P 260-E
 California P 98-T
 rugose, Devonian B 1111-A

Cretaceous

- Mississippi and Texas P 210-E
 Missouri, Owl Creek
 fossils P 274-E
 New Mexico P 98-P-S
 Pacific Coast A 17 I h; B 133

crinoids

- composition of skeletons P 90-D
 Tertiary, Oregon P 233-E

crustaceans

- bibliography of Paleozoic B 63
 Miocene, New Jersey M 24
See also ostracodes,

Devonian

- New York B 210, 244
 New York B 3, 16
 Pennsylvania B 3

diatoms. See under paleobotany.dinosaurs. See under reptiles.

- discoasters, Saipan P 280-F
 Eagle Ford fauna, Texas P 274-C

echinoderms

- Cenozoic, United States M 54
 inorganic constituents P 90-L
 Mesozoic, United States P 97; M 54
 North Atlantic deep-sea
 cores P 196-D

See also crinoids and echinoids.

echinoids

- Cenozoic P 321
 Cretaceous P 254-A, 264-E
 Pliocene
 California P 190
 Okinawa P 264-C
 Saipan P 280-J
 Eocene, Pacific Coast A 17 I h
 Eutaw formation, Alabama
 and Georgia P 274-J

fish

- Cretaceous P 120-I
 Esmeralda formation A 21 II c
 Paleozoic, North
 America M 16
 Triassic, New Jersey and
 Connecticut Valley M 14

Foraminifera

- Alaska P 236-A, B,
 294-F,
 305-A-H
 arenaceous, Lodo forma-
 tion P 240-A

Paleontology--Continued

Foraminifera--Continued

- Arkadelphia marl,
 Arkansas P 221-A
 P 260-N, O

Bikini

- Bulimina and related
 genera P 210-D

- Byram calcareous marl,
 Mississippi P 129-E

Cretaceous

- Gulf coastal region P 206
 New Jersey B 88
 South Dakota and
 Wyoming P 254-E
 ecology, Gulf of Mexico P 274-G
 Eniwetok P 260-V, X

Eocene

- Canal Zone and vicinity P 244
 Fiji P 374-A
 southeastern United
 States P 181

Fusulinidae

- New Mexico OC-2
 Texas P 315-C
 Globigerina ooze, Eocene P 260-W
 Gulf of Mexico P 254-F,
 274-G

Heterostegina, America

- Jurassic, Alaska P 128-E

- Lagenidae, Lodo forma-
 tion P 240-B

- Lepidocyclina, America P 125-D

- Marianna limestone P 129-F

- Miliolidae, Lodo forma-
 tion P 240-B

- Miocene, Coastal Plain B 676;

- P 128-B, 175-A

- Monterey shale, Calif-
 ornia B 268; P 294-M

- Nonionidae P 191

- North Atlantic deep-sea
 cores P 196-A

- North Carolina P 189-G

Oligocene

- Alabama P 189-D,

- 197-B

- Canal Zone and vicinity P 244

- Fiji P 374-A

- Vicksburg P 133, 241

- Operculina, America P 128-E

- Orbitolina, North America P 333

- Orthophragmina P 108-G,

- 125-D, 128-E

- Palau Islands P 221-B

- Paleocene, Gulf coastal
 region P 232

- Pleistocene

- California B 513

- New York P 254-G

Pliocene

- California B 513

- Coastal Plain B 676

- Puente formation, Califor-
 nia P 294-M

- Recent, Marshall Islands P 260-H

- Saipan P 253,

- 280-H, I

Paleontology--Continued

Foraminifera--Continued

- Tejon formation, California B 268
- Tertiary
- Virgin Islands P 210-A
- Washington OC-57
- Triassic, Alaska P 236-A

gastropods

- Bathygalea P 314-B
- Ceratopora, Ordovician P 294-H
- Comanche series P 211
- Cretaceous, Tennessee and Mississippi P 331-A
- Eocene, Gulf province P 193-B
- Miocene and Pliocene,

- Virginia and North Carolina P 199-B
- Orthaulax, Tertiary P 129-B
- Paleozoic, Alaska P 334-D
- Raritan clays and green-sand marls, New Jersey M 18

- Tertiary, Canal Zone and Panama P 306-A

- Tertiary and Quaternary, Okinawa P 339

- Green River formation, Colorado and Utah P 168

- Guadalupean fauna P 58

- Hamilton formation, New York B 206

- Idaho formation, Balkan fresh-water fauna, Idaho P 132-G

insects

- Aphidae, Tertiary A 13 II f
- bibliography B 69
- butterflies, Colorado A 8 I d
- cockroaches B 124
- Coleoptera, Tertiary M 21, 40
- index B 71
- Miocene, Mojave Desert P 294-G
- review B 31
- Rhode Island coal field B 101

- Tertiary, Colorado and Utah B 93

- Judith River formation B 257

Jurassic

- California B 175-B
- North America B 29
- United States P 214-B

- Knoxville beds, Pacific Coast B 133

- Lance formation, Cannonball marine member P 128-A

- Littleton formation, New Hampshire P 334-B

- Louisiana, northwestern B 142

- Louisiana limestone, Missouri P 203

- Malone formation, Texas B 266

mammals

- Artiodactyla, cranial morphology P 243-H

- Cenozoic, North America B 361

- Dinocerata A 5 e; M 10

- Edentata P 140-B

Paleontology--Continued

mammals--Continued

- Felidae, auditory region P 243-G
- Hoplophonus P 221-H
- Lagomorpha, Arizona P 131-E
- Merychippus P 264-G
- Proboscidea B 790-B; P 140-B

- Rodentia, Arizona P 131-E

- titanotheres M 55

- medusae M 30

- Mesozoic B 4

- California B 15

- North America B 102

- Miocene, Oregon P 59

mollusks

- Alum Bluff group, Florida P 142

- Barstow formation, California P 254-C

- Buda limestone B 205

- Cenozoic, High Plains P 337

- Cretaceous, Wyoming and adjoining States P 233-A, 254-B

- Eocene

- Texas P 131-D

- western North America B 18, 34

- Jurassic, Alaska P 274-D

- Laramie fauna B 34

- Miocene

- New Jersey M 24

- Virginia and North Carolina P 199

- western North America B 18

- Morrison formation P 233-B

- North America, review of

- nonmarine A 3 g

- North Atlantic deep-sea

- cores P 196-D

- North Carolina P 189-G

- Paleocene, Montana P 214-C

- Pliocene

- California P 190

- Florida P 170-D

- Virginia and North Carolina P 199

- Quaternary and Recent

- Great Basin B 11

- North Carolina to Brazil and the Bermudas B 24

- Tertiary, Canal Zone and Panama P 306-A, B

- Woodbine formation, Pepper shale member P 243-E

- See also cephalopods,

- gastropods, pelecypods,

- scaphopods,

- Moorefield shale, Arkansas B 439

- Moose River sandstone,

- Maine P 89

- myriapods

- index B 71

- systematic review B 31

- nautiloids, Triassic,

- American P 250

- Nevada, Eureka district M 8; P 334-C

- Onondaga faunas, Allegheny region B 508

- Ordovician

Paleontology--Continued

- Ordovician
 Montana B 1021-M
 ostracodes
 Bairdia, Paleozoic P 330-A
 Cenozoic, North Carolina P 234-A
 growth series, Permian P 221-C
 Mesozoic, North Carolina P 234-B
 North Atlantic deep-sea
 cores P 196-C
 Permian, Texas P 221-C,
 264-A
 Sundance formation, South
 Dakota, Wyoming,
 and Montana P 243-A
 Ouray limestone A 20 II c;
 B 391
 Pacific Coast, invertebrates B 51
 paleobotany
 algae
 calcareous P 170-E,
 260-M, 280-E
 reefs P 154-G
 Alum Bluff formation,
 Florida P 98-E
 Amboy clays M 26
 Aneimites, Pennsylvanian P 197-C
 Animas formation P 134
 Calamopityeae, New Albany
 shale P 185-H, 186-E
 Calvert formation P 98-F
 Carboniferous, Missouri B 98; M 37
 Cascade Range, lavas A 20 III a
 Catahoula sandstone P 98-M
 Cenozoic and Mesozoic
 catalogue, North
 America B 152, 696,
 924
 Charophyta, Mesozoic P 294-A
 Cheyenne sandstone,
 Kansas P 129-I
 Citronelle formation P 98-L
 Cretaceous
 Alaska P 159
 Black Hills A 19 II e
 catalogue B 152
 Colorado P 221-D
 Gulf region P 112
 New York and New
 England M 50
 South Carolina and
 Georgia P 84
 Dakota group M 17
 Denver and associated
 formations, Colo-
 rado P 155
 diatoms
 North Atlantic deep-sea
 cores P 196-B
 North Carolina P 189-G
 Pleistocene P 189-H
 Pliocene P 189-C
 Washington P 140-A
 Diplothemema, Pennsylv-
 anian P 197-C
 Eocene
 southeastern North
 America P 84, 91, 156

Paleontology--Continued
paleobotany--Continued

- Eocene--Continued
 Texas P 125-A,
 132-E, 193-E
 Eremopteris, Pennsylv-
 anian P 197-C
 Esmeralda formation A 21 II c
 Fayetteville shale P 186-B
 ferns Tempskya P 186-F
 Forkston coal, Pennsylv-
 vania P 210-B
 Fox Hills sandstone P 98-H, 189-I
 Frontier formation,
 Wyoming P 108-F, 158-H
 Fruitland formation, New
 Mexico P 98-S
 Green River formation P 131-F, 154-J,
 165-B, 185-C
 index of generic names B 1013
 Jackfork sandstone, Okla-
 homa and Arkansas P 186-C
 John Day basin B 204
 Judith River formation B 257
 Jurassic, Alaska P 85-D
 Kirtland formation, New
 Mexico P 98-S
 Lance formation, South
 Dakota P 185-F
 Laramie flora A 6 f; B 37;
 P 130
 Latah formation, Wash-
 ington and Idaho P 140-A, 154-H
 Mariopteris, Penn-
 sylvanian P 197-C
 Mesozoic
 United States M 48
 Virginia M 6
 Mesozoic and Cenozoic
 catalogue, North
 America B 152, 696,
 924
 Miocene
 Idaho P 185-E
 Washington P 170-C
 Montana formation B 163
 North America, later ex-
 tinct floras M 35
 Oklahoma, McAlester-
 Lehigh coal field A 19 III e
 palmlike plants, Dolores
 formation P 274-H
 Payette formation, Idaho A 18 III e
 Pennsylvanian, Kansas P 254-D
 Pleistocene, North Car-
 olina P 140-C
 Pocono formation P 263
 Potomac formation B 56; M 15
 Pottsville age, Colorado P 185-D
 Pottsville formation,
 Pennsylvania A 20 II f
 Price sandstone P 263
 resins, Paleozoic P 85-E
 Ripley formation P 136
 sketch A 5 g
 Spotted Ridge formation,
 Oregon P 274-I
 Stanley shale, Oklahoma
 and Arkansas P 186-C

- Paleontology--Continued
 paleobotany--Continued
Tempskya, Cretaceous P 196-F
 Tertiary,
 Alaska P 182
 catalogue B 152
 Colorado P 131-G
 Triassic, New Jersey and
 the Connecticut
 Valley M 14
 western United States P 186-J
 Wilcox flora P131-A, 156,
 193-E
 wood, Newark formation A 21 III a
 wood and lignite, Potomac
 formation B 56
 Woodbine formation,
 Texas P 129-G
 Paleozoic
 Maine P 165
 Oklahoma A 19 III e
 Roemer's types rede-
 scribed, Texas P 186-M
 Park City formation, phosphate
 beds, Idaho, Wyoming,
 and Utah B 436
 pelecypods
 Aucella P 314-G
 Clementia, Tertiary P 147-C
 Comanche series P 211
 Exogyra, Cretaceous P 81, 154-I
 Gryphaea, Cretaceous B 151
 Inoceramus, Alaska P 334-E
 Miocene and Pliocene,
 Virginia and
 North Carolina P 199-A
 Noetinae, Tertiary P 189-A
 Ostreidae
 Gulf region P 186-A
 North America A 4 e
 Raritan clays and green-
 sand marls, New
 Jersey M 9
 rudistid, Kemp clay P 193-A
 Venericardia, Gulf
 province P 189-F, 210-E
 Pleistocene
 Alaska P 125-C
 Maryland, Virginia and
 North Carolina P 150-F
 Pliocene
 Alaska P 125-C
 Florida P 170-D
 North Carolina P 150-F
 Pocono fauna, Pennsylvania P 150-E
 Radiolaria, Eocene, Saipan P 280-G
 Raritan formation, New
 Jersey M 9, 18; P 264-B
 reptiles
 Cretaceous, New Mexico P 119
 dinosaurs
 Ceratopsia M 49, P 103
 North America A 16 I b
 North Horn formation,
 Utah P 210-C
 Torrejon and Puerco for-
 mations, New
 Mexico P 119
- Paleontology--Continued
 reptiles--Continued
 Two Medicine formation,
 Montana P 103
 Ripley formation, Tennessee P 137
 scaphopods
 Alum Bluff group, Florida P 142-H
 Miocene and Pliocene,
 Virginia and North
 Carolina P 199-B
 stromatolites, Belt Series,
 Montana P 294-D
 Tertiary, Philippine Islands A 21 III f
 Trent marl, North Carolina P 143
 Triassic
 Nevada P 322
 North America P 83, 141
 trilobites
 Cambrian, Great Basin P 264-D
 Dunderberg shale, Nevada P 334-C
 vertebrates
 bibliography and catalog B 179
 Ojo Alamo, Kirtland and
 Fruitland forma-
 tions, New Mexico P 98-Q
 See also birds, fish, mammals,
 reptiles,
 Wasatch fossils in Fort Union
 beds, Wyoming P 108-D
 Wewoka formation, Oklahoma B 544
 Wilcox group, Mississippi P 108-E
 Woodbine age biofacies, Gulf
 Coastal Plain P 264-I
 Woodbine formation, Texas P 242
 See also particular States, formations,
 periods.
 Paleotectonic maps
 Jurassic system I-175
 Triassic system I-300
 Paleozoic formations
 Alabama B 781-A
 Alaska P 303-A, B
 Appalachian basin SP
 Arizona B 1121-H;
 OC-7, 10;
 P 98-K, 131-B
 Arkansas C 160
 Colorado OC-7, 16, 39,
 59; OM-101,
 P 185-P
 Florida and adjacent States C 91
 Kansas OC-47, 61;
 OM-101
 Maine B 165
 Midcontinent region, index map,
 sections OM-184
 Mississippi B 781-A
 Montana B 110; OC-18,
 19, 40; OM-43;
 P 120-F
 New Mexico OC-7; OM-61;
 P 108-C
 Oklahoma OC 61; OM-101
 Utah C 16; OC-7, 16
 Wyoming OC 40, 44;
 P 120-F
 See also names of formations.

- Paleozoic fossils**
 Alaska B 1021-H;
 P 334-D
 Maine B 165
 Oklahoma A 19 III e
 plants, resins in P 85-E
 Texas P 186-M
 Wyoming OC-44
See also Paleontology.
- Palladium, Nevada** B 620-A
Palouse soil B 790-B
- Panama**
 hydrography A 22 IV b
 manganese B 710-C, 1034
 Tertiary mollusks P 306-A, B
- Panama, Canal Zone, See Canal Zone.**
- Paper-making wastes, pollution**
 by W 121, 226
- Paraguay**
 geologic map p. 192
 geology, mineral resources,
 igneous and meta-
 morphic rocks,
 soils P 327
- Park City formation** B 436; P 313-A
Payette formation A 18 III e
- Peat**
 Alaska B 379-A, 442-B
 annual resource data, 1894, 1904-1923, see
 MRUS, p. 102-103, 109-131.
 Maine B 376; GF-192
 United States B 394, 728
 Virginia-North Carolina,
 Dismal Swamp B 711-C
 zinc-bearing, geochemical re-
 lations to dolomite,
 New York B 1000-D
- Pebbles, shapes** B 730-C;
 P 131-C
- Pecos River**
 floods W 842
 profile surveys W 421
 quality of water W 596-D, 970
- Pectolite, constitution** B 167
- Pedestal rocks** B 760-A, D,
 790-A
- Pegmatites**
 Alaska, southeastern B 1024-G
 Colorado B 1011; P 227,
 265
 Connecticut B 1042-Q
 Idaho and Montana, beryl-
 bearing P 229
 Maine B 445
 Nevada and Arizona, beryl-
 bearing B 1082-D
 P 255
 New England States B 931-P
 New Hampshire C 309;
 North Carolina P 248-A, C, D
 South Dakota B 1015-C;
 C 245; MF-44;
 P 247
 beryl-bearing B 1072-I;
 P 297-A
 tin-bearing B 922-T
 Utah, Wyoming P 227
 Virginia P 248-B, C
- Pegmatites--Continued**
See also Mica.
- Pelecypoda. See under Paleontology.**
- Peneplains**
 Colorado, Front Range and Rocky
 Mountain National
 Park B 730-A
- Pennsylvania**
 aeromagnetic maps, See geographic list-
 ing for specific areas; see also
 map listing, p. 236-244.
- barite B 225-o
 base map p. 250
 Berea sand, maps OC-21; OM-29,
 49, 58, 89
 brownstone MRUS 1896
 carnotite B 580-H
 cement rock B 225-J
 chromite B 725-B,
 1082-K
 clay B 225-k,
 285-L, 315-I
 coal, See Coal.
 copper B 430-B
 Corry and Cussewago sand-
 stones OC-21
 C 204; W 147,
 162, 771, 915,
 1134-B
 B 380-J
 ganister
 gas. See Gas.
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for
 specific areas.
 geomorphology, surficial
 geology, Potter
 County P 288
 glacial boundary B 58
 glacial geology M 41
 graphite, mining history MRUS 1919 II
 Illinoisian outwash B 1121-B
 iron B 430-E
See also Magnetite.
 levelling B 288, 515
 limestone B 249
 magnetite. See Magnetite.
 mineral paint B 315-N,
 430-G, 470-I
- mineral resources**
 Amity quadrangle B 300; GF-144
 Beaver quadrangle B 286
 Bellefonte quadrangle B 855
 Butler and Zelenople
 quadrangles B 873
 Delaware Water Gap and
 Easton quadrangles B 920
 Elders Ridge quadrangle B 256; GF-123
 Honey Brook and Phoenix-
 ville quadrangles B 891
 Johnstown region B 447; GF-174
 Kittanning and Rural Valley
 quadrangles B 279
 Middletown quadrangle B 840
 Piedmont Upland B 1082-K
 Quakertown-Doylestown
 district B 828
See also specific mineral
 commodities.

Pennsylvania--Continued

Murrysville sand OM-49, 89
 Nineveh and Gordon oil sands B 285-G
 ocher B 430-G
 oil. See Oil.
 paleontology
 Devonian B 3
 linguloid shells P 193-C
 paleobotany
 Pennsylvanian P 210-B
 Pocono formation and
 Price sandstone P 263
 Pottsville formation A 20 II f
 Pocono formation P 150-E
 phosphorus ore B 315-P
 physiographic and hydraulic
 studies, streams P 271, 282-F;
 W 108
 Precambrian geology, Dela-
 ware Water Gap
 and Easton quad-
 rangles B 920
 sand and gravel B 430-F
 shale B 285-L, 315-I,
 470-I
 slate industry B 213-I
 stratigraphy
 Berea, Corry, and Cussewago
 sandstones OC-21
 bituminous coal field B 65
 Cambrian B 134
 Devonian B 120
 Doe Run-Avondale region P 98-B
 Helderberg limestones P 108-k
 structural geology
 Northern Anthracite coal
 basin P 193-D
 Punxsutawney, Curwens-
 ville, Houtzdale,
 Barnesboro and Patton
 quadrangles B 531-D
 triangulation and traverse B 644-N
 uranium B 580-H; C 350
 volcanic rocks, South Moun-
 tain B 136
 water, ground
 artesian pressure table, p. 183
 Middletown, Olmsted Air
 Force Base W 1539-H
 water levels table, p. 183
 wells W 61, 106, 114,
 149
 water, surface
 Delaware River, chemical
 characteristics W 1262
 quality W 108, 161,
 236, 1262;
 table, p. 182
 river profiles W 44
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 381, 383
 water resources
 Bellefonte quadrangle B 855
 Bucks County C 104

Pennsylvania--Continued

water resources--Continued
 Chambersburg, Mercersburg,
 Curwensville, Patton,
 Ebensburg, Barnesboro,
 Elders Ridge, and Waynes-
 burg quadrangles W 110
 Coatesville-West Chester
 region GF-223
 Erie district W 161
 Lake Erie shore region C 174
 Middletown quadrangle B 840
 Pawpaw and Hancock
 quadrangles W 145
 Philadelphia district W 106
 Pittsburgh area C 315
 power P 123; W 44
 Quakertown-Doylestown
 district B 828
 quality W 364
 springs B 32; W 110,
 114
 Susquehanna River basin
 use W 108, 109
 C 257
See also Appalachian region;
 Eastern States.
 Pennsylvanian formations
 Appalachian basin SP
 California B 1061-A
 Colorado OC-46; OM-135
 Kansas OC-46, 48
 Kentucky OM-156, 163,
 173
 Montana OC-50
 New Mexico OM-21
 Texas P 129-A, 315,
 1096-A
 Utah SP
See also names of formations.
 Pennsylvanian fossils
 Appalachian region P 197-C
 Colorado P 185-D
 Idaho B 436
 Kansas P 254-D
 New Mexico OC-2
 Oklahoma B 544
 Oregon P 274-I
 Pennsylvania P 210-B
 Texas P 315-C
 Wyoming and Utah B 436
See also Paleontology.
 Penobscot River basin, Maine,
 water resources W 279
 Penokee series A 10 I c; M 19
 Peridotite
 Arkansas B 540-U,
 735-H, 1
 Kentucky B 38
 North Carolina B 948-E
 Perlite, United States B 1027-I
 Permafrost
 Alaska
 Dunbar area C 42
 Fairbanks area B 989-F
 relation to ground water P 264-F
 heat conduction B 1052-B,
 1083-A

- Permafrost--Continued**
 relation to ground water C 275; P 264-F
- Permian formations**
 Arizona OC-7; P 374-H
 California B 1061-A
 Colorado OC-7, 46;
 OM-135
 Idaho C 208, 262, 301,
 304, 305, 327
 OC-46
 Kansas B 1027-A;
 Montana C 209, 260, 302,
 303, 326
 New Mexico B 389; OC-7;
 OM-21; P 374-H
 Texas B 77, 1081-G,
 1096-A; OM-80;
 P 315;
 Utah C 211, 306;
 OC-7;
 P 150-C, 374-H
 P 313-A
 Wyoming B 1042-E;
 C 210, 307, 324,
 325; P 98-O
- See also names of formations.
- Permian fossils**
 Guadalupe group P 58
 Idaho B 436
 Texas B 77; P 221-C,
 264-A
 B 436
 Wyoming and Utah
- See also Paleontology.
- Permian salt deposits** B 715-M
Perrysburg formation OC-45
- Peru**
 base-metal deposits B 1040
 lead-zinc deposits B 1017
 mercury B 975-A
 mineral resources, Atacocha
 district B 975-E
- Petrified Forest National Monument,**
 Ariz., map p. 254
- Petrography**
 Hawaii P 214-D
 Montana
- Elkhorn mining district A 22 II d
 Highwood Mountains B 237
 Little Belt Mountains A 20 III c
 Nevada, Pioche district P 158-D
 phosphorites, Puerto Rico P 317-C
 radioactive Tertiary igneous
 rocks, Colorado B 1032-E
 xenotime and monazite concen-
 trations, Colorado B 1032-F
- Petroleum. See Oil.**
- Petroleum-coke ashes, analyses** B 950
- Philippine Islands**
 coal MRUS 1905
 geology, Tertiary fossils A 20 II a,
 21 III f
 mineral resources MRUS 1897
- Phosphate** B 46
 Alaska, northern P 302-A
 annual resource data, 1882-1923, see
 MRUS, p. 98-131.
 Arkansas, northern B 315-P
 bibliography B 1018,
 1059-B; C 135
- Phosphate--Continued**
 Florida B 604, 906-F,
 934, 1046-K;
 C 230
 Map 3-198
 (p. 226)
- Idaho**
 Deer Creek-Wells
 Canyon B 955-C, 982-A
 Georgetown region B 577
 southeastern B 430-H,
 530-f, 680
 B 944-A
 Teton Basin area
 Mexico, Concepción del Oro
 district B 1037-A
 B 530-f;
 Map 3-198 (p. 226)
- Montana**
 Beaverhead County B 661-I
 Elliston field B 580-N
 Garrison and Philipsburg
 fields B 640-K
 Maxville, Philipsburg, and
 Avon regions B 715-J, 847-D
 Melrose B 470-H, 780-A
 Three Forks-Yellowstone
 Park region B 795-G
 regulations, mining on public
 lands R
 South Carolina B 580-J;
 MRUS 1882
 Charleston area B 1079
 synthesis, abstracts C 135
 Tennessee A 17 II e,
 21 III e; B
 B 213-m;
 MRUS 1894,
 1898
 United States B 315-P, 340-K,
 394, 666-J,
 1018; C 297;
 P 313
- See also Phosphate, annual resource
 data.
- Utah** B 430-H;
 Map 3-198 (p. 226)
- Uinta Mountains B 690-C
 Virginia, southwestern B 540-L
 Wyoming B 430-H;
 Map 3-198 (p. 226)
- Salt River Range B 620-O
 Teton Basin B 944-A
 western B 680
 Wind River Mountains B 764
- Phosphate rock, aluminum in,**
 determination B 992
 C 375
- Phosphoria formation** C 208, 262,
 301, 304, 305,
 327
- Idaho**
- Meade Peak phosphatic**
 shale member
 petrology B 1111-C
 B 1027-A;
 C 209, 260, 302,
 303, 326
- Montana** B 988-D,
 1009-D, 1084-D
- uranium** C 211, 306
 B 988-D,
 1009-D, 1084-D
- Utah** C 211, 306
 western phosphate field P 313-A

Phosphoria formation--Continued

- Wyoming B 1042-E,
1111-C; C 210,
307, 324, 325
- Phosphorites
petrography, Puerto Rico P 317-C
uranium-bearing B 1059-B,
1084-D; P 314-D
- Phosphorus MRUS 1906
- chloronitrides of, and meta-
phosphimic acids B 167
- determination in rocks con-
taining vanadium B 992
- Pennsylvania, Mount Holly
Springs B 315-P
- Photogeologic maps. See map listing,
p. 206-212.
- Photogeologic procedures B 1043
- Photogrammetry C 164, 222
- application to aerial surveys B 657
- in the U. S. Geological Survey,
development C 218
- Photography
methods of showing mineral
relations B 992
- micrographic B 825, 914
- topographic B 657, 788-F,
797-E; C 222
- Photointerpretation, Alaska
Highway terrain B 963-D
- Phreatophytes W 1423
- research, Western United
States C 413
- Physiographic features, topo-
graphic maps illus-
trating p. 255
- Physiography
Alaska
Amchitka Island B 1028-P
Yakutat Bay P 64
- Colorado, San Juan Mountains P 166
- Klamath Mountains B 196
- Montana P 174, 231
- Big Horn Basin OM-71
- Oklahoma, western, and Texas
Panhandle B 730-D
- Ozark region A 22 II b
- rivers P 282-A-F
- Susquehanna River drainage
basin W 108
- Taconic B 272
- Tennessee, Georgia, Alabama,
Chattanooga dis-
trict A 19 II a
- Wyoming, Big Horn Basin OM-71
- See also Geomorphology.
- Piedmont
gold P 213
- granitic rocks A 15 f
- mica P 248
- mineral deposits in serpentine
rocks B 1082-K
- Pierre shale P 391-A, B
- Sharon Springs member B 1046-L, R
- Pipelines
Arizona OM-201
- Colorado OM-116
- Mississippi OM-200

Pipelines--Continued

- Nebraska OM-198
- New Mexico OM-159, 207
- Wyoming OM-107, 175;
p. 213
OM-179
- Piper formation
- Pipes, steel-concrete, exper-
iments W 143
- Pitchblende, Colorado C 186; P 90-A
- See also Radioactive deposits.
- Place names. See geographic finding
list.
- Placers, Oregon B 430-A; C 8
- Plankton, Marshall Islands P 260-F
- Plants
as ground water indicators W 577, 659-A
- See also Phreatophytes.
fossil. See Paleontology (paleobotany).
- Platinum
Alaska
Chistochina River B 692-C
- Goodnews Bay district B 910-B, 918
- Kahiltna Valley B 692-D
- Tolstoi district B 692-F
- annual resource data, 1882-1923, see
MRUS, p. 98-131.
- bibliography B 694
- geologic relations and distri-
bution B 193
- Nevada B 430-D, 620-A
- United States B 666-D
- See also Platinum, annual resource
data.
- Washington B 805-A
- Wyoming
Centennial region B 780-C
- in copper ores B 213-c
- Rambler mine MRUS 1902
- Pleistocene fossils
Alaska P 125-C
- California B 513
- Idaho P 132-G
- Maryland P 150-F
- New York P 189-H, 254-G
- North Carolina P 140-C,
150-F
- Okinawa P 314-A
- Virginia P 150-F
- See also Paleontology.
- Pleistocene geology
Cochrane problem B 1021-J
- Idaho P 158-G
- Indiana, Michigan M 53
- Iowa, northeastern A 11 I b
- Montana I-327; P 174,
231
- South Dakota, eastern P 262
- See also Glacial Geology.
- Pleistocene-Recent boundary,
Rocky Mountains B 996-A
- Pliocene formations
correlation B 84
- Gulf Coastal Plain P 98-L
- Wyoming B 1121-I
- See also names of formations.
- Pliocene fossils
Alaska P 125-C
- Atlantic Coastal Plain B 676

- Pliocene fossils--Continued
- California B 513;
P 189-C, 190
- Florida P 170-D
- Gulf Coastal Plain B 676; P 98-L
- Idaho P 132-G
- North Carolina P 150-F,
199-A, B
- Okinawa P 264-C
- Virginia P 199-A, B
- See also Paleontology; Tertiary fossils.
- Pliocene history, Mississippi P 108-H
- Pocono formation P 150-E, 263
- Polishing materials. See Abrasive materials.
- Polyconic maps C 57
- Polyconic projections B 809
- Porphyry, Rhode Island B 311
- Portland cement. See Construction materials.
- Potash
annual resource data, 1887, 1910-1923,
see MRUS, p. 100-101, 115-131.
- California
Death Valley, Saline Valley B 540-N
Searles Lake MRUS 1912 II
- France B 715-B
- from wyomingite P 98-D
- Great Basin, Quaternary
lakes B 540-N
- in copper and gold ores B 620-J
- Nebraska B 715-I
- Nevada, Columbus Marsh B 540-N
- New Jersey B 727
- New Mexico B 780-B
- mineralogy of drill cores B 833
- regulations, mining on public
lands R
- Spain B 715-A
- Texas
mineralogy of drill cores B 833
western B 780-B
- United States B 530-g, 540-P,
666-N, 785-B;
MR-3
- See also Potash, annual resource data.
- Wyoming, Leucite Hills B 517
- Potash brines
evaporation P 95-E, 98-A
- Utah, Great Salt Lake Desert B 795-B
- Potassium, determination in
silicate rocks B 992
- Potomac formation A 15 c; B 56,
145; M 15
- Potomac River
floods W 800
- water flow time, Cumberland
to Washington C 438
- Potomac River basin W 192
- See also particular States.
- Pottsville formation A 20 II f;
P 185-D
- Powder River drainage basin,
Wyo., Mont., sedi-
mentation, water
quality C 170
- Powell survey, publications B 222
- Powellite (calcium molybdate) B 90
- Power, capacity and production,
United States W 579
- Power--Continued
- See also Waterpower.
- Power systems
Boston-Washington P 123
California, Oregon, Nevada W 493
- Prairie Bluff formation P 331-A
- Precambrian formations
Archean and Algonkian,
correlation B 86
- Arizona P 98-I
- classification A 7 e
- Colorado B 777, OM-116
- Lake Superior region A 10 1c; M 19;
P 184
- Michigan B 23, 1030-F;
P 314-C
- New Mexico OM-207
- Northwestern States A 5 d
- Pennsylvania P 98-B
- Precambrian fossils, Montana P 294-D
- Precambrian geology
New Jersey A 18 II e;
B 920
- North America A 16 I f; B 360
- Pennsylvania B 920
- Texas B 430-E, 450
- Precious metals, United States,
industry, 1880-1892 MRUS 1892
- Precious stones. See Gemstones.
- Precipitation
New England-New York area HA-7
relation to tree growth W 841
- See also Rainfall.
- Price sandstone P 263
- Producer-gas plants
status B 316-G, 416
tests B 393; P 48,
pt. 3
- See also Fuel-testing plants.
- Prospecting methods B 988-I; C 127;
SP
- See also Geobotanical prospecting;
Geochemical prospecting.
- Pseudoserpentine, Washington B 262
- Public lands
classification A 21 V g;
B 424, 537
R
- leasing, regulations B 623
- petroleum, withdrawals and
restorations AP
- royalties A 16 II e
- water supply C 400
- waterpower and storage sites P 294-M
- Puente formation P 119
- Puerco formation P 119
- Puerto Rico
base maps p. 257
beach sands B 1042-1
- copper I-326
- floods C 451
- gazetteer B 183
- gypsum and anhydrite, bib-
liography B 1105
- iron B 1082-C; 1-326
- mineral resources MRUS 1898
- phosphorites, petrography P 317-C
- shoreline features P 317-B
- Tertiary geology, coastal
plains OM-85

Puerto Rico--Continued
 water resources W 32
 quality, public supplies W 1460-A
 Pulp-mill pollution, prevention W 121, 226
 Pumice, Oregon, Klamath Indian
 Reservation C 128
 Pumping systems W 1, 14, 71, 320
 Puyallup River basin, Wash.,
 floods W 968-B
 Pyrite B 186
 Alaska, Latouche Island B 1024-E
 annual resource data, 1883-1923, see
 MRUS, p. 99-131.
 bibliography, United States C 157
 Georgia, Dahlonega district B 213-b
 New York, Adirondacks B 260-o
 South Carolina, Haile and
 Brewer mines B 725-F
 Pyrophyllite B 1019-N
 bibliography B 167
 constitution B 167
 Quartz
 annual resource data, 1896-1923, see
 MRUS, p. 104-131.
 Arkansas, western B 973-E
 Maine, New York B 315-L
 primary, in basalt B 66
 Virginia, North Carolina B 1072-D
 Quaternary fossils
 Atlantic Ocean B 24
 California P 47
 Great Basin B 11
 Okinawa P 339
 See also Paleontology.
 Quaternary geology
 Alaska
 Broad Pass region B 608
 Nabesna-White River dis-
 trict B 417
 Nenana River valley and
 Alaska Range P 293-A
 California, Mono Valley A 8 I b
 Colorado, San Juan Mountains P 166
 Georgia OM-72
 Iowa A 11 I b; P 161
 Minnesota, adjacent States P 161
 Montana-North Dakota, Smoke
 Creek-Medicine Lake-
 Grenora area B 1073
 Texas, Rio Grande region B 837
 Utah, Boulder Mountain B 1061-D
 Wisconsin, southeastern P 106
 See also Glacial geology.
 Quaternary lakes, Great Basin A 2 c, 3 d;
 B 11, 540-N;
 M 1, 11; P 257-A
 Quicksilver, See Mercury.
 Radioactive deposits
 Alabama, Chattanooga shale B 1087-E
 Alaska C 196, 202,
 248
 Cache Creek area, Yentna
 district B 1024-A
 Cook Inlet region C 207
 Eagle-Nation area C 316
 east-central C 335
 eastern C 348

Radioactive deposits--Continued
 Alaska--Continued
 eastern interior C 331
 Manley Hot Springs-
 Rampart district C 317
 northeastern C 185, 195
 Ruby-Poortman, Nixon Fork
 districts C 279
 Seward Peninsula B 1024-C;
 C 214, 244, 250,
 265, 300, 319
 south-central C 184
 southeastern B 1024-B,
 1058-A
 Yukon-Kuskokwim region C 255, 328
 Arizona
 Carrizo Mountains area C 111
 Gila County B 1046-P
 C 137
 Monument Valley B 1030-C,
 1107-C
 California C C 313
 Kern River uranium area B 1087-F
 Colorado B 936-P,
 1009-J, 1046-N;
 C 186, 215, 219;
 I-309; P 90-A
 Alma district C 294
 Bitter Creek, zoning B 1042-F
 Caribou area B 1030-N
 carnotite region B 750-D
 Central City district B 1032-A, F;
 C 186
 Clear Creek County C 345
 Copper King mine,
 Larimer County B 1032-D
 Front Range mineral belt B 1032-E
 Garo, Park County B 1087-A
 Golden Gate Canyon B 1030-G;
 C 320
 Lawson-Dumont district,
 Jo Reynolds area C 213
 metal-mining districts B 1046-O;
 C 215
 northern MF-130
 Pierre shale B 1046-L
 Powderhorn district B 1027-O
 Ralston Creek area C 320
 Rifle Creek area B 1101
 Rio Blanco County B 315-C
 Routt County, western B 340-D
 St. Kevin district C 321
 San Juan Mountains B 1046-O;
 C 236
 southwestern Map 3-226
 (p. 226)
 Uravan mineral belt B 988-A;
 MF-169
 western B 262
 Wet Mountains B 1072-H;
 C 290
 Colorado Plateau B 1074-D;
 MF-16, 54
 age determination C 271
 exploration and prospec-
 ting B 988-B,
 1009-J
 botanical B 1030-M,

Radioactive deposits--Continued

Colorado Plateau--Continued
 exploration and prospecting
 botanical--Continued

geophysical B 1085-A, B, C
 study of stream gravel B 1083-B
 mineralogy B 1030-E
 • B 1009-B,
 1074-A; P 320
 Morrison formation B 1112-B
 reserve estimates B 1030-D

Cordilleran foreland, cen-
 tral B 1087-I;
 MF-120
 Florida, Marion County B 1046-J
 foreign deposits MRUS 1923 I
 Georgia B 1087-E
 Great Plains B 1030-H
 Idaho B 1074-B;
 C 219;
 MRUS 1909 II
 east-central B 988-H
 Fall Creek area B 1055-I; C212
 Goose Creek district B 1055-H
 northern B 430-D
 Red River valley B 1046-C

Kansas
 northwestern MF-129
 Pierre Shale B 1046-L
 oil fields, southeastern B 988-E
 Michigan, Palmer area B 1030-F
 Montana I-311;
 Map C-33
 eastern MF-126
 Ekakala lignite field B 1055-F
 Jefferson County B 988-F, G;
 C 277
 southwestern B 988-H
 Townsend and Helena
 Valleys B 1046-G
 western B 1074-B;
 C 251

Nebraska
 Pierre shale B 1046-R
 western MF-129

Nevada B 1009-C
 carbonaceous rocks C 313
 Coaldale C 291
 East Walker River area B 988-C
 Goose Creek district B 1055-H
 Majuba Hill B 1046-I
 Virgin Valley opal district C 142

New Jersey, Scrub Oaks mine,
 Morris County B 1082-B

New Mexico B 1009-L;
 C 219, 354
 Black Hawk district B 1009-K
 Carrizo Mountain area C 111
 Coyote district B 1030-L;
 C 334
 Grants area C 264
 La Ventana Mesa area B 1009-M,
 1055-J

White Signal district,
 Merry Widow claim C 18

New York, Phillips mine-
 Camp Smith area B 1074-E

North Dakota Map C-33

Radioactive deposits--Continued

North Dakota--Continued

Bowman County B 1055-C
 southwestern B 1055-E
 western MF-125

Oregon, carbonaceous rocks C 313

Pennsylvania, Carbon County B 580-H;
 C 350

Rocky Mountains B 1030-H

South Dakota Map C-33
 Black Hills B 1046-A;
 C 351

Cedar Canyon, Slim Buttes B 1009-I
 Edgemont mining district MF-39
 Fall River County B 1009-G; C 175

Harding and Perkins
 Counties B 1009-I,
 1055-C, D
 C 286

Lawrence County B 1063-A
 Long Mountain B 1055-B
 northwestern B 1046-R
 Pierre shale MF-128
 western C 359
 White River badlands B 1087-E

Tennessee B 1030-A;
 C 220; 1-299;
 MR-2; P 300

United States B 1019-F, 1059

bibliographies
 southeastern. See Monazite.
 western B 1046-E,
 1070-C

Utah B 936-P, 1009-J,
 1046-N; C 219
 carnotite region B 750-D
 Cedar Mountain area B 1087-B
 Circle Cliffs B 1085-C
 Clay Hills area B 1087-H
 Goose Creek district B 1055-H
 Green River district B 530-c,
 1087-C
 B 1087-C

Henry Mountains district
 Kane County, Bulloch
 claims C 239

Monument Valley B 1087-D
 northeastern MF-130

Piute County, East slope
 No. 2 prospect C 322

San Rafael district B 1046-D
 C 336

Seven Mile Canyon area
 southeastern B 260-e;
 Map 3-226
 C 349

southern C 349

White Canyon area B 1009-H,
 1046-H,
 1085-B; C 217

Yellow Canary deposits C 312

Washington B 1074-B

Wyoming B 1046-N;
 C 219; MF-127
 C 352; MF-83

Gas Hills area B 1030-K; C 358
 Mayoworth region B 1074-F; C 278
 Miller (Hill) area C 344
 Poison Basin area C 176, 338
 Pumpkin Buttes area B 1030-I,
 1055-G

Red Desert area B 1046-M

Saratoga area B 1046-M

- Radioactive deposits--Continued
 Wyoming--Continued
 Silver Cliff mine, Lusk B 1009-A
 See also Carnotite; Monazite; Radium;
 Thorium; Uranium.
 Radioactive wastes, disposal B 1088; P 386-A
 Radioactivity surveys, See under particular
 States; see also Geophysical
 investigations.
 Radium, annual resource data, 1913-1923, see
 MRUS, p. 118-131.
 Radon, in mountain streams B 1052-E
 Raft River basin, Idaho-Utah,
 water resources W 1587
 Rainfall
 distribution and catchment
 areas W 234
 relation to runoff W 80, 772
 See also Droughts; Precipitation.
 Rare earths
 bibliography, United States B 1019-F
 California, Mountain Pass dis-
 trict P 261
 Colorado, Powderhorn dis-
 trict B 1027-O
 fractional precipitation with
 phosphoric acid B 1036-N
 New Jersey, Scrub Oaks
 mine B 1082-B
 New York, Mineville B 1046-B
 Texas, Baringer Hill B 340-D
 Rarer metals B 666-U
 Raritan formation M 9, 18;
 P 264-B
 Red Beds, New Mexico B 794
 Red Mountain formation C 1
 Red River basin, ground water HA-2, 3
 Red River of the North, floods W 1137-B,
 1260-C
 Reefs, Green River formation,
 algae P 154-G
 Reforestation, effect on stream-
 flow, central New
 York W 1602
 Regulations, See particular subjects.
 Remanent magnetization, basalt B 1083-E
 Rensselaer grit A 13 II e
 Reptiles, See under Paleontology.
 Republican River, floods W 796-B
 Republican River valley, geology,
 ground water C 19; W 1360-H
 Reservoir sites
 Alaska, Cordova region C 136
 California, Sierra Nevada C 85
 Colorado
 Arkansas River basin A 13 III d
 San Juan Mountains B 685
 geology W580-A, 597-A
 surveys A 12 II a,
 13 III e
 Reservoirs
 effect on runoff, Cheyenne
 River basin C 223
 for irrigation A 18 IV d
 United States C 23; W1360-A
 use for dissipation of heat C 282
 utility for water-loss studies C 103
 Resin, mineral, Montana B 78
 Resins in Paleozoic plants and
 in coals P 85-E
 Rhode Island
 base map p. 250
 clay, glacial brick A 17 I g
 coal B 541-F, 615
 contour map p. 249
 geographic dictionary B 115
 geologic map index p. 192
 geology B 597
 See geographic listing for specific
 areas.
 greenschists, granites, B 311, 354
 porphyries
 mineral resources, map MR-4
 paleontology, insects B 101
 water, ground
 artesian pressure table, p. 183
 quality W 102, 114, 144
 water levels table, p. 183
 wells W 61, 102, 114
 water, surface
 quality table 1, p. 182
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 381
 water resources
 power P 123
 Providence area W 1499-A
 springs W 102, 114
 See also Eastern States; New England
 States.
 Rice irrigation, Louisiana W 101
 Rio Grande basin
 profile surveys W 44, 421
 sediments W 274
 water quality W 839, 970
 water resources W 358
 See also New Mexico; Texas.
 Ripley formation P 136, 137, 331-A
 Riprap, North and South Dakota,
 map MB-20
 River hydraulics P 282-A-F
 debris transported by
 streams P 86, 105
 189-E
 effects of ice on streamflow W 337
 fluid mechanics W 1369-A
 surges in natural channels W 1369-C
 See also Floods; Gaging stations;
 Stream channels; particular
 rivers and States.
 River surveys W 44, 115, 346-
 350, 366-368,
 376-379, 396,
 417, 419-421
 indexes W 558, 995
 maps p. 257
 See also under particular States.
 Roads, geology A 15 b
 Rochester shale B 292
 Rock
 analyses, U. S. Geological
 Survey B 9, 78, 148,
 168, 228, 419,
 591, 878

Rock--Continued

- cleavage B 239, 241
 decay B 52
 flow and fracture, principles A 16 I f
 pressure, Cleveland gas field B 661-A
 specimens, educational series,
 U. S. Geological
 Survey B 150
 thermal expansion B 78
See also particular formations and
 kinds of rocks.
- Rock bursts in granite quarries,
 Vermont C 13
- Rocky Mountain National Park,
 Colo.
 map p. 254
 peneplains B 730-A
- Rocky Mountains
 coal fields A 22 III j
 Cretaceous formations P 95-C
 floods W 520-G
 mineralogy B 20
 oil shale B 729
 Paleocene deposits, map p. 235
 peneplains B 730-A
 Pleistocene-Recent boundary B 996-A
 runoff W 500-C, 520-A
 soil, pre-Wisconsin P 221-G
 uranium in black shale B 1030-H
- Rogers City limestone OM-38
- Roscoelite, composition B 950
- Rowlandite, composition B 113
- Runoff
 annual, in United States C 52
 New England-New York area HA-7
 relation to rainfall W 80, 772
 Rocky Mountain region W 500-C
See also particular States; river basins;
 Streamflow measurements;
 Water, surface.
- Rutile
 United States, eastern B 580-O
 Virginia B 430-D
- Ryukyu Islands. See Okinawa.
- Saguaro National Monument,
 Ariz., map p. 254
- St. Lawrence River basin, water
 resources. See
 particular States;
 tables, p. 184-187.
- St. Mary River, Mont., water
 supply W 491
- St. Peter sandstone C 249
- Saipan, geology, petrology,
 soils, paleontology P 253, 280
- Salina formation OM-40
- Saline water resources
 Texas W 1365
 United States W 1374
- Salines. See Borax; Potash; Salt.
- Salt
 annual resource data, 1882-1923, see
 MRUS, p. 98-131.
 bibliography B 1019-J
 California B 225-1
 Owens, Searles, Panamint
 basins B 580-L
 Saline Valley B 540-N

Salt--Continued

- Great Basin, Quaternary
 lakes B 540-N
 B 430-I
- Idaho MRUS 1882
- Louisiana B 530-g
- Nevada, Silver Peak Marsh
 New Mexico
 southeastern B 780-B
 Zuni deposits B 260-n
- New York, Watkins Glen dis-
 trict B 260-n
- Texas
 Trans-Pecos B 260-n
 western B 780-B
 United States B 666-F, 669;
 715-M
 See also Salt, annual resource data.
- Utah B 225-1
- Virginia, southwestern B 213-1, 530-e
- Wyoming B 430-I
- Salt domes
 cap rock P 175-D
 Mississippi OM-200
- Texas
 Brooks, Steen, and Grand
 Saline B 736-G
 Palestine and Brenham B 661-G
- Salt-making processes, United
 States A 7 g
- Salt marshes, Nevada B 530-G, 540-N
- Salt-pan basins, uranium deposi-
 tion P 354-G
- Sand. See Black sands; Glass-
 making materials.
- Sand and gravel
 annual resource data, 1904-1923. See
 MRUS, p. 109-131.
- Arkansas B 690-B
- Colorado, map MB-2
- Maryland, eastern B 906-A
- Montana, map MB-6
- Nebraska, map MB-7
- North Dakota, map MB-3
- Pennsylvania, Pittsburgh
 district B 430-F
- South Dakota, map MB-4
- United States B 666-G
 See also Sand and gravel, annual re-
 source data.
- Wyoming, map MB-5
- Sand-lime brick
 Alabama B 315-G
 annual resource data, 1905-1920, see
 MRUS, p. 110-128.
- Sandstones
 Appalachian basin, Paleozoic,
 texture SP
 brine-saturated, pulse-transient
 behavior B 1083-D
 Indiana, western MRUS 1895
 Morrisson formation, elec-
 trical properties B 1052-J
 uranium-bearing B 1009-I,
 1059-C,
 1112-B;
 C 224, 359
- Sandine, luster, in rhyolites B 20
- Santa Fe Route, guidebook B 613

- Saskatchewan Glacier, Alta.,
mode of flow P 351
- Saturday Mountain formation P 294-L
- Saudi Arabia, geographic and
geologic maps. See
geographic listing.
- Scaphopods. See under Paleontology.
- Schistosity B 241
- Scintillation counters B 1052-F;
C 353
- Scorodite, Yellowstone National
Park B 55
- Scotts Bluff National Monument,
Nebr., map p. 254
- Sea level, form and position B 48
- Secondary metals, annual resource data,
1913-1923, see MRUS,
p. 118-131.
- Sediment
- Boise River basin, Idaho W 1048
- Colorado River W 636-B, 998
- discharge
- by streams C 421
- Einstein procedure for
computing W 1593
- aeolian, Matanuska Valley,
Alaska B 1121-C
- marine, calcium carbonate
content, relation
salinity P 186-N
- movement, bibliography W 797
- Niobrara River, Nebr. C 67, 205
- North Atlantic P 196
- organic constituents P 186-D, H,
196-E
- river W 400-C
- transport P 86
- effect of depth of flow W 1498-D
- Middle Loup River, Nebr. W 1476
- Rio Grande C 421; W 274
- type, relation to channel
shape P 352-B
- Whitehead watershed and
reservoir, Nebr. C 406
- Sedimentary materials, grain-
size definitions,
chart p. 235
- Sedimentary rocks
- Black Hills, lithologic
studies P 165-A
- Minnesota, Pigeon Point B 109
- Utah, San Rafael Swell area P 150-D
- Wyoming, Eocene, volcanic-
rich P 274-A
- Sedimentary studies, Virginia,
Shenandoah Valley P 314-F
- Sedimentation
- Alaska, Chamberlain Glacier
area P 414-C
- alluvial channels P 352-B
- Arizona, Papago country B 730-B
- Chesapeake Bay, Choptank
River area P 90-B
- Fivemile Creek, Wyo., ero-
sional history P 352-A
- in ephemeral stream chan-
nels P 352-C
- in small reservoirs, Utah C 256
- Sedimentation--Continued
- Lake Mead P 295
- Little Colorado River W 1110-D
- Moreau River basin, S. Dak. C 270
- Ohio River, flood deposits W 838
- Powder River drainage basin C 170
- Wind River Basin, Wyo. W 1373
- See also particular periods and
formations.
- Selenium
- annual resource data, 1906-1923, see
MRUS, p. 111-131.
- bibliography B 1019-M
- in deep-sea cores, North
Atlantic P 196-F
- in epithermal deposits B 1112-A
- in volcanic rocks, western
U. S., Hawaii B 1084-C
- Selma chalk OM-105
- Sequoia National Park, Calif.,
map p. 254
- Serpentine rocks, chromite and
other mineral de-
posits B 1082-K
- Sewage
- irrigation W 3, 22
- pollution from W 121, 161,
192, 193,
194, 293
- purification W 185, 229
- Shale
- baked P 108-A
- oil in. See Oil shale.
- Pennsylvania B 470-I
- central B 285-L
- Clarion quadrangle and
Cambria County B 315-I
- uranium-bearing, carbon-
aceous B 1059-A;
C 251
- Wyoming, siliceous Mowry
shale, origin P 154-D
- Shasta Route, guidebook B 614
- Shedhorn formation P 313-A
- Shenandoah limestone P 98-B
- Shenandoah National Park, Va.,
map p. 254
- Shenandoah River, entrenched
meanders, North
Fork P 354-A
- Shiloh National Military Park,
Tenn., map p. 254
- Shinarump conglomerate B 1030-C
- Shorelines
- Florida and Georgia,
Pleistocene P 221-F
- Lake Superior basin P 154-A
- Puerto Rico P 317-B
- San Francisco Bay 1-298
- Sierra Nevada
- forests P 8
- geology A 14 II h,
17 I d; P 110,
160
- gold B 213-b, P 73
- hydraulic-mining debris P 86, 105
- lava B 89
- Tertiary gravels P 73

Silica, high-grade, bibliography B 1019-H
 Silica resources, eastern United States B 1072-L
 Silicate minerals, internal structure B 950
 Silicate rocks
 analysis B 305, 422, 700, 980, 1036-C; C 165
 composition B 1113
 determination of sodium and potassium B 992
 Silicates
 action of ammonium chloride B 113, 207
 action of silver nitrate and thallous nitrate B 262
 alkaline reaction B 167
 alkalinity B 9; P 185-A
 base exchange in ground water W 520-D
 benzyl P 113
 chemical structure B 60
 constitution B 78, 125, 588
 gelatinization B 950
 internal structure B 950
 solubility in water B 167
 Sillimanite
 bibliography B 1019-N
 United States, southeastern P 336
 Silurian formations
 Appalachian Basin OM-00
 Michigan OC-33; OM-40
 New York B 899-B
 See also names of formations.
 Silurian fossils
 Alaska P 233-C
 New York B 292
 United States, western B 1021-F
 See also Paleontology.
 Silver-
 Alaska B 783-C, D
 annual resource data, 1882-1923, see MRUS, p. 98-131.
 Arizona
 Chloride and Kingman regions B 750-B
 dry placers MRUS 1912 I
 Wickenburg region B 735-E
 California
 Darwin district B 580-A
 dry placers MRUS 1912 I
 Ophir A 14 II e
 colloidal B 113
 Colorado
 Aspen district B 750-C, 785-A; M 31
 Carson Camp, Hinsdale County B 470-B
 Creede district B 530-a
 Durango district B 260-b
 Georgetown district B 260-b; P 63
 Idaho Springs district B 285-A
 Lake City region B 260-b, 478
 Ouray district B 260-b; GF-153
 San Juan Mountains B 735-D
 Silverton region B 182, 315-A; GF-120

Silver--Continued
 determination in soils and rocks B 992
 fallacies concerning deposits A 4 d
 B 113
 hydrosol
 Idaho
 Clark Fork district B 944-B
 De Lamar district A 20 III b
 Dome district B 540-E
 Loon Creek and St. Joe-Clearwater regions B 530-a
 Silver City district A 20 III b; GF-104
 B 202
 Kansas, western
 Montana, Phillipsburg quadrangle B 315-A; GF-196; P 78
 Nevada
 Antelope district B 530-a
 Arabia district B 660-H
 Candelaria district B 735-A
 Comstock Lode A 2 e; B 17, 735-C; M 3, 4
 Divide district B 715-K
 dry placers MRUS 1912 I
 Eureka district A 3 e, 4 c; M 7, 20
 Hornsilver district B 380-A
 Osceola district B 340-A
 Ramsey, Talapoosa, and White Horse districts B 470-B
 Round Mountain B 380-A, 725-I
 Tonopah district B 213-b, 219, 225-b, 260-b; P 42, 104
 New Mexico B 285-A
 Black Hawk district B 1009-K
 dry placers MRUS 1912 I
 Pinos Altos B 470-B
 Ontario, Cobalt region, genesis B 735-E
 quantitative determination of regulations, mining on public lands R
 United States B 260-b, 340-A, 394
 See also Silver, annual resource data.
 Utah
 Annie Laurie mine B 285-A
 La Sal Mountains B 530-a
 See also Gold; Mining districts.
 Sinter, siliceous, formation A 9 d
 Skagit River basin, Wash., floods W 1527
 Slag formed by burning coal beds P 108-A
 Slate
 annual resource data, 1905-1923, see MRUS, p. 110-131.
 Arkansas B 225-i, 430-F
 California and Utah B 225-i
 Maine B 285-M
 New York and Vermont A 19 III b
 Pennsylvania-West Virginia B 213-i
 United States B 275, 586
 See also Slate, annual resource data.

Slaty cleavage B 241
 Smoke prevention B 334, 373
 Snake River basin,
 profile surveys W 347
 springs W 1463
 water resources W 370, 657
See also particular States;
 tables, p. 184-187.
 Soapstone
 annual resource data, 1889-1923, see
 MRUS, p. 101-131.
 United States B 666-I
 Sodium
 determination in silicate rocks B 992
 regulations, mining on public
 lands R
 Sodium carbonate brine,
 Wyoming C 235
 Sodium compounds B 60
 annual resource data, 1882-1923, see
 MRUS, p. 93-131.
 Wyoming B 430-I
 Sodium sulfate
 California, Carrizo Plain B 380-L,
 540-N
 sources and uses B 717
 Soils
 Maryland, southern Coastal
 Plain P 267-B
 minerals P 205-B
 origin and nature A 12 I b
 "Palouse soil," Washington B 790-B
 Paraguay P 327
 pre-Wisconsin, Rocky Moun-
 tains P 221-G
 Saipan P 280-D
 Solids
 chemical action between B 64
 diffusion P 95-G
 flow B 55, 64
 viscosity B 73, 94
 Sonic depth sounder C 450
 Sonyea formation OC-54
 South Africa, Union of, gold MRUS 1896
 South America, continental shelf,
 geology, mineral
 resources B 1067
 South Carolina
 base map p. 250
 Carolina bays P 254-I
 deep wells
 Atlantic Coast P 186-I
 Charleston P 90-H
 earthquake, Charleston A 9 b
 flood W 96
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for
 specific areas.
 leveling B 441, 890
 mica P 248-E
 monazite B 340-D
 paleontology
 Exogyra P 81
 paleobotany, Cretaceous,
 Eocene P 84
 phosphate B 580-J, 1079;
 MRUS 1882

South Carolina--Continued
 spodumene B 936-J
 pyrite B 725-F
 radioactivity surveys GP-123, 306
 stratigraphy, Tertiary P 243-B
 tin. See Tin.
 topaz B 936-C
 traverse B 709-N
 water, ground A 14 II b;
 B 32; GF-147,
 222; W 114
 table, p. 183
 B 138, 298,
 867; P 90-H,
 186-I; W 149
 P 90-H; W 258,
 364
 table, p. 183
 quality
 water levels W 236;
 water, surface table 1, p. 182
 quality W 44, 115
 river surveys and profiles tables, p. 184-
 streamflow records 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 382
 See also Appalachian region; Atlantic
 Coastal Plain; Piedmont;
 Southeastern States;
 Southern States.
 South-central States, salt B 715-M
 South Dakota
 autunite C 286
 base map p. 250
 bentonite MF-36
 beryl B 1072-I;
 P 297-A
 coal. See Coal; Lignite.
 construction materials MB-12, 20
 floods W 147, 162,
 1137-A
 forests A 19 V b
 geologic map p. 191
 geologic map index p. 192
 geology W 227
 See geographic listing for specific
 areas.
 glacial geology, moraines B 158
 gold B 225-b; C 351
 irrigation A 18 IVc; C 54
 laccoliths, Black Hills A 12 III b
 land-classification map p. 257
 leveling B 472, 643
 lignite. See Lignite.
 mica B 380-N
 mineral resources
 Black Hills, northern B 225-b; P 26
 Homestake ore body B 765
 maps MB-12, 13
 See also specific mineral com-
 modities; Mining districts.
 paleontology
 Foraminifera P 254-E
 ostracodes P 243-A
 paleobotany
 Cretaceous A 19 II e
 Lance formation P 185-F

- South Dakota--Continued
 paleontology--Continued
 titanotheres M 55
 pegmatites. *See* Pegmatites.
 Quaternary geology P 161, 262
 radioactive deposits. *See* Radioactive deposits.
 sand and gravel MB-4
 sedimentation, Moreau River basin C 270
 stratigraphy
 Cretaceous, Jurassic, Black Hills A 19 II e; B 1081-B; MF-218; P 165-A OC-40
 Paleozoic structural geology
 Black Hills OM-191
 Williston basin area B 380-D
 tantalum B 380-D
 tectonic map showing uranium MF-128
 tin B 380-D, 922-T
 traverse B 644-E
 tungsten B 380-D
 uranium, relation to calcium carbonate element B 1046-A
 See also Radioactive deposits.
 water, ground W 227
 Angostura irrigation project, quality C 54
 artesian A 1711 g; W 34, 90, 428
 artesian pressure table, p. 183
 Crow Creek-Sand Lake area W 1425
 Dakota sandstone, Canton district W 597-C
 Grand River valley, quality W 1298
 Jewel Cave National Monument W 1475-D
 Niobrara River, Ponca Creek basins, quality W 1460-G
 quality C 54
 water levels table, p. 183
 wells A 18 IV c; W 149
 water, surface
 Cheyenne River basin, stock-water reservoirs, sediment W 1531
 Moreau River basin, quality C 270
 quality W 274; table 1, p. 182
 for irrigation table 7, p. 187
 river profiles; power W 44
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 385, 386
 water resources
 Aberdeen-Redfield district GF-165
- South Dakota--Continued
 water resources--Continued
 Belle Fourche district GF-164
 Black Hills A 21 IV b; P 65; W 428
 James River valley W 90
 Newell district GF-209
 Rapid Valley unit C 201
 southeastern W 34
 See also Great Plains.
 South Platte River valley geology, ground water underflow W 1378
 W 184
 Southeastern States
 Cretaceous, correlation P 140-F
 floras, Eocene P 91, 156
 Foraminifera, Eocene P 181
 granite B 426
 kyanite, sillimanite, andalusite P 336
 monazite B 1042-L; C 237
 river basins, water use, 1960 C 449
 zirconium and hafnium B 1082-A
 Southern California batholith, comparison with Idaho batholith B 1070-A
 Southern Pacific Lines, guide-book B 845
 Southern States
 clay B 901
 salt, Permian B 715-M
 springs, thermal W 145
 Southwestern States
 coal A 22 III i
 pedestal rocks B 760-A
 Spain
 manganese MRUS 1887
 potash B 715-A
 Spectrochemical analysis, rocks, minerals, ores B 1084-G, H, I
 Spectrographic analysis
 natural water W 1540-A, B
 Pierre shale P 391-B
 Spectrographic identification, mineral grains C 234
 Spectrographic methods
 determination hafnium-zirconium ratio in zircon B 1036-F
 microphotometric scanning B 1036-E
 Spectrophotometric determination, lead in igneous rocks B 1084-F
 Spirit leveling. *See* Leveling under particular States.
 Split Rock formation B 1121-I
 Spodumene, North and South Carolina B 936-J; C 309
 Spokane River basin, Wash., profile surveys W 377
 Spotted Ridge formation P 274-I
 Springs
 Arkansas, Ozark region W 145
 California W 278, 338
 Colorado GF-203; W 240
 Idaho, Snake River valley W 1463
 mineral
 Alaska W 418

- Springs--Continued
 mineral--Continued
 lists and analyses A 14 II b; B 32
 Maine W 258
 Missouri, Ozark region W 145
 Ohio, in glacial terrane W 1619-A
 protection W 255
 thermal
 formations from A 9 d
 Georgia W 819
 United States W 679-B
 southern W 145
 value B 260
 United States B 32; W 557, 836-D
 eastern W 102, 114, 819
 zinc-bearing, Missouri B 113
 Stadia, tables AP
 Stanley shale P 186-C
 State coordinates and polyconic maps C 57
 Steam boilers, significance of drafts B 367
 Steel
 annual resource data, 1883-1923, see MRUS, p. 99-131.
 oxide films on B 27
 relation electrical resistance and density B 27
 See also Iron.
 Steel industry, 1885 B 25
 Stereoplotting instrument, Twin-plex C 82
 Stillwater Complex, Montana B 922-N, 1015-D, 1071-H; P 358
 Stone
 annual resource data, 1889-1923, see MRUS, p. 101-131.
 Illinois, Chicago area B 213-i
 Minnesota, structural and ornamental B 663
 Montana, ornamental C 4
 road-building, Massachusetts and other regions A 16 II c
 See also Construction materials.
 Strategic minerals investigations. See particular minerals.
 Stratigraphy, determination depth and thickness strata, projection dip P 120-G, 129-C
 See also names of formations, ages; Stratigraphy under particular States.
 Strawboard waste, disposal W 113, 189
 Stream channels
 bed configuration, measurement by electronic device C 450
 braided, meandering, straight P 282-B, E
 depth-discharge relations W 1498-C
 hydraulic geometry, physiography P 252
 natural channel, Brandywine Creek, Pa. P 271
 pedestal rocks B 760-D
 prismatic, stage-fall-discharge relations W 1164
 Streamflow, under ice W 187; 337
 Streamflow measurement
 accuracy W 95, 400-D
 maximum at gaging stations W 847
 methods and equipment C 17; W 56, 94, 345-E, 371, 375-E, F, 868, 888
 relation to hydraulics W 375-C
 runoff, annual in United States C 52
 silt-laden streams W 400-C
 See also tables, p. 184-187.
 Streams, large, in United States C 44
 Stromatolites. See under Paleontology.
 Strontianite, California, Barstow region B 660-I
 Strontium
 annual resource data, 1882, 1886, 1901, 1906-1923, see MRUS, p. 98, 100, 107, 111-131.
 in natural water, occurrence and determination C 420; W 1496-A, B
 United States B 666-W
 Structural geology
 determination depth and thickness strata, projection dip P 120-G, 129-C
 nonparallel folds P 344-E
 oil and gas fields C 419
 rock flow and fracture A 16 I f
 Structural materials. See Construction materials.
 Structural-materials testing laboratories, St. Louis, Mo. B 329
 Submarine geology, Alaska, Amchitka Island B 1028-P
 Subsidence, fine solid particles in liquids B 60
 Sulfide ores, enrichment B 529, 625
 Sulfite pulp waste, stream pollution W 226
 Sulfur
 Alaska B 692-E
 annual resource data, 1882-1923, see MRUS, p. 98-131.
 bibliography, United States C 157
 Colorado, Mineral County B 530-h
 Idaho, Soda Springs region B 470-J
 Nevada, Rabbit Hole mines B 225-m
 regulations, mining on public lands R
 Texas, El Paso County B 260-o
 United States B 666-B
 See also Sulfur, annual resource data.
 Utah
 Cove Creek beds B 315-Q
 San Rafael Canyon B 530-h
 Wyoming
 Cody B 340-L
 Park County B 540-R
 Sunlight Basin B 530-h
 Thermopolis region B 380-M
 Sulfur species, chemical relationships with dissolved ferrous iron W 1459-C

- Sulfuric acid, annual resource data,
1911-1917, 1920, see
MRUS, p. 116-124, 127-128.
- Sulphantimonites, Colorado B 60
- Sundance formation P 243-A
- Surface waters. See Water, surtace; see also
particular States.
- Susquehanna River basin
hydrography W 109
physiography, quality of
water W 108
water resources. See particular States;
tables, p. 184-187.
- Swamps
Dismal Swamp, Virginia-North
Carolina A 101 b;
B 711-C
fresh-water, United States A 101 b
seacoast, eastern United
States A 6 e
- Sylvania formation OM-28
- Sylvania Guyot, *Globigerina* ooze P 260-W
- Synclines. See Anticlines and synclines.
- Taconic Range, physiography B 272
- Talc
annual resource data, 1882-1923, see
MRUS, p. 98-131
- New York, Gouverneur district Map 3-163
(p. 226)
- North Carolina B 213-o;
GF-143
- United States B 666-1
See also Talc, annual resource data.
- Vermont C 95
- Barnes Hill prospect MF-7
- Rousseau prospect MF-8
- Sterling Pond area MF-11
- Tantalum
annual resource data, 1904, 1905, 1907,
1909-1912, 1918-1923, see
MRUS, p. 109-118, 124-131.
- bibliography B 1029-A
- South Dakota B 380-D
- Tar MRUS 1907 II,
1908 II, 1912 II
- Taylor marl P 186-G
- Teapot dome P 163
- Tectonic maps. See under particular States.
- Tectonic pattern, Central Cordilleran
Foreland B 1087-1
- Tejon formation B 268
- Tellurium, annual resource data, 1882,
1908, 1913-1923, see MRUS,
p. 98, 113, 118-131.
- Tellurium minerals, Colorado B 262
- Temperatures. See also Earth temperature.
high, igneous fusion and ebulli-
tion B 103
- thermoelectric measure-
ment B 54
- Tennessee
base map p. 250
- cement resources B 285-I
- chert, manganiferous and
ferruginous B 928-D
- clay B 213-k,
285-L
- coal. See Coal.
- Tennessee--Continued
cobalt, in manganese de-
posits B 940-J
floods W 1227-A
geologic map p. 191
geologic map index p. 192
geology. See geographic listing for
specific areas.
iron. See Iron; Magnetite.
leveling B 441, 519
manganese B 737, 928-D,
940-J
B 213-I
B 113
- marble
meteorite
mine-water problems, zinc
district C 71
- mineral resources, Ducktown
district B 470-C;
P 139, 179
- See also specific mineral
commodities.
- paleontology
gastropods P 331-A
paleobotany
Cretaceous P 112
Wilcox flora P 156
Ripley formation P 136, 137
- phosphate. See Phosphate.
physiography, Chattanooga dis-
trict A 19 II a
- stratigraphy
Chattanooga shale and re-
lated rocks B 1087-E;
P 357
- Mascot-Jefferson City zinc
district P 277
- Ordovician, Tellico-
Sevier belt P 274-F
- sulfuric-acid manufacture,
Ducktown MRUS 1911 II
- triangulation and traverse B 644-H,
709-H
- uranium, Chattanooga shale
water, ground B 1087-E
- artesian pressure table, p. 183
Memphis area C 33, 408;
W 638-A
W 640
- north-central
quality W 364, 656
south-central W 677
- water levels table, p. 183
wells W 102, 114,
149
- western W 164, 656
- water, surface
power W 44, 115
quality W 236;
table, p. 182
- river surveys and pro-
files W 44, 115
- streamflow records tables, p. 184-
187
- compilation
daily, by years table 6
index tables 4 and 5
C 383, 387
- water resources
springs B 32; W 114
B 225-e;
zinc C 71; P 277

Tennessee--Continued

See also Appalachian region; Southern States.

Tennessee River basin

base, hydraulic, and mineral
resources maps p. 214
river profiles W 44
surface-water records, index C 383
water resources, See particular
States; tables, p. 184-187.

Tensleep sandstone OM-182

Terrace deposits, Wyoming and
Montana, Big Horn

Basin OM-71

Tertiary formations

Alabama B 43; OM-45

Alaska B 917-D;
P 182

Arizona, Grand Canyon National

Park M 2

California OC-6, 34; P 73

Colorado P 134, 332

Florida B 1092

Georgia OM-72

Gulf Coastal Plain B 43; OC-29

Mexico P 264-H

Montana B 531-G

New Mexico OC-24; P 134

North America, correlation A 18 II c

South Carolina P 243-B

Utah P 332

Washington OC-57

Wyoming B 1121-I;

OC-22, 27,
56

See also Eocene formations; Miocene
formations; Oligocene for-
mations; Paleocene forma-
tions; Pliocene formations;
names of formations.

Tertiary fossils

Alaska P 182

Animas formation P 134

Atlantic Coastal Plain B 676; P 175-A

California P 47

Canal Zone P 244, 306-A, B

Colorado B 93; M 40;

P 131-G, 134

Fiji P 374-A

North America B 152; M 40

western B 18, 34

Okinawa P 314-A, 339

Oregon P 59; 233-E

Philippine Islands A 21 III f

United States B 361; M 21,

39, 40

Utah B 93

Virgin Islands P 210-A

See also Eocene fossils; Miocene
fossils; Oligocene fossils;
Paleocene fossils, Paleontology;
Pliocene fossils.

Tertiary geology

Colorado, Piceance Creek
basin B 1082-L

Idaho, Utah, Nevada

Goose Creek district B 1055-H

Puerto Rico, coastal plains OM-85

Tertiary geology--Continued

Texas, Rio Grande region B 837

Tertiary topography, Pacific
Coast

A 14 II g

Test wells

Alaska, Naval Petroleum Re-
serve No. 4

P 305-A-K

Colorado OM-116

Mississippi B 1072-A;

OM-200

Montana OM-130, 170

Nebraska OM-198

New Mexico OM-159, 207

Wyoming OM-19, 107,

175; p. 213

Texas

aeroradioactivity maps. See geographic
listing for specific areas; see
also map listing, p. 236-244.

asphalt MRUS 1896

base map p. 250

boundary, northwest B 194

clay B 470-G

coal B 164, 691-I

construction materials B 340-H,

430-F

contour map p. 249

dam, Austin W 40

evaporation studies, Lake
Colorado City P 272-B

floods C 32, 99, W 162,

488, 796-G,

816, 914, 1046,

1227-B,

1260-A, 1320-C

B 987

fluorsoar

gas. See Gas.

gazetteer B 190, 224

streams W 448

geologic map p. 191

geologic map index p. 192

geology B 45

See geographic listing for
specific areas.

gypsum B 223, 260-n

Horseshoe atoll OC-53;

P 315-A, B

igneous rocks, San Carlos

coal field B 164

iron. See Iron.

irrigation W 13, 71

leveling B 468, 637,

883

mercury B 405; P 312

mineral resources

Llano-Burnet region B 450

Shafter mining district B 928-B

See also specific mineral

commodities.

mineralogy of drill cores,

potash field B 833

oil. See Oil.

paleontology

conodonts P 243-F,

294-J

Eagle Ford shale P 274-C

Fusulinidae P 315-C

Gryphaeas B 151

Texas--Continued

paleontology--Continued

- Malone formation B 266
 Mississippian P 146
 mollusks P 131-D,
 210-E, 243-E
 ostracodes P 221-C, 264-A
 paleobotany, Eocene P 125-A, 132-E,
 193-E

Paleozoic types, Ferdinand

- Roemer's P 186-M
 Permian B 77
 rudistid, Kemp clay P 193-A
 Woodbine formation P 129-G, 242,
 243-E

physiographic provinces and

sections, Panhandle

- potash B 730-D
 B 780, 833
 Precambrian geology B 430-E, 450
 rare-earth minerals B 340-D
 salt B 260-n, 780-B
 salt domes B 661-G, 736-G
 Scurry Reef OM-143

stratigraphy

- Austin, Taylor, equivalent
 formations P 186-G
 "Bend series" P 129-A
 Cambrian P 186-L
 Cretaceous A 21 VII; OC-3,
 8, 23; OM-98;
 P 154-F

Horseshoe Atoll

- OC-53;
 P 315-A, B
 Mississippian P 129-A, 146
 Pennsylvanian B 1096-A;
 P 129-A, 315
 Permian B 77, 1081-G,
 1096-A; OM-80;
 P 315

pre-Pennsylvanian rocks

- Reklaw age of ferruginous
 conglomerate P 243-C
 Wichita group B 1081-G
 Woodbine formation OM-98

structural geology, Denison

- area B 736-A
 sulfur B 260-o

Tertiary and Quaternary

- geology B 837
 tin B 178, 213-c,
 285-C

triangulation and traverse

- B 644-P,
 709-O, Q
 volcanic rocks, water-laid P 154-F

water, ground

- Arkansas, White, and Red
 River basins HA-2, 3
 artesian A 11 II c;
 W 190, 276, 335,
 849-A
 artesian pressure W 773-B,D;
 table, p. 183
 Atascosa County W 676, 1079-C
 Balmorhea area W 849-C
 Big Spring area W 913
 Black and Grand Prairies A 21 VII
 Coastal Plain W 190, 335
 Comal County W 1138

Texas--Continued

water, ground--Continued

- Duval County W 776
 Edwards Plateau A 18 II b
 El Paso area W 141, 919
 Frio County W 676
 Galveston County W 1416
 Gregg County W 1079-B
 Harris County, relation of
 salt water W 1360-F
 High Plains W 889-F
 Houston district W 889-C, D
 Hueco Bolson W 1426
 Kieberg County W 773-D
 LaSalle and McMullen
 Counties W 375-G
 Liberty County W 1079-A
 Lufkin area W 849-A
 Medina County W 678, 1422
 Mineral Wells area C 6
 northeastern W 276
 quality W 141, 163, 276,
 335, 364, 375-G,
 839, 1138

San Antonio area, Edwards

- limestone W 773-B
 Somervell County W 660
 Uvalde County W 678
 water levels table, p. 183
 Webb County W 778
 wells A 11 II c; W 149,
 190, 282, 298,
 364, 375-G,
 889-D

Wichita region

- W 317
 Winter Garden district W 1481

water, surface

- Comal County, quality W 1138
 gazetteer W 448
 Pecos River, quality W 596-D
 power W 44, 105
 quality, for irrigation table 7, p. 187
 river profiles W 44
 streamflow tables, p. 184-
 187

compilation

- table 6
 daily, by years tables 4 and 5
 index C 387, 388

water resources

- eastern W 1047
 Panhandle W 154, 191
 public supplies W 1069, 1070,
 1106
 quality W 236, 274,
 375-G, 839
 Rio Grande basin A 18 II b;
 W 141, 274,
 358, 839
 saline W 1365
 San Antonio area A 18 II b;
 W 773-B
 springs B 32; W 154,
 190, 191, 557
 W 889-D

well drilling, exploratory

- See also Texas, irrigation.
See also Gulf Coastal Plain; Southern
 States.

- Thailand
 mineral deposits B 984
 water resources, Khorat Plateau W 1429
 Thalenite, formula B 262
 Thermal expansion, rocks B 78
 Thermal springs. See Springs.
 Thinolite, Lake Lahontan B 12
 Thoria, isomorphism B 113
 Thorium MRUS 1916 II, 1919 II
 Alaska C 202, 248
 bibliography B 1019-F, 1107-A
 Colorado
 Powderhorn district B 1027-O
 Wet Mountains B 1072-H; C 290
 geology, contributions for United Nations conference, 1955 P 300
 Idaho, east-central B 988-H
 isomorphism, composition B 90
 methods of analysis B 1006
 mineralogy B 1064
 minerals
 glossary B 1009-F; C 74, 194
 X-ray powder data B 1036-G
 Montana, southwestern B 988-H
 United States B 1019-F; P 300
- Tin
 Alaska B 213-c, 259, 520-B, 622-B
 Birch Creek district B 442-F
 Manley Hot Springs district B 1058-I
 Ruby district B 692-F
 Seward Peninsula B 225-c, 229, 284, 345-E, 358, 692-G, 733; MRUS 1900
 annual resource data, 1882-1923, see MRUS, p. 98-131.
 Appalachian region B 293
 California, San Diego County B 620-P
 Georgia, Dahlonega mines B 293
 Mexico B 935-C
 Durango B 962-D
 Guadalcázar, placers B 960-D
 Nevada
 Lander County B 640-G, 931-L
 Majuba Hill B 931-C
 New Mexico
 Black Range B 922-M
 Taylor Creek B 725-G
 North Carolina B 260-c, 660-D, 936-J; C 309; GF-222; MRUS 1903
 South Carolina B 260-c, 660-D, 936-J; GF-222; MRUS 1903
 South Dakota B 380-D
 Tinton district B 922-T
- Tin--Continued
 Texas
 El Paso B B 178, 213-c
 Franklin Mountains B 285-C
 United States B 666-U
See also Tin, annual resource data.
 Virginia, Irish Creek B 936-K
 Washington, Spokane County B 340-D, 931-H
- Titanium
 annual resource data, 1901, 1907, 1909-1923, see MRUS, p. 107-108, 112-113, 114-131.
 Arkansas B 1015-B
 bibliography B 1019-G; C 87
 estimation B 167
 geochemical association with niobium (columbium) C 225
 Virginia B 430-D
 Nelson and Amherst Counties P 198
See also Magnetite; Rutile.
 Tombigbee River, Tertiary and Cretaceous strata B 43
 Topaz, South Carolina B 936-C
See also Gemstones.
 Topographic instructions AP; B 307, 657, 788; C 92, 164; M 22; p. 188
 Topographic maps, features C 368
See also Index maps.
 Topography
 drainage basins W 968-C
 lakeshores A 5 b
 Pacific coast, Tertiary revolution A 14 II g
 P 119
 Torrejon formation
 Tourmaline
 analysis and composition B 55
 constitution B 167
 Trace elements
 in petroleum and rock
 asphalts P 356-B
 reports, bibliography B 1019-B; C 281
 Transpiration, bibliography W 1539-R
 Traverse, methods B 788-C
See also under United States; particular States.
 Traverse group OC-4, 28
 Travertine, formation A 9 d; P 170-E
 Tree growth, precipitation and W 841
 Trent marl P 143
 Trenton limestone A 8 II a; OC-11
 Triangulation, methods B 788-B
See also under United States; particular States.
 Triassic formations
 Atlantic coast coal field A 22 III b
 Colorado Plateau B 1046-Q, 1074-D
 Connecticut A 7 f, 18 II a, 21 III a
 Connecticut Valley W 110
 Idaho, Montana P 254-H
 Navajo country P 291
 Newark system A 21 III a; B 67, 85

Triassic formations--Continued

Wyoming OC-17; P 98-O
See also names of formations.

Triassic fossils

Alaska P 236-A
 Colorado P 274-H
 Connecticut A 21 III a; M 14
 Idaho P 152
 Massachusetts M 14
 Nevada P 322
 New Jersey M 14
 North America P 40, 83, 141, 167

See also Paleontology.

Triassic system, paleotectonic maps I-300

Trilobites, See under Paleontology.

Tripoli, Missouri, Seneca region B 340-J

Trona deposits, Wyoming C 235

Tscheffkinitite, analyses B 90

Tuffs

ash flow P 366
 uranium-bearing, Nevada C 291
 use as building stone,
 Idaho B 811-E
 Tungsten B 652

Tungsten

Alaska
 Birch Creek district B 442-F
 Fairbanks district B 1024-I
 Hyder district B 1024-F
 annual resource data, 1882-1886, 1900-1902, 1907-1923, see MRUS, p. 98-100, 106-108, 112-131.

Argentina B 954-A

Arizona

Calabasas B 430-D
 Mohave County B 940-I
 Whetstone Mountains, wolframite B 380-D

California

Atolia district B 922-H
 Benton Range B 922-S
 Inyo County B 640-L, 922-Q
 Raymond region B 340-D
 Sierra Nevada B 931-E
 Chile, north-central B 960-C
 Colorado B 583
 Boulder County B 922-F; P. 245; p. 234

Connecticut, Trumbull A 22 II a;

B 213-c

Cuba B 935-D

determination in soils C 119

field tests B 950

geochemical prospecting C 411

gravimetric determination B 950

Idaho

Lemhi County B 528, 931-A
 Stibnite region B 969-F

Mexico

Sierra de Juarez B 946-C
 Sonora B 946-D

Nevada

eastern B 213-c
 Nightingale district B 936-B
 Rose Creek mine B 940-A
 Snake Range B 340-D

Tungsten--Continued

New Mexico, Iron Mountain district B 945-C
 North Carolina and Virginia B 948-A
 South Dakota B 380-D
 United States B 666-U, 725-D

See also, Tungsten, annual resource data.

Utah, Beaver County B 945-D

Washington

Deer Park region B 430-D

Silver Hill B 931-H

Tunnels, Alaska, Sitka region C 147

Turbines, tests and power tables W 180

Turquoise, See Gemstones.

Tuscaloosa River, Tertiary and Cretaceous strata B 43

Twinplex, stereoplotting instrument C 82

Two Medicine formation P 103

Uinta formation OC-52

Uinta Mountains

geomorphology P 185-I

glaciation P 61

Uintaite A 17 I f; MRUS 1896

Umpqua River basin, Oreg., profile surveys W 379

Underflow meter, description W 110

Underground waters, See Water, ground;

see also particular States.

United Nations International Conference on Peaceful Uses of Atomic Energy, uranium and thorium geology papers P 300

United States

altitudes B 5, 72, 76, 160, 274, 689, 817
 areas and boundaries B 13, 171, 174, 226, 302, 689, 817

base maps p. 256

contour map p. 249

elevation, average A 13 II d

floods C 377, 380;

W 96, 147,

162, 771, 799,

836-D, 867,

966, 967, 1066,

1137-I, 1227-D,

1260-F, 1320-E,

1370-C

forests A 19 V a,

20 V a, 21 V a

B 197, 258

geographic names

geographic positions, dictionary B 123

geologic maps P 71; p. 190

geological surveys B 222, 465

geothermal data B 701

glaciers A 5 f

guidebooks

Denver, and Rio Grande

Western Route B 707

Northern Pacific Route B 611

United States--Continued
 guidebooks--Continued
 Overland Route B 612
 Santa Fe Route B 613
 Shasta Route and Coast Line B 614
 Southern Pacific lines B 845
 hydrology, eastern half W 102, 110, 145, 160, 258
 index maps (status of aerial mosaics, aerial photography, geologic and topographic mapping, horizontal and vertical control) p. 256
 leveling A 18 I b, 19 I b, 20 I b, 21 I b; B 185
 See also under particular States.
 lithology, Paleozoic and Mesozoic rocks, index map OM-184
 magnetic declination A 17 I b
 mineral resources B 585, 599, 624, 666
 See also specific commodities.
 mineral waters A 14 II b
 outline maps p. 256
 paleontology
 ammonites P 170-B
 Coleoptera M 21, 40
 corals M 39
 echinoderms B 97; M 54
 echinoids P 254-A, 321
 paleobotany, Mesozoic M 15, 48
 peat B 394, 728
 physical divisions, map p. 257
 power, capacity and production W 579
 reservoir storage, water yield C 409
 reservoirs C 23; W 1360-A
 roads, geology A 15 b
 shaded-relief maps p. 249
 status maps p. 256
 stratigraphy, index P 71
 swamps A 10 I b
 topographic maps, indexes to p. 249
 triangulation, traverse A 18 I b, 19 I b, 20 I b, 21 I b; B 122, 181, 201, 216, 245, 276, 310, 440, 496, 551
 See also particular States.
 water, ground A 14 II a, 16 II e; W 102, 110, 114, 145, 489, 638-C, 836-D
 bibliography W 427, 836-D
 levels, artesian pressures table, p. 183
 temperature, for industrial use W 520-F
 water, surface
 index of records C 381-396
 quality W 236, 274, 364;

United States--Continued
 water, surface--Continued
 quality--Continued tables, p. 182, 187
 river surveys and profiles W 44, 115, 558, 995
 rivers, large C 44
 supply tables, p. 185-187
 water resources
 public lands A 16 II e
 saline W 1374
 springs
 large W 557
 mineral A 14 II b; B 32
 thermal W 145, 679-B
 water use C 114, 115, 398; W 836-D
 waterpower C 200, 329, 367; W 234, 238, 400-A, 579
 See also Eastern States; New England States; Northeastern States; Northwestern States; Southeastern States; Southern States; Southwestern States; Western States.
 U. S. Geological Survey
 geologic time classification B 769
 hydrographic manual W 94
 open-file maps and reports, lists of C 56, 64, 149, 227, 263, 337, 364, 379, 401, 403, 412, 428, 448
 origin, functions A 1, 35; B 227
 photogrammetry, development C 218
 preparation of illustrations for reports AP
 publications, catalogue and index, 1879-1903 B 100, 177, 215
 research, 1961 P 424
 topographic instructions B 788; C 92, 164; p. 188
 trace elements and related reports, bibliography B 1019-B; C 281
 uranium and thorium reports, bibliography B 1107-A
 Unkar terrane, Grand Canyon A 14 II i
 Unkpapa sandstone MF-218
 Uraninite
 analyses B 90
 nitrogen content, composition B 78
 Uranium, For regional papers, see Radioactive deposits.
 age determination C 271
 analytical methods B 1006; C 199
 annual resource data, 1882, 1899-1902, 1907, 1909-1923, see MRUS, p. 98, 106-108, 112-131.
 bibliography B 1019-B, 1059, 1107-A; C 281
 Chattanooga shale B 1087-E

- Uranium--Continued
 deposition in salt-pan basins P 354-G
 determination
 chromatographic method B 1036-L
 fluorimetric methods B 1036-M;
 C 199, 330
 in natural waters B 1036-J
 epigenetic deposits I-299
 geochemistry. See Geochemistry.
 geology B 1009, 1030,
 1046; P 300
 geophysical studies B 1052-A,
 1083-B
 in asphalt-bearing rocks B 1046-E;
 P 356-B
 in bituminous substances B 1059-D
 in black shale B 1030-H,
 1059-F, 1084-D;
 P 356-A, C
 in carbonaceous rocks B 1046-G,
 1055-I, J,
 1059-A; C 212,
 251, 313, 349
 in coal B 1055, 1059-A;
 C 212, 251;
 Map C-33
 in copper deposits B 1030-L;
 C 219, 334
 in igneous and metamorphic
 rocks B 1059-E
 in lignite B 1055-B-F
 in Mesozoic batholiths B 1070-C
 in nickel-cobalt-silver de-
 posits B 1009-M
 in oolitic limestone B 1030-K
 in opal C 142
 in petroleum B 356-B
 in phosphate beds B 988-D, 1009-D,
 1059-B, 1084-D;
 P 314-D
 in placer deposits B 1046-C
 in quartzite C 137
 in rhyolitic tuff C 291
 in sandstone B 1009-I,
 1059-C, 1112-B;
 C 224, 359
 in veins B 1059-G
 in water B 1036-J,
 1087-G
 mineralogy B 1009-B,
 1064, 1074-A,
 1101; P 320
 minerals
 glossary B 1009-F;
 C 74, 194
 X-ray powder data B 1036-G
 origin and precipitation C 224
 prospecting B 988-B, I,
 1009-J, 1030-A;
 SP
 botanical B 1009-M,
 1030-M, 1085-
 A, B, C; C 274
 geophysical B 1083-B
 stream gravel study B 1030-E
 relation to calcium carbonate
 cement B 1046-A
 relation to tectonic pattern B 1087-I;
 MF-125-130
- Uranium--Continued
 stratigraphic, structural
 controls B 1063-A
 B 113
 Uranium dioxide
 Uranophane, Wyoming, Silver
 Cliff mine B 1009-A
 Useful minerals, United States
 B 585, 624;
 MRUS 1882,
 1887
- Utah
 alunite B 511, 620-K,
 886-D
 analcite, Green River forma-
 tion P 158-A
 antimony B 340-D
 asphalt. See Asphalt.
 base map p. 250
 bituminous sandstone B 822-C; OM-86
 botanical prospecting B 1085-B, C
 carnotite B 530-c,
 750-D
 Cenozoic history P 205-D
 coal. See Coal.
 copper. See Copper; Mining districts.
 floods C 457; W 771,
 967-A, 994,
 1260-E, 1320-E
 B 1005, 1069
 fluorspar
 fuel resources, Orderville-
 Glendale area Map C-49
 gas. See Gas.
 gazetteer B 166
 geochemical prospecting B 1015-H
 geologic map index p. 192
 geology. See geographic listing for
 specific areas.
 geomorphology, Uinta Moun-
 tains P 185-I
 geophysical investigations,
 Lisbon Valley area P 316-C
 glacial geology, Uinta and
 Wasatch Mountains P 61
 gold. See Gold; Mining districts.
 graphite B 430-J
 gravity surveys, Wasatch
 Front P 316-E
 gypsum B 225-I, 530-e
 ilsemanite B 750-A
 iron B 225-f, 338;
 MF-14
 laccoliths A 14 II d
 lakes, Pleistocene A 2 c, 3 d; M 1
 lamprophyre dikes P 120-E
 land classification map p. 257
 lead B 470-D
 See also Mining districts.
 leveling B 489, 566,
 912
 B 1046-N
 limonite, radioactive
 manganese. See Manganese.
 marsh gas B 471-A
 meerschau, Green River
 formation P 158-A
 Mesozoic history P 205-D
 mineral resources P 111
 Boulder Dam region B 871
 Castlegate, Wellington,
 Sunnyside quad-
 rangles B 793

Utah--Continued

mineral resources--Continued

- La Sal Mountains B 530-a
 Randolph quadrangle B 923
 Stockton and Fairfield quadrangles P 173
See also specific mineral commodities; Mining districts.
- minerals B 20, 55
 molybdenum B 340-D
 oil, See Oil; Oil shale.
 ozokerite B 285-H, 641-A
 paleontology
 Green River formation P 168
 See also Green River formation.
 insects B 93
 mollusks P 254-B
 Park City formation B 436
 reptilian fauna P 210-C
 pegmatites P 227
 phosphate B 430-H, 690-C; Map 3-198 (p. 226)
 photogeologic maps, See map listing, p. 206-212.
 potash brines B 795-B
 Quaternary geology, Boulder Mountain B 1061-D
 radioactive deposits, See Radioactive deposits.
 radioactivity survey, Myton area GP-127
 salt B 225-1
 sedimentation, small reservoirs C 256
 silver B 285-A, 530-a
 See also Mining districts.
 slate B 225-i
 stratigraphy
 Cretaceous and Tertiary, Book Cliffs P 332
 Green River formation OC-52
 Jurassic P 183
 Kaibab limestone P 150-C
 Mesozoic OC-16
 Paleozoic C 16 OC-16
 Pennsylvanian SP
 Permian and older rocks OC-7
 Phosphoria formation C 211, 306
 southwestern P 129-D
 Uinta formation OC-52
 Wasatch Range C 296
 structural geology
 Basin and Range province P 153
 Farnham anticline B 711-A
 Paradox member, Hermosa formation OM-209
 Salt Valley anticline B 863
 San Juan Canyon area B 751-D
 sulfur B 315-Q, 530-h
 tectonic map showing uranium distribution MF-130
 Tertiary geology, Goose Creek district B 1055-H
 triangulation B 913
 tungsten B 945-D

Utah--Continued

- uintaite (gilsonite) A 171 f
 uranium, See Radioactive deposits.
 vanadium, See Vanadium.
 water, ground
 artesian pressure W 836-C; table, p. 183
 Boxelder County W 333
 Escalante Valley W 659-A
 Iron County W 277, 993
 Jordan River valley W 157, 1029
 Juab and Millard Counties W 277
 Lehi, vicinity W 836-C
 mining, water rights C 347
 Ogden Valley W 796-D
 quality W 217, 277, 333, 364
 Sanpete and Sevier Valleys W 199
 Tooele County W 333
 Utah Lake valley W 157
 water levels table, p. 183
 wells W 61, 149, 157, 217, 277, 364
 water, surface
 chemical composition of streams HA-61
 power W 44, 395, 396, 420, 517, 556, 617, 618
 quality W 274; table, p. 182
 for irrigation table 7, p. 187
 Sevier Lake Basin W 920
 streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 389, 390
 water resources
 Beaver Valley W 217
 Colorado River basin W 395, 556, 617, 618, 636-A, B, 638-D
 Great Salt Lake Basin W 517
 Green River basin C 129; W 618
 Navajo Country W 380
 Raft River basin W 1587
 reservoirs W 1360-A
 San Juan Canyon W 538
 springs B 32; P 80, 153, 164, 188; W 199, 364, 557, 679-B
 use by phreatophytes C 413
 water seepage, northern W 7
 zinc B 690-A
 See also Mining districts.
 See also Colorado Plateau; Great Basin; Western States.
- Vanadium
 annual resource data, 1882, 1899-1902, 1907-1923, see MRUS, p. 98, 106-108, 112-131.
- Arizona B 1107-C
 Colorado B 936-P
 Garo B 1087-A
 Placerville B 530-c

Vanadium--Continued

Colorado--Continued

- Rifle Creek area B 1101
- Rio Blanco County B 315-C
- Routt County B 340-D
- southwestern Map 3-226
(p. 226)
- Uravan district B 1042-F;
MF-169
- western B 262
- Colorado Plateau B 1009-B,
1030-D,
1074-A; MF-54
- foreign deposits MRUS 1923 I
- Idaho, Paris-Bloomington
area MF-41
- mineralogy B 1009-B;
1074-A, 1101

New Mexico, Sierra de los

- Caballos B 530-c
- New York, Lake Sanford B 940-D
- separation from chromium B 950
- tests for B 950
- United States B 167
- Utah B 936-P
- Green River region B 530-c
- southeastern B 260-e;
Map 3-226
- volumetric estimation B 167

See also Carnotite.

Vanderbilt Mansion National Historic

- Site, N. Y., map p. 254
- Varves, Green River epoch P 158-E

Vegetation

- Alaska, Arctic Slope P 302-B
- North America, northwestern,
aid in interpreting
geology B 1061-E

Vermiculite, Montana, Rainy

- Creek district B 805-B

Vermont

- aeromagnetic maps. See geographic list-
ing for specific areas; see also
map listing, p. 236-244,

- base map p. 250
- copper B 225-d
- dolomite B 589
- floods C 155; W 798,
867

- geologic map index p. 192
- geology. See geographic listing for
specific areas.

- gold B 225-b;
MRUS 1894

- granite B 404
- granite quarries, rock bursts C 13
- leveling B 437, 888
- marble B 521, 589
- mineral resources MR-5

See also specific mineral
commodities.

- physiography, Taconic B 272
- slate A 19 III b

structural geology, Green

- Mountain-Taconic
region A 14 II j, 161e;
B 195

- talc C 95;
MF-7, 8, 11

Vermont--Continued

- triangulation B 644-J
- water, ground
 - artesian pressure table, p. 183
 - quality W 102, 114, 144
 - water levels table, p. 183
 - wells W 102, 114, 149
- water, surface
 - gazetteer W 424
 - power W 44
 - quality table table, p. 182
 - river surveys W 44, 424, 995
 - runoff, precipitation HA-7
 - streamflow records tables, p. 184-
187
- compilation table 6
- daily, by years tables 4 and 5
- index C 381, 384

water resources

- Fort Ticonderoga quad-
rangle W 110
- pollution, Lake Champlain W 121
- springs B 32; W 102, 114
- Taconic quadrangle W 110

See also Appalachian region; Eastern States;
New England States.

Vertebrates. See under Paleontology.

- Vicksburg group P 133, 241

Vicksburg National Military Park,

- Miss., map p. 255

Virgin Islands

- Foraminifera P 210-A
- geology and ground water W 1067

Virginia

- arsenic B 470-E
- barite MF-5
- base map p. 250
- cement materials B 225-J, 260-I,
285-I

coal. See Coal.

- copper B 285-B
- deep wells, Atlantic Coast P 186-I
- floods W 800, 1066,
1420

- gas B 1027-L,
1072-K

- gazetteer B 232

- geologic map p. 191

- geologic map index p. 192

- geology. See geographic listing for
specific areas.

- gypsum B 213-I, 223,
530-e

- iron B 285-E, 380-E;
MF-5

- leveling B 434, 562

manganese. See Manganese.

- meanders, intrenched,

Shenandoah River P 354-A

- mica P 248-B, C

mineral resources

- James River-Roanoke
River district B 1008, MF-5

- Richmond region B 483

See also specific mineral commodities.

oil. See Oil.

- paleontology

- Helderberg group P 158-C

- mollusks P 199-A, B

Virginia--Continued

paleontology--Continued

paleobotany

Mesozoic

M 6

Pocono formation and

Price sandstone

P 263

Pleistocene

P 150-F

peat

B 711-C

pegmatites

P 248-B, C

phosphate

B 540-L

quartz crystal deposits

B 1072-D

rutile

B 430-D

salt

B 213-I, 530-e

sediment

Chincoteague Bay, organic

constituents

P 186-D

Shenandoah Valley, Middle

River basin

P 314-F

stratigraphy

Eocene

B 141

Helderberg group

P 158-C

Mississippian

B 1072-K; OC-38

Potomac formation

B 145

structural geology, Rose Hill

oil field

OM-76

swamps, Dismal Swamp

A 10 I b;

B 711-C

tin

B 936-K

titanium

B 430-D; P 198

triangulation and traverse

B 644-R, 709-L

tungsten

B 948-A

water, ground

artesian pressure

table, p. 183

in shale and sandstone,

Fairfax, Loudoun, and

Prince William

Counties

C 424

Manassas region

W 258

quality

B 32; W 258,

364

water levels

table, p. 183

wells

P 186-I; W 61,

114, 149

Woodstock region

W 596-C

York-James Peninsula

W 1361

water, surface

Dismal Swamp

A 10 I b

Fort Belvoir area

W 1586-A

New-Kanawha River basin

W 536

power

W 44

quality

P 135; W 236,

364, 1586-A;

table, p. 182

river surveys and profiles

P 294-B;

W 44, 115

Shenandoah River

meanders

P 354-A

streamflow records

tables, p. 184-

187

compilation

table 6

daily, by years

tables 4 and 5

index

C 381, 382, 383

water resources

springs

A 14 II a

A 14 II b; B 32;

W 114, 364,

679-B

zircon

B 530-c

Virginia--Continued

See also Allegheny region; Appalachian region; Eastern States; South-eastern States; Southern States.

Viscosity of solids B 73, 94

Volcanic ash

Colorado, Durango region B 285-O

recent falls, effects B 1028-N

welded ash flows, zones and zonal variations P 354-F

Volcanic debris, in uraniferous sandstone

C 224

Volcanic-rich sedimentary rocks,

Wyoming

P 274-A

Volcanic rocks

as building stone B 811-E

California, El Modeno area P 274-L

New Mexico

Mount Taylor field P 189-B

Tewan Mountains B 66

Pennsylvania, South Mountain B 136

selenium content, western U. S.,

Hawaii

B 1084-C

water-laid, Arkansas, Okla-

homa, Texas

P 154-F

Volcanoes and volcanism

Alaska

B 974-B,

1028-A - T;

C 318; P 95-D

California

B 79

Canada, Yukon Basin

P 95-D

Hawaii

A 4 b; B 974-

A, D, 996-B, D,

1021-B, D,

1061-B

Mexico, Parícutin region

B 965, 1104-A

Wasatch formation

P 132-F

Wasatch Range, glaciation

P 61

Washington

aeromagnetic maps. See geographic

listing for specific areas;

see also map listing, p. 236-244.

aeroradioactivity, Hanford

Plant area

GP-307

alumina resources

MR-1

base map

p. 250

black sand

B 805-A

boundaries

B 466

chromite

B 725-A

clay

B 260-m, 1091

coal. See Coal.

construction materials

B 285-I, 387

deformation, Wenatchee-Chelan

district

P 19

dolomite

B 1027-C

drainage changes

B 40

floods

C 191, 380;

W 968-B,

1080, 1527

forests

A 19 V g h,

21 V c d; P 5,

6, 7

gas

B 581-B

geologic map

p. 191

geologic map index

p. 192

geology. See geographic listing for

specific areas.

Washington--Continued

- glaciation B 40
glaciers, Mount Rainier A 18 II d;
P 387-A;
maps, p. 254
- gold, See Gold.
iron B 969-D, 978-B
- land-classification map, Seattle p. 254
lead B 470-D
See also Mining districts.
leveling B 457, 557, 674
magnetite MF-117
manganese B 725-C,
795-A, 931-R
- mineral resources
Colville Indian Reservation B 677
Metaline quadrangle P 202
Monte Cristo A 22 II f
northeastern B 550
See also specific mineral commodities; Mining districts.
- nickel B 931-D,
969-D, 978-B
B 581-B
- oil
paleontology
diatoms P 140-A
elephant remains B 790-B
Foraminifera OC-57
invertebrates B 51
paleobotany, Miocene P 170-C
Latah formation P 140-A,
154-H
- physiography, central and
Wenatchee-Chelan district P 19
platinum B 805-A
radioactive deposits B 1074-B
silver, See Mining districts;
Washington, Mineral resources.
- soils, "Palouse" B 790-B
- stratigraphy
Latah formation P 140-A
Tertiary OC-57
- structural geology, Cascade Range A 20 III a
- tin B 340-D,
931-H
- triangulation and traverse B 644-Q,
709-K
- tungsten B 430-D, 931-H
- water, ground W 111, 114, 115
artesian pressure table, p. 183
Ferry County, border stations C 422
Kitsap County W 1413
Quincy Valley W 425-E
Snohomish County W 1135
Spokane Valley W 889-B
storage behind subsurface dams W 383-A
Walla Walla area, artificial recharge W 1594-A
water levels table, p. 183
wells W 61, 118,
149, 298

Washington--Continued

- water, ground--Continued
Yelm area C 356
water, surface
power W 44, 253, 313,
346, 366, 368,
369, 376, 377,
419, 486
P 135; W 274,
339;
table, p. 182
for irrigation table 7, p. 187
river profiles and surveys W 44, 253, 313,
346, 366, 368,
369, 376, 377,
419, 486
streamflow records tables, p. 184-
187
compilation table 6
daily, by years tables 4 and 5
index C 392-394
Yakima River basin C 180
- water resources
Dosewallips, Duckabush, and Hamma Hamma Rivers C 109
east-central W 118
Snake River Basin, use W 657
south-central W 55, 316
southeastern W 4
springs W 118, 356
557, 679-B
storage C 409; W 369,
1539-I
- Vancouver area C 372
Yakima County GF-86; W 55,
316
zinc B 470-D
See also Pacific Coast; Western States.
- Wastes, See Industrial wastes; Radioactive wastes.
- Water
analyses B 9, 47; W 364,
1535-A-D
index W 560-C, 659-C
industrial application W 274
interpretation B 479; W 1473
methods B 9, 47, 479;
C 445; W 151,
236, 274, 596-H,
1454, 1473,
1496-A, B,
1535-C, 1540-A,
B, 1544-A
W 1536-A-C,
1545-A, B
conservation C 402, 414-A-C,
425; W 234
contaminated W 1136
evaporation, transpiration, bibliography W 1539-R
for irrigation, See particular States and areas; see also tables 1 and 7, p. 182, 187.
industrial utility C 197, 203, 206,
221, 232, 253, 269,
283, 287, 288, 299,
339, 341, 369, 378;

Water--Continued

industrial utility--Continued

- W 233, 239, 254, 259,
274, 335, 341, 375,
398, 496, 520-F, 559,
658, 912, 1299, 1300,
1330-A-E
- iron in, chemistry W 1459-A-H
- law C 117, 347, 400,
432, 446; W 103,
122, 152
- mineral
analysis A 14 II b; B 32;
MRUS 1921 II;
W 254, 258, 259
- radioactivity B 395;
MRUS 1913 II
- source A 14 II b; B 32;
MRUS 1918 II;
W 160
- therapeutic activity MRUS 1911 II
- trade, 1883-1923 MRUS 1923 II
- minor elements in C 445
- methods for determining W 1540-A, B
- natural, chemical character-
istics W 1473
- of lakes and rivers, analyses P 135
- pollution
by industries W 113, 121,
179, 186, 189,
192, 193, 226,
273
- by sewage W 121, 161,
192, 193, 194
- laws against
of wells W 103, 152
W 160, 255, 257
- probability analysis C 410
- purification W 185, 235,
239, 254, 259,
315, 339, 341,
363, 398, 399,
559
- quality
analysis B 9, 479, 770;
C 378; W 236,
274, 364,
560-B, C, 596-H,
659-C; tables 1
and 7, p. 182, 187
- See also particular States and
river basins.
- for boiler use W 233, 239, 254,
259, 274, 339,
341, 363, 398
table 7, p. 187
- for irrigation
requirements W 1330-C
aluminum industry W 1330-B
carbon-black industry W 1330-E
copper industry W 1330-A
pulp and paper industry W 1330-D
rayon-and acetate-fiber
industry W 1330-D
- rights in areas of ground-water
mining C 347
- samples, extraction methods W 1544-A
- softening W 239, 293,
341, 363

Water--Continued

- strontium content, analytical
determinations C 420, 445;
W 1496-A, B
- temperature, for industrial
use W 520-F
- thermal, radioactivity B 395
- use, bibliography C 455
- See also Drought; Floods; Geochemistry;
Hydraulics; Hydrology; Rain-
fall; Springs; Streamflow
measurement; Wells.
- Water, ground
artificial recharge W 1594-A
- bibliography W 1477
- calcium carbonate saturation W 1535-D
- coastal areas W 537
- contamination W 110, 160
255, 258
- See also Water, pollution.
- estimates of supply, methods W 597-B,
638-C, 659-A
- factors affecting drainage C 198
- farm use W 255
- hydraulics W 1536-A-C
- hydrologic principles, defi-
nitions W 489, 494
- intake and discharge W 597-B,
638-C, 659-A
- ion exchange W 520-D
- movement A 19 II b; W 67,
110, 140, 232,
294, 537, 596-A
C 275; P 264-F
- permafrost regions W 577, 659-A
- plants as indicators C 114, 115, 398,
456; W 836-D
- For regional papers see particular States,
countries, regions, river basins;
see also Hydraulics; Hydrology;
Springs; Wells.
- Water, surface
analyses P 135; W 236,
274, 364; tables,
p. 182, 187
- gaging stations W 280, 340
- index to records C 381-396
- losses P 269, 270, 272,
298; C 229
- power. See particular States and rivers.
- quality, for irrigation table 7, p. 187
- reports, annual. See tables, p. 184-187.
- runoff, annual C 52
- streamflow tables, p. 184-
187
- streamflow records, probability
analysis C 410
- For regional papers see particular States,
countries, regions, river basins;
see also Floods; Hydraulics;
Hydrology; Lakes; Rainfall;
Streamflow measurement.
- Water-bearing materials, hydrologic
properties W 596-F, 679-A,
- Water levels. See table, p. 183.
- Water loss
Lake Hefner C 229; P 269,
270

- Water loss--Continued
 Lake Mead C 346; P 298
 selected drainage basins W 846
- Water-loving plants
 consumption of water by W 1412, 1423
 iron content W 1459-G
- Water management C 414-A-D, 415
- Water resources
 bibliography C 190, 200, 455; W 119, 120, 163, 280, 340, 427, 836-D, 837, 992, 1459-F, 1477, 1492, 1539-R
 A 16 II e
 public lands W 1591-A
 urban areas
 For regional papers see particular States, countries, regions, river basins.
- Water witching. See Dowsing.
- Waterpower
 bibliography C 200
 Cascade Range W 253, 313, 369, 486
 Colorado River W 395, 556, 617, 618
 control W 238, 344, 400-A
 Deschutes River, Oreg. W 344
 development in United States C 329, 367; P 123; W 234, 579
 Great Salt Lake basin W 517
 Jefferson River basin, Mont. W 580-B
 land classification, storage sites C 400
 Madison River basin, Mont. W 560-A
 Snake River, Oreg.-Idaho W 520-C
See also particular States (water, surface, power).
- Waterways, method computing cross-section area W 147
- Weirs
 discharge characteristics C 397
 experiments W 150, 200
- Wells
 artesian
 aquifer tests, methods W 1545-A, B
 Atlantic Coastal Plain, prospects B 138
 conditions favoring A 5 c; B 319
 pressure. See table, p. 183.
 contamination W 110, 160, 258, 537
 construction W 110, 257
 deep B 264, 298; W 57, 61, 149, 775; OM-136; P 186-I
 flow measurement W 110, 596-A
 fluctuations of water level W 155, 537, 597-B, 659-A
See also table, p. 183.
 freezing W 258
 gage, intakes for W 868-B
 leaks, methods of locating W 796-A
 magnetic W 258
 multiaquifer, geophysical methods for analyzing specific capacity W 1536-A
- Wells--Continued
 protection W 255, 258
 small-diameter, equipment for measuring water levels C 453
See also particular States (water, ground); Test wells.
- Wenatchee River basin, Wash., profile surveys W 368
 OC-55
- West Falls formation
- West Virginia
 asphalt A 22 I b
 base map p. 250
 Berea sand, maps OM-9, 29, 49, 58, 59, 69, 79, 89
 coal. See Coal.
 drainage features M 41; P 13
 floods W 334, 800, 1066, 1134-A, 1420
 gas B 318, 1072-K
 gazetteer B 233
 geologic map p. 191
 geologic map index p. 192
 geology. See geographic listing for specific areas.
- glacial geology M 41; P 13
 glass-making materials B 285-N
 leveling B 399, 477, 632
 limestone B 225-o
 manganese B 940-G
 mineral resources, Kenova quadrangle B 349; GF-184
See also specific mineral commodities.
- Murrysville sand, maps OM-49, 89
 oil B 318, 1072-K
See also Berea sand.
- paleontology
 Helderberg group P 158-C
 paleobotany, Pocono formation and Price sandstone P 263
 slate industry B 213-i
 stratigraphy
 bituminous coal field B 65
 Helderberg group P 158-C
 Mississippian B 1072-K; OC-38
- triangulation and traverse B 644-R, 709-A
 water, ground C 114, 398; GF-179; W 110, 114
 artesian pressure table, p. 183
 quality W 364
 water levels table, p. 183
 wells B 264, 298; W 110, 149, 364
- water, surface
 New-Kanawha River basin W 536
 W 192
 Potomac River basin W 236; table, p. 182
 quality W 44
 river profiles; power streamflow records tables, p. 184-187
 compilation table 6
 daily, by years tables 4 and 5
 index C 381, 383

- West Virginia--Continued
water resources A 14 II a, b;
C 114
- Nicholas, Pawpaw, and
Hancock quad-
rangles W 145
quality W 192, 364
springs B 32; W 114,
679-B
- Wheeling-Steubenville
area C 340
See also Appalachian region; Eastern
States.
- Western phosphate field
geology, bibliography B 1018
Permian rocks P 313
- Western States
asphalt B 1070-C
coal A 22 III h-k
Cretaceous deposits OM-10; P 355
floods C 380
guidebooks B 611, 612,
613, 614, 845
iron B 285-E;
Map 3-212
(p. 226)
irrigation W 1430, 1465,
1485
mining districts B 507;
MRUS 1907 I
- paleontology
ammonites P 249-A, 334-F
cephalopods P 151
corals B 1021-F
Exogyra P 154-I
Jurassic P 214-B
mammals B 361
mollusks P 233-B
paleobotany P 186-J
phosphate B 315-P, 340-K,
394, 1018; C 297;
C 313
phreatophyte research C 413
potash B 540-P
selenium, in volcanic rocks B 1084-C
uranium B 1046-E,
1070-C
- water, surface, quality for
irrigation W 1430, 1465,
1485
- Wewoka formation B 544
Wheeler survey, publications B 222
White River, Oreg., profile sur-
veys W 378
White River basin, ground water HA-2, 3
White Sands National Monument,
N. Mex., map p. 255
Wichita group B 1081-G
Wilcox group P 108-E, 131-A,
156, 193-E;
Map 3-195
(p. 226)
- Willamette River, Oreg., profile
surveys W 378
Wind Cave National Park, S. Dak.,
map p. 255
Windmills W 8, 20, 29,
41, 42
- Winnipeg River basin, floods W 1137-B
- Wisconsin
barite MF-15
base map p. 250
electrical resistivity
studies C 69, 181
geologic map p. 191
geologic map index p. 192
geology. See geographic listing for
specific areas.
glacial geology
Delavan lobe of Lake Mich-
igan glacier P 34
Driftless Area A 6 c
drumlins, southeastern B 273
Lake Superior region M 52; P 154-A
See also Wisconsin, Quaternary
geology.
iron. See Iron.
lead. See Lead.
leveling B 461, 570
Quaternary geology P 106, 161
stratigraphy, Ordovician P 274-K
structural geology, Beetown
lead-zinc area MF-3
syenite complex, reconnais-
sance B 1042-B
B 644-E, 709-E
traverse
water, ground
artesian pressure table, p. 183
Brown County, artesian
aquifers W 1190
Langlade County W 1294
Milwaukee-Waukesha area W 1229
Outagamie County W 1421
water levels table, p. 183
wells B 298; W 61,
145, 149
water, surface
power W 115, 156,
417
quality W 236;
table, p. 182
streamflow records tables, p. 184-
187
compilation table 6
daily, by years tables 4 and 5
index C 384, 385
water resources
Milwaukee area C 247
Mineral Point quadrangle GF-145; W 145
river profiles and surveys W 115, 417
springs A 14 II b; B 32;
GF-140, 145;
W 145
use, estimated C 114, 115,
398, 456
zinc. See Zinc.
See also Lake Superior region.
- Wiscoy sandstone OC-37
Wissahickon mica gneiss P 98-B
Witwatersrand banket, gold MRUS 1896
Wolframite
Alaska B 442-F
Arizona B 380-D
Colorado B 583
Wood, fossil. See under Paleontology.
Woodbine formation OM-98; P 129-G,
242

Woodbine formation--Continued

- Pepper shale member P 243-E
- Wyoming
- analcite P 158-A
- anorthosite areas MF-119
- anticlines, See Wyoming, Structural geology.
- base map p. 250
- bentonite B 260-m, 285-1, 1023; C 150; MF-36 B 315-F
- cement materials
- chemical degradation, Wind River Range W 1535-E
- coal, See Coal.
- construction materials, map MB-9
- copper B 213-d, 315-B; C 219; P 25
- erosion, Fivemile Creek P 352-A
- forests A 19 V b, c, d
- gas, See gas.
- geography
- Lincoln County B 543
- southwestern P 56
- geologic map p. 191
- geologic map index p. 192
- geology, See geographic listing for specific areas.
- glacial geology A 21 II b; P 174
- gold, See Gold.
- graphite B 315-M
- gypsum B 223, 285-K, 640-H; GF-173
- hydrology
- Box Creek basin, effects of water spreading W 1532-A
- Cheyenne River basin C 223; W 1531
- Wind River and Fifteen Mile Creek basins W 1475-A
- igneous rocks, Yellowstone National Park A 7 c, 12 I e B 315-D, 811-D
- iron W 425-B, 1360-E, 1418
- irrigation A 21 III b p. 257 B 558
- laccoliths, Black Hills B 1030-K
- land-classification maps B 1046-N
- leveling B 715-C
- limestone, oolitic
- limonite, radioactive
- manganese
- meerschau, Green River formation P 158-A
- mica B 315-M
- mineral resources
- Big Horn Basin and Moun-tains B 285-F
- Black Hills P 26
- Carlile quadrangle B 1082-J
- Kirwin B 540-C
- Laramie Basin B 364
- Lincoln County B 543
- metallic, map MB-17
- nonmetallic, map MB-9
- Randolph quadrangle B 923
- See also specific mineral commodities.
- oil, See Oil; Oil shale.

Wyoming--Continued

- paleontology
- cephalopods P 150-A
- Dakota formation, equivalent P 131-H
- Foraminifera P 254-E
- mollusks P 233-A, 254-B
- ostracodes P 243-A
- paleobotany
- Cretaceous A 19 II e
- Frontier formation P 108-F, 158-H
- Green River formation P 165-B
- See also Green River formation.
- Paleozoic rocks, Hartville area OC-44
- Park City formation B 436
- titanotheres M 55
- Wasatch fossils, Fort Union beds P 108-D
- pegmatites P 227
- petrology, Meade Peak phosphatic shale member, Phosphoria formation B 1111-C
- phosphate, See Phosphate.
- physiography, Big Horn Basin OM-71
- pipelines OM-107, 175; p. 213
- platinum B 213-c, 780-C; MRUS 1902
- potash B 512
- radioactive deposits, See Radioactive deposits.
- salt B 430-I
- sand and gravel deposits, map MB-5
- scorodite B 55
- sedimentary rocks, volcanic-rich P 274-A
- sedimentation
- Fivemile Creek P 352-A
- Powder River drainage basin C 170
- Wind River Basin W 1373
- sodium carbonate brine C 235
- sodium salts B 430-I
- stratigraphy P 149
- Bighorn dolomite and correlative formations OM-202
- Cody shale, younger
- Cretaceous and Paleocene rocks OC-49
- Cretaceous A 19 II e; OC-13, 36, 43, 56; P 154-D, 165-A
- See also names of Cretaceous formations.
- Embar and Chugwater formations P 98-O
- Green River formation P 132-F, 140-D
- Hanna Basin P 108-L
- Inyan Kara group B 1081-B; MF-218
- Jurassic MF-218; OC-13, 14
- Mesozoic, early P 120-F
- Mowry shale P 154-D

Wyoming--Continued

stratigraphy--Continued
 Paleozoic OC-40, 44;
 P 120-F
 Phosphoria formation B 1042-E;
 C 210, 307,
 324, 325
 Powder River basin P 108-D
 Split Rock and Moonstone
 formations B 1121-I
 Tertiary OC-22, 27, 56
 Triassic OC-17
 Wasatch formation P 132-F
 structural geology
 Basin-Greybull area OM-77
 Big Horn Basin B 656; OM-3,
 74, 182
 Black Hills OM-191
 Byron-Frannie area, map p. 234
 central, anticlines B 641-I
 Clay Basin gas field and
 vicinity, map p. 234
 Elk Basin oil and gas field
 and vicinity, map p. 234
 Garland and Byron anti-
 clines, map p. 235
 Little Buffalo Basin oil and
 gas field and vicinity,
 map p. 235
 Maverick Springs region B 711-H; OM-13
 Mush Creek area, map p. 235
 North Fork oil field, Kaycee
 dome and vicinity OM-206
 Oregon Basin anticline,
 map p. 234
 Powder River Basin OM-33, 133,
 185
 Sage Creek dome OM-53
 Sussex and Meadow Creek
 oilfields region OM-164
 Tisdale anticline and
 vicinity OM-194
 Williston basin area OM-165
 sulfur B 340-L,
 380-M, 530-h,
 540-R
 tectonic map showing uranium MF-127
 terrace deposits, Big Horn
 Basin OM-71
 test wells, maps OM-19, 107,
 175; p. 213
 triangulation B 644-D
 trona deposits C 235
 uranium. *See* Radioactive deposits.
 uranophane B 1009-A
 water, ground
 Albany County W 1367
 artesian pressure table, p. 183
 Gillette region C 76
 Glendo-Wendover area C 163
 Goshen County W 1377
 Great Plains, central P 32
 Horse Creek-Bear Creek
 area C 162
 Kaycee irrigation project,
 Johnson County W 1360-E
 La Prele area C 243
 Laramie Basin B 364; C 80;
 GF-173

Wyoming--Continued

water, ground--Continued
 Laramie County W 1140, 1367
 Lodgepole Creek basin W 1483
 Lodgepole Valley W 425-B
 Niobrara River basin W 1368
 Owl Creek area W 1519
 Paintrock irrigation proj-
 ect C 96
 Pass Creek Flats C 188
 Platte County W 1490
 quality A 9 d; B 47;
 C 76, 96, 96,
 162, 163, 188,
 243; W 364,
 425-B, 1360-E,
 1367, 1368,
 1375, 1377,
 1418, 1483,
 1490
 Rawlins area W 1458
 Riverton irrigation project
 area W 1375
 Salt Creek-Teapot Dome
 uplift P 163
 Shoshone irrigation
 project, quality W 1418
 Torrington region C 238
 water levels table, p. 183
 wells W 61, 149
 Wheatland Flats area C 70
 water, surface
 Big Horn Mountains, water
 rights W 23
 Cheyenne River basin, ef-
 fect of stock reser-
 voirs on runoff C 223; W 1531-A
 for irrigation W 469;
 table 7, p. 187
 Green River, utilization W 618
 Powder River basin, sedi-
 mentation, quality C 170
 power W 44, 396, 469
 quality C 170; W 274,
 1373, 1418,
 1535-E;
 tables 1, 7,
 p. 182, 187
 W 44, 396
 river profile surveys
 Snake River Basin, util-
 ization W 657
 streamflow records tables, p. 184-
 187
 compilation table 6
 daily, by years tables 4 and 5
 index C 386, 389,
 390, 393
 Wind River Basin
 quality, sedimentation W 1373
 runoff C 66
 Wind River Range, chemical
 degradation W 1535-E
 water resources
 Big Horn Basin B 656; P 53
 Black Hills A 21 IV b; P 65
 Patrick and Goshen Hole
 quadrangles W 70
 use, estimated C 114, 115,
 398, 456

Wyoming--Continued

- water resources--Continued
 Yellowstone National Park
 analyses of natural waters B 47
 radioactivity of thermal waters B 395
See also Great Plains; Rocky Mountains; Western States; Yellowstone National Park.
- Wyomingite, potash from P 98-D
- X-ray investigations
 calcite-dolomite ratio in mineral mixtures B 1111-D
 tables of d spacings C 29
 uranium and thorium minerals B 1036-G
- Xenotime, Colorado, Central City district B 1032-F
- Yampa River, Colo., drainage history P 90-K
- Yellowstone National Park
 eruptive rocks A 12 I e
 forests A 19 V d
 geology GF-30; M 32; P 120-F
 guidebooks B 611, 612
 map p. 255
 Obsidian Cliff A 7 c
 phosphate B 795-G
 radioactivity of thermal waters B 395
 scorodite B 55
 waters, analyses B 47
- Yosemite National Park
 maps p. 255
 Yosemite Valley, geologic history P 160
- Youghiogheny River basin, Pa.-Md., floods C 204
 B 262
- Yttrialite B 262
- Yuba River, Calif., reconnaissance W 46
- Yukon River, discharge at Eagle, Alaska W 345-F
- Zeolites, New Jersey B 832
- Zeunerite, Alaska C 214
- Zinc
 Alaska
 Ketchikan and Wales districts B 998-C
 Petersburg district B 998-A
 Wrangell district B 998-B
 annual resource data, 1882-1923, see MRUS, p. 98-131.
 Arkansas, northern A 22 II b;
 B 213-e, 853;
 P 24
 bibliography C 242
 California, Shasta County P 285
 Colorado, Leadville region B 681, 779;
 P 148
 Illinois B 225-e, 294;
 P 274-K
 Galena-Elizabeth region GF-200
 northwestern B 246
 in peat, New York B 1000-D
 in plants, determination C 41

Zinc--Continued

- in spring waters, Missouri B 113
 C 231; P 274-K
- Iowa
 Catfish Creek area MF-116
 Couler Valley area MF-42
 Dubuque County B 1027-K
 Durango area MF-33
 Galena-Elizabeth GF-200
- Kansas
 Joplin district B 213-e, 606
 Picher field, map p. 226
 Kentucky, western B 213-e; P 36
 Mississippi Valley, upper B 294, 1015-G,
 1123-A; P 309
- Missouri
 Joplin district B 213-e, 606;
 GF-148
 Ozark region A 22 II b
 Montana, Bearpaw Mountains B 430-C
 Nevada B 285-D
- Goodsprings (Yellow Pine) district B 540-F, 1010;
 P 162
- See also Mining districts.
- New Jersey, Franklin Furnace B 213-e
- New Mexico B 380-C
- See also Mining districts.
- New York
 Orleans County B 1000-D
 Shawangunk mine B 978-D
 Nigeria, Nyeba district B 1000-B
- Oklahoma
 Joplin district B 606
 northeastern B 340-C
 Picher field, map p. 226
 Ozark region A 22 II b
- Peru, Cordillera Blanca, Cordillera Huayhuash B 1017
- Tennessee
 eastern B 225-e; C 71
 Mascot-Jefferson City district P 277
- United States B 394, 666-Y
- See also Zinc, annual resource data.
- Utah, Ophir B 690-A
- Washington B 470-D
- See also Washington, mineral resources.
- Wisconsin
 Beetown area MF-3
 Cuba City region MF-15
 Dodgeville region B 260-g
 geochemical studies B 1000-E
 Lancaster-Mineral Point GF-145
 Sinsinawa River area MF-40
- Zion National Park
 geology, geography P 220
 map p. 255
- Zircon, in sandstone, Virginia, Ashland region B 530-c
- Zirconium
 annual resource data, 1883-1919, see MRUS, p. 99-127.
 Atlantic States, southeastern B 1082-A
- Zirconium-hafnium ratio
 in minerals and rocks B 1021-A
 in zircon B 1036-F

GEOGRAPHIC LIST¹

Abbreviations used

A	Annual Report	Map 3-	Mineral Investigations Preliminary Map
AP	Administrative publication	MR-	Mineral Investigations Resource Map
B	Bulletin	MRUS	Mineral Resources of the United States
C	Circular; Map C-, Coal Investigations Map	OC-	Oil and Gas Chart
GF	Geologic Folio	OM-	Oil and Gas Map
GP-	Geophysical Investigations Map	P	Professional Paper
GQ-	Geologic Quadrangle Map	p.	page number listing publications having no series designation
HA-	Hydrologic Investigations Atlas	R	Regulations
I-	Miscellaneous Geologic Investigations Map	SP	Special publication
M	Monograph	W	Water-Supply Paper
MB-	Missouri River basin map		
MF-	Mineral Investigations Field Studies Map		

ALABAMA		ALABAMA--Continued	
Alabama River region		Gadsden	GF-35
stratigraphy	B 43	Gordo quadrangle	
Aliceville quadrangle		stratigraphy	OM-64
geology	OM-50	Greasy Cove	
Bessemer	GF-221	iron	C 1
Birmingham district		Huntsville quadrangle	I-329
clay	B 315-I	Lamar County	
coal	B 285-F	stratigraphy	C 267
geology	GF-175	McCrary, McShan quadrangles	
iron	B 315-D, 340-E, 400	stratigraphy	OM-64
limestone, dolomite,		Mantua quadrangle	
brickmaking	B 315-G	geology	OM-50
water supply	C 254	Millry region	
Brookwood quadrangle		Foraminifera	P 197-B
coal	B 260-i	Mobile area	
iron	B 260-h	water resources	C 373
Cahaba coal field	B 316-A, 431-B	Montevallo region	
Camp McClellan		dolomite	B 470-K
map	p. 252	geology	GF-226
Chattahoochee River region		iron	B 470-F
paleontology	P 274-J	northern	
Chattanooga region		iron	B 285-E, 540-G
iron	B 380-E	stratigraphy	OC-20, 58
physiography	A 19 II a	northwestern	
Choctaw Bluff		Warrier basin	
Foraminifera	P 189-D	coal	B 260-i, 285-F
Choctaw County		stratigraphy	OC-20, 58
Hatchetigbee anticline		Rock Run region	
oil, gas	B 661-H	map	p.254
Quitman fault zone	OM-6	Rome	GF-78
Columbiana region		Russellville district	
geology	GF-226	iron	B 315-D
iron	B 470-F	Samantha and Searles quad-	
Coosa coal field, Coal City		rangles	
and Fairview basins		stratigraphy	OM-64
geology	p. 224	Shelby County	
Cottdale quadrangle		Calera area	
geology	OM-37	marble	B 470-G
Eples quadrangle	GQ-113, OM-167	Stevenson	GF-19
Eutaw quadrangle		Talladega County	
geology	OM-50	gold	B 640-I
Fayette County		iron	B 315-D
stratigraphy	C 267	Tombigbee River region	
Fayette gas field	B 471-G	stratigraphy	B 43
Florence area		Tuscaloosa area	
Paleozoic rocks	B 781-A	geology	OC-31
		Tuscaloosa quadrangle	
		geology	OM-37

¹ Puerto Rico and Virgin Islands and foreign countries follow State names, on p. 428.

ALABAMA--Continued

- Tuscaloosa River region
stratigraphy B 43
GF-221
Vandiver
Washington County
Hatchetigbee anticline
oil, gas B 661-H

ALASKA

Southeastern Region.

(General)

- aerial photographic
surveys B 797-E
brachiopods P 233-C
geology, mineral re-
sources B 259, 284,
314-C, D, 345-B, 379-B,
442-C, 480-D, 682, 773-B,
783-B, 800, 947-B, C, D,
963-A, 1024-B, F, G, H, 1058-A
water B 442-C, 642-B, 662-B,
692-B, 712-B, 714-B,
722-B, 836-C; W 372

- Admiralty Island
geology B 287; 1-323
nickel, copper B 936-O
Aleak River region
reconnaissance B 314-D
Baranof Island
mineral resources B 936-G, M
Berners Bay
geology B 446
Bohemia Basin region
nickel B 931-F
Chicagof Island
geology, mineral re-
sources B 692-B,
824-E, 929, 936-I,
989-B, 1058-E

- Chickamin River
geology B 807
Copper Mountain
geology, mineral re-
sources P 87
Craig C-2 quadrangle
geology B 1058-H
Douglas Island
Treadwell ore de-
posits B 259
Eagle River region
geology, mineral re-
sources B 480-D, 502
Geikie Inlet
geology B 1058-C
Glacier Bay
glaciers A 161 c
Gravina Island
geology P 95-H, 120-D
Haines region
iron B 442-C
Hollis area
linear features 1-231, 232
Hyder region
geology B 807
tungsten B 1024-F
Jumbo basin
geology, mineral re-
sources P 251
Juneau region
geology, mineral re-
sources B 225-b, 287,
592-C, 622-C, 662-B, 714-B

ALASKA--Continued

Juneau region--Continued

- Juneau quadrangle 1-276, 303
Juneau (B-3) quadrangle GQ-100
Kasaan Peninsula
geology, mineral re-
sources B 1090; P 87
Ketchikan district
geology, mineral re-
sources B 347, 542-B,
592-B, 662-B, 692-B,
714-B, 998-C; P 1
Lituya Bay
geography, geology B 836-B
waves P 354-C
Lynn Canal region
industrial sites C 280
mineral resources C 252
Malaspina district
geology 1-271; OM-189
Mount St. Elias
expedition A 13 II a
Petersburg district
zinc, copper B 998-A
Porcupine district
geology, mineral re-
sources B 225-b,
236, 662-B, 699
Portland Canal region
B 722-C
Prince of Wales Island
aeromagnetic map GP-135
geology, mineral re-
sources B 345-B,
1058-H, 1090; 1-230-232; P 87
Reid Inlet
geology, ore deposits B 1058-B
Revillagigedo Island
geology P 120-D
Salmon River region
B 714-B,
722-C
Salt Chuck area
linear features 1-230
Sitka region
geology, mineral re-
sources B 504, 592-B
Blue Lake damsite and
tunnel C 147
Skagway district
marble B 592-B
Unuk River region
mineral resources B 714-B
Wales district
mineral resources B 998-C
Wrangell district
mineral resources B 347, 542-B,
662-B, 739-B, 963-C, 998-B
Yakobi Island
nickel B 931-F
Yakutat Bay
earthquakes P 69
geology B 294, 314-d
physiography, glacial
geology P 64
Southwestern Region (including
Alaska Peninsular, Aleutian
Islands, Kodiak Island)
(General)
mineral resources, recon-
naissance A 20 VII 6;
B 379-C

ALASKA--Continued

Southwestern--Continued

- Adak Island
geology B 1028-C, M
- Akun Island
sulfur B 692-E
- Alaska Peninsula
geology, mineral re-
sources B 467, 857-D
paleontology P 249-B
- Alaska Range, southern B 862
- Aleutian Islands
geology B 857-D
volcanism B 974-B,
1028-E
- See also names of particular
islands and volcanoes.
- Amchitka Island
geology, submarine
physiography B 1028-P
- Andreanof Islands
geology B 1028-I
P 132-I
- Aniakchak Crater
Aniakchak district
geology, mineral re-
sources B 797-F
- Bogoslof Island
geology B 1028-L
- Buldir Island
geology B 989-A
- Chignik district
geology B 755-D
oil B 773-D
- Cold Bay district
geology, oil B 739-C,
755-D, 773-D, 783-C
- Davidof Island
geology B 1028-K
- Delarof Islands
geology B 1028-I
- Frosty Peak volcano and
vicinity
geology B 1028-T
- Gareloi Island
geology B 1028-J
- Goodnews Bay region
mineral resources B 714-E,
910-B, 918
- Goodnews quadrangle
geology I-339
- Great Sitkin Island
geology B 1028-B
- Hagemeister Island quad-
rangle
geology I-321
- Herendeen Bay region
coal B 284
- Iliamna region
geology, mineral re-
sources B 422-E, 485
- Kagalaska Island
geology B 1028-M
- Kamishak Bay region
oil B 773-D
- Kanaga Island
geology B 1028-D
- Katmai district
oil B 773-D
- Katmai National Monument
Trident Volcano, eruption C 318

ALASKA--Continued

Southwestern--Continued

- Khvostof Island
geology B 1028-K
- Kiska Island
geology B 1028-R
- Kodiak Island
geology, mineral re-
sources B 542-E,
692-E, 868-B, 880-C
- Lake Clark region
geology, mineral re-
sources B 442-E, H,
655, 824-C
- Little Sitkin Island
geology B 1028-H
- Mount Katmai area
geology B 1058-G
- Mulchatna region
geology, mineral re-
sources B 442-E,
824-C
- Nushagak district
geology B 903
- Pavlof Volcano
geology B 1028-A
- Pribilof Islands
geology, petrology B 1028-F
- Rat Islands
geology, structure B 1028-G, Q
- Segula Island
geology B 1028-K
- Semisopochnoi Island
geology B 1028-O
- Shumagin Islands
gold B 259
- Stepovak Bay
sulfur B 692-E
- Tuxedni Bay
geology B 722-d
magnetite B 1024-D
- Umnak Island
geology B 1028-L
- Unalaska Island
gold B 259
sulfur B 692-E
- Cook Inlet-Susitna Region
- Alaska Railroad region
engineering geology P 293-B
geology, mineral re-
sources B 755-C,
844-B, 849, 907; C 18
- Akaska Range, southern
geology B 862
- Anchorage region
geology B 1093
- Anchorage (D-1) quadrangle
geology I-343
- Anchorage (D-2, D-3) quad-
rangles I-342
- Anthracite Ridge district
geology B 849-A, 861
- Bradley River basin
waterpower resources W 1610-A
- Broad Pass region
geology B 592-H, 608
- Cache Creek area
radioactivity investiga-
tions B 1024-A

ALASKA--Continued

Cook Inlet-Susitna Region --Continued

- Chakachamna-Lake region
 geology B 813-B
- Chinitna region
 geology B 789
- Chulitna River region
 mineral resources B 692-D,
 849-E
- Cook Inlet region
 radioactive deposits C 207
- Cooper and Crescent Lakes
 geology B 1031-A
- Curry district
 mineral resources B 857-C
- Dunbar area
 permafrost C 42
- Girdwood district
 geology, mineral re-
 sources B 849-G
- Grant Lake
 geology B 1031-A
- Homer district
 geology, coal B 1058-F
- Hope district
 geology B 849-I
- Iniskin Bay
 oil B 739-C
- Iniskin Peninsula
 geology B 789; OM-95
- Kachemak Bay region
 coal B 277
- Kahiltna Valley
 platinum, gold B 692-D
- Kashwitna district
 mineral resources B 864-B
- Kenai-Kasilof area
 geology I-269
- Kenai Peninsula
 geology, mineral re-
 sources B 442-D, 587,
 692-C, 712-D, 742,
 931-G, 1039-B
- glaciers B 526
- See also particular areas.
- Kings River area
 haydite B 1039-C
- Knik Arm region
 geology B 642-E,
 792-B
- marl B 1039-A
- Lawing area
 haydite B 1039-C
- Little Susitna district
 geology, coal B 1058-D
- Matanuska Valley
 eolian deposits B 1121-C
- geology, mineral re-
 sources B 284, 289,
 314-F, 327, 480-F, 500,
 592-H, 692-D, 712-E,
 714-E, 791, 792-B
- ground water C 267; W 1494
- Eska Creek
 coal B 880-D
- Moose Creek area
 coal B 857-E
- Moose Pass district
 geology B 849-I

ALASKA--Continued

Cook Inlet-Susitna Region--Continued

- Mount McKinley region
 geology P 70
- Mount McKinley National
 Park
 geology B 836-D
 map p. 254
- Mount McKinley quadrangle
 geology B 1108-A
- Mount Spurr region
 geology B 810-C
- Nelchina region
 geology, mineral re-
 sources B 592-H,
 622-D, 668; I-312
- Ptarmigan Lake
 geology B 1031-A
- Seward region
 geology, mineral re-
 sources B 379-C,
 520-E
- Sheep Mountain
 gypsum B 989-C
- Skwentna district
 geology B 797-B
- Snug Harbor district
 geology B 789
- Sunrise region
 gold B 520-E
- Susitna region
 geology, mineral re-
 sources A 20 VII a;
 B 480-E, 498, 668
- Sutton area
 haydite B 1039-C
- Talkeetna basin
 geology, mineral re-
 sources B 314-F, 327
- Talkeetna Mountains
 ammonites P 354-D
 mineral resources B 692-D
- Talkeetna Mountains (A-1)
 (B-1) quadrangles I-314
- Talkeetna Mountains (A-2)
 quadrangle I-313
- Turnagain Arm region
 geology, mineral re-
 sources B 259, 277,
 642-E
- Willow Creek region
 geology, mineral re-
 sources B 480-F,
 592-H, 607, 642-F, 692-D,
 712-E, 714-D, 849-C, 864-B,
 933-C, 1004
- Windy Creek area,
 cement materials B 1039-D
- Wishbone Hill district
 geology B 1016
- Yentna district
 geology, mineral re-
 sources B 520-F,
 524, 773-A, 1024-A
- Yukon Basin Region (including
 Kuskokwim Basin)
 (General)
 mineral resources A 18 III b;
 213-g, 218, 284
 volcanism P 95-D

ALASKA--Continued

Yukon Basin region--Continued

Alaska Highway

terrain, photointerpretation B 963-D

Alaska Railroad region

engineering geology P 293-B

geology, mineral resources B 755-C, 844-B, 907; C 18

Alaska Range, eastern

geology B 989-D

Allen River

P 10

Anvik-Andreafski region

geology B 683

Bethel quadrangle

1-285

Birch Creek region

mineral resources B 251, 442-F

Black Rapids glacier

B 926-B

Bonnifield region

geology, mineral resources B 314-L, 480-H, 501; P 70

Chandalar region

geology, mineral resources A 21 II i, B 442-G, 532, 773-E, 810-B

Chisana district

geology, mineral resources B 593-I, 622-F, 630

geology, mineral resources B 285, 295

314-K, 520-H, 538, 816,

824-D, 897-C, 917-D

water supply B 520-H;

W 228

Coleen River region

radioactive deposits C 185

Cosna region

geology B 642-H, 667

Dall River

P 10

Dennison Fork district

geology B 827

Eagle district

geology, mineral resources A 21 II g; B 520-H, 816, 897-C, 917-D; C 316

water supply B 520-H; W 345-F

Eureka region

mineral resources B 849-F

Fairbanks region

gold B 225-b, 251,

379-E, 442-F, 849-B

hydrology B 337, 345-D,

520-H; W 218, 228, 1539-B

mining B 520-H, 525,

542-F, 592-J, 622-G,

662-H, 692-F, 849-B

permafrost B 989-F

tungsten B 1024-I

Fairbanks quadrangle

geology B 337, 442-F,

525

Fairbanks (DD-1) quadrangle

GQ-124

Fairbanks (D-2) quadrangle

GQ-110

ALASKA--Continued

Yukon Basin region--Continued

Fairbanks (D-3) quadrangle

I-340

Fort Hamlin region

geology B 284; P 10

Fortymile region

geology, mineral resources B 251, 345-D,

375, 520-H, 813-C, 897-C

waater supply B 520-H

Fourth of July Creek region

gold B 520-G

Gerstle River district

geology B 926-B

Glenn Creek district

gold B 213-b

Gold Hill district

placers B 379-E, 410

Healy Creek

coal, clay B 963-E

Healy River

molybdenum B 692-F

Hot Springs district

geology, mineral resources B 520-I, 622-G, 692-F, 844-D

Iditarod region

geology, mineral resources B 480-I, 542-G, 578, 622-H

Innoko district

gold B 379-E,

410, 480-I, 542-G

Jarvis Creek coal field

B 989-G

Kaiyuh Hills

geology, mineral resources B 868-D

Kantishna region

geology, mineral resources B 314-L, 662-E, 687, 836-D, 849-F, 936-N; P 70

Kanut River

P 10

Kateel River area

1-243, 249

Kowak River

P 10

Koyukuk region

geology, mineral resources A 21 II i; B 442-G, 532, 592-K, 631, 844-E; P 20

Kuskokwim region

geology, mineral resources B 410, 622-H,

642-H, 655, 722-E, 739-D,

754, 864-C; C 255, 328; P 268

geomorphology B 1071-G

Manley Hot Springs region

mineral resources B 1058-I;

C 317

Marshall district

geology B 683

Melozitna quadrangle

1-290

Mount Eielson district

geology, mineral resources B 849-D

Mount McKinley region

geologv P 70

ALASKA--Continued

Yukon Basin region--Continued

Mount McKinley National

Park

geology B 836-D
map p. 254

Mount McKinley quadrangle

geology B 1108-A

Nabesna district

geology, mineral re-
sources B 379-D, 417

Nation district

geology, mineral re-
sources B 836-E;
C 316

Nenana coal field region

B 662-G, 664,
739-C, 963-E; C 310

Nenana-Rex area

engineering, surficial
geology I-307

Nenana River valley,

Quaternary geology P 293-A

Nixon Fork region

mineral resources B 783-D;
C 279

Nowitna region

geology, mineral re-
sources B 642-H, 667

Nulato region

geology, mineral re-
sources B 442-H, 449;
I-249, 291

Poorman district

radioactive deposits C 279

Porcupine River region

geology B 933-D
radioactive deposits C 185

Pyramid Harbor-Eagle City

reconnaissance A 21 II g

Rampart quadrangle

geology B 337, 535

Rampart region

geology, mineral re-
sources B 259, 280,
520-I, 844-D; C 317

water supply

W 228

Ruby Creek region

placers B 410

Ruby region

geology, mineral re-
sources B 379-E, 520-J,
542-G, 578, 592-J,
642-H, 692-F, 754,
783-D, 864-C; C 279

Ruby quadrangle

I-289

Russian Mission quadrangle

I-292

Salchaket district

water supply B 520-H

Seventymile district

mining, water supply B 520-H

Shaktolik River area

I-226

Sheenjek district

geology, mineral re-
sources B 797-C,
810-B

Stony River region

geology B 813-B

Tanana River region

geology, mineral re-
sources A 20 VII c,e,

ALASKA--Continued

Yukon Basin region--Continued

Tanana River region--Continued

geology, mineral re-

sources 21 II g; B 295, 337,
345-D, 442-F, 542-F, 592-J,
868-C, 872

water supply

B 379-E,
442-F, 480-G, 542-F;
W 228, 342

Tatlanika and Totatlanika

Basins

mining development B 836-D

Tatonduk district

geology, mineral re-
sources B 836-E

Tetling River district

geology B 917-B

Toklak-Tonzona River region

geology B 792-C

Tolovana district

geology, mineral re-
sources B 642-G,
662-D, 712-F

Tolstoi district

mineral resources B 692-F
Unalakleet quadrangle I-288

White River district

geology, mineral re-
sources A 20 VII e,
21 II g; B 379-D, 417,
622-F, 630

Woodchopper Creek region

gold B 520-G

Yukon-Koyukuk region

geology B 631

Yukon-Kuskokwim region

metalliferous deposits B 739-D
radioactive deposits C 255, 328
Yukon-Kuskokwim delta I-223

Yukon River, lower

geology I-197

Yukon-Tanana region

geology, mineral re-
sources B 295, 337,
345-D, 442-F, 480-G,
542-F, 592-J, 872
water supply B 379-E,
442-F, 480-G, 542-F;
W 228, 342

Controller Bay, Prince William Sound,Copper River Regions

Alaska Range, eastern

geology B 989-D

Bering River region

geology, coal B 250, 259,
284; C 146

Big Delta (D-6) quadrangle

I-297

Bremner River region

geology, mineral re-
sources B 520-C, 576

Cape Yaktag

placers B 259

Chistochina district

geology, mineral re-
sources B 379-D,
480-E, 498, 692-C

Chitina Valley

ammonites P 354-D
geology A 21 II h;
B 675, 894

ALASKA--Continued

Controller Bay, Prince William Sound,
 Copper River--Continued
 Chitina Valley--Continued
 mineral resources B 345-C, 374,
 379-D, 442-D, 520-C, 542-C,
 622-D, 642-C, 714-C, 755-B
 Controller Bay
 geology, mineral re-
 sources B 335
 oil B 314-E
 Copper River region
 aeromagnetic map GP-156
 geology, mineral re-
 sources A 20 VII d;
 B 345-C, 662-C, 712-C,
 824-B, 844-C, 868-C, 880-B;
 943-B, C; P 41; SP
 Cordova region
 engineering geology C 136
 Ellamar district
 geology, mineral re-
 sources B 542-D, 605
 Gulkana River headwaters
 region
 geology B 498
 Hanagita region
 geology B 576
 Katalla area
 engineering geology I-308
 Knight Island
 mineral resources B 662-C, 947-E
 Kotsina region
 geology, mineral re-
 sources B 345-C, 374
 379-D, 622-D, 745
 Kuskulana district
 geology, mineral re-
 sources B 622-D, 745
 Latouche Island
 mineral resources B 662-C,
 1024-E
 McKinley Lake district
 mineral resources B 542-C
 Maclaren River region
 copper C 332
 Mount Wrangell region
 mineral resources B 213-d; P 15
 Nizina district
 geology, mineral re-
 sources B 448, 813-D,
 947-F
 Nutzotin Mountains
 geology B 933-B
 Port Wells region,
 gold B 592-G
 Barry Glacier P 98-C
 Portage Pass area
 geology B 926-D
 Prince William Sound region
 geology, mineral re-
 sources A 20 VII d;
 B 284, 345-C, 379-C,
 443, 592-G, 692-C,
 773-C, 963-B, 989-E;
 I-273
 glaciers B 526; P 98-C
 mining B 442-D, 592-G,
 622-E, 642-D,
 662-C, 692-C

ALASKA--Continued

Controller Bay, Prince William Sound,
 Copper River--Continued
 Resurrection Bay-Tanana
 River
 reconnaissance A 20 VII c
 Robinson Mountains
 geology OM-187
 Skolai Mountains
 reconnaissance A 21 II h
 Slana district
 geology, mineral re-
 sources B 824-B, 904
 Susitna River headwaters
 region
 geology B 498
 Suslota Pass district
 geology, mineral re-
 sources B 844-C
 Taral region
 mineral resources B 520-C
 Tok district
 geology B 904
 Tonsina district
 geology B 866
 Valdez Creek district
 geology, mineral re-
 sources B 379-D, 498,
 592-H, 849-H, 897-B
 Valdez region
 mineral resources B 520-D,
 622-E
 Valdez (A-5) quadrangle GQ-142
 Yakataga district
 geology OM-187
 mineral resources B 259, 592-E
 Seward Peninsula
 (General)
 frost action B 974-C
 mineral resources,
 mining B 284, 345-E,
 358, 379-F, 442-I, 520-M,
 592-L, 622-I, 662-I,
 692-G, 714-F, 722-F;
 SP; W 314
 water resources B 379-F,
 442-I; W 314
 Brooks Mountain
 mineral resources B 345-E;
 C 214
 Candle quadrangle
 I-287
 Cape Nome region
 geology, mineral re-
 sources C 244; SP
 Casadepaga quadrangle
 geology, mineral re-
 sources B 433
 Council region
 mineral resources B 328, 442-H
 Darby Mountains
 radioactivity investi-
 gations C 300
 Ear Mountain
 radioactivity investi-
 gations B 1024-C
 Fairhaven region
 mineral resources B 247, 379-F
 Goodhope precinct
 gold B 328
 Grand Central quadrangle
 geology B 533

ALASKA--Continued

Seward Peninsula--Continued

Iron Creek

geology, mineral re-
sources B 314-H, 379-F

Kiwalik-Koyuk region

gold, platinum B 692-G

Kotzebue region

gold B 225-b

Kougarok region

mineral resources B 314-I, 328;
C 265
water supply B 345-E; W 218

Lost River area

mineral resources B 345-E; C 319

Niukluk River basin

gold B 314-H

Nome region

geology, mineral re-
sources B 314-G, 328,
622-I
paleontology P 125-C
water supply B 314-J, 345-E;
W 196, 218

Nome quadrangle

geology B 533

northeastern

radioactivity investiga-
tions C 250

northwestern

reconnaissance P 2

Norton Bay region

geology B 449; SP

Norton Bay quadrangle

I-286

Port Clarence precinct

gold B 328

Serpentine area

radioactivity investi-
gations C 265

Solomon quadrangle

geology, mineral re-
sources B 433

Solomon River basin

gold B 314-H

southeastern

geology B 449

southern

mineral resources B 722-F

Teller region

radioactivity investiga-
tions C 244

York region

tin B 225-c, 229,
284, 733; MRUS 1900

Northern Region

(General)

earth temperature B 1083-C
geology, mineral re-
sources B 783-E, 792-C;
P 20
paleontology P 274-D, 283,
294-C, 334-D, E
phosphate P 302-A

Alatna region

geology, mineral re-
sources B 520-L

Anaktuvuk River

geology P 20

Arctic Coast

paleontology P 125-C
reconnaissance P 20

ALASKA--Continued

Seward Peninsula--Continued

Arctic Slope

Foraminifera P 236-A, B
geology OM-126
vegetation P 302-B

Barrow region

core tests, test
wells, earth tem-
perature P 305-K
reconnaissance B 772

Brooks Range

geology P 303-A, B

Canning River region

geology P 109

Cape Lisburne region

geology, coal B 259, 278
Jurassic flora P 85-D
reconnaissance P 20

Carter Creek

Foraminifera P 294-F

Chamberlin Glacier area

hydrochemistry, sedi-
mentation P 414-C

Colville River

geology P 20

Corwin region

geology P 303-C

Fish Creek area

test well P 305-I

Grandstand area

test wells, paleon-
tology P 305-E

Gubik area

test wells, paleon-
tology P 305-C

John River

geology P 20

Kaolak area

test wells, paleon-
tology P 305-F

Knifeblade area

test wells, paleon-
tology P 305-G

Kobuk Valley

geology, mineral re-
sources B 480-J, 536

Meade area

test wells, paleon-
tology P 305-F

Naval Petroleum Reserve

No. 4
geology, mineral re-
sources, paleontology P 301, 302,
303, 305

Noatak region

geology, mineral re-
sources B 520-L, 536

northwestern

geology, mineral re-
sources B 712-G,
797-D, 815

Oumalik area

test wells, paleon-
tology P 305-A

Sentinel Hill area

core test P 305-I

Shainin Lake area

geology P 303-A

ALASKA--Continued

Northern Region--Continued

Shaviovik and Sagavanirktok

Rivers

geology P 303-D

Shungnak region

geology, mineral re-
sources B 480-J

Simpson area

test wells P 305-J

Square Lake area

test wells,
paleontology B 305-H

Squirrel River

placers B 480-J

Titaluk area

test wells,
paleontology P 305-G

Topagoruk area

test wells,
paleontology P 305-D

Umiat area

test wells, paleon-
tology, earth tem-
perature P 305-B

Utukok region

geology P 303-C

Wol Creek area

test wells,
paleontology P 305-H

ARIZONA

Agathla Peak NE, NW, SE,
SW quadranglesMF-88 - 91
P 209

Ajo mining district

Alamo area

water resources W 1360-D

Alpine area

geology B 1121-H

Aquarius Range

tungsten B 940-I

Aravaipa mining district

B 763

Aravaipa Valley

MF-238

Artillery Mountains region

manganese B 936-R, 961

Avra-Altar Valley

ground water W 796-E

Bagdad area

geology, mineral re-
sources P 278

Banner mining district

B 771

Bisbee region

geology, mineral re-
sources B 213-d;
GF-112; P 21

p. 252

Black Bill Park area

geology, geophysics C 233

Black Mesa coal field

B 431-B

Black Mesa Forest Reserve

P 23

Black Mountains

mineral resources B 340-A, 397

Bonita Creek area

geology, water W 1589

Boot Mesa NE, NW, SE, SW

quadrangles MF-84 - 87

Boriana district

tungsten B 940-I

Boulder Dam region

mineral resources B 871

ARIZONA--Continued

Bradshaw Mountains

geology, mineral re-
sources B 782; GF-126

Bridge Canyon, map

p. 252

Bright Angel quadrangle map

p. 252

Buckskin Gulch SE, SW

quadrangles I-244, 260

Calabasas region

tungsten B 430-D

Canyon Creek area

iron B 821-C

Canyon de Chelly National

Monument

map p. 252

Carrizo Mountains area

carnotite C 111

geology OM-160

Castle Dome area

geology, mineral

resources B 971

central

Devonian, Missis-
sippian rocks P 233-D

Cerbat Range

mineral resources B 340-A,
397, 978-E

Chinle area

radioactivity survey GP-124

Chiricahua Mountains

marble B 380-I

Chloride region

silver B 750-B

Chuska Mountains area

water resources C 308

Clarkdale quadrangle

geology B 1021-N

Clifton district

geology, mineral re-
sources B 213-d;
GF-129; P 43

minerals B 262

Cochise County

geology MF-213;
P 266, 281

Cochise quadangle

MF-231

Coconino County

geology OM-145

Colorado Plateau area

geology P 132-A, 279

Colorado River basin

water records C 389

Cottonwood Wash

water use, vegeta-
tion C 434

Deer Creek coal field

B 225-g

Dinnehots NE, NW, SE, SW

quadrangles MF-92 - 95

Doney Park area

geology, geophysics,
ground water C 233

Dos Cabezas quadrangle

MF-231

Douglas basin

geology, ground
water W 1354

Emmett Wash NE, NW, quad-

rangles I-190, 192;

MF-197, 215

Fisher Hills quadrangle

MF-231

ARIZONA--Continued

Fort Apache Indian Reservation	
iron	B 821-C
Fredonia NE, NW, SW quadrangles	I-333, 160, 247
Gila County	
Christmas copper mine	B 1027-H
uranium	B 1046-P; C 137
Gila region	
geography, geology, hydrology	P 129-H; W 490-C, 498
Gila River valley	
geology, water resources	W 33, 104, 450-A, 796-F, 1104
Globe district	
geology, mineral resources	GF-111; GQ-41; P 12
Grand Canyon region	
geology	A 2 b, 14 II i; B 549; M 2; P 98-I, 131-B; W 556
guidebook	B 613
maps	p. 253
water supply	W 1475-C
Grand Gulch mining region	B 580-D
Grand Wash Cliffs	
geology	B 798
mineral resources	B 340-A, 397
Greaterville	
placers	B 430-A
Haunted Canyon quadrangle	GQ-128
Heaton Knolls NW quadrangle	I-143
Helvetia mining district	
copper	B 1027-F
Holbrook region	
ground water	W 836-B
House Rock Spring NE, NW, SE, SW quadrangles	I-198, 199, 253, 254; MF-188, 189
House Rock Valley area	
geology	B 1081-D
Hurricane Cliffs-2 NE, NW, quadrangles	I-252, 293
Jacob Lake NE quadrangle	I-194
Jerome region	
geochemical anomaly	B 1000-C
geology, mineral resources	B 782; P 308
Kaibito Plateau	
geology	OM-145
Kaiparowits Peak-1, -2, -7 quadrangles	I-134 - 136
Kaiparowits region	
geology, geography	P 164
Kanab SE, SW quadrangles	I-137, 138
Kingman region	
silver	B 750-B
Kofa Mountains	
geology, mineral resources	B 620-H

ARIZONA--Continued

Lake Mead	C 346; P 295, 298
Lake Mead region	
manganese	B 948-D
Lees Ferry NE, NW, SE, SW, quadrangles	I-169, 189, 196, 222
Little Colorado River basin	
sedimentation	W 1110-D
Lost Spring Mountain NE, NW, SE quadrangles	I-144-146
Mayer quadrangle NW ¼	MF-228
Mazatzal Mountains	
mercury	B 620-F, 1042-R
Miami region	
geology, mineral resources	P 115
Moenkopi Plateau	
geology	OM-145
Monument Valley	
mapping	B 1043-D
uranium-vanadium	B 1030-C, 1107-C
Morenci district	
copper	P 43
minerals	B 262
Navajo country	
geography, hydrography	W 380
geology	P 93, 291
Navajo Mountain-13, -14, -15 quadrangles	I-184, 185, 238
northeastern	
stratigraphy	OC-7; P 374-H
northern	
reconnaissance	B 435
northwestern	
stratigraphy	P 129-D
Nutriso area	
geology	B 1121-H
Oatman gold district	B 743
Painted Desert area	
geology	OM-145
radioactivity survey	GP-120
Papago country	
erosion, sedimentation	B 730-B
geography, geology, hydrology	W 490-D, 499
Paradise Valley	
ground water	W 375-B
Paria NE, SE, SW quadrangles	I-263, 265, 266
Paria Plateau NE, NW, SE, SW quadrangles	I-171, 182, 191, 228; MF-196, 214
Parker Dam area, map	p. 254
Patagonia Mountains	
mineral resources	B 430-D, 540-I, 582
Petrified Forest National Monument, map	p. 254
Phoenix Mountains	
mercury	B 690-D
Phoenix region	
irrigation	W 2

ARIZONA--Continued

Pima mining district
 geology B 1112-C
 Pinal Ranch quadrangle MF-81
 Pinedale region
 coal B 431-B
 Pinto area
 radioactivity survey GP-124
 Quartzsite region
 gold B 620-C
 Ray region
 geology, mineral re-
 sources GF-217; P 115
 map p. 254
 Ruby Mountains
 beryl, pegmatites B 1082-D
 Saddle Mountain mining dis-
 trict B 771
 Safford Valley
 water use, vegetation W 1103
 Saguaro National Monument
 map p. 254
 Salt River valley
 water W 73, 136
 San Carlos Indian Reserva-
 tion
 mineral resources B 1027-N
 San Franciscan volcanic field P 76
 San Francisco Mountains
 Forest Reserve P 22
 San Manuel copper district P 256;
 Map 3-180 (p. 226)
 San Pedro Valley
 geology MF-238
 paleontology P 131-E, 140-B
 San Simon Creek region
 geology, ground water W 796-F
 San Simon Valley
 ground water W 425-A
 Santa Rita Mountains
 mineral resources B 430-D, 582
 Shinarump NE, NW quadran-
 gles I-139, 255
 Shinumo quadrangle
 geology, mineral re-
 sources B 549
 Short Creek NE, NW, SE, SW
 quadrangles I-140-142, 153
 Sierrita Mountains
 mineral resources B 725-J
 southeastern
 nitrate B 820
 Springdale SW quadrangle I-132
 Stanley mining district B 763
 Sulphur Spring Valley
 geology, water re-
 sources W 320
 Superior region
 copper B 540-D
 Tanner Wash NW quadrangle I-193
 Tombstone district, map p. 255
 Turquoise copper mining dis-
 trict B 530-b
 Virgin SE quadrangle I-179
 western
 cinnabar B 430-D
 geology B 352
 Whetstone Mountains
 wolframite B 380-D
 White Mesa district
 copper B 540-D

ARIZONA--Continued

Wickenburg region
 silver B 735-E
 Willcox quadrangle MF-231
 Yuma County
 mineral resources B 451
 Zion National Park region
 geography, geology P 220
 ARKANSAS
 Arkansas coal field B 316-D,
 326, 847-E
 C 361
 Arkansas River
 Arkansas Valley
 stratigraphy OC-51
 Batesville district
 Boone formation,
 paleontology B 595, 598;
 P 154-B
 geology, manganese B 715-C, 734,
 921-A; MF-1;
 OM-12
 Buffalo River valley
 lithology C 249
 Caddo Gap quadrangle
 geology B 808
 gravel B 690-B
 manganese B 660-C
 Camden coal field A 21 II f
 Camp Pike, map p. 252
 Carver area
 stratigraphy C 160
 Coastal Plain
 stratigraphy OC-3
 Columbia County
 ground water C 241
 De Queen quadrangle
 geology B 808
 gravel B 690-B
 manganese B 660-C
 El Dorado oil field B 736-H
 Eureka Springs GF-202
 Fayetteville GF-119
 Fort Smith district
 gas field, structure B 541-B
 geology P 221-E
 Garland County
 clay B 285-L
 Gilbert area
 geology C 160; OM-132
 Harrison GF-202
 Hot Springs GF-215
 Little Rock area, map p. 251
 Magnet Cove
 igneous area MF-53
 niobium, titanium B 1015-B
 Marshall area
 stratigraphy C 160
 northeastern
 geology, ground water W 399
 northern
 Batesville sandstone,
 paleontology B 593
 mineral resources B 213-e,
 315-P, 853;
 P 24, 314-H
 stratigraphy W 145
 water resources
 Ozark region
 lead, zinc, geology A 22 II b
 Pike County
 asphalt B 213-h

ARKANSAS--Continued

- Pike County--Continued
 diamond-bearing
 peridotite B 735-1
 mercury B 936-H
 Potash Sulphur Springs
 niobium, titanium B 1015-B
 Pulaski County
 bauxite district P 299; p. 226
 St. Joe
 Boone formation B 598
 Saline County
 bauxite district P 299; p. 226
 Scott County
 peridotite dikes B 735-H
 southern
 geology, ground water P 46
 southwestern
 geology, mineral re-
 sources A 22 III o;
 B 691-J,
 886-C; P 154-F
 Tahlequah quadrangle
 Waldron quadrangle and
 vicinity GF-122
 geology OM-192
 western
 paleobotany P 186-C
 quartz B 973-E
 Winslow quadrangle
 geology GF-154
 water resources W 145

BLACK HILLS. (See SOUTH DAKOTA;
 WYOMING)

CALIFORNIA

- Alleghany district
 gold B 580-I; P 172
 Alpine Butte
 quadrangle MF-222
 Alvord Mountain quadrangle
 geology B 1089-A
 Amargosa region
 geology, mineral re-
 sources B 724, 785-D
 Antelope Valley
 water resources W 278
 Apple Valley quadrangle
 MF-232
 Atolia district
 tungsten B 922-H
 Avenal area
 ground water W 1457
 Bakersfield region
 irrigation W 17
 map p. 252
 Barstow region
 geology MF-233
 mineral resources B 540-K,
 541-E, 660-I
 P 197-D
 Basin and Range province
 Benton Range
 tungsten B 922-S
 Bidwell Bar GF-43
 Big Bar area, map p. 252
 Big Trees GF-51
 Bishop region
 tungsten B 931-E
 Bissell station, Mohave re-
 gion
 magnetite MRUS 1911 II

CALIFORNIA--Continued

- Bitterwater Valley
 geology, oil B 581-D
 Boron quadrangle MF-204
 Bouquet Reservoir quad-
 rangle MF-79
 Bristol Dry Lake
 core logs B 1045-D
 Bullfrog quadrangle
 geology MF-177
 Butte Valley region
 geology, ground water W 1491
 Cache Creek
 water storage W 45
 Cadiz Dry Lake
 core logs B 1045-D
 Camp Irwin
 geology, hydrology W 1460-F
 Cane Springs region
 gypsum B 430-F
 Cantua region
 geology, oil B 431-A
 Carrizo Creek
 corals P 98-T
 Carrizo Plain
 sodium sulfate B 380-L,
 540-N
 Carrville district
 gold B 530-A
 Carson River basin
 water-power re-
 sources W 1329-A
 Casa Diablo Mountain quad-
 rangle GQ-99
 Casmalia region
 diatomaceous rock, oil OM-34
 Castle Butte quadrangle
 central MF-170
 Foraminifera P 240
 Central Valley
 floods W 1137-F
 map p. 252
 stratigraphy OC-34
 China basin
 core logs B 1045-A
 Coalinga district
 geology, oil B 357, 398,
 603; OC-1, P 205-C
 paleontology B 396; OC-1
 Coast Ranges, southern
 minerals in streams W 1535-B
 Colfax GF-66
 Colton region
 water use W 59, 60
 Colusa County
 thermal waters W 1535-A
 Concord GF-193
 Coso quicksilver district B 936-Q
 Cuyama Valley
 geology B 621-M
 ground water W 1110-B
 Dale region
 iron B 430-E
 Danby Dry Lake
 core logs B 1045-D
 Darwin district
 silver, lead B 580-A
 Death Valley
 mineral resources B 200, 540-N

CALIFORNIA--Continued

Del Puerto area
chromite, mercury B 936-D
Downieville GF-37
Eagle Mountains
iron B 503,

eastern
geology B 208, 308
mineral resources B 213-I, 285-A
Edna region
bituminous sandstone OM-16
El Modeno area
volcanic rocks P 274-L
Elk Hills
geology, oil B 835
Eureka area
geology, ground water W 1470
Fresno area
irrigation W 18
Gasquet quadrangle
geology, mineral
resources B 995-C
Genesee, map p. 253
Glenn County
chromite B 945-A
Goodsprings, map p. 253
Grass Valley district
gold A 17 II a;
P 194
Hawes quadrangle MF-226
Hayward quadrangle GF-193; GQ-88
Hoopa Valley
water resources W 1576-C
Huron area
ground water W 1360-G
Indian Valley district
mineral resources B 260-b
Indio region
ground water W 225
map p.253
Inyo County
tungsten B 640-L,
922-Q

Inyo Mountains
geology B 1061-A; P 110
mineral resources B 540-B
Islais Creek basin,
engineering geology I-264
Ivanpah quadrangle
geology, mineral re-
sources P 275
ground water W 450-C
Jackson GF-11
Kern County
geology, oil B 721
Kern River and basin
flood W 1260-D
oil field, map p. 253
physical character-
istics W 46
uranium area B 1087-F
Kettleman Hills
geology, paleon-
tology P 189-C, 195;
p. 234
Kings Canyon National Park
map p. 254
Kings River
water storage W 58

CALIFORNIA--Continued

Klamath Mountains
chromite B 725-A
topography B 196
Kramer region
borate B 785-C;
P 158-I
B 1045-B, F

core logs
geology, mineral re-
sources B 541-E,
1089-B

La Canada valley
flood W 796-C
Lake County
thermal waters W 1535-A
Lake Tahoe Forest Reserve A 21 V f
Lancaster quadrangle MF-76
Lanfair Valley
ground water W 450-B
Lassen Peak district A 8 I c;
GF-15

Lassen Volcanic National
Park and vicinity
map p. 253
Lodoga quadrangle
geology OM-210
Long Beach area
hydrology W 1109, 1136,
1471
map p. 251
Los Angeles region
geology, oil B 285-G, 309,
753; GP-149;
MF-79; OM-117, 196

landslides I-284
map p. 251
paleontology P 190
Los Angeles River basin
ground water W 112
Los Burros district
mineral resources B 735-J
Lower Lake area
ground water W 1297
McGuffy Creek region
chromite B 948-B
McKittrick region
bituminous sandstone,
asphalt OM-35
geology, oil B 406
ground water W 1457
Manix Lake
fossil birds P 264-J
Marysville GF-17
Marysville Buttes
map p. 254
stratigraphy OC-34
Mayacmas district
mercury B 922-L
Medford quadrangle GQ-89
Mendota area
ground water W 1360-G
Merced area
irrigation W 19
Mesquite Valley
ground water W 450-C
Middletown area
ground water W 1297
Midway region
geology, oil OM-30;
P 116, 117

CALIFORNIA--Continued

Miner ranch oil field	B 340-F
Mohave Desert	
arthropods	P 294-G
borax	B 200, 785-C; P 158-I
core logs	B 1045-A - F
geology, geography,	
hydrology	W 490-B, 578
gravity survey	P 316-D
Mohave quadrangle	MF-219
Mokelumne area	
geology, water	W 619, 780
Mono Lake area, map	p. 254
Mono Valley	
Quaternary history	A 81 b
Monterey County, southwestern	
mercury	B 922-R
Morgan Hill area	
ground water	W 400-E
Mother Lode district	
geology, mineral re-	
sources	GF-63; P 157
Mount Diablo Range	
coal	B 285-F
Mount Diablo region	
mercury	B 922-B
stratigraphy	OC-34
Mountain Pass district	
rare earths	P 261
Napa valley	
geology, ground	
water	W 1495
Naval Petroleum Reserve No. 1	
geology, oil	B 835
map	p. 254
Needles, map	p. 254
Nevada City district	
geology, mineral re-	
sources	A 17 a; GF-29
New Almaden	
Harry workings, map	p. 226
metacinnabarite	B 78
Niles cone area	
ground water	W 345-H
North Elder Creek area	
chromite	B 945-G
northeastern	
mining districts	B 594
northern	
floods	W 843
geology	B 33
volcanic eruption	B 79
water supply	W 637-A
northwestern	
floods	W 1137-E, 1320-D
Oakland and vicinity, map	p. 251
Oakland West quadrangle,	
geology, engineering	I-239
Ophir	
gold, silver	A 14 II e
Owens basin	
core logs	B 1045-A
salines	B 580-L
Owens Lake area, map	p. 254
Owens Valley	
geology, water re-	
sources	W 181, 294

CALIFORNIA--Continued

Pacific Palisades area	
landslides	I-284
Pahrump Valley	
ground water	W 450-C
Palen Mountains	
gypsum	B 430-F
Palos Verdes Hills	
geology, paleontology	P 207
Panamint basin	
core logs	B 1045-A
salines	B 580-L
Panoche region	
geology, oil	B 431-A; OM-128
Parker Dam area, map	p. 254
Parkfield area	
geology, oil	B 691-H
mercury	B 936-F
Paymaster mining district	
manganese	B 931-S
Peachtree Valley	
geology, oil	B 581-D
Pearland quadrangle	GQ-24
Petaluma Valley	
geology, ground water	W 1427
Pilliken area	
chromite	B 922-O
Placerville	GF-3
Point Arena	
bituminous sandstone	OM-125
Priest Valley	
geology, oil	B 581-D
Puente Hills	
geology, oil	B 309, 768; OM-23, 83, 195
Pyramid Peak	GF-31
Ramona region	
molybdenum	B 640-D
Randsburg quadrangle	
gold	B 430-A
Raymond region	
tungsten	B 340-D
Redding region	
geology, mineral re-	
sources	B 213-d, f, i, 225-d; GF-138
Riverside region	
water use	W 59, 60
Rock Corral area	
radioactivity studies	B 1021-C
Rogers Lake quadrangle	
geology	B 1089-B
Ryan	
borax	MRUS 1911 II
Sacramento Valley	
geology, ground water	GF-5; W 375-A, 495, 1497
surface water	W 295, 597-E
Salinas Valley	
geology, oil	B 691-H; OM-24
water resources	W 89
Saline Valley	
salt, borax, potash	B 540-N
Salt Lake oil field	B 285-G
Salton Sea region	
geology, geography,	
hydrology	W 490-A, 497

CALIFORNIA--Continued

Salton Sink, map	p. 254
San Benito County	
coal	B 431-B
San Bernardino County	
Birthday claims	
bastnaesite	MF-4
San Bernardino Forest Reserve	A 19 V i, 20 V f
San Bernardino Mountains	
hydrology	HA-1
San Bernardino region	
hydrology	W 59, 60, 142
San Clemente Island	
geology	A 18 II f; B 1071-B
San Diego County	
geology, ground	
water	W 446
mineral resources	B 620-P, 640-D
San Francisco Bay region	
earthquake	B 324
engineering geology	I-264
flood	W 1260-D
geology	A 15 d; GF-193; I-272
map	p. 251
shoreline features	I-298
water resources	C 378; W 637-A
San Gabriel Basin	
geology	OM-63
San Gabriel Forest Reserve	A 19 V i, 20 V f
San Gabriel Mountains	
hydrology	HA-1
San Jacinto Basin	
ground water	W 429
San Jacinto Forest Reserve	A 19 V i, 20 V f
San Joaquin basin	
geomorphology,	
glacial geology	P 329
water	W 296, 636-D
San Joaquin Hills	
geology	OM-193
San Joaquin Valley	
flood	W 1260-D
geology, oil	B 471-A, 603, 653, 812-D; OC-6
ground water	W 222, 398, 1469
San Jose Hills	
geology, oil	OM-23
San Juan Capistrano area	
Foraminifera	P 294-M
geology	OM-193
San Luis	GF-101
San Luis Obispo County	
chromite	B 945-B
mercury	B 922-R
San Mateo	GF-193
Santa Ana area	
hydrology	W 1109, 1471 1136
Santa Ana Mountains	
clay	Map 3-197 (p. 226)
Foraminifera	P 294-M
geology	OC-12; OM-154

CALIFORNIA--Continued

Santa Barbara	
water problems	W 116
Santa Barbara County	
diatomaceous de-	
posits	B 315-O
geology, water re-	
sources	W 1068, 1108
Santa Clara Valley	
geology, oil	B 309
ground water	W 519
Santa Cruz region	
bituminous sandstone	OM-27
geology	GF-163
Santa Maria district	
geology, oil	B 317, 322; OM-14; P 222; p. 235
Santa Maria Valley	
water resources	W 1000
Santa Monica area	
geology, hydrology	W 1461
Santa Monica Mountains	
geology	P 165-C
Santa Rosa Hills	
geology	OM-26
Santa Rosa Valley area	
geology, ground water	W 1427
Santa Ynez River basin	
geology, water re-	
sources	W 1107, 1467
Scott Valley	
geology, ground water	W 1462
Searles Lake	B 580-L, 1045-A, E; MRUS 1912 II; P 98-A
Seiad Creek region	
chromite	B 948-B
Seiad quadrangle	
chromite	B 922-J
Sequoia National Park, map	p. 254
Shadow Mountains quad-	
rangle	MF-227
Shasta County	
copper, zinc	B 430-B; P 285
Shasta Valley	
geology, ground water	W 1484
Shoshone region	
colemanite	B 785-D
Sierra Nevada	
forests	P 8
geology	A 14 II h, 171 d; B 89; P 110
geomorphology,	
glacial geology	P 329
hydraulic mining	
debris	P 105
Neocene rivers	B 213-b
reservoir sites	C 85
Tertiary gravels	P 73
tungsten	B 931-E
Simi Valley	
structure, oil	B 691-M
Smartsville	GF-18
Smith River plain	
geology, ground water	W 1254

CALIFORNIA--Continued

Soda Lake	
core logs	B 1045-C
Solano County	
geology, water re-	
sources	B 1464
Sonoma Valley	
geology, ground water	W 1495
Sonora	GF-41
southeastern	
mineral resources	B 580-L,
	710-E, 820
water	W 224
southern	
floods	W 426, 844
paleontology	B 513; P 254-C
water resources,	
irrigation	C 105, 399, 404,
	416, 429; W 59,
	60, 137, 138, 139,
	213, 219, 468,
	636-E, 1366
southern coast	
magnetometer survey	GP-211
Stanislaus Forest Reserve	A 21 V f
Stayton district	
antimony, mercury	B 931-Q
Stone Canyon	
coal	B 316-F
Stony Creek	
reservoirs	W 86
Sulphur Bank district	
mercury	B 922-L
Summerland district	
geology, oil	B 321
Sunset region	
geology, oil	B 406; OM-30;
	P 116, 117
	GF-193
Tamalpais	
Taylorsville region	
geology	B 353
Temecula Basin	
ground water	W 429
Torrance area	
geology, hydrology	W 1461
Trinity River basin	
gold	B 470-B
Truckee	GF-39
Truckee Basin	
water storage	W 68
Tulare Lake basin	
flood	W 1260-D
Tumey Hills	
geology	OM-128
Tungsten Hills	
tungsten	B 922-Q
Ubehebe Peak quadrangle	GQ-95
Valyermo quadrangle	GQ-50
Ventura basin	
geology	OM-196
Ventura County	
borate	B 540-O
geology, oil	B 753
Victorville quadrangle	MF-229
Waltham Valley	
geology, oil	B 581-D
Weaverville region	
gold	B 430-A, 540-A
West Shasta copper-zinc	
district	P 285

CALIFORNIA--Continued

White Mountains	
mineral resources	B 540-B
Wildrose Canyon area	
antimony	B 922-K
Yosemite National Park	
map	p. 255
Yosemite Valley	
geology	P 160
map	p. 255
Yuba River	
reconnaissance	W 46
COLORADO	
Aguilar area	
coal	B 1072-G
geology	OM-174
Alma district	
radioactive minerals	C 294
Alta Basin and vicinity,	
map	p. 252
Anderson Mesa quadrangle	GQ-77; MF-25
Aneth-1, -8 quadrangles	I-90, 97
Anthracite region	GF-9
Apishapa quadrangle	
geology	GF-186; P 90-C
Archuleta County	
geology	OM-81
Arkansas Valley	
geology, ground water	A 17 II f; P 52
reservoir sites	A 13 III d
Aspen and vicinity, map	p. 252
Aspen mining district	B 750-C,
	785-A; M-31
	GQ-57; MF-18
Atkinson Creek quadrangle	
Axial quadrangle	
geology, coal	B 757
Baca County	
geology, ground water	W 1256
Battlement Mesa Forest	
Reserve	A 20 V c
Bear Creek region	
gold	B 285-A
Beaver-Tarryall area	
geology	B 928-A
Black Canyon of the Gunnison	
National Monument,	
map	p. 252
Blue River area	
geology, mineral re-	
sources	B 970
Bonanza and vicinity, map	p. 252
Bonanza district	
geology, mineral re-	
sources	OM-153; P 169
Book Cliffs coal field	B 316-E, 371,
	851; P 332
Boulder County	
geology, mineral re-	
sources	B 265, 922-F;
	P 94, 245;
	p. 234
	B 213-h,
	225-h, 381-D
oil	
Breckenridge district	
geology, mineral re-	
sources	P 75, 176
map	p. 252
Buffalo Peaks	
geology	B 1
Bull Canyon quadrangle	GQ-33

COLORADO--Continued

Calamity Mesa quadrangle GQ-61; MF-32
 Calhan region
 clay B 470-G
 B 381-C
 Canon City coal field B 381-C
 Caribou area
 geology, uranium B 1030-N
 Castle Rock GF-198
 Cathedral Bluffs oil-shale
 area
 geology OM-134
 Central City, map p. 252
 Central City district
 geology, mineral re-
 sources B 1032-A, C,
 F; C 186;
 P 374-B
 Chaffee County
 copper B 340-B
 Clear Creek County
 economic geology P 94, 319, 1032
 radioactivity C 345
 Climax area
 molybdenum B 846-C
 Club Mesa area
 uranium, vanadium MF-169
 Coach Creek NE, SE quad-
 rangles I-278, 279
 Colorado National Monument,
 map p. 252
 Colorado River basin
 profile surveys W 396
 water C 389; W 395,
 617
 Colorado Springs region
 coal B 381-C
 geology GF-203
 Cortez SW quadrangle MF-217
 Creede district
 geology, mineral re-
 sources B 530-a, 718,
 811-B
 map p. 252
 Crested Butte GF-9
 Cripple Creek district
 geology, mineral re-
 sources A 16 II a;
 B 254, 260-b,
 955-B; P 54
 Crystal Mountain district
 pegmatites B 1011
 Crystal River
 waterpower C 292
 Cuchara Pass
 geology, coal Map C-26
 Custer County
 Cerussite B 580-C
 mines A 17 II c
 Danforth Hills
 coal B 316-E
 Davis Mesa quadrangle GQ-71; MF-31
 De Beque region
 geology, oil B 531-C;
 OM-114
 Delta quadrangle I-282
 Denver area
 Pleistocene, Recent B 996-C
 Denver mountain area,
 maps p. 253

COLORADO--Continued

Denver Basin
 coal B 381-C
 geology M 27
 Laramie flora P 130
 Dinosaur National Monument,
 map p. 253
 Dove Creek area
 geology OM-120
 Doyleville SW quadrangle I-277
 Durango area
 geology, mineral re-
 sources B 260-b,
 285-F, 315-I, 316-E, F,
 341-C; OM-109
 volcanic ash B 285-O
 Eagle County
 gypsum B 470-G
 eastern
 stratigraphy OC-46; P 149,
 186-K
 structure OM-176
 Egnar region GQ-68;
 MF-26;
 OM-93
 GF-58
 Elmore
 Empire district
 economic geology P 63
 Engineer Mountain GF-171
 Escalante Forks quadrangle I-274
 Florence oil field B 260-J,
 381-D
 Florissant
 paleontology A 8 I d; B 93,
 M 40
 Freeland-Lamartine district
 geology, mineral re-
 sources B 1032-B
 Fremont County
 copper B 340-B
 Front Range
 geology, mineral re-
 sources P 223; p. 235
 peneplains B 730-A
 petrography B 1032-E
 stratigraphy B 1102; C 68;
 OC-39, 60;
 P 274-B
 Garfield County
 oil shale OM-94, 114
 Garfield quadrangle
 geology, mineral re-
 sources P 289
 Garo region
 uranium-vanadium-
 copper B 1087-A
 Gateway area GQ-55;
 Map 3-173 (p. 226);
 MF-122
 Georgetown district
 economic geology B 260-b; P 63
 Gilpin County
 economic geology B 620-M, 1032;
 P 94
 Gold Hill region
 map p. 253
 nickel B 931-O
 Golden Gate Canyon
 pitchblende B 1030-G;
 C 320

COLORADO--Continued

Golden quadrangle	
geology	GQ 103
Table Mountain minerals	B 20
Grand County	
Granby anticline	B 822-B
Grand Hogback	
coal	B 316-E
Grand Mesa	
coal	B 341-C, 510
Gray Head quadrangle	MF-176
Great Sand Dunes National Monument, map	p. 253
Greeley region	
irrigation	W 9
Green River	
history	P 90-K
hydrology	C 129
utilization	W 618
Gulnare area	
geology, coal	Map C-26
Gunnison County	
gold	B 380-A
granite	B 540-K
Gunnison River	
Precambrian rocks	B 777
Gunnison Valley	
coal	B 471-H
Gypsum Gap quadrangle	GQ-59; MF-19
Gypsum Valley area	
geology	OM-93
Hahns Peak gold field	B 285-A
Hamm Canyon quadrangle	GQ-69; MF-21
Hinsdale County	
Carson Camp	
geology	B 470-B
Horse Range Mesa quadrangle	GQ-64; MF-29
Huerfano Park area	
geology	B 1071-D; OM-183
Idaho Springs area	
gold, silver	B 285-A
Precambrian rocks, joints	P 374-B
Ignacio area	
geology	OM-138
Independence Pass and vicinity, map	p. 253
Indian Hills quadrangle	I-333
Iris SE quadrangle	I-277
Iron Hill	
alkalic rocks	P 197-A
Jackson County	
North and South McCallum anticlines	C 5
Jefferson County	
copper	B 340-B
Jo Dandy area	
Morrison formation	B 1084-E
Jo Reynolds area	
geology	C 213
Joe Davis Hill quadrangle	GQ-66; MF-27
Juanita Arch quadrangle	GQ-81; MF-28
Kansas River basin	
irrigation	C 295
La Plata district	
geology, mineral resources	GF-60; P 219

COLORADO--Continued

La Veta area	
coal	Map C-20
geology	OM-146
Lake City region	
geology, mineral resources	B 260-b, 478
Lamartine district	
geology, uranium	B 1032-B
Larimer County	
geology, mineral resources	B 1032-D
Las Animas County	
Model anticline, structure	OM-68
Lawson-Dumont district	
geology	C 213
Lay region	
gold	B 340-A
Leadville district	
geology, mineral resources	A 2 d; B 320, 681, 779; M 12; P 148 p. 234, 253
maps	
Leadville quadrangle	
Pleistocene geology	B 386
Lisbon Valley area	
geophysics	P 316-C
Little Cone quadrangle	
geology	B 1082-g; MF-223
Logan County	
ground water	HA-9
Louisville quadrangle	
geology	B 996-E, GQ-151
McKinley Mountain area	
geologic, radiometric maps	MF-37
Mancos region	
coal	B 691-K
Meeker quadrangle	
geology, coal	B 812-C
Mesa Verde area	
geology, fuels	B 1072-M; OM-152
Mesa Verde National Park, map	p. 254
Mineral County	
sulfur	B 530-h
Moffat County	
geology, fuels	B 751-G, 1027-D, GP-125, 126 OM-7, 41
radioactivity survey	
Rangely anticline	
Montezuma quadrangle	
geology, ore deposits	P 178
Montrose County	
Cashin mine, copper	B 285-B
Monument Butte quadrangle	
geology, coal	B 757
Moqui SE, SW quadrangles	MF-216, 221
Morgan County	
ground water	HA-9
Mosquito Range	
geology, mineral resources	P 185-B, 235; p. 234
paleontology	P 185-D

COLORADO--Continued

Mount Antero region beryllium	B 982-D
Mount Peale quadrangles 1 NE, 1 SE	I-165; MF-123, 139
4 NE, 4 SE	MF-149, 150
8, 9, 16	I-157, 174, 176
Naturita NW quadrangle	GQ-65; MF-30
Naval Oil Shale Reserves 1 and 3	
geology	OM-94
Needle Mountains	GF-131
Nepesta	GF-135
north-central	
Dakota fauna	P 131-H
North Park	
geology, coal	B 596
northeastern	
geology, oil and gas	B 796-B; OC-42
northern	
Niobrara limestone	B 380-J
tectonic map, uranium	MF-130
Northgate district	
geology, fluorspar	B 1082-F, MF-13
metamorphism	P 274-M
northwestern	
coal	B 316-E, 341-C, 415
geology	A 9 e; OC-16, 59; P 132-F
oil shale	B 581-A, 641-F
Norwood-1 quadrangle	I-283
Ouray district	
geology, mineral re- sources	B 260-b; GF-153
Pando area	MF-12
Paonia coal field	p. 224
Paradox quadrangle	GQ-72; MF-22
Park County	
mineral resources	B 911, 955-D, 1087-A
Pearl region	
copper	B 213-d
Piceance Creek basin	
geology, oil	B 1042-H, 1082-L; OM-119
Piedra River Canyon	
geology	OM-96
Pikes Peak region	
geology	GF-7
map	p. 254
minerals	B 20
Pikes Peak Forest Re- serve	A 20 V b
Pine Mountain quadrangle	GQ-60; MF-20
Placerville quadrangle	
geology	B 1072-E; MF-96
Placerville region	
vanadium	B 530-c
Platora mining area, map	p. 254
Plum Creek Forest Reserve	A 20 V b
Powderhorn district	
thorium, rare-earth minerals	B 1027-O
Pueblo	GF-36
Quartz Creek pegmatite dis- trict	P 265

COLORADO--Continued

Ralston Buttes quadrangle	MF-179
Ralston Creek area	
uranium	C 320
Rangely district	
geology	B 350; OM-7, 41, 67
Raton Mesa region	
geology	GF-214; OM-183; P 101
Red Canyon quadrangle	GQ-58; MF-17
Red Mesa area	
geology, fuels	OM-149
Rico district	
geology	GF-130
maps	p. 254
Rico Mountains	
geology, mineral re- sources	A 21 II a, 22 II c
Rifle Creek area	
uranium-vanadium	B 1101
Rio Blanco County	
carnotite	B 315-C
Rangely anticline	OM-7, 41, 67
Roc Creek quadrangle	GQ-83; MF-23
Rocky Mountain National Park	
map	p. 254
penneplains	B 730-A
Rosita Hills	
geology	A 17II b
Routt Count y	
carn ite	B 340-D
geology, fuels	B 285-F, 297, 748, 1027-D
St. Kevin mining district	B 1027-E; C 321; p. 254
San Cristobal quadrangle	
alunite	B 530-d
San Juan region	
geology	B 843; P 134, 166, 258
landslides, reservoir sites	B 685; P 67
mineral resources	B 735-D, 1046-D; C 236
San Luis Valley	
geology, water re- sources	W 240, 1379
Sentinel Peak NE, NW quad- rangles	MF-132, 224
Silver Cliff	
geology	A 17 II b
Silver Plume, map	p. 254
Silverton region	
geology, mineral re- sources	B 182, 285-A, 315-A; GF-120
Slick Rock district	MF-203
Snowmass Mountain area	
geology, mineral re- sources	B 884
south-central	
clay	B 993
paleontology	P 131-G
South Park coal field	B 381-C
South Platte Forest Reserve	A 20 V b
South Platte River valley	
geology, ground water	W 1378

COLORADO--Continued

southeastern	
geology	OM-101, 135
southwestern	
Eocene glacial deposits	P 95-B
landslides	C 31
paleontology	A 20 II c; P 221-D, 274-H
stratigraphy	OC-7; P 90-E
vanadium	Map 3-226 (p. 226)
Spanish Peaks	GF-71
Starkville area	
geology, coal	B 1051
Stonewall area	
geology, coal	Map C-4, 26
Sugar Loaf mining district	B 1027-E; p. 254
Summitville district	
geology, mineral re- sources	P 343
map	p. 254
Taylor Peak region	
iron	B 380-E
Telluride quadrangle	
geology, mineral re- sources	A 18 III f; GF-57
Tenmile mining district	GF-48; p. 254
Tennessee Pass area	MF-34
Tercio area	
geology, coal	Map C-4
Trinidad area	
coal	B 381-C, 1072-G, 1112-E
geology	OM-174
Twentymile Park district	
geology	B 748
Unaweep copper district	B 580-B
Uncompahgre region	
economic geology	B 285-K, 906-E
Uravan area	
geology, mineral re- sources	B 988-A, 1042-F; MF-169
geophysical investiga- tions	P 316-A
Uravan quadrangle	
geology	GQ-78; MF-24
Walsenburg area	
geology, mineral re- sources	B 1042-O; GF-68; OM-161
Washakie Basin	
geology	OM-32
Weld County	
ground water	HA-9; W 1367
West Elk Mountains	
coal	B 510
western	
minerals	B 262
Weston area	
geology, coal	B 1051
Wet Mountains	
geology, thorium	B 1072-H; C 290; MF-37
White River Plateau Timber Land Reserve	A 20 V c
Whitepine region	
iron	B 380-E

COLORADO--Continued

Willow Creek Butte quad- rangle	I-322
Wray area	
geology	B 1001
Yampa coal field	B 285-F, 297, 748
Yampa River	
history	P 90-K
Yellow Jacket quadrangle	I-281
CONNECTICUT	
Avon quadrangle	GQ-134
Bristol quadrangle	GQ-145
Connecticut Valley	
geology, paleontology	A 7 f, 18 II a; M 14
water resources	W 110
Glastonbury area	
ground water	W 470
Granby area	
ground water	W 466
Hartford area	
water	W 374, 836-A
Holyoke, Mass., region	GF-50
Meriden area	
ground water	W 449
Middletown area	
pegmatites	B 1042-Q
New Britain quadrangle	GQ-119
New Haven area	
ground water	W 540
Norwalk area	
ground water	W 470
Norwich quadrangle	GQ-144
Pomperaug Valley	
geology	A 21 III a;
ground water	W 597-B
Preston area	
gabbros	B 492
Roxbury quadrangle	GQ--121
Salisbury and Saybrook areas	W 374
South Britain area	
fossil wood	A 21 III a
Southington area	
ground water	W 466
Southington quadrangle	GQ-146
Stamford area	
ground water	W 374
Suffield area	
ground water	W 470
Trumbull	
tungsten	A 22 II a; B 213-c
Uncasville quadrangle	GQ-138
Waterbury area	
ground water	W 397
western	
limestone	B 744
Willimantic area	
ground water	W 374
Windsor Locks quadrangle	GQ-137
DELAWARE	
Delaware River basin	
water resources	C 190
Dover	GF-137
Elkton	GF-211
Piedmont Upland	
mineral resources	B 1082-K
West Chester quadrangle	GF-223

DELAWARE--Continued

Wilmington region
geology GF-211
map p. 252

FLORIDA

De Soto County
stratigraphy B 1030-B
Everglades area
geology C 314
Fort Myers area
radioactivity survey GP-21
Gardner area
radioactivity survey GP-122
Hardee County
stratigraphy B 1030-B,
1074-C
Hernando County
stratigraphy B 1074-C
Miami area
geology, ground water W 1255
Nassau County
radioactivity survey GP-119
northern
Cretaceous rocks OC-26
Ocala region
radioactivity B 1046-J
southeastern
water resources W 1255
southern
Pliocene fossils P 170-D
Tampa region
stratigraphy B 1074-C
west-central
stratigraphy B 1092
fuller's earth MRUS 1901

GEORGIA

Atlanta area
map p. 251
water resources C 148
Barnesville district
mica P 248-F
Bartow County
bauxite C 193
Camp Gordon and vicinity,
map p. 252
Cartersville district
geology, mineral re-
sources B 213-f, n,
340-M; P 224
map p. 252
central
clay B 315-I
Chattahoochee River region
paleontology P 274-J
Chattanooga, Tenn., region
iron B 380-E
map p. 251
physiography A 19 II a
Chickamauga and Chattanooga
National Military
Park, map p. 252
Coastal Plain
geology B 941
ground water W 341
Dahlonega district
gold, tin, pyrite B 213-b, 293
map p. 251
Ellijay region
geology, mineral re-
sources B 340-E;
GF-187

GEORGIA--Continued

Floyd County
bauxite C 193
Folkston area
radioactivity survey GP-119
Hartwell district
mica P 248-E
Lookout Mountain
coal p. 224
northwestern
Chattanooga shale,
uranium B 1087-E
iron B 540-G
Polk County
bauxite C 193
Ringgold GF-2
Rock Run and vicinity, map p. 254
Rome GF-78
Sand Mountain
coal, map p. 224
Savannah River Plant area
radioactivity GP-306
Seminole copper deposit B 225-d
southwestern
fuller's earth MRUS 1901
limestone sinks,
hydrology W 1110-E
Stevenson GF-19
Thomaston district
mica P 248-F

HAWAII

Hawaii Island
petrography P 214-D
Kau district
geology, ground water W 616
Kilauea-Mauna Loa section,
Hawaii National Park,
map p. 253
Mauna Loa volcano
eruption B 974-A
Kauai Island
map p. 254
Waimea area
flood W 1137-C
Lanai Island, map p. 253
Maui Island, maps p. 253, 254
Molokai Island
map p. 254
water resources W 77
Niihau Island, map p. 254
Oahu Island
ground water C 435
map p. 254
Honolulu and vicinity, map p. 251

IDAHO

Ammon quadrangle
geography, geology,
mineral resources P 238
Bannock County
manganese B 795-H
Bayhorse region
geology, mineral re-
sources B 877
Bear River basin
profile surveys W 350
Bear River Range
lead, copper B 470-D
Big Wood River region
water resources C 192;
W 1478, 1479
Bitterroot Forest Reserve A19Vf, 20V e

IDAHO--Continued

Bitterroot Range	
geology, mineral re-	
sources	B 213-b; P 27
Bloomington area	
geology, vanadium	MF-41
Blue Wing district	
tungsten	B 931-A
Boise Basin	
geology, mineral re-	
sources	B 640-E, 846-d, 944-C; GF-45
Boise Ridge mining district	A 18 III e
Boise River drainage basin	W 1048
Bruneau area	
ground-water	W 1460-D
Buffalo Hump district	
geology, mineral re-	
sources	C 9
Casto quadrangle	
geology, mineral re-	
sources	B 854
Clark Fork basin	
profile surveys	W 346
Clark Fork district	
lead-silver	B 944-B
Clearwater Mountains	
geology, mineral re-	
sources	B 213-b; P 27
Clearwater region	
economic geology	B 530-a
Coeur d'Alene district	
geochemical prospect-	
ing	B 1098-A; C 168
geology, mineral re-	
sources	B 260-g, 710-A; P 62; p. 226
Latah formation	P 140-A
Columbia River basin	W 346, 916
Craters of the Moon National	
Monument, map	p. 252
Custer County	
geology, mineral re-	
sources	B 539, 877
De Lamar district	
gold, silver	A 20 III b
Deer Creek area	
phosphate	B 955-C, 982-A
Dismal Swamp placer deposit	B 1042-K
Dome district	
lead-silver	B 540-E
Dry Creek area, map	p. 253
Dry Valley quadrangle	
geology	B 1015-I
east-central	
uranium, thorium	B 988-H
eastern	
coal	B 716-F
Elk City district	
geology, mineral re-	
sources	C 9
Fall Creek area	
uranium in coal	B 1055-I; C 212
Fort Hall Indian Reservation	
geography, geology, min-	
eral resources	B 713

IDAHO--Continued

Fort Hall mining district	
copper	B 340-B
Georgetown district	
geology, phosphate	B 577
Gilmore mining district, map	p. 253
Goose Creek district	
lignite	B 531-H
Tertiary geology	B 1055-H
Grand View area	
ground-water	W 1460-D
Grimes Pass and vicinity,	
map	p. 253
Henrys Fork	
profile surveys	W 420
Horseshoe Bend	
coal	B 531-H
Horseshoe Creek district,	
Teton Basin	
coal field	B 541-I
Idaho Basin	
geology, mineral re-	
sources	A 18 III e
Idaho County	
geology, mineral re-	
sources	B 1046-c; C 9
Iron Mountain district	
iron	B 982-E
Island Park area	
geology, water re-	
sources	W 818
Jerusalem Valley	
coal	B 531-H
Johnson Creek quadrangle	
geology	B 1042-A
Kellogg and vicinity, map	p. 253
King Hill area, map	p. 253
Kootenai River	
damsites	W 866-A
Lemhi County	
geology, mineral re-	
sources	B 528, 931-A
Lemhi Range	
brachiopods	P 294-L
geology	B 1081-F
Little Eightmile mining dis-	
trict, map	p. 253
Loon Creek district	
mineral resources	B 530-a
Mackay region	
geology, mineral re-	
sources	P 97
Malad Valley	
water consumption by	
plants	W 1412
Meyers Cove region	
fluorspar	B 1015-A
Montpelier region	
copper	B 430-B
Moscow area	
ground water	B 1460-H
Mud Lake region	
geology, water re-	
sources	W 560-D, 818
Mullan region	
economic geology	B 540-E
map	p. 254
Murray area	
geology	B 1027-P

IDAHO--Continued

Nampa	GF-103
Nez Perce County	
geology, water re-	
sources	W 53, 54
northern	
forests	A 19 V j
geology	B 8384
mineral resources	B 285-A, 430-D
Orofino coal field	B 621-I
Orogrande district	
geology, mineral re-	
sources	C 9
Paradise Valley quadrangle	
geography, geology,	
mineral resources	P 238
Paris-Bloomington vanadium	
area	MF-41
Payette area	
gas, oil	B 431-A
Pend Oreille district	
metamorphism	P 158-F
Pine Creek district	
geology, mineral re-	
sources	B 710-A; p. 226
Portneuf quadrangle	
geography, geology, min-	
eral resources	B 803
Pottsville and vicinity, map	p. 254
Priest River Forest Reserve	A 19 V e
Raft River basin	
water resources	W 1587
Red River valley	
uranium	B 1046-C
Rocky Bar district	
molybdenum	B 750-F
St. Joe River basin	
geology, mineral re-	
sources	B 285-B, 470-B, 530-a
Salmon Falls area	
ground water	C 436
Salmon region	
copper	B 774
Salmon River valley	
building stone	B 811-E
Sawtooth quadrangle	
mineral resources	B 580-K
Shoshone County	
geology, mineral re-	
sources	B 732, 1027-P; p. 226
Silver City district	
geology, mineral re-	
sources	A 20 III b; GF-104
Silver Creek region	
ground water	W 1478
Smelterville and vicinity, map	p. 254
Snake River region	
geology, ground water	B 199; W 774, 775, 1460-C, 1463
gold	B 620-L
Idaho formation, fossils	P 132-G
profile surveys	W 347
Snowdrift Mountain quadrangle	MF-118
Soda Springs region	
sulfur	B 470-J

IDAHO--Continued

southeastern	
geology, mineral re-	
sources	B 430-H, 530-f, 680, 711-B; P 98-C, 152 254-H
southern	
nitrate	B 620-B
southwestern	
artesian basins	W 78
geology	B 217
Spokane Valley region	
water table	W 889-B
Stibnite region	
mineral resources	B 969-F
Tenmile district	
geology, mineral re-	
sources	C 9
Teton Basin area	
phosphate	B 944-A
Weiser region	
mercury	B 1042-D
Wells Canyon area	
phosphate	B 955-C, 982-A
Wood River region	
geology, mineral re-	
sources	B 814
Yellow Pine district	
geologic map	p. 226
mineral resources	B 715-E, 780-D, 922-I

ILLINOIS	
Belleville-Breese	GF-195
Blue Island, map	p. 251
Brussels quadrangle	
geology, mineral re-	
sources	P 218
Camp Grant, map	p. 252
Carlyle-Centralia	GF-216
Cave in Rock fluorspar dis-	
trict	
geology	B 942
Champaign area, map	p. 251
Chicago area	
construction materials	B 213-I, 340-H
floods	W 1370-B
geology	GF-81
Chicago Heights area	
floods	HA-39
Colchester	GF-208
Danville	GF-67
Dubuque South quadrangle	
geology	B 1123-A
Galena-Elizabeth	GF-200
Gallatin region	
coal	B 316-B
Gary, Ind., and vicinity, map	p. 251
Gillespie	GF-220
Hannibal, Mo., and vicinity,	
map	p. 253
Hardin County	
geology, fluorspar	B 942
Hardin quadrangle	
geology, mineral re-	
sources	P 218

ILLINOIS--Continued

Herrin	GF-185
Lancaster-Mineral Point	GF-145
Macomb	GF-208
Moline area, map	p. 251
Mount Olive	GF-220
Murphysboro quadrangle	
clays	B 470-G
geology, mineral re-	
sources	GF-185
New Athens-Okawville	GF-213
northwestern	
zinc, lead	B 246
Patoka	GF-105
Peoria and vicinity, map	p. 251
Peoria quadrangle	
geology, mineral re-	
sources	B 506
Rock Island area, map	p. 251
Rosiclare district	
geology, fluorspar	B 942
St. Louis, Mo., region	
water resources	C 216
St. Louis quadrangle	
geology, mineral re-	
sources	B 438
Saline region	
coal	B 316-B
southern	
fluorspar	B 225-o, 255
Tallula-Springfield	GF-188
Urbana area, map	p. 251

INDIANA

Adams County	
aeromagnetic map	GP-20
Allen County	
aeromagnetic map	GP-21
Bartholomew County	
aeromagnetic map	GP-82
Bedford-Bloomington	
limestone	B 430-F; MRUS 1896
Benton County	
aeromagnetic map	p. 236
Blackford County	
aeromagnetic map	GP-52
Boone County	
aeromagnetic map	GP-35
Brown County	
aeromagnetic map	GP-53
Carroll County	
aeromagnetic map	GP-22
Cass County	
aeromagnetic map	p. 237
Chicago area	
floods	W 1370-B
geology	GF-81
map	p. 251
Clark County	
aeromagnetic map	GP-54
Clay County	
aeromagnetic map	GP-103
Clinton County	
aeromagnetic map	GP-36
Coal City quadrangle	
geology, coal	Map C-28
Crawford County	
aeromagnetic map	GP-55
Danville	GF-67

INDIANA--Continued

Daviess County	
aeromagnetic map	GP-7
Dearborn County	
aeromagnetic map	GP-83
Decatur County	
aeromagnetic map	GP-56
De Kalb County	
aeromagnetic map	GP-23
Delaware County	
aeromagnetic map	GP-57
Dennison quadrangle	
geology, coal	Map C-44 GF-84
Ditney	
Dubois County	
aeromagnetic map	GP-8
Dugger quadrangle	
geology, coal	Map C-11
Elkhart County	
aeromagnetic map	p. 237
Fayette County	
aeromagnetic map	GP-84
Floyd County	
aeromagnetic map	GP-58
Fountain County	
aeromagnetic map	GP-104
Franklin County	
aeromagnetic map	GP-105
Fulton County	
aeromagnetic map	p. 236
Gary and vicinity, map	p. 251
Gibson County	
aeromagnetic map	GP-37
Grant County	
aeromagnetic map	GP-59
Greene County	
aeromagnetic map	GP-106
Hamilton County	
Hancock County	
aeromagnetic map	GP-61
Harrison County	
aeromagnetic map	GP-62
Hendricks County	
aeromagnetic map	GP-38
Henry County	
aeromagnetic map	GP-63
Howard County	
aeromagnetic map	GP-24
Huntington County	
aeromagnetic map	GP-25
Hymera quadrangle	
geology, coal	Map C-16
Indiana coal field	B 381-A
Indianapolis area, map	p. 251
water resources	C 366
Jackson County	
aeromagnetic map	GP-85
Jasonville quadrangle	
geology, coal	Map C-1
Jasper County	
aeromagnetic map	p. 236
Jay County	
aeromagnetic map	GP-86
Jefferson County	
aeromagnetic map	GP-64
Jennings County	
aeromagnetic map	GP-65
Johnson County	
aeromagnetic map	GP-107

INDIANA--Continued

Knox County	
aeromagnetic map	GP-108
Kosciusko County	
aeromagnetic map	GP-26
La Porte County	
aeromagnetic map	p. 236
Lagrange County	
aeromagnetic map	GP-27
Lake County	
aeromagnetic map	p. 236
Lawrence County	
aeromagnetic map	GP-66, 108
Linton quadrangle	
geology, coal	Map C-9
Louisville, Ky., area, map	p. 251
water resources	C 276
Madison County	
aeromagnetic map	GP-67
Marion County	
aeromagnetic map	GP-109
Marshall County	
aeromagnetic map	p. 237
Martin County	
aeromagnetic map	GP-9
Miami County	
aeromagnetic map	GP-28
Monroe County	
aeromagnetic map	GP-87
Montgomery County	
aeromagnetic map	GP-39
Morgan County	
aeromagnetic map	GP-68
Newton County	
aeromagnetic map	p. 236
Noble County	
aeromagnetic map	GP-29
northern	
ground water	W 21, 254
northwestern	
aeromagnetic map	[GP-4] p. 236
Ohio County	
aeromagnetic map	GP-88
Orange County	
aeromagnetic map	GP-69
Owen County	
aeromagnetic map	GP-70
Parke County	
aeromagnetic map	GP-71
Patoka	GF-105
Perry County	
aeromagnetic map	GP-40
Pike County	
aeromagnetic map	GP-10
Porter County	
aeromagnetic map	GP-30
Posey County	
aeromagnetic map	p. 236
Pulaski County	
aeromagnetic map	p. 236
Putnam County	
aeromagnetic map	GP-41
Randolph County	
aeromagnetic map	GP-110
Ripley County	
aeromagnetic map	GP-72
Rush County	
aeromagnetic map	GP-89
St. Joseph County	
aeromagnetic map	p. 236

INDIANA--Continued

Scott County	
aeromagnetic map	GP-73
Seelyville quadrangle	
geology, coal	Map C-27
Shelburn quadrangle	
geology, coal	Map C-17
Shelby County	
aeromagnetic map	GP-74
southern	
wells	W 26
southwestern	
asphalt, oil, and gas	B 213-h
Spencer County	
aeromagnetic map	GP-11
Starke County	
aeromagnetic map	p. 236
Steuben County	
aeromagnetic map	GP-31
Sullivan County	
aeromagnetic map	GP-111
Switz City quadrangle	
geology, coal	Map C-41
Switzerland County	
aeromagnetic map	GP-90
Terre Haute quadrangle	
geology, coal	Map C-44
Tippecanoe County	
aeromagnetic map	GP-42
Tipton County	
aeromagnetic map	GP-75
Union County	
aeromagnetic map	GP-112
Vanderburgh County	
aeromagnetic map	GP-43
Vermillion County	
aeromagnetic map	GP-44
Vigo County	
aeromagnetic map	GP-113
Wabash County	
aeromagnetic map	GP-32
Warren County	
aeromagnetic map	GP-45
Warrick County	
aeromagnetic map	GP-12
Washington County	
aeromagnetic map	GP-76
Wayne County	
aeromagnetic map	GP-114
Wells County	
aeromagnetic map	GP-33
western	
sandstones	MRUS 1895
White County	
aeromagnetic map	p. 236
Whitley County	
aeromagnetic map	GP-34
IOWA	
Camp Dodge, map	p. 252
Catfish Creek area	
geology, zinc-lead	MF-116
Couler Valley area	
geology, zinc-lead	MF-42
Davenport and vicinity, map	p. 251
Dubuque County	
cement materials	B 315-F
lead, zinc	B 1027-K
Dubuque South quadrangle	
geology	B 1123-A
Durango area	
geology, zinc-lead	MF-33

IOWA--Continued

Elk Point	GF-156
Forest City basin structure	OM-48
Galena-Elizabeth	GF-200
Lancaster-Mineral Point northeastern	GF-145
Pleistocene history northwestern	A II I b
floods	W 1320-A
Omaha, Nebr., and vicinity, map	p. 254

KANSAS

Altoona quadrangle	GQ-149
Cedar Bluffs area construction materials	C 15
Cloud County construction materials	C 88
Cottonwood Falls	GF-109
Decatur County construction materials	C 40
Ellis County construction materials	C 30
Forest City basin structure	OM-48
Fort Riley Military Reservation and vicinity geology	B 137
Fredonia quadrangle geology	GQ-49; OC-48
Graham County construction materials	C 51
Independence quadrangle geology, mineral resources	B 260-j,l,m, 296; GF-159
Iola quadrangle economic geology	B 238
Jewell County construction materials	C 38
Joplin district geology	GF-148
zinc, lead	B 213-e, 606
Kansas City area water resources	C 273
Lakin	GF-212
Leavenworth	GF-206
Marion County geology, construction materials	B 1060-B
Mitchell County construction materials	C 106
Morris County geology, construction materials	B 1060-A
Nemaha County geology, construction materials	B 1060-D
northwestern tectonic map, uranium	MF-129
Norton County construction materials	C 24
Osborne County construction materials	C 179
Phillips County construction materials	C 21
Picher field lead-zinc, map	p. 226

IOWA--Continued

Pottawatomie County geology, construction materials	B 1060-C
Rawlins County construction materials	C 132
Republic County construction materials	C 79
Rooks County construction materials	C 27
St. Francis region ground water	W 258
Sheridan County construction materials	C 118
Smith County construction materials	C 25
southeastern oil fields, radioactivity	B 988-E
stream pollution	W 273
southwestern geology	B 57; OM-101
Syracuse	GF-212
Topeka floods	HA-14
Wabaunsee County geology	B 1068
western gold, silver, shales stratigraphy	B 202
Wichita region ground water	OC-46
	W 345-A

KENTUCKY

Allen County oil, geology	B 688
Anderson County ground water	HA-24
Austin quadrangle	GQ-173
Bath County ground water	HA-18
iron	B 285-E
Big Stone Gap coal field	B 111
Blue Grass region water resources	C 299; W 233, 1533
Boone County ground water	HA-15
Bourbon County ground water	HA-25
Bowling Green limestone	B 430-F
Boyle County ground water	HA-20
Bracken County ground water	HA-16
Buckhorn quadrangle coal	Map C-15
Bullitt County ground water	HA-22
Camp Taylor and vicinity, map	p. 252
Campbell County ground water	HA-15
Campton oil pool	B 471-A
Campton quadrangle coal	Map C-42
Cannel City quadrangle geology, coal	B 1020-A
Carroll County ground water	HA-23

KENTUCKY--Continued

Clark County	
ground water	HA-19
Cornettsville quadrangle	
coal	Map C-22
Covington area	
geology, ground water	C 240
Crittenden County	
geology, fluorspar	B 1012-B-E, 1042-S
Cumberland Gap coal field	B 225-g; P 49
Dingus area	
geology	B 1047
eastern	
flood	W 967-B
geology, oil, gas	B 1072-K; OC-38, OM-69
Elkhorn coal field	B 316-A
Elliott County	
peridotite	B 38
Estill County	
geology, oil	B 661-D
ground water	HA-19
Estillville	GF-12
Ewing quadrangle	GQ-172
Fayette County	
ground water	HA-25
Fleming County	
ground water	HA-18
Fort Knox and vicinity	
geologic map	p. 226
Franklin County	
ground water	HA-24
Gallatin County	
ground water	HA-23
Garrard County	
ground water	HA-20
Grant County	
ground water	HA-15
Haldeman quadrangle	GQ-169
Harrison County	
ground water	HA-16
Henderson area	
geology, ground water	W 1356
Henry County	
ground water	HA-23
Hopkinsville quadrangle	
ground water	W 1328
Hyden quadrangle	
coal	Map C-5
Irvine oil field	B 661-D
Jackson Purchase region	
water supply	C 287
Jefferson County	
ground water	HA-8, 22
Jessamine County	
ground water	HA-25
Kenova quadrangle	
geology, mineral re- sources	B 285-F, 349; GF-184
Kenton County	
ground water	HA-15
Knox County	
oil, gas	B 471-A
Lewis County	
ground water	HA-17
Lincoln County	
ground water	HA-20

KENTUCKY--Continued

Livingston County	
fluorspar	B 1012-B,D,E
London	GF-47
Louisville area	
geologic map	HA-5
map	p. 251
water resources	C 276
McCreary County	
geology, oil, gas	B 579
Madison County	
ground water	HA-19
Mammoth Cave National Park, map	p. 254
Marion County	
ground water	HA-21
Mason County	
ground water	HA-16
Menifee gas field	B 531-A
Mercer County	
ground water	HA-20
Mineral Ridge area	
fluorspar	B 1012-D
Mississippian Plateau region	
water supply	C 341
Montgomery County	
ground water	HA-18
Nelson County	
ground water	HA-21
Newport area	
geology, ground water	C 240
Nicholas County	
ground water	HA-16
northeastern	
clay	B 285-L
Ohio Valley	
alluvial deposits	W 1411
flood	W 334
Oldham County	
ground water	HA-22
Owen County	
ground water	HA-23
Paducah area	
geology, ground water	W 1417
Paintsville area	
geology, ground water	W 1257
Pendleton County	
ground water	HA-15
Pike County	
coal	B 876
Pound quadrangle	
coal, geology	B 541-F
Powell County	
ground water	HA-19
Prestonburg quadrangle	
geology, ground water	W 1359
Ragland oil field	B 531-A
Richmond	GF-46
Robertson County	
ground water	HA-16
Rowan County	
ground water	HA-17
Russell Fork basin	
coal	B 348
Scott County	
ground water	HA-25
Seitz quadrangle	
geology	OM-173
Senator-Schwenck area	
Tabb fault system, fluorspar	B 1012-F

KENTUCKY--Continued

Shelby and Spencer Counties	
ground water	HA-24
Tiptop quadrangle	
geology, coal	B 1024-P; OM-163
Trimble County	
ground water	HA-23
Troublesome quadrangle	
coal	Map C-18
Washington County	
ground water	HA-21
Wayne County	
geology, oil, gas	B 579
western	
ground water	W 164
mineral resources	B 213-e, 285-L, 886-B, 1012-A- F, 1042-S; MF-2; P 36
White Oak quadrangle	
geology, coal	B 1047-A; OM-156
Woodford County	
ground water	HA-24
Wrigley quadrangle	GQ-170

LOUISIANA

Baton Rouge area	
geology, ground water	W 1296
Bossier and Caddo Parishes	
iron	B 620-G
Caddo oil and gas field	B 619
Calcasieu Parish	
geology, ground water	W 1488
De Soto-Red River oil and gas	
field	B 661-C
Gulf Coastal Plain	
oil, geology	B 212, 213-h, 260-j, 282; OC-3
Mississippi River mouths	
mud lumps, gas	B 541-A; P 85-B
Natchitoches area	
ground water	W 968-D
New Orleans and vicinity	
map	p. 251
northern	
geology, ground water	P 46
northwestern	
geology, paleontology	B 142
Shreveport and vicinity, map	p. 251
southern	
ground water	W 101
southwestern	
water resources	W 1364
Webster Parish	
iron	B 620-G

MAINE

Acadia National Park and	
vicinity, map	p. 252
Aroostook County	
geology	B 165
manganese	B 940-E
Ayers Junction region	
mineral prospect	B 315-C
Baldwin	
flood	W 967-C
Berwick quadrangle	
aeromagnetic map	GP-137

MAINE--Continued

eastern	
molybdenum	B 260-d
Eastport	GF-192
Harrington Lake quadrangle	
aeromagnetic map	GP-155
Jo-Mary Mountain area	
aeromagnetic map	GP-154
Kennebec River basin	
water resources	W 198
Knox County	
lime industry	B 285-J
Litchfield	
minerals	B 42
Mount Desert Island	
geology	A 8 II d
northern	
corals	B 1111-A
Penobscot Bay region	
clay	B 285-L
geology	GF-149
granite	B 260-k
Penobscot River basin	
water resources	W 279
Perry basin	
geology	P 35
Piscataquis County	
aeromagnetic map,	
geology	GP-116
Poland quadrangle	GQ-120
Portland region	
clay	B 530-e
Rockland	GF-158
southern	
ground water	W 223
southwestern	
stratigraphy	P 108-I
Stoneham	
topaz	B 27
West Pembroke	
mineral prospect	B 315-C
MARYLAND	
Accident	GF-160
Atlantic slope	
Eocene deposits	B 141
Baltimore region	
gravel, sand	B 906-A
igneous rocks	B 28
Beaverdam Creek basin	
hydrology	W 1472
Brandywine area	
geology, soils	P 267-A, B
Catoctin belt	
geology	A 14 II f
central	
granite	A 15 g
Chesapeake Bay region	
geology	A 7 h
Choptank region	
geology	GF-182; P 90-B
Coastal Plain, southern	
soils	P 267-B
Dover, Del., region	GF-137
eastern	
sand, gravel	B 906-A
Elkton	GF-211
Emmitsburg quadrangle	
aeromagnetic map	GP-283

MARYLAND--Continued

Fairfield quadrangle	
aeromagnetic map	GP-283
Fredericksburg, Va., region	GF-13
Grantsville	GF-160
Great Falls region	
gold	B 260-b
Hancock	GF-179
Harpers Ferry, W. Va., region	GF-10
Kiskiminetas River basin	
floods	C 204
Nomini, Va., region	GF-23
Patuxent	GF-152
Pawpaw, W. Va., region	GF-179
Piedmont, W. Va., region	GF-28
Piedmont Upland	
mineral deposits	B 1082-K
St. Marys	GF-136
southern	
geology, soils	P 267-A, B
Tolchester	GF-204
Washington, D. C., region	
geology	GF-70
map	p. 252
Worcester and Wicomico	
Counties	
magnetic maps	OM-46
Youghiogheny River basin	
floods	C 204

MASSACHUSETTS

Ayer quadrangle	GQ-21
Berkshire County	B 159
Bernardston quadrangle	GQ-90
Boston area	
geology	B 839
Bridgewater quadrangle	GQ-127
Bristol quadrangle	GQ-42, 70
Brockton quadrangle	GQ-5, 6
Camp Devens and vicinity	
map	p. 252
Cape Ann	
geology	A 9 c
Cape Cod	
clay	B 285-L
geology	A 18 II g
central	
physical features	B 760-B
Cheshire quadrangle	GQ-108
Clinton region	
fuller's earth, clay	B 430-F
Colrain quadrangle	GQ-82, 86
Connecticut Valley	
geology, floods	W 996
paleontology	M 14
structure	A 7 f
Essex County	
igneous rocks, geology	B 704
Franklin County	
geology	M 29
mineralogy	B 126
Fresh Pond area	
glacial geology	B 1061-F
Great Barrington	
Monument Mountain	
structure	A 14 II k
Green Mountains	
geology	A 161e; B 195; M 23

MASSACHUSETTS--Continued

Greenfield quadrangle	GQ-20
Hampden and Hampshire	
Counties	
geology	M 29
mineralogy	B 126
Holyoke	GF-50
Hudson quadrangle	
geology, mineral re-	
sources	B 1038
Lawrence quadrangle	GQ-107
Martha's Vineyard	
geology	A 7 d
Maynard quadrangle	
geology, mineral re-	
sources	B 1038
Millers Falls quadrangle	GQ-93
Mount Grace quadrangle	GQ-3, 4
Mount Toby quadrangle	GQ-8, 9
Mystic Lakes area	
glacial geology	B 1061-F
Nantucket	
geology	B 53
Narragansett Basin	
geology	M 33
North Adams quadrangle	GQ-139
Northfield quadrangle	GQ-92
Pawtucket quadrangle	GQ-1, 2
Shelburne Falls quadrangle	GQ-87, 116
southeastern	
clay	A 17 I g
Taconic Range	
physiography	B 272
Williamsburg quadrangle	GQ-80, 85
Wilmington quadrangle	GQ-122

MICHIGAN

Ahmeek quadrangle	GQ-27
Alpha iron district	Map 3-181 (p. 226)
Ann Arbor	GF-155
Baraga County	
aeromagnetic and radio-	
activity maps	p. 236
Bruneau Creek quadrangle	GQ-35
Camp Custer	
map	p. 252
Chassell quadrangle	MF-43
Chicagon Creek area	
magnetic map, geology	Map 3-213 (p. 226)
Crystal Falls iron-bearing	
district	A 19 III a; C 153; M 36; MF-225; Map 3-181 (p. 226)
Delaware quadrangle	GQ-51
Detroit	GF-205
Dickinson County	
aeromagnetic map	GP-115
geology	C 84; P 310
radioactivity map	p. 226
Eagle Harbor quadrangle	GQ-36
eastern	
Berea sandstone	OM-17
Fort Wilkins quadrangle	GQ-74
Grand Rapids area	
water resources	C 323
Hancock quadrangle	MF-46

MICHIGAN--Continued

Houghton County	
aeromagnetic map	p. 236
Ice Lake area	
magnetic map, geology	Map 3-213 (p. 226)
Iron County	
aeromagnetic map	p. 236
geology	C 84
Iron River district	
geology, magnetic surveys	C 26, 43, 120; MF-225
Isle Royale National Park,	
map	p. 253
Keweenaw Point	
stratigraphy	B 23
Kiernan quadrangle	
geology	B 1044
Lake Mary quadrangle	
geology	B 1077
Lake Medora quadrangle	GQ-52
Lake Superior region	
geology, mineral resources	A 3 c, 21 III c; B 23, 213-f, 225-f; M 5, 52; P 144, 184 MF-47
Laurium quadrangle	
Lower Peninsula	
water resources	W 30, 31, 182, 183 GQ-73
Manitou Island quadrangle	
Marquette County	
radioactivity map	p. 236
Marquette district	
geology, iron	A 15 e; B 62; M 28
Menominee district	
geology, iron	B 62; GF-62; M 46
Michigan basin	
geology, oil, gas	OC-9, 11, 28, 33; OM-38, 40 GQ-54
Mohawk quadrangle	
northern	
stratigraphy	P 314-C
Palmer area	
Goodrich quartzite	B 1030-F
Phoenix quadrangle	GQ-34
south-central	
geology, oil, gas	OM-11
South Range quadrangle	MF-48
southwestern	
stratigraphy	OC-4
Stager area	
geology, magnetic survey	C 55
Toledo, Ohio, and vicinity	
map	p. 251
Ypsilanti area	
ground water	W 1078
MINNESOTA	
Aitkin County	
aeromagnetic, geologic maps	GP-100, 101
Becker County	
aeromagnetic map	GP-48

MINNESOTA--Continued

Beltrami County	
aeromagnetic, geologic maps	GP-129, 130, 143, 146; p. 236
Cass County	
aeromagnetic maps	p. 236
Clearwater County	
aeromagnetic maps	GP-46, 47, 130, 146
Crow Wing County	
aeromagnetic maps	p. 236
Cuyuna district	
geology, iron	B 660-A; MF-99, 181, 182
Douglas County	
aeromagnetic map	GP-51
Duluth, Superior, and vicinity	
map	p. 251
Fargo, N. Dak., region	GF-117
Grant County	
aeromagnetic map	GP-51
Herman	GF-210
Hubbard County	
aeromagnetic maps	p. 236
Itaska County	
aeromagnetic, geologic maps	GP-97, 98, 99; p. 236
Kanabec County	
aeromagnetic, geologic maps	GP-102
Kittson County	
aeromagnetic map	GP-142
Koochiching County	
aeromagnetic, geologic maps	GP-97, 131-134
Lake of the Woods County	
aeromagnetic, geologic maps	GP-128, 129
Lake Superior region	
floods	W 1137-G
geology, mineral resources	A 3 c, 21 III c; B 213-f, 225-f; M 5, 52; P 184
moraines and shorelines	P 154-A
Lyon County	
ground water	C 423, 444; W 1539-F
Mahnomen County	
aeromagnetic map	GP-47
Marshall County	
aeromagnetic maps	GP-143, 144, 145 M 43
Mesabi iron district	
Mille Lacs County	
aeromagnetic map	GP-101, 102
Minneapolis-St. Paul region	
construction materials	B 430-F
geology	GF-201
map	p. 251
water resources	C 274
Mississippi River basin	
floods	W 1137-G 1260-C

MINNESOTA--Continued

Morris	GF-210
Morrison County	
aeromagnetic map	p. 236
Mountain Iron area	
ground water	W 1539-A
North Range	
geology	MF-99, 181, 182
Otter Tail County	
aeromagnetic map	GP-49, 50
Pennington County	
aeromagnetic maps	GP-144, 146
Pigeon Point	
eruptive and sedimentary rocks	B 109
Pine County	
aeromagnetic and geologic map	GP-102
Polk County	
aeromagnetic map	GP-46, 145-148
Red Lake County	
aeromagnetic maps	GP-46, 146, 147
Roseau County	
aeromagnetic maps	GP-128, 140, 141
St. Louis County	
aeromagnetic maps	GP-91 - 96
southern	
geology, ground water	W 256
southwestern	
metamorphic rocks	B 157
Todd County	
aeromagnetic map	p. 236
Vermilion iron district	M 45
Virginia area	
ground water	W 1539-A
Wadena County	
aeromagnetic map	p. 236
MISSISSIPPI	
Byram region	
marl, Foraminifera	P 129-E
central	
Pliocene history	P 108-H
Clarke County	
Quitman fault zone	OM-6
Jackson area	
geology, oil, gas	B 641-D, 831-A, 986
	OM-65
Lake Washington	W 1460-I
Meridian	
geologic history, paleontology	P 108-E
northeastern	
bauxite	B 750-G
cement	B 260-I
stratigraphy	B 781-A; OC-35, 58, 62, 64
northern	
Pliocene history	P 108-H
northwestern	
clay	B 213-k
Stone County	
cored section	C 298
Tishomingo County	
Paleozoic formations	B 781-A

MISSISSIPPI--Continued

Vicksburg area	
geology, oil, gas	B 641-D
Vicksburg National Military Park, map	p. 255
Wayne County	
Quitman fault zone	OM-6
MISSOURI	
Berryman quadrangle	
aeromagnetic map	GP-77
Bonne Terre quadrangle	
aeromagnetic map	GP-14
Coldwater quadrangle	
aeromagnetic map	p. 236
Crowleys Ridge	
paleontology	P 274-E
Crystal City quadrangle	
aeromagnetic map	p. 236
De Soto quadrangle	
aeromagnetic map	p. 236
Des Arc quadrangle	
aeromagnetic map	p. 236
Eureka Springs-Harrison, Ark., region	GF-202
Farmington quadrangle	
aeromagnetic map	p. 236
Fayetteville, Ark., region	GF-119
Forest City basin	
structure	OM-48
Fredericktown quadrangle	
aeromagnetic map	p. 236
Hannibal and vicinity, map	p. 253
Higdon quadrangle	
aeromagnetic map	GP-80
Ironton quadrangle	
aeromagnetic map	p. 236
Joplin district	
geology, mineral resources	B 213-e, 606; GF-148
Kansas City area	
water resources	C 273
Leavenworth, Kan., region	GF-206
Marquand quadrangle	
aeromagnetic map	GP-79
New Madrid	
earthquake	B 494
northeastern	
coal	B 541-F
Ozark region	
lead, zinc	A 22 II b
Potosi quadrangle	
aeromagnetic map	GP-13
Richwoods quadrangle	
aeromagnetic map	p. 236
St. Clair quadrangle	
aeromagnetic map	p. 236
St. Louis region	
clay	B 315-I
water resources	C 216
St. Louis quadrangle	
geology, mineral resources	B 438
Seneca region	
triplite deposits	B 340-J
Smithville	GF-206
southeastern	
lead	B 132

MISSOURI--Continued
southwestern

- paleontology B 98
Sullivan and Union quadrangles
aeromagnetic map GP-78
Weingarten quadrangle
aeromagnetic map GP-81

MONTANA

- Aladdin GF-128
Ashland coal field B 831-B
Avon region
phosphate B 847-D
Baker lignite field B 471-D
Barker district
mineral resources A 20 III c
Bear Creek coal fields B 285-F
Bearpaw Mountains region
aeromagnetic maps GP-150 - 153
geology, mineral re-
sources B 430-C,
751-C, 1081-C,
E; I-234 - 237

Beaverhead County
geology B 969-C
Belt region
clay B 340-I
Big Horn Basin
geology OM-3, 71, 74,
182

Big Horn County
geology, mineral re-
sources B 541-H, 749,
806-B, 812-A,
822-A, 856;
OM-111
B 541-H
I-130
Big Sandy coal field
Big Sandy quadrangle
Big Snowy Mountains
geology P 165-D
Big Timber quadrangle
forests P 29
Bighorn Canyon area
geology B 1026
Birch Creek area
geology, oil, gas B 691-E
Birney-Broadus coal field B 1072-J
Bitterroot Range
geology, mineral re-
sources B 213-b,
974-E; P 27
Bitterroot Forest Reserve A 19 V f, 20 V e
Black Hills
bentonite MF-36
geology OM-191
Blackfeet Indian Reservation
anticlines, oil B 641-J
magnetite B 540-H
Bonner quadrangle
geology B 1111-F;
I-296
Boulder Hot Springs
mineral-vein formation A 21 II d
Boulder quadrangle MF-183, 187
Boulder River area.
chromite B 948-C
Bridger region
coal B 341-B
Broadwater County
geology B 1042-N;
P 292

MONTANA--Continued

- Buffalo Rapids Irrigation
Project
ground water C 198; W 1424
Bull Mountain coal field
B 341-A,
381-A,
431-B, 647

Butte district
geology, mineral re-
sources B 213-d,
690-E; GF-28;
MRUS 1883-84;
P 74
p. 252
W 345-G
map
water resources
Button Butte area
geology OM-106
Canyon Ferry quadrangle
geology B 972
Carbon County
geology, mineral re-
sources B 285-F,
316-C, 341-A,
B, 641-C,
822-A
I-155
Cartersville quadrangle
Castle Mountain mining dis-
trict B 139
B 786-B
Cat Creek oil field
Centennial quadrangle
aeromagnetic map GP-152
geologic map I-235
central
geology OC-25, 50;
P 125-B
P 243-D
paleontology
Chouteau County
geology, mineral re-
sources B 847-F
Clancey region
uranium B 988-F
Clark Fork
profile surveys W 346
Cleveland coal field B 541-H
Coalwood coal field B 973-B
Coeur d'Alene district, map p. 252
Comet area
geology C 277
Cooke City mining district B 811-A
Crazy Mountains region
coal B 341-A
Crow Indian Reservation
geology, resources B 736-B, 856
Culbertson lignite field B 471-D
Custer Battlefield National
Monument, map p. 252
Custer County
geology, coal B 316-C,
341-A, 471-D,
531-F, 831-B,
847-B, 906-C,
995-E
Custer National Forest
coal B 381-A
Custer region
geology, coal B 541-H
Cut Bank district
structure, maps p. 235
Dawson County
Cedar Creek anticline,
map p. 234

MONTANA--Continued

coal	B 316-C, 471-D, 531-F, 847-C
Deer Lodge quadrangle geology	MF-174
Dell region oil shale, phosphate	B 661-I
Devils Basin oil field	B 786-B
Dillon region mineral resources	B 470-K, 574, 661-I
Dunkleberg mining district	B 660-G
Eagleton quadrangle eastern	GQ-29
lignite	B 285-F, 471-D
physiography, glacial geology	I- 327; P 174
tectonic map, uranium	MF-126
Ekalaka lignite field	B 751-F, 1055-F
Electric coal field	B 471-E
Elk basin oil and gas field maps	p. 234, 253
Elkhorn mining district	A 22 II d
Elkhorn Mountains geology, mineral re- sources	B 470-B; P 292
Elliston phosphate field	B 580-N
Fallon County Cedar Creek anticline, map	p. 234
Flathead Lake region ground water	W 849-B
Flathead region geology	P 296
Flathead Forest Reserve	A 20 V d
Flathead River basin damsites	W 866-B, C
streamflow	C 182
Forestgrove area geology	OM-106
Forsyth coal field	B 812-A
Fort Benton	GF-55
Fort Peck Indian Reservation geology	I-225
lignite	B 381-A
Gallatin County corundum	B 969-B
Gallatin Valley geology, ground water	W 1482
Garnet Range mineral resources	B 660-F
Garrison phosphate field	B 640-K
Girard coal field	Map C-24
Glacier National Park geology	B 600; P 294-D, K, 296
map	p. 253
Glendive lignite field	B 471-D
Golden Valley County ground water	W 518
Great Falls region geology, water resources	W 221
Great Falls coal field	B 316-C, 356, 614-H
Hardin area bentonite	B 1023; C 150
geology	B 1026; OM-111
Hathaway quadrangle	I-155
Havre region cement materials	B 380-J

MONTANA--Continued

Helena mining region	B 527, 842
Helena Valley geology, ground water	C 83
uranium	B 1046-G
Highwood Mountains area faulting, oil	B 806-E
igneous rocks	B 237
Hill County geology, mineral re- sources	B 847-F p. 253
Hinsdale, map	
Hobson area geology	B 1027-J; OM-108
Hound Creek district geology, coal	B 641-H
Huntley field geology, oil, gas	B 711-G
Jefferson City quadrangle	MF-171, 172
Jefferson County geology	P 292; B 988-F, G; 1042-N; C 277
Jefferson River basin irrigation	W 580-B
Judith Mountains geology, mineral re- sources	A 18 III d
Judith region coal	B 541-H
Kenilworth quadrangle	I-129
Kevin-Sunburst oil field	B 812-B, p. 235
Kootenai River damsites	W 866-A
Lake Basin field geology, oil, gas	B 691-D
Laredo quadrangle aeromagnetic map	GP-150
geologic map	I-234
Lewis and Clarke Forest Re- serve	A 21 V b
Lewistown area geology	OM-199
Lewistown coal field	B 341-A, 390
Libby region geology, mineral re- sources	B 805-B, 956; C 7
Liberty County geology, mineral re- sources	B 847-F
Little Belt Mountains forests	P 30
geology, mineral re- sources	A 20 III c; GF-56
Little Bighorn River valley geology, ground water	W 1487
Little Bitterroot Valley artesian water	W 400-B
Little Rocky Mountains region gold	B 340-A
map	OM-4
oil	B 736-F
stratigraphy	B 1072-N
Little Sheep Mountain coal field	B 531-F

MONTANA--Continued

Livingston region	
geology, coal	B 471-E, 1021-L; GF-1
mineral resin	B 78
Livingston quadrangle	
forests	P 29
Lloyd quadrangle	
geology	B 1081-E
Lonesome, map	p. 253
Lothair area	
geology	OM-87
McCone County	
coal	B 905
Maddux quadrangle	
geology	B 1081-C
Madison County	
geology, mineral re- sources	B 690-F, 969-B, C
Madison River basin	
irrigation	W 560-A
Marias River area	
geology, ground water	B 1071-E; W 1460-B
Marysville, map	p. 254
Marysville mining district	B 213-b; P 57
Maxville region	
phosphate	B 715-J, 847-D
Medicine Lake area	
Quaternary geology	B 1073
resistivity survey	C 97
Melrose region	
nitrate	B 540-Q
phosphate	B 470-H, 780-A
Miles City coal field	B 341-A
Milk River	
water supply	W 491
Milk River coal field	B 381-A, 471-E
Mineral County	
geology	B 1027-M
Missouri River	
profile surveys	W 367
Missouri River valley	
geology, water	W 917, 1263, 1320-B
Mizpah coal field	B 906-C
Musselshell County	
coal	B 341-A, 381-A, 431-B, 541-H, 647
ground water	W 518
Musselshell Valley	
anticlines	B 691-F
National Bison Range, map	p. 254
Neihart district	
mineral resources	A 20 III c
New World (Cooke City) mining	
district	B 811-A
north-central	
geology	P 90-I
oil, gas	B 641-C
northeastern	
clay	B 540-K
geology	P 120-B, 326
northwestern	
geology	B 384; OC-15, 25; P 90-G, I

MONTANA--Continued

northwestern--Continued	
gold	B 285-B, 470-B
Park County	
calcite	B 1042-M
Phillpsburg region	
geology, mineral re- sources	B 315-A, 640-K, 847-D, 922-G; GF-196; P 78
Pioneer district	
gold	B 978-C
Plentywood region	
lignite	B 541-H
Pottsville and vicinity, map	p. 254
Powder River Basin	
structure	OM-33, 133
Powder River County	
coal	B 831-B, 973-B, 995-E, 1072-J
Powder River drainage basin	
sedimentation, water	C 170
Prairie County	
Cedar Creek anticline, map	p. 234
Rainy Creek district	
minerals	B 805-B
Red Lodge region	
chromite	B 945-F
coal	B 341-A
Richland County	
coal	B 847-C; Map C-24
Rosebud County	
coal	B 316-C, 531-F, 749, 806-B, 812-A, 831-B, 847-B, 995-I, 1072-J
geology, ground water	W 600
Ingomar anticline	B 786-A
Porcupine dome, oil	B 621-F
Saco, map	p. 254
St. Mary River	
water supply, records	W 491, 917
St. Regis-Superior area	
geology, mineral re- sources	B 1082-I
Saltese region	
economic geology	B 540-E
Scobey lignite field	B 541-H, 751-E
Sentinel Butte lignite field	B 341-A
Shambo quadrangle	
aeromagnetic map	GP-151
geologic map	I-236
Sheridan coal field	B 806-B
Sidney lignite field	B 471-D
Smoke Creek area	
Quaternary geology	B 1073
south-central	
geology	OC-18, 19; OM-43
southeastern	
geology	OM-40
southern	
geology	OM-202; P 149
paleontology	P 132-B, 214-C, 243-A

MONTANA--Continued

- southwestern
 coal, Tertiary lake beds B 531-G
 geology P 120-F
 stratigraphy B 1027-A
 uranium, thorium B 988-H
- Stanford region
 geology B 1027-J; OM-139
 iron B 715-F
- Stillwater County
 geology, mineral re-
 sources B 641-G,
 725-A, 822-A,
 922-N
- Stillwater complex
 B 922-N,
 1015-D, 1071-H;
 P 358
- Sun River area
 geology, oil, gas B 691-E
- Sweet Grass County
 calcite B 1042-M
 chromite B 725-A,
 948-C, 1015 D
- coal
 B 341-A,
 471-E; GF-1
- Stillwater complex
 B 922-N,
 1015-D, 1071-H;
 P 358
- Terry lignite field
 Teton County
 geology, coal B 621-K
- Three Forks region
 geology B 110; GF-24
 phosphate B 795-G
- Toole County
 structure, maps p. 235
- Townsend Valley
 geology, ground water B 1042-N;
 W 539, 1360-C
- uranium B 1046-G
- Trail Creek coal field
 Treasure County
 coal B 812-A
 ground water W 599
 Ingomar anticline B 786-A
- Tullock Creek coal field
 Upper Stillwater Basin
 geology, coal, oil B 641-G
- Vaughn quadrangle
 Warrick quadrangle
 aeromagnetic map GP-153
 geologic map I-237
- West Kevin district
 structure, map p. 235
- western
 oil shale B 711-B
 physiography, glacial
 geology P 231
 radioactive deposits B 1074-B;
 C 251
- Wibaux County
 Cedar Creek anticline,
 map p. 234
 lignite B 995-G
- Williston basin
 geology OM-165, 179
 paleontology B 1021-M,
 1071-F
- Wolf Point quadrangle
 GQ-67

MONTANA--Continued

- Yellowstone County
 geology, mineral re-
 sources B 341-A,
 381-A, 431-B, 541-H,
 647, 822-A; OM-111
- ground water W 599
- Yellowstone Forest Reserve P 29
- Yellowstone National Park
 geology M 32
 map p.255
 phosphate B 795-G
 scorodite B 55
- Yellowstone Valley
 geology, ground water W 1355
 glaciation B 104
- Yellowtail district
 bentonite C 150
- Yogo district
 mineral resources A 20 III c
- NEBRASKA
 Ainsworth region
 ground water W 1371
- Big Blue River basin
 geology, ground water W 1474
- Box Butte County
 geology, ground water C 166; W 969
- Buffalo County
 geology, ground water W 1358
- Camp Clarke
 GF-87
- Clay County
 geology, ground water W 1468
- Dutch Flats area
 ground water C 126
- Edgemont, S. Dak., region
 GF-108
- Elk Point
 GF-156
- Elkhorn River basin
 geology, ground water W 1360-I
- Forest City basin
 structure OM-48
- Frenchman River valley
 geology, ground water C 19; W 1360-H
- Goshen Hole quadrangle
 geology, water re-
 sources W 70
- Grand Island
 ground water W 836-E
- Keith County
 ground water W 848
- Little Blue River basin
 geology, ground water W 1489
- Lodgepole Creek basin
 geology, ground water W 1410
- Lodgepole Valley
 ground water W 425-B
- Loup River basin
 geology, water C 107; W 1493
- Missouri River Valley
 geology, water re-
 sources W 215
- Niobrara River basin
 geology, ground water
 sediments W 1368, 1460-G
 C 67, 205;
 W 1357
- northeastern
 uranium B 1046-R
- Oelrichs, S. Dak., region
 GF-85
- Omaha and vicinity, map p. 254

NEBRASKA--Continued

Patrick quadrangle	
geology, water re-	
sources	W 70
Pine Ridge	
timber	A 19 V k
Platte River basin	
geology, ground water	C 20; W 679-A, 779, 1489
Middle Loup Division	
ground water	W 1258
sediment transportation	W 1476
North Loup Division	
ground water	HA-12
Prairie Creek unit	
ground water	W 1327
Wood River unit	
ground water	C 139
Ponca Creek basin	
ground water	W 1460-G
Pumpkin Creek area	
geology, ground water	C 156
Republican River valley	
cement materials	B 430-F
geology, ground water	C 19; W 216, 1360-H, 1489
Scotts Bluff County	
geology, ground water	GF-88; W 943
Scotts Bluff National Monu-	
ment, map	p. 254
Sioux County	
geology, ground water	HA-6
south-central	
geology, ground water	W 779
South Platte River valley	
geology, ground water	W 184, 1378
southeastern	
ground water	W 12
western	
geology, water re-	
sources	A 19 IV c; P 17
tectonic map, uranium	MF-129
Whitehead watershed and	
reservoir	
sediment	C 406
Wray area	
geology	B 1001
Yankton, S. Dak. area	
geology	P 328
NEVADA	
Alkali Spring Valley	
geology, water re-	
sources	W 423
Antelope mining district	B 530-a
Antler Peak quadrangle	GQ-10
Arabia district	
mineral resources	B 660-H
Atomic Energy Commission	
proving grounds	
geology	B 1021-K
Austin area, map	p. 252
Bare Mountain quadrangle	GQ-157; MF-239
Basin and Range province	
geology	P 197-D
Big Smoky Valley	
geology, water re-	
sources	W 375-D, 423

NEVADA--Continued

Bottle Creek district	
mercury	B 922-A
Boulder Dam region	
mineral resources	B 871
Bovard	
alunite	B 540-I
Buckskin Peak	
mercury	B 922-E
Buffalo Mountain quadrangle	MF-220
Bullfrog mining district	B 303, 407
Bullfrog quadrangle	MF-177
Bullwhacker mine area	
geochemical prospecting	B 1000-H
Candelaria district	
coal	B 225-g
silver	B 735-A
Carson River basin	
waterpower	W 1329-A
Cedar Mountain	
mineral resources	B 725-H
Charleston mining district	B 741
Clark County	
colemanite	B 735-B
geology	MF-138
Clayton Valley	
geology, water re-	
sources	W 423
Clifford mining district	B 640-F
Climax Stock and vicinity	I-328
Coaldale region	
coal	B 531-K
uranium, tuff	C 291
Coaldale quadrangle	GQ-23
Columbus Marsh	
muds	P 95-A
potash	B 540-N
Comstock lode district	
geology, mineral re-	
sources	A 2 e; B 735-B; M 3,4; p. 235
Contact mining district	B 497, 847-A
Crescent Valley	
ground water	W 1581
Currant Creek district	B 978-A
Dayton region	
iron	B 430-E
Divide silver district	B 715-K
Douglas County	MF-80
East Walker River area	
uranium	B 988-C
eastern	
mineral resources	B 213-C, 648; MRUS 1899 VI
Elk Mountain mining district	B 497
Elko County	
mining districts	B 408, 497
Ellendale mining district	B 640-F
Ely district	
geology, mineral re-	
sources	P 96
map	p. 253
Ely Range, map	p. 253
Eureka County	
geology	MF-178
mining camps	B 408
Eureka district	
geochemical prospec-	
ting	B 1000-H

NEVADA--Continued

Eureka district--Continued
 geology, mineral re-
 sources A 3 e, 4 c;
 M 7, 20; P 276
 p. 253
 map
 paleontology M 8; P 334-C
 Fallon region
 magnesia alum B 750-E
 Gabbs region
 geology, mineral re-
 sources MF-35, 52
 B 795-F
 Gilbert mining district GQ-15
 Golconda quadrangle
 Golden Arrow mining district B 640-F
 Goldfield, map p. 253
 Goldfield mining district B 225-b, 260-b,
 303; P 66
 p. 253
 Goodsprings, map
 Goodsprings (Yellow Pine)
 district
 geology, mineral re-
 sources B 540-F, 1010;
 P 162
 Goose Creek district
 Tertiary geology B 1055-H
 Hawthorne quadrangle
 structure P 216
 Hornsilver district
 gold, silver B 380-A
 Horse Canyon
 gold C 10
 Humboldt County
 geology MF-236
 mining districts B 414
 Humboldt House region
 Rabbit hole sulfur mines B 225-m
 Humboldt River basin
 ground water W 425-D
 Ivanpah quadrangle
 geology, mineral re-
 sources P 275
 Ivanpah Valley
 ground water W 450-C
 Jarbidge mining district B 497, 741
 Kaiparowits region
 geology, geography P 164
 Lake Mead
 hydrology C 346; P 298
 sedimentation P 295
 Lake Mead region
 manganese B 948-D
 Lander County
 mineral resources B 408, 640-G,
 931-L; C 10
 Las Vegas area
 artesian wells W 849-D
 Lincoln County MF-206
 Lyon County
 geology MF-80
 oil B 381-D
 McCoy mining district C 10
 Majuba Hill
 geology, mineral re-
 sources B 931-C,
 1046-I
 Manhattan and vicinity, map p. 254
 Manhattan mining district B 303, 640-J,
 723
 Mina quadrangle GQ-45

NEVADA--Continued

Mount Moses quadrangle GQ-12
 Mount Tobin quadrangle GQ-7
 Muddy Mountains
 geology B 798
 National mining district B 601, 922-E
 Nevada district
 manganese B 931-M
 Nightingale district
 tungsten B 936-B
 northeastern
 asphalt B 380-H
 northwestern
 mining districts B 594
 Opalite district
 mercury B 931-N
 Ormsby County MF-80
 Osceola mining district B 340-A
 Osgood Mountains quadrangle MF-161
 Pahrump Valley
 ground water B 540-C
 Pershing County
 tungsten B 936-B, 940-A
 Pilot Mountains
 mercury B 795-E,
 973-D
 Pioche district
 geology, mineral re-
 sources P 158-D, 171
 MF-136
 Pioche Hills
 Ramsey mining district B 470-B
 Reese River basin
 ground water W 425-D
 Reese River mining district B 997; p. 252
 Reno region
 geology, oil B 381-D
 Rochester mining district B 580-M, 762;
 p. 254
 Round Mountain district
 gold, silver B 380-A,
 725-I
 Round Mountain quadrangle GQ-40
 Ruby Mountains
 pegmatites B 1082-D
 Searchlight district
 geology B 906-D
 Shoshone Mountains
 geology P 322
 Silver Peak Marsh
 salines B 530-g
 Silver Peak region
 mineral resources B 225-b,g,m;
 P 55
 Sloan region
 dolomite B 973-C
 Smith Valley
 geology, water re-
 sources W 1228
 Snake Range
 tungsten B 340-D
 southeastern
 ground water W 365
 platinum B 430-D
 southern
 geology, mineral re-
 sources B 208, 303,
 620-A
 southwestern
 geology B 308
 mineral resources B 285-A

NEVADA--Continued

southwestern--Continued	
water	W 224
Steptoe Valley	
ground water	W 467
Talapoosa mining district	B 470-B
Three Kids manganese district	B 936-L
Tonopah mining district	B 213-b, 219, 225-b, 260-b; P 42, 104; p. 255
Tonopah quadrangle	
structure	P 216
Truckee Basin	
water storage	W 68
Union district	
geology	P 322
Virgin Range	
geology	B 798
Virgin Valley opal district	C 142
Virginia City region	
ores	B 735-C
Virginia City quadrangle	
geology	B 1042-C
Washoe County	MF-80
Washoe district	
geology	A 2 e; B 17, 725-C; M 3, 4
western	
floods	W 1137-H
mercury	B 620-D
White Horse mining district	B 470-B
White Pine County	
marble	B 340-G
Wild Horse quicksilver district	B 931-K
Winnemucca Lake Valley	
ground water	W 1539-C
Winnemucca quadrangle	GQ-11
Yellow Pine mining district	B 540-F, 1010; P 162
Yerington district	
geology, ore deposits	B 380-B; P 114
map	p. 255

NEW HAMPSHIRE

Alton quadrangle	
aeromagnetic map	GP-136
Berlin and vicinity	
aeromagnetic map	GP-139
Berwick quadrangle	
aeromagnetic map	GP-137
Canaan area	
surficial geology	B 1061-C
Lake Tarleton and vicinity	
aeromagnetic map	GP-196
Lawrence quadrangle	GQ-107
Littleton and vicinity	
aeromagnetic map	GP-194
southeastern	
stratigraphy	P 108-I
Unbagog Lake area	
aeromagnetic map	GP-138
Woodsville and vicinity	
aeromagnetic map	GP-195

NEW JERSEY

Bernardsville and Bound	
Brook quadrangles	GP-174
Boonton quadrangle	
aeromagnetic map	GP-167

NEW JERSEY--Continued

Caldwell quadrangle	
aeromagnetic map	GP-172
Chatham quadrangle	
aeromagnetic map	GP-175
Chester quadrangle	
aeromagnetic map	GP-169
Delaware River basin	
water resources	C 190
Delaware Water Gap, map	p. 253
Delaware Water Gap quadrangle	
geology, mineral resources	B 920
Dover, Del., region	GF-137
Dover magnetite district	B 982-G; P 287
Dover quadrangle	
aeromagnetic map	GP-166
Easton quadrangle	
aeromagnetic map	GP-235
geology, mineral resources	B 920
Franklin quadrangle	
aeromagnetic map	GP-162
geologic map	I-346
Franklin region	
geology, mineral resources	A 18 II e; B 213-e; GF-161; P 180
Frenchtown quadrangle	
Gladstone quadrangle	
aeromagnetic map	GP-173
Greenwood Lake quadrangle	
aeromagnetic map	GP-160
Griggstown copper deposit	B 225-d
Hamburg quadrangle	
aeromagnetic map	GP-158
geologic map	I-346
Jersey Highlands	
magnetic deposits	B 955-A
Lambertville quadrangle	
aeromagnetic map	GP-216
Lehigh district	
cement rock	B 225-j
Lumberville quadrangle	
aeromagnetic map	GP-261
Mendham quadrangle	
aeromagnetic map	GP-170
Morris County	
Scrub Oaks mine,	
radioactive deposit	B 1082-B
Morristown National Historical	
Park, map	p. 254
Morristown quadrangle	
aeromagnetic map	GP-171
New York City region	GF-83; p. 251
Newfoundland quadrangle	
aeromagnetic map	GP-163
Newton East quadrangle	
aeromagnetic map	GP-161
Passaic region	
floods	W 88, 92
geology	GF-157
Philadelphia, Pa., region	GF-162
Pine Island quadrangle	
aeromagnetic map	GP-159

NEW JERSEY--Continued

Plainfield quadrangle	
aeromagnetic map	GP-175
Pompton Plains quadrangle	
aeromagnetic map	GP-168
Raritan	GF-191
Riegelsville quadrangle	
aeromagnetic map	GP-236
Ringwood area	
magnetite	B 982-F
Roselle quadrangle	
aeromagnetic map	GP-175
Stanhope quadrangle	
aeromagnetic map	GP-165
Sterling Hill	
minerals	P 180
Stockton quadrangle	
aeromagnetic map	GP-216
Sussex County	
geology	A 18 II e
Trenton	GF-167
Wanaque quadrangle	
aeromagnetic map	GP-164
Wayawanda quadrangle	
aeromagnetic map	GP-159
Wilmington, Del., region	GF-200; p. 252

NEW MEXICO

Abbott quadrangle	
geology	OM-141
Alamosa Creek valley	
geology, oil and gas	B 716-A
Albuquerque and vicinity,	
map	p. 251
Animas basin	
ground water	W 422
Baldy Peak	
Aztec gold mine	B 620-N
Bandelier National Monu-	
ment, map	p. 252
Barker dome area	
geology, fuel	OM-144
Bayard area	
geology, mineral re-	
sources	B 870
Bernallilo County	
Lucero uplift	OM-47
Black Hawk district	
mineral resources	B 1009-K
Black Range	
tin	B 922-M
Brilliant	GF-214
Burro Mountains region	
mineral resources	B 470-C,
	973-F
Cabazon-3 quadrangle	I-317
Canadian River basin	
floods	W 842
Carlsbad Caverns East and	
West quadrangles	GQ-98, 112
Carlsbad Caverns National	
Park, map	p. 252
Carlsbad region	
geology, irrigation proj-	
ect	W 580-A
Carrizo Mountains area	
carnotite	C 111
geology	OM-160
Carthage coal field	B 381-C
Cedar Mountains	
geology	MF-159

NEW MEXICO--Continued

central	
ground water	W 275
Céntral mining district	B 870
Cerillos coal field	B 531-J
Chaco Canyon-2 quadrangle	I-315
Chaco River valley	
stratigraphy	P 98-P
Chacra Mesa coal field	B 860-C
Chupadera Mesa	
geology	OM-61, 121
Chuska Mountains area	
water resources	C 308
Colfax County	
geology	OM-141
Colorado River basin	
profile surveys	W 396
water records	C 389
Conchas Reservoir	W 1110-C
Cornfield Wash	
hydrology	W 1475-B
Coyote district	
uranium, copper	B 1020-L;
	C 334
Cuba region	
coal	B 381-C
Dayton region	
oil	B 541-D
De Baca County	
aeromagnetic maps	GP-15, 16
Deming region	
fluorspar	B 470-K
geology	GF-207
Engle coal field	B 285-F
Estancia Valley	
geology, water re-	
sources	W 260, 275
Fort Stanton Reservation	
region	
coal	B 316-F
Fort Wingate Indian School	
area	
geology, ground water	C 360
Fruitland area	
geology, fuels	OM-144
Gallina region	
coal	B 341-C
Gallinas Mountains	
geology	Map 3-211
	(p. 226)
Gallup region	
alluvial fills	W 1110-A
geology, coal, clay	B 285-F,
	315-I, 316-F,
	341-C, 767,
	860-A
ground water	C 443
Gila River	
alum	B 315-E
Gila River Forest Reserve	P 39
Grants region	
geobotanical prospec-	
ting	C 264
Guadalupe County	
aeromagnetic maps	GP-15-18
geology, asphalt	OM-44
Hachita basin	
ground water	W 422
Hanover region	
iron	B 380-E

New Mexico--Continued

Hogback quadrangle	
geology	Map C-29
Iron Mountain district	
beryllium, tungsten	B 945-C
Jornado del Muerto	
geology, ground water	W 123
Joyita Hills	
geology	OM-61
Kirtland quadrangle	
geology	Map C-32
Koehler quadrangle	
geology	GF-214; OM-141
La Ventana Mesa region	
coal	B 860-C
uranium	B 1009-M, 1055-J
Laguna 4 NW, SW quad-	
rangles	MF-133, 134
Lake Valley manganese dis-	
trict	MF-9
Las Vegas Basin	
geology	OM-54
Lincoln Forest Reserve	P 33
Lincoln National Forest, map	p. 253
Little Florida Mountains	
manganese	B 922-C
Little Hatchet Mountains	
geology, mineral re-	
sources	P 208
Lordsburg, map	p. 253
Lordsburg mining district	B 885
Los Pinos Mountains	
geology	OM-61
Luna County	
geology, ground water	B 618; W 345-C
Magdalena mining district	P 200; p. 254
Mesilla Valley	
ground water	W 1230
irrigation	W 10
Mimbres Valley	
ground water	W 637-B
Mogollon mining district	B 715-L, 787
Monero region	
coal	B 341-C
Mora County	
geology	OM-137
Mora River	
profile surveys	W 421
Mount Laughlin quadrangle	
geology	OM-141
Mount Taylor	
geology	A 6 b; P 189-B
Mount Taylor coal field	B 860-A, B
Nacimiento Mountains	
geology	OM-57
Naschitti quadrangle	
geology	Map C-31
Navajo Country	
geography, hydrography	W 380
geology	P 93, 291
north-central	
geology	OM-21
northwestern	
geology	B 435, 1030-J; 1-224; OC-7; P 374-H
gypsum	B 314-H

New Mexico--Continued

Pecos River basin	
floods	W 842
geology	OM-8
profile surveys	W 421
Peloncillo Mountains	
geology	MF-160
Pinos Altos region	
mineral resources	B 470-B
Playas basin	
ground water	W 422
Quay County	
geology	OM-62
Raton region	
coal	B 752
geology	GF-214; P 101
graphite	B 530-I
Raton Springs region	
coal	B 341-C
Rincon Valley	
ground water	W 1230
Rio Arriba County	
geology	OM-57, 78; p. 234
Rio Galisteo region	OM-8
Rio Grande	
profile surveys	W 421
Rio Grande Valley	
geology, water re-	
sources	B 389; W 141, 181
tectonic map	OM-157
Rio Salado area	
pedestal rocks	B 700-A
Rocky Mountains	
geology	P 95-C
Roswell artesian basin	W 158, 596-A, 639
San Juan Basin	
geology, fuels	B 341-C, 860-A- C; OC-24; OM- 78, 158, 190; P 134, 193-F
San Juan County	
geology, fuels	B 716-G; OM-144, 147; P 98-P, Q, R, S, 119
San Luis basin	
ground water	W 422
San Mateo region	
coal	B 341-C, 381-C
San Miguel County	
aeromagnetic maps	GP-17, 18
coal	B 381-C
San Pedro Mountain	
geology	OM-57
San Simon Valley	
ground water	W 425-A
Sandoval County	
geology, ground water	OM-57; W 620
Sangre de Cristo Mountains	
geology	OM-54
Santa Fe County	
coal	B 381-C, 531-J
Santa Rita mining district	B 859
Ship Rock quadrangle	
geology	Map C-29
Sierra Blanca coal field	B 541-J
Sierra de los Caballos	
vanadium	B 530-c

New Mexico--Continued

Sierra Nacimiento	
paleontology	OC-2
Silver City	GF-199
Socorro County	
geology	OM-121
Lucero uplift	OM-47
pedestal rocks	B 790-A
southeastern	
geology, mineral re-	
sources	B 780-B; I-256;
	OM-177
reconnaissance map	p. 254
southern	
geology	P 108-C
southwestern	
geology	I-344
nitrate	B 820
Springer quadrangle	
geology	OM-141
Taos and vicinity, map	p. 254
Taylor Creek	
tin	B 725-G
Tewan Mountains	
volcanic rocks	B 66
Tijeras coal field	B 471-H
Toadlena quadrangle	
geology	Map C-30
Tres Hermanas mining dis-	
trict	B 380-C
Tularosa Basin	
geology, water re-	
sources	W 343
Tyrone district	
copper	P 122
Una del Gato coal field	B 316-F
Valencia County	
Lucero uplift	OM-47
White Mountain region	
coal	B 225-g
White Sands Missile Range	
water conservation	HA-42
White Sands National Monu-	
ment, map	p. 255
White Signal district	
uranium	C 189
Zuni Basin	
coal	B 767
Zuni Plateau	
geology	A 6 b
Zuni salt deposits	B 260-n
NEW YORK	
Adirondacks	
mineral resources	A 19 III d;
	B 225-o, 260-o
Brandy Brook belt	
magnetite, magnetic	
anomalies	MF-6
Brooklyn	
ground water	C 167
Buffalo region	
map	p. 251
water resources	C 173
Camp Albert L. Mills, map	p. 252
Camp Smith area	
uranium	B 1074-E
Camp Upton, map	p. 252
Catatonk	GF-169

New York--Continued

Catskill Mountain region	
floods	W 1227-C
Cayuga Lake region	
paleontology	B 206
central	
geology	OC-37, 45, 54, 55
reforestation, stream-	
flow	W 1602
Chateaugay quadrangle	
aeromagnetic map	GP-191
geologic map	I-168
Childwold quadrangle	
aeromagnetic, geologic	
map	GP-117
Clinton County	
magnetite district	P 237
Cranberry Lake quadrangle	
aeromagnetic, geologic	
map	GP-118
Dannemora quadrangle	GQ-14
eastern	
limestone	B 744
limonite	B 260-h
Rensselaer grit plateau	A 13 II e
slate belt	A 19 III b,
structural geology	A 16 I e; B 195
Eden quadrangle	GQ-96
Franklin D. Roosevelt	
National Historic	
Site, map	p. 253
Gaines, Pa., region	GF-92
Gouverneur talc district	Map 3-163
	(p. 226)
Greenwood Lake quadrangle	
aeromagnetic map	GP-160
Hamburg quadrangle	GQ-97
Hornell quadrangle	GQ-37
Hudson Valley	
geology	B 242
Jersey Highlands	
magnetic deposits	B 955-A
Lake Champlain	
pollution	W 121
Lake Champlain region	
trap dikes	B 107
Lake Sanord region	
mineral resources	B 940-D
Long Island	
geology	P 82, 189-H,
	254-G
ground water	P 44; W 155
Loon Lake quadrangle	
aeromagnetic map	GP-191
geologic map	GQ-63
Malone quadrangle	I-167
Mineville	
rare earths, apatite	B 1046-B
New York City region	
geology	B 270; GF-190
maps	p. 251
water	W 72, 76
Niagara	GF-190
Niagara River and vicinity,	
maps	p. 254
Niagara Falls	
recession	B 306
Niagara Falls region	
water resources	C 173

NEW YORK--Continued

Nicholville quadrangle	GQ-123
Ontario County	
Devonian faunas	B 16
Orleans County	
zinc-bearing peat and Lockport dolomite	B 1000-D
Oswegatchie quadrangle	
aeromagnetic, geologic maps	GP-1, 192 GF-157
Passaic, N. J., region	
Phillips mine area	
uranium	B 1074-E
Pine Island quadrangle	
aeromagnetic map	GP-159
Rochester region	
map	p. 251
water resources	C 246
Russell quadrangle	
aeromagnetic, geologic map	GP-117
St. Lawrence County	
Benson mines, aero- magnetic map	GP-2
magnetite, magnetic anomalies	MF-6, 10
St. Regis and Santa Clara quadrangles	
aeromagnetic, geologic map	GP-190 GQ-30
Silver Creek quadrangle	
Silver Pond belt	
magnetite, magnetic anomalies	MF-6
southeastern	
feldspar, quartz	B 315-L
ground water	C 417
southern	
Cretaceous flora	M 50
southwestern	
geology, gas	B 899-A, B
Spruce Mountain tract	
magnetite, magnetic anomalies	MF-10
Stark quadrangle	
aeromagnetic, geologic map	GP-117
Sterling Lake area	
magnetite	B 982-F
Steuben County	
geology, gas	B 899-A
Sullivan County	
Shawangunk mine, zinc, lead	B 978-D
Taconic Range	
physiography	B 272
Tupper Lake quadrangle	
aeromagnetic, geologic map	GP-193
Vanderbilt Mansion National Historic Site	p. 255
Warren, Pa., region	GF-172
Warwick quadrangle	
aeromagnetic map	GQ-157
Watkins Glen district	
geology, mineral re- sources	B 260-n; GF-169
Wayawanda quadrangle	
aeromagnetic map	GP-159

NEW YORK--Continued

western	
geology	OC-45, 54, 55
Yates County	
geology, gas	B 899-A
NORTH CAROLINA	
Asheville	GF-116
Atlantic Coastal region	
deep wells	P 186-I
Bakersville area,	
geology	MF-97
Clay County	
corundum	B 948-E
Concord quadrangle	
geochemical, heavy- mineral recon- naissance	MF-234, 235
Cranberry district	
geology, mineral re- sources	B 213-f; GF-90
Dan River region	
coal	B 471-B
Deep River coal field	P 246; p. 224
Dismal Swamp	A 101 b; B 711-C
Elizabeth City region	
geology, ground water	W 773-A
paleontology	P 189-G
Ellijay	GF-187
Great Smoky Mountains National Park and vicinity, map	p. 253 GF-118
Greeneville, Tenn., region	
Guilford Court House Battle- field National Military Park,	
map	p. 253
Hickory region	
mica	P 248-D
Kings Mountain region	
geology, mineral re- sources	B 660-D; GF-222
Knoxville, Tenn., region	GF-16
Mount Mitchell	GF-124
Nantahala	GF-143
Neuse River basin	
water resources	W 1414
New River basin	
water supply	W 536
Norfolk, Va., region	GF-80
Pisgah	GF-147
Plumtree area	
geology	MF-97
Ridgeway-Sandy Ridge district	
mica	P 248-C
Roan Mountain, Tenn., region	GF-151
Shelby region	
mica	P 248-D
Spruce Pine district	
geology	MF-97
mica	B 936-A
Vance County	
tungsten	B 948-A
western	
mineral resources	B 315-M, 735-F, G, 1072-D
Yadkin-Pee Dee River district	
water resources	W 1415

NORTH DAKOTA

Bismarck GF-181
 Bowbells quadrangle GQ-26
 Bowman County
 Cedar Creek anticline,
 map p. 234
 lignite B 1015-E,
 1055-C
 Cannonball River lignite
 field B 541-G
 Casselton GF-117
 Chalky Buttes area
 geology Map C-38
 Cheyenne River Indian Reser-
 vation
 geology B 575
 lignite C 78
 Crosby quadrangle GQ-40
 Devils Lake basin
 water, quality W 1295
 Dickinson area
 geology, ground water C 34
 Eckelson quadrangle GF-168
 Edgeley quadrangle
 geology, water resources
 B 801; W 520-E
 Ellendale area
 water supply W 889-A
 Fargo GF-117
 Fort Berthold Indian Reser-
 vation
 geology, ground water W 1259
 lignite B 381-A,
 471-C, 726-D
 Grenora area
 Quaternary geology B 1073
 Heart River irrigation project
 geology, ground water C 34
 Jamestown area
 geology GF-168
 water supply W 889-A
 Knife River area
 structure, map p. 235
 La Moure quadrangle
 geology, water re-
 sources B 801
 Marmarth lignite field B 775
 Minot region
 geology, coal B 906-B
 Missouri River basin
 floods W 1137-A
 New Salem lignite field B 726-A
 Noonan quadrangle GQ-44
 northwestern
 Cenozoic history P 326
 Portal quadrangle GQ-47
 Sentinel Butte lignite field B 341-A
 Slope County
 lignite B 1015-E
 Souris River area
 geology P 325
 southwestern
 geologic map p. 235
 uranium-bearing
 lignite B 1055-E
 Square Buttes district
 coal B 1076
 geology OM-148

NORTH DAKOTA--Continued

Standing Rock Indian Reser-
 vation
 geology B 575
 lignite C 78
 Tower quadrangle GF-168
 Velva quadrangle GQ-31
 Washburn lignite field B 381-A
 western
 riprap sources MB-20
 tectonic map, uranium MF-125
 Wibaux area
 lignite B 995-G
 Williams County
 Nesson anticline B 691-G
 Williston basin region
 structure OM-165, 179
 Williston lignite field B 531-E
 OHIO
 Ashland region
 spring W 1619-A
 Belmont County
 coal C 363
 Cadiz quadrangle
 oil, gas B 198, 541-A
 Camp Sherman, map p. 252
 Canton quadrangle
 oil, gas geology B 1003-A
 Cincinnati area
 ground water W 999
 map p. 251
 Cleveland area
 geology, mineral re-
 sources B 818
 map p. 251
 Cleveland gas field B 661-A
 Columbus area
 geology GF-197
 map p. 251
 Dayton and vicinity, map p. 251
 Dover quadrangle
 oil, gas geology B 1003-A
 eastern
 Berea sand OM-58
 oil fields B 213-h
 Erie Basin
 glacial geology, drain-
 age M 41
 Flushing quadrangle
 geology, oil B 346
 Huntington, W. Va., region GF-69
 Kenova quadrangle
 geology, mineral re-
 sources B 285-F, 349;
 GF-184
 Mahoning River basin
 water resources C 177
 Massillon quadrangle
 oil, gas geology B 1003-A
 Maumee and Miami drainage
 areas W 91
 Mount Vernon
 floods HA-40
 Muskingum River basin
 floods W 869
 natural features,
 economic develop-
 ment W 91

OHIO--Continued

- Navarre quadrangle
oil, gas geology B 1003-A
northeastern
Berea, Corry, Cussewago,
Murrysville sands OM-49, OC-21
northern
Berea sand, map OM-39, 99
Ohio River basin
floods W 334, 800, 838
glacial geology, drain-
age M 41
Piqua area
geology, hydrology B 1133-A
Sandusky drainage area W 91
southeastern
Berea, Murrysville
sands, map OM-5, 9, 29,
79, 89
drainage changes P 13
southern
Berea sand OM-69
southwestern
ground water W 269
Springfield
floods HA-43
Steubenville area
water resources C 340
Steubenville quadrangle
geology, oil, gas B 318
Summerfield quadrangle
geology, mineral re-
sources B 621-N, 720
Toledo and vicinity, map p. 251
west-central
preglacial Teays Valley W 1460-E
Woodsfield quadrangle
geology, mineral re-
sources B 621-O, 720
Wooster region
anticlines, Clinton sand B 621-H
Youngstown area
map p. 252
water resources C 177

OKLAHOMA

- Arbuckle Mountains
geology P 31
Arkansas River
quality of water C 361
Asher, map p. 252
Atoka GF-79
Billings region
structure B 641-E
Black Knob Ridge area OM-1
Bristow quadrangle
geology, oil, gas B 661-B, 759
Bromide region
manganese B 725-E
Cement oil field B 726-B
central
gas fields B 629
Choctaw coal field A 21 II e
Coalgate GF-74
Cotton County
structure B 602
Cushing oil and gas field B 658
Dougherty asphalt area OM-15
Duncan gas field B 621-D

OKLAHOMA--Continued

- Enid region
ground water W 345-B, 520-B
Foraker quadrangle
oil, gas geology B 641-B
Fort Smith-Poteau gas field B 541-B
Gage region
ground water W 500-B
Glenn oil and gas pool B 541-B
Grandfield district
geology B 547
Healdton oil field B 621-B
Henryetta mining district
geology, coal B 1015-F
Howe district
geology, fuels B 874-D;
p. 224
Jefferson County
geology, oil, gas B 602, 726-F
Joplin, Mo., region
map p. 253
zinc, lead B 606
Lake Hefner
water-loss investiga-
tions C 229; P 269,
270
Lawton oil and gas field B 621-G
Le Flore County
coal map p. 224
Lehigh district
geology, fuels A 19 III e,
B 874-B; p. 224
B 621-C
Loco gas field A 19 III e,
B 874-A; p. 224
McAlester district
geology, fuels B 874-A; p. 224
Madill area
geology, oil, gas B 381-D, 736-A
Muskogee region
geology, oil B 260-j; GF-132
north-central
oil, gas B 531-B
northeastern
geology OC-5; OM-52
mineral resources B 340-C
Oklahoma City region
ground water W 345-D
Oklahoma coal field
geology, fuels B 874
Osage County
geology, oil, gas B 886-A, 900
map p. 234
Osage Reservation
geology, oil, gas B 686
Ouachita Mountains
geology OM-66
Ozark region
lead, zinc, physiog-
raphy A 22 II b
Panhandle region
geology OM-101
Pawhuska quadrangle
structure B 691-C
Pershing oil and gas field B 751-B
Picher field
lead, zinc, map p. 226
Poteau district
coal map p. 224
geology, gas B 541-B

OKLAHOMA--Continued

Prague, northwest, map	p. 254
Quinton-Scipio district	
geology, fuels	B 874-C; p. 234
southeastern	
coal maps	p. 224
grahamite	B 380-H
paleobotany	P 186-C
volcanic rocks	P 154-F
southern	
gas fields	B 629
geology	P 120-H
Stigler district	
coal map	p. 224
Sulphur asphalt area	OM-22
Tahlequah	GF-122
Tishomingo	GF-98
western	
floods	W 1227-B
physiographic provinces	B 730-D
Wichita Mountains	
geology, mineral re-	
sources	B 225-b; P 31
Wilburton district	
geology, fuels	B 874-D; p. 224
Winslow	GF-154
OREGON	
Airlie, map	p. 252
Aldrich Mountain quadrangle	MF-49
Alsea quadrangle	OM-162
Ashland Forest Reserve	A 21 V e
Astoria	
paleontology	P 59
Baker quadrangle	
geology, mineral re-	
sources	B 879
Blue Creek district	
geology, mineral re-	
sources	B 846-B
Blue Mountains	
gold belt	A 22 II e
Blue River mining region	A 20 III a
Bohemia mining district	A 20 III a; B 380-A
Bonanza district	
mercury	B 955-F
Briggs Creek area	
chromite	B 922-P
Cape Kiwanda to Cape Foul-	
weather	
geology OM	OM-97
Cascade Range	
geology, mineral re-	
sources	A 20 III a; B 893
Cascade Range Forest Re-	
serve	A 21 V e; p. 9
central	
geology, water resources	B 252
paleobotany	P 274-I
coast	
mineral resources	B 945-E; C 8
Coos Bay region	
geology, coal	A 19 III c; B 431-B, 982-B; GF-73*
paleontology	P 59
Cracker Creek gold district	B 380-A

OREGON--Continued

Crater Lake National Park	
geology	P 3
map p.	p. 252
Dalles region	
geology, ground water	W 659-B
Deschutes River basin	
geology, water re-	
sources	W 344, 637-D
Douglas County	
gold	B 830-B
eastern	
mineral resources	B 620-B, 725-A, 846-A, 875
Eden Ridge coal field	B 541-I
Galice quadrangle	GQ-25
Gasquet quadrangle	
geology, mineral re-	
sources	B 995-C
Granite district	
gold	B 430-A
Grant County	
chromite	B 922-D
Grants Pass quadrangle	
aeromagnetic map	GP-197
mineral resources	B 380-A
Hanford Plant area	
aeroradioactivity	GP-307
Harney Basin region	
geology, water re-	
sources	W 231, 841
Harney Valley	
gas	B 431-A
Heppner	
flood	W 96
Hobart Butte	
high-alumina clay de-	
posit	C 143
Hood River basin	
profile surveys	W 348
Horse Heaven mining district	
mercury	B 969-E
Izee quadrangle	MF-82
John Day basin	
paleobotany	B 204
profile surveys	W 377
John Day quadrangle	MF-51
Keating region	
copper	B 830-A
Kerby quadrangle,	
aeromagnetic map	GP-197
Klamath Indian Reservation	
pumice	C 128
Klamath Mountains	
chromite	B 725-A
topographic develop-	
ment	B 196
Logdell quadrangle	MF-82
McKenzie River	
waterpower	W 637-C
McKenzie Valley	
geology, water re-	
sources	W 597-A
McMinnville quadrangle	OM-155
Malheur County	
Cow Creek and Soldier	
Creek grazing units,	
ground water	W 1475-E
Marys Peak quadrangle	OM-162

OREGON--Continued

Medford quadrangle	GQ-89
Mount Hood and vicinity, map	
map	p. 254
Mount Vernon quadrangle	MF--50
Nampa, Idaho, region	GF-103
Newport area	
geology	OM-88
Nickel Mountain	
nickel	B 315-C
Nonpareil district	
mercury	B 955-F
northwestern	
geology, oil	A 171c; B 590;
paleontology	OM-42
P 233-E	
Ochoco quicksilver district	
geophysical surveys	B 940-C
Opalite district	
mercury	B 931-N
Owyhee irrigation project	W 597-A
Picture Gorge, map	p. 254
Port Orford	GF-89
Portland quadrangle	GQ-104
Portland region	
iron	B 260-h
map	p. 251
water resources	C 372
Pueblo Mountains	
mercury	B 931-J, 995-B
Riddle quadrangle	
geology, mineral re-	
sources	B 340-A, 931-I;
	GF-218
Rogue River basin	
streamflow records	C 187
Rogue River valley coal	
field	B 341-C
Roseburg	GF-49
Sandy River basin	
profile surveys	W 348
Scappoose region	
limonite	B 982-C
Sheridan quadrangle	OM-155
Silver Peak district	
copper	C 2
Siuslaw River area	
geology	OM-186
Snake River	
power resources	W 520-C
Sourdough area	
chromite	B 922-P
south-central	
geology, water re-	
sources	W 220
southeastern	
artesian basins	W 78
geology	B 217
southern	
geology	A 4 f
southwestern	
floods	W 1137-E
geology	MF-38
mineral resources	B 546, 830-B,
	850; C 2
Sparta region	
granite	
Spirit Mountain quadrangle	OM-129
Squaw Butte Ranch, map	p. 254

OREGON--Continued

Squaw Creek district	
copper	C 2
Steens Mountain	
mercury	B 931-J, 995-B
Sumpter district	
gold	B 430-A
Takilma-Waldo district	
geology, mineral re-	
sources	B 846-B
Umpqua River basin	
geology	OM-204
profile surveys	W 379
waterpower	W 636-F
Vale region	
gas, oil	B 431-A
Waldport area	
geology	OM-88
western	
floods	W 1320-D
geology	I-325
Willamette and White Rivers	
profile surveys	W 349, 378
Willamette Valley	
flood runoff	W 968-A
geology	OM-110, 150
ground water	W 890
Willow Creek	
coal	B 341-C
PENNSYLVANIA	
Abbottstown quadrangle	
aeromagnetic map	GP-281
Accident, Md., region	GF-160
Alburtis quadrangle	
aeromagnetic map	GP-266
Allentown quadrangle	
aeromagnetic map	GP-213
Ambler quadrangle	
aeromagnetic map	GP-265
Amity quadrangle	
geology, mineral re-	
sources	B 300; GF-144
Arendtsville quadrangle	
aeromagnetic map	GP-278
Ashland quadrangle	
geology, coal	Map C-13, 14
Avondale region	
geology	P 98-B
Barnesboro-Patton coal field	B 225-g
Barnesboro quadrangle	
geology, mineral re-	
sources	B 531-D;
	GF-189
Beaver quadrangle	
geology, mineral re-	
sources	B 286; GF-134
Bedminster quadrangle	
aeromagnetic map	GP-260
Bellefonte quadrangle	
geology, mineral re-	
sources	B 855
Berks County	
magnetite	B 315-D
Bernville quadrangle	
aeromagnetic map	GP-273
Biglerville quadrangle	
aeromagnetic map	GP-279
Birdsboro quadrangle	
aeromagnetic map	GP-231

PENNSYLVANIA--Continued

Blair County
 ganister B 380-J
Boyertown quadrangle
 aeromagnetic map GP-232
 magnetite B 995-D
Brandywine Creek
 natural channel P 271
Broad Top coal field
 paleontology P 150-E
Brownsville GF-94
Buckingham quadrangle
 aeromagnetic map GP-215
Bucks County
 water resources C 104
Burgettstown quadrangle
 coal B 260-I
 geology GF-177
 oil, gas B 318
Butler quadrangle
 geology, mineral re-
 sources B 873
Cambria County
 clay, shale B 315-I
 coal B 225-g
Carbon County
 uranium B 580-H; C 350
Carlisle quadrangle GF-28
Carnegie quadrangle
 geology, oil, gas B 456; GF-177
central
 clay, shale B 285-L
 geology P 108-K
 physiography, hydrau-
 lics P 282-F
Chambersburg GF-170
Chester quadrangle GF-162
Clarion quadrangle
 geology, mineral re-
 sources B 315-I, 316-A;
 GF-178
Claysville district
 geology, oil, gas B 318; GF-180
Clearfield coal field B 285-F
Coatesville quadrangle
 aeromagnetic map GP-225
 geology GF-223
Collegeville quadrangle
 aeromagnetic map GP-210
Columbia east quadrangle
 aeromagnetic map GP-258
Conestoga quadrangle
 aeromagnetic map GP-218
Connellsville GF-94
Curwensville quadrangle
 geology B 531-D
Delano quadrangle
 geology, coal Map C-25
Delaware River basin
 water resources C 190
Delaware Water Gap, map p. 253
Delaware Water Gap quad-
 rangle
 geology, mineral re-
 sources B 920
Dillsburg quadrangle
 aeromagnetic map GP-277
Dillsburg region
 iron B 430-E, 969-A

PENNSYLVANIA--Continued

Doe Run region
 geology P 98-B
Downington quadrangle
 aeromagnetic map GP-224
Doylestown district
 geology, mineral re-
 sources B 828
Doylestown quadrangle
 aeromagnetic map GP-263
East Greenville quadrangle
 aeromagnetic map GP-205
eastern
 geology B 120
 mineral paints B 430-G;
 MRUS 1908 II
Easton quadrangle
 aeromagnetic map GP-235
 geology, mineral re-
 sources B 920
Ebensburg GF GF-133
Elders Ridge coal field B 225-g
Elders Ridge quadrangle
 geology, mineral re-
 sources B 256; GF-123
Elkland GF-93
Elkton, Md., region GF-211
Elverson quadrangle
 aeromagnetic map GP-221
Emmitsburg quadrangle
 aeromagnetic map GP-283
Ephrata quadrangle
 aeromagnetic map GP-241
Erie
 quality of water W 161
Erie Basin
 glacial geology, drainage M 41
Fairfield quadrangle
 aeromagnetic map GP-283
 geology GF-225
Fleetwood quadrangle
 aeromagnetic map GP-228
Foxburg quadrangle
 geology, mineral re-
 sources B 454; GF-178
Frenchtown quadrangle GQ-133
Gaines region
 geology GF-92
 oil A 22 III m
Gap quadrangle
 aeromagnetic map GP-245
Germantown quadrangle GF-162
Gettysburg quadrangle
 aeromagnetic map GP-284
 geology GF-225
Glen Campbell coal field B 285-F
Glen Rock quadrangle
 aeromagnetic map GP-272
Grantsville, Md., region GF-160
Greene County
 oil, gas B 225-h,
 285-G, 304
Hampton quadrangle
 aeromagnetic map GP-280
Hancock, Md.-W. Va., region GF-179
Hanover district
 geology P 204
Hanover quadrangle
 aeromagnetic map GP-286

PENNSYLVANIA--Continued

Hatboro quadrangle	
aeromagnetic map	GP-237
Holidaysburg	GF-227
Honey Brook quadrangle	
aeromagnetic map	GP-233
geology, mineral resources	B 891
Houtzdale quadrangle	
geology	B 531-D
Hummelstown quadrangle	
aeromagnetic map	GP-267
Huntingdon	GF-227
Hyner gas pool	B 225-h
Indiana	GF-102
Johnstown region	
geology, mineral resources	B 316-A, 447; GF-174
Kiskiminetas River basin	
floods	C 204
Kittanning quadrangle	
geology, mineral resources	B 279; GF-115
Lake Erie shore region	
water resources	C 174
Lambertville quadrangle	
aeromagnetic map	GP-216
Lancaster quadrangle	
aeromagnetic map	GP-259
Langhorne quadrangle	
aeromagnetic map	GP-238
Lansdale quadrangle	
aeromagnetic map	GP-264
Latrobe	GF-110
Lebanon County	
magnetite	B 315-D
Lebanon quadrangle	
aeromagnetic map	GP-254
Lehigh district	
cement rock	B 225-j
Lehigh Gap	
mineral paint	B 315-N, 430-G
Leola quadrangle	
aeromagnetic map	GP-243
Lineboro quadrangle	
aeromagnetic map	GP-287
Lititz quadrangle	
aeromagnetic map	GP-257
Littlestown quadrangle	
aeromagnetic map	GP-285
Lumberville quadrangle	
aeromagnetic map	GP-261
McCalls Ferry district	
geology	B 799
McSherrystown quadrangle	
aeromagnetic map	GP-285
Malvern quadrangle	
aeromagnetic map	GP-202
Manatawny quadrangle	
aeromagnetic map	GP-229
Manchester quadrangle	
aeromagnetic map	GP-286
Manheim quadrangle	
aeromagnetic map	GP-256
Masontown	GF-82
Mauch Chunk region	
carnotite	B 580-H
Mechanicsburg quadrangle	
aeromagnetic map	GP-274

PENNSYLVANIA--Continued

Media quadrangle	
aeromagnetic map	GP-204
Mercersburg	GF-170
Middletown quadrangle	
aeromagnetic map	GP-269
geology, mineral resources	B 840
Olmsted Air Force Base	
ground water	W 1539-H
Milford Square quadrangle	
aeromagnetic map	GP-206
Minersville quadrangle	
geology, coal	Map C-43
Morgantown quadrangle	
aeromagnetic map	GP-220
Mount Carmel quadrangle	
geology, coal	Map C-3, 7, 10, 12
Mount Holly Springs	
phosphorus	B 315-P
Mount Holly Springs quadrangle	
aeromagnetic map	GP-276
New Cumberland quadrangle	
aeromagnetic map	GP-275
New Freedom quadrangle	
aeromagnetic map	GP-272
New Holland quadrangle	
aeromagnetic map	GP-244
New Kensington quadrangle	
geology, fuels	B 829
Norristown quadrangle	
aeromagnetic map	GP-201
geology	GF-162
north-central	
floods	W 1134-B
Northern Anthracite coal basin	
structure	P 193-D
northwestern	
stratigraphy	OC-21
Ohio Valley	
clay	B 225-k
Palmyra quadrangle	
aeromagnetic map	GP-268
Parkesburg quadrangle	
aeromagnetic map	GP-234
Patton quadrangle	
geology, mineral resources	B 225-g, 531-D; GF-189
Pawpaw, W. Va., region	GF-179
Perkiomenville quadrangle	
aeromagnetic map	GP-208
Philadelphia region	
geology	GF-162
map	p. 251
water resources	W 106
Phoenixville quadrangle	
aeromagnetic map	GP-209
geology, mineral resources	B 891
Piedmont Upland	
mineral resources	B 1082-K
Pittsburgh region	
map	p. 251
sand, gravel	B 430-F
water resources	C 315
Pittston and vicinity, map	p. 252
Potter County	
geology, geomorphology	P 288

PENNSYLVANIA--Continued

Pottstown quadrangle	
aeromagnetic map	GP-222
Punxsutawney coal field	B 285-F
Punxsutawney quadrangle	
geology	B 531-D
Quakertown district	
geology, mineral re- sources	B 828
Quakertown quadrangle	
aeromagnetic map	GP-214
Quarryville district	
geology	B 799
Quarryville quadrangle	
aeromagnetic map	GP-219
Reading quadrangle	
aeromagnetic map	GP-230
Red Lion quadrangle	
aeromagnetic map	GP-271
Richland quadrangle	
aeromagnetic map	GP-255
Riegelsville quadrangle	
aeromagnetic map	GP-236
Rogersville	GF-146
Rural Valley quadrangle	
geology, mineral re- sources	B 279; GF-125
Safe Harbor quadrangle	
aeromagnetic map	GP-217
Sassamansville quadrangle	
aeromagnetic map	GP-207
Seven Valleys quadrangle	
aeromagnetic map	GP-287
Sewickley	GF-176
Shenandoah quadrangle	
geology, coal	Map C-19, 21
Sinking Spring quadrangle	
aeromagnetic map	GP-240
Slatington	
slate	B 213-i
Somerset	GF-224
South Mountain	
clay	B 315-I
copper	B 430-B
geology	B 136; GF-225
southeastern	
chrome ores	B 725-B
Illinoian outwash	B 1121-B
southern	
barite	B 225-o
Southern Anthracite coal field	
paleobotany, stratigraphy	A 20 II f
southwestern	
Berea, Murrys ville sands, map	OM-29, 89
limestones	B 249
Steubenville quadrangle	
geology, oil, gas	B 318
Stockton quadrangle	
aeromagnetic map	GP-216
Susquehanna River basin	
hydrography	W 109
physiography, water	W 108
Taneytown quadrangle	
aeromagnetic map	GP-284
Telford quadrangle	
aeromagnetic map	GP-262
Temple quadrangle	
aeromagnetic map	GP-227

PENNSYLVANIA--Continued

Terre Hill quadrangle	
aeromagnetic map	GP-242
Tioga	GF-93
Tremont quadrangle	
geology, coal	Map C-43
Trenton, N. J., region	
Uniontown GF-82	GF-167
Unionville quadrangle	
aeromagnetic map	GP-226
Valley Forge quadrangle	
aeromagnetic map	GP-200
Wagontown quadrangle	
aeromagnetic map	GP-223
Warren	GF-172
Waynesburg	GF-121
West Chester quadrangle	
aeromagnetic map	GP-203
geology	GF-223
West York quadrangle	
aeromagnetic map	GP-282
western	
Berea, Murrys ville sands	OM-49 58
glacial boundary	B 58
Wilkes-Barre and vicinity, map	p. 252
Wilmington, Del., region	
geology	GF-211
map	p. 252
Wilmore Basin	
coal	B 225-g
Wirdber	GF-224
Womelsdorf quadrangle	
aeromagnetic map	GP-239
York district	
geology	P 204
York quadrangle	
aeromagnetic map	GP-270
Youghiogheny River basin	
floods	C 204
Youngstown, Ohio, and vicinity, map	p. 252
Zilienople quadrangle	
geology, mineral re- sources	B 873
RHODE ISLAND	
Bristol and vicinity	GQ-42, 70
Carolina quadrangle	GQ-117
Crompton quadrangle	GQ-94
East Greenwich quadrangle	GQ-17, 62
Georgiaville quadrangle	GQ-16, 22
Hope Valley quadrangle	GQ-105
Kingston quadrangle	
geology	B 1071-I
Narragansett basin	
geology	M 33
Narragansett Pier quadrangle	GQ-91, 140
North Scituate quadrangle	GQ-13, 143
Pawtucket quadrangle	GQ-1, 2
Providence area	
water resources	W 1499-A
Providence quadrangle	GQ-84, 118
Quonochontaug quadrangle	GQ-117
Slocum quadrangle	GQ-106, 114
Wickford quadrangle	GQ-136
SOUTH CAROLINA	
Atlantic Coastal region	
deep wells	P 186-I

SOUTH CAROLINA--Continued

Charleston	
deep well	P 90-H
earthquake	A 9 b
Charleston phosphate area	B 1079
Chesterfield County	
Brewer mine region,	
pyrite, topaz	B 725-F, 936-C
Coastal Plain	
geology	B 867
Edisto Island area	
radioactivity survey	GP-123
Gaffney-Kings Mountain	
district	
geology, mineral re-	
sources	B 660-D; GF-222
Hartwell district	
mica	P 248-E
Kershaw	
Haile mine, pyrite	B 725-F
Pisgah	GF-147
Savannah River Plant area	
aeroradioactivity	GP-306
SOUTH DAKOTA	
Aberdeen quadrangle	GF-165
Aladdin, Wyo., region	GF-128
Alexandria	GF-100
Angostura irrigation project	
geology, ground water	C 54
Bald Mountain gold-mining area	
radioactive minerals	C 351
Bar H area	
geology	Map C-37
Belle Fourche	GF-164
Black Hills Forest Reserve	A 19 V b
Black Hills region	
geology, water resources	A 19 II e,
21 IV b; B 1081-B; GF-219;	
MF-218; OM-191; P 65,	
154-D; W 428	
laccoliths	A 21 III b
lithology	P 165-A
mineral resources	B 225-b, 499,
1046-A; C 351; MF-36; P 26	
pegmatites	P 247
Burdock quadrangle	MF-71 - 75
Byron quadrangle	GF-165
Canning quadrangle	GQ-39
Canton	
Dakota sandstone, water	W 597-C
Cascade Springs quadrangle	MF-207 - 212
Cave Hills area	
geology	Map C-34
Cedar Canyon	
carnotite	B 1009-I
Cheyenne River basin	
hydrology	W 1531
Cheyenne River Indian Reser-	
vation	
geology	B 575
lignite	C 78
Craven Canyon area	
carnotite	C 175
Crow Creek area	
ground water	W 1425
Custer County	
geology, pegmatites	B 1015-C,
1072-I; C 245; MF-44	
De Smet	GF-114
Dewey quadrangle	MF-77, 78

SOUTH DAKOTA--Continued
eastern

Pleistocene geology	P 262
wells, irrigation	A 18 IV c
Edgemont	GF-108
Edgemont mining district	
uranium	MF-39
Edgemont NE quadrangle	MF-55 - 60
Elk Point	GF-156
Fall River County	
radioactive deposits	B 1009-G;
C 175; MF-39	
MF-61 - 66	
Flint Hill quadrangle	
Fourmile area	
geology, pegmatites	B 245
Grand River valley	
geology, ground water	W 1298
Great Sioux Reservation	
lignite	B 21
Harding County	
paleobotany	P 185-F
radioactive deposits,	
lignite	B 1009-I,
1055-C, D	
GF-113	
Huron	
James River valley	
geology, water resources	W 90
Jewel Cave National Monument	
geology, ground water	W 1475-D
Lawrence County	
autunite	C 286
Lead region	
geology	B 765
Long Mountain	
uranium	B 1063-A
Mendenhall area	
uranium, lignite	B 1055-D
Minnekahta quadrangle	MF-67 - 70
Missouri River basin	
floods	W 1137-A
Mitchell	GF-99
Moreau River drainage basin	
water quality, sedimen-	
tation	C 270
Newcastle, Wyo., region	GF-107
Newell	GF-209
Northville quadrangle	GF-165
northwestern	
lignite, uranium	B 627, 1055-B
riprap sources	MB-20
Oahe quadrangle	GQ-53
Oelrichs	GF-85
Olivet	GF-96
Parker	GF-97
Pennington County	
Peerless pegmatite,	
geology, beryl	P 297-A
Perkins County	
uranium, lignite	B 1055-C
Pierre area	
geology	P 307
Pierre quadrangle	GQ-32
Ponca Creek basin	
ground water	W 1460-G
Rapid Valley	
ground water	C 201
Redfield quadrangle	GF-165
Sand Lake area	
ground water	W 1425

SOUTH DAKOTA--Continued

- Slim Buttes area
carnotite geology B 1009-1
Map C-35,
36, 37
- southeastern
geology, water resources W 34
glacial deposits B 158
- Standing Rock Indian Reser-
vation
geology B 575
lignite C 78
- Sundance, Wyo., region GF-127
- Table Mountain area
geology Map C-34
- Tinton district
tin, pegmatites B 922-T
- western
tectonic map, uranium MF-128
- White River badlands
uranium C 359
- Williston basin region
structure OM-165, 179
- Wind Cave National Park,
map p. 255
- Yankton area
geology P 328
- TENNESSEE
- Asheville, N. C., region
geology GF-116
- Athens quadrangle GQ-19
- Bearden quadrangle GQ-126
- Blockhouse quadrangle GQ-131
- Bon Air-Clifty region
coal B 641-K
- Briceville GF-33
- Bristol, Va., region GF-59
- central
geology P 357
- Chattanooga region
geology GF-6
- iron B 380-E
- map p. 251
- physiography A 19 II a
- Cleveland GF-20
- Columbia GF-95
- Coon Creek
Ripley formation, fauna P 137
- Cranberry, N. C., district
geology, mineral re-
sources B 213-f; GF-90
- Cumberland Gap district
cement resources B 285-l
- coal B 225-g
- Decatur County
phosphate B 213-m
- Ducktown district
geology, mineral re-
sources B 470-C;
P 139, 179
- eastern
geology, mineral re-
sources B 225-c,
540-G, 735-G, 737, 1087-E;
P 274-F
- mine-water problems C 71
- Ellijay GF-187
- Estillville, Va., region GF-12

TENNESSEE--Continued

- Great Smoky Mountains
National Park and
vicinity, maps p. 253
GF-118
- Greeneville
Hamblen County
meteorite B 113
- Ivydell quadrangle
geology, coal Map C-40
GF-4
- Kingston
Knoxville and vicinity, map p. 251
- Knoxville quadrangle GF-16; GQ-115
- Lewis County
manganiferous, ferru-
ginous chert B 928-D
GF-25
GF-22
- Loudon
McMinnville
Mascot-Jefferson City zinc
district P 277
GF-75
- Maynardville
Memphis area
geology, ground water C 33, 408;
W 638-A
GF-27
- Morristown
Mount Mitchell, N. C.,
region GF-124
- Nantahala, N. C., region GF-143
- Niota quadrangle GQ-18
- north-central
ground water W 640
- northeastern
geology P 311
- Perry County
manganiferous, ferru-
ginous chert B 928-D
GF-21
- Pikeville
Pioneer quadrangle
geology, coal Map C-39
- Ringgold, Ga., region GF-2
- Roan Mountain GF-151
- Sewanee GF-8
- Shiloh National Military Park,
map p. 254
- Shooks Gap quadrangle GQ-76
- south-central
ground water W 677
- Standingstone GF-53
- Stevenson, Ala., region GF-19
- Tellico-Sevier belt
geology P 274-F
GF-40
- Wartburg
western
clay B 213-k
- ground water W 164, 656
- iron B 795-D
- Wildwood quadrangle GQ-130
- TEXAS
- Anderson County
Palestine salt dome B 661-G
- Arthurs Bluff
paleontology P 129-G
- Atascosa County
geology, ground water W 676, 1079-C
- Austin County
Brenham salt dome B 661-G
- Austin region
dam W 40
- geology, ground water A 18 II b,
GF-76

TEXAS--Continued

Austin region--Continued	
map	p. 251
structural materials	B 430-F
Balmorhea area	
geology, ground water	W 849-C
Baringer Hill	
rare-earth minerals	B 340-D
Barnes Bridge, map	p. 252
Big Spring area	
geology, ground water	W 913
Black Prairie	
geology, geography,	
ground water	A 21 VII
Borden County	
Horseshoe atoll	P 315-B
Brazos River Valley	
stratigraphy	B 1081-G
Brown County	
paleontology, stratig-	
raphy	P 315-C, D
Burnet region	
geology, mineral re-	
sources	B 450; GF-183
Caddo oil and gas field	B 619
Camp Travis, map	p. 253
Cass and Cherokee Counties	
iron	B 620-E
central	
floods	W 488, 1260-A
paleobotany	P 132-E
water supplies	W 1069
Chisos Mountains, map	p. 252
Coastal Plain	
geology	OC-3; P 126,
	131-D
ground water	W 190, 335
oil	B 184, 212,
	213-h, 260-j, 282
radioactivity	GP-198
Coleman County	
paleontology, stratig-	
raphy	P 315-C, D
Colorado River basin	
floods	W 1260-A
Colorado River Valley	
geology	OM-80
Comal County	
geology, ground water	W 1138
Cooke County	
geology	OM-98
Corsicana oil and gas field	B 661-F
Cross Plains quadrangle	
geology	B 1096-B
Culberson County	
geology	OM-2, 18, 90
Dallas region	
gas	B 629, 716-D
Denison area	
geology, oil, gas	B 736-A
Duval County	
geology, ground water	W 776
Eagle Mountains	
fluorspar	B 987
eastern	
geology	OC-8; P 243-C
iron	B 902
water supplies	W 1047

TEXAS--Continued

Edwards Plateau	
geology, ground water	A 18 II b
El Paso County	
sulfur	B 260-o
El Paso region	
cement materials	B 340-H
geology	GF-166
ground water	W 919, 1426
tin	B 178, 213-c
Falls City NE, NW, SE, SW	
quadrangles	
aeroradioactivity,	
geology	GP-249, 250,
	252, 253
Fannin County	
geology	OM-98
Floresville SE quadrangle	
aeroradioactivity,	
geology	GP-246
Fort Worth region	
gas	B 629
map	p. 251
Franklin Mountains	
tin	B 285-C
Frio County	
geology, ground water	W 676
Galveston County	
geology, ground water	W 1416
Glass Mountains	
paleontology	P 264-A
Grand Prairie	
geology, geography,	
ground water	A 21 VII
Grayson County	
geology	OM-98
Gregg County	
ground water	W 1079-B
Grosvenor quadrangle	
geology	B 1096-A
Guadalupe Mountains	
geology	OM-18; P 215
Guadalupe River basin	
floods	W 1260-A
Harris County	
ground water	W 1360-F
High Plains	
ground water	W 889-F
Houston district	
ground water	W 889-C, D
map	p. 251
Howard County	
Horseshoe Atoll	P 315-B
Hudspeth County	
geology	OM-2, 18, 36, 90
Hueco Bolson	
ground water	W 1426
Hueco Mountains	
geology	OM-36
Johnson County	
paleontology	P 274-C
Karnes City NW quadrangle	
aeroradioactivity,	
geology	GP-251
Kelly Field and Camp Travis,	
map	p. 253
Kent County	
Horseshoe atoll	OC-53; P 315-A

TEXAS--Continued

Kleberg County	
ground water	W 773-D
La Salle County	
ground water	W 375-G
Lacasa area	
geology, fuels	B 726-G
Lake Colorado City	
evaporation studies	P 272-B
Liberty County	
ground water	W 1079-A
Llano County	
geology, iron	B 430-E, 450; GF-183
Lufkin area	
geology, ground water	W 849-A
McLennan County	
paleontology	P 243-E
McMullen County	
ground water	W 375-G
Malone Mountain	
stratigraphy	B 266
Marathon region	
geology	P 187
Marion County	
iron	B 620-E
Medina County	
geology, ground water	W 678, 1422
Mineral Wells area	
mineral water	C 6
Morris County	
iron	B 620-E
north-central	
gas	B 629, 716-D
geology	OM-80; P 129-A
water supplies	W 1069
northeastern	
geology, ground water	P 120-H; W 276
iron	B 260-h
volcanic rocks	P 154-F
northern	
fuels	B 184
physiographic provinces	B 730-D
northwestern	
boundary	B 194
floods	W 1227-B
Nueces	GF-42
Palo Pinto County	
geology, oil, gas	B 621-E
Panhandle	
geology, water re-	
sources	W 154, 191
Pecos River	
quality of water	W 596-D
Quanah region	
oil	B 621-J
Ranger district	
geology, oil	B 726-G, 736-C, E
Rio Grande region	
coal	B 164
geology, ground water	A 18 II b; B 837; P 131-D; W 141, 839
Rockwall, map	p. 254
San Antonio region	
flood	C 32
geology, ground water	A 18 II b; W 773-B
map	p. 254

TEXAS--Continued

San Carlos coal field	
igneous rocks	B 164
San Saba County	
geology	P 146
Scurry County	
Horseshoe atoll	OC-53; P 315-A
Scurry Reef	OM-143
Shafter mining district	B 928-B
Sierra Blanca region	
stratigraphy	B 266
Sierra Diablo region	
geology	OM-2
Smith County	
salt domes	B 736-G
Somervell County	
artesian water	W 660
southern	
geology	OC-8
water supplies	W 1070
southwestern	
paleontology	P 131-D
Stockdale SE, SW quadrangles	
aeroradioactivity,	
geology	GP-247, 248
Tarrant County	
paleontology	P 274-C
Terlingua district	
geology, mercury	B 405; P 312
map	p. 255
Trans-Pecos	
mineral resources	B 260-n, 987
paleobotany	P 125-A
Uvalde County	
geology, ground water	GF-64; W 678
paleontology	P 210-E
Van Horn	GF-194
Van Zandt County	
salt domes	B 736-G
Washington County	
Brenham salt dome	B 661-G
Webb County	
cannel coal	B 691-I
geology, ground water	W 778
western	
geology, mineral re-	
sources	B 780-B; MRUS 1896
Wichita Falls	
flood	C 99
Wichita region	
geology, ground water	W 317
Wiles area	
geology, oil	B 736-C
Winter Garden district	
geology, ground water	W 1481

UTAH

Agathla Peak NE, NW quad-	
rangles	MF-88, 89
Allens Ranch quadrangle	MF-45
American Fork mining	
region	B 620-I; P 201
Aneth-1 - 8 quadrangles	I-90 - 97
Aquarius Plateau	
Quaternary geology	B 1061-D
Ashley Creek area	
geology	OM-82
Basin and Range province	
geology	P 153, 197-D

UTAH--Continued

Bear River Range lead, copper	B 470-D
Beaver County tungsten	B 945-D
Beaver quadrangle geology	MF-202
Beaver region alunite	B 620-K
Beaver Valley water resources	W 217
Bingham mining district	B 213-d, 260-f; P 38; p. 252
Blacksmith Fork profile surveys	W 420
Blacktail (Tabby) Mountain coal field	B 471-I
Bluff-1, 3 - 6, 8, 11, 12 quadrangles	I-53, 54, 59 - 61, 64, 80, 181
Bonanza-Dragon oil-shale area	OM-153
Book Cliffs coal field	B 285-F, 316-E, 371, 852 P 332
geology	
Boot Mesa NE, NW quad- rangles	MF-84, 85
Boulder Dam region mineral resources	B 871
Boulder Mountain Quaternary geology	B 1061-D
Boulter Peak quadrangle	GQ-141
Box Elder County ground water	W 333
Brigham region graphite	B 430-J
Brush Creek area geology	B 1007; OM-123
Bryce Canyon National Park, map	p. 252
Buckskin Gulch NE, NW, SE, SW quadrangles	I-244, 251, 259, 260 p. 252
Bull Valley district, map Canyon Range geology	P 90-F
Capitol Reef area geochemical studies	B 1015-H
Carbon County Farnham anticline, fuels	B 711-A
Carlisle-1 - 7, 10 - 15 quad- rangles	I-2, 6, 67 - 76, 180
Castle Dale-16 quadrangle	I-124
Castle Valley geology, coal	B 628
Castlegate quadrangle economic geology	B 793
Catatract Canyon region geology	B 951; OM-55
Cedar Breaks National Mon- ument, map	p. 252
Cedar City Valley geology, ground water	W 993
Cedar Mountain area uranium	B 1087-B

UTAH--Continued
central

Mesozoic, Cenozoic history	P 205-D
ozokerite	B 641-A
reptilian fauna	P 210-C
Circle Cliffs area uranium, botanical prospecting	B 1085-C
Circle Cliffs quadrangles 1-16, photogeology	I-17 - 31, 52
1 NW, SE, SW; 2 NE; 4 NE geology	MF-153 - 158
Clay Basin gas field and vici- nity geologic map	p. 234
Clay Basin quadrangle	GQ-101
Clay Hills area geology, uranium	B 1087-H
Clay Hills quadrangles 1, 2, 7-11 photogeology	I-51, 58, 62, 65, 78, 79
2 NE, NW, SW geology	MF-184 - 186
Coach Creek NE, SE quad- rangles	I-278, 279
Coalville coal field	B 581-E
Cockscomb SE quadrangle	I-275
Colob coal field	B 341-C
Colorado Plateau geology	P 132-A, 279
Colorado River basin profile surveys water records	W 396 C 389
Comb Ridge region geology	B 1021-E
Cottonwood mining region	B 620-I; P 201
Cove Creek sulfur beds	B 315-Q
Crooks Creek SE, SW quad- rangles	I-304, 305
Daggett County Yellow Canary uranium deposits	C 312
Deep Creek district coal	B 471-I
Deer Flat area botanical prospecting, uranium	B 1085-B
Desert Lake-1 - 4, 6 - 16 quad- rangles	I-4, 99 - 106, 102 - 122, 154, 246, 295
Diamond Mountain area geology	OM-123
Dinnehotso NE, NW, SE, SW quadrangles	MF-92 - 95
Dinosaur National Monument map	p. 253
Morgan formation	SP
Drum Mountains manganese	B 1082-H
Duchesne County stratigraphy	OC-52
Duchesne River area geology	C 16; OM-75
Dutch John Mountain quad- rangle	I-324

UTAH--Continued

East Tintic district
geologic, alteration
maps MF-230
eastern
geology OM-70; P 150-D
Elk Ridge quadrangles
1 - 11, 14 - 16
photogeology 1-7, 8, 32, 35,
55, 56, 63, 82,
98, 125-127,
151, 152
1 NW, SW; 2 NE, NW, SE,
SW; 3 NE, NW; 4 NW,
SW
geology MF-190 - 195,
198 - 201
Emery County
structure OM-197
Emery-1, 2, 7, 8, 10, 15
quadrangles 1-9 - 11, 166,
177, 261
Escalante Valley
ground water W 659-A
Fairfield quadrangle
geology, mineral re-
sources P 173
Fivemile Pass quadrangle MF-131
Flaming Gorge GQ-75
Frisco (special), map p. 253
Garfield County
structure OM-197
Garfield quadrangle MF-240
Gateway district
geology MF-122;
Map 3-173
(p. 226)
Glendale area
geology, fuels Map C-49
Gold Hill mining district P 177
Goose Creek district
Tertiary geology B 1055-H
Goslin Mountain quadrangle 1-324
Grand County
geology B 841, 852, 863,
908; Map 3-173;
OM-169
Granite Mountain area
geology, iron MF-14
Great Salt Lake basin
oil, asphalt B 260-j
waterpower W 517
Great Salt Lake Desert
potash B 795-B
Green River Desert region
geology B 951; OM-55
Green River region
geology P 90-K, 132-C,
158-E, 168
hydrology C 129
oil, gas B 541-D
uranium, vanadium B 530-c, 1087-C
B 341-C
Harmony coal field
Henry Mountains
geology, geography OM-131; P 228
uranium B 1087-C
Iron County
coal B 316-E
ground water W 277

UTAH--Continued

Iron Springs district
iron B 338
Johnson NE, NW, SE, SW
quadrangles 1-164, 245,
248, 267
Jordan River valley
ground water W 157, 1029
Juab County
ground water W 277
Kaibab Gulch
Kaibab limestone P 150-C
Kaiparowits Peak-1, 2, 7 - 9
quadrangles 1-14, 15,
134 - 136
Kaiparowits region
geography, geology P 164
Kanab coal field B 341-C
Kanab SE, SW quadrangles 1-137, 138
Kane County
Bulloch claims, uranium B 239
La Sal Mountains
geology P 294-I
mineral resources B 530-a
Lehi region
artesian water W 836-D
Lisbon Valley area
geophysics P 316-C
Loa 1 NE, SE; 4 NE quad-
rangles MF-100 - 102
Logan River
profile surveys W 420
Lost Creek coal field B 691-L
Magna quadrangle MF-240
Manila quadrangle 1-156
Marysvale region
alunite B 511, 620-K,
886-D
Mercur mining district A 16 II d
Millard County
ground water W 277
Mills Junction quadrangle MF-240
Moab district
geology, oil, gas B 471-A, 841
Moab-4, 6, 10 - 16 quad-
rangles 1-83, 85, 86,
107, 116 - 119,
128
Monroe quadrangle GQ-155
Monument Valley
geology, uranium B 865, 1087-D;
OM-168
Moon Lake area
geology OM-115
Mount Ellen-4, 5 quadrangles 1-250, 280
Mount Nebo
dikes P 120-E
Mount Peale quadrangles
1, 4-13, 16
photogeology 1-157 - 159, 165
172 - 174, 176
183, 240 - 242
1 NE, NW, SE, SW; 2 NE,
NW, SE, SW; 3 NE,
NW, SE, SW; 4 NE,
NW, SE, SW
geology MF-123, 124,
139 - 152
Mount Pennell-5, 11 - 14 quad-
rangles 1-46 - 50

UTAH--Continued

Mount Pleasant coal field map	p. 224
Myton area radioactivity survey	GP-127
Navajo Country geography, hydrology	W 380
geology	P 93
Navajo Mountain-1 - 8, 10, 12 - 15 quadrangles	1-41 - 45, 66, 77, 184, 185, 221, 229, 233, 238
Navajo Mountain region geology	B 865; OM-168
Naval Oil-Shale Reserve No. 2	B 1072-O
Nephi gypsum	B 225-1
northeastern coal	B 341-C, 415
geology	A 9 3; OC-16
oil shale	B 581-A, 641-F, 691-B, 711-B
tectonic map, uranium	MF-130
Notom quadrangles 1, 2, 8, 15	
photogeology	I-34, 262, 294, 302
1 SW; 2 NE, NW, SE, SW; 3 NE, NW, SE, SW; 4 NE, NW, SE, SW	
geology	MF-103 - 115
Ogden region phosphate	B 430-H
Ogden Valley geology, ground water	W 796-D
Ophir zinc, copper	B 690-A
Oquirrh Range geology	MF-240
Orange Cliffs quadrangles 11, 13	
photogeology	I-178, 187
3 NE geology	MF-173
Orderville area geology, fuels	Map C-49
Orderville Canyon N.W.	I-188
Ouray ilsemaninite	B 750-A
Paria NE, NW, SE, SW quadrangles	I-263, 265, 266, 268
Park City mining district	B 213-b, 225-b, 260-b; P 77
Parowan Valley geology, ground water	W 993
Pauasaugunt region geography, geology	P 226
Piute County Annie Laurie mine, gold	B 285-A
uranium	C 322
Pleasant Valley coal district	B 316-E
Promontory district economic geology	B 640-A
Provo region geology	OC-30

UTAH--Continued

Raft River basin water resources	W 1587
Rainbow Point SE, SW quadrangles	I-257, 258
Randolph quadrangle geology, mineral resources	B 923
Salina Canyon district geology, coal	B 796-C
Salt Lake City region gas	B 260-j
map	p. 251
stratigraphy	C 296
San Francisco district geology, mineral resources	P 80
San Juan Canyon region geography, hydrography	W 538
structure	B 751-D
San Juan Country geology, geology	P 188
San Juan County geology	B 865, 908, 1009-H, 1021-E, 1046-H, 1087-H; OM-169
oil	B 431-A, 471-A, 751-D
San Rafael Canyon sulfur	B 530-h
San Rafael district uranium	B 1046-D
San Rafael Swell geology, oil, gas	B 806-C
gypsum	B 530-e
reservoir sedimentation	C 256
sedimentary rocks	P 150-D
Sanpete County coal	B 285-F, 541-J; p. 224
Sanpete Valley ground water	W 199
Santaquin dikes	P 120-E
Seven Mile Canyon area geology, uranium	C 336
Sevier Lake basin water resources	W 920
Sevier Valley ground water	W 199
southeastern geology, geography	OC-7; P 132-A, 188
mineral resources	B 260-e, 979-B; Map 3-226
southern geology	OM-70
mineral resources	B 225-f, 340-D; C 349
oil	B 340-F
southwestern stratigraphy	P 129-D
Springdale NE, SE, SW quadrangles	I-131, 132, 148
Stockton quadrangle geology, mineral resources	P 173

UTAH--Continued

Straight Cliffs 1 - 3, 7 - 9
quadrangles I-13, 37 - 40,
81

Sunnyside quadrangle
economic geology B 793

Sunnyside region
bituminous sandstone OM-86

Thomas Range fluorspar
district B 1069

Thompson region
coal B 541-J

Tidwell-1 - 12, 15 - 16
quadrangles I-3, 12, 87 - 89,
108, 109, 112 -
115, 162, 186,
227

Timpanogos Cave quadrangle GQ-132

Tintic mining district A 19 III f;
GF-65; P 107;
map, p. 255

Tooele County
ground water W 333

Uinta Basin
oil shale B 691-B

stratigraphy and photo-
geology OM-171

Uinta Mountains
geology, mineral re-
sources B 225-f, 690-C

geomorphology P 185-I

glacial geology P 61

Uinta River area
geology B 1007, OM-123

Utah County
stratigraphy OC-52; SP

Utah Lake valley
ground water W 157

Utah Valley
geology P 257-A

Verdure 1 SW; 2 NW, SE;
3 NE, SE; 4 NW,
SW quadrangles MF-162 - 168

Vernal region
bituminous sandstone B 822-C

coal B 471-I

Virgin NE, NW, SE, SW quad-
rangles I-147, 149,
161, 179

Wales region
coal B 541-J

Wasatch County
stratigraphy OC-52

Wasatch Front
gravity surveys P 316-E

Wasatch Plateau coal field B 819

Wasatch Range
glacial geology P 61

stratigraphy C 296; OC-30

Washington County
oil B 726-C

Wayne County
structure OM-197

Weber River coal field B 285-F

Wellington quadrangle
economic geology B 793

western
manganese B 979-A

White Canyon area
geology, uranium B 1009-H,

UTAH--Continued

White Canyon area--Continued
geology, uranium B 1046-H,
1085-B; C 217

White Canyon-1 - 4, 7, 8
quadrangles I-33, 36, 150,
163, 170, 195

Whiterocks River area
geology OM-82

Willow Creek Butte quad-
rangle I-322

Woodside-4, 5, 12, 13 quad-
rangles I-5, 110,
111, 123

Zion National Park region
geography, geology P 220
maps p. 255

VERMONT

Ascutney Mountain
geology B 209

Barre
rock-bursts, granite
quarries C 13

Bird Mountain
geology A 20 II b

Cambridge
Rousseau talc prospect MF-8

Colrain quadrangle GQ-82, 86

eastern
calcite marble, dolo-
mite B 589

Green Mountain region
gold MRUS 1894 III

structure A 14 II j,
16 I e; B 195

Hyde Park quadrangle
Lake Champlain
pollution W 121

Lake Champlain region
trap dikes B 107

Lake Tarleton region
aeromagnetic map GP-196

Littleton, N. H., region
aeromagnetic map GP-194

Montpelier quadrangle GQ-79

North Adams quadrangle GQ-139

Stowe
Sterling Pond area
talc MF-11

Taconic Range
geology A 14 II j

physiography B 272

Waterbury
Barnes Hill talc
prospect MF-7

western
marble B 521

slate belt A 19 III b;

Woodsville, N. H., region
aeromagnetic map GP-195

VIRGINIA

Amelia district
mica P 248-B

Amherst County
titanium P 198

Appalachian region
iron B 380-E

Ashland region
zircon B 530-c

VIRGINIA--Continued

Atlantic Coast region	
deep wells	P 186-I
Atlantic Slope	
Eocene deposits	B 141
Big Stone Gap coal field	B 111
Brinton	
arsenic	B 470-E
Bristol	GF-59
Cedar Creek Valley	
manganese	B 936-E
Charlottesville and vicinity,	
map	p. 252
Chincoteague Bay	
sediment, organic con-	
stituents	P 186-D
Colonial National Historical	
Park (Yorktown Battle-	
field), map	p. 252
Cripple Creek district	
iron	B 285-E
Cumberland Gap district	
cement resources	B 285-I
Dante	
coal	B 316-A
Dismal Swamp	A 10 I b; B 711-C
Duffield quadrangle	GQ-111
Elkton area	
geology	P 230
manganese	B 940-B
Estillville, Ky., region	GF-12
Ewing quadrangle	GQ-172
Fairfax County	
ground water	C 424
Flat Top district	
manganese	B 940-H
Fort Belvoir area	
water resources	W 1586-A
Franklin, W. Va., region	GF-32
Fredericksburg	GF-13
Fredericksburg-Spotsylvania	
Battlefield National	
Monument, map	p. 253
Harpers Ferry, W. Va.,	
region	GF-10
Irish Creek	
tin	B 936-K
James River district	
geology, ground water	W 1361
manganese, iron, barite	B 1008; MF-5
Jonesville district	
geology, oil	B 990; OM-104
Langley field, map	p. 253
Little Black Mountain coal	
field	B 341-C
Loudoun County	
ground water	C 424
Luray region	
copper	B 285-B
Lyndhurst district	
manganese	B 940-F
Manassas region	
ground water	W 258
Mecklenburg County	
tungsten	B 948-A
Middle River drainage basin	
sedimentary studies	P 314-F

VIRGINIA--Continued

Monterey	GF-61
Nelson County	
titanium	P 198
New River basin	
water supply	B 536
New River district	
iron	B 285-E
Nomini	GF-23
Norfolk region	
geology	GF-80
Norfolk, Portsmouth,	
Newport News and	
vicinity, map	p. 251
Pocahontas	GF-26
Pocket coal district	B 341-C
Pound quadrangle	
geology, coal	B 541-F
Powell Mountain coal field	B 431-B, 541-F
Prince William County	
ground water	C 424
Richmond region	
geology, mineral re-	
sources	A 19 II d; B 483
Ridgeway-Sandy Ridge district	
mica	P 248-C
Roanoke River district	
manganese, iron, barite	B 1008; MF-5
Rose Hill oil field	OM-20, 76
Round Mountain district	
manganese	B 940-H
Russell Fork basin	
coal	B 316-A, 348
St. Marys, Md., region	GF-136
Shenandoah National Park,	
maps	p. 254
Shenandoah River	
North Fork	
meanders	P 354-A
Shenandoah Valley	
cement resources	B 225-J, 260-1
manganese	B 660-J
sedimentary studies	P 314-F
southwestern	
geology, oil, gas	B 1027-L, 1072-K; OC-38
phosphate	B 540-L
quartz crystal deposits	B 1072-D
salt, gypsum	B 213-1, 530-e
Staunton	GF-14
Sweet Springs district	
manganese	B 940-G
Tazewell	GF-44
Vesuvius district	
manganese	B 940-F
Washington, D. C., region	GF-70
Woodstock region	
ground water	W 596-C
York-James Peninsula	
geology, ground water	W 1361
Yorktown region	
Colonial National Historical	
Park, map	p. 252
WASHINGTON	
Aberdeen quadrangle	
aeromagnetic map	GP-177

WASHINGTON--Continued

Adna quadrangle
aeromagnetic map GP-187
Buckley quadrangle GQ-125
Cape Shoalwater quadrangle
aeromagnetic map GP-183
Cascade Range
forests P 6
geology A 2011 d, III 2;
B 235; P 19
W 253, 313,
369, 486
waterpower
Castle Rock district
geology, coal B 1062
Cedar River basin
waterpower W 313
central
geology, physiography B 108; P 19
gold B 213-b
Centralia-Chehalis coal
district B 1053;
Map C-8
Centralia quadrangle
aeromagnetic map GP-188
Chehalis River basin
floods W 968-B
Chelan County
Blewett iron nickel de-
posit B 969-D
physiography, defor-
mation P 19
Chelan River basin
profile surveys W 376
Clallum County
coal B 260-i
Clark Fork of Columbia River
profile surveys W 346
Cle Elum River region
nickel, iron B 978-B
coastal region
mineral resources B 213-b, 805-A
Columbia Plateau
geology, paleontology P 140-A, 154-H
soil, elephant remains B 790-B
Columbia River basin
alumina MR-1
bank storage W 1539-I
streams W 135, 178
water records C 60, 102, 392
Colville Indian Reservation
geology, mineral re-
sources B 677
Conconully mining district B 640-B
Cowlitz River valley
coal B 531-L
waterpower W 313
Deep Lake quadrangle MF-237
Deer Park region
tungsten B 430-D
Dosewallips River
water resources C 109
Doty-Minot Peak area
geology OM-188
Duckabush River
water resources C 109
east-central
geology, water resources W 118
Ellensburg GF-86
Entiat River basin
waterpower W 486

WASHINGTON--Continued

Ferry region
ground water C 422
Glacier coal field B 541-I
Grand Coulee
Miocene flora P 170-C
Grayland quadrangle
aeromagnetic map GP-176
Green River basin
waterpower W 313
Haas quadrangle GQ-43
Hamma Hamma River
water resources C 109
Hanford Plant area
aeroradioactivity GP-307
Hay quadrangle GQ-48
Humptulips region
manganese B 795-A
King County
coal fields, map p. 224
Kitsap County
geology, ground water W 1413
Kittitas drainage district,
maps p. 253
Lake Crescent region
geology OM-203
manganese B 795-A
Laurier region
ground water C 422
Leadpoint quadrangle MF-137
Malone quadrangle
aeromagnetic map GP-179
Marble region
dolomite B 1027-C
Metaline mining district B 470-D
Metaline quadrangle
geology, mineral re-
sources P 202
Methow River basin
profile surveys W 376
Minot Peak area
geology OM-188
Monte Cristo
mineral resources A 22 II f
Montesano quadrangle
aeromagnetic map GP-178
Moses Lake North quadrangle I-330
Mount Baker, map p. 254
Mount Hood and vicinity, map p. 254
Mount Rainier
geology, glaciers A 18 II d;
P 387-A; p. 254
Mount Rainier Forest Reserve A 21 V c
Mount Rainier National Park
map p. 254
Mount Stuart GF-106
Mount Vernon region
nickel, gold B 931-D
Nisqually River basin
waterpower W 313
northeastern
mineral resources B 315-A,
470-D, 550
Olympic Forest Reserve A 21 V d; P 7
Olympic Peninsula
manganese B 931-R
oil, gas B 581-B
Onalaska quadrangle
aeromagnetic map GP-189
Pacific Slope
water records C 60, 102, 392

WASHINGTON--Continued

Pe Ell quadrangle	
aeromagnetic map	GP-186
Penawawa quadrangle	GQ-56
Port Angeles area	
geology	OM-203
Portland, Oreg., region	
coal	B 260-I
map	p. 251
Portland quadrangle	GQ-104
Poverty Bay quadrangle	GQ-158
Puget Sound region	
coal	A 18 III c
streams	W 135, 178
Puyallup River basin	
floods	B 968-B
waterpower	W 313
Pysht quadrangle	GQ-129
Quincy Valley	
ground water	W 425-E
Republic mining district	B 550
Rochester quadrangle	
aeromagnetic map	GP-180
Ruby mining district	B 640-B
Seattle and vicinity, maps	p. 251, 254
Silver Hill	
tin, tungsten	B 931-H
Skagit River basin	
floods	W 1527
profile surveys	W 366
Skykomish River	
profile surveys	W 366
Snohomish County	
ground water	W 1135
Snoqualmie	GF-139
Snoqualmie River	
profile surveys	W 366
South Bend quadrangle	
aeromagnetic map	GP-184
south-central	
geology, water re-	
sources	W 316
southeastern	
geology, water re-	
sources	W 4
southwestern	
geology	OC-57
Spokane region	
map	p. 251
paleobotany	P 140-A
tin	B 340-D
Spokane River basin	
ground water	W 889-B
profile surveys	W 377
Starbuck quadrangle	GQ-38
Stevens County	
magnesite belt	MF-117
pseudoserpentine	B 262
Sultan River	
profile surveys	W 366
Tacoma region	
geology	GF-54
map	p. 254
Tenino quadrangle	
aeromagnetic map	GP-181
Toledo district	
geology, coal	B 1062
Turtle Lake quadrangle	MF-135
Vancouver region	
map	p. 251

WASHINGTON--Continued

Vancouver region--Continued	
water resources	C 372
Walla Walla region	
ground water	W 1594-A
Washington Forest Reserve	A 19 V g, h
Wenatchee district	
physiography, defor-	
mation	P 19
Wenatchee River basin	
profile surveys	W 368
waterpower	W 486
western	
floods	C 191
White River basin	
waterpower	W 313
Willapa quadrangle	
aeromagnetic map	GP-185
Yakima County	
geology, water re-	
sources	W 55
Yakima River basin	
streamflow records	C 180
waterpower	W 369
Yelm quadrangle	
aeromagnetic map	GP-182
Yelm region	
ground water	C 356
WEST VIRGINIA	
Abram Creek-Stony River	
coal field	B 711-F
Accident, Md., region	GF-160
Berkeley County	
limestone	B 225-o
Buckhannon	GF-34
central	
flood	W 1134-A
Charleston	GF-72
eastern	
glass sand	B 285-N
Franklin	GF-32
Hancock	GF-179
Harpers Ferry	GF-10
Harrison region	
coal	B 716-H
Huntington	GF-69
Kanawha River Valley	
coal	MRUS 1883-84
geology	A 17 II d
water supply	W 536
Kenova quadrangle	
geology, mineral re-	
sources	B 285-F, 349;
	GF-184
Martinsburg	
slate industry	B 213-i
Meadow Branch coal field	B 225-g
Monterey, Va., region	GF-61
New River Valley	
geology	A 17 II d
water supply	W 536
Nicholas quadrangle	
coal	B 260-i
northern	
Berea, Murrys ville	
sands	OM-29, 49, 89
Pawpaw	GF-179
Piedmont region	GF-28
Pocahontas, Va., region	GF-26

WEST VIRGINIA--Continued

Potomac and Roaring Creek coal fields	A 14 II 1
Raleigh southern	GF-77
Berea sand geology, oil, gas	OM-59 B 1072-K; OC-38
southwestern	
Berea sand	OM-69
Staunton, Va., region	GF-14
Steubenville district geology, oil, gas	B 318
Stony River coal field	B 711-F
Sweet Springs district manganese	B 940-G
Tazewell, Va., region western	GF-44
Berea sands	OM-9, 79
Wheeling area water resources	C 340
WISCONSIN	
Antigo region resistivity studies	C 181
Beetown lead-zinc area structure	MF-3
Brown County ground water	W 1190
Cuba City region geology, lead-zinc-barite	MF-15
Dodgeville region lead, zinc	B 260-g
eastern iron	B 540-H
Fond du Lac area electrical resistivity	C 69
Lake Superior region geology, mineral resources	A 3 c; M 52; P 184
Lancaster-Mineral Point	GF-145
Langlade County ground water	W 1294
Madison and vicinity, map	p. 251
Milwaukee area geology	GF-140
water resources	C 247; W 1229
northern waterpower	W 156
Outagamie County geology, ground water	W 1421
Ripon area electrical resistivity	C 69
Sinsinawa River area lead, zinc	MF-40
southeastern Quaternary geology	B 273; P 106
southwestern geochemical prospecting, lead-zinc	B 1000-E
Superior and vicinity, map	p. 251
Waukesha area ground water	W 1229
Wausau region syenite complex	B 1042-B
WYOMING	
Absaroka	GF-52
Aladdin	GF-128

WYOMING--Continued

Albany County geology, oil	B 806-D
ground water	W 1367
Alkali Butte coal field	C 152
Atlantic gold district	B 626
Badwater area geology	OM-124
Bald Mountain	GF-141
Barber coal field	B 531-I
Bargee area geology	OM-56
Basin region geology	OM-77
oil, gas	B 621-L
Baxter Basin geology, oil, gas	B 702, 781-B
Bear Creek area geology, ground water	C 162
Beaver Creek coal field	C 152
Beaver Divide area geology	OM-113, 140, 180
Bedford quadrangle	GQ-109
Bell Springs district geology, oil, gas	B 796-D
Big Horn Basin coal	B 225-g, 285-F, 341-B, 381-B
geology	OM-3, 71, 74, 182; P 53
oil, gas water resources	B 340-F, 656
Big Horn Mountains geology	P 51
glacial sculpture	A 21 II b
mineral resources	B 285-F, 640
water	B 23
Big Muddy dome oil	B 581-C
Big Sand Draw coal	C 152
gas	B 711-E
Bighorn Canyon geology	B 1026
Bighorn Forest Reserve	A 19 V c
Bighorn River gold	B 580-G
Black Hills forest reserve	A 19 V b
geology	A 19 II e, 21 IV b
	B 1081-B;
	MF-218;
	OM-191; P 65,
	155-D, 165-A
laccoliths	A 21 III b
mineral resources	B 260-i, 499;
	MF-36; P 26
water resources	A 21 IV b; P 65
Boysen area geology	OM-91
Buffalo area geology, coal	B 381-B, B 1078
Byron structure, maps	p. 234, 235
Campbell County coal	B 471-F, 1050

WYOMING--Continued

Carbon County	
coal	B 316-D, 804
geology, oil, gas	B 796-D, 804, 806-D; OM-32
iron	B 811-D
Carlisle quadrangle	
geology, mineral re- sources	B 1082-J
Carpenter area	
geology, ground water	W 1140
Centennial region	
platinum	B 780-C
central	
anticlines	B 641-1
geology	B 1121-1; OC-13, 14, 17, 36; OM-51, 60; P 98-O, 149
Cheyenne River basin	
reservoirs, runoff	C 223
Clay Basin gas field	
geologic map	p. 234
Clifton quadrangle	MF-180
Cloud Peak	GF-142
Coal Canyon	
petrology	B 1111-C
Cody region	
geology, oil, coal	B 921-B
sulfur	B 340-L
Colorado River basin	
profile surveys	W 396
Converse County	
coal	B 471-F
oil, gas	B 541-C, 581-C
Crandall quadrangle	GF-52
Crazy Woman Creek area	
geology	B 1027-B; OM-142
Crooks Creek SE, SW quad- rangles	I-304, 305
Dayton	GF-141
Devils Tower National Monu- ment	
geology	B 1021-1; GF-150
map	p. 253
Dewey quadrangle	MF-77
Douglas oil and gas field	B 541-C
Du Noir area	
geology	OM-66; P 294-E
eastern	
cement materials	B 315-F
Egbert-Pine Bluffs-Carpenter area	
geology, ground water	W 1140
Elk Basin	
map	p. 253
oil, gas field, maps	p. 234
Encampment copper district	B 213-d; P 25
Ferris district	
oil, gas	B 756
Fifteen Mile Creek basin	
hydrology	W 1475-A
Fivemile Creek	
sedimentation, erosion	P 352-A
Flaming Gorge quadrangle	GQ-75
Flat Top Mountain NE quad- rangle	I-301
Fort McKinney	GF-142
Fossil and vicinity, map	p. 253

WYOMING--Continued

Frannie area	
structure, map	p. 234
Fremont County	
coal	B 471-G; C 152
gas	B 711-E, H
Sage Creek dome, geology	OM-53
Garland region	
anticline, map	p. 235
Gas Hills area	
geology, uranium	C 352; MF-83; OM-180
Gillette region	
coal	B 796-A
ground water	C 76
Glendo area	
geology, ground water	C 163; OM-92
Glenrock coal field	B 341-B
Goshen County	
geology, ground water	C 162; W 1377
Goshen Hole quadrangle	
geology, water re- sources	W 70
Grand Teton National Park, map	p. 253
Grass Creek Basin quad- rangle	
geology, oil, coal	P 145
Great Divide Basin coal field	B 341-B
Green River Basin	
coal weathering	B 381-B
geology	P 132-C
Greybull area	
geology	OM-77
Gros Ventre River area	
geology	OM-118
Hanna Basin	
geology, coal, oil	B 804; P 108-L
Hardin, Mont., district	
bentonite	B 1023
geology	B 1026
Hartville region	
geology	GF-91; OC-44; OM-102
mineral resources	B 315-B, D, M
Haystack Hills	
graphite	B 315-M
Horse Creek area	
geology, ground water	C 162
Hulett Creek mining area	MF-121
Hyattville area	
geology	OM-84
Iron Mountain	
iron	B 315-D
Ishawooa quadrangle	GF-52
Jackson County	
Tisdale anticline region	OM-194
Jackson Hole area	
stratigraphy	OC-27
Johnson County	
geology, coal	B 471-F, 531-I, 1078; C 228; Map C-23
Kaycee irrigation project	W 1360-E
North Fork oil field, Kaycee dome and vicinity	OM-206
Kirwin	
mineral resources	B 540-C
La Barge, map	p. 253

WYOMING--Continued

La Prele area	
geology, ground water	C 243
Labarge oil field	B 340-F
Lake De Smet region	
geology, coal	B 1078; C 228; Map C-23
Lance Creek oil and gas field	B 716-E; map, p. 234
Lander region	
coal	B 316-D
geology	OM-112
oil	B 452
phosphate	B 764
Laramie Basin	
geology, mineral re- sources	B 285-K, L, 316-D, 364; GF-173
ground water	C 80
Laramie County	
ground water	W 1367
Laramie Range	
geology, anorthosite	MF-119
Leucite Hills	
potash	B 512
Lincoln County	
geology, geography	B 543
Little Buffalo Basin oil and gas field	
geologic map	p. 235
Little Dome area	
geology	OM-181
Little Powder River coal field	B 471-F
Little Snake River coal field	B 341-B, 381-B
Lodgepole Creek basin	
geology, ground water	W 1483
Lodgepole Valley	
ground water	W 425-B
Long Creek area	
geology	OM-140
Lost Soldier district	
oil, gas	B 756
Lost Spring coal field	B 471-F
Lusk	
Silver Cliff mine, uranophane	B 1009-A
Manila quadrangle	I-156
Maverick Springs region	
geology, fuels	B 711-H; OM-13
Mayoworth region	
uranium	B 1030-K; C 358
Meadow Creek oil field	
geology	OM-164
Meeteetse quadrangle	
geology, oil, coal	P 145
Miller (Hill) area	
geology, uranium	B 1074-F; C 278
Minturn district	
coal	B 796-A
Moorcroft oil field	B 581-C
Mule Creek oil field	B 716-C
Mush Creek area	
geology, oil	OM-103; p. 235
Natrona County	
coal	B 471-F, G
oil	B 581-C
Tisdale anticline region	OM-194
Naval Petroleum Reserve No. 3	
geology	P 163

WYOMING--Continued

Newcastle	GF-107
Niobrara River basin	
geology, ground water	W 1368
North Fork oil field	OM-206
North Laramie Mountains	
geology, mineral re- sources	B 626
northeastern	
stratigraphy	OC-40
northern	
stratigraphy	OM-202
northwestern	
geology	B 119
Phosphoria formation	B 1042-E
Oregon Basin	
anticline, map	p. 234
Cody shale, cephalopods	P 150-A
geology, oil, coal	P 145
Osage oil field	B 736-D; OM-103
Owl Creek area	
geology, ground water	W 1519
Park County	
geology, oil, coal	B 921-B
sulfur	B 540-R
Pass Creek Flats area	
geology, ground water	C 188
Patrick quadrangle	
geology, water resources	W 70
Pilot Butte area	
geology	OM-151
Pine Bluffs area	
geology, ground water	W 1140
Platte County	
geology, ground water	W 1490
Poison Basin area	
uranium	C 344
Powder River Basin	
geology	OM-33, 122, 133, 185; P 108-D
sedimentation, water	C 170
Powder River coal field	B 381-B
Powder River oil field	B 471-A
Pumpkin Buttes area	
coal	B 806-A
geology, uranium	C 176, 338; MF-98
Randolph quadrangle	
geology, mineral re- sources	B 923
Rattlesnake Hills region	
volcanic-rich sedimen- tary rocks	P 274-A
Rawlins area	
geology, ground water	W 1458
iron	B 811-D
Red Desert area	
uranium	B 1030-I, 1055-G
Riverton area	
geology	OM-127
Rock Creek oil field region	B 806-D
Rock Springs region	
coal	B 341-B, 381-B
oil, gas	B 702, 781-B
Salt Creek oil field	B 452, 670; P 163
Salt River Range	
phosphate	B 620-O

WYOMING--Continued

Saratoga area	
uranium	B 1046-M
Seminole region	
iron	B 811-D
Sheldon area	
geology	OM-181
Sheridan County	
bentonite	B 1023; C 150
geology, coal	B 341-B, 1050, 1078
Sherman	GF-173
Shirley region	
iron	B 811-D
Shoshone irrigation project	W 1418
Shoshone River region	
stratigraphic section	B 541-C
Shotgun Butte area	
geology	OC-56; OM-172
Snow River region	
gold	B 315-A
southeastern	
paleontology	P 131-H
southern	
geology, oil	P 132-F
southwestern	
geology, coal, oil	A 9 e; B 641-F; 1-332; P 56
paleobotany	P 108-F
Split Rock SW quadrangle	1-306
Spotted Horse coal field	B 1050
Spread Creek area	
geology	OM-118
Steamboat Butte area	
geology	OM-151
Sundance	GF-127
Sunlight Basin	
sulfur	B 530-h
Sussex coal field	B 471-F
Sussex oil field	
geology	OM-164
Superior coal district, map	p. 254
Superior mining district, map	p. 234
Sweetwater County	
coal	B 341-B, 381-B, 1055-G
geology, oil, gas	B 702, 751-G, 781-B; OM-32; P 140-D
sodium carbonate brine, trona	C 235
Teapot Dome region	
geology	P 163
Teton Basin area	
phosphate	B 944-A
Teton County	
stratigraphy	OC-43
Teton Forest Reserve	A 19 V d
Thermopolis region	
oil	B 711-D
sulfur	B 380-M
Tinton, S. Dak., and vicinity, map	p. 255
Torrington region	
ground water	C 238
Uinta County	
coal, oil	B 285-F, 316-D, 340-F
gold	B 315-A
Upton-Thornton oil field	B 716-B

WYOMING--Continued

Washakie Basin	
geology	OM-32
Wendover area	
geology, ground water	C 163
western	
coal, phosphate	B 680
Wheatland Flats area	
ground water	C 70
Williston basin	
structure	OM-165
Willow Creek coal area, map	p. 224
Willow Creek district, map	p. 255
Wind River Basin	
coal	B 471-G
geology	OC-22, 49; OM-51, 60
gold	B 580-G
hydrology	C 66; W 1475-A
paleobotany	P 165-B
sedimentation, quality	
water	W 1373
Wind River Range	
chemical degradation	W 1535-E
geology, oil	OM-31
phosphate	B 764
Worland area	
geology	OM-84
Yellowstone National Park	
forest reserve	A 19 V d
geology	GF-30; M 32; P 120-F
guidebooks	B 611, 612
map	p. 255
radioactivity thermal	
waters	B 395
scorodite	B 55
Electric Peak and Sepulchre Mountain, eruptive rocks	A 12 I e
Obsidian Cliff	A 7 c
BRAZIL	
Amapá	
Serra do Navio district	
manganese	B 964-A
Bahia	
Brumado, Serra das Eguas	
magnetite	B 975-C
Camamu Bay	
barite	B 960-A
Ceará, central	
magnetite	B 962-C
Goiás	
São José do Tocantins	
mineral resources	B 935-E
Mato Grosso	
Morro do Urucum	
manganese, iron	B 946-A
Minas Gerais	
mica	B 964-C
Congonhas district	
geology	P 290
CANADA	
Alberta	
Saskatchewan Glacier	P 351
British Columbia	
iron	B 285-E
Canada-Alaska boundary	
geology	B 520-K
Maritime Provinces	
gold	MRUS 1894 III

CANADA--Continued		MEXICO--Continued	
Ontario		Baja California--Continued	
Cobalt region		Sierra de Juarez	
silver	B 735-E	scheelite	B 946-C
Niagara River and vicinity,		central	
map	p. 254	Tertiary conglomerates	P 264-H
Sudbury		Chihuahua	
nickel ores	MRUS 1888	Talamantes district	
Yukon Territory		manganese	B 954-E
Yukon Basin		Durango	
ancient volcanic eruption	P 95-D	tin	B 962-D
CANAL ZONE		Cuarenta mercury district	
Alhajuela		geology	B 946-F
Madden Dam project	B 821-B	Guerrero	
Panama Canal		Huahuaxtla mercury district	
slides	P 98-N	trict	B 960-E
CHILE		Huitzuco	
north-central		mercury, antimony	B 946-B
tungsten	B 960-C	Hidalgo	
CUBA		Zimapan mining district	
Camaguey district		geology, mineral resources	P 284
geology, chromite	B 954-B	Michoacán	
Guisa-Los Negros area		Parícutin area	
geology, manganese	B 935-G	erosion	B 965-A, 1104-A
Isla de Pinos		volcanoes	B 965-B-D
tungsten	B 935-D	Oaxaca	
Oriente Province		Tejocotes region	
south-central		antimony	B 953-A
geology	B 975-D	Querétaro	
Santiago		Bernal-Jalpan area	
manganese	B 213-f	geology	B 1104-B
Sierra Maestra		Soyatal district	
manganese	B 935-F	antimony	B 960-B
DOMINICAN REPUBLIC		San Luis Potosí	
Majmon-Hatillo district		Guadalcázar area	
geology, mineral resources	B 964-D	tin	B 960-D
Sierra de Bahoruco area		Wadley	
aluminous lateritic soil	B 953-C	San José antimony mines	B 946-E
EAST INDIES		Sonora	
Banga and Billiton Islands		El Antimonio district	
tin	MRUS 1895 III	antimony	B 962-B
FIJI		Santa Clara district	
Viti Levu		coal	B 962-A
Foraminifera	P 374-A	southern	
FRANCE		tungsten	B 946-D
Lorraine		Zacatecas	
iron	B 703	Canoas	
GERMANY		geology, mercury	B 975-B
Saar district		Concepción del Oro district	
iron	B 703	geology, phosphate	B 1037-A
MARIANA ISLANDS		NIGERIA	
Saipan		Nyeba lead-zinc district	
geology, petrology and		geochemical prospecting	B 1000-B
soils, paleontology	P 253, 280	PERU	
MARSHALL ISLANDS		Atachocha district	
Bikini and nearby atolls (including Eniwetok, Kwajalein, Rongelap lagoon, Sylvania Guyot)		geology, mineral resources	B 975-E
geology, oceanography, geophysics, paleontology	P 260	Cordillera Blanca and Cordillera Huayhuash	
MEXICO		lead, zinc	B 1017
Baja California		Cordillera Negra	
Boleo copper district	P 273	base-metal deposits	B 1040
Lucifer district		Huancavelica quicksilver district	B 975-A
geology, manganese	B 960-F	PUERTO RICO	
		Cayey quadrangle	1-319
		Central Aguirre quadrangle	1-318
		Coamo quadrangle	1-335

PUERTO RICO--Continued		SAUDI ARABIA--Continued	
Comerio quadrangle	I-320	Rub' Al Khali quadrangles	I-213-A, B, 214-A, B
floods	C 451	Tihamat Ash Sham quad- rangle	I-216-A, B
Isla Mona		Tuwayq quadrangles	I-207-A, B, 212-A, B
geology, phosphorites	P 317-C	Wadi Al Batin quadrangle	I-203-A, B
Juncos quadrangle		Wadi Ar Rimah quadrangle	I-206-B
geology, iron, copper	I-326	SOUTH AFRICA, UNION OF	
Salinas quadrangle	I-337	Witwatersrand	
San Juan metropolitan area		gold	MRUS 1894
geology	P 317-A	THAILAND	
SAUDI ARABIA		Khorat Plateau	
Asir quadrangle	I-217-A, B	water resources	W 1429
Darb Zubaydah quadrangle	I-202-B	VIRGIN ISLANDS	
Hijaz quadrangles	I-204-B, 205-B, 210-B	St. Croix	
Jawf-Sakakah quadrangle	I- 201-B	Foraminifera	P 210-A
Persian Gulf quadrangles	I 208-A, B, 209-A, B	geology, ground water	W 1067

FINDING LIST OF AUTHORS

Abbreviations used

A	Annual Report	MAP	3-Mineral Investigations Preliminary Map
AP	Administrative publication	MR-	Mineral Investigations Resource Map
B	Bulletin	MRUS	Mineral Resources of the United States
C	Circular; Map C-, Coal Investigations Map	OC-	Oil and Gas Chart
GF	Geologic Folio	OM-	Oil and Gas Map
GP-	Geophysical Investigations Map	P	Professional Paper
GQ-	Geologic Quadrangle Map	p.	page number listing publications having
HA-	Hydrologic Investigations Atlas		no series designation
I-	Miscellaneous Geologic Investigations Map	R	Regulations
M	Monograph	SP	Special publication
MB-	Missouri River basin map	W	Water-Supply Paper
MF-	Mineral Investigations Field Studies Map		

A			
Abbe, Cleveland, Jr.	P 45	Altenhofen, R. E.	P 400-B
Abele C., Guillermo	B 975-E	Altschuler, Z. S.	P 300,
Abrahams, J. H., Jr.	P 424-D	314-D, 317-C, 400 B	
Adams, G. I.	A 21 II e,	Alverson, D. C.	B 1092
22 II b; B 184, 211, 213 e, 223,		Alvord, D. C.	P 400-B
225 m, 238; MRUS 1902 dd;		Amezcuca, E. T.	P 424-D
P 24; W 70, 110; GF 119		Amsden, D. W.	P 233-C
Adams, J. W.	B 982-D,	Anderson, A. L.	B 944-B, C
1031-G; C 320; P 300, 424-C		Anderson, C. A.	P 278, 308;
Adkison, W. L.	B 1047-A;	MF-228	
Map C-18; OC-61; OM-156		Anderson, C. G.	AP p. 188
Adler, Isidore	P 424-B	Anderson, I. E.	P 424-C;
Agnew, A. F.	B 1015-G;	W 968-B	
C 131, 231; P 284-K, 309; MF-		Anderson, J. W.	B 1006
1, 15, 40		Anderson, L. A.	P 400-B,
Agthe, F. T.	B 430-G	424-C, D	
Ahlman, C.	MB-3	Anderson, R. H.	W 109
Ahrens, L. H.	B 980	Anderson, Robert	B 315-C,
Akers, J. P.	P 424-C	317, 322, 357, 380-H, 381-D,	
Albear, J. F. de	B 954-B	398, 431-A, 471-A, 603	
Albee, A. L.	P 424-C;	Andreasen, G. E.	P 400-B,
GQ-102; MF-179		424-D; W 1472; GP-156	
Albee, H. F.	B 1046-Q	Andrews, D. A.	B 906-B, C,
Albers, J. P.	P 285,	921-B, 1041-A; W 796-E; CM-	
424-C		3, 8, 13, 21, 25, 70, 74; Map,	
Albertson, M. L.	W 1498-A	p. 190, 224, 234	
Albritton, C. C., Jr.	B 1010	Andrews, H. N., Jr.	B 1013
Alden, W. C.	B 213 i,	Annell, C. S.	B 1036-H,
273, 430-F, 760-B, 956; P 34,		1084-J; P 400-B, 424-C	
106, 174, 231; GF 81, 92, 93,		Antweiler, J. C.	P 424-B
140, Map, p. 252		Appelman, D. E.	P 424-C
Aldous, A. E.	Map, p. 256	Applin, E. R.	C 298;
Aldrich, H. R.	MRUS 1918	P 264-I, 400-B; OC-26	
1 aa		Applin, P. L.	C 91, 298;
Alexander, W. H., Jr.	W 1079-A	P 400-B; OC-26	
Ali, K. A-S.	P 424-D	Armstrong, C. A.	C 408
Allredge, L. R.	P 260-L	Armstrong, F. C.	B 969-B,
Allen, A. S.	P 400-B	1042-K-M, 1046-C, 1074-B;	
Allen, E. T.	B 253	C 210, 301	
Allen, I. C.	B 398	Arndt, H. H.	P 400-B,
Allen, M. W.	OM-107;	424-B; Map C-7, 10, 12, 13,	
Map, p. 213		14	
Allen, R. D.	B 1036-K	Arndt, Robert	P 334-B
Allen, V. T.	B 1091;	Arnold, B. P.	B 1018
C 143		Arnold, Ralph	B 260 b, i,
Allen, W. B.	P 424-C	285-F, G, 309, 315-O, 317,	
Alliger, J.	Map, p. 235	321, 322, 340-F, 357, 380-L,	
Allingham, J. W.	C 231;	396, 398, 406; P 47; GF 163	
P 400-B, 424-D; MF-40		Arnove, Ted	P 424-C;
Almond, Hy	B 992, 1036	W 1608-A	
-A, B; C 125, 161		Arx, W. S. von	P 260-B
		Ash, S. R.	P 424-D
		Ashburner, C. A.	MRUS 1882
		a, 1885 a, 1886 g, 1887 g,	
		1888 g	
		Ashe, W. W.	P 37; W 192
		Ashley, G. H.	A 22 III f;
		B 213 g, 225 g, 260 i, 285-F,	
		285-L, 381-A, 424, 531-D,	
		541-F, 615, 641-L, 659, 660-B,	
		691-I, 711-F; P 49; W 110,	
		145; GF 84	
		Ashley, H. E.	B 388
		Asselstine, E. S.	C 403, 412,
		428, 448	
		Atherton, R. A.	C 56, 64
		Atwood, W. W.	B 379-C,
		467, 685; P 60, 61, 95-B, 166;	
		Map, p. 252	
		Austin, T. S.	P 260-E
		Averitt, Paul	B 1136;
		C 90, 94, 293; P 228, 400-B;	
		OM-9, 66, 86; Map, p. 213	
		Avery, R. B.	B 1019-L
		Avrett, J. R.	C 221
		Axelrod, J. M.	C 29
		Ayer, G. R.	W 1602
		Ayres, H. B.	A 19 V g,
		20 V d, 21 V b, i; P 37	
		Ayvazoglou, Wladimir	B 887, 895,
		909, 915, 925, 932, 939	
		B	
		Babb, C. C.	W 130, 172,
		279	
		Babcock, H. M.	C 126, 156,
		162, 163, 238; W 1367, 1490	
		Bach, W. K.	C 96
		Bachman, G. C.	B 1055-B,
		J; P 400-B, 424-B; Map C-34,	
		35; I-224, 256, 344; OM-137	
		Back, William	C 378;
		P 424-C, D; W 1254, 1535-D	
		Bagg, R. M., Jr.	B 88, 268,
		513	
		Bagley, B. W.	MRUS 1921
		II aa, 1922 II z	
		Bagley, J. W.	B 657
		Bagnold, R. A.	C 421;
		P 282-D, E	
		Bailey, E. G.	C 392, 393,
		394, 395, 396	

- Bailey, E(dgar) H(erbert)
B 931-Q, 936-F; P 424-D
- Bailey, E(dgar) H(enry) S.
P 154-C
- Bailey, R. A. P 424-D
- Bailey, R. K. B 660-B;
- Bain, H. F. A 22 II b,
22 III h; B 225 b,e,o, 246, 255,
260 f,g, 267, 285-D, 294;
MRUS 1894 IV g, 1905 g; P 31
- Baker, A. A. B 755-D,
796-C, 806-B, 841, 865, 951,
979-B; P 183; GQ-132; OC-30;
CM-55, 168, 169, 197
- Baker, D. R. I-346
- Baker, J. A. C 369, 431;
W 1257
- Baker, Marcus A 21 II j;
B 174, 187, 194, 299
- Baker, R. C. C 216, 241,
350
- Baldwin, D. H. B 281, 288,
342, 399, 411, 421
- Baldwin, E. M. B 1041-D;
OM-129, 155, 162, 186, 204
- Baldwin, H. L., Jr. P 424-B
- Bales, W. E. B 1009-G
- Balk, Robert GQ-90, 92,
93
- Ball, M. W. B 341-B,
381-B, 623
- Ball, S. H. B 285-A,
308, 315-B, D, F, M; P 63
- Balsley, J. R., Jr. B 936-C,
940-D, 995-D; GP-1, 2, [3],
46-51, 115-118, 150-155, 190-
193, 197, 211; OM-46; Map, p.
236
- Baltz, D. H. C 333; OM-
159
- Baltz, E. H., Jr. C 334;
P 424-B; OM-149
- Baltzer, R. A. P 424-C
- Bancroft, Howland B 430-D,
451, 470-D, 478, 550
- Bandy, O. L. P 254-F,
274-C
- Banks, R. B. P 411-A
- Bannerman, H. M. C 73
- Barbosa, A. L. M. B 964-C
- Barbour, E. H. W 29
- Barker, F. C. W 10
- Barker, Franklin B. P 424-B, D
- Barker, Fred P 424-C;
GQ-100
- Barnard, E. C. A 21 V g
- Barnes, David F. B 1052-C;
P 400-B, 424-D
- Barnes, Farrell F. B 926-D,
963-E, 1016, 1058-D, F; C 146;
154; Map, p. 213, 226
- Barnes, Harley P 424-C;
OM-138, 149
- Barnes, Harry H., Jr. C 451, 452
- Barnes, Ivan P 424-C
- Barnes, Phineas B 25
- Barnett, H. F. B 1028-I
- Barnett, P. R. B 1084-G,
H; P 391-B, 400-B
- Barnett, V. H. B 541-C,
575, 581-C, 641-H, 796-A
- Barrell, Joseph A 22 II d;
P 57
- Barrows, H. K. W 124, 165,
187, 198, 201, 202, 206, 279
- Barstow, F. C. B 1045-D
- Barth, T. F. W. B 1028-F
- Barton, P. B., Jr. P 424-B, D
- Barus, Carl B 14, 27,
35, 36, 42, 54, 60, 73, 92, 94,
96, 103
- Bascom, Florence B 136, 828,
891; MRUS 1919 II v; P 132-H;
W 106; GF 162, 167, 211, 223,
225
- Bass, N. W. B 831-B,
886-A, 900-A-E, G, I-K, 1027-
D; OC-7; OM-67, 68, 73, 116
- Bassett, A. M. B 1045-D
- Bassler, Harvey B 726-C;
P 129-D
- Bassler, R. S. B 173,
260 I, 292
- Bastin, E. S. B 285-J, L,
315-L, 376, 420, 445, 620-M,
640-I, 735-C-E, 750-B, C;
MRUS 1906 ss, 1907 II f, 1908
II x,ee, 1909 II aa,ff, 1910 II
bb,gg, 1911 II cc, 1912 II dd,
1913 II n, 1914 II o, 1915 II k,
1916 I p, 1917 I x, 1918 I a;
P 90-A, 94, 104; GF 149, 158,
192
- Bastron, Harry B 1084-G
- Bateman, A. F., Jr. I-225
- Bates, C. E. I-68, 71,
107, 114, 116
- Bates, R. G. B 1058-A;
C 202; P 400-B, 424-D
- Bates, R. L. OM-61, 62
- Bath, G. D. P 400-B
- Bauer, C. M. B 540-K,
541-H, 716-G, 726-D, 751-F;
P 98-P
- Bauer, H. L., Jr. B 988-C;
C 142, 189, 220
- Baumgardner, L. H. B 1021-C
- Bay, H. X. B 901
- Bayley, R. W. B 1077;
- Bayley, W. S. A 15 e, 19
III a; B 109, 708, 735-F-G,
920; M 28, 36, 46; W 102, 114,
223; GF 62, 157, 191
- Beach, L. M. MRUS 1918
II dd, 1919 II v,aa-cc, 1920 II j,
q-s,u, 1921 II b,d,e,w, 1922 II
v,y
- Beal, C. H. B 658
- Beaman, W. M. B 788-E
- Beamer, N. H. C 283, 315
- Bearman, C. H. C 15, 24,
30, 40
- Beaumont, E. C. Map C-29,
32; OM-147, 190
- Beck, H. V. C 21, 24,
27, 40, 79, 118, 132; P 424-D
- Becker, G. F. A 2 e, 8 II
c, 18 III a, 20 II a, 21 III f;
B 19, 241, 401; MRUS 1892 f,
1894 III b, 1896 V b, 1897 VI
(cont.) u; M 3, 13; P 98-N
- Becraft, G. E. B 1046-G;
C 277; P 300; MF-135, 171,
172, 183, 187
- Bedinger, M. S. P 424-C
- Beede, J. W. GF 109
- Beekly, A. L. B 471-D,
- Beer, G. W. Map, p. 234
- Begeman, F. MRUS 1920
I n, 1921 I l, 1922 I p, 1923 I f,
- Behre, C. H., Jr. B 811-E
1015-G; P 235, 274-K, 309;
Map, p. 234
- Beikman, H. M. B 1072-A;
OM-200, 201
- Belden, A. W. B 336, 368
- Bell, Henry, 3rd B 1009-G;
P 300, 400-B, 424-B-D; MF-
61-66, 234, 235
- Bell, K. G. P 300, 354-
G, 356-B
- Bell, M. M. MF-178
- Belser, Carl OM-119
- Benda, W. K. 1045-F
- Benedict, G. H. Map, p. 192
- Benedict, P. C. C 206;
W 1048
- Benjamin, Marcus MRUS 1885
m, 1886 I
- Bennett, B. L. GP-202,
209, 213, 216-220
- Bennett, G. D. W 1536-A
- Bennett, H. S. I-10, 11, 35,
44, 45, 55, 66, 77, 108
- Bennett, R. R. W 913
- Bennett, S. G. W 147
- Bennit, H. L. MRUS 1923
II ff
- Benson, M. A. P 424-B
- Benson, P. D. B 1024-B
- Benson, W. E. C 217; Map,
p. 235
- Berg, E. L. I-208 A, B
- Berg, H. C. P 400-B;
I-276, 303, 323
- Berg, J. W., Jr. P 316-E
- Bergenbeck, R. E. OM-143
- Bergendahl, M. H. B 1030-B,
1082-J; P 400-B, 424-C
- Bergin, M. J. B 1046-M;
OM-173
- Bergman, D. W. C 106
- Bergquist, H. R. B 953-C,
954-C; P 305-A-H, 424-D; OC-
43; OM-85, 98, 118
- Bergquist, W. E. I-118; (See
also Eckstein, W. H.)
- Berman, Harry B 848
- Beroni, E. P. B 1046-N;
C 217, 220, 239, 320
- Berry, D. W. W 1458,
1519
- Berry, E. W. P 84, 91,
92, 95-F, 98-E, F, L, M, 108-
E, 112, 125-A, 129-G, I, 131-A,
132-E, 136, 140-C, 154-H, 155,
156, 158-H, 165-B, 170-C, 185
-E, F, 193-E
- Berry, W. B. N. P 424-B
- Berryhill, H. L., Jr. C 81, 171,
363; P 424-B; Map C-6; I-318,
319
- Berryhill, L. R. C 86, 90,
94, 293
- Berthold, S. M. B 992
- Bethke, P. M. P 424-B, C
- Bibbins, A. B. M 48;
GF 152, 204
- Bickel, R. S. I-197, 226,
249
- Bieberman, R. A. C 333;
OM-159, 207
- Bien, Morris W 93, 146

- Bigwood, B. L. C 365;
W 836-A, 867
- Billings, M. P. C 95; Map,
p. 190
- Billingsley, G. A. C 197, 221,
241, 254; W 1414, 1415
- Birdseye, C. H. B 766, 809
- Birkinbine, John MRUS 1883-
84 c, 1886 a, 1887 a, 1889-90 a,
1891 a, 1892 a, 1893 a, 1894 III
a, 1895 III a, 1896 V a, h, 1897
VI a, b, 1898 VI a, c, 1899 VI a,
c, 1900 a, c, 1901 a, c, 1902 a, c,
1903 b, c, 1904 a, b, 1905 b, c,
1909 I b
- Birman, J. H. C 310
- Bjorklund, L. J. W 1367,
1378, 1410, 1483; HA-9
- Black, Robert F. B 947-G;
P 293-B, 424-D
- Black, Rudolph A. P 300,
424-C
- Blackmon, P. D. B 1021-G;
P 424-C
- Blackwelder, Eliot B 314-D,
430-H, 470-H; GF 173
- Blackwell, G. E. MRUS
1887 f
- Blade, L. V. MF-53
- Blair, R. W. OC-42
- Blake, M. C., Jr. P 424-C
- Blake, W. P. B 223;
MRUS 1882 h, 1883-84 h
- Blanchett, Jean GP-154,
155
- Bliss, E. F. MRUS 1918
I aa; P 98-B; (See also Knopf,
E. B.)
- Bloom, Harold C 125
- Boardman, Leona B 838;
MRUS 1923 II t; Map, p. 191
- Boardman, Richard S. P 340
- Boardman, Robert L. P 300;
MF-169
- Bodenlos, A. J. B 960-A,
962-C, 975-C, 1017, 1040
- Bodhaine, G. L. C 191;
W 1527
- Bogart, D. B. C 451;
W 1420
- Bogue, R. G. I-204 B
- Bolster, R. H. W 192
- Boner, F. C. W 1482
- Bonilla, M. G. P 400-B,
424-C; I-156, 272
- Bonine, C. A. B 580-N,
621-H
- Books, K. G. GP-128-
134, 140-148
- Bostwick, D. A. C 209
- Botinelly, Theodore B 1074-A,
1101; P 320, 400-B; OM-92,
102
- Boucot, A. J. B 1111-E;
P 334-B
- Boutwell, J. M. B 213 b, d,
223, 225 b, f, i, 260 b, e, f, j;
MRUS 1906 f-h; P 38, 77;
W 102
- Bove, A. N. Map, p. 191
- Bowen, C. F. B 471-D,
531-H, 541-H, 621-F, 661-I,
686-D, F, L, P, U, 691-F, 804;
P 90-I, 108-L, 125-B
- Bower, A. S. MRUS
1882 b
- Bowers, H. E. P 300;
MF-169
- Bowie, J. E. C 434
- Bowles, Edgar P 189-F
- Bowles, Oliver B 663
- Bowman, Isaiah P 44;
W 113, 160, 257
- Bownocker, J. A. P 100-B;
GF 197
- Bowsher, A. L. P 303-A
- Bowyer, Ben MF-138
- Boyd, David W 9
- Boyle, C. B. B 102
- Bozion, C. N. P 400-B
- Brabb, E. E. P 424-B
- Braddock, W. A. B 1063-A;
MF-39
- Bradley, Edward W 1360-H,
1368; HA-6
- Bradley, Wendell A. P 424-B
- Bradley, Wilmot H. B 899-A;
P 132-F, 140-D, 154-G, 158-A,
E, 168, 185-I, 196-A; I-332;
OM-32
- Bradt, H. H. MRUS 1915
I n
- Bramkamp, R. A. I.201 B, 202
B, 203 A, B, 206 B, 207 A, B,
209 A, B, 212 A, B, 213 A, B,
214 A, B
- Bramlette, M. N. B 781-A,
901; P 196-A, 207, 212, 222,
280-F; OM-14, 24, 26, Map, p.
235
- Brandegge, T. S. A 19 V d
- Brands, M. D. W 968-A
- Branner, J. C. B 143, 351;
GF 163
- Brannock, W. W. B 992,
1036-C; C 165
- Bransky, O. E. B 475
- Branson, F. A. P 424-B, C
- Brant, R. A. C 77, 226
- Breckenridge, L. P. B 325
- Breeding, S. D. C 32;
W 914, 1046, 1079-A, B, 1138,
1260-A
- Breger, Carpel L. B 430-I;
P 89
- Breger, Irving A. P 300, 320
- Brennan, Robert C 378;
W 1474, 1489
- Bressler, C. T. B 963-C
- Brew, D. A. P 424-C;
MF-156, 158
- Brewer, Max C. B 1083-C;
P 305-B, K, 400-B
- Brewer, William M. MRUS 1895
III.(cont.) r
- Brice, J. C. B 1071-C
- Bridge, Josiah P 186-L, M,
253, 277, 294-H
- Bridges, J. H. B 470-J
- Bridges, Thomas W. W 773-D
- Briggs, Guy H., Jr. B 876
- Briggs, R. C. W 843
- Briggs, Reginald P. P 400-B;
Map C-42; I-320
- Bright, M. J., Jr. P 424-B
- Brill, K. G., Jr. B 1041-E
- Britt, S. H. C 75, 259
- Broadhurst, W. L. W 889-F,
1047, 1069, 1070, 1079-B, 1106
- Brobst, D. A. B 1019-C,
1072-B; MF-77, 78, 97
- Brock, M. R. B 1072-H;
P 300, 424-D
- Broderick, T. M. P 144
- Brodsky, Harold P 400-B
- Broedel, C. H. C 157;
I-326
- Brokaw, A. L. B 1010
- Bromery, R. W. P 400-B;
GP-136-139, 194-197, 200-211,
213-245, 254-287
- Bromfield, C. S. B 1027-N,
1072-E; P 424-C; MF-96, 159,
160, 176
- Brookhart, J. W. W 1428
- Brooks, Alfred H. A 18 II e,
20 VII e, 21 II g, 22 III I;
B 213 b, c, 225 b, 259, 284,
304-A, I, K, 328, 345-A, 379-A,
394, 442-A, J, 480-A-C,
520-A, D, 542-A, 592-A, I,
622-A, 642-A, G, 649, 662-A,
666-P, 703, 714-A, 722-A,
739-A, C, 755-A, 773-A; MRUS
1900 k, 1905 d, 1906 d, 1907 I e,
1908 I h, 1909 I h, II a, 1910 h,
1911 I j, 1912 I h, 1913 I j, 1914
I e, 1915 I i, 1916 I g, 1919 I q,
1920 I j, 1921 I ss, 1922 I qq;
P I, 45, 70, 128-D; W 314;
GF 34; SP p. 189
- Brooks, Harold P. C 418
- Brooks, L. R. Map, p. 256
- Brosge, W. P. B 990;
P 400-B; CM-104
- Brown, Andrew B 995-E;
C 77, 81, 171; 300
- Brown, Annabel Map, p. 191;
(See also Clson, A. B.)
- Brown, Charles W. GF 149
- Brown, Clarence E. B 1027-K,
1123-A; P 400-B, 424-C; MF-
33, 42, 116
- Brown, Delbert W. W 1258,
1469
- Brown, Donald M. C 53, 81,
159; Map C-6
- Brown, Eugene C 373
- Brown, Glen F. B 984;
I-204 B, 205 B, 206 B, 210 B,
212 A, B, 216 A, B, 217 A, B,
270 B
- Brown, Harrison P 300
- Brown, James H., Jr. OM-134,
153
- Brown, John S. B 783-D;
W 490-A, 497, 537, 540
- Brown, Paul N. C 247, 253,
366
- Brown, Randall E. B 955-F,
969-E; Map, p. 226
- Brown, Richmond F. C 341;
W 1378
- Brown, Robert D., Jr. B 1053;
P 400-B; GP-249-252; OM-155,
203, 210
- Brown, Roland W. P 154-J,
185-C, 186-F, J, 189-I, 221-D,
274-H; Map, p. 235
- Brown, S. G. W 1539-I
- Brown, Severn P. Map, p. 224
- Brush, L. M., Jr. P 282-D, F
- Bryan, Kirk B 730-B,
760-A, D, 790-A, B; P 132-A,
140-A; W 375-A, 490-D, 495,
499, 580-A, 597-A

- Bryan, Lester L. W 560-D, 818
 Bryant, Bruce B 1081-C, E; P 400-B, 424-C, D
 Bryson, R. P. B 973-B; MB-12; OM-14; Map, p. 226, 234, 235
 Buck, Katherine L. B 1019-F; P 300
 Buck, Laurence P. C 88
 Buck, Stuart M. MRUS 1883-84 a
 Buckmaster, J. L. C 405
 Buddington, Arthur F. B 739-B, 773-B, 783-B, 800, 807, 893; P 287, 424-B; GP-117, 118, 190, 192, 193; I-346
 Bull, W. B. P 424-B
 Bunker, C. M. B 1052-G; P 400-B, 424-B
 Bunnag, D. I-261
 Buravas, Saman B 984
 Burbank, W. S. B 906-E
 953-B; C 236; P 144, 169, 400-B, 424-C, D; MB-8; Map, p. 190
 Burchard, E. F. B 225 g
 260 h, 285-N, 315-D, F, K, N, 340-E, H, 380-E, 400, 430-F, 470-G, K, 522, 540-G, 542-B, 592-C, D, 620-E, G, 666-S, V, CC, 682, 750-G, 795-D, 821-C, 928-D; MRUS 1906 i, w, cc, dd, hh, 1907 II d, e, 1908 II o, p, t, u, 1909 I b, c, u, II f, h, k, o, p, u, v, 1910 I b, c, t, II f, h, i, l, p, q, v, w, 1911 I b, c, II f, h, j, m, q, 1912 I b, II f, n, r, 1913 I p, II i, v, hh, jj, 1914 I n, II l, q, 1915 I n, II f, p, 1916 I k, II v, x, 1917 I v, II v, x, 1918 I x, aa, II n, y, 1919 I dd, II dd, 1920 I aa, II bb, 1921 I rr, II aa, 1922 I aa, II z, 1923 I t, II z; P 24
 Burke, H. W. P 280-A
 Burley, R. J. W 491
 Burns, James R. P 400-B
 Burns, Ruth N. C 77; Map C-6
 Burnside, R. J. P 315-B
 Burrows, J. S. B 225 g, 316-G, 362, 378
 Burtis, V. M. HA-2, 3
 Burton, R. H. B 1068
 Bush, Alfred I. B 1030-D
 1072-E, 1082-G; MF-96, 176, 223
 Butler, Arthur P., Jr. P 300, 424-B; GQ-78; Map 3-173; Map, p. 226
 Butler, Bert S. B 511, 580-B, 620-I, J, 640-A, 666-Q, 846-C, 911; MRUS 1908 I e, i, 1909 I e, i, 1910 I e, i, 1911 I f, k, 1912 I e, h, 1913 I g, bb, 1914 I d, o, 1915 I f, p, 1916 I e, r, 1917 I n, aa, 1918 I f, jj, P 64, 80, 111, 144, 201
 Butler, Charles R. C 186
 Butts, Charles B 225 g, 260 i, 279, 285-F, 315-G, I, 316-A, 380-J, 400, 431-B, 470-F, G, K 541-F, 641-K, 855; GF 115, 125, 133, 172, 175, 189, 221, 226, 227; Map, p. 252
 Buwalda, J. P. P 264-G
 Byerly, P. E. P 316-A, C
 Byers, Frank M., Jr. B 1024-F, I, 1028-L, 1045-C, 1089-A; P 424-C; Map, p. 226
 Byers, Horace G. P 196-F
 Byers, Virginia P. MB-16
 Byrd, M. F. MR-3
 Byrne, F. E. B 1060-B; C 15, 21, 24, 25, 27, 30, 38, 40, 51, 79, 106
 Cabot, G. L. C MRUS 1913 II ii
 Cadigan, R. A. B 1046-Q; P 320; MF-153, 157
 Cady, Richard C. W 849-B, 943, 969
 Cady, Wallace M. C 95; P 268; GQ-79
 Cahill, E. D. P 175-A
 Calhoun, F. H. H. P 50
 Calkins, Frank C. B 235, 384, 530 a, 540-E, 640-D; P 62, 78, 201; W 118; GF 139, 196; Map, p. 235
 Calkins, James A. MF-82; MR-5, 6
 Call, R. E. B 11
 Callaghan, Eugene B 871, 886-D, 893, 906-D, 931-A; GQ-155; MF-35, 52, 202
 Callahan, J. T. C 360
 Callen, A. C. B 430-G
 Calvert, W. R. B 341-A, 390, 471-D, E, 575, 641-G
 Cameron, E. N. B 1082-D P 255, 318
 Campbell, Arthur B. 1082-I
 P 400-B
 Campbell, Ian MF-117
 Campbell, Marius R. A 17 II d, 22 III d; B 111, 200, 213 g, l, 225 g, 261, 285-F, 297, 316-F, 341-A, 381-A, 394, 431-B, 531-D, 541-F, K, 600, 611, 621-P, 707, 716-H, 748, 1027-D; MRUS 1905 tt, 1906 qq, 1907 II f; P 48, 100-A; GF 12, 26, 44, 46, 47, 53, 59, 67, 69, 72, 77, 82, 94, 110, 189; Map, p. 252
 Campbell, Russell H. P 400-B, 424-C, D; MF-190-195, 198-201
 Campbell, R. M. C 301
 Canfield, G. H. B 642-B, 662-B, 692-B, 712-B, 714-B, 722-B
 Canney, F. C. P 300, 400-B, 424-B
 Cannon, Helen L. B 1000-D, 1009-M, 1030-M, 1085-A; C 264; P 300, 400-B; MB-8, 17
 Cannon, Ralph S., Jr. P 202
 Capps, S. R. B 386, 417, 448, 480-H, 501, 520-F, 534, 542-D, 592-H, 605, 607, 622-F, 630, 642-E, F, 662-E, 687, 692-D, 739-C, 755-A, C, 773-A, 783-C, 791, 792-C, 797-B, 810-C, 813-B, 824-C, 836-D, 844-B, 857-D, 862, 864-B, 868-B, 880-C, 907; MRUS 1922 I qq; P 95-D, 170-A; W 254
 Cardenas, Salvatore B 946-D
 Cardwell, George T. W 1427
 Cardwell, William D. E. C 295
 Carithers, L. W. P 300
 Carlson, John E. P 424-D
 Carlson, Marvin P. HA-12
 Carlton, J. T. Map, p. 213
 Carpenter, Carl H. P 424-B
 Carpenter, Everett W 333, 365
 Carpenter, Jean R. C 87
 Carpenter, Philip P. P 59
 Carr, Martha S. B 967, 1082-C; Map 3-212
 Carr, Wilfred J. B 1092; P 424-B, C
 Carroll, Dorothy P 314-F, 400-B, 424-D
 Carron, M. K. B 1036-N
 Carswell, L. D. C 325, 375 P 300; GQ-63; I-168; MF-154-156, 158
 Carter, Rolland W. C 100, 148, 284, 376; P 424-B; W 1543-B
 Carter, William D. MF-123, 124, 139, 140, 150
 Carvalho, J. C. M. P 294-G
 Case, J. E. P 400-B, 424-D
 Cashion, W. B. B 1072-C; P 424-C; Map C-49; OM-134, 153
 Cass, J. T. I-103, 243, 273, 286-291
 Castle, R. O. GQ-107, 122
 Castor, H. R. OM-73
 Cater, F. W., Jr. B 995-C; P 400-B; GQ-33, 55, 59-61, 64-66, 68, 69, 71, 77, 78; MB-16; MF-19-21, 24-27, 29-32
 Cathcart, James B. B 973-D, 1046-K; P 300
 Cathcart, Stanley H. B 712-H, 722-F, 733, 736-F; GQ-23, 40, 45
 Cather, Elaine SP p. 189
 Catlett, Charles B 64, 225 J
 Cattermole, J. M. P 424-B; GQ-76, 115, 126; Map, p. 234
 Cavender, W. S. B 1030-N
 Cederstrom, D. J. C 169, 275 P 210-A, 424-D; W 1067, 1361, 1539-B
 Chace, F. M. MB-16; Map, p. 235
 Chamberlin, Rollin T. B 383
 Chamberlin, Thomas C. A 3 f, 5 c, 6 c, 7 b; B 23, 58
 Chambers, A. A. MRUS 1916 II dd; W 418
 Chance, H. M. MRUS 1883-84 a
 Chandler, A. E. W 45, 133
 Chang Hi, Cheong B 1041-B
 Chao, E. C. T. P 400-B
 Chapin, Theodore B 542-C, 592-J-L, 622-D, 642-B, 662-B, 668, 682, 692-B, C-F, 712-E, F, 714-D, 800; P 120-D
 Chapman, R. M. C 332; P 303-C, 400-B

- Charaljanaphet, Jamchet
B 984
- Charlesworth, L. J., Jr.
MF-71-73, 75
- Chatard, T. M. A VII g;
B 9, 42, 60, 78; MRUS 1883
-84 i
- Chayes, Felix B 980
- Cheney, T. M. C 306, 324,
375
- Chester, F. D. B 59
- Chew, R. T. 3d B 1009-H,
1030-E; P 320; MF-54
- Chidester, A. H. C 95; MF-7,
8, 11
- Chisholm, F. F. MRUS 1883-
84 c, 1885 c, 1887 a, 1888 a
- Chodos, A. A. P 400-B
- Christ, C. L. P 320
- Christman, R. A. B 1072-H;
C 290
- Christner, H. B. Map C-2
- Christy, S. B. MRUS 1883-
84 h
- Chun, R. K. W 1137-C
- Chute, N. E. B 1061-F;
GQ-2, 5, 6
- Clabaugh, Patricia S. Map 3-198
- Clabaugh, Stephen E. B 969-B,
983, 1042-A; MB-1, 9, 10
- Clapp, Charles H. B 704
- Clapp, Frederick G. B 249, 285-
G, 300, 304; W 110, 163, 223,
258, 259, GF 105, 144, 146, 189
- Clapp, W. B. W 134, 177,
213
- Clark, Austin H. P 196-D
- Clark, Frank R. B 541-J,
621-P, 686-I, 691-L, 711-A,
793; P 100-B
- Clark, Joan R. P 424-C
- Clark, Lawrence W. OM-168
- Clark, Lorin D. P 210, 400-B
- Clark, M. B. MRUS 1915
1 a, 1916 1 a, 1917 1 c, 1918 1 a,
1919 1 a, 1920 1 a, 1921 1 a,
1922 1 a, 1923 1 a
- Clark, William Bullock
B 83, 97, 141; M 54; GF 162,
167
- Clark, William Otterbein
W 345-H, 400-E, 467, 519, 616
- Clarke, Frank W. B 9, 27, 42,
55, 60, 64, 78, 90, 113, 125,
148, 167, 168, 207, 220, 228,
262, 330, 419, 491, 588, 591,
616, 695, 770; MRUS 1882 h,
1883-84 m; P 90-D, L, 102,
124, 127, 132-D, 135; W 364
- Clarke, John M. B 16
- Clarke, J. W. B 1116-A-E,
1146-A, B
- Clarke, Roy S. P 314-D
- Clebsch, Alfred, Jr. P 424-C, D
- Cleland, H. F. B 206
- Clement, J. K. B 393
- Clements, Julius M. A 19 III a;
M 36, 45
- Clerc, F. L. MRUS 1882 g
- Clevenger, G. H. MRUS 1905 II
- Clinton, N. J. P 300
- Cloos, Ernst Sp p. 188
- Cloud, P. E., Jr. P 280-A, K
- Coates, Donald R. W 1354
- Coats, Robert R. B 929, 974-B,
989-A, 1028-C-E, J, O, P, R;
P 300
- Cobb, E. H. B 963-E,
989-B, 1039-D, 1058-F, 1094,
1139; MR-8-11; Map, p. 191
- Cobban, W. A. P 239,
243-D, 355, 400-B, 424-D
- Cochrane, J. L. B 418
- Cockerell, T. D. A. P 120-I
- Coe, A. C. Map, p. 213
- Cohee, G. V. C 77; OC-4,
9, 11, 28, 33, 41; OM-11, 17, 38;
Map, p. 213
- Cohen, Philip P 424-C
- Colby, B. R. C 35, 37,
107, 205, 270; W 1077, 1103,
1295, 1357, 1373, 1498-D, 1593
- Cole, Burt W 86
- Cole, W. Storrs P 221-B,
244, 253, 260-O, V, 280-I,
374-A
- Coleman, Robert G. P 320,
424-C
- Collier, A. J. B 213 b.g.,
218, 225-C, 229, 259, 278,
285-B, 315-A, 316-B, 326, 328,
340-D, 341-A, 531-L, 661-E,
691-G, K, 700-D, E-H, 736-D-
F, 751-E, 812-B, 905; MRUS
1906 m,uu; P 2, 108-J, 120-B;
SP p. 189
- Collins, Florence R. P 305-B, D,
F, H, I, K
- Collins, Jack, B. OC-46, 47;
QM-101, 135
- Collins, Lorence G. MF-42
- Collins, William D. MRUS 1920
II t, 1921 II bb, 1922 II x, 1923
II n; W 239, 496, 520-F, 559,
560-C, 596-B, D, E, G, H, 658,
659-C, 942, 950
- Colton, George W. GQ-30, 97;
OC-54, 55
- Colton, Roger B. GQ-67-137;
1-225, 327
- Combo, J. X. C 53; Map
C-2, 6
- Compton, R. R. B 969-E,
995-B
- Conant, Georgianna D. B 1054,
1065, 1075, 1095, 1115
- Conant, Louis C. P 300, 357;
OM-37, 64, 84; Map, p. 213
- Conant, Mary Lou B 1019-L
- Concha, J. F. B 975-A
- Condit, D. D. B 541-A,
621-N, O, 640-H, 711-B, 720,
764, 795-G; P 98-O, 120-F
- Condon, W. H. 1-102, 104,
177, 273, 276, 303
- Condra, G. E. W 215, 216
- Conklin, Dora R. B 1107-A
- Conklin, H. L. W 1330-B,
C
- Conklin, Nancy M. P 424-D
- Conley, J. N. B 900-C
- Connor, J. G. C 107
- Connor, P. G. C 269
- Conover, Clyde S. C 442;
W 1230
- Conover, L. F. W 836-A
- Conrad, T. A. P 59
- Conwell, F. R. MF-180
- Cook, David R. P 294-G
- Cook, Kenneth L. P 316-E
- Cooke, C. Wythe B 867, 941;
P 95-I, 108-G, 120-C, 129-B,
E, 133, 140-E, F, 243-B, 254-
A, I, 264-C, E, 280-J, 321
- Cooley, Elmo F. P 424-B
- Cooley, Maurice E. P 424-C
- Coombs, V. B. C 15, 30,
51, 79
- Coonrad, W. L. 1-223, 285,
292, 321, 339
- Coons, A. T. B 275;
MRUS 1902 rr, 1903 oo, 1904
mm, 1905 u,w, 1906 x,y,ff,
1907 II b, 1908 II h,j,k, 1909 II
j, 1910 II k, 1911 II l, 1912 II
l, 1913 II f, 1914 II i, 1917 II
dd, 1918 II k,hh, 1919 II z,cc,
ee,ff, 1920 II o,s,v,aa, 1921 II
d,g,x,z, 1922 II s,w,g,bb, 1923
II f,r,u,x
- Cooper, G. Arthur P 260-G,
314-A
- Cooper, John R. B 969-F,
1112-C; P 266; MF-213, 231
- Cooper, William F. W 102
- Corbett, D. M. W 888,
1363
- Cordell, L. E. P 424-D
- Cornwall, H. R. B 1019-K;
P 424-B; GQ-27, 34-36, 51, 52,
73, 74, 157; MF-46, 47, 177,
239
- Corse, W. M. MRUS 1922
I r
- Corwin, Gilbert P 424-C
- Cotter, R. D. W 1539-A
- Cottrell, K. W. MRUS 1919
II d,t, 1920 II f,g, 1921 II c,l,m,
o,s, 1922 II b,c,e,p, 1923 II g,
h,o,p
- Coulter, Elizabeth B. GQ-142
- Coulter, Henry W. P 400-B;
GQ-142
- Covert, C. C. B 337,
345-D, 379-E; W 162, 218,
228
- Cowgill, E. B. W 5
- Cox, Allan B 1083-E;
P 400-B
- Cox, Doak C. B 1005,
1015-A
- Cox, Manning W. B 935-F
- Cozzens, A. B. Map, p. 235
- Cragin, F. W. B 266
- Craig, Franklin C. P 424-C
- Crøig, Lawrence C. B 1009-E
- Cram, M. P. B 365
- Crandall, Lynn W 774, 775,
818
- Crandell, Dwight R. P 307,
400-B, 424-B; GQ-32, 39, 53,
125
- Crandell, Herbert C., Jr.
B 1054, 1065, 1075
- Crane, W. R. B 238, 734
- Crawford, L. C. W 847
- Creasey, S. C. 1027 F;
P 308; MF-9, 238

- Cressman, E. R. B 1015-I, 1027-A; C 209, 302, 303, 325; MF-118
- Crickmay, Colin H. P 175-B
- Crickmay, Geoffrey W. W 819
- Crider, A. F. B 260 I, 283, 285-L; W 159, 160, 399
- Criner, J. H. C 408
- Crittenden, M. D., Jr. B 979-A, 1082-H; P 424-D; GQ-132
- Crocker, William MRUS 1919 II h
- Cronin, J. G. W 1371
- Cropper, W. H. W 1459-A
- Crosby, Percy MF-42, 116
- Crosby, William O. P 44; W 102, 114, 145
- Cross, Whitman A 14 II d, 16 II a, 17 II b, 21 II a; B 1, 20, 512, 843; M 27; P 88, 90-C, E, 258; GF 7, 9, 57, 60, 120, 130, 131, 153, 171
- Cross, William P. C 177, 418; HA-40
- Crosthwaite, E. G. C 371; W 1460-C, D
- Crowe, H. E. B 1036-B, I
- Crumpton, Carl F. B 1061-C
- Crumpton, Russian P. MF-15
- Cruse, R. R. W 1480
- Cserna, Zoltan de B 1037-A; P 424-D
- Culbertson, James K. P 424-C
- Culbertson, William C. P 95-E, H, 1015-E; P 424-D
- Culier, R. C. C 110, 223; P 424-B; W 1531
- Cumings, Edgar R. GF 197
- Cummings, G. B. P 295
- Cummings, Uriah MRUS 1894 IV k, 1895 III (cont.) h, 1896 V (cont.) g, 1897 VI (cont.) g, 1898 VI (cont.) f, 1899 VI (cont.) f, 1900 a
- Cuppels, N. P. P 300, 424-D; MF-180, 207, 209
- Currier, L. W. B 886-B, 942, 1109; C 426
- Curtis, Bruce F. Map, p. 234
- Curtis, Diane B 1059-B, 1059-E; C 281
- Curtis, Joseph S. A 4 c, 6 d; M 7
- Cushing, Elliot M. C 33
- Cushing, Henry P. B 818
- Cushman, Joseph A. B 676; P 108-G, 125-D, 128-B, E, 129-E, F, 133, 175-A, 181, 189-D, 191, 196-A, 197-B, 206, 210-A, D, 221-A, 232, 260-H
- Cushman, Robert L. C 360; W 1354
- Curtitta, Frank B 992, 1029-A; P 300, 400-B, 424-C, D
- D
- Dale, T. N. A 13 II e, 14 II j,k, 16 I e, 19 III b, 20 II b; B 195, 213 I, 225 I, 242, 260 k, 272, 275, 285-M, 313, 315-J, 354, 404, 430-F, 470-G, 484, 521, 586, 589, 738, 744; MRUS 1908 II j, 1912 II m; M 23; W 110
- Dall, W. H. A 17 I e, 18 II c; B 24, 84; P 59, 125-C, 132-G
- Dalrymple, Tate W 796-G, 816, 842, 914, 1543-A
- Daly, R. A. B 209
- Dana, E. S. B 12
- Dana, J. D. P 59
- Dane, C. H. B 796-D, 806-D, 860-C, 863, 874-C, 931-K; P 183, 186-K, 400-B; 1-224, 256, 344; OC-24, 52; OM-78, 158, 169, 171; Map, p. 234
- Daniels, W. S. W 1370-B
- Danilchik, Walter P 424-D; Map C-21; OM-192
- Darton, N. H. A 17 II g, 18 IV c, 19 IV c, 19 V k, 21 IV b; B 44, 67, 75, 91, 99, 127, 138, 167, 223, 260 i,n, 285-F, 316-C, 340-G, 364, 387, 430-F, 435, 470-K, 483, 613, 618, 691-A, 701, 715-M, 726-E, 794, 845, 906-A; P 17, 32, 51, 52, 65, 108-C, 193-D, 217; W 12, 57, 61, 114, 149, 227, 345-C, 428; GF 13, 14, 23, 28, 32, 61, 70, 80, 83, 85, 87, 88, 107, 108, 127, 128, 141, 142, 150, 157, 162, 164, 167, 173, 207, 209, 212, 219; Map, p. 190, 191, 235
- Daugherty, C. R. W 579
- Daum, C. R. P 424-B
- Davenport, R. W. B 542-F, 592-F; W 342, 345-F, 372, 375-C, 500-A, 579
- Davidian, Jacob P 424-B
- Davidson, D. F. B 1018, 1084-C, 1112-A; C 208, 262, 305; P 424-C
- Davidson, E. S. P 424-C; GQ-54; MF-153-156, 158
- Davies, W. E. P 400-B, 424-D
- Davies, S. N. B 935-G; OM-24, 83; Map, p. 226
- Davis, A. P. A 18 IV a, 20 IV b, 22 IV b; W 2, 11, 73
- Davis, C. A. B 376, 379-A, 394, 442-B; MRUS 1908 II cc, 1909 II e, 1910 II e, 1911 II e, 1912 II e, 1913 II w, 1914 II y
- Davis, D. L. P 300
- Davis, F. J. Map, p. 236
- Davis, G. H. W 1360-G, 1457, 1469, 1497, 1535-B
- Davis, Herbert J. MRUS 1885 m
- Davis, Hubert W. MRUS 1919 II y, 1920 I aa, II i, 1921 I rr, II j, 1922 I aa, II d, 1923 I t, II d
- Davis, James R. C 170
- Davis, John A. B 471-F
- Davis, L. C., Jr. C 438
- Davis, N. A. Map, p. 235
- Davis, R. W. W 1534
- Davis, Robert E. B 1019-E, 1082-J; P 400-B; GQ-133
- Davis, W. E. P 400-B
- Davis, W. M. A 7 f, 18
- II a
- Davison, Robert Map, p. 234
- Dawdy, D. R. P 424-C; W 1498-C
- Day, D. T. B 223, 285-C, 365, 381-D, 394, 581-A; MRUS 1882 h, 1883-4 h,k,m, 1885 h,k, 1897 VI i, 1904 j, 1905 II, 1906 a,o,r, 1907 I q, II a, 1908 I t, II d, 1909 II d,x, 1910 II c,d,y, 1911 II c,d,y, 1912 I w, II d,z, 1913 I z, II cc,gg
- Day, J. R. W 778
- Day, W. C. MRUS 1885 m, 1886 h,k, 1887 h,k, 1888 h, 1889-90 h, 1891 h, 1892 h, 1893 h, 1894 IV g, 1895 III (cont.) e, 1896 V (cont.) d, 1897 V (cont.) c,d, 1898 VI (cont.) d
- Dean, B. G. B 1019-C, 1059-G, 1087-I; MF-125-130
- Dean, H. J. W 299, 300, 370, 415
- de Chadenédes, E. H. B 1115
- Decker, C. E. OM-22
- Deeds, J. F. W 560-A, 580-B; Map, p. 256
- Deiss, Charles B 955-C, 973-C; 1027-C
- Delamater, G. R. B 336, 368
- Delevalux, M. H. P 400-B
- Dellwig, L. F. C 290
- Demarest, D. F. P 259; OM-5, 9, 29, 39, 49, 69, 79, 89
- Demok, F. K. OM-73
- Dempsey, W. J. P 424-D; GP-13-18, 22-34, 52, 59, 77-81, 140-148, 156; Map, p. 236, 237
- Dennen, W. H. B 980
- Dennis, P. E. P 424-D
- Denny, C. S. B 963-D, 1061-C, D; P 288, 424-D; Map, p. 226
- Denson, M. E. P 300
- Denson, N. M. B 1055-A, B; C 78, 193; P 300, 424-C; Map C-33-35; OC-44; OM-92, 94, 102
- Derzay, R. C. P 300
- Desborough, Arthur B 369
- Dexter, J. S. I-9, 14, 15, 17, 19-21, 24, 25, 27, 41, 43, 47-49, 57, 67, 73, 85, 86, 98, 99, 124, 134-137, 151, 164, 189, 190, 248
- Detterman, R. L. P 303-D
- Deul, Maurice B 1036-H; P 300, 320
- Deussen, Alexander B 470-G; P 126; W 335, 375-G
- Dewey, F. P. P 95-G
- de Witt, Wallace, Jr. B 1003-A; P 259; GQ-30, 96; OC-21, 37, 45, 54, 55; OM-39, 69, 79, 99
- de Wolf, F. W. B 316-B
- Dibblee, T. W., Jr. B 1089-B; P 424-B; MF-76, 79, 170, 204, 219, 222, 226, 227, 229, 232, 233

- Dichtel, W. J. P 260-L
 Dickey, D. D. B 1045-B;
 P 400-B, 424-C
 Dickinson, W. E. W 918
 Dillard, W. R. B 886-A,
 900-A, B, G-J
 Diller, J. S. A 81 c, 14
 II g, 171 c, 19 III c, 20 III a;
 B 33, 38, 42, 64, 79, 150, 196,
 213 d,f,i, 225 d, 260 b,h,i, 340-A,
 341-C, 353, 380-A, 431-B,
 470-B, K, 540-A, 546, 614, 666-A,
 H, I, 725-A; MRUS 1906 jj,
 1907 II f, 1908 II v,ff, 1909 II
 w,gg, 1910 II x,hh, 1911 II x,
 ii, 1912 I v, II h,hh, 1913 I c,
 II k,t, 1914 I b, II j,n, 1915 I b,
 II d,i, 1916 I c, II d,e, 1917 I j,
 II f,n, 1918 I aa, II w,x, 1919 I
 I, II r,u; GF 15, 49, 73, 89, 138,
 218
 Diment, W. H. P 400-B,
 424-B
 Dingman, R. J. W 1259
 Dings, M. G. B 978-E;
 P 289
 Dinnin, J. I. B 1084-B;
 P 400-B, 424-B, D
 Disbrow, A. E. GQ-141;
 MF-131
 Dixon, George H. B 1051,
 1072-G; C 333; Map C-26;
 OM-159, 174
 Dixon, H. Roberta I-235, 236
 Dobbin, C. E. B 736-C,
 796-A, D, 804, 806-A, D, 812-A;
 P 158-B; OM-103, 176, 178-A,
 B, 185; Map, p. 234, 235
 Dobbell, J. P. B 111-F;
 I-296
 Dobrin, M. B. P 260-J
 Dobrovolsky, Ernest B 1093;
 P 233-d, 424-C; OC-10; OM-
 62
 Dobson, F. S. W 147
 Dodd, P. H. P 300
 Dodge, R. E. GF 83
 Dodson, C. L. P 424-B;
 GQ-63; MF-143-148, 151, 152
 Dodwell, Arthur A 21 v d;
 P 7, 9, 22, 23
 Doell, R. R. P 400-B
 Dole, R. B. B 530 g;
 MRUS 1911 II gg, 1913 II x,y,
 1914 II p, 1915 II w; W 160,
 193, 234, 236, 254, 259, 341,
 375-G, 398, 399, 418
 Doll, W. L. C 340
 Donnell, J. R. B 1042-H,
 1082-L; P 424-B; OM-114,
 134
 Dooley, J. R., Jr. P 424-C
 Dorr, J. V. N., 2nd B 922-H,
 931-F, 946-A, 964-A
 Douglas, E. M. A 181 b,
 191 b, 201 b, 211 b; B 181,
 185, 201, 689, 788-B, D, 817
 Douglas, James, Jr.
 MRUS 1882 e, 1883-84 e
 Douglass, R. C. P 333, 424-B
 Dover, T. B. C 206, 221,
 361
 Dow, D. H. MB-1
 Doyel, W. W. W 1360-F
 Drake, A. A., Jr. B 1032-C;
 P 400-B; GQ-133
 Drake, L. Y. C 179
 Drake, N. F. GF 103-104
 Drakoulis, Sophie B 1072-A;
 OM-200; Map, p. 213; (See also
 Vlissides, S. D.)
 Dreeszen, V. H. W 1468
 Dreher, F. C. C 247
 Drennen, C. W. C 267
 Drescher, W. J. C 247;
 W 1190, 1229, 1294
 Drewes, Harald P 400-B
 Dryden, Lincoln B 1042-L
 Dudley, W. L. MRUS 1883-84 h
 Duffner, R. T. C 89; GP-
 13, 14, 22-34, 52, 59; Map, p.
 236, 237
 Dunaven, R. R. B 958, 968,
 977; (See also King, R. R.)
 Duncan, D. C. B 979-B,
 982-B; C 291; OC-43; OM-94,
 118, 119, 125; Map, p. 224
 Duncan, Helen B 1012-A,
 1021-F; P 424-B, C
 Dunham, R. J. B 995-E,
 1015-F
 Dunlop, J. P. MRUS 1910
 I i, 1911 I k, 1912 I h, 1913 I f,
 g,hh, 1914 I c,d,e,i, 1915 I d,f,
 q,t, 1916 I d,e,o, 1917 I n,r,w,
 1918 I f,y,bb, 1919 I j,k,r,ff,
 1920 I c,m,n,nn, 1921 I c,l,t,
 mm, 1922 I c,p,r,pp, 1923 I b,
 f,r,cc
 Dunton, P. J. B 1084-I,
 1100-A
 Durfor, C. N. W 1262,
 1586-A
 Durham, D. L. OM-195,
 196
 Durum, W. H. C 126, 156,
 162, 163, 166, 188, 216, 238,
 243, 274, 445; P 424-C;
 W 1263, 1375, 1377
 Duryee, Edward B 213 j
 Dutro, J. T., Jr. B 1021-H;
 P 303-A, 334-D, 424-B, C;
 Map, p. 190
 Dutton, Carl E. B 1082-C;
 C 43, 84, 120; MF-99, 225;
 Map 3-212
 Dutton, Clarence Edward
 A 2 b, 4 b, 6 b, 9 b, 10 II c;
 M 2
 Dwornik, E. J. P 424-B
 Dwyer, B. C. W 1069
 Dyer, C. F. W 1475-D,
 1534
 Dynan, J. L. B 430-G
 E
 Eakin, H. M. B 442-H,
 449, 480-J, 520-I, 535, 542-G,
 578, 592-J, K, 622-B, C, G, I,
 631, 642-H, 662-B, 667, 699;
 W 1228
 Eakin, T. E. W 1228
 Eakins, L. G. B 60, 78,
 90, 113
 Eargle, D. H. B 1014;
 P 315-D, 400-B, 424-D; GP-
 198, 246-253; OC-20, 31, 35,
 OM-37, 50, 64, 71, 105
 Eaton, F. M. W 237
 Eaton, J. P. B 1021-D,
 1061-B; P 424-D
 Ebert, F. C. W 426, 468
 Ebner, M. J. B 1019-A
 Eby, J. B. B 812-C,
 1027-D
 Eckel, Edwin Butt B 902,
 922-R, 1114; C 430; P 219,
 327; W 836-B; Map, p. 190,
 192, 234
 Eckel, Edwin Clarence B 203b,f,k-
 n, 223, 225 i,j,l, 243, 260 h,l,o,
 275, 285-A, E, I, L, 315-A, N,
 400, 522; MRUS 1900 a, 1905 r,
 t,cc, 1906 b,c,t,v,ii, 1907 I b,
 II b, 1908 II e; W 93, 102
 Eckhart, R. A. B 989-C,
 1039-A, C, D.
 Eckstein, W. H. C 56; SP p.
 189; (See also Bergquist, W.
 E.)
 Eddards, M. L. C 374
 Edelen, G. W., Jr. HA-40
 Edgington, Glen P 196-F
 Edwards, G. J. C 97
 Edwards, J. D. P 264-H
 Eggleston, R. E. P 424-D
 Eichler, L. J. MF-122
 Eisenlohr, W. S., Jr. C 401;
 W 847, 1134-B
 Ekren, E. B. P 300, 400-
 B, 424-D; MF-132, 216, 217,
 221, 224
 Eldridge, G. H. A 16 II b,
 17 I f, 20 VII a, 22 I b; B 119,
 213 h, 309; M 27; GF 9
 Ellis, A. J. MRUS 1916
 II dd, 1917 II aa, 1918 II t, 1919
 II i; W 374, 375-B, 397, 416,
 446, 518
 Ellis, E. E. B 260 g;
 W 160, 232
 Ellis, M. W. P 299
 Ellsworth, C. E. B 379-E,
 442-F, 480-G, 520-H, 542-F,
 592-F; W 228, 342, 372, 488,
 850
 Elston, D. P. B 1084-E;
 P 320, 400-B, 424-C; OM-209
 Emerson, B. K. B 126, 159,
 311, 597; M 29; GF 50
 Emery, K. O. P 260-A, T;
 GP-211
 Emery, W. B. B 686-B
 Emley, W. E. MRUS 1913
 II jj
 Emmett, W. W. P 424-C
 Emmons, S. F. A 2 d, 16
 II d, 17 II c; B 1, 213 a,c, 225
 a, 260 a,f, 315-A, 320; MRUS
 1892 b; M 12, 27; P 26, 38, 148;
 GF 9, 38, 48, 65
 Emmons, W. H. B 260 b,
 285-A, B, 303, 315-A, 340-A,
 407, 408, 432, 470-C, 529,
 530 a, 625, 718; P 66, 78, 139;
 GF 131, 196
 Engel, A. E. J. B 973-E;
 P 400-B, 424-C
 Engel, C. G. P 400-B,
 424-C

- English, W. A. B 581-D,
621-M, 691-H, 721, 768
Englund, K. J. B 1020-A;
P 424-C; Map C-15, 39, 40;
GQ-172
Engstrom, D. B. I-235
Ensign, O. H. W 146
Erd, R. C. B 1045-F;
P 424-C
Erdmann, C. E. B 851;
C 172; P 332; W 866-A-C;
OM-87, 130, 170, 178-A, 178-
B; Map, p. 235
Eric, J. H. B 1074-E
Erickson, G. E. B 1017;
P 424-C
Erickson, E. T. P 186-D
Erickson, R. L. C 219
P 400-B, 424-B, D; MF-53
Erikson, J. E. B 1000-G
Ernst, W. G. B 1081-E
Erskine, H. M. W 1134-A
Erwin, M. I. C 258, 362
Espenshade, G. H. B 948-A,
1008, 1046-J; C 157; P 336,
424-C; GQ-54; MF-5
Eugster, H. P. P 400-B
Evans, H. T., Jr. P 320
400-B
Evans, L. P. B 580-P;
MRUS 1917 I t, 1918 I h, 1921
I m, 1922 I n, 1923 I e
Evensen, C. G. P 300
Evenson, R. E. W 1470
Everhart, D. L. P 300
Everhart, G. M. B 1003-A;
OM-136
F
Fahey, J. J. B 1006;
P 424-C
Fahnestock, R. K. P 424-B
Faick, J. N. B 1042-R
Fairbairn, H. W. B 980
Fairbanks, H. W. B 223,
GF 101
Fairchild, J. G. B 1006
Falck, Depue Map, p. 256
Farnsworth, H. R. B 835
Fath, A. E. B 641-E,
661-B, 756, 759; P 128-C
Faul, Henry B 1052-F,
I; C 353
Feeger, J. A. C 217
Fellows, A. L. W 74, 146
Fellows, R. E. B 963-B,
998-A
Feltis, R. D. P 424-C
Fenneman, N. M. B 213 h,
225 h, 260 j, 265, 282, 285-F,
297, 315-I, 438, 730-D; Map,
p. 255
Ferguson, G. E. W 1255
Ferguson, H. W. P 311
Ferguson, Henry G. B 540-A,
580-I, 610-F, J, 666-L, 715-L,
723, 725-I, 787, 795-F; MRUS
1916 II g, 1917 II h, 1918 I e,
II j; P 172, 216; GQ-7, 11, 12,
15, 23, 40, 45
Fernald, A. T. B 1071-G
Fernald, R. H. B 316-G,
393, 416
Ferrier, W. F. B 315-P
Fersman, A. Ye C 127
Feth, J. H. C 233;
P 424-B, D
Fiedler, A. G. W 596-A,
639, 660
Fieldner, A. C. C 11
Finch, E. H. B 795-G
Finch, Ruy Herbert B 974-D,
996-B
Finch, Warren I. B 1074-D,
1112-B; C 336; P 300, 320;
I 299; MF-16
Finkle, F. C. W 146
Finlay, G. I. GF 203
Finley, E. A. C 419;
OM-120, 176
Finnell, T. L. B 1081-A;
P 300; MF-120
Fischer, Elizabeth C. B 999;
MB 11, 14
Fischer, Richard P. B 936-P,
972, 988-A, 1101; P 300, 320,
400-B; MB-8, 13, 17; Map 3-
173, 226; Map, p. 226
Fischer, W. A. P 400-B
Fish, R. E. W 1414,
1415
Fishel, V. C. C 273;
W 887
Fisher, Cassius A. B 225 g, 260
m, 285-F, 316-C, 340-I, 341-C,
356, 424; P 53; W 158, 221;
GF 135
Fisher, Daniel J. B 852;
P 332
Fisher, Frances G. P 424-D
Fisher, Richard V. P 400-B
Fisher, W. L. B 505
Fitch, C. H. A 21 V g, h;
B 175
FitzGerald, Gerald B 933-D;
C 101
Fix, Carolyn E. B 1059-F
Fix, Philip F. P 300
Flanagan, F. J. P 400-B,
424-B
Fleischer, Michael B 1006,
1009-F, 1021-A; C 74, 194,
225, 285; P 424-B
Fletcher, Janet D. C 225
Fletcher, Mary H. B 1006;
C 199, 311
Flint, Arthur E. B 1027-K;
C 231; P 309; MF-15, 33, 40
Flint, Delos E. B 934-B
Flint, George M., Jr. B 989-B,
998-B; OM-15, 22
Flint, Richard F. B 1061-D;
P 262
Flores W., Hector B 964-E
Floyd, E. O. W 1545-A
Flynn, Benjamin H. W 91
Flynn, Margaret S. W 91
Foerste, A. F. M 33
Foley, F. C. W 1229
Follansbee, Robert W 207,
214, 469, 487, 500-C, 520-A,
G, 617, 796-B, 997
Follett, C. R. W 1079-C
Fontaine, W. M. A 19 II e,
20 II e; B 145; M 6, 15, 59
Foote, Royal S. P 300
Foran, W. T. B 772,
783-E
Forbes, R. H. W 320,
425-A
Ford, A. E. MF-237
Ford, Donald M. C 154
Forrester, J. D. Map, p. 190
Forsyth, J. L. I-316
Fortier, Samuel W 7, 43
Fosberg, F. R. P 424-D
Foshag, W. F. B 795-E,
935-C, 965-D
Foster, Frank W. B 1060-C
Foster, Helen L. P 400-B
Foster, Margaret D. B 1006,
1036-D; P 320, 354-B, E,
424-C; W 656
Fournier, R. O. P 424-C, D
Fowler, F. H. W 493
Fowler, H. C. C 11
Fowler, K. H. C 436
Fox, E. L. MB-12
Fox, Jeanette OM-184,
198
Fox, S. K., Jr. P 254-E
Foxworthy, B. L. P 424-C;
I-330
Franck, Mona B 1036-E
Fraser, G. D. B 1028-I,
M; P 400-B
Frayha, Resk B 964-C
Frazier, J. C. W. B 425
Frederick, B. J. P 424-D
Freedman, Jacob B 963-E;
P 310
Freeman, V. L. B 1030-J
1042-N; P 300
French, H. F. Map, p. 234,
235
Frezon, S. E. C 249;
P 314-H, 424-C
Friedman, Irving P 424-C
Friedman, S. A. Map C-44
Fries, Carl, Jr. B 922-M,
931-L, 935-C, 936-C, 946-C,
954-D, 960-D; P 424-D
Frischknecht, F. C. P 400-B,
424-D
Froelich, A. J. B 1085-B
Frondel, Clifford B 1036-G,
1064; P 300
Frondel, J. W. B 1009-F,
1036-G; C 74, 194
Frost, I. C. P 400-B,
424-C
Frye, H. M. B 788-A
Fryklund, V. C., Jr. B 1015-B;
P 400-B
Fryxell, F. M. Map, p. 253
Fuller, G. W. B 1030-L
Fuller, J. O. OM-20, 76
Fuller, M. L. A 22 III m;
B 213 g, h, 225 h, 264, 285-L,
298, 319, 494; MRUS 1905 mm,
rr, 1906 ee; P 82; W 101, 102,
110, 114, 120, 145, 160, 163,
255, 256, 258, 259; GF 84, 92,
93, 105
Fuyat, R. K. B 1006
G
Gabelman, J. W. P 300

- Gair, J. E. B 1044;
P 424-C; OM-155
- Galbraith, F. W. P 219
- Gale, B. T. GQ-98
- Gale, H. S. B 285-A, F,
297, 315-C, 316-E, 340-A, D,
341-C, 350, 381-B, 415, 430-B,
H, J, 470-A, H, 511, 523, 530 G,
540-N, O, S, 580-L, 612, 666-
N, Z, BB, 715-A, B; MRUS
1911 II p,dd, 1912 II q,ee,
1913 II z,bb, 1914 II t,ee, 1916
II i,z,aa, 1917 II z; P 85-A;
W 110, 780, 849-C
- Gallagher, David B 936-H,
946-F, 960-E, 975-B
- Gannett, Henry A 13 II d,
161 g, 171 b, 19 Va, 20 Va,
21 Va.g; B 5, 13, 76, 115-118,
122, 123, 154, 160, 166, 169,
171, 183, 190, 192, 197, 224,
226, 230-233, 248, 258, 274,
291, 302, 307, 394; MRUS 1882
I; M 22; P 4, 5, 9; W 44, 234;
Map, p.
- Gannett, R. W. P 172
- Gannett, S. S. B 214, 216,
234, 245, 276, 281, 288, 310,
342, 399, 411, 421, 650
- Gard, L. M., Jr. P 400-B;
GQ-38, 48, 56, 125
- Gardner, James H. B 315-I,
341-C, 381-C, 430-F
- Gardner, Julia P 131-D,
142, 189-F, 193-B, 199-A, B;
Map, p. 191
- Gardner, L. S. B 944-A,
953-B; OC-18, 19, 32; OM-43,
66, 106, 199
- Garmoe, W. J. C 302
- Garrels, R. M. B 948-C;
P 300, 320
- Garrett, A. A. W 1136,
1461
- Garrey, G. H. B 260 b,
285-A, 303, 407; P 63, 66
- Garrison, F. L. MRUS 1894
III k,l
- Gaskill, D. L. P 424-B
- Gates, George Laurence
P 305-B
- Gates, George Oscar B 936-M,
963-A
- Gates, Robert M. GQ-121
- Gatewood, J. S. C 387-391;
W 967-A, 1103
- Gault, D. E. P 424-D
- Gault, H. Richard B 947-B,
998-A, B; C 250
- Gay, J. R. P 196-E
- Gazdik, G. C. B 1019-I
- Gemmill, Paul MF-136
- Genth, F. A. B 74
- George, J. R. P 424-D
- George, William O. W 1138,
1481
- Gerry, C. N. MRUS 1908
I h, 1909 I h, 1910 I h, 1911 I j,
1912 I h, 1913 I i, 1914 I p,
1915 I o, 1916 I l, 1917 I u,
1918 I n,u,v, 1919 I x-z, 1920 I
s,u,v, 1921 I ee,kk,ll, 1922 I w,
x,ee, 1923 I w,x,z
- Geurin, J. W. C 197, 361
- Geyne, A. R. P 424-D
- Gianella, V. P. B 931-C
- Gibbons, A. B. P 400-B
- Gibson, Russell B 956; C 7
- Gidley, J. W. P 131-E,
140-B
- Gielow, D. G. P 400-B
- Gierhart, R. D. I-212 A, B
- Gignoux, J. E. MRUS
1882 e
- Gilbert, Charles M. B 971
- Gilbert, Francis P. GP-150-
153, 156, 194-196
- Gilbert, Grove K. A 2 c,g, 5 b,
17 II f, 18 II h; B 11, 306, 324;
M 1; P 69, 73, 85-C, 86, 105,
153; GF 36; Map, p. 254
- Gilchrist, S. A. GP-173-
175, 182, 189
- Giles, J. M. W 173, 209
- Gill, Adam C. B 712-D,
742
- Gill, James R. B 1009-I,
1055-D, F; C 228, 251; P 300,
400-B, 424-D; Map C-36
- Gillerman, Elliot B 973-F,
987, 1009-K
- Gillson, J. L. P 158-D, F
- Gilluly, James B 736-H,
772, 796-B, 806-C, 830-A,
846-A, 879; P 150-D, 173, 175-
C, 209, 266, 281, 400-B; Map
3-163
- Gilmore, C. W. P 98-Q,
103, 119, 210-C
- Gilpin, J. E. B 365, 475
- Girard, R. M. OM-33, 133
- Girty, G. H. A 19 III e,
20 I c; B 211, 326, 377, 389,
436, 439, 544, 593, 595, 598;
M 32; P 16, 58, 146, 150-E,
152, 154-B, 186-M, 193-C
- Giist, J. T. Map, p. 235
- Glass, J. J. B 936-K,
945-C, 1042-I
- Glenn, L. C. P 49, 72;
W 102, 114, 164
- Glenn, William MRUS 1895
III k, 1897 VI k
- Glick, E. E. C 249;
P 314-H
- Glover, Lynn, 3rd B 1087-E;
P 400-B; I-319, 335, 337
- Goddard, E. M. B 922-G,
931-O, 953-B, 1090; P 219,
223; SP p. 188; Map, p. 190,
234, 235
- Godfrey, R. G. P 424-C, D;
W 1543-B
- Godijn, Elizabeth P 400-B
- Golden, H. G. W 1460-I
- Goldich, S. S. B 953-C,
954-C
- Goldman, M. I. B 381-C,
686-W-Y; P 129-A, 146, 175-
D
- Goldsmith, Richard P 424-C, D;
GQ-138
- Goldthwait, R. P. I-316
- González, E. M. B 954-A
- González, R., Jenaro B 946-E,
965-D
- Gooch, F. A. B 27, 42, 47
- Good, J. M. P 400-B
- Good, S. E. C 55
- Goode, H. D. P 424-C;
MF-121
- Goode, R. U. A 18 I b, 19
I b, 20 I b, 21 I b; B 170, 181,
185, 201; P 45
- Goodell, E. B. W 103, 152
- Goodlett, J. C. P 347
- Goodrich, H. B. A 18 III b;
B 900-F, I, J
- Goodwin, A. B. C 382
- Goodwin, M. H., Jr. W 1110-E
- Gordon, C. H. P 68;
W 276, 317
- Gordon, E. D. W 1259
- Gordon, Mackenzie, Jr. B 964-D; P 283, 299, 424-C, D;
OM-12; Map, p. 226
- Gorman, J. M. OM-15, 22,
44
- Gorman, M. W. A 19 V h
- Gosman, R. F. C 326
- Goss, W. F. M. B 363, 402
- Gott, G. B. B 988-E,
1046-A; C 219, 220, 239, 290;
P 300; MF-55-60, 218
- Gottfried, David B 1070-B,
C, 1097-A, B; P 300, 424-B
- Gould, Charles N. B 223;
W 148, 154, 191
- Gould, E. E. Map 3-180
- Gould, E. R. L. MRUS
1886 n
- Gower, H. D. P 424-C;
GQ-129; OM-203
- Gowsell, M. G. P 33
- Graham, J. B. C 104, 257
- Graham, John A. B 1072-F
- Grametbauer, A. B. B 1019-N
- Granger, Arthur E. B 922-R;
C 296; MF-9
- Granger, Harry C. B 1046-P;
C 189, 220, 224; P 400-B
- Grant, U. S. B 260 g,
284, 379-C, 442-D, 443, 526,
587; W 145; GF 145
- Grantz, Arthur B 1024-D;
P 400-B, 424-C; I 312-314,
342, 343
- Graton, L. C. B 260 c,
285-A, 293, 430-B; MRUS 1906
e, 1907 I f,h; P 68, 144
- Graves, H. S. A 19 V b
- Gray, Carlyle P 400-B
- Gray, G. A. W 448
- Gray, R. J. C 343
- Green, J. H. W 1469
- Greene, F. C. B 541-F;
GF 206
- Greene, G. W. P 400-B
- Greenman, D. W. C 315
- Greenslet, E. R. Map, p. 256
- Gregory, H. E. B 165, 431-
A, B, 484; P 93, 164, 188, 220,
226; W 102, 114, 232, 374, 380,
397
- Grieve, Thomas, Jr. W 212
- Griffin, W. C. C 372;
P 424-B
- Griffitts, W. R. C 309;
P 248-A-E, 400-B, 424-B, C;
MB-9, 10

- Griggs, A. B. B 945-B, E;
P 400-B; MB-17; OM-141
- Griggs, R. L. C 354
- Grimaldi, F. S. B 992,
1006; C 199; P 300, 391-A,
400-B, 424-B, D
- Grimsley, G. P. B 223;
MRUS 1904 dd
- Grine, H. A. B 393
- Griscom, Andrew P 424-D
- Griswold, W. T. B 198,
213 h, 260 i, 318, 346; MRUS
1905 p,q, 1906 s
- Grivetti, R. M. OM-42;
Map, p. 224
- Grolier, M. J. I-330
- Gross, E. B. P 300
- Grossman, I. G. C 246;
P 424-C
- Grout, F. F. B 678
- Grover, N. C. W 125, 126,
146, 166, 167, 202, 203, 205,
400-D, 517, 536, 798-800, 838,
870, 994
- Groves, J. W. B 368
- Grundt, W. D. P 300
- Gruner, J. W. P 300
- Grunsky, C. E. W 17-19
- Gruett, E. W., Jr. P 300
- Gryc, George B 1094;
P 334-E
- Gualtieri, J. L. MF-123,
124, 139, 140, 150
- Gude, A. J., 3d B 988-F, C;
C 220, 320
- Guild, P. W. B 931-G,
936-B, G, 954-B; P 290
- Gullinger, R. R. B 1030-K
- Guillou, R. B. B 1042-I;
P 400-B
- Guiza, Reinaldo, Jr. B 953-A,
962-B, D
- Gulbrandsen, R. A. B 1015-I,
1042-A, 1111-C, D; C 301;
P 400-B; MF-238
- Guttig, N. S. 3 1006
- Guy, H. P. P 414-C
- Guyton, W. F. W 889-C
- H
- Haas, Frank B 425
- Hack, J. T. P 267-A,
294-B, 347, 354-A, 400-B
- Hackett, O. M. W 1375,
1482
- Hackman, R. J. P 400-B;
1-6, 7, 18, 22, 23, 26, 27, 29,
30-32, 34, 42, 46, 50, 52, 76,
90-97, 157-159, 165, 172-174,
176, 183-185, 233, 238, 244,
245, 248, 251, 259, 274, 278,
279, 281, 351
- Hadd, G. A. B 1046-H
- Hadfield, R. A. MRUS 1887 f
- Hadley, Herbert D. OC-18, 19,
32; CM-43
- Hadley, Jarvis B. B 931-S,
948-E; GQ-3, 4
- Hadley, Richard F. C 437;
- Hadley, Richard F. C 437;
P 352-A, 424-B, C; W 1531
- Haffty, Joseph C 445;
P 424-B; W 1540-A
- Hagner, A. F. MF-119
- Hague, Arnold A 3 e; B 17;
M 20, 32; GF 30, 52
- Hahn, G. W. P 424-C
- Hahn, G. H. MRUS 1882 f
- Haigler, L. B. OM-177
- Hail, W. J., Jr. B 1046-E,
1055-H; C 251; P 300, 400-B;
OM-108;
- Haines, D. V. B 1045-E
- Hains, C. H. C 110
- Hains, Charles F. W 1110-D
- Hait, M. H., Jr. P 424-B
- Halberg, H. N. W 1499-A
- Hale, M. D. C 440;
- Hale, S. A. MRUS 1921
II gg, 1922 II gg
- Haley, B. R. B 1072-P;
P 424-C; Map C-3, 7, 10, 12-
14
- Hall, Benjarin M. W 107, 146,
197
- Hall, Charles M. W 90; GF
100, 114, 117
- Hall, Christopher W. B 157;
W 102, 114, 256
- Hall, Clarence B 333, 423
- Hall, Frances R. C 299;
W 1533; HA-15-25
- Hall, George M. B 856;
W 596-C, 599
- Hall, M. R. W 127, 128,
168, 169, 197, 204, 205, 345-E,
375-E
- Hall, William C. B 306;
W 115
- Hall, W. E. W 345-E
- Hall, Wayne E. P 424-B
- Hallgarth, W. E. OC-59
- Hallock, William B 42, 55,
60, 64, 78
- Halmos, E. E. W 848
- Halpenny, L. C. W 1103,
1360-D
- Ham, W. E. B 1061-A;
P 285; OM-22
- Hamilton, E. L. P 260-W
- Hamilton, J. C. P 400-B,
424-B
- Hamilton, Warren P 311,
400-B, 424-C, D
- Hamlin, Homer W 89, 112
- Hamlin, Howard P. P 424-C
- Hammond, G. A. W 146
- Hamontre, H. C. B 1052-G
- Hampton, E. R. P 424-B
- Hance, J. H. B 471-D,
531-K, 540-P; MRUS 1912 II g,
1913 II dd
- Hancock, E. T. B 691-D,
711-G, 716-B, C, E, 726-A,
757, 806-D, 812-C; P 90-K
- Hanley, J. B. P 227;
GQ-120
- Hanna, F. W. W 146, 147,
162, 169-171
- Hanna, Jane Map, p. 213
- Hansen, B. E. B 1056-B
- Hansen, W. R. B 1038;
P 400-B, 424-B; GQ-75, 101;
1-156, 322, 324
- Hanshaw, P. M. P 400-B
- Harbaugh, J. W. B 1000-A
- Harbeck, G. E., Jr. C 23, 103,
282; P 272-A, B, 298; W 1360
-A, 1460-I, 1480
- Harbour, R. L. B 1072-G;
OM-174, 183
- Hard, H. A. B 801;
- Harder, A. H. W 1294,
1488
- Harder, E. C. B 338, 380-
E, 427, 430-D-F, 503, 660-A,
666 EE; MRUS 1907 I c, 1908 I
b,c,r,u; P 113
- Hardin, G. C., Jr. B 1012-B,
E, 1042-S
- Hardison, C. H. C 108; P
424-C; W 1541-B
- Hare, R. F. W 343, 422
- Hares, C. J. B 627, 641-
1, 775; OM-51, 60
- Harner, R. S. B 1015-B
- Harrell, M. A. W 836-B
- Harrington, A. W. W 867
- Harrington, G. L. B 642-H,
662-F, 683, 692-F, G, 714-E,
F, 754
- Harris, G. D. B 84, 429;
W 101
- Harris, Joseph P 424-C
- Harris, L. D. P 400-B;
GQ-111, 172; OC-48
- Harris, R. A. B 1018
- Harrison, J. E. B 1032-B;
C 213, 345; P 319, 374-B,
424-B
- Harriss, T. F. I-208 A, B
- Harshbarger, J. W. C 308;
P 291
- Harshman, E. N. P 424-C
- Hartman, Olga P 260-Q
- Hartshorn, J. H. P 424-C;
GQ-127
- Hartssock, Lydia C 127
- Hartwell, O. W. W 867
- Harvey, E. J. W 1356,
1460-I
- Haseltine, R. M. A 22 III d
- Hass, W. H. P 243-F,
286, 294-J
- Hastings, W. W. W 1047,
1138
- Hatcher, J. B. B 257;
M 49
- Hatchett, J. L. C 308;
W 1354, 1374
- Hathaway, J. C. B 1021-G;
P 320, 424-C
- Haushild, W. L. P 424-C, D
- Havens, J. S. P 424-B
- Havens, Raymond G. B 1084-I;
P 400-B, 424-C
- Hawkes, H. E., Jr. B 936-D,
955-A, 973-A, 995-D, 1000-B,
F; C 28; GP-1, 2, 117, 118
- Hawkins, D. B. P 400-B
- Hawley, C. C. P 400-B;
MF-173
- Haworth, Erasmus B 238,
260 j,l,m, 296; W 6
- Hay, Oliver P. B 179
- Hay, Robert A 16 II f;
B 57, 137

- Hayes, C. W. A 17 II e,
19 II a, 21 III d,e, 22 III a,e;
B 212, 213 a, f-h,m,n, 225
a, 260 a, 285-A, 315-A, E,
340-A, M, 380-A, 394, 465;
MRUS 1893 f, 1894 III h, IV n,
1898 VI (cont.) j; GF 2, 4, 6, 8,
19-22, 35, 78, 95
- Hayes, P. T. P 400-B,
424-B, C; GQ-98, 112; CM-144,
149
- Haynes, Donald D. P 424-D
- Haynes, Elwood MRUS
1912 I k
- Heald, K. C. B 621-B,
641-B, 686-E, G, K, M, P-R,
Z, 691-C, 736-H, 786-A
- Healey, D. L. P 400-B
- Heath, R. C. P 424-C, D
- Heck, W. E. Map C-5
- Hedlund, D. C. P 424-B;
MF-122
- Heidel, S. G. P 424-C
- Heikes, V. C. B 340-B,
620-I, 640-A, 782; MRUS 1904
c, 1905 d, 1906 d, 1907 I e, 1908
I h, 1909 I h, 1910 I h, 1911 I j,
1912 I d,h, 1913 I x,c,ff,ii,
1914 I m,p, 1915 I o, 1916 I g,
1917 I q,s,u, 1918 I m,q,r,
1919 I u-w, 1920 I h-j, x-z,
1921 I o-r,ff,gg,jj, 1922 I d-f,
i,z,bb,ff, 1923 I i-k,o,yaa,bb;
- Heilprin, Angelo A 4 e
- Heindl, L. A. W 1589
- Heinrich, E. W. P 227, 248-
A, F, G
- Helland, R. O. W 558, 995
- Hely, A. G. HA-11
- Helz, Armin W. B 1084-J;
P 400-B, 424-B-D
- Hem, J. D. C 203;
P 424-D; W 1103, 1104, 1110-C,
1459-A-E, H, 1473, 1535-C
- Hembree, C. H. C 170, 270;
W 1357, 1373, 1535-E
- Hemley, J. J. P 424-C, D
- Hemphill, W. R. B 1043-C,
D; 1-83, 121, 133, 250, 262,
280, 294, 302
- Henbest, L. G. P 189-G,
196-A, D, 400-B; SP p. 189;
OC-2, 44
- Henderson, Charles W. B 846-C;
MRUS 1908 I h, 1909 I h, 1910
I h, 1911 I j, 1912 I h, 1913 I d,
k,y, 1914 I h, 1915 I o, 1916 I
g, 1917 I q,z,bb, 1918 I i,j,o,p,
ii, 1919 I bb,cc,nn,oo,qq, 1920 I
o,p,oo,pp,qq, 1921 I hh,ii,nn-pp,
1922 I s-v,gg, 1923 I dd-hh;
P 138, 169
- Henderson, Edward P. B 833;
P 154-C
- Henderson, John R., Jr.
P 316-B; GP-[4], 7-14, 21-45,
52-76, 91-114, 128-135, 156-
189, 215, 216, 221, 223, 225,
227, 228, 230, 231, 233-238;
Map, p. 236, 237
- Henderson, Roland G. B 1052-D;
P 400-B
- Hendricks, Ernest L. C 434;
P 387-A; W 1110-E, 1364
- Hendricks, Sterling B. P 205-B
- Hendricks, Thomas A. B 847-E,
874-A, D; P 193-F, 221-E,
424-B; OC-18; OM-1, 66;
Map, p. 224
- Hendrickson, G. E. P 424-D;
HA-10
- Hendrixson, W. S. W 293
- Hengst, J. H. B 886-A,
900-A, C
- Henrickson, E. L. OM-16, 27,
35
- Henshaw, F. F. B 314-J,
345-E, 379-F, 442-I, 836-C;
W 196, 218, 298, 313, 314, 344,
370
- Herald, F. A. B 471-D,
531-E, 726-D
- Hernon, R. M. P 424-C
- Heroy, W. B. B 713
- Herrick, E. H. HA-42
- Herrick, H. N. B 223
- Herrick, S. M. C 148;
P 424-B, D
- Herron, W. H. W 396, 417,
419-421
- Herz, Norman GQ-108,
139
- Hess, F. L. B 259, 260
c, 280, 284, 285-J, 328, 337,
340-D, 355, 380-D, 413, 430-A,
F, 470-E, 520-B, 530 c,h, 583,
652, 666 v, 725-D, 750-A, D,
761, 780-C; MRUS 1905 m,
1906 j-l,n,aa,tt, 1907 I m,n,p,
II d,f, 1908 I m-q,s, II m, 1909
I m-t,x, II m,q, 1910 I m-s, II
n, 1911 I o-v, x-z,aa, II o, 1912
I k-u, II p, 1913 I l-o, q-w,
1914 I u-z, aa-ff, 1915 I r,s,
u-z,aa-dd, 1916 I s-x, 1917 I ee
-jj, 1918 I cc-hh,II, 1919 I gg-
mm, 1920 I ff-hh, 1921 I w-z,
aa-cc, 1922 I hh-nn, 1923 I q
- Hetland, D. L. P 300
- Heuser, J. F. W 849-A
- Hewett, D. F. B 530 h,
540-C, R, 541-C, 640-C, 656,
660-J, 666-C, 725-E, 750-E,
795-H, 814, 871, 921-A; MRUS
1912 I c, 1913 I e, 1914 I f,
1915 I e, 1916 I q, 1917 I y,
1918 I z; P 145, 162, 261, 275;
W 819
- Heyl, A. V., Jr. B 1015-G,
1042-F, 1082-B, K; C 131;
P 274-K, 309, 400-B, 424-D;
MF-3
- Heyman, A. M. C 290
- Hibbard, D. E. B 1021-K
- Hickcox, C. A. B 963-E,
989-G; Map, p. 226
- Hicks, W. B. B 660-B,
715-I; MRUS 1915 II I, 1917 II
z, 1918 II r, 1919 II f; P 95-A,
E, 98-A
- Hidden, W. E. B 285-E
MRUS 1882 j
- Hietanen, Anna P 424-D
- Higgins, D. F., Jr. B 379-C,
442-D, 443, 526
- Hildebrand, F. A. B 1036-N;
P 400-B, 424-B
- Hilgard, E. W. MRUS 1882 I
- Hill, Belle MRUS
1906 r, 1907 II a, 1908 II c,
1909 II c, 1910 II c, 1911 II c,
1912 II c, 1913 II ii
- Hill, Benjamin F. B 223
- Hill, David P. P 424-B
- Hill, Dorothy R. B 1001
(See also Radbruch, D. H.)
- Hill, James Madison B 380-A,
430-A, D, 470-B, 507, 530 a,
540-D, F, 580-D, 582, 594,
620-L, M, 648, 666-D, O, W,
725-C, 735-J, 849-B; MRUS
1912 II w,x, 1913 II e,i, 1914
I j, II f,g,k, 1915 I c,g, II o,
1916 I b,f,g, II k,p, 1917 I d,e,
I, II b,u, 1918 I k,l,w, 1919 I
c-g,i, 1920 I f,g, 1921 I j,s,
1922 I k,o,cc,dd, II h, 1923 I
c,d,u,v, II b; P 94
- Hill, James Wilcott B 988-E
- Hill, Jarvis L. B 1061-B
- Hill, Mary E. GP-15-18,
46-51, 117, 118; Map, p. 236
- Hill, Robert T. A 18 II b,
21 VII; B 45, 151; MRUS 1891
h, 1892 h, 1893 h, 1898 VI
(cont.) u; GF 42, 76
- Hillebrand, W. F. B 20, 55,
64, 78, 90, 113, 148, 167, 176,
253, 262, 275, 305, 405, 422,
700
- Hills, R. C. GF 58, 68,
71
- Hilpert, L. S. B 988-A,
1030-J; P 300, 424-B
- Hilton, G. S. MB-20
- Hinderlider, M. C. W 131, 133,
147, 172, 173, 175, 176
- Hinds, Henry GF 206, 208
- Hindshaw, H. H. MRUS 1904 ss
- Hinrichs, E. N. B 1082-D;
C 220; P 400-B, 424-D; MF-
100-115
- Hite, R. J. P 424-D
- Hoare, J. M. P 268;
1-285, 292, 321, 339
- Hobbie, J. E. P 400-B
- Hobbs, S. Warren B 931-D, I,
940-I, 945-D, 972, 1098-A;
P 400-B
- Hobbs, William H. A 21 III a,
22 II a; B 213 c, 270
- Hodges, P. V. W 520-G
- Hoekstra, H. R. P 300
- Hofman, H. O. MRUS 1883-84 f
- Hofmann, R. B. P 400-B,
424-C
- Hofmann, Walter C 399
- Hoggatt, R. E. C 440
- Hohl, C. D. P 144
- Holbrook, G. F. W 556
- Holden, E. S. B 95
- Holden, R. J. B 285-E
- Hole, A. D. GF 171
- Holk, Margery OC-41
- Holland, W. T. W 837

- Hollick, Arthur M 26, 35, 50; P 159, 182; GF 83
 Hollister, G. B. W 88, 94, 108, 145
 Holmberg, G. D. C 356
 Holmes, C. N. Map C-2; OM-34, 86, 125
 Holmes, J. A. B 261, 290, 324, 329, 332, 333, 336; MRUS 1895 III (cont.) J, 1898 VI (cont.) n, 1902 oo; P 48
 Holser, W. T. P 318
 Holt, C. L. R., Jr. W 1422
 Holt, R. D. OM-5, 29, 89
 Holtz, H. C. B 694
 Holze, A. F. I-317
 Honkala, F. S. B 1042-A; C 260
 Hood, O. P. W 14
 Hooker, Marjorie B 958, 968, 977, 985, 1049
 Hoos, H. W. B 780-B, 796-D, 804, 806-D, 812-D; P 154-E, 165-C
 Hoover, Linn, Jr. Map C-8; OM-150, 188
 Hopkins, D. M. B 963-E, 974-C; P 264-F, 400-B
 Hopkins, G. R. C 11
 Hopkins, O. B. B 641-D, 661-C, F-H, 686-H, S, 736-A, G
 Hopkins, T. C. MRUS 1895 III (cont.) e, 1896 V (cont.) d
 Hopper, W. L. Map, p. 256
 Hoppin, R. A. C 210, 262
 Horn, G. H. OM-103, 164, 185; Map, p. 235
 Horr, C. A. B 1100-A; C 420; P 300; W 1496-A
 Horton, A. H. W 205-207, 334, 536, 579
 Horton, F. W. MRUS 1905 h, j
 Horton, R. E. P 44; W 125, 129, 145-147, 150, 162, 166, 170, 180, 187, 200
 Hose, R. K. B 1027-B; P 424-D; OC-43; OM-118, 142; Map, p. 191
 Hosford, G. F. C 211
 Hoskins, L. M. A 161 f
 Hosterman, J. W. B 1027-M, P, 1091; P 400-B, 424-B; GQ-169, 170
 Hotz, P. E. B 955-A, 969-A, 978-B, D, 982-C, F, 995-F; P 424-D; MF-161
 Hough, Jean P 221-H, 243-G
 Houser, F. N. P 400-B, 424-B, D; I-328; MF-132, 216, 217, 221, 224
 Houser, S. S. C 281
 Houston, J. R. B 1058-A; C 196
 Houston, M. S. C 21, 25, 27, 38
 Hovey, E. O. MRUS 1901 vv, 1903 t, dd, ee, 1904 l-n, t, ee, ff, 1905 bb-ee, jj, oo
 Howard, A. D. P 326
 Howard, C. S. C 203, 232; W 560-C, 576, 596-B, E, G, 599, 636-A, B, 638-D, 659-C, 942, 970, 998
 Howard, Hildegard P 264-J
 Howe, Ernest A 21 III b; P 67; GF 120, 131, 153
 Howe, H. M. B 26
 Howe, J. L. B 694
 Howe, M. A. P 170-E
 Howell, R. W. B 621-G, 806-A
 Howland, A. L. B 922-N, 948-C, 1071-H, 1015-D
 Hoyt, J. C. B 314-J, 442-C; W 94, 97-100, 109, 115, 119, 124-132, 166-174, 177, 196, 295-300, 372, 400-D, 680, 820
 Hoyt, W. G. W 337, 345-I, 520-C, 657, 772
 Hoyte, A. F. P 400-B
 Hubbard, G. D. GF 197
 Hubbell, D. W. C 205; P 424-D; W 1476, 1593
 Hubbert, M. K. B 942
 Huddle, J. W. B 1027-L; C 16; P 233-D; GQ 170; OC-10; OM-75, 115
 Huff, L. C. B 1000-C, 1015-H; P 424-B; MB-3; MF-100-115, 163-167
 Huffman, Claude, Jr. P 400-B, 424-B, C
 Hufschmidt, E. L. C 272
 Hughes, G. H. P 272-B, 300
 Hummel, C. L. P 400-B, 424-D
 Humphrey, R. L. B 324, 329, 331, 344, 370
 Hunt, Alfred E. MRUS 1892 f, 1895 III i
 Hunt, Alice P. P 424-B
 Hunt, Charles B. B 847-F, 860-B, 876, 936-L, 979-B, 996-A, C; P 189-B, 193-F, 221-G, 228, 257-A, 279, 294-I, 400-B, 424-B; CM-70, 131, 158
 Hunt, James L. GQ-113
 Hunter, J. F. B 530 h, 540
 -K, 580-C, 777; P 90-B, 98-I
 Hussey, K. M. P 400-B
 Hutchins, J. P. B 345-A
 Hutchinson, H. C. Map C-27
 Hutson, W. F. W 13
 Huxel, C. J., Jr. P 424-D
 Hyatt, Alpheus M 44; P 40
 Hyden, H. J. B 1100-B; P 300; MF-83
 I
 Iddings, J. P. A 7 c, 12 I e, 14 II i; B 17, 66; M 32; P 18; GF 1, 30
 Ihlseng, M. C. MRUS 1895
 III (cont.) k
 Iles, M. W. MRUS 1883
 -84 f
 Imlay, R. W. P 214-B, 249-A, B, 274-D, 314-G, 334-F, 354-D; I-175; OC-3, 8, 32
 Ingerson, Earl P 400-B
 Insley, Herbert MRUS 1918 II bb, 1919 II c, p, s
 Ireland, Burdge C 221; W 1364
 Ireland, H. A. OC-5; OM-52
 Irving, Earl M. B 1034
 Irving, John D. B 225 b, 260 b, 320, 478; P 26, 148; GF 131, 153
 Irving, Roland D. A 3 c, 5 d, 7 e, 10 I c; B 8, 23, 62; M 5, 19
 Irwin, J. H. P 291
 Irwin, W. P. P 400-B, 424-B; MF-220
 Isachsen, Y. W. P 300
 Iseri, K. T. W 1541-A
 Israelisky, M. C. P 240-A, B
 Ivey, J. B. C 254
 Izett, G. A. B 1082-J; P 424-B
 J
 Jack, J. G. A 20 V b
 Jackson, D. D. W 144
 Jackson, Everett D. P 358, 400-B, 424-C; MF-238
 Jackson, H. J. W 334
 Jackson, Roy O. I-204 B
 205 B, 210 B, 212 A, B, 216 A, B, 217 A, B
 Jackson, Wayne H. P 400-B, 424-B
 Jacobsen, E. T. B 1027-L
 Jaffe, Elizabeth B. C 135; P 300
 Jaffe, Howard W. B 1070-B, 1097-A, B
 Jaggar, T. A., Jr. A 21 III b; P 26; GF 126
 Jahns, R. H. B 945-C; P 225, 248-A-C, F; W 996; GQ-9, 21
 Jalichandra, Nitipat B 984
 James, Harold L. B 922-O, P, 945-F; C 26, 120; P 310, 314-C; MF-225; Map 3-213; Map, p. 236
 Janes, Willard W. P 424-D
 Jarboe, W. S. MRUS 1883
 -84 b
 Jarvis, C. S. W 771, 837
 Jaster, M. C. B 1019-H, 1027-I, 1105
 Jenison, H. A. C. MRUS 1919 I m, aa, 1920 I w, II, 1921 I h, dd, II y, 1922 I y, oo, II t
 Jenkins, Harold D. B 900-B, D, H
 Jenkins, Lillie P 424-B
 Jenks, C. N. MRUS 1895
 III (cont.) j
 Jenney, W. P. A 19 II e
 Jespersen, Anna C 149
 Jessup, L. T. W 841
 Jetter, K. R. W 1526
 Jobin, Daniel A. P 300, 424-B; MF-18
 Jochens, E. R. C 270; W 1298, 1410, 1424, 1483
 Joesting, H. R. P 316-A, C, 400-B, 424-D; GP-[4]
 Johannsen, Albert B 352

- Johnson, Arnold I. C 453;
P 424-D; W 1539-R
- Johnson, Arthur C 280, 337,
364, 379, 401, 403, 412, 428,
448
- Johnson, Bertrand L. B 442-F,
520-E, 542-D, 587, 592-G, 605,
622-E, 642-D, 662-C, 692-C;
MRUS 1919 I pp, 1920 I mm,
1921 I k, 1922 I q, 1923 I h;
P 98-C; W 163
- Johnson, Carlton R. W 1360-H,
1474, 1489
- Johnson, Chester O. OC-13, 14,
17; OM-53
- Johnson, Donald H. B 1009-A
- Johnson, Douglas W. W 122;
Map, p. 255
- Johnson, Edward, Jr. W 128, 129
- Johnson, Frederick A. C 85;
W 1610-A
- Johnson, George Arthur
W 315
- Johnson, George E. W 848
- Johnson, Gordon R. P 424-C
- Johnson, Harry R. B 380-L,
406; W 278
- Johnson, Henry S., Jr. B 1046-D,
1087-B, C; P 424-C
- Johnson, Hollister W 773-E
- Johnson, Jesse C. P 300
- Johnson, Jesse Harlan P 185-B,
260-M, 280-C, E
- Johnson, Lawrence C. B 43;
W 102, 114, 159
- Johnson, Mike S. B 1021-K
- Johnson, M. W. P 260-F
- Johnson, Ross B. B 1042-O,
1051, 1071-D, 1112-E; P 424-C;
Map C-4, 20, 26; OM-146,
161, 183
- Johnson, Robert F. B 975-E;
P 424-D
- Johnson, Robert W. P 400-B;
GP-125-127
- Johnson, Vard H. B 948-D;
Map, p. 224
- Johnson, Wendell B. C 79, 106
- Johnson, Willard D. A 21 IV c,
22 IV c
- Johnson, William David, Jr.
B 1076; OM-139, 148
- Johnston, A. Walfred B 660-A
- Johnston, John E. Map C-5,
22
- Johnston, Paul M. C 275, 424
- Johnston, William Drumm, Jr.
B 984; P 194
- Jonas, A. I. B 799, 828,
840; P 98-B; (See also Stose,
A. J.)
- Jones, Benjamin E. C 200, 227,
263, 329; W 491, 558, 636-F,
637-C, 638-B, 866-B, 995
- Jones, Blair F. P 424-B, C
- Jones, David L. P 334-E,
400-B
- Jones, E. E. W 487
- Jones, Edward Leroy, Jr.
B 530 a, 540-E, 620-C, H, 640-B,
E, 710-A, B, D-F, 715-C,
D, 732
- Jones, Fayette A. MRUS
1904 c
- Jones, Harriet N. B 1059-D
- Jones, J. H. MRUS
1893 g
- Jones, L. M. MRUS 1921
I qq
- Jones, Paul H. P 424-D;
W 968-D, 1364
- Jones, R. P. C 192
- Jones, Robert S. C 303
- Jones, William R. B 948-C,
1071-H; P 424-C
- Jopling, A. V. P 424-D
- Jordan, Paul R. C 406
- Jorrian, William, Jr. B 331
- Jussen, V. M. B 1025,
1035, 1054, 1065, 1075, 1095,
1115
- K
- Kachadoorian, Reuben B 1139;
P 424-D; I-307, 308
- Kaiser, E. P. B 1015-B,
1030-N; C 137, 220; GP-116
- Kam, William C 434
- Kammerer, J. C. C 449;
W 1591-A
- Kane, M. F. P 400-B,
424-C, D
- Karlstrom, T. N. V. B 1021-J;
P 264-F, 400-B; I-269
- Katz, Frank J. B 379-E,
442-E, 480-F, 485, 500, 525,
530-E, 660-J, 666-K; MRUS
1912 II o, aa, 1913 II j, m, o,
1914 II aa, bb, dd, 1915 II g, h, j,
1916 II j, l, s, 1917 II j, p, q, 1918
II q, gg, 1921 II r, 1922 II u, aa,
1923 I a, II v, aa; P 108-B, I
- Katz, Joseph J. P 300
- Kay, G. F. B 315-C,
340-A, 380-A, 580-E; GF 218
- Kaye, C. A. B 1071-I;
P 317-A-C, 424-B; GQ-26
- Keech, C. F. C 139;
W 1468, 1474; HA-12
- Keefer, Eleanor K. OM-107;
Map, p. 213
- Keefer, William R. P 294-E;
OC-56; OM-118, 166, 172
- Keeler, J. E. B 68;
P 400-B
- Kehn, T. M. B 1059-A;
Map C-19
- Keighton, W. B. W 1262
- Keith, Arthur A 14 II f;
B 213 f, i, o, 225 e, 660-D;
P 38, 108-B, 139; GF 10, 16,
25, 27, 33, 40, 70, 75, 90, 116,
118, 124, 143, 147, 151, 222
- Keller, A. Samuel B 1058-G;
P 303-D
- Keller, Fred, Jr. P 260-L;
GP-13, 14
- Keller, George V. B 1052-H,
J, 1083-B, D; P 400-B, 424-D
- Keller, Walter D. P 320
- Kelley, L. A. OM-168
- Kelley, Vincent C. P 300;
OM-47, 81, 157; Map 3-211
- Kellum, L. B. P 143; Map,
p. 226
- Kelton, F. C. W 320
- Kemp, J. F. A 19 III d;
B 107, 193, 225 o; MRUS 1902 h
- Kennedy, George C. B 947-C, D,
1028-A; P 251
- Kennedy, Luther E. B 900-A-F,
I
- Kennedy, Richard A. W 1426
- Kennedy, Vance C. B 1000-E,
1098-A; C 168; MF-142, 152
- Kennedy, William B 212
- Kennon, F. W. P 424-B;
W 1475-B
- Kent, Bion H. I-13, 28,
39, 81, 105, 120; OM-171
- Kent, D. F. B 975-A;
C 71
- Kent, Lois S. SP p. 189
- Kent, William MRUS 1889
-90 b
- Kepperle, R. C. B 995-E, I,
1015-E, 1046-R, 1055-E; Map
C-38
- Keroher, Grace C. B 1056-B
- Keroher, Jewell K. OM-74;
(See also Kirby, Jewell J.)
- Keroher, Raymond P. SP p. 189
- Kerr, G. M. Map, p. 256
- Kerr, Joe H. I-236
- Kerr, Paul F. P 165-E,
185-G, 300
- Kerr, W. C. MRUS
1882 n
- Kesler, T. L. B 936-A, J;
P 224
- Ketner, K. B. B 1074-C
- Kew, W. S. W. B 691-M,
753; P 207
- Keyes, C. R. A 15 g;
B 121; W 123
- Keys, W. S. P 300
- Killeen, P. L. B 1024-C;
C 250, 255, 331
- Kilpatrick, F. A. P 424-C
- Kimball, L. L. MRUS 1902
w, 1904 w, 1905 r,
1906 t
- Kindle, E. M. B 244,
260 n, 285-E, 391, 508; W 145;
GF 169, 190
- Kindsvater, C. E. C 284;
W 1369-A, B
- King, Clarence A 1, 2 a, f
- King, Elizabeth R. P 400-B,
424-B, D
- King, Franklin H. A 19 II b
- King, John W. P 300
- King, Norman J. C 256;
P 424-B; W 1475-A
- King, Philip B. B 901, 940-
B; P 187, 215, 230, 311, 424-B;
OM-2, 18, 36, 90; Map, p. 253
- King, Robert E. OM-36
- King, Robert U. C 215, 220
- King, Ruth R. B 1025,
1035, 1049, 1054, 1065, 1075,
1095, 1115; (See also Dunaven,
R. R.)
- Kingston, Jack B 943-C
- Kinkel, A. R., Jr. P 285
- Kinney, D. M. B 1007;
MF-1; OM-12, 82, 123, 128,
154
- Kinnison, H. B. C 180;
P 400-B; W 636-C, 836-A, 867

- Kinser, C. A. C 330;
P 400-B, 424-B
- Kirby, Jewell J. OM-3, 19;
(See also Keroher, Jewell K.)
- Kirby, John R. GP-138,
139, 154, 155
- Kirchhoff, Charles, Jr. MRUS 1882
e-g, 1883-84 e-g, 1885 e-g,
1886 c-e, 1887 c-e, 1888 c-e,
1889-90 c-e, 1891 c-e, 1892 c-
e, 1893 c-e, 1894 III c-e, 1895
III c-e, 1896 V c-e, 1897 VI d-
f, 1898 VI d-f, 1899 VI d-f,
1900 d-f, 1901 d-f, 1902 d-f,
1903 e-g, 1904 d-f, 1905 e-g
- Kirk, C. T. B 900-B,
G, H; MRUS 1907 I e
- Kirk, Edwin P 110, 233
-C
- Kirschner, C. E. OM-95
- Kiser, R. T. C 203, 232
- Kister, L. R. C 374;
W 1365, 1367
- Klaer, F. H., Jr. W 999
- Klein, Howard C 314;
P 424-D
- Kleinhampf, F. J. B 1046-O,
1085-B, C; P 300; GQ-157;
MF-177, 239
- Klemic, Harry B 1046-B,
1074-E, 1082-B; C 350; P 400-
B, 424-D
- Klepper, M. R. B 964-C,
969-C, 1042-N, 1046-F; C 260;
P 248-F, 292, 300
- Klepser, H. J. B 1012-F
- Klug, M. F. W 1487
- Knapp, G. N. W 114;
GF 162
- Knappen, R. S. B 797-F,
822-A
- Knechtel, M. M. B 874-B,
905, 940-F, 1023, 1072-N;
C 150; P 400-B; W 796-F;
MB-11; MF-36; OM-4, 66;
Map, p. 224
- Knight, James B. OM-2, 36
- Knight, Wilbur C. B 223
- Knopf, Adolph B 314-F,
327, 345-E, 358, 379-D, 417,
442-C, 446, 480-D, 502, 504,
527, 540-B, 580-A, D, 620-A,
D, 640-G, L, 660-H, I, 715-K,
725-H, 735-A, 762, 785-A;
MRUS 1916 I m, 1917 I m, 1918
I d, 1919 I pp; P 110, 114, 157,
171
- Knopf, E. B. B 725-B,
799; (See also Bliss, E. F.)
- Knowles, D. B. W 1426
- Knowlton, F. H. A 18 III e,
19 II e, 20 II e, III a, 21 II c,
III a; B 56, 105, 152, 163, 204,
257, 696; M 17, 32; P 73, 85-D,
98-H, S, 101, 108-F, 130, 131-
F, G, 134, 140-A, 155
- Knox, C. E. C 381, 384;
W 1105, 1499-A; HA-7
- Koberg, G. E. P 272-B,
298, 424-B
- Kohler, M. A. P 298
- Kohout, F. A. P 424-D;
W 1355, 1360-E, 1424
- Koloseus, H. J. P 424-B
- Koogle, R. L. GQ-112
- Koopman, F. C. C 198;
W 1425
- Kopf, R. W. B 1056-A
- Koschmann, A. H. B 936-K,
955-B, 964-D; P 200, 400-B;
Map, p. 254
- Koteff, Carl B 1085-C;
P 424-C
- Kottowski, F. E. Map C-11,
28, 41
- Kovar, A. J. P 400-B
- Kover, Allan N. I-315
- Kraemer, A. J. C 11
- Kramer, W. B. OM-185;
Map, p. 234
- Kreisinger, Henry B 367, 403,
412
- Kremp, G. O. W. P 400-B
- Krieger, Medora H. P 424-C;
MB-17
- Krieger, Robert A. C 238;
W 1360-I, 1371, 1374, 1460-G,
1482, 1483, 1487
- Krinsley, D. B. P 424-C
- Krivoy, H. L. P 424-D
- Kubel, S. J. MRUS 1900
dd
- Kulp, J. Laurence MF-97
- Kulp, W. K. P 424-D
- Kummel, H. B. GF 157,
161, 162, 167, 191
- Kummel, Bernhard P 250,
254-H
- Kunkel, Fred C 433;
W 1297, 1460-F, 1495
- Kunkel, Robert P. B 1076;
OM-148, 165
- Kunz, G. F. MRUS
1882 j, 1883-84 j, 1885 j, 1886
i, 1888 i, 1889-90 i, 1891 i,
1892 i, 1893 i, 1894 IV m, 1895
III (cont.) i, 1896 V (cont.) h,
1897 VI (cont.) h, 1898 VI
(cont.) h, 1899 VI (cont.) h,
1900 t, 1901 y, 1902 x, 1903 x,
1904 x, 1905 uu
- Kupfer, D. H. B 1045-D;
Map 3-180
- L
- Lachenbruch, A. H. B 1052-B,
1083-A, C; P 400-B
- LaCroix, M. F. B 703
- Ladd, H. S. B 940-G, H;
P 260-A, Y, 400-B
- LaForge, Laurence B 839;
W 102, 110; GF 187
- Laird, L. B. C 183, 276,
323
- Laird, W. M. OC-15, 25
- Lakes, Arthur B 223
- Lakin, H. W. B 992,
1036-L; C 41, 63, 161; P 300,
424-C
- Lamar, W. L. C 197, 253,
269; W 658, 889-E, 912
- Lamb, W. A. W 210
- Lambert, G. S. OM-25
- Lambert, T. W. P 424-B
- Lamey, C. A. B 969-D,
978-B; P 310
- LaMoreaux, P. E. C 441;
W 1429
- LaMotte, R. S. B 924
- Lancaster, F. W. P 225
- Landes, Henry B 260-M,
285-I; W 111
- Landes, Kenneth K. B 792-B;
C 133; OM-28, 40
- Landis, E. R. B 1046-L,
1072-C, 1087-G; P 400-B, 424-
B, C; Map C-24
- Lane, Alfred C. A 22 III g;
W 30, 31, 114
- Lane, Donald W. MF-208,
210
- Lane, F. K. B 705
- LANEY, F. B. B 470-C;
MRUS 1911 II u; P 104, 139
- Lang, Andrew J., Jr. C 245;
MF-44
- Lang, Joseph W. P 424-D;
W 889-F
- Lang, Solomon M. P 424-D;
W 1536-C, 1545-B
- Lang, Walter B. B 785-B,
901, 1019-J; Map, p. 249
- Langbein, W. B. C 52, 110,
409; P 424-D; SP p. 188;
W 869, 915, 968-C, 1541-A, B
- Langford, R. H. B 1428,
1490, 1493
- Langille, H. D. P 9
- Lantz, R. J. C 160; OC-
51; OM-132
- La Rocque, G. A., Jr. W 889-B,
1068; GQ-44, 46, 47
- Larrabee, D. M. B 964-C;
MB-1-7, 9-12, 14, 15
- Larrison, G. K. W 336, 373
- Larsen, Axel B 425
- Larsen, Esper S., Jr. B 470-B,
530 a,d,h, 679, 715-E, 718, 725
-D, 805-B, 811-B, 843, 848,
1070-A-C; P 90-E, 197-A, 258,
300
- Larsen, Esper S., 3d C 29; P 320
- Larsen, Raymond M. OM-107,
168; Map, p. 213, 234
- La Rue, E. C. W 212, 214,
395, 556
- La Sala, A. M. C 337, 364;
GQ-146
- Lasky, S. G. B 870, 885,
922-C, 936-R, 961; P 208
- Lathram, E. H. I-276, 303,
323
- Laub, D. C. B 1030-L
- Lavery, R. A. P 300
- Lawrence, F. F. C 109, 292,
400
- Lawson, A. C. A 15 d;
GF 193
- Lawthers, Robert B 1019-G
- Leatherock, Constance OC-40; (See
also Nieschmidt, C. L.)
- Leatherock, Otto B 900-A, B,
E, F, H
- Lee, C. H. W 294, 446
- Lee, D. E. P 424-C
- Lee, Lasley W 486, 492
- Lee, Wallace B 749;
GF 220; OM-48

- Lee, Willis T. B 285-F, 315-Q, 316-E, G, 341-C, 352, 389, 471-H, 510, 530 I, 531-J, 612, 620-N, 730-A, 751-A, 752, 760-C; MRUS 1908 II a; P 95-C, 101, 149; W 104, 136, 181, 188, 217; GF 214
- Lees, J. H. Map, p. 252
- Leffingwell, E. de K. P 109
- Leggette, R. M. W 796-D, 1029
- LeGrand, H. E. W 1415
- Lehner, R. E. B 1021-N; MF-178
- Leiberg, J. B. A 19 V e,f, i,j, 20 V e,f, 21 V e,g; P 8, 9, 22, 29, 30
- Leighton, M. O. W 72, 79, 88, 92, 108, 121, 151, 194, 234, 238
- Leith, Andrew P 184
- Leith, Charles K. B 213 f, 225 f, 239, 285-E, 338, 360; MRUS 1911 I b, 1917 I b; M 43, 52; P 184
- Lemke, R. W. P 248-B, C, 325, 424-C; GQ-26, 31; I-327
- Lemmon, D. M. B 922-H, Q, S, 931-A, E
- Leonard, Alvin R. P 424-D
- Leonard, Arthur G. B 285-F, 316-C, 341-A, 431-A; GF 181
- Leopard, Benjamin F. C 213, 215; P 424-B; GP-117, 118; MF-6, 10
- Leopold, Estella B. P 400-B
- Leopold, Luna B. C 402, 410, 414-A-D; P 252, 282-A-D; SP p. 188; W 1110-A, 1261
- Leppanen, O. E. P 424-B
- LeRoux, E. F. W 1421, 1464
- Leshar, C. E. B 541-I, 621-A, 666-M; MRUS 1914 II z,ff, 1915 II a,x,y,hh, 1916 II a, ii,kk, 1917 II a,ff,hh, 1918 II a, d,aa,ii,II
- Lesley, R. W. MRUS 1917 II x, 1918 II y
- Lesquereux, Leo M 17
- Lester, C. M. P 424-C; W 1592-A
- Lesure, F. G. MF-163-168
- Leverett, Frank A 17 II h, 18 IV b; B 818; M 38, 41, 53; P 154-A, 161; W 21, 26, 114, 160, 182, 183; GF 67, 115, 155; Map, p. 252
- Levine, Harry B 992, 1006
- Levish, Murray C 359
- Lewis, Charles R. I-121
- Lewis, George E. B 975-D; P 264-G, 400-B
- Lewis, J. H. W 344
- Lewis, Joseph V. B 725-B
- Lewis, Richard Q., Sr. B 1028-Q, R, 1087-D; P 424-B; MF-190-195, 198-201
- Lewis, Richard W., Jr. B 975-E
- Lewis, S. J. W 161
- Licastro, P. H. B 1052-H
- Lichtblau, Stephen W 800
- Lichty, R. W. P 424-B
- Lindberg, Carolyn B 1052-I
- Lindberg, Marie L. C 29; P 400
- B, 424-B
- Lindeman, H. B. C 235
- Lindgren, Waldemar A 14 II e, 17 II a, 18 III e, 20 III b, 22 II e; B 61, 202, 213 b,d, 223, 254, 260 h, 262, 285-A, 293, 340-A, B, 380-A, C, 394, 507, 530, 550, 601, 782; MRUS 1904 c, 1905 d, 1906 d, 1907 I d,q, 1908 I d, 1909 I a,v, 1910 I u, 1911 I cc; P 27, 43, 54, 68, 73, 107; W 77; GF 3, 5, 17, 18, 29, 31, 39, 45, 66, 103, 104, 129
- Lindvall, R. M. GQ-29; I-129, 130, 327
- Lines, E. F. B 264, 315-I, 316-A; GF 178
- Lipp, H. H. P 400-B, 424-C
- Lippincott, J. B. A 19 IV a; W 33, 58-60, 81, 93, 116, 146
- Litsey, L. R. MF-169
- Little, H. P. GF 204
- Littleton, R. T. C 54, 70, 76, 80; W 1377, 1460-D, 1519
- Livermore, J. S. B 948-B
- Livingston, Douglas C. B 715-E
- Livingston, Penn. W 773-B, D, 796-A, 849-D, 889-D, 913, 919
- Ljungstedt, O. A. Map, p. 190
- Lloyd, E. R. B 541-G, 627, 686-J; MRUS 1918 II ff
- Lockwood, W. N. B 1121-B
- Loeltz, O. J. W 1228
- Loggren, B. E. P 424-B
- Logan, W. N. W 576
- Lohman, Kenneth E. P 189-C, G, H, 196-B, 424-D; OM-14; Map, p. 235
- Lohman, Stanley W. P 424-B; W 773-A; HA-2, 3
- Lohr, E. W. C 197, 203, 206, 221, 232, 253, 269, 283, 288; W 658, 796-F, 1299, 1300, 1460-A
- Loney, R. A. I-276, 303, 323
- Longwell, C. R. B 798; P 132-A; MF-138
- Longwill, Stanley M. W 1539-H
- Loonsdale, J. T. W 676, 778
- Loofbourrow, J. S., Jr. C 143; MF-117; OM-26
- Lord, Edwin C. E. B 164
- Lord, Eliot M 4
- Lord, N. W. B 323
- Lorenz, H. W. C 83; W 1360-C
- Loud, E. I, Jr. C 164
- Loud, Elisabeth S. B 1049, 1054, 1065, 1075, 1095, 1115
- Louderback, G. D. B 223
- Loughlin, G. F. B 492, 620-I, K, 666-R, 681, 690-A, 779, 811-C; MRUS 1913 II hh, 1914 II r,s,x,hh, 1915 II s,aa, 1916 II h,cc,jj, 1917 II i,cc,dd, 1918 II k,u,bb,hh, 1919 I a, II w,z,ee,ff, 1920 I a, II o,v,aa, 1921 I a, e, II g,x,z, 1922 I a,i, II h,s,w,bb, 1923 I o, II b,f,u,x; P 90-F, 107, 111, 120-E, 148, 200
- Love, J. D. B 1121-I; C 176, 278, 352, 358; P 424-C; OC-13, 14, 17, 27, 36, 43, 44; OM-19, 92, 107, 118, 122; Map, p. 191, 213
- Love, S. K. W 942, 950, 970, 1048, 1255, 1299, 1300
- Lovering, Thomas S. B 795-C, 811-A, D, 822-B, 922-F, 931-O; P 176, 178, 223, 245, 300, 424-C; MF-230; Map, p. 190, 234, 235
- Lovering, Tom G. B 1009-C, L, 1046-N; P 320
- Low, Doris P 260-X
- Lowell, W. R. B 982-A; C 209
- Lubke, E. Ronald P 424-D
- Lucas, F. A. A 21 II c
- Luedke, Elaine M. B 1072-F
- Luedke, Robert G. P 400-B, 424-C, D; MF-100-115
- Lugn, Alvin L. W 779
- Lugn, R. V. P 424-D
- Lull, R. S. M 49
- Lund, R. J. P 184
- Lupton, C. T. B 381-B, 431-B, 471-I, 530 e, 541-D, 581-B, 621-I, L, 628, 640-H, 647, 656
- Lusby, G. C. P 424-B
- Luszczynski, N. J. C 167; W 1544-A
- Lusk, R. G. B 796-B
- Luttrell, G. W. B 1019-D, M; C 87, 178, 242
- Lyman, John B 1067
- Lynch, Walter W 796-A
- Lyons, G. L. W 371
- Lyons, Erwin J. B 1015-G; C 131; P 274-K, 309; MF-3
- Lyons, John B. B 1024-A; P 424-B
- Mabey, D. R. P 316-D, 400-B, 424-C
- McAllister, J. F. B 935-D, 946-B, 960-C, 964-E; P 424-B; GQ-95
- MacAlpin, A. J. OM-54, 61, 81
- McBride, R. S. MRUS 1919 II gg, 1920 II hh,ii, 1921 II ee,ff
- McCallie, S. W. W 102, 110, 114
- McCann, F. T. C 16; SP p. 189; OC-16; OM-75, 115
- McCarren, E. F. C 269; P 424-D
- McCarthy, J. H., Jr. P 424-C
- MacCary, L. M. W 1417; HA-5, 8
- McCaskey, H. D. B 340-A; MRUS 1906 d, 1907 I d,e,g,k, 1908 I d,j,k, 1909 I d,j,k, 1910 I a,d,h,j,k, 1911 I a,e,j,l,m, 1912 I d,h,i, 1913 I a,h,i,ii, 1914 I a,i,r, 1915 I a,m,t, 1916 I a,o,r, 1917 I c,w, 1918 I a
- McCaslin, M. E. MRUS 1919 II w
- McCaustland, E. J. W 344
- McClure, J. D. B 900-D
- McClymonds, N. E. P 424-D

- McCombe, John W 596-A
 McConnell, I. W. W 93
 McCormack, R. K. C 116, 132
 McCormick, James C 39
 McCracken, R. J. P 280-D
 McCulloh, T. H. P 400-B;
 GP-149
 McCullough, R. A. W 1589
 McDonald, C. C. C 36
 MacDonald, D. F. B 285-A,
 380-A, 384, 430-A, 530 a
 Macdonald, G. A. B 974-A,
 D, 994, 996-B, D, 1021-B, D,
 1061-B; P 214-D
 Mace, M. M. C 256
 McGee, W. J. A 7 h, 11 i
 b, 12 i c, 14 ii a
 McGill, J. T. I-284
 McGlamery, Winnie P 189-D,
 197-B
 McGlashan, H. D. W 298-300,
 426, 447, 597-E, 636-D, E, 637
 -A, 843
 McGowan, E. F. GP-176-
 181, 183-188
 McGrath, J. G. P 424-C
 McGreevy, L. J. B 1046-K,
 1074-C
 McGrew, L. W. OM-175
 McGuinness, C. L. C 114, 117;
 W 1078
 Macha, Carol OC-41
 McIntosh, W. L. I-275
 Mack, Seymour W 1462,
 1484
 McKay, E. J. B 1009-J;
 C 338; P 300; GQ-57, 58, 78;
 MF-17, 18, 24, 31
 McKee, E. D. P 400-B;
 I-175, 300
 MacKee, P. V. OM-96
 McKelvey, V. E. B 936-L,
 948-D, 1030-A; C 208, 210,
 297, 301; P 300, 313-A; MF-41
 McKenney, W. F. MRUS 1920
 II k, 1921 II a, 1922 II a, 1923
 II e
 McKeown, F. A. B 1046-B,
 1074-E; C 239; P 300, 400-B;
 MF-173
 MacKevett, E. M., Jr. B 1087-F;
 P 400-B
 MacKichan, K. A. C 115, 398,
 449
 Mackin, J. H. B 982-E;
 P 300, 400-B; MF-14
 McKnight, E. T. B 853, 908;
 MB-18; OM-169; Map, p. 226
 McLaughlin, D. B. GQ-133
 McLaughlin, K. P. B 1042-A
 McLaughlin, T. G. W 1256
 McMillan, Robert Map, p. 234
 McMurtrey, R. G. W 1360-C,
 1482
 McNeary, S. S. W 1536-B
 MacNeil, F. S. P 189-A,
 221-F, 243-B, 294-C, 339, 400
 -B; OC-29; OM-45, 72; Map 3-
 195
 McNitt, J. R. B 1074-E
 McQueen, I. S. P 334-G,
 424-B, C; W 1463
 McQueen, Kathleen I-169, 196,
 199, 222, 228, 230-232, 255,
 265, 266, 268, 277; (See also
 Tagg, K. M.)
 McVay, T. N. B 901
 Maddock, Thomas, Jr. P 252
 Madden, A. G. B 345-C,
 374, 379-E, 410, 442-G, 480-I,
 520-J, K, 532, 592-E, 622-H,
 662-G, 692-E
 Magin, G. B., Jr. P 272-C,
 320
 Maher, J. C. C 68, 160;
 W 968-D; OC-39, 46, 51; OM-
 101, 132, 135
 Mailhous, C. O. MRUS
 1882 n
 Maide, H. E. B 996-E,
 1079; P 400-B, 424-B
 Malmberg, G. T. I-329
 Mamay, S. H. P 254-D,
 274-I, 400-B
 Mangan, G. B. GP-150-153
 Mangan, J. W. C 104, 174,
 257
 Mann, Albert P 140-A
 Mann, L. MRUS 1923
 II gg
 Mansfield, G. R. B 470-H,
 577, 620-B, O, 713, 716-F, 724,
 727, 803, 838, 901, 934; C 4;
 MRUS 1922 II g,n,o, 1923 II t,
 w; P 98-G, 152, 157, 238; W
 838
 Mansfield, W. C. P 150-F,
 170-D, 186-I, 189-G, 199-A
 Manson, Marsden W 46
 Mao, Han-Lee P 260-R
 Mapei, W. J. B 1030-H,
 1055-H, 1078; C 228; P 300,
 424-B, C; Map C-23; MF-218;
 OM-115, 191
 Mapes V., Eduardo P 284
 Marbut, C. F. A 17 i g
 Marcher, M. V. P 424-B
 Marcou, John B. B 7
 Marcou, Jules B 7
 Marden, D. W. B 1072-K;
 OC-38
 Marine, I. W. P 424-D
 Mark, H. R. B 1019-G
 Markewicz, F. J. P 400-B
 Markward, E. L. B 1098-B
 Marranzino, A. P. B 1036-J;
 P 400-B, 424-B, D
 Marsell, R. E. W 994
 Marsh, M. C. W 192
 Marsh, Othniel C. A 3 b, 5 e,
 16 i b; M 10, 49
 Marsh, Owen T. B 1082-G;
 MF-176, 223
 Marshall, Charles H. P 424-D;
 I-51, 58, 62, 65, 78, 88, 122,
 140, 141, 143-147, 149, 153,
 154, 160, 161, 181, 191, 194,
 246, 252, 282, 283, 295, 304-
 306
 Marshall, Robert B 844-E
 Marshall, Robert Bradford
 A 21 v g; B 434, 437, 440, 441,
 453, 457-464, 466, 468, 469,
 472, 473, 476, 477, 481, 482,
 486-489, 493, 496, 514-519,
 551-573, 632-639, 643, 646,
 651, 654, 671-674; W 346-350,
 366-368, 376-379
 Marsters, V. F. B 107
 Martin, George C. B 225 h,
 250, 259, 284, 289, 314-B, E,
 335, 380-J, 381-C, 442-E, 480-
 F, 485, 500, 542-E, 587, 592-
 H, 664, 692-A, D, 712-A, 714-
 A, 719, 722-E, 739-C, 773-D,
 776; MRUS 1917 I o, 1918 I g,
 1919 I q; P 159; W 110, 145;
 GF 160
 Martin, K. A 21 III f
 Martin, Lawrence B 315-I,
 447; P 69
 Martin, W. F. W 318
 Martinez, Prudencio P 400-B
 Martyn, William MRUS 1883
 -84 m
 Marvel, W. D. MRUS
 1887 f
 Marvin, Richard P 320
 Mason, A. C. I-351
 Mason, R. S. C 362
 Masursky, Harold B 1055-G;
 P 300, 400-B, 424-D
 Matejka, D. Q. C 205;
 W 1476
 Mather, K. F. B 686-J,
 M, R, 688, 773-D, 796-B;
 P 166
 Mathews, E. B. GF 204
 Mathewson, D. E. B 1028-B
 Matson, G. C. B 380-K,
 530 e, 604, 619, 629, 660-E,
 661-C, F; MRUS 1910 II ee,
 1911 II ff, 1912 II gg; P 98-L,
 M; W 233, 258, 319
 Matthai, H. F. C 378, 385,
 386
 Matthes, F. E. A 21 II b;
 P 160, 329; Map, p. 252, 254, 255
 Matthew, W. D. B 361
 Mathews, C. W. B 1060-A;
 C 40, 51
 Mattson, P. H. P 400-B
 Matzko, J. J. C 244, 348;
 P 302-A, 424-D
 Maughan, E. K. GQ-135
 Maxwell, B. W. C 339
 Maxwell, C. H. MF-179
 Maxwell, J. A. Map C-25
 May, Irving B 1006;
 C 199; P 400-B, 424-D
 May, P. R. B 995-E, G
 Mead, Elwood W 23
 Mead, M. C. B 1115
 Meade, R. H. P 424-B, D
 Means, T. H. W 93, 146
 Mears, A. H. C 405
 Meeker, R. I. W 208, 209,
 211
 Meier, M. F. P 351,
 424-B
 Meinzer, O. E. W 256, 260,
 275, 277, 293, 320, 343, 345-A,
 G, 375-B, D, 400-B, 423, 425-
 B, E, 427, 467, 489, 494, 518,
 520-E, 557, 577, 580-A, 596-A,
 597-B, C, 616, 638-C, 836-D,
 992

- Meisler, Harold B 1121-B;
W 1539-H
- Meissner, Carl B 369
- Melin, R. E. B 1055-E;
Map C-38
- Melville, W. H. B 61, 78,
90, 113
- Melvin, R. E. B 1059-C
- Memminger, C. G. MRUS 1894
IV n
- Mendenhall, W. C. A 17 II d,
20 VII c, 52, 53; B 213 b,d, 341
-C; P 10, 15, 41; SP p. 189;
W 137-139, 142, 146, 219, 222,
224, 225, 234, 258, 398
- Merewether, E. A. P 424-C;
1-309-311
- Merrels, C. W., 2d OM-59, 69
- Merriam, C. W. B 1061-A;
P 276, 424-C, D
- Merrill, F. J. H. MRUS 1904
bb, 1905 aa; GF 83
- Merrill, G. P. B 110
- Mertie, J. B., Jr. B 520-G,
592-H, 642-H, 662-D, H, I,
692-D, 714-B, 739-D, 745, 754,
773-E, 783-E, 791, 797-C, 810
-B, 813-C, 815, 816, 824-D,
827, 836-B, E, 844-D, 864-C,
868-D, 872, 897-C, 903, 910-B,
917-D, 918, 972, 1072-D, 1082-
A; C 237; P 129-C, 314-E
- Mesler, R. D. B 340-J
- Mesnier, G. N. P 424-D
- Metzger, D. G. W 1475-C
- Meuschke, J. L. GP-7-12,
46-51, 53-58, 77-114, 120-124,
128-134, 140-148; Map, p. 236
- Meyer, Charles P 424-D
- Meyer, H. M. MRUS 1921
II y, 1922 I oo, II t, 1923 I i,n,
p, II a
- Meyer, R. R. W 1296
- Meyrowitz, Robert P 400-B,
424-B
- Middleton, Jefferson B 666-T;
MRUS 1894 IV j, 1895 III-(cont.)
g, 1896 V (cont.) f, 1897 VI
(cont.) f, 1898 VI (cont.) e, 1900
r, 1901 w, 1902 v, 1903 v, 1904
v, 1905 s, 1906 u, 1907 II b,
1908 II f, 1909 II g, 1910 II g,j,
z, 1911 II g,z,aa, 1912 II g,bb,
1913 II c,h,dd, 1914 II a,c,cc,
1915 II b,c,cc, 1916 II b,o,ee,
1917 II o,s,bb, 1918 II b,f,cc,
1919 II o,q, 1920 II d,e,gg, 1921
II f,q, 1922 II k,l, 1923 II i,l,m,
y
- Miesch, A. T. B 1000-H,
1112-B; P 320, 424-B
- Milkey, R. G. C 271
- Miller, B. L. B 470-I;
GF 136, 137, 152, 162, 167,
182, 204, 211
- Miller, C. F. I-3, 8, 54,
61, 63, 64, 82, 100-102, 106,
126, 127
- Miller, D. J. B 943-C,
947-F, 1094; C 136; P 354-C;
I-271; OM-187, 189; Map, p.
226
- Miller, G. A. MF-122,
153, 157
- Miller, John Charles C 5; Map,
p. 234, 235
- Miller, John Preston P 282-A;
W 1261
- Miller, Ralph L. B 990;
P 228; GQ-111; OM-20, 76, 104
- Miller, Raymond E. P 424-B
- Miller, Reuben F. P 334-G,
424-B, C
- Miller, Robert D. B 1093;
P 424-B
- Mills, J. E. B 343
- Mills, R. V. A. B 686-T, V,
693
- Milton, Charles P 327
- Minard, D. L. OM-95
- Minard, J. P. P 400-B,
424-C; I-171, 182, 192, 193,
198, 253, 260
- Mink, J. F. C 435
- Miser, H. D. B 530 e,
540-U, 660-C, J, 690-B, 691-J,
715-C, 734, 735-H, I, 751-D,
781-A, 808, 921-A; C 14;
P 132-A, 154-F; W 538; GF
202, 215; Map, p. 191, 252
- Mitchell, W. D. P 424-B;
W 1164
- Moench, R. H. B 1032-D;
P 374-B; MF-133, 134
- Moerlein, G. A. OM-181
- Moffit, F. H. B 225 b,
247, 259, 277, 284, 314-G, 345-
C, 374, 379-D, 417, 442-D, 448,
480-E, 498, 523-C, 533, 542-C,
576, 592-H, 608, 622-D, 642-C,
662-C, 675, 714-C, 722-D, 739
-C, 745, 755-B, 773-C, 789,
792-A, 797-E, 813-D, 824-B,
836-D, 844-C, 866, 868-C, 880
-B, 894, 904, 917-B, 926-B,
933-B, 943-B, 947-F, G, 963-
B, 989-D, E
- Moldenke, Richard B 336
- Monk, G. B. W 147
- Monroe, W. H. B 831-A,
936-E, 986; P 400-B; GQ-113;
OC-23; OM-37, 50, 65, 167
- Montgomery, J. H. W 1260-A
- Moore, B. N. B 871, 875
- Moore, E. S. B 855
- Moore, F. B. B 1030-N;
C 186, 215, 220
- Moore, George Emerson, Jr.
GQ-105, 117
- Moore, George William
B 1009-I, 1055-E, J; C 212,
313, 359; P 400-B, 424-C; Map
C-36, 38
- Moore, James G. P 400-B,
424-C; MF-80
- Moore, Raymond C. P 132-A,
164, 233-E; W 556; OM-80
- Moore, Richard B. B 395
- Moore, S. L. GQ-173
- Moran, T. G. OM-23, 35
- Morey, G. W. P 424-C
- Morgan, A. M. W 1140
- Morgan, R. E. Map, p. 256
- Morgan, Vincent P 424-C
- Morrell, Foster C 11
- Morris, Donald A. P 424-D;
W 1375, 1487, 1490
- Morris, Duane C. MF-7, 8
- Morris, J. H. OM-37, 50
- Morris, R. H. B 1043-D;
P 303-D; I-139, 247
- Morrison, R. B. P 424-D
- Mosburg, Shirley P 424-C
- Moses, O. A. MRUS
1882 k
- Moston, R. P. P 424-C, D
- Moulder, E. A. C 198;
W 1375, 1424, 1487
- Moulton, G. F. B 756, 822-
A, 856
- Mountjoy, Wayne P 424-C
- Moustafa, G. I-261
- Mower, R. W. P 424-C;
W 1376, 1412
- Moxham, R. M. B 947-E,
1021-C, 1039-A, D; C 184, 207,
230, 265, 317; GP-119, 198,
246-253
- Mudge, M. R. B 1060-A,
D, 1068; C 25, 38
- Muessig, Siegfried B 1045-C
- Mullens, T. E. B 1087-H;
MF-184-186
- Muller, S. W. P 216;
GQ-7, 11, 12, 15, 23, 45
- Mullineaux, D. R. P 400-B
- Mundorff, James C. C 406
- Mundorff, Maurice J. C 356
- Munk, W. H. P 260-C
- Munn, M. J. B 318, 454,
456, 471-A, 531-A, 547, 579;
GF 176-178, 180
- Munroe, C. E. B 423
- Munyan, A. C. B 876, 901
- Murata, K. J. B 1084-G;
C 225, 272; P 424-B
- Murphy, E. C. P 86; W 8,
41, 42, 64, 94-96, 146, 147, 162
- Murphy, J. F. OM-151,
181
- Murphy, T. D. B 1072-L
- Murray, W. S. P 123
- Mussey, O. D. W 1330-A,
D, E
- Mutz, P. B. W 1379
- Myers, Alfred T. B 1084-I,
1100-A; P 300, 400-B, 424-B
- Myers, Donald A. P 315-C;
OM-110, 143, 150
- Myers, W. Bradley B 931-Q;
P 424-D
- Mytton, J. W. P 300
- N
- Nace, R. L. C 166, 415;
W 1376, 1412, 1463, 1587; OC-
17
- Naeser, C. R. B 1036-N;
P 424-D
- Nakagawa, H. M. B 1084-F;
P 400-B
- Naramore, Chester MRUS 1906
d, 1907 I e, 1908 I h, 1909 I h
- Narten, P. F. C 225
- Natof, N. C. GP-269,
284-287
- Neil, S. T. P 400-B
- Nelson, Arthur E. C 184, 196,
207, 348; GQ-123; I-167, 168
- Nelson, John M. B 988-I
- Nelson, Reuben A. Map, p. 236

- Nelson, Vincent E. Map, p. 226
 Nelson, Willis H. B 1028-K,
 P-R, 1111-F; I-296
 Neuerburg, G. J. P 300
 Neuman, R. B. P 274-F,
 400-B, 424-B; GQ-130, 131
 Neuschel, V. S. B 1116-A-
 E, 1146-A, B; MB-18
 Newberry, John S. M 14, 16,
 26, 35
 Newberry, Spencer H. MRUS 1891
 h, 1892 h, 1893 h, 1894 IV k,
 1895 III (cont.) h, 1896 V
 (cont.) g, 1897 V (cont.) g, 1898
 VI (cont.) f, 1899 VI (cont.) f,
 1900 s
 Newcomb, R. C. P 424-B;
 W 1135, 1475-E, 1539-I
 Newell, F. H. A 12 II b,
 13 III a, 14 II c, 16 II e, 19 IV
 a, 20 IV a, 21 IV a, 22 IV a;
 B 131, 140; W 75, 82-85, 93,
 146, 234
 Newell, T. R. W 916, 917
 Newhouse, W. H. MF-119
 Newman, W. L. B 1084-E,
 1112-B; P 320
 Newport, T. G. W 1360-I,
 1371, 1460-G
 Newsom, J. F. GF 163
 Newton, Edmund MRUS 1915
 I n
 Nichols, Donald R. P 400-B,
 424-D; GQ-91
 Nichols, Robert L. C 143
 Nichols, Thomas C., Jr. P 424-B
 Nickles, J. M. B 173, 316-
 G, 341-C, 372, 409, 444, 495,
 524, 545, 584, 617, 645, 665,
 684, 698, 731, 746, 747, 758,
 784, 802, 823, 834, 858; MRUS
 1908 II a
 Nieschmidt, C. L. OC-50;
 OM-202; (See also Leatherock,
 Constance)
 Nikiforoff, C. C. P 267-B
 Nitze, H. B. C. MRUS 1894
 IV t, 1898 VI b, (cont.) u
 Noble, Levi F. B 549, 724,
 735-B, 785-C, D, 820; P 98-I,
 131-B, 150-C; GQ-24, 50
 Noble, T. A. W 135, 178
 Noecker, Max C 315
 Nolan, T. B. B 795-B,
 871, 1000-H; P 177, 197-D, 276
 Norbistrath, Hans OM-42, 88;
 Map, p. 224
 Norcross, T. W. W 162
 Nordeen, C. E. C 400
 Nordenson, T. J. HA-7, 11
 Nordin, C. F., Jr. P 424-C
 Nordquist, J. W. Map, p. 235
 Norris, S. E. B 1133-A;
 C 177; P 424-B; W 1460-E,
 1619-A
 Northrop, John D. B 666-DD;
 MRUS 1914 II w,gg,ii, 1915 II
 m,z,dd, 1916 II r,ff,gg, 1917
 II r,ee,gg
 Northrop, Stuart A. OM-54, 57,
 141
 Norton, James J. B 1027-G;
 P 297-A
 Norton, William H. W 114, 145,
 293
 Norwood, C. J. P 49
 Nourse, M. R. MRUS 1919
 II f, 1920 II m, 1921 II k
 Novotny, R. F. P 424-D
 Nutting, P. G. B 928-C;
 C 3; P 197-E, F
 Nye, S. S. W 639,
 849-C
 O
 Oakley, Warren W 638-B
 Oborn, E. T. P 424-B;
 W 1459-F-H
 Oda, Uteana P 400-B,
 424-D
 Ogata, Akio P 411-A, B
 O'Harra, C. C. GF 128,
 150, 164
 O'hm, J. M. C 427
 Oldale, R. N. P 424-C
 Oliphant, F. H. MRUS 1896
 V (cont.) b, 1897 VI (cont.) a,b,
 1898 VI (cont.) a,b, 1899 VI
 (cont.) a,b, 1900 n,o, 1901 s,t,
 1902 r,s, 1903 r,s, 1904 r,s
 Olive, W. W. B 1050
 Oliver, Howard W. P 400-B
 Oliver, William A., Jr. B 1111-A;
 P 400-B
 Olmsted, F. H. B 1071-B;
 W 46, 1464, 1469, 1497
 Olson, A. B. I-186, 221,
 227, 229, 263, 301
 Olson, J. C. B 931-P,
 936-A, 1027-O, 1082-D; P 248-
 D, E, G, 261, 300, 424-B
 Olsson, A. A. P 314-B
 Olzman, R. E. C 35, 37,
 66, 98, 116; P 424-D; W 1077,
 1137-A
 O'Malley, F. W. C 208, 262
 O'Neill, Kellie P 294-G
 Orday, R. J. B 1024-C
 Orem, H. M. P 424-C
 Oriel, S. S. P 424-B
 Orkild, P. P. P 424-D;
 I-4, 5, 53, 60, 79, 80, 111-113,
 115, 123, 150, 163, 166, 170,
 195, 257; MF-173
 Orr, J. B. B 974-A
 Orth, R. P. C 378
 Ortiz, D. H. B 946-B
 Orton, Edward A 8 II a,
 19 IV b
 Osborn, C. C. B 711-C,
 728; MRUS 1917 II t, 1918 II
 o,s
 Osborn, H. F. B 361; M 55
 Oshiro, Seiki P 334-A
 Osterwald, F. W. B 1032-A,
 1069, 1087-I; P 300, 400-B,
 424-C; MF-125-130
 O'Sullivan, John B. P 400-B
 O'Sullivan, Robert B. Map C-31,
 32; OM-190
 Otton, E. G. W 1078
 Outerbridge, W. F. P 400-B
 Outlaw, D. E. W 1481
 Overbeck, R. M. B 662-G,
 675, 692-B, 712-C, G
 Overstreet, W. C. P 300,
 400-B, 424-B, C; MF-234, 235
 Owens, J. P. P 400-B,
 424-C
 P
 Pack, R. W. B 540-K,
 541-E, 581-D, 603; P 116
 Packard, R. L. MRUS 1882
 h, 1883-84 h, 1885 h, 1886 f,
 1887 f, 1888 f, 1889-90 f, 1891
 f, 1893 f,j, 1894 III h, 1896 V f
 Page, B. M. OM-16, 27,
 35, 86, 125
 Page, L. R. B 922-O, P,
 T, 931-H, 935-D; C 175, 220;
 P 227, 247, 300
 Paige, R. A. GQ-124
 Paige, Sidney B 284, 314-
 F, 327, 345-B, 380-E, I, 430-
 E, 450, 470-B, C, 765, 772,
 859; P 122, 132-A; GF 183,
 199, 219
 Paiva, Glycon de B 964-A
 Pakiser, L. C. P 400-B,
 424-B
 Palache, Charles P 144, 180;
 GF 126, 161
 Palmer, A. R. P 264-D,
 281, 294-C, 334-C, 400-B,
 424-C
 Palmer, Chase B 479;
 P 90-H; W 233
 Palmer, H. S. P 120-G;
 W 466, 470
 Palmquist, W. N., Jr. C 299;
 W 1533; HA-15-25
 Pampeyan, E. H. MF-138,
 206
 Pardee, J. T. B 380-A,
 430-A, 470-B, 530 f, 531-G,
 640-K, 660-F, G, 677, 690-E,
 F, 710-F, 715-J, 725-A, C,
 780-A, 795-A, G, 805-A, B,
 842, 847-D, 956, 978-C; C 8;
 P 140-A, 147-B, 213; W 539
 Park, C. F., Jr. B 846-A,
 849-G, 931-R, 935-B, F, 964-
 A; P 202, 213; W 841; MF-136
 Parker, C. J. B 1021-G
 Parker, E. W. B 261,
 316-G, 394; MRUS 1889-90 g,i,
 1891 f,g,j, 1892 g,h,j, 1893 g,h,
 j, 1894 III m, IV a,f,h,i,o,p,s,u-
 w, 1895 III d,l,n, (cont.) f,j,l-n,
 q,s,t, 1896 V j,l, (cont.) a,c,e,i,
 k-p,r,s, 1897 VI j,m,n, (cont.)
 c,g,i,k-p, 1898 VI j,m,n, (cont.)
 c,g,i,k-q, 1899 V h,j,l,m,
 (cont.) c,g,j-m,o,p,r,s, 1900 I,
 m,p,x-z,aa,bb,ff,gg, 1901 q,r,
 1902 p,q, 1903 p,q, 1904 p,q,
 1905 n,o, 1906 a,p,q, 1907 II a,
 1908 II a, 1909 II a,b, 1910 II a,
 b, 1911 I a, II a,b, 1912 I a, II
 a,b,ii, 1913 I a, II b,aa,ff, 1914
 II e; P 48
 Parker, Frances L. P 210-D
 Parker, Frank S. B 847-C,
 906-C
 Parker, Gerald G. W 1255
 Parker, Glenn L. B 480-G;
 W 313, 314, 369, 486, 492, 870
 Parker, H. N. W 192, 234,
 273

- Parker, R. L. GQ-155;
MF-202
- Parks, Bryan B 847-E;
P 221-E
- Parks, E. M. B 627
- Parrish, I. S. I-299;
MF-120
- Parshall, E. E. B 1036-M;
P 424-B
- Parsons, A. L. MRUS 1901
cc
- Parsons, K. R. I-208 A, B
- Patmore, H. W. P 196-E
- Patten, E. P., Jr. W 1536-A
- Patten, Lorraine E. P 424-C
- Patterson, S. H. B 1023;
C 150; P 424-B, C; GQ-169,
170; MF-36
- Patton, H. B. P 3
- Patton, W. W., Jr. P 302-A,
303-B; I-197, 226, 249
- Paulsen, C. G. W 867
- Pauszek, F. H. C 269;
W 1499-A
- Pavrides, Louis P 400-B,
424-B
- Payne, O. A. C 260
- Payne, T. G. B 1016,
1094; I-84; OM-126; Map, p.
190
- Peale, A. C. A 14 II b;
B 32, 110; MRUS 1883-84 n,
1885 n, 1886 m, 1887 m, 1888
n, 1889-90 m, 1891 k, 1892 k,
1893 k, 1894 IV x, 1895 III
(cont.) u, 1896 V (cont.) w,
1897 V (cont.) s, 1898 VI (cont.)
t, 1899 VI (cont.) v, 1900 kk;
GF 24
- Pearre, N. C. B 1082-K;
MR-4-7, 12
- Pearson, R. C. B 1072-H
- Pease, M. H., Jr. P 400-B;
Map C-8; I-320; OM-155, 188
- Peck, Dallas L. P 400-B,
424-D; I-325
- Peck, Frederick B. B 285-F
- Peck, Lee C. P 424-D
- Peck, Raymond E. P 294-A
- Pecora, W. T. B 931-D, I,
935-E, 936-I, 964-C, 1081-C,
E; C 73; I-234-237
- Peirce, H. W. C 304, 305
- Peirce, Laurence B. C 342
- Pendleton, T. P. B 788-F
- Penfield, S. L. B 262
- Penrose, R. A. F., Jr. A 16 II a;
B 46
- Peoples, J. W. B 922-N,
1071-H
- Peppel, S. V. B 223;
MRUS 1903 v
- Pepper, J. F. B 899-A,
1003-A, 1067; P 259; GQ-37;
OC-37, 45, 55; OM-5, 9, 29, 39,
69, 89
- Pepperberg, L. J. B 380-J,
381-A, 430-C, 471-E
- Pérez Siliceo, Rafael B 946-F,
960-E
- Perkins, Beauregard, Jr.
P 260-J, K
- Pertkins, G. H. W 102, 114
- Perlmutter, N. M. C 417
- Perrenoud, G. F. MRUS
1885 m
- Perrey, J. I. W 1363
- Perrine, C. D. B 112, 114,
129, 147, 155, 161
- Perry, J. H. B 311
- Perry, T. O. W 20
- Peselnick, Louis P 400-B
- Peters, F. D., Jr. MRUS 1882
e, 1883-84 e, 1888 f
- Peters, W. J. P 20
- Petersen, R. G. MF-196,
197, 214, 215
- Peterson, Donald L. P 424-D
- Peterson, Donald William
P 424-D; GQ-128
- Peterson, Harold V. C 223;
W 1110-D, 1475-B
- Fterson, James A. C 326;
P 243-A
- Peterson, John Q. W 796-C;
Map, p. 256
- Peterson, Nels P. B 971,
1027-H; GQ-41; MF-81; Map
3-180
- Peterson, W. C. C 399, 404,
416, 429
- Pettitt, B. M., Jr. W 1416
- Petrunkovitch, Alexander
P 294-G
- Pettijohn, F. J. C 55, 153;
P 310; MF-225; Map 3-181
- Péwé, T. L. B 989-F;
C 42, 289; P 424-D; GQ-110,
124; I-340
- Phair, George B 1032-D;
P 300, 424-D
- Phalen, W. C. B 285-B, F,
L, 315-I, 316-A, 340-E, M,
349, 447, 530 g, 540-T, 669;
MRUS 1907 I I, II c,d, 1908 I I,
II I,r,s, 1909 I I, II I,s,t, 1910
I I, II m,s-u, 1911 I n,bb, II n,
s-w, 1912 I j, II s-v, 1913 I b,
II d,g,p,q, 1914 I g, II b,d,m,u,
1915 I h, II I,r,t,v; GF 174, 184,
187
- Phelps, E. B. W 185, 189,
226, 229
- Phillips, E. R. MRUS 1923
II j
- Phillips, W. B. MRUS 1886
j, 1898 VI (cont.) b
- Phinney, A. J. A 11 I c
- Phinney, W. C. P 424-D
- Phoenix, D. A. B 973-D;
P 300, 320, 424-C; MF-214;
OM-93
- Pierce, A. P. C 127;
P 300, 400-B, 424-D
- Pierce, C. H. C 17;
W 318, 336, 345-E, 375-C, F,
415, 424, 868-A, B
- Pierce, R. C. W 400-C
- Pierce, W. G. B 847-B, F,
921-B, 940-J; P 186-K, 400-B,
424-B; OM-3, 33, 71, 74, 77,
133
- Pierson, C. T. B 1046-O,
1072-E; C 215, 236, 294, 321;
P 424-D; MF-96
- Piggot, C. S. P 196-A
- Pillmore, C. L. B 1043-B,
D; P 424-B; I-125, 131, 132,
138, 141, 142, 148, 179, 188,
230-232
- Pinckney, D. M. MF-183,
187
- Piper, A. M. C 425, 432;
W 640, 659-B, 780, 841, 889-B,
890, 1109, 1136
- Pipirinos, G. M. B 1055-G;
P 300; OC-49; OM-112
- Pirsson, L. V. A 18 III d,
20 III c; B 139, 237
- Pishel, M. A. B 431-B,
471-C, 575
- Pitman, R. K. P 300
- Plafker, George B 1031-A,
1039-B, C; I-271; OM-189
- Platt, J. N. I-2, 16, 59,
74, 75, 151
- Plouff, Donald P 424-C, D
- Pluhowski, E. J. P 424-D
- Plummer, F. G. A 21 V c;
P 6, 9, 22, 23, 33
- Plunkett, R. T. C 182
- Pogue, J. E. B 608
- Poindexter, O. F. W 1078
- Poland, J. F. C 105;
P 424-B; W 1109, 1360-G,
1461, 1471
- Pomeroy, J. S. B 1025,
1035; I-254, 258, 267, 293, 323
- Pommer, A. M. P 320, 400-
B, 424-C
- Poole, F. G. P 300, 400-
B, 424-B-D; I-328
- Poole, J. L. W 1374,
1576-C
- Pope, G. S. B 428
- Popenoe, W. P. OC-6, 12
- Porter, Dwight A 19 IV a
- Porter, E. A. B 520-H;
W 345-F
- Porter, E. P. MRUS
1904 c
- Porter, J. T. B 315-I
- Porter, L., Jr. W 1068
- Ports, P. L. B 716-D
- Posakony, G. J. C 450
- Post, E. V. B 1081-A;
P 300, 424-D; MF-61-66, 207-
212
- Post, R. J. P 260-H, N
- Postel, A. W. P 237;
GP-191; GQ-14, 63, 123; I-167,
168
- Postley, O. C. Map, p. 213
- Porter, D. B. P 336
- Powell, John E. W 1534
- Powell, John Wesley A 2 a, 3 a,
4 a, 5 a, 6 a, 7 a, 8 I a, 9 a, 10
I a, II a, 11 I a, II a-c, 12 I a,
13 I, 14 I, 15 a
- Powell, William J. C 373;
W 1379
- Power, W. R., Jr. GQ-106,
114
- Powers, Harold A. B 1028-P-
R, 1084-C; P 400-B, 424-B
- Powers, Sidney B 686-S,
736-A, G
- Pratt, Ethel M. B 1019-K
- Pratt, G. H. W 235
- Pratt, Joseph H. B 180, 269;
MRUS 1899 VI k, 1900 g,I,j,u,v,
cc,ee,jj, 1901 j,k,o,z,aa,ii-kk,

- nn,qq-ss, 1902 j,k,o,y,z,cc,hh,
jj,kk,qq, 1903 j,l,o,y,z,bb,ff-ii,
kk,nn, 1904 i,k,o,y,z,cc,gg-ii,
kk,nn,pp,rr, 1905 i,x,ss,ww
- Pratt, Walden P. B 1045-A;
P 424-C; GP-115
- Pray, L. C. P 261;
MF-4
- Free, H. L., Jr. C 287;
W 1417
- Pressey, H. A. W 62, 63,
69, 76; GF 83
- Preston, R. E. MRUS
1893 b
- Price, Charles E., Jr. W 1594-A
- Price, William E., Jr. C 369;
W 1359
- Prichard, G. E. B 1074-F;
C 344; Map C-24; OM-198
- Prill, R. C. P 424-D
- Prindle, L. M. B 225 b,
251, 259, 280, 284, 295, 314-L,
337, 345-D, 375, 379-E, 442-
F, 520-G, 525, 538; P 70
- Prinz, W. C. P 424-B
- Prior, C. H. C 274
- Privasky, N. C. OM-181
- Proctor, P. D. MF-45
- Prosser, C. S. B 120;
GF 109, 197
- Pruzman, P. W. B 768
- Puffett, W. P. P 424-B;
MF-133, 134, 141, 143, 149-
152
- Pulver, H. F. C 53
- Pumpelly, Raphael M 23
- Pumphrey, H. L. C 400;
W 1329-A
- Purdue, A. H. B 315-P,
430-F, 690-B, 691-J, 808;
P 24; W 102, 114, 145; GF 154,
202, 215
- Purington, C. W. A 18 III f;
B 259, 263; GF 57, 60
- Purytun, W. D. P 424-D
- Pusey, L. B. SP p. 188
- Pyncheon, W. H. C. W 110
- Q
- Quick, G. L. B 971,
1027-F
- Quinn, A. W. GQ-1, 13,
17, 42, 118
- Quinton, J. H. W 143
- R
- Rabbitt, M. C. B 966, 976,
981, 991, 1002, 1022, 1033,
1048, 1066, 1086-A
- Raborg, W. A. MRUS 1886
h,k, 1887 k, 1888 k, 1889-90 I
- Radbruch, D. H. I-239, 264,
272, 298; (See also Hill, D. R.)
- Rader, L. F., Jr. B 1036-M;
P 391-A, 400-B
- Rafter, G. W. W 3, 22, 24,
25, 80
- Rainwater, F. H. C 273;
P 414-C; W 1258, 1327, 1358,
1360-E, 1368, 1373, 1454,
1468, 1535-E; HA-6, 9
- Raitt, R. W. P 260-K, S
- Ramirez, L. F. I-201 B,
202 B, 203 A, B, 206 B, 207 A,
B, 209 A, B, 213 A, B, 214 A,
B
- Ramon, N. D. SP p. 189;
OC-16
- Ramsahoye, L. E. W 1536-C
- Randall, D. T. B 334, 339,
366, 373, 378
- Randall, L. E. C 149, 227,
263, 337, 364, 379, 455; P 272
-C
- Randolph, James R. W 1536-B
- Randolph, Richard B. B 992
- Rankin, H. S. B 928-D
- Ransome, F. L. A 22 II c;
B 89, 182, 213 d, 254, 260 b,g,
262, 303, 380-A, B, 407, 414,
530 b, 540-D, 620-F, 626, 666-
FF, 710-D, 725-J, 743; MRUS
1917 I t, 1918 I h, 1919 I n,
1920 I ii, 1921 I m, 1922 I n;
P 12, 21, 54, 62, 66, 75, 98-K,
115; GF 41, 51, 63, 111, 112,
120, 130, 217
- Rantz, S. E. P 424-C, D;
W 1080, 1260-D, 1320-D, 1369-
C
- Rapp, J. R. C 162, 163,
243; W 1140, 1377
- Rasmussen, W. C. W 1472
- Ratté, J. C. P 343,
400-B
- Ratzlaff, K. W. P 424-B
- Rau, W. W. B 1053;
OC-57
- Raup, Hugh M. B 963-D
- Raup, Omer B. B 1046-Q
- Raup, Robert B., Jr. B 1046-P
- Ray, James C. B 849-C
- Ray, Louis L. P 400-B;
Map, p. 226
- Ray, Richard G. B 998-B,
1004, 1043-A; P 373; GQ-1;
I-178, 187, 268; OM-171
- Ray, W. T. B 367, 403,
412
- Raymond, R. W. MRUS 1882
n, 1883-84 o
- Read, Charles B. B 1055-J;
C 89; P 185-D, H, 186-E, F,
197-C, 210-B, 263, 274-I, 374-
H, 400-B, 424-C, D; OC-2;
OM-8, 21, 96
- Read, Matthew C. MRUS
1882 I
- Reck, C. W. C 173
- Redden, J. A. B 1072-I;
C 175, 245
- Redfield, A. H. MRUS 1919
II I, 1922 II j
- Reed, Eugene C. OM-198
- Reed, H. S. W 211
- Reed, John C. B 846-A,
849-D, 886-C, 897-D, 929,
931-F, 936-M, O, 947-A, 963-
A; C 9; P 301
- Reed, John C., Jr. B 1108-A;
P 400-B, 424-C, D; I-33, 36,
38, 56, 98, 125
- Reed, W. J. B 381-D
- Reed, W. M. W 146
- Reedy, O. T. W 147
- Reeside, J. B., Jr. B 716-G,
726-C; P 108-K, 118, 129-D,
131-H, 132-B, C, 134, 147-A,
150-A, B, D, 151, 154-I, 158-
B, 170-B, 183, 186-K, 214-A,
233-B, 281, 332, 355; OM-10
- Reeves, Frank B 686-U,
726-B, 736-E, 751-C, 786-B,
806-E, 821-B; P 165-D
- Rehder, H. A. P 196-D
- Reichen, L. E. C 41, 124
- Reid, H. F. A 16 I c
- Reinemund, J. A. B 1010,
1041-C; P 246; OM-192; Map,
p. 224
- Reinhardt, P. W. Map, p. 236
- Reiser, H. N. B 1058-G
- Remington, E. W. GP-197
- Remson, Irwin W 1536-B
- Renick, B. C. W 520-B,
D, 580-A, 600, 620
- Renshaw, J. H. A 18 I b,
19 I b, 20 I b, 21 I b; B 181,
185, 201
- Repenning, C. A. C 308;
P 291, 424-C
- Replogle, B. K. C 303
- Revelle, Roger P 260-T
- Rex, R. W. P 260-W
- Rezak, Richard P 294-D, K
- Rhoden, V. C. B 1052-F;
C 353
- Rice, G. S. B 425
- Rich, Ernest I. P 400-B;
OM-210
- Rich, John L. B 430-E
- Richards, Arthur B 1010
- Richards, Paul W. B 1021-L,
1026; OM-84, 111, 202
- Richards, R. H. B 285-C;
MRUS 1905 II
- Richards, Ralph W. B 381-A,
430-H, 470-D, H, J, 530 f, 540-
Q, 577, 647, 780-A, 849-A;
C-11; P 195; MB-15
- Richardson, Donald C 187;
P 424-C
- Richardson, Everett Ellsworth
OM-176, 194, 206
- Richardson, Everett V.
C 450; P 424-C, D; W 1498-A
- Richardson, G. B. B 260 j,n,o,
285-C, F, 316-E, 340-D, F, H,
341-C, 371, 381-C, 470-C, 541
-D, 686-Z, 829, 873, 899-B,
923; C 11; MRUS 1921 II dd,
1922 II cc-ff, 1923 II k,cc-ee;
SP p. 189; W 157, 199; GF 102,
166, 194, 198, 224; Map, p. 213
- Richmond, G. M. P 400-B,
424-D; GQ-16, 22; OM-31
- Richter, D. H. P 400-B,
424-B, D
- Riddell, C. W. W 467
- Ridgway, J. L. AP p. 188
- Riedel, W. R. P 280-G
- Ries, Heinrich B 708;
MRUS 1894 IV j, 1895 III (cont.)
e.g, 1896 V (cont.) f,v, 1897 VI
(cont.) f, 1898 VI (cont.) a,
1899 VI (cont.) e,u, 1901 pp,
1902 v,II, 1903 jj, 1904 II,
1905 vv; P 11

- Riffenburg, H. B. W 560-B,
596-D, 598, 600
Riggs, H. C. C 36;
P 424-B; W 1080
Riggs, R. B. B 42, 55
Riley, F. S. P 424-B;
W 1460-F
Riley, L. B. P 320
Rinehart, C. D. GQ-99
Riseman, L. B 1060-B
Riska, Daphne B 1036-G;
(See also Ross, Daphne R.)
Rittenhouse, Gordon C 22; SP p.
189; OM-58, 100
Rivard, N. R. I-340
Rivera, J. O. P 424-D
Rixon, T. F. A 21 V d;
P 7, 9, 22, 23, 39
Roach, C. H. P 320, 400-
B, 424-C
Robeck, R. C. OM-44
Roberson, C. E. P 424-C, D;
W 1535-A
Roberts, Albert E. B 1053,
1062; P 424-B; Map C-8; OM-
129
Roberts, Claude M. C 366
Roberts, G. E. MRUS 1901
b, 1902 b
Roberts, Ralph Jackson
B 922-A, E, 931-M, 935-H,
940-A, 1034, 1082-H; P 400-B,
424-D; GQ-7, 10-12, 15; MF-
178, 240
Roberts, Ralph W. OM-151
Roberts, Wayne A. B 988-F, G
Robertson Eugene C. P 424-C
Robertson, Jacques F. MF-137
Robinove, C. J. W 1428
Robinson, Charles S. B 1021-I;
P 289, 424-B; GQ-143; MF-
121; OM-191
Robinson, Florence M. P 305-A, C,
E, G, I, J; (See also Weber,
F. R.)
Robinson, Gershon D. B 947-B,
998-C, 1024-A; P 400-B; GQ-
88
Robinson, Heath M. B 641-A,
686-T, V, Y, 726-F, 736-A
Robinson, Henry H. P 76
Robinson, Margaret K. P 260-D
Robinson, Thomas W. C 413;
P 400-B, 424-B; W 619, 780,
841, 1103, 1423, 1481, 1539-R
Robinson, William H. C 191, 254,
373
Robison, F. L. C 454
Rocha, V. S. B 954-E,
962-A; P 273
Rodgers, John P 277; GQ-
18, 19
Rodie, H. G. C 423, 444;
W 1539-F
Rodriguez Cabo, José B 954-F
Roedder, Edwin B 1088
Roesler, Max B 706
Rogers, Allen S. B 1052-E
Rogers, Carl P., Jr. OC-18, 19,
32; OM-43, 54, 84, 111
Rogers, Cleaves L. B 1037-A;
P 424-D
Rogers, Gaillard S. B 531-F,
541-H, 580-J, 653, 661-A, 749;
P 108-A, 117, 121
Rogers, James E. W 1539-A
Rogers, William B. MF-203
Rohn, Oscar A 21 II h
Rolfe, B. N. P 334-G
Rolkner, C. M. MRUS 1894
III g
Roller, J. C. P 400-B,
424-C
Roman, Irwin B 927-A;
P 365
Rominger, J. F. OM-82
Rorabaugh, M. I. C 276;
W 1360-B
Rose, Harry J., Jr. B 1036-N;
P 424-B
Rose, Nicholas A. W 889-C, D
Rose, Pat Map, p. 224
Rosenblum, Samuel B 1074-B
Rosholt, J. N., Jr. B 1084-A;
P 400-B, 424-D
Rostier, A. J. C 201
Ross, Clarence S. B 686-N, O,
U, 726-G, 735-H, I; P 154-F,
165-E, 179, 185-G, 198, 205-B,
366, 424-D
Ross, Clyde P. B 763, 771,
774, 780-D, 814, 821-A, B, 846
-D, 849-E, H, 854, 877, 922-B,
L, 928-B, 931-B, J, K, 936-Q,
955-E, 974-E, 997, 1042-D,
1081-F; MRUS 1923 I e; P 129-
H, 158-G, 294-K, 296, 400-B,
424-C; W 490-C, 498; Map, p.
190
Ross, D. W. W 135, 178
Ross, Daphne R. P 424-B, C;
(See also Riska, Daphne)
Ross, Donald C. GQ-99
Ross, Reuben J., Jr. B 1021-M;
P 294-L, 424-B, C
Rossman, D. L. B 998-B,
1058-B, E; GP-135; OM-46;
Map, p. 226
Rothrock, H. E. B 874-C;
Map C-3, 7, 10, 12-14, 21, 25;
OM-143; Map, p. 224
Rothwell, R. P. MRUS
1886 k
Roundy, P. V. B 686-U, Z,
835, 906-F; P 98-G, 146
Rowe, J. J. B 1006;
P 424-C
Rowland, J. B. C 368
Rowley, J. H. W 1070
Rubey, W. W. B 751-B,
871; P 154-D, 165-A, 189-E,
218, 424-B; SP p. 188; GQ-109
Ruggles, F. H., Jr. HA-40
Ruiz F., Carlos B 960-C,
964-E
Ruppel, E. T. B 1042-N;
C 260; P 292, 424-B; MF-174
Russell, I. C. A 3 d, 4 f,
5 f, 8 I b, 13 II a, 18 II d, 20 II
d, 22 III n; B 52, 85, 108, 199,
-217, 252; M 11; W 4, 53, 54,
78; GF 155
Russell, R. T. Map 3-173
Ryan, H. J. W 345-I
Ryder, J. A. A 4 e
Rynearson, G. A. B 922-J,
945-A, C, 948-B
S
Sable, E. G. P 303-C
Sable, V. H. I-12, 40, 69,
70, 72, 87, 89, 109, 110, 114,
117, 119, 128, 152, 162
Sackett, R. L. W 113
Sailer, R. J. P 294-G
Sainsbury, C. L. B 1024-F-
H, 1058-H; P 400-B, 424-C
Sakakura, A. Y. B 1052-A,
I; P 300
Salisbury, R. D. A 6 c; P 60,
GF 83, 141, 142, 157, 161, 162,
167, 191
Salvas, E. H. P 424-C
Sampson, Edward MRUS 1920
I e, II x, ff, 1921 I d, II p, u,
1922 I m, II f, m, 1923 I I, II bb
Sand, H. H. W 889-A
Sandberg, A. E. Map, p. 234
Sandberg, D. T. OM-179
(See also Taylor, Dorothy A.)
Sando, W. J. B 1056-A,
1071-F; P 400-B
Sanford, Samuel B 298, 585,
624; MRUS 1906 oo, 1907 II f,
1908 II aa, 1909 II dd; W 258,
319
Sanford, T. H., Jr. I-329
Sardeson, F. W. P 161;
GF 201, 210
Sargent, M. C. P 260-C, E
Sargent, R. H. B 797-E
Saunders, R. H. C 332
Savage, T. E. GF 185, 188
Savini, John W 1591-A
Sawyer, L. R. W 997
Sayre, A. N. W 678, 773-
B, 776, 849-A, 919, 1079-D
Scarcia, Glenn C 374
Sceva, J. E. W 1413
Schafer, J. P. P 424-D;
GQ-136, 140
Schaller, W. T. B 262, 405,
490, 509, 583, 610, 620-P,
666-X, 832, 833, 871, 992;
MRUS 1915 II u, bb, 1916 II c, n,
u, y, hh, 1917 II k, m, 1918 II c, z,
1919 II a; P 158-I
Scheid, V. E. B 1091
Scher, M. B. C 357
Scherer, O. J. W 969
Schipf, R. G. W 1414
Schlanger, S. O. P 260-Y
Schlecht, W. G. B 980, 992,
1006
Schlegel, D. M. B 1027-G,
1042-G
Schlocker, Julius P 400-B;
I-264, 272
Schlundt, Herman B 395
Schmeckebier, L. F. B 222
Schmidt, Dwight L. P 300
Schmidt, Robert George
B 1070-A, 1081-C, E; P 280-A
-B, 424-C; MF-99, 181, 182
Schmidt, Robert Gordon
P 400-B; GP-306, 307
Schmidt, Ruth A. M. P 424-D

- Schmitter, Eduardo B 946-C, 960-D
- Schnoll, H. R. P 424-C
- Schnabel, R. W. P 300; GQ-134; MF-55-60, 71-75; MR-2
- Schnatterbeck, C. C. MRUS 1905 k,l,y
- Schneider, E. A. B 78, 90, 113
- Schneider, Robert C 33, 274, 423; W 1539-D, F
- Schneider, W. J. P 424-B, C; W 1602
- Schnepe, M. M. P 400-B, 424-D
- Schoellhamer, J. E. OM-117, 128, 154, 193
- Scholz, Carl B 425
- Scholz, E. A. P 278
- Scholz, M. J. P 144
- Schopf, J. M. B 1053, 1055-C, D, 1111-B; C 228, 343; P 424-B
- Schoppenhorst, C. E. C 407
- Schrader, Floyd F. C 276; W 967-B
- Schrader, Frank C. A 20 VII d, 21 II i; B 213 d, 260 j,l,m, 285-F, 296, 340-A, 397, 430-D, 470-B, 497, 530 a, 540-I, 580-C, M, 582, 624, 690-D, 725-F, 737, 741, 750-F, 780-D, 842, 847-A; C 10; MRUS 1919 I s, 1920 I k, 1921 I n, 1922 I l, 1923 I s; P 15, 20; SP p. 189; GF 159
- Schreurs, R. L. W 1358; HA-4
- Schroeder, Marvin C. C 314
- Schroeder, Merle E. C 177
- Schuchert, Charles B 87
- Schultz, A. R. B 315-A, 316-D, 340-F, 341-B, 381-B, 430-I, 512, 530 f, 543, 680, 690-C, 702; W 114
- Schultz, L. G. P 400-B, 424-C
- Schumm, S. A. C 437; P 352-B, C, 424-B; W 1531
- Schuyler, J. D. A 18 IV d
- Schwartz, G. M. P 256; GP-128-134, 140-148; Map 3-180
- Schwennessen, A. T. W 345-B, D, 422, 425-A, E, 450-A
- Scotfield, C. S. W 839
- Scott, Glenn R. B 1060-C; I-333
- Scott, Richard A. P 424-B
- Scott, Robert C. C 371; P 424-B, D
- Scott, T. N. Map, p. 226
- Scudder, S. H. A 8 I d, 13 II f; B 31, 69, 71, 93, 101, 124; M 21, 40
- Searcy, J. K. C 216, 273, 370, 438; W 1541-B, C, 1542-A
- Sears, J. D. B 710-C, 751-C, 767, 781-B, 860-A, 1021-E; P 132-F, 193-F
- Sears, R. S. C 211
- Segerstrom, Kenneth B 962-D, 965-A, 1104-A, B; P 424-C, D; CQ-80, 82, 86, 87, 116
- Seitz, J. F. B 1058-C
- Senftle, F. E. B 1097-A; P 334-A, 400-B
- Serr, E. F. 3d C 67
- Sewell, J. S. B 324
- Seymour, W. L. GQ-1
- Shacklette, H. T. P 400-B, 424-D
- Shaler, M. K. B 260 j, 315-H, I, 316-F
- Shaler, N. S. A 6 e, 7 d, 8 II d, 9 c, 10 I b, 12 I b, 13 II b, 15 b, 16 II c, 17 I g, 18 II g; 19 II d; B 46, 53; MRUS IV c; M 33
- Shamblin, W. E. B 900-E
- Shapiro, Leonard B 1036-C; C 165; P 400-B, 424-B
- Sharkey, H. H. R. OM-19, 53, 56
- Sharp, B. J. P 300
- Sharp, W. N. B 1030-I; P 261, 300, 400-B, 424-B; MF 4, 98
- Shattuck, G. B. B 205; GF 136, 152
- Shaw, E. W. B 341-B, 430-F, 454, 470-G, 541-A, 629, 661-D, 688, 716-D; P 85-B, 108-H; GF 177, 178, 185, 188, 195, 200, 213, 216
- Shawe, Daniel R. P 261, 300, 424-B; MF-203
- Shawe, Fred R. P 424-B
- Shearer, H. K. P 120-C
- Sheffey, N. B. B 1084-K, 1117-A; P 400-B, 424-D
- Sheldon, Mary G. OM-184
- Sheldon, Richard P. B 1042-E, 1084-D; C 262, 297, 304, 307, 324, 325, 327, 375
- Shelton, John S. OM-23, 63
- Shen, John P 424-B, C
- Shenon, P. J. B 830-B, 846-B; C 2, 9
- Shepard, A. O. P 424-C
- Shepard, E. M. W 102, 110, 114, 195
- Sheridan, D. M. B 1015-C, 1030-I; P 297-A, 424-C; MF-179
- Sherwood, Alexander M. B 1036-E; P 400-B
- Sherwood, Clarence B., Jr. P 424-D
- Sherzer, W. H. GF 205
- Shoemaker, E. M. B 1112-B; P 300, 320, 400-B, 424-C, D; GQ-81, 83; MF-23, 28, 139; OM-209
- Short, M. N. B 783-C, 825, 914
- Showalter, A. K. W 869
- Shride, A. F. B 1027-N; MB-5, 6, 14
- Shumard, B. F. P 59
- Shuter, Eugene C 453
- Sieenthal, C. E. B 285-K, L, 316-D, 340-C, J, 364, 606, 666-Y, AA; MRUS 1896 V (cont.) U, 1907 I f,l,j, 1908 I f,g,i,u, 1909 I f,g,i,w, 1910 I f,g,v, 1911 I g-i, 1912 I f,g,y, 1913 I dd,ee,gg, 1914 I q,s,t, 1915 I j,ee,ff, 1916 I y,z,aa, 1917 I k,cc,dd, 1918 I f,kk,mm, 1919 I b,t,ee, 1920 I b,l,t,kk, 1921 I b,f,g,i, 1922 I b,g,h,j, 1923 I g,m, II j; W 240; GF 148, 173
- Sievers, E. G. MRUS 1918 II j,kk, 1919 II hh, 1920 II p,dd, 1921 II i,cc,ee
- Sigafoos, R. S. B 974-C, 1061-E; P 387-A, 424-C
- Sigvaldason, G. E. P 424-D
- Silberling, N. J. P 322, 400-B; MF-52, 220
- Silver, L. T. P 300
- Silvey, W. D. W 1540-B
- Simmons, E. T. C 173
- Simmons, G. C. MF-203
- Simons, Daryl B. C 450; P 424-C, D; W 1498-A
- Simons, Frank S. B 1028-B, 1034, 1057; P 284
- Simons, Wilbur D. P 424-B; W 1220
- Simpson, H. E. P 328; W 293, 598; GQ-119, 145
- Simpson, T. A. P 424-B
- Sims, P. K. B 978-D, 982-G, 1032-A, D, F; P 287, 300, 400-B, 424-B
- Singewald, Q. D. B 911, 928-B, 955-D, 964-B, 970, 1027-E, 1072-H; C 294, 321; P 300; MF-37
- Sinnott, Allen P 424-D; W 1461, 1471
- Skibitzke, H. E. P 386-A; W 1360-D
- Skinner, D. L. P 424-B
- Skipp, B. A. L. P 424-C
- Skitsky, V. L. B 957, 959, 966, 976, 1025, 1035
- Skoog, R. E. B 1060-D
- Skougstad, M. W. C 420; W 1459-E, 1496-B
- Slavin, Morris B 1006
- Slichter, C. S. A 19 II c; P 44; W 67, 110, 140, 141, 153, 184
- Sloss, L. L. OC-15, 25
- Smart, R. A. C 305-307, 325, 327
- Smedes, H. W. P 400-B
- Smith, Audrey P. B 1006
- Smith, Carl D. B 285-H, 341-A, 381-A, 393, 541-B
- Smith, Clay T. B 922-J, 945-B, 948-B
- Smith, E. Eggleston B 341-B, 474
- Smith, Eugene A. B 43, 225 j, MRUS 1882 b; W 102, 114
- Smith, George Irving B 1045-A; P 400-B
- Smith, George Otis A 18 II d, 19 III f, 22 III k, 28-51; B 213 b, 225 b, 235, 260 d,k, 285-O, 313, 315-C, 537, 599; MRUS 1905 II,nn,qq, 1906 II, 1915 I a, 1917 I a; P 19, 35; W 55, 145, 400-A; GF 54, 65, 86, 106, 139, 149
- Smith, Harriet B. B 1019-B; P 300
- Smith, Henry L. GQ-172

- Smith, Howard R. C 355;
OM 170
- Smith, J. Fred, Jr. B 1071-E;
1-155, MF-100-115; Map, p.
226
- Smith, James Hiram GQ-62, 70,
84, 94
- Smith, James Perrin M 42; P 40,
83, 141, 167
- Smith, Lawrence E. C 208, 210,
211; Map 3-213
- Smith, Leonard S. W 156
- Smith, Patsy B. P 294-M,
400-B
- Smith, Philip S. B 314-H,
315-D, 328, 345-E, 379-F,
433, 442-H, 449, 480-J, 520-
L, M, 525, 536, 542-F, 592-B,
622-H, 655, 666-B, 783-A, E,
792-C, 797-A, D, 810-A, 813-
A, 815, 824-A, 836-A, 844-A,
849-A, 857-A, B, 864-A, 868-
A, 880-A, 897-A, 910 -A-C, 917
-A-C, 926-A, C, 933-A, 943-A;
MRUS 1916 II bb, I917 II d,
1918 II p, 1919 II ii, 1920 II ee;
P 95-H, 182, 192; W 314
- Smith, Rex O. W 1478,
1479
- Smith, Richard D. MF-67-70
- Smith, Robert C. C 340
- Smith Robert L. P 354-F,
- Smith, Vertie C. P 424-D
- Smith, W. H.
MRUS 1905 n
- Smith, Waldo E. W 869
- Smith, Walter R. B 755-D,
773-D, 783-C; P 132-J
- Smith, Ward C. B 922-T,
931-C, 936-B, 954-A, 962-D,
1045-F
- Smith, William Lee P 300,
400-B
- Smith, William Ogden P 295,
402-A
- Smith, William S. T. A 18 II f;
B 213 e; P 36; W 145; GF 91,
108, 148
- Smith, Winchell P 424-D
- Smock, J. C.
MRUS 1882 n
- Smysor, Bettie Map, p. 191
- Smyth, H. L. A 15 e, 19
III a; M 28, 36
- Snavelly, P. D., Jr. B 1053;
P 424-D; Map C-8; OC-6; OM-
88, 97, 110, 203
- Snell, L. J. C 201
- Snelling, W. O. B 333;
MRUS 1901 p.
- Sniegocki, R. T. W 1327,
1493
- Snow, L. G. OM-168
- Snyder, C. T. W 1110-A
- Snyder, G. L. B 1028-G,
H, M; C 318; P 424-D; GQ-144
- Sohl, N. F. P 331-A
- Sohn, I. G. B 1091;
- C 158; P 221-C, 264-A, 330-A,
424-B, D; MR-1
- Soister, P. E. B 1107-A;
C 338; MF-83
- Sokol, Daniel B 1058-D
- Sokoloff, V. P. P 221-G
- Somers, W. P. C 452
- Sommerville, A. J. W 1526
- Soper, E. K. B 678, 728
- Soren, Julian Map C-43
- Soulé, Frank B 324
- Soule, R. M. W 1105
- Soyster, H. B. C 11
- Speer, P. R. C 382, 383
- Speert, J. L. AP p. 188
- Spence, F. H. P 424-C
- Spencer, A. C. A 21 II a;
- B 213 d,f, 225 b, 259, 287, 315-
D, 340-E, 359, 430-E, 626, 859;
P 25, 96; SP p. 189; GF 60, 161
- Spencer, F. D. C 258, 266;
GQ-151
- Spencer, J. W. B 6
- Spetzman, L. A. P 302-B
- Spicer, H. C. C 69, 181;
W 1460-E
- Spiegel, J. B. W 796-B
- Spieker, Andrew M. B 1133-A
- Spieker, Edmund M. B 796-C, 819,
822-C; P 163, 205-D
- Spratt, R. E. AP p. 188;
C 56, 64, 149
- Springer, G. H. GQ-42
- Sproull, H. S. MRUS 1885
i,k
- Sprouse, D. P. C 211
- Spurr, J. E. A 16 II d, 18
III b, 20 VII b, 22 II f; B 208,
213 b, 219, 225 b,g,m, 260 b,
285-A; M 31; P 42, 55, 63
- Sresthaputra, Vija B 984
- Staack, J. G. B 881, 882,
888, 889, 912, 913, 919
- Staatz, M. H. B 988-C,
1005, 1069; C 142, 220; P 265,
297-A, 300, 400-B
- Stabler, Herman P 163;
W 179, 186, 234, 235, 274, 398,
657
- Stackpole, M. R. W 967-C
- Stadnichenko, Taisia B 1084-K,
1117-A; C 272; P 400-B,
424-D
- Stafford, H. M. W 1260-D
- Stafford, P. T. B 1081-G,
1096-B; P 315-A; Map C-15, 22;
OC-53; OM-143
- Stager, H. K. B 1030-D;
P 400-B
- Stallman, R. W. P 424-B, C
- Stanton, T. W. A 17 I h;
B 106, 133, 257, 266; M 32, 44;
P 98-R, 128-A, 211
- Staples, L. W. B 969-E
- Starrett, W. H. B 1009-M
- Stauffer, C. R. GF 197;
Map 3-197
- Stearcy, R. E. C 439
- Stead, F. W. B 940-H;
P 300; Map, p. 236
- Stearns, Harold T. W 560-D,
597-D, 616, 619, 636-F, 637-C,
D, 638-B, 679-B, 774, 775, 818
- Stearns, Nora D. W 596-F,
597-B, 679-B
- Stebinger, Eugene B 381-B,
471-D, 540-H, 621-K, 641-C,
J, 691-E; P 90-G
- Stefansson, Karl B 947-E
- Steidtmann, Edward B 733
- Steiger, George B 167, 207,
262, 413, 620-J
- Steineke, Max 1-208 A, B
- Steinhilber, W. L. W 1482
- Stejer, F. A. B 1024-E
- Stenzel, H. B. P 242
- Stephens, Hal G. P 297-A
- Stephens, James G. B 1046-M;
C 313; P 300; Map C-20; GQ-
172; OM-145, 146, 161
- Stephenson, Edgar L. B 940-C
- Stephenson, Lloyd W. P 81, 90-H,
J, 98-J, 120-H, 154-F, 186-A,
G, 193-A, 210-E, 242, 243-C,
E, 264-B, 274-C, E, J; W 341,
399, 576; Maps, p. 190, 191,
252-254.
- Stermitz, Frank W 1482
- Stern, T. W. C 271;
P 300, 320, 334-A, 400-B,
424-B
- Sterrett, D. B. B 315-M,
340-D, M, 380-N, 430-J, 530 I,
580-F, 660-D, 740; MRUS 1906
z,nn,pp,rr, 1907 II f, 1908 II z,
bb,dd, 1909 II z,cc,ee, 1910 II
aa,dd,ff, 1911 II bb,ee,hh, 1912
II cc,ff, 1913 II a,ee, 1914 II h,
v; GF 222
- Stewart, W. M. W 234
- Steven, Thomas A. B 1082-F
P 274-M, 343, 400-B; MF-13
- Stevens, Guy C. C 108;
W 536
- Stevens, John C. W 214, 230,
253
- Stevens, John M. C 279
- Stevens, Peter R. W 1460-H
- Stevens, Rollin E. B 980,992,
1006, 1113; C 63; P 185-A,
400-B
- Steward, W. G. W 774, 775
- Stewart, Benjamin D. B 824-E
- Stewart, David B. P 424-D;
I-234-236
- Stewart, Glenn W. MF-7,8
- Stewart, James E.
W 208, 1134-B, 1527
- Stewart, Joe W. P 424-B
- Stewart, John H. B 1046-Q;
P 400-B, 424-B
- Stewart, Moyle D. C 211
- Stewart, Ralph P 195,
205-C; OC-1, 6, 34
- Stewart, Samuel W. P 400-B,
424-B
- Stich, J. N. C 234,
- Stieff, L. R. C 271;
P 300, 320, 334-A, 400-B
- Stimson, J. L. P 196-E
- Stipp, T. F. C 333;
OM-159, 177, 201; Map, p. 235
- Stockbridge, L. W. B 623
- Stocking, H. E. P 300
- Stoddard, B. H. MRUS 1919
II k, 1920 II y,cc, 1921 II n,v,
1922 II r, 1923 II q,s
- Stoddard, Jesse C. B 430-G
- Stoek, H. H. A 22 III c
- Stokes, Henry N. B 78, 90,
113, 167, 186

- Stokes, William L. C 111;
OM-93; Map 3-173
- Stoll, A. MRUS 1919
I t, ee, 1920 I b, I t, kk, 1921 I b,
f, g, i, 1922 I b, g, h, j, 1923 I g, m
- Stoll, Walter C. B 933-C,
1042-M; P 229
- Stone, G. H. M 34
- Stone, Jerome B 1082-B;
P 300
- Stone, R. W. B 225 g, h,
256, 259, 277, 284, 304, 316-A,
341-A, 348, 381-B, 470-B,
471-B, 499, 580-N, 585, 612,
624, 666-E-G, J, 697; MRUS
1912 II h-j, 1913 II r, s, u, 1915
II n, q, 1916 II f, m, q, w, 1917 I
p, II c, e, g, i, y, 1918 I c, II e, g, i,
l, m, 1919 I h, II h, j, m, n, 1920
I d, II a-c, h, z; W 110; GF 121,
123
- Storey, F. B. W 369
- Storrs, H. A. W 93, 146
- Storrs, Lucius S. A 22 III J
- Stose, A. J. P 204;
(See also Jonas, A. I.)
- Stose, G. W. B 225 o,
285-N, 315-I, P, 430-B, 530 e,
540-L, 660-J, 737, 828, 840,
891; MRUS 1906 ee, 1918 II v,
ee, 1919 II g, x, 1920 II l, w,
1921 II h, t, 1922 II i, q, 1923 II
c; P 71, 204; W 110, 145; GF
170, 179, 186, 223, 225; GQ-
28; OM-25; Map, p. 190, 253
- Stowell, S. H. MRUS 1882
J, 1883-84 b, 1885 b
- Straczek, J. A. B 975-D,
1040, 1057, 1082-H; MF-1
- Stramel, G. J. C 183, 323
- Stratton, Garland C 340
- Stringfield, V. T. W 773-C
- Strobell, J. D., Jr. P 278;
MF-41; OM-160
- Stromquist, A. A. P 424-B
- Strong, R. M. B 392
- Strouhal, Vincent B 14, 27,
35, 42
- Struth, H. J. C 11
- Struthers, Joseph MRUS 1901
g-i, l-n, u, bb, dd-hh, ii, mm, tt,
1902 g-i, l-n, t, aa, bb, ee-gg, ii,
mm, nn, 1903 h, m-o
- Stuart, David J. P 424-C;
GP-113
- Stuart, Wilbur J. P 424-B
- Stugard, Frederick, Jr. B 1030-G, 1042-Q; C 220, 239;
P 300; MF-165, 168
- Stupke, Arthur Map, p. 253
- Stutzer, O. MRUS 1910
II u
- Subitsky, Seymour C 275;
P 424-D
- Sudworth, G. B. A 20 V c,
21 V f
- Sukamto, Rab P 424-D
- Sullivan, E. C. B 312
- Sullwold, H. H., Jr. OM-54
- Sulsona, P. T. P 327
- Summerson, C. H. OM-62
- Sundstrom, R. W. W 1047,
1069, 1070, 1079-C, 1106
- Sutton, A. H. MF-2
- Svoboda, R. F. OM-198
- Swadley, W. C. P 400-B
- Swain, F. M. P 234-A, B,
243-A
- Swank, J. M. MRUS 1882
b, 1883-84 c, 1885 c, 1886 a,
1887 a, 1888 a, 1889-90 a, 1891
a, 1892 a, 1893 a, 1894 III a,
1895 III a, 1896 V a, 1897 VI a,
1898 VI a, 1899 VI a, 1900 a,
1901 a, 1902 a, 1903 b, 1904 a
- Swanson, Roger W. B 1027-H;
C 209, 297, 303, 326, 375;
P 400-B; GQ-27
- Swanson, Vernon E. P 300, 356-
A, C, 357
- Swartz, Charles K. GF 179
- Swartz, Frank M. P 158-C
- Swartz, Joel H. P 260-U
- Swendsen, G. L. W 133, 175,
176
- Swenson, F. A. C 83, 93, 96;
W 1263, 1418, 1460-B, 1487
- Swenson, H. A. C 19, 20,
34, 54, 76, 83, 93, 96, 170, 203,
206, 372; W 1259, 1295, 1355,
1360-C, 1378, 1418, 1460-B
- Swinney, C. M. Map, p. 226
- Switzer, George C 29
- T
- Taber, Stephen B 430-D
- Taff, J. A. A 19 III e,
21 II e, f, 22 III i, o; B 260 I, j,
285-F, H, 316-E, 341-B, 380-
H, 381-D; MRUS 1906 kk, 1907
II f, 1908 II w; P 31; GF 28,
34, 74, 79, 98, 122, 132
- Tagg, K. M. B 1019-I;
MF-178; (See also McQueen,
Kathleen)
- Tait, D. B. C 241
- Talbot, A. N. W 110
- Tandy, C. W. C 302
- Tangborn, W. V. P 424-B
- Tanner, A. B. P 400-B
- Tappan, Helen P 236-A, B
- Tarr, R. S. B 284; P 64,
69; W 110; GF 169
- Tatlock, D. B. P 400-B,
424-B; MF-220
- Tavera, Eugenio B 1037-A
- Tavernier, René W 238
- Taylor, Alfred R. B 1082-B;
- Taylor, Dorothy A. C 53, 81,
171, 293;
(See also Sandberg, D. T.)
- Taylor, Dwight W. P 254-C,
337
- Taylor, F. W. MRUS
1882 h
- Taylor, Frank B. M 53;
W 110; GF 190
- Taylor, George Carroll, Jr. B 984; W 1079-D
- Taylor, George Holmes W 619, 796-D, 836-C, 993, 1029
- Taylor, L. H. W 68
- Taylor, Richard B. B 1082-G;
MF-176, 223
- Taylor, Thomas U. W 40, 71,
105, 132, 174, 190, 210
- Terriere, R. T. B 1096-A;
OM-143
- Thaden, R. E. P 300, 424-
B, C
- Thatcher, L. L. P 424-D;
W 1454
- Thayer, T. P. B 922-D,
935-A; P 400-B, 424-D; MF-
49-51; Map, p. 235
- Theiler, J. J. MF-3
- Theis, C. V. W 677
- Theobald, P. K., Jr. B 1030-K,
1071-A; C 411; P 300, 424-B;
OM-191
- Thiessen, Reinhardt P 132-I
- Thom, Emma M. B 869, 892,
937, 938, 949, 952, 958, 968,
977, 1049
- Thom, William T. MRUS 1905
a, 1906 a, 1907 I a, b, 1908 I a, b,
u, 1909 I a, 1910 I a, 1911 I a,
1912 I a, 1913 I a; Map, p. 224
- Thom, William T., Jr. B 736-B,
796-A, 856; P 108-J, 163
- Thomas, C. R. OC-16;
OM-7, 41, 85
- Thomas, H. E. C 129, 346,
347, 446; P 257-A; W 780, 836-
C, 993
- Thomas, M. P. C 365
- Thomas, N. O. W 1360-A
- Thomasson, E. M. B 1067
- Thomasson, H. C., Jr. W 1000,
1107, 1108, 1464
- Thompson, A. H. A 10 II b,
11 II d, 12 II a, 13 III d, e
- Thompson, Charles E. B 1036-B,
L, 1084-F; C 411; P 424-B
- Thompson, D. G. W 450-B,
490-B, 500-B, 578, 999
- Thompson, George A. B 1042-C;
P 312
- Thompson, Mary E. B 988-D,
1009-B, D; C 304; P 320
- Thompson, Morris M. C 82, 218,
357
- Thompson, Raymond M. C 152; OC-13, 36; OM-91, 112,
127
- Thorpe, Arthur P 400-B
- Thurlow, E. E. P 300
- Thurston, Ralph H. B 1046-I
- Thurston, William R. B 1005,
1011, 1012-E
- Thurtell, Henry W 176, 212
- Thwaites, F. T. B 540-H
- Tibbitts, G. C., Jr. P 424-D;
W 1539-B
- Tight, W. G. P 13
- Tillinghast, F. H. W 146
- Tison, L. J. P 424-C
- Titcomb, Jane B 1006;
C 64
- Todd, D. K. W 1477
- Todd, J. E. B 144, 158;
W 34, 90; GF 96, 97, 99, 100,
113, 114, 156, 165
- Todd, Ruth P 241, 260-
H, N, X, 280-H, 294-F, 424-C
- Tolbert, G. E. C 196; I-34,
159, 180, 240-242
- Tom, C. W. P 300
- Tompkin, J. M. B 1001

- Tooker, E. W. B 988-H, 1032-A; P 300; MF-240
 Torrey, A. E. C 93, 198; W 1355
 Toulmin, Martha S. P 424-B
 Toulmin, Priestley, 3d P 424-B-D
 Tourtelot, H. A. P 400-B, 424-C; OC-14, 22, 36; OM-6, 91, 124
 Tower, G. W. A 19 III f; GF 38, 65
 Town, F. E. A 19 V c
 Townsend, R. C. GQ-44, 46, 47
 Trace, R. D. B 1012-C, D, 1042-S; P 400-B
 Tracey, J. I., Jr. P 260-A, 299, 424-B
 Tracy, H. J. C 66, 98, 284, 397; W 1592-A
 Trainer, F. W. B 1121-C; C 268; P 424-D; W 1494
 Trask, P. D. B 954-F; P 186-H, N, 196-E
 Tressler, W. L. P 196-C
 Trexler, J. P. P 424-B; Map C-43
 Trimble, D. E. B 1071-E, 1087-D; P 424-B, C; GQ-43, 104
 Trites, A. F., Jr. B 988-H, 1009-H, 1046-H, I; C 217; P 265, 300, 320
 Trow, James P 310
 Trowbridge, A. C. B 837; P 131-D; GF 200
 Troxell, H. C. C 105; W 796-C, 844, 1366; HA-1
 Troyer, M. L. C 338; OC-56; OM-112, 172
 True, F. W. P 59
 Truesdell, A. H. P 400-B
 Truesdell, P. E. MB-20; Map, p. 235
 Trumbull, J. V. A. B 1015-F, 1042-J, 1067; C 171, 447; GP-246-248, 251; Map, p. 213
 Tryon, F. G. MRUS 1918 II II, 1919 II b, 1920 II hh, 1921 II gg, 1922 II gg, hh, 1923 II ff, gg
 Tschanz, C. M. B 1030-L; P 400-B; MF-136, 206
 Tuck, Ralph B 849-I, 857-C, 864-B, 880-D, 897-B; Map, p. 226
 Turcan, A. N., Jr. W 1296
 Turner, George M. MRUS 1885 i, 1886 h, k
 Turner, Henry W. A 14 II h, 17 I d, 21 II c; GF 3, 11, 17, 18, 37, 41, 43, 51
 Turner, Samuel F. C 6; W 1481
 Turp, J. S. MRUS 1915 II gg, 1916 II t
 Tuttle, A. H. W 916, 917
 Tuttle, Curtis R. P 424-C
 Twenhofel, W. S. B 947-B, 963-A, 998-C; C 147, 252, 280; P 300
 Twenter, F. R. P 424-C
- Tweto, Ogden P 245, 400-B, 424-B; MF-12, 34; Map, p. 234, 253
 Twitchell, M. W. M 54
 Tychsen, P. C. C 34; W 1298
 Tyson, N. S. GP-157-189
- U
- Udden, J. A. B 430-F, 506; GF 195
 Ulloa, Salvador B 1037-A
 Ulrich, E. O. B 213 e, 260 f, 267; P 24, 36; GF 95, 119
 Umpleby, J. B. B 528, 530 a, 539, 540-E, 580-K, 732, 814; MRUS 1912 I k, 1916 I h-j, 1917 I f-i; P 97
 Underwood, L. B. OM-17, 38
 Upham, Warren B 39, 72; M 25
 Upson, J. E. W 1068, 1107, 1108, 1110-B, 1297, 1495
- V
- Van Alstine, R. E. B 947-G; P 400-B, 424-C
 Vanderwilt, J. W. B 846-C, 884
 van der Wyck, O. H. MRUS 1895 III h
 Van Hise, C. R. A 10 I c, 15 e, 16 I f, 19 III a, 21 III c, 22 II b; B 8, 86, 360; M 19, 28, 36, 47, 52; GF 62
 Van Horn, Frank Benjamin B 394; MRUS 1907 II d, f, 1908 II q, 1909 II r, y, 1910 II r, 1911 II r
 Van Horn, Frank Robertson B 818
 Van Horn, Richard C 88; P 424-C; GQ-103; MF-179
 Van Houten, F. B. P 274-A; OM-113, 140, 180
 Vanlier, K. E. W 1375
 Van Orstrand, C. E. P 95-G
 Van Sickle, D. M. W 1110-D
 Van't Hul, Arthur W 1463
 Van Tuyt, D. W. C 174
 van Vloten, Roger P 424-D
 Van Winkle, Walton W 237, 339, 363
 Vargo, J. L. GP-138, 139
 Varnes, David J. B 1081-A; C 12; P 424-B, C; Map, p. 235
 Varnes, Helen D. C 31; P 257; MB-2
 Vaudrey, W. C. W 1455-A
 Vaughan, T. W. A 18 II b; B 142, 151, 164, 205, 213 k; MRUS 1896 V (cont.), c, 1901 oo; M 39; P 98-T, 128-A; GF 42, 64, 76
 Vaughn, W. W. B 1052-I; C 353, 427
 Veatch, Arthur C. B 264, 285-F, 316-D, 431-B, 505; P 44, 46, 56; W 114, 155
- Veatch, Jethro Otto B 315-I; W 341
 Vedder, J. G. P 400-B, 424-C; OM-154, 193
 Velikanje, R. S. B 1058-A
 Vesselowsky, S. T. B 959, 966, 976, 981, 991, 1002, 1022, 1033, 1048, 1066, 1086-A-D, 1106-A-D
 Vetter, C. P. P 295
 Veytia, Mario B 960-F
 Vhay, J. S. B 936-K
 Vickers, R. C. B 1030-F, 1042-B; C 286, 351; P 300
 Vine, J. D. B 1027-J, 1055-I, J, 1074-F; C 172, 212, 344; P 300, 424-C; OM-108, 130, 139, 170
 Visser, F. N. C 126, 156, 188, 238, 435; W 1377, 1482
 Vitaliano, Charles J. B 978-A; MF-35, 52
 Vitaliano, Dorothy B. B 1022, 1033, 1048, 1066, 1086, 1106, 1116, 1146-A, B
 Vlissides, S. D. OM-207; (See also Drakoulis, Sophie)
 Vogdes, A. W. B 63
 Vokes, H. E. P 233-E; OM-88, 97, 110, 150
 Vorbe, Georges OM-61
 Vorhis, R. C. W 1298, 1492
- W
- Waagé, K. M. B 993, 1081
 -B, 1102; P 274-B; OC-60
 Waananen, A. O. P 424-C
 Waddell, Courtney Map C-17
 Wade, Bruce P 137
 Wagener, F. W. P 424-B
 Wagner, A. O., Jr. B 942
 Wagner, H. C. B 995-A; P 424-D; Map C-3, 7, 10, 12-14, 19, 21; GQ-49, 149; OC-48
 Wahl, R. R. P 424-C
 Wahlstrom, E. E. P 424-B
 Wahrhaftig, Clyde B 963-E, 989-G; C 310; P 293-A, B
 Waite, H. A. C 19, 20; W 848, 943
 Walcott, C. D. A 10 I d, 12 I d, 14 II I, 16 I a, 17 I a, 18 I a, 19 I a, 20 I a, 21 I a, 22 I a, 23-27; B 10, 30, 81, 134; M 8, 30, 32, 51
 Waldron, Fred R. OM-114
 Waldron, Howard H. B 1028-A, T; GQ-38, 48, 56, 158
 Walker, Edward C. P 400-B
 Walker, Eugene H. C 240; W 1328, 1411
 Walker, Flora K. OM-116
 Walker, George W. B 969-E, 1021-C; C 128; P 300, 400-B, 424-C; GQ-25; I-299
 Walker, John A. MRUS 1882 m, 1883-84 m
 Walker, William H. C 287; W 1417
 Wallace, Jane H. B 1019-B
 Wallace, Robert E. B 1027-M; P 268, 400-B, 424-D; MF-82, 220

- Wallace, Stewart R. B 1027-O;
C 338; P 300
- Walling, I. W. C 232
- Walter, K. L. Map, p. 235
- Walter, R. F. W 147
- Walters, Charles P. B 1060-B,
D; C 179
- Walters, Kenneth L. C 422
- Walton, Matt S., Jr. B 947-C, D;
GP-135; OM-46
- Walton, William C. W 1229
- Wandke, Alfred P 144
- Wanek, A. A. B 1072-M;
P 374-H, 424-C; OM-96, 121,
145, 152
- Wanner, Atreus A 20 II e
- Ward, Frederick N. B 992, 1006,
1036-I, J; C 119, 124, 161;
P 300, 400-B, 424-B
- Ward, Lester F. A 5 g, 6 f,
8 II b, 15 c, 16 I d, 19 II e, 20
II e; B 37; M 48;
- Ward, Porter E. P 424-D
- Ward, W. S. MRUS
1904 c
- Warder, R. B. B 60
- Waring, Claude L. B 1036-E,
F, 1070-B, 1097-B
- Waring, Gerald A. B 849-A,
857-E, 861; C 18; P 424-C;
W 220, 231, 316, 338, 418, 425
-D, 429, 449, 450-C, 376, 679-
B, 992
- Waring, Robert G. C 306, 307,
324, 327
- Warr, J. W. P 424-D
- Warman, P. C. B 100, 177,
215
- Warner, Donald A. W 1140
- Warner, Ernest Ray C 311
- Warner, Lawrence A. B 1090;
P 318, 424-B
- Warner, Maurice A. C 304, 306,
307, 324
- Warr, J. J. P 400-B,
424-C
- Warren, John H. OM-52
- Warren, Walter C. B 1072-J;
OM-42; Map, p. 224
- Warrick, R. E. P 424-B
- Warshaw, C. M. B 1006
- Washburn, A. L. P 400-B
- Washburne, C. W. B 340-F,
341-B, 381-C, D, 431-A, 590
- Washington, H. S. B 55; MRUS
1906 rr; P 14, 28, 99, 127
- Waters, Aaron C. B 850,
955-F, 969-E; C 224
- Waters, Arnold E., Jr. B 844-D
- Watkins, F. A., Jr. C 372
- Watson, Elaine Map, p. 191
- Watson, Thomas L. B 225 d,
426, 430-D, 530 c, 580-O
- Watteyne, Victor B 369
- Wayland, R. G. B 933-B,
1058-I
- Weaver, D. E. W 1106
- Webber, Benjamin N. B 936-R,
961
- Webber, Edward J. P 268
- Webber, F. R. P 424-D
(See also Robinson, F. M.)
- Wedow, Helmuth, Jr. B 995-D,
1024-A, 1058-A; C 202, 248,
316, 331, 335; P 424-D
- Weed, W. H. A 9 d, 18 III
d, 20 III c, 21 II d, 22 II d;
B 104, 105, 139, 178, 213 b-d,
223, 225 d, 260 b,f,r, 285-B,
455; M 32; P 74; W 145; GF 1,
30, 38, 55, 56
- Weeks, Alice D. B 1009-B,
1074-A; P 300, 320, 400-B,
424-B, D
- Weeks, Fred B. B 130, 135,
146, 149, 156, 162, 172, 188,
189, 191, 203, 213 c, 221, 240,
271, 301, 315-P, 340-A, B, D,
K, 372; W 102, 114
- Weeks, H. W. B 373
- Weeks, Joseph D. A 14 II i;
MRUS 1883-84 a,m, 1885 a,b,h,
o, 1886 f,g, 1887 f,g, 1888 f,g,
1889-90 f,g, 1891 f,g, 1892 f,g,
1893 f,g, 1894 III f, IV b,d,e,
1895 III g, (cont.) a-c, 1899 VI
k
- Weeks, Robert A. P 292;
MB-7, 15
- Weeks, Wilford F. B 1046-O
- Wegemann, C. H. B 381-A,
B, 452, 471-A, F, 531-I, 541-
J, 581-E, 602, 621-C-E, G, J,
629, 670, 806-A, 856; P 108-D
- Weigle, J. M. C 356
- Weir, Doris B. B 988-B
- Weir, Gordon W. P 424-B;
MF-141-152
- Weir, James E., Jr. P 424-B, D
- Weis, P. L. B 1046-C,
1074-B, 1082-E; P 400-B; MF-
135
- Weiser, J. D. C 305
- Weiss, Lawrence P 254-G
- Weissenborn, H. F. B 1019-L
- Weitz, J. L. OC-43;
OM-122, 180; Map, p. 191
- Welch, S. W. B 1042-P;
Map C-22; OC-58, 62; OM-163;
Map, p. 213
- Weld, B. A. C 401, 403,
412, 428, 448
- Weller, Stuart R 153;
MF-2
- Wells, Francis G. B 830-B,
849-F, 850, 886-C, 922-O, P,
936-D, 945-A, 948-B, 995-C;
W 638-A, 656; GQ-25, 89;
I-325; MF-38
- Wells, John David B 1032-B,
E, 1060-A, 1081-D; C 345;
P 319, 424-C; MF-188, 189, 197
- Wells, John West P 260-I, P
- Wells, Roger C. B 548, 609,
693, 717, 778, 878, 950; MRUS
1917 II w, 1918 II h, 1919 II e,
1920 II n; P 98-D, 120-A, 144,
154-C, 186-D, 205-A
- Wentworth, C. K. B 730-C,
994, 996-D; P 131-C
- Wenzel, L. K. W 679-A,
779, 836-E, 848, 887, 889-A,
943
- Wesbrook, F. F. W 193
- Wesley, G. R. B 876
- West, Lewis R. I-329
- West, Samuel W. C 443;
P 424-D; W 1376
- West, Walter S. B 1024-B;
C 196, 214, 244, 250, 265, 300,
319, 328, 348; P 424-D
- Westgate, L. G. B 715-F,
722-C, 725-A, 814; P 171
- Westley, Harold P 424-C
- Wharton, Joseph MRUS
1896 V I
- Wheeler, Dooley P., Jr. B 936-D
- Wheeler, Walter C. P 90-D, L,
102, 124
- Wherry, E. T. B 580-H,
828
- Whipple, G. C. W 198
- Whistler, J. T. W 135, 178
- White, Amos M. P 300, 424-
-B; MF-98
- White, Bernard L. GP-283
- White, Charles A. A 3 g, 4 e,
9 3; B 4, 15, 18, 22, 29, 34, 51,
77, 82, 128
- White, David A 19 III e,
20 II f, 22 III d; B 98, 211, 326,
382, 629, 686-A; M 37; P 35,
85-E, 186-B, C, 197-C
- White, Donald E. B 922-I, K,
936-N, 946-E, 953-A, 960-B,
962-B; P 400-B, 424-C, D;
Map, p. 226
- White, George N. B 1045-C
- White, George Willard B 1121-A;
P 424-B, C; I-316
- White, Israel C. B 65
- White, Max G. C 185, 195,
196, 214, 244, 255, 279, 319,
335; P 424-B, D
- White, Raymond L. P 300
- White, Vincent L. C 152;
OM-112, 127
- White, Walter Finch, Jr. C 104, 174, 283, 288
- White, Walter Noy W 560-A,
580-B, 637-B, 659-A, 773-B,
849-A, C, 889-C, D, F, 1481
- White, Walter Stanley B 940-E;
C 13, 193; P 400-B; GQ-27,
54, 73; MF-43, 48
- Whitebread, D. H. B 1009-K;
P 424-C
- Whitehead, H. C. P 424-D;
W 1535-A
- Whitfield, James E. B 42, 47,
55, 60, 64
- Whitfield, Robert P. M 9, 18, 24
- Whitlow, J. W. B 1123-A;
P 300; MF-116
- Whitmore, F. C., Jr. P 243-H,
400-B
- Whitney, F. L. W 110
- Widman, L. E. C 366
- Wieland, G. R. M 48
- Wier, Charles E. Map C-1,
9, 16
- Wier, Kenneth L. B 1044;
C 26; P 310; GP-115; MF-225;
Map, p. 236
- Wiese, J. H. B 936-L,
946-D, 948-D

- Wiesnet, D. R. C 227, 263;
P 400-B; GQ-123, I-167, 168
Witala, S. W. W 1526
Wilber, F. A. MRUS 1882
I, k, 1883-84 I, k
Wilcox, R. E. B 965-C,
1028 n; P 400-B
Wilder, Frank Alonzo B 223;
W 117
Willard, Daniel E. GF 117, 168
Willard, Max E. GQ-8, 20,
85
Willden, Ronald P 400-B,
424-C, D; MF-161, 236
Williams, Albert, Jr. A 4 d; B 2;
MRUS 1887 n
Williams, Edward G. P 424-D
Williams, George Arthur
B 1046-Q; P 300
Williams, George Huntington
A 15 f; B 28, 62
Williams, Gordon R. W 797, 846,
847
Williams, Henry S. B 3, 41, 80,
165, 210, 244; P 79, 89; GF 169,
192
Williams, Howel B 965-B,
969-E, 995-B
Williams, James Steele
B 874-C, 1012-A; P 203, 219,
266, 276, 281
Williams, John R. P 400-B;
GQ-124; I-297
Williams, Marden D. OM-16, 27,
34, 35, 56
Williamson, A. D. B 1027-L;
Map C-18
Willis, Bailey A 13 II c,
18 III c; B 21, 40; P 19, 71;
W 192; GF 54, 83
Wilmarth, Mary Grace B 769, 826,
896
Wilmarth, Verl Richard
B 1009-A, 1087-A; C 220, 312;
P 318, 400-B; MF-67-70
Wilmoth, B. M., Jr. C 379
Wilpolt, R. H. B 1072-K;
OC-38; OM-21, 61, 121
Wilson, C. E.
MRUS 1905 II
Wilson, Druid B 1056-A, B
Wilson, Ernest E. B 1052-F;
C 353, 427
Wilson, Harry D., Jr. W 1467
Wilson, Herbert M. A 12 II c, 13
III b, c, 18 I b, 19 I b, 20 I b, 21
I b; B 181, 185, 201, 418; W 1,
32, 87
Wilson, Ivan F. B 954-E;
960-F, 962-A; P 273, 424-D
Wilson, May GP-157,
160, 164, 166, 168, 169, 171,
172
Wilson, Robert Lake GQ-131
Wilson, William H. C 302
Winchell, A. N. B 470-K,
574; MRUS 1904 c, 1905 d,
1906 d
Winchester, D. E. B 471-F, G,
627, 641-F, 686-C, G, 691-B,
716-A. 729
- Winslow, Allen F. W 1360-F,
1365, 1416
Winslow, Arthur B 132
Winslow, C. E. A. W 185
Winterer, E. L. OM-96
Wires, H. O. P 424-B
Wisler, C. O. C 183, 323
Withington, C. F. B 1105;
P 424-D; GQ-72; MF-22
Witkind, I. J. B 1030-C,
1043-D, 1071-E, 1073, 1107-C;
P 300, 424-D; I-234; MF-84-95,
162; Map, p. 190
Wolcott, H. N. W 1360-D
Wolfe, J. A. P 424-C
Wolff, Henry C. W 184, 258
Wolff, John E. 18 II e;
B 213 e; M 23; GF 161
Wolman, M. G. P 271,
282-B-D
Wones, D. R. P 424-C
Wood, B. D. W 119, 280,
295-297, 340
Wood, George M. AP p. 188;
B 666-GG; Map, p. 252
Wood, Gordon H., Jr. B 1051;
C 89, P 400-B, 424-B; Map C-
4, 26, 43; OM-47, 57, 81, 96,
141, 183
Wood, Hiram B. P 300
Wood, Leonard A. W 1360-F
Wood, Perry R. W 1457,
1491
Wood, Robert H. B 531-B
Woodford, A. O. OM-23, 83,
117
Woodring, W. P. B 835, 935-
G; P 147-C, 190, 195, 207, 222,
306-A, B, 314-B; I-1; OC-12;
OM-14, 26; Map, p. 234, 235
Woodruff, E. G. B 316-D,
340-L, 341-A, B, 380-M, 381-
B, 431-B, 452, 471-A, G, H,
531-C, 541-I, 581-A
Woodward, Robert S. B 48-50, 70
Woodward, Walter T. OM-30
Woodworth, Jay B. A 17 I g, 19
II d, 22 III b; M 33
Woolley, R. R. W 517, 618,
920, 994
Woolsey, L. H. B 225 k, 285
-O, 286, 315-A, 341-A, 647;
P 77; GF 134
Work, Hubert W 556
Worthing, Helen W. B 1036-F,
1097-B
Worts, G. F., Jr. W 1000,
1068, 1110-B
Wright, Charles L. B 385;
MRUS 1909 II a
Wright, Charles Will B 225 b,
236, 259, 284, 287, 314-C, 345-
B, 347, 379-B; P 87
Wright, Dorothy C 77
Wright, Fred E. B 259, 284,
347
Wright, George F. B 58
Wright, James C. P 400-B;
CQ 35, 36, 54; MF-46-48;
OM-114
Wright, Thomas L. P 400-B
- Wrucke, C. T. B 1072-F,
1121-H; MF-159, 160
Wyant, D. G. B 1030-I,
1046-F; C 220, 322; P 300
Wyrick, G. G. W 1545-A
- Y
Yale, C. G. MRUS 1882
n, 1883-84 c, 1885 c, 1889-90
I, 1894 IV i, 1903 aa, II, 1904 c,
aa, oo, 1905 d, z, pp, 1906 d, bb,
mm, 1907 I e, II d, f, 1908 I h,
II n, y, 1909 I h, II n, bb*, 1910 I
h, II o, cc, 1911 I j, II p, 1912
I d, h, II q, ee, 1913 I aa, II z, bb,
1914 I k, II t, ee, 1915 I k, I, II
ee, ff, 1916 I g, II z, aa; 1917 I
q, II e, 1918 I s, t, II g, 1919 I
o, p, II n, 1920 I q, r, II a, 1921
I v, r, II o
Yarger, L. B. C 246
Yates, R. G. B 922-R,
931-N, 936-Q, 975-A; P 312;
MF-137, 237
Yehle, L. A. P 424-D
Yelenosky, Andy C-43
Yen, Teng-Chien P 214-C,
233-A, B, 254-B
Yenne, K. A. OC-49
Yerkes, R. F. P 274-L;
OM-154, 193, 195
Yochelson, E. L. P 294-H,
334-D, 424-B
Yoshida, Kozo P 260-R
Yost, Cloyd B, Jr. C 233
Yost, Ivan D. C 99;
W 1370-A
Young, Edward J. B 1032-F;
P 314-D, 400-B, 424-B, C
Young, Harry B. P 300
Young, Loyd L. C 200, 329,
367
Young, Richard A. P 424-B
Young, Robert Glen C 88
Young, Robert Spencer P 354-A
Young, Ruth Map, p. 191
Youngquist, C. V. W 869
Yuster, S. T. P 305-J
- Z
Zablocki, C. J. P 400-B,
424-C, D
Zandle, G. L. GP-136,
137, 200, 201, 203-208, 210,
214, 215, 217-245, 254-268,
270-282
Zapp, A. D. C 89;
P 400-B; OM-53, 85, 109, 133,
144, 182
Zeller, H. D. B 1055-B-
D; C 334, 349; P 300; Map C-
34, 35, 37; MF-83
Zen, E-an P 400-B
Ziegler, D. L. Map C-30
Zietz, Isidore B 1052-D;
P 316-B, 400-B, 424-D
Zones, C. P. P 424-D;
W 1539-C, 1581
Zubovic, Peter B 1084-K,
1117-A; C 272; P 400-B, 424-C,
D

