Bulletin No. 215

Series G, Miscellaneous, 24

DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY

CHARLES D. WALCOTT, DIRECTOR

CATALOGUE AND INDEX

OF THE

PUBLICATIONS OF THE UNITED STATES GEOLOGICAL SURVEY

1901 to 1903

BY

PHILIP CREVELING WARMAN



WASHINGTON
GOVERNMENT PRINTING OFFICE
1903

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR, UNITED STATES GEOLOGICAL SURVEY, Washington, D. C., June 1, 1903.

Sir: I have the honor to transmit herewith the manuscript for a catalogue and index of the publications of the United States Geological Survey issued between March, 1901, and June, 1903, and to request that it be published in the Bulletin series.

Very respectfully,

P. C. WARMAN,

Editor.

Hon. Charles D. Walcott, Director of United States Geological Survey.

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INTRODUCTION.

This catalogue and index are supplemental to those published in 1901 as Bulletin No. 177. These begin where those end; but there will be found in this index some entries—additional and corrective—which refer to papers covered by Bulletin No. 177. The two bulletins constitute a general catalogue and index of the publications of the Geological Survey from its organization, in 1879, to the present time. It is hoped that within the next few years someone will have the time and the inclination to combine the two and bring the work down to date.

The indexing has been done in a desultory manner, as opportunity arose; and in the work the writer has had the assistance of other members of the editorial corps, viz, Messrs. Charles A. Mansuy, Laurence F. Schmeckebier, and George M. Wood.

P. C. W.

PUBLICATIONS CATALOGUED AND INDEXED HEREIN.

ANNUAL REPORTS:

Twenty-second, four parts.

Twenty-third.

MONOGRAPHS:

Nos. XLI to XLV.

PROFESSIONAL PAPERS:

Nos. 1 to 13.

BULLETINS:

Nos. 177 to 214.

WATER-SUPPLY AND IRRIGATION PAPERS:

Nos. 46 to 80.

MINERAL RESOURCES:

For calendar year 1900. For calendar year 1901.

GEOLOGIC ATLAS OF UNITED STATES:

Folios Nos. 71 to 90.

TOPOGRAPHIC MAPS:

About 180 atlas sheets and other separate maps.

MISCELLANEOUS PUBLICATIONS:

Six.

CATALOGUE AND INDEX OF PUBLICATIONS OF THE UNITED STATES GEOLOGICAL SURVEY, 1901–1903.

By P. C. WARMAN.

CATALOGUE.

ANNUAL REPORTS.

Twenty-second Annual Report of the United States Geological Survey to the Secretary of the Interior 1900–01 Charles D. Walcott Director In four parts Part I.—Director's report and a paper on asphalt and bituminous rock deposits [Part II—Ore deposits; Part III.—Coal, oil, cement; Part IV.—Hydrography F. H. Newell, chief of division] [Vignette] Washington Government Printing Office 1901 [Pts. III and IV, 1902]

8°. 4 vols. 464 pp., 58 pls.; 888 pp., 82 pls.; 763 pp., 53 pls.; 690 pp., 65 pls.

Pt. I. Director's report and a paper on asphalt and bituminous rock deposits. 452 pp., 58 pls.

Director's report, pp. 1-207, pls. i-xxiv.

Asphalt and bituminous rock deposits of the United States, by G. H. Eldridge, pp. 209–452, pls. xxv-lviii.

Index, pp. 453-464.

Pt. II. Ore deposits. 888 pp., 82 pls.

Old tungsten mine at Trumbull, Conn., by W. H. Hobbs, pp. 7–22, pls. i–v.

Preliminary report on the lead and zinc deposits of the Ozark region, by H. F. Bain, with an introduction by C. R. Van Hise, and chapters on the physiography and geology, by G. I. Adams, pp. 23–228, pls. vi–xxv.

The ore deposits of the Rico Mountains, Colorado, by F. L. Ransome, pp. 229-398, pls. xxvi-xli.

Geology and ore deposits of Elkhorn mining district, Jefferson County, Mont., by W. H. Weed, with an appendix on the microscopical petrography, by J. Barrell, pp. 399–550, pls. xlii–lxii.

The gold belt of the Blue Mountains of Oregon, by Waldemar Lindgren, pp. 551-776, pls. lxiii-lxxviii.

The ore deposits of Monte Cristo, Wash., by J. E. Spurr, pp. 777-866, pls. lxxix-lxxxii.

Index, pp. 867-888.

Pt. III. Coal, oil, cement. 763 pp., 53 pls.

Coal fields of the United States, by C. W. Hayes, pp. 1-24, pl. i. Atlantic coast Triassic coal field, by J. B. Woodworth, pp. 25-53, pls.

Pennsylvania anthracite coal field, by H. H. Stoek, pp. 55-117, pls. vi-x. Northern Appalachian coal field, by M. R. Campbell, David White, and R. M. Haseltine, pp. 119-226, pls. xi-xii.

Southern Appalachian coal field, by C. W. Hayes, pp. 227-263, pls. xiii-xv.

Eastern Interior coal field, by G. H. Ashley, pp. 265-305, pls. xvi-xix. Northern Interior coal field, by A. C. Lane, pp. 307-331, pls. xx-xxi. Western Interior coal field, by H. F. Bain, pp. 333-366, pls. xxii-xxiv. Southwestern coal field, by J. A. Taff, pp. 367-413, pls. xxv-xxviii. Rocky Mountain coal fields, by L. S. Storrs, pp. 415-471, pls. xxix-xxx. Pacific Coast coal fields, by G. O. Smith, pp. 473-513, pls. xxxi-xxxiv. Coal resources of Alaska, by A. H. Brooks, pp. 515-571, pl. xxxv.

The Gaines oil field of northern Pennsylvania, by M. L. Fuller, pp. 573-627, pls. xxxvi-xliii.

Portland cement industry in Michigan, by I. C. Russell, pp. 629-685, pls. xliv-xlvi.

Chalk of southwestern Arkansas, by J. A. Taff, pp. 687-742, pls. xlvii-liii. Index, pp. 743-763.

Pt. IV. Hydrography. 690 pp., 65 pls.

Report of progress of stream measurements for the calendar year 1900, by F. H. Newell, pp. 9-506, pls. i-xxxvi.

Hydrography of the American isthmus, by A. P. Davis, pp. 507-630, pls. xxxvii-l.

The High Plains and their utilization (concluded), by W. D. Johnson, pp. 631-669, pls. li-lxv. Index, pp. 671-690.

Twenty-third Annual Report of the Director of the United States Geological Survey to the Secretary of the Interior 1901-02 [Vignette] Washington Government Printing Office 1902

217 pp., 26 pls. An administrative report only.

A law of Congress approved May 16, 1902, requires the annual report of the Director to be confined to one volume. Such papers as have heretofore appeared in the Annual Report series are now published in the series of Professional Papers, Bulletins, and Water-Supply and Irrigation Papers.

MONOGRAPHS.

Department of the Interior Monographs of the United States Geological Survey Volume XLI [-XLV] [Seal of the Department] Washington Government Printing Office 1902 [-1903]

- 4°. 5 vols. Bound in dark-maroon cloth.
 - XLI. Glacial formations and drainage features of the Erie and Ohio basins, by Frank Leverett. 1902. 802 pp., 26 pls. Price, \$1.75.
 - XLII. Carboniferous ammonoids of America, by J. P. Smith. 1903. 211 pp., 29 pls. Price, 85 cents.
 - XLIII. The Mesabi iron-bearing district of Minnesota, by C. K. Leith. 1903. 316 pp., 33 pls. Price, \$1.50.
 - XLIV. Pseudoceratites of the Cretaceous, by Alpheus Hyatt, edited by T. W. Stanton. 1903. 351 pp., 47 pls. Price, \$1.
 - XLV. The Vermilion iron-bearing district of Minnesota, with atlas, by J. M. Clements. 1903. 463 pp., 13 pls. Price, —.

PROFESSIONAL PAPERS.

Professional Paper No. 1 [-13] Series A, Economic geology, 16 B, Descriptive geology, 20 Department of the Interior United States Geological Survey Charles D. Walcott, Director Preliminary report on the Ketchikan mining district, Alaska with an introductory sketch of the geology of southeastern Alaska by Alfred Hulse Brooks [Survey design] Washington Government Printing Office 1902 [-1903]

4°. 13 brochures, "granite" covers.

 Preliminary report on the Ketchikan mining district, Alaska, with an introductory sketch of the geology of southeastern Alaska, by A. H. Brooks. 1902. 120 pp., 2 pls.

2. Reconnaissance of the northwestern portion of Seward Peninsula, Alaska,

by A. J. Collier. 1902. 70 pp., 11 pls.

 Geology and petrography of Crater Lake National Park, by J. S. Diller and H. B. Patton. 1902. 167 pp., 19 pls.

4. The forests of Oregon, by Henry Gannett. 1902. 36 pp., 7 pls.

5. The forests of Washington, a revision of estimates, by Henry Gannett. 1902. 38 pp., 1 pl.

Forest conditions in the Cascade Range, Washington, between the Washington and Mount Rainier forest reserves, by F. G. Plummer. 1902. 42 pp., 11 pls.

7. Forest conditions in the Olympic Forest Reserve, Washington, from notes

by Arthur Dodwell and T. F. Rixon. 1902. 110 pp., 20 pls.

8. Forest conditions in the northern Sierra Nevada, California, by J. B. Lei-

berg. 1902. 194 pp., 12 pls.

Forest conditions in the Cascade Range Forest Reserve, by A. D. Langille,
 F. G. Plummer, Arthur Dodwell, T. F. Rixon, and J. B. Leiberg, with an introduction by Henry Gannett. 1903. 298 pp., 41 pls.

 Reconnaissance from Fort Hamlin to Kotzebue Sound, Alaska, by way of Dall, Kanuti, Allen, and Kowak rivers, by W. C. Mendenhall. 1902. 68

pp., 10 pls.

11. Clays of the United States east of the Mississippi River, by Heinrich Ries. 1903. 298 pp., 9 pls.

Geology of the Globe copper district, Arizona, by F. L. Ransome. 1903.
 168 pp., 27 pls.

Drainage modifications in southeastern Ohio and adjacent parts of West Virginia and Kentucky, by W. G. Tight. 1903. 111 pp., 17 pls.

BULLETINS.

Department of the Interior Bulletin of the United States Geological Survey No. 177[-214] [Seal of the Department] Washington Government Printing Office 1901[-1903]

8°. 38 pamphlets, "granite" covers.

177. Catalogue and index of the publications of the United States Geological Survey, 1880–1901, by P. C. Warman. 1901. 858 pp. (Out of stock.)

178. The El Paso tin deposits, by W. H. Weed. 1901. 15 pp., 1 pl.

- 179. Bibliography and catalogue of the fossil Vertebrata of North America, by O. P. Hay. 1902. 868 pp.
- 180. The occurrence and distribution of corundum in the United States, by J. H. Pratt. 1901. 98 pp., 14 pls.
- 181. Results of primary triangulation and primary traverse, fiscal year 1900–1901, by H. M. Wilson, J. H. Renshawe, E. M. Douglas, and R. U. Goode. 1901. 240 pp., 1 map.
- 182. A report on the economic geology of the Silverton quadrangle, Colorado, by F. L. Ransome. 1901. 265 pp., 16 pls. (Out of stock.)

183. A gazetteer of Porto Rico, by Henry Gannett. 1901. 51 pp.

- 184. Oil and gas fields of the Western Interior and northern Texas coal measures and of the Upper Cretaceous and Tertiary of the western Gulf Coast, by George I. Adams. 1901. 64 pp., 10 pls. (Out of stock.)
- 185. Results of spirit leveling, fiscal year 1900–1901, by H. M. Wilson, J. H. Renshawe, E. M. Douglas, and R. U. Goode. 1901. 219 pp.

186. On pyrite and marcasite, by H. N. Stokes. 1901. 50 pp.

- 187. Geographic dictionary of Alaska, by Marcus Baker. 1901. 446 pp.
- 188. Bibliography of North American geology, paleontology, petrology, and mineralogy for the years 1892–1900, inclusive, by F. B. Weeks, 1902. 717 pp.
- 189. Index to North American geology, paleontology, petrology, and mineralogy for the years 1892–1900, inclusive, by F. B. Weeks. 1902. 337 pp.

190. A gazetteer of Texas, by Henry Gannett. 1902. 162 pp., 8 pls.

 North American geologic formation names: Bibliography, synonymy, and distribution, by F. B. Weeks. 1902. 448 pp.

192. A gazetteer of Cuba, by Henry Gannett. 1902. 113 pp., 8 pls.

193. The geological relations and distribution of platinum and associated metals, by J. F. Kemp. 1902. 95 pp., 6 pls. (Out of stock.)

194. Northwest boundary of Texas, by Marcus Baker. 1902. 51 pp., 1 pl.

- 195. Structural details in the Green Mountain region and in eastern New York (second paper), by T. N. Dale. 1902. 22 pp., 4 pls.
- 196. Topographic development of the Klamath Mountains, by J. S. Diller. 1902. 69 pp., 13 pls.
- 197. The origin of certain place names in the United States, by Henry Gannett. 1902. 280 pp. (Out of stock.)
- 198. The Berea grit oil sand in the Cadiz quadrangle, Ohio, by W. T. Griswold. 1902. 43 pp., 1 pl.

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- 199. Geology and water resources of the Snake River Plains of Idaho, by I. C. Russell. 1902. 192 pp., 25 pls.
- 200. Reconnaissance of the borax deposits of Death Valley and Mohave Desert, by M. R. Campbell. 1902. 23 pp., 1 pl.
- Results of primary triangulation and primary traverse, fiscal year 1901-2,
 by H. M. Wilson, J. H. Renshawe, E. M. Douglas, and R. U. Goode.
 1902. 164 pp., 1 pl.
- 202. Tests for gold and silver in shales from western Kansas, by Waldemar Lindgren. 1902. 21 pp.
- 203. Bibliography and index of North American geology, paleontology, petrology, and mineralogy for the year 1901, by F. B. Weeks. 1902. 144 pp.
- 204. Fossil flora of the John Day Basin, Oregon, by F. H. Knowlton. 1902. 153 pp., 17 pls.
- 205. Mollusca of the Buda limestone, by G. B. Shattuck, with an appendix on the corals of the Buda limestone, by T. W. Vaughan. 1903. 94 pp., 27 pls.
- 206. A study of the fauna of the Hamilton formation of the Cayuga Lake section in central New York, by H. F. Cleland. 1903. 112 pp., 5 pls.
- 207. The action of ammonium chloride upon silicates, by F. W. Clarke and George Steiger. 1902. 57 pp.
- 208. Descriptive geology of Nevada south of the fortieth parallel and adjacent portions of California, by J. E. Spurr. 1903. 229 pp., 8 pls.
- 209. The geology of Ascutney Mountain, Vermont, by R. A. Daly. 1903. 122 pp., 7 pls.
- 210. The correlation of geological faunas: a contribution to Devonian paleontology, by H. S. Williams. 1903. 147 pp., 1 pl.
- 211. Stratigraphy and paleontology of the Upper Carboniferous rocks of the Kansas section, by G. I. Adams, G. H. Girty, and David White. 1903. 123 pp., 4 pls.
- *212. Oil fields of the Texas-Louisiana Gulf Coastal Plain, by C. W. Hayes and William Kennedy. 1903. 174 pp., 11 pls.
- 213. Contributions to economic geology, 1902; S. F. Emmons and C. W. Hayes, geologists in charge. 1903. 449 pp.
- 214. Geographic tables and formulas, compiled by Samuel S. Gannett. 1903. .284 pp.

WATER-SUPPLY AND IRRIGATION PAPERS.

Department of the Interior Water-Supply and Irrigation Papers of the United States Geological Survey No. 46 [-80] [Seal of the Department] Washington Government Printing Office 1901 [-1903]

8°. 35 pamphlets, "terra-cotta" covers.

 Physical characteristics of Kern River, California, by F. H. Olmsted; and Reconnaissance of Yuba River, California, by Marsden Manson. 1901.
 57 pp., 8 pls.

47. Operations at river stations, 1900, Part I. 1901. 100 pp.

- 48. Operations at river stations, 1900, Part II. 1901. 101-196 pp.
- 49. Operations at river stations, 1900, Part III. 1901. 197-292 pp.
- 50. Operations at river stations, 1900, Part IV. 1901. 293-388 pp.
- 51. Operations at river stations, 1900, Part V. 1901. 389-488 pp.
- 52. Operations at river stations, 1900, Part VI. 1901. 489-575 pp.
- Geology and water resources of Nez Perce County, Idaho, Part I, by I. C. Russell. 1901. 86 pp., 10 pls.
- Geology and water resources of Nez Perce County, Idaho, Part II, by I. C. Russell. 1901. 87-141 pp.
- 55. Geology and water resources of a portion of Yakima County, Wash:, by G. O. Smith. 1901. 68 pp., 7 pls.
- 56. Methods of stream measurement. 1901. 51 pp., 12 pls.
- 57. Preliminary list of deep borings in the United States, Part I, by N. H. Darton. 1902. 60 pp. (Out of stock.)
- Storage of water on King River, California, by J. B. Lippincott. 1902.
 100 pp., 32 pls. (Out of stock.)
- Development and application of water in southern California, Part I, by
 J. B. Lippincott. 1902. 95 pp., 11 pls. (Out of stock.)
- Development and application of water in southern California, Part II, by
 J. B. Lippincott. 1902. 96-140 pp. (Out of stock.)
- Preliminary list of deep borings in the United States, Part II, by N. H. Darton. 1902. 67 pp. (Out of stock.)
- Hydrography of the Southern Appalachian Mountain region, Part I, by H. A. Pressey. 1902. 95 pp., 25 pls. (Out of stock.)
- Hydrography of the Southern Appalachian Mountain region, Part II, by
 H. A. Pressey. 1902. 96-190 pp., pls. 26-44. (Out of stock.)
- Accuracy of stream measurements, by E. C. Murphy. 1902. 99 pp., 4 pls. (Out of stock.)
- 65. Operations at river stations, 1901, Part I. (East of Mississippi River.) 1902. 334 pp.
- Operations at river stations, 1901, Part II. (West of Mississippi River.)
 1902. 188 pp.
- 67. The motions of underground waters, by C. S. Slichter. 1902. 106 pp., 8 pls.

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- 68. Water storage in the Truckee Basin, California-Nevada, by L. H. Taylor. 1902. 90 pp., 8 pls.
- Water powers of the State of Maine, by H. A. Pressey. 1902. 124 pp., 14 pls.
- Geology and water resources of the Patrick and Goshen Hole quadrangles, Wyoming, by G. I. Adams. 1902. 50 pp., 11 pls.
- 71. Irrigation systems of Texas, by T. U. Taylor. 1902. 137 pp., 9 pls.
- 72. Sewage pollution in the metropolitan area near New York City and its effect on inland water resources, by M. O. Leighton. 1902. 75 pp., 8 pls.
- Water storage on Salt River, Arizona, by A. P. Davis. 1902. 54 pp., 25 pls.
- Water resources of the State of Colorado, by A. L. Fellows. 1902. 151 pp., 14 pls.
- Report of progress of stream measurements for calendar year 1901, by F. H.
 Newell. 1903. 246 pp., 13 pls.
- Observations on the flow of rivers in the vicinity of New York City, by H.
 A. Pressey. 1903. 108 pp., 13 pls.
- 77. Water resources of Molakai, Hawaiian Islands, by Waldemar Lindgren. 1903. 62 pp., 4 pls.
- 78. Preliminary report on artesian basins in southwestern Idaho and south-eastern Oregon, by I. C. Russell. 1903. 53 pp., 2 pls.
- Normal and polluted waters in northeastern United States, by M. O. Leighton. 1903. 192 pp.
- 80. Relation of rainfall to run-off, by G. W. Rafter. 1903. 104 pp.

MINERAL RESOURCES.

Department of the Interior United States Geological Survey Charles D. Walcott, Director Mineral resources of the United States Calendar year 1900 David T. Day chief of division of mining and mineral resources [Survey design] Washington Government Printing Office 1901

8°. 927 pp. Bound in black cloth. By act of Congress approved March 3, 1901, the report on mineral resources was again made an independent publication.

Introduction, pp. 11-12.

Summary of the mineral production of the United States in 1900, pp. 13-38.

Iron ores, by John Birkinbine, pp. 39-67.

Iron and steel at the close of the nineteenth century, by James M. Swank, general manager of the American Iron and Steel Association, pp. 69–104.

Gold and silver, by George E. Roberts, Director of the Mint, pp. 105-113.

Manganese ores, by John Birkinbine, pp. 115-140.

Copper, by Charles Kirchhoff, pp. 141-190.

Lead, by Charles Kirchhoff, pp. 191-211.

Zinc, by Charles Kirchhoff, pp. 213–227.

Aluminum and bauxite, by Joseph Hyde Pratt, pp. 229-231.

Platinum, pp. 233-234.

Quicksilver, pp. 235-238.

Lithium, pp. 239-243.

Nickel and cobalt, pp. 245-249.

Antimony, by Joseph Hyde Pratt, pp. 251-255.

Tungsten, molybdenum, uranium, and vanadium, by Joseph Hyde Pratt, pp. 257–265.

An occurrence of stream tin in the York region, Alaska, by Alfred H. Brooks, pp. 267–271.

Coal, by Edward W. Parker, pp. 273-457.

Coke, by Edward W. Parker, pp. 459–536.

Petroleum, by F. H. Oliphant, pp. 537–627.

Natural gas, by F. H. Oliphant, pp. 629-651.

Asphaltum and bituminous rock, by Edward W. Parker, pp. 653-660.

Stone, pp. 661-692.

Clay products, by Jefferson Middleton, pp. 693–736.

Portland cement, by Spencer B. Newberry, pp. 737–744.

American rock cement, by Uriah Cummings, pp. 745–746. Slag cement in Alabama, by Edwin C. Eckel, pp. 747–748.

Precious stones, by George F. Kunz, pp. 749-778.

Talc and soapstone, by Joseph Hyde Pratt, pp. 779-786.

Abrasive materials, by Joseph Hyde Pratt, pp. 787-801.

Phosphate rock, by Edward W. Parker, pp. 803-814.

Sulphur and pyrite, by Edward W. Parker, pp. 815-826.

Gypsum, by Edward W. Parker, pp. 827-833.

Salt, by Edward W. Parker, pp. 835-847.

Mica, pp. 849-856.

Fluorspar, by Edward W. Parker, pp. 857-859.

Asbestos, by Joseph Hyde Pratt, pp. 861-868.

Lithographic stone, by S. J. Kubel, pp. 869-873.

Graphite, by Joseph Hyde Pratt, pp. 875-877.

Mineral paints, by Edward W. Parker, pp. 879-890.

Barytes, by Edward W. Parker, pp. 891-892.

Fuller's earth, pp. 893-894.

Flint and feldspar, p. 895.

Chromite, or chromitic iron ore, by Joseph Hyde Pratt, pp. 897-898.

Mineral waters, by A. C. Peale, pp. 899-905.

Index, pp. 907-927.

Department of the Interior United States Geological Survey Charles D. Walcott, Director Mineral resources of the United States Calendar year 1901 David T. Day chief of division of mining and mineral resources [Survey design] Washington Government Printing Office 1902

8°. 996 pp. Bound in black cloth.

Introduction, pp. 13-14.

Summary of the mineral production of the United States in 1901, pp. 15-41.

Iron ores, by John Birkinbine, pp. 43-72.

Statistics of the American iron trade for 1901, by James M. Swank, general manager of the American Iron and Steel Association, pp. 73-115.

Gold and silver, by George E. Roberts, Director of the Mint, pp. 117-126.

Manganese ores, by John Birkinbine, pp. 127-155.

Copper, by Charles Kirchhoff, pp. 157-198.

Lead, by Charles Kirchhoff, pp. 199-210.

Zinc, by Charles Kirchhoff, pp. 211-223.

Aluminum and bauxite, by Joseph Struthers, pp. 225-229.

Platinum, by Joseph Struthers, pp. 231-233.

Quicksilver, by Joseph Struthers, pp. 235-238.

Lithium, by Joseph Hyde Pratt, pp. 239-240.

Nickel and cobalt, by Joseph Hyde Pratt, pp. 241-250.

Antimony, by Joseph Struthers, pp. 251-256.

Arsenic, by Joseph Struthers, pp. 257-258.

Bismuth, by Joseph Struthers, pp. 259-260.

Tungsten, molybdenum, uranium, and Vanadium, by Joseph Hyde Pratt, pp. 261-270.

Titanium ores, by W. O. Snelling, pp. 271-278.

Coal, by Edward W. Parker, pp. 279-449.

Coke, by Edward W. Parker, pp. 451-523.

Petroleum, by F. H. Oliphant, pp. 525-611.

Natural gas, by F. H. Oliphant, pp. 613-632.

Asphaltum and bituminous rock, by Joseph Struthers, pp. 633-640.

Stone, pp. 641-670.

Clay-working industries, by Jefferson Middleton, pp. 671-720.

Cement, pp. 721-728.

Precious stones, by George F. Kunz, pp. 729-771.

Talc and soapstone, by Joseph Hyde Pratt, pp. 773-780.

Abrasive materials, by Joseph Hyde Pratt, pp. 781-809.

Phosphate rock, by Joseph Struthers, pp. 811-822.

Greensand marl, by Arthur L. Parsons, pp. 823-827. Sulphur and pyrite, by Joseph Struthers, pp. 829-842. Gypsum, by Joseph Struthers, pp. 843-851. Salt, by Joseph Struthers, pp. 853-865. Bromine, by Joseph Struthers, pp. 867-868. Borax, by Joseph Struthers, pp. 869-872. Mica, by Joseph Hyde Pratt, pp. 873-878. Fluorspar and cryolite, by Joseph Hyde Pratt, pp. 879-885. Asbestos, by Joseph Hyde Pratt, pp. 887-895. Graphite, by Joseph Struthers, pp. 897-900. Mineral paints, by Joseph Struthers, pp. 901-914. Barytes, by Joseph Hyde Pratt, pp. 915-919. Fuller's earth, pp. 921-934. Flint and feldspar, by Heinrich Ries, pp. 935-939. Chromite or chromitic iron ore, by Joseph Hyde Pratt, pp. 941-948. Monazite, by Joseph Hyde Pratt, pp. 949-954. Strontium ores, by Joseph Hyde Pratt, pp. 955-958. Magnesite, by Joseph Struthers, pp. 958-960. Mineral waters, pp. 961-966. Ores of economic importance, by Edmund O. Hovey, pp. 967-973. Index, pp. 975-996.

GEOLOGIC ATLAS OF UNITED STATES.

Department of the Interior United States Geological Survey Charles D. Walcott, Director Geologic Atlas of the United States Spanish Peaks folio Colorado [-Cranberry Tennessee] Index map [Map] List of sheets description topography historical geology igneous geology economic geology structure sections artesian water columnar sections special illustrations Folio 71 [-90] Library edition [or Field edition] Spanish Peaks [-Cranberry] Washington, D. C. Engraved and printed by the U. S. Geological Survey George W. Stose, editor of geologic maps S. J. Kübel, chief engraver 1901 [-1903]

Folio. 20 numbers (71-90).

Folios of Geologic Atlas of United States, 1901-1903.

No.	Name of folio.	State.	Limiting meridians.	Limiting parallels.	Area.	Price
				4.00	Sq. m.	Cents
7.	Spanish Peaks	Colorado	104° 30′-105°	37°-37° 30′	950	2
72	Charleston	West Virginia	81° 30′-82°	38°-38° 30′	938	2
73	Coos Bay	Oregon	124°-124° 30′	43°-43° 30′	871	2
74	Coalgate	Indian Territory	960-960 30'	34° 30′-35°	980	2
75	Maynardville	Tennessee	83° 30′-84°	36°-36° 30′	963	2
76	Austin	Texas	97° 30′-98°	30°-30° 30′	1,030	2
77	Raleigh	West Virginia	810-810 301	37° 30′-38°	944	2
78	Rome	Georgia	85°-85° 30′	34°-34° 30′	986	2
79	Atoka	Indian Territory	96°-96° 30′	34°-34° 30′	986	2
80	Norfolk	Virginia North Carolina	}75° 30′–76° 30′	36° 30′-37°	1,913	2
82 83	Riverside Chicago Desplaines Calumet Masontown-Uniontown New York City:	Illinois	87° 30′–88° 78° 30′–80°	41° 30′-42°	892 458	. 5
	Paterson	New York	}78° 45′-74° 15′	40° 30′-41°	906	5
84	Ditney	Indiana	87°-87° 30′	38°-38° 30′	938	2
85	Oelrichs	South Dakota Nebraska	} 103°-103° 30′	43°-43° 30′	871	2
86	Ellensburg	Washington	120° 30′-121°	46° 30′-47°	820	2
87	Camp Clarke	Nebraska	103°-103° 30′	41° 30′-42°	892	2
88	Scotts Bluff	Nebraska	103° 30′-104°	41° 30′-42°	892	2
89	Port Orford	Oregon	124°-124° 30′	42° 30′-43°	878	2
90	Cranberry	Tennessee	81° 30′-82°	360-360 30'	963	2

TOPOGRAPHIC MAPS.

ATLAS SHEETS.

Atlas sheets, 1901-1903, arranged by States.

ALABAMA.

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Atlas sheets, 1901-1903, arranged by States-Continued.

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Millbrook (N. YConn.)	41	45	73	30	1 degree	20	1:62500	
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Ocean City (MdDel.)	38	15	75	00	degree	10	1;62500	
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Hamilton (Idaho-Mont.)	46	00	114	00	degree	100	1:125000	
Rathdrum	47	30	116	30	do	100	1:125000	
Sandpoint	48	00	116	30	do	100	1:125000	
Spokane (Idaho-Wash.)	47	30	117	00	do	100	1:125000	
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Kahoka (MoIowa-Ill.)	40	00	91	30	degree	20	1:125000	
Mineral Point (WisIll.)	42	30	90	00	do	20	1:125000	
O'Fallon (MoIll.)	38	30	90	30	do	50	1:125000	
Rock Island (Iowa-Ill.)	41	30	90	30	do	20	1:125000	
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Antlers	34	00	95	30	do	50	1:125000	
Ardmore	34	00	97	00	do	50	1:125000	
Denison (Ind. TTex)	33	30	96	30	do	50	1:125000	
Gainesville (Ind. TTex)	33	30	97	00	do	50	1:125000	
Lukfata	34	00	94	30	do	50	1:125000	
Nowata	36	30	95	30	do	50	1:125000	
Nuyaka	35	30	96	00	do	50	1:125000	
Pauls Valley	34	30	97	00	do	50	1:125000	
Rush Springs	34	30	97	30	do	50	1:125000	
Winslow (ArkInd. T.)	35	30	94	00	do	50	1:125000	1

Atlas sheets, 1901–1093, arranged by States—Continued.

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Boonville	38	00	87	15	1 degree	20	1:62500	
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Ditney	38	00	87	00	degree	20	1:125000	
Haubstadt	38	00	87	30	1 degree	20	1:62500	
New Harmony	38	00	87	45	do	10	1:62500	43.5
Owensboro (IndKy.)	37	45	87	00	do	20	1:62500	
Petersburg	38	15	87.	15	do	20	1:62500	
Princeton	38	15	87	30	do	20	1:62500	
St. Meinrad	38	00	86	45	do	20	1:62500	
Tell City (KyInd.)	37	45	86	45	do	. 20	1:62500	
Velpen	38	15	87.	00	do	20	1:62500	
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Elk Point (S. Dak,-Nebr-Iowa)	42	30	96	30	degree	20	1:125000	
Elkader (Iowa-Wis.)	42		91	00	do	20	1:125000	188
Kahoka (MoIowa-Ill.)	40	00	91	30	do	20	1:125000	1.00
Oelwein	42	30	91	30	do	20	1:125000	17/16
Rock Island (IllIowa)	41	30	90	30	do	20	1:125000	
Stanwood	41	30	91	00	do	20	1:125000	
Winthrop	42	00	91	30	do	20	1:125000	
тинитор	42	00	91	30	do	20	1.120000	100
		K	ENTU	ICK	Υ.			
Kenova (KyW. VaOhio)	38	00	82	30	½ degree	100	1:125000	
Owensboro (IndKy.)	37	45	87	00	1 degree	20	1:62500	
Tell City (KyInd.)	37	45	86	45	do	20	1:62500	
			MAII	NE.				
Bangor	45	45	68	45	1 degree	20	1:62500	
Castine	44	15	68	45	do	20	1:62500	
Orono	44	45	68	30	do	20	1:62500	
		М	ARYI	AN	D.			
Belair (MdPa.)	39	30	76	15	1 degree	20	1:62500	
Bloodsworth Island	38	00	76	00	do		1:62500	
Chestertown	39	00	. 76	00.	do	20	1:62500	1
Crisfield (MdVa.)	37	45	75	45	do		1:62500	
Deal Island		. 00	75	45	do	10	1:62500	
Green Run (MdVa.)	38	00	75	00	do	10	1:62500	
Hancock (MdW. VaPa.)	39	30	78	00	do	20	1:62500	
Nanticoke	38	15	75	45	do	10	1:62500	
Ocean City (MdDel.)	38	15	75	00	do	10	1:62500	
Parkton (MdPa.)	39	30	76	30	do	20	1:62500	
Pittsville (Md.–Del.)	38	15	75	15	do	10	1:62500	
Princess Anne (MdVa.)	38	00	75	30	do	10	1:62500	
Salisbury (MdDel.)	38	15	75	30	do	10	1:62500	
Snow Hill (MdVa.)	38	00	75	15	do	10	1:62500	
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Atlas sheets, 1901-1903, arranged by States-Continued.

MINNESOTA.

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Anoka	45	00	93	15	1 degree	20	1:62500	
White Bear	45	00	93	00	do	20	1:62500	
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De Soto	38	00	90	30	degree	50	1:125000-	
Edina	40	00	92	00	do	20	1:125000	
Eureka Springs (ArkMo.)	36	00	93	30	do	50	1:125000	
Kahoka (MoIowa-Ill.)	40	00	91	30	do	20	1:125000	1.15
O'Fallon (MoIll.)	38	30	90	30	do	50	1:125000	
Sullivan	38	00	91	00	do	50	1:125000	
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Aladdin (WyoS. DakMont.)	44	30	104	00	degree	50	1:125000	
Bonner	46	30	113	30	do	100	1:125000	
Browning	48	30	113	00	do	100	1:125000	
Coopers Lake	47	00	112	30	do	100	1:125000	
Hamilton (Idaho-Mont.)	46	00	114	00	do	100	1:125000	
		N	EBRA	sk.	Α.			
Elk Point (S. Dak,-Nebr,-Iowa)	42	30	96	30	degree	20	1:125000	
Gothenburg	40	30	100	00	do	20	1:125000	
North Platte	41	00	100	30	do	20	1:125000	
Weeping Water	40	30	96	00	do	20	1:125000	
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		NE	EW JE	RSI	5Y.	1		1
Navesink	40	00	74	00	degree	20	1:125000	
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Alexandria Bay	44	15	75	45	degree	20	1:62500	
Babylon	40	30	73	15	do	20	1:62500	
Big Moose	43	45	74	45	do	20	1:62500	
Broadalbin	43	00	74	00	do	20	1:62500	
Canandaigua	42	45	77	15	do	20	1:62500	
Clayton	44	00	76	00	do	20	1:62500	
Clyde	43	00	76	45	do	20	1:62500	
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Grindstone	44	15	76	00	do	20	1:62500	
Hammondsport	42	15	77	00	do	20	1:62500	
Kinderhook	42	15	73	30	do	20	1:62500	
Luzerne	43	15	73	45	do	20	1:62500	
	43	00	73	00	degree	40	1:125000	
Mettawee (N. YVt.) Millbrook (N. YConn.)	41	45	73	30	1 degree	20	1:62500	100000

Atlas sheets, 1901–1903, arranged by States—Continued.

NEW YORK-Continued.

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Naples	42	30	77	15	1 degree	20	1:62500	3-2
Newburg	41	30	74	00	do	20	1:62500	
Northport	40	45	73	15	do	20	1:62500	
Norwich	42	30	75	30	do	20	1:62500	
Owego	42	00	76	15	do	20	1:62500	
Penn Yan	42	30	77	00	do	20	1:62500	
Phelps	42	45	77	00	do	20	1:62500	
Phoenicia	42	00	. 74	15	do	20	1:62500	
Pultneyville	43	15	77	00	do	20	1:62500	
Raquette Lake	43	45	74	30	do	20	1:62500	
Richfield Springs	42	45	74	45	do	20	1:62500	
Saratoga	43	00	73	45	do	20	1:62500	
Schunemunk	41	15	74	00	do	20	1:62500	
Sodus Bay	43	15	76	45	do	20	1:62500	
Theresa	44	00	75	45	do	20	1:62500	
Waverly	42	00	76	30	do	20	1:62500	
Weedsport	43	00	76	30	do	20	1:62500	
		3			l			
	N	ORT	H CA	RO	LINA.			
Kenly	35	30	78	00	degree	20	1:62500	1.50
Parmele	35	45	77	15	do	10	1:62500	
Tarboro	35	45	77	30	do	10	1:62500	
Williamston	35	45	77	00	do	10	1:62500	
			оні	0.				
Fostoria	41	00	83	15	1 degree	10	1:62500	١,
Guyandot (W. VaOhio)	38	15	82	15	do	20	1:62500	
Kenova (KyW. VaOhio)	38	00	82	30	degree	100	1:125000	
Oberlin	41	15	82	00	degree	100	1:62500	
Put-in-Bay	41	30	82	45	do	10	1:62500	
Wheeling (W. VaOhio-Pa.)	40	00	80	30	do	20	1:62500	
			OREG	ON		<u> </u>		
Baker City	44	30	117	30	degree	100	1:125000	
Sumpter	44	03	118	00	do	100	1:125000	
		PEN	NSYL	VA	NIA.			
Belair (MdPa.)	. 39	30	76	15	degree	20	1:62500	
Boyertown	40	15	75	30	do	20	1:62500	
Brownsville	40		79	45	do	20	1:62500	
Chambersburg	39	45	77	30	do	20	1:62500	
Connellsville.	40	CO	79	30	do	20	1:62500	
Everett	40	00	78	15	do	20	1:62500	
Hancock (MdW.VaPa.)	39	30	78	00	do	20	1:62500	
Indiana	0.637.0	30	79		do	20	1:62500	

Atlas sheets, 1901-1903, arranged by States-Continued.

PENNSYLVANIA—Continued.

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Kittanning	40	45	79	30	16 degree	20	1:62500	cents.
Latrobe	40	15	79	15	do	20	1:62500	
Mercersburg	39	45	77	45	do	20	1:62500	
Morgantown (W. VaPa.)	39	30	79	45	do	20	1:62500	
Parkton (MdPa.)	39	30	76	30	do	20	1:62500	
Slatington	2000	30	75	30	do	20	1:62500	
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Tioga	41	45	77	00		20	1:62500	
Wernersville	40	15	76	00	do	20	1:62500	
Wheeling (W. VaOhio-Pa.)	40	00	80	30	do	20	1:62500	
	\$	SOU'	TH D	AKO	OTA.			
						1		
Aladdin (WyoS. DMont.)		30	104	00	degree	50	1:125000	
Edgemont	43	00	103	30	do	50	1:125000	
Elk Point (S. DakNebrIowa)	42	30	96	30	do	20	1:125000	
Newcastle (WyoS. Dak.)	43	30	104	00	do	50	1:125000	
			TEX.	AS.		1		ı
Cerro Alto	31	30	105	30	½ degree	50	1:125000	
Denison (Ind. TTex.)	33	30	96	30	do	50	1:125000	
Gainesville (Ind. TTex.)	33	30	97	00	do	50	1:125000	
			UTA	н.		•		
Coalville	40	30	UTA		degree	100	1:125000	
Coalville	40			00		100	1;125000	ļ
Coalville			111 ERM	00		100	1:125000	
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Atlas sheets, 1901-1903, arranged by States-Continued.

WEST VIRGINIA.

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	d	120	0	,		Feet.		Cents.
Clarksburg	39	15	80	15	16 degree	20	1:62500	
Fairmont	39	15	80	00	do	20	1:62500	
Guyandot (W. VaOhio)	38	15	82	15	do	20	1:62500	
Hancock (MdW. VaPa.)	39	30	78	00	do	20	1:62500	
Kenova (KyW. VaOhio)	38	00	82	30	½ degree	100	1:125000	
Milton	38	15	82	00	degree	20	1:62500	
Morgantown (W. VaPa.)	39	30	79	45	do	20	1:62500	
Wheeling (W. VaOhio-Pa.)	40	00	80	30	do	20	1:62500	E

Briggsville	43	30	89	30	1 degree	20	1:62500	5
Denzer	43	15	89	45	do	20	1:62500	5
Elkader (Iowa-Wis.)	42	30	91	00	degree	20	1:125000	5
Mineral Point (WisIll.)	42	30	90	00	do	20	1:125000	5
Poynette	43	15	89	15	1 degree	20	1:62500	5
The Dells	43	30	89	45	do	20	1:62500	5

WYOMING.

Aladdin (WyoS. DMont.)	44	30	104	00	1 degree	50	1:125000	5
Fort McKinney	44	00	106	30	do	100	1:125000	5
Mount Leidy	43	30	110	00	do	100	1:125000	5
Newcastle (S. DakWyo.)	43	30	104	00	do	50	1:125000	5

Index to foregoing list of topographic atlas sheets.

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GENERAL, SPECIAL, AND ECONOMIC MAPS.

ARIZONA:

Bisbee Special. Scale, 1:12000; contour interval, 20 feet. Shows location of copper mines in the Bisbee district.

Globe Special. Scale, 1:12000; contour interval, 20 feet. Shows location of mines and smelters in the Globe district.

CALIFORNIA:

Southern California. Scale, 1:250000; contour interval, 250 feet. Covers the southern part of the State, on reduced scale. Latitude, 33° 30'-34° 30'; longitude, 116° 30'-118° 30'.

COLORADO-WYOMING:

Encampment Special. Scale, 1:90000; contour interval, 100 feet. Latitude, 41°-41° 15'; longitude, 106° 45′-107° 15′. IDAHO-MONTANA:

Cœur d'Alene Special. Scale, 1:62500; contour interval, 50 feet. Cœur d'Alene region, chiefly in northern Idaho.

INDIAN TERRITORY:

Map of the Territory. Scale, 1:500000; contour interval, 100 feet.

MISSOURI-KANSAS:

Joplin district. Scale, 1:62500; contour interval, 10 feet. Covers the region around Joplin for a north-south distance of about 15 miles and an east-west distance of about 25 miles.

MONTANA:

Marysville Special. Scale, 1:31250; contour interval, 50 feet. Covers the region around Marysville for a north-south distance of about 8 miles and an east-west distance of about 5 miles.

NEW YORK:

Niagara River and vicinity. Scale, 1:62500; contour interval, 20 feet. Covers portions of Niagara Falls, Tonawanda, Wilson, and Buffalo quadrangles.

Terlingua Special. Scale, 1:50000; contour interval, 25 feet. Covers the region extending 12 miles eastward and 3 miles westward from Terlingua and about 5 miles in a north-south direction.

UTAH:

Bingham mining map. Scale, 1:20000; contour interval, 50 feet. Covers part of Tooele Valley quadrangle, in the vicinity of Bingham Canyon.

Park City Special. Scale, 1:25000; contour interval, 50 feet. Covers the region extending about 4 miles southward and 3 miles eastward and westward from Park City.

WISCONSIN:

Marathon Special. Scale, 1:125000; contour interval, 20 feet. Latitude, 44° 45'-45° 15'; longitude, 89° 45′-90° 15′.

Wausau Special. Scale, 1:125000; contour interval, 20 feet. Latitude, 44° 45'-45° 15'; longitude, 890 15'-890 45'.

MISCELLANEOUS PUBLICATIONS.

SPECIAL REPORTS ON ALASKA.

CAPE NOME AND NORTON BAY REGIONS.

Department of the Interior United States Geological Survey Charles D. Walcott, Director Reconnaissances in the Cape Nome and Norton Bay regions, Alaska, in 1900 By Alfred H. Brooks, George B. Richardson, Arthur J. Collier and Walter C. Mendenhall Washington Government Printing Office 1901

Royal 8°. 222 pp., 23 pls. "Granite" cover. Published by authority of concurrent resolution of Congress of February 13, 1901. The documentary issue is House Doc. No. 547, 2d session, 56th Congress.

COPPER RIVER DISTRICT.

Department of the Interior United States Geological Survey Charles D. Walcott, Director The geology and mineral resources of a portion of the Copper River district, Alaska By Frank Charles Schrader and Arthur Coe Spencer Washington Government Printing Office 1901

Royal 8°. 94 pp., 13 pls. "Granite" cover. Published by authority of concurrent resolution of Congress of February 13, 1901. The documentary issue is House Doc. No. 546, 2d session, 56th Congress.

For other reports on Alaska, published within the time covered by this catalogue, see Twenty-second Annual, Pt. III, p. 515; Professional Papers, Nos. 1, 2, and 10; and Bulletin No. 187.

LOGARITHM TABLES.

Department of the Interior United States Geological Survey Charles D. Walcott, Director Five-place logarithms of natural numbers and circular functions expressed in arc and time Washington Government Printing Office 1901

Large 8°. 69 pp. Bound in brown cloth.

REGULATIONS.

United States Geological Survey Charles D. Walcott, Director Regulations of the United States Geological Survey third edition approved December 27, 1902, to take effect January 1, 1903. Washington Government Printing Office 1903.

16°. 52 pp. Bound in dark-blue leatherette.

INSTRUCTIONS.

United States Geological Survey Charles D. Walcott, Director Instructions relating to the work of the United States Geological Survey to take effect May 1, 1903 Washington Government Printing Office 1903

16°. 131 pp. Bound in red leatherette.

LIST OF PUBLICATIONS.

(9-320) Department of the Interior United States Geological Survey List of the publications of the United States Geological Survey Charles D. Walcott, Director [Design] Washington Government Printing Office 1903

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[PP = Professional Paper: B = Bulletin; WS = Water-Supply Paper.]

Series num- ber.	A. Economic geology.	B. Descriptive geology.	C. Systematic geology and paleontology.	D. Petrog- raphy and mineral- ogy.	E. Chemis- try and physics.	F. Geography.	G. Miscella- neous.	H. For- estry.	I. Irriga- tion.	J. Water storage.	K. Pumping water.	L. Quality of water.	M. General hydro- graphic investi- gations.	N. Water power.	O. Under- ground waters.	P. Hydro- graphic progress reports.
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[Abbreviations: Ann=Annual Report; Mon=Monograph; PP=Professional Paper; Bull=Bulletin; WS=Water-Supply and Irrigation Paper; GF=Geologic Folio: N and N=Cape Nome and Norton Bay pamphlet, and Copper=Copper River pamphlet, both catalogued on page 33 of this bulletin; I=part I, II=part II, etc.; p=page, pp=pages.]
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