BIBLIOGRAPHY AND INDEX

OF

NORTH AMERICAN GEOLOGY, PALEONTOLOGY, PETROLOGY, AND MINERALOGY

FOR

THE YEAR 1904

BY

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WASHINGTON
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1905
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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
UNITED STATES GEOLOGICAL SURVEY,
Washington, D. C., June 7, 1905.

Sir: I transmit herewith the manuscript of a bibliography and index of North American geology, paleontology, petrology, and mineralogy for the year 1904, and request that it be published as a bulletin of the Survey.

Very respectfully,

F. B. Weeks.

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

The arrangement of the material of the Bibliography and Index for 1903 is similar to that adopted for the preceding annual bibliographies, Bulletins Nos. 130, 135, 146, 149, 156, 162, 172 (combined in Bulletins 188 and 189), 203, 221, and 240.

**Bibliography.**—The bibliography consists of full titles of separate papers, arranged alphabetically by authors’ names, an abbreviated reference to the publication in which the paper is printed, and a brief description of the contents, each paper being numbered for index reference.

**Index.**—The subject headings, their subdivisions and arrangement, are shown in the classified key to the index, which immediately precedes the index. Reference is made in each entry by author’s name and number of article in the bibliography.

The series of annual bibliographies has been prepared solely from publications received by the library of the United States Geological Survey. On January 1, 1903, the writer was placed in charge of the library of this organization, and an effort has since been made to procure the publications which were not noticed in the bibliographies of previous years, it being known that there were a considerable number of omissions of geological papers. Many of these are noted in this bulletin.

Mr. John M. Nickles has again assisted in the compilation of this work, and credit is due him for its careful preparation and completeness.
LIST OF PUBLICATIONS EXAMINED.

American Association for the Advancement of Science: Proceedings, vols. 52 and 53, 1903 and 1904.
American Geologist, vols. 33 and 34, 1904. Minneapolis, Minn.
American Institute of Mining Engineers: Transactions, vol. 34, 1904, and advance papers of 1904 meetings. New York, N. Y.
American Paleontology: Bulletin no. 19, 1904. Ithaca, N. Y.
Canadian Mining Institute: Journal, vol. 6, 1904. Ottawa, Canada.
LIST OF PUBLICATIONS EXAMINED.

Centralblatt für Mineralogie, Geologie und Palaeontologie, nos. 1-24, 1904. Stuttgart, Germany.
Engineering and Mining Journal, vols. 77 and 78, 1904. New York, N. Y.
Harriman Alaska Expedition, vols. 3, 4, 1904. New York, N. Y.
Indiana, Department of Geology and Natural Resources: 28th Annual Report, 1904. Indianapolis, Ind.
Institution of Mining Engineers: Transactions, vol. 24, pts. 6 and 7; vol. 25, pts. 5 and 6; vol. 26, pts. 3 and 4; vol. 27, pts. 1-5, and vol. 28, pt. 1, 1904. Newcastle-upon-Tyne, England.
Johns Hopkins University: Circulars, nos. 1-8, 1904. Baltimore, Md.


McGill University, Department of Geology: Papers, no. 16, 1904. Montreal, Canada.


Mexico, Secretaria de Fomento: Boletin, 2d época, año 3, IV, 1903-4; año 4, IV, nos. 1-4, 1904. Mexico, D. F., Mexico.

Michigan Academy of Science: Reports 4-6, 1904. Lansing, Mich.


Mines and Minerals, vol. 24, nos. 6-12; vol. 25, nos. 1-5, 1904. Scranton, Pa., and Denver, Colo.


Neues Jahrbuch für Mineralogie, Geologie, und Paleontologie (except abstracts), Banda 1 and 2, 1904; Beilage Bands, 18, 19, 1904. Berlin, Germany.


Ohio State Academy of Science: 12th Annual Report, 1904; Special Papers, nos 8-10, 1904. Columbus, Ohio.


Ottawa Naturalist, vol. 17, nos. 10-12, and vol. 18, nos. 1-9, 1904. Ottawa, Canada.
LIST OF PUBLICATIONS EXAMINED.

Paleontographica, Band 50, Lief. 4-6 and 51, Lief. 1-3, 1904; Supplement, Band 4, Lief. 1, 1904. Stuttgart, Germany.


Popular Science Monthly, vol. 64, nos. 3-6, vol. 65, and vol. 66, nos. 1 and 2, 1904. New York, N. Y.


St. Louis Academy of Science: Transactions, vol. 14, nos. 1-7, 1904. St. Louis, Mo.

School of Mines Quarterly, vol. 25, nos. 2-4, and vol. 26, no. 1, 1904. New York, N. Y.

Staten Island Natural Science Association: Proceedings, vol. 9, nos. 3-10, 1904. Staten Island, N. Y.

Stone, vol. 27, nos. 3 and 4, 1904. New York, N. Y.


Texas University Mineral Survey: Bulletin, nos. 7-9, 1904. Austin, Tex.


Zeitschrift für praktische Geologie (except abstracts), Jahrg. 12, 1904. Berlin, Germany.
BIBLIOGRAPHY.

A.

Abbe (Cleveland, jr.).
1. Die Fall-Linie der südöstlichen Vereinigten Staaten.
   Vierteljahrsheften für den geographischen Unterricht. Herausgegeben von Prof. Dr. Heiderich, Wien, Jahrg. 2, pp. 204-210, 2 pls., 1903.
   Describes the position, and discusses the geologic, topographic, geographic, and historic significance of the fall line in the Atlantic coastal plain.

Abercrombie (W. R.).
1. The Copper River country, Alaska.
   Includes observations on the general geology, and the occurrence of copper and gold ores in Alaska.

Adams (George I.).
1. Geology, technology, and statistics of gypsum.
   Includes a short discussion of the origin and geologic age of gypsum deposits in general.
2. Zinc and lead deposits of northern Arkansas.
   Describes physiographic features briefly, the occurrence and character of Ordovician, Devonian, and Carboniferous formations, the geological history and structure, and the occurrence and origin of the zinc and lead ore deposits of this region.
3. Zinc and lead deposits of northern Arkansas.
   See no. 8 of the Bibliography for 1903, U. S. Geol. Surv., Bull. no. 240.
4. The Rabbit Hole sulphur mines near Humboldt House, Nev.
   General geology and occurrence and origin of the sulphur.

Adams (George I.), Haworth (Erasmus), and Crane (W. R.).
   U. S. Geol. Surv., Bull. no. 238, 83 pp., 11 pls. and 13 figs., 1904.
   Describes the general character and areal geology of the area, the character, occurrence, and relations of the Carboniferous formations, the geologic structure of the field, and in detail the occurrence, character, and origin of the natural gas and petroleum, and their utilization in the manufacture of cement, brick, and zinc spelter.
Adams (Frank D.).
1. On a new nepheline rock from the Province of Ontario, Canada.
   Describes the occurrence, characters, and composition.

2. Geophysical investigations suggested.
   Sets forth lines of investigations of igneous and metamorphic rocks.

Aguilera (José G.).
1. [The great Bacubirito meteorite of Mexico.]
   Am. Geol., vol. 33, p. 267, 1904.
   Gives data in regard to the Bacubirito meteorite.

2. Sobre las condiciones tectónicas de la República Mexicana.
   México, Oficina Tip. de la Secretaría de Fomento, 34 pp., 1901.
   Gives a general account of the geologic structure of Mexico.

Alcala (Maximino).
1. Criaderos de petroleo de Pichucalco, Estado de Chiapas [México].
   Describes the occurrence, geologic relations, and character of petroleum from
   this locality.

Aldrich (T. H.).
   Nantilus, vol. 18, p. 61, 1 pl., 1904.

Allen (J. A.).
1. A fossil porcupine from Arizona.

Althouse (H. W.).
1. The Norton coals of the Big Sandy basin.
   Describes the location, topography, and general geology of the field, and the
   character, occurrence, and geologic relations of the coal seams.

Ami (H. M.).
1. Bibliography of Canadian geology and paleontology for the year 1902.

Anderson (F. M.).
1. Stratigraphy of the southern Coast ranges of California.

Angermann (Ernesto).
1. Informe acerca de la fisiografía, geología e hidrología de los alrededores de La Paz, Baja California.
   México, Bol. de la Secretaría de Fomento, 2a. ép., año 3, IV, pp. 216-283, 1904;
   Gives physiographic, geologic, and hydrologic observations upon the environs
   of La Paz in Lower California.
Angermann (Ernesto)—Continued.
2. Apuntes sobre el Paleozoico en Sonora [México].
   México, Inst. Geol., Par., t. 1, pp. 81-90, 1 pl., 1 fig., 1904.
   Gives observations upon the occurrence and character of the geologic formations of Sonora, particularly upon Paleozoic deposits.

3. El fierro meteórico de Bacubírito (Est. de Sinaloa).
   Observations upon size and occurrence of the meteorite of Bacubírito, Mexico.

Armstrong (L. K.).
   Gives notes upon the general geology of the region, and describes the occurrence and character of the coal beds, and the character of the coals.

Arnold (Ralph).
1. Faunal relations of the Carrizo Creek beds of California.

Arnold (Ralph), Haehl (H. L.) and.
1. The Miocene diabase of the Santa Cruz Mountains in San Mateo County, California.
   See Haehl (H. L.) and Arnold (Ralph), 1.

Ashley (George H.).
1. The Cumberland Gap coal field of Kentucky and Tennessee.
   Describes location, stratigraphy, and geologic structure of the field, the character and geologic relations of the coal seams, and the mining developments.

2. The Cumberland Gap coal field.
   M. Mag., vol. 10, pp. 94-100, 1 pl., 5 figs., 1904.
   Describes the location and general geologic structure of the coal basin occupying parts of Kentucky and Tennessee, and the occurrence, character, and mining of the coals.

3. [Geologic structure of the region around Middlesboro, Ky.]

Atkin (Austin J. R.).
1. The genesis of the gold deposits of Baskerville (British Columbia) and the vicinity.

B.

Babcock (E. N.) and Minor (Jessie).
1. The Graydon sandstone and its mineral waters.
   Describes the character and occurrence of the sandstone and discusses its origin and bearing upon the geologic history of the region. Describes mineral waters coming from the sandstone.

Bull. 271—05—2
Bagg (Rufus M., jr.).
1. Earthquakes in New Mexico.
   Am. Geol., vol. 34, pp. 102-104, 1904.
2. Secondary enrichment in the Santa Rita district [New Mexico].
   Describes character and occurrence of copper deposits.
3. Systematic paleontology of the Miocene deposits of Maryland:
   Foraminifera.

Bailey (G. E.).
1. The desert dry lakes of California.
   Describes physiographic features and the occurrence and production of borax.

Bailey (L. W.).
1. Report upon the Carboniferous system of New Brunswick with
   special reference to workable coal.
   separately, 1902.)
   Describes the extent, geologic structure, and divisions of the Carboniferous of
   New Brunswick, and the character, occurrence, and possible production of
   the coal beds, gives lists of fossils, and discusses the geologic horizon of cer­
   tain beds.
2. New Brunswick caves.
   Discusses the origin of the various caves described and the geologic formations
   in which they occur.

Bain (H. Foster).
1. Fluorspar deposits of southern Illinois.
   Reviews history of the development of the fluorspar deposits, describes the
   geology of the district, and the character and occurrence of the ore bodies,
   and discusses their origin.
2. [Geological nomenclature.]
3. Reported gold deposits of the Wichita Mountains [Oklahoma].
   Describes the investigation of reputed gold deposits in Oklahoma. Includes a
   report on the assays by E. T. Allen.
4. Reported gold deposits of the Wichita Mountains.
   U. S. Geol. Surv., Bull. no. 225, pp. 120-122, 1904.
   Describes the general geology and the prospecting for gold.
5. Reported ore deposits of the Wichita Mountains.
   U. S. Geol. Surv., Professional Paper no. 31, pp. 82-93, 1904.
Bain (H. Foster)—Continued.
   Describes the general geology, character, occurrence, and origin of the ore deposits of lead and zinc.

7. Fluorspar deposits of the Kentucky-Illinois district. Grades of ore, geology of the district, and genesis of the ores.
   Describes the character, occurrence, geologic relations, genesis, and production of fluorspar deposits of southern Illinois and western Kentucky.

8. The zinc deposits of Missouri.
   Describes the general geology of the zinc districts of Missouri, with a generalized section of the Boone formation, the geological structure, and the character, occurrence, and origin of the zinc-ore deposits.

Baker (M. B.).
1. On the occurrence and development of corundum in Ontario.

Ball (Sydney H.).
1. The deposition of the Carboniferous formations of the north slope of the Ozark uplift.
   Jour. Geol., vol. 12, pp. 335-343, 3 figs., 1904.
   Describes the occurrence and character of Carboniferous strata and the geologic history of their deposition.

Ball (Sydney H.) and Smith (A. F.).
1. The geology of Miller County [Missouri].
   Describes the physiography and drainage, the character, occurrence, geologic relations, and economic resources of Cambro-Ordovician and Carboniferous formations, including numerous sections of strata, and discusses the general geologic structure and the origin of chert and dolomite.

Ball (S. H.) and Smith (A. F.), Buckley (E. R.).
1. Glacial boulders along the Osage River in Missouri.
   See Buckley (E. R.), Ball (S. H.), and Smith (A. F.), 1.

Barber (William Burton).
1. On the lamprophyres and associated igneous rocks of the Rossland mining district, British Columbia.
   Am. Geol., vol. 33, pp. 335-347, 6 pls., 1904.

Barbour (Erwin H.).
1. Memoir of Wilbur Clinton Knight.
   Includes a list of his published writings.

Barlow (Alfred Ernest).
1. Report on the origin, geological relations, and composition of the nickel and copper deposits of the Sudbury mining district, Ontario, Canada.
Barney (W. G.).
1. The Silver Bell Mountains, Arizona.
   Describes the occurrence, character, and geologic relations of copper-ore deposits.

Bascom (Florence).
1. Water resources of the Philadelphia district.
   Includes a short general account of the physiography and stratigraphy, and of the igneous and sedimentary rocks of the area.

Baskerville (Charles) and Kunz (George F.).

Bassler (R. S.), Ulrich (E. O.) and.
   See Ulrich (E. O.) and Bassler (R. S.), 1.
   See Ulrich (E. O.) and Bassler (R. S.), 2.
   See Ulrich (E. O.) and Bassler (R. S.), 3.
   See Ulrich (E. O.) and Bassler (R. S.), 4.

Bather (F. A.).
1. The term Bradfordian.
   Calls attention to the fact that the term Bradfordian has been used for European Mesozoic rocks.

Bauer (Max).
1. Jadeit und Chloromelanite in Form prähistorischer Artefakte aus Guatemala.
   Describes the character and structure of jade and chloromelanite used by prehistoric people in Guatemala.

Bayley (William Shirley).
1. The Menominee iron-bearing district of Michigan.
   Reviews the literature bearing on the subject, describes the physiography of the region, the character and occurrence of Archean, Algonkian and Paleozoic rocks, and the occurrence, character, and mining of the iron ores, and gives an outline of the geologic history.
2. Notes on the wells, springs, and general water resources of Maine.
Becke (F.).
   Describes crystallographic features of an albite from Amelia, Virginia.

Becker (George F.).
1. Construction of geophysical laboratory.
   Carnegie Inst. of Wash., Yearb. no. 2, 1903, pp. 185-194, 1904.
2. Experiments on schistosity and slaty cleavage.
   Describes experiments to determine the cause of cleavage and schistosity in rocks, and discusses the results obtained.
3. Present problems of geophysics.

Beecher (Charles E.).
1. Note on a new Permian Xiphosuran from Kansas.

Beede (J. W.) and Rogers (Austin F.).
1. Coal Measure faunal studies. III. Lower Coal Measures.
   Describes the character and occurrence of lower Coal Measures formations and gives lists of fossils obtained from them.

Beede (J. W.), Prosser (Charles S.) and.
1. Cottonwood Falls folio, Kansas.
   See Prosser (Charles S.) and Beede (J. W.), 1.

Bell (James Mackintosh).
1. Economic resources of Moose River Basin [Ontario].
   Includes observations on the occurrence, character, and geologic relations of pre-Cambrian, Paleozoic, and Pleistocene rocks and deposits, the physiographic features, and the economic resources.

Bell (Ralston).
1. How copper is produced.
   Includes notes upon the geologic occurrence of copper.

Bell (Robert).
1. Report on the geology of the basin of the Nottaway River.
   Describes the character and occurrence of Laurentian and Huronian rocks in this region.
2. Volcanic origin of natural gas and petroleum.
Bell (Robert N.).
1. The mining industry of Idaho.
   Gives a brief account of the general geology of the state, and the occurrence
   and production of ores by counties.
2. Geology of Park City, Utah, district.
   Describes the general geology and the occurrence of lead-ore deposits.

Bendrat (T. A.).
1. The geology of Lincoln County, South Dakota, and adjacent por­
tions...
   Describes the topography and drainage, the character and occurrence of
   Algonkian and Cretaceous strata and glacial deposits.

Bergeat (Alfred).
1. Ein Rückblick auf die vulkanischen Ereignisse in Westindien im
   Mai 1902.
   Globus, Bd. 82, pp. 125–131, 1902.
   Reviews the volcanic eruptions in the West Indian Islands during 1902.

Berger (W. F. B.).
1. Bauxite in Arkansas.
   Describes character and occurrence of bauxite, and the mining operations in
   Arkansas.

Berkey (Charles P.).
1. Mineral resources of the Uinta Mountains [Utah].
   Discusses the stratigraphy and geologic structure of the Uinta Mountains and
   their mineral resources.
2. A geological reconnaissance of the Uintah Reservation, southeastern
   Utah.
   Describes stratigraphic succession in this region.

Berry (Edward W.).
1. Additions to the flora of the Matawan formation.
2. The Cretaceous exposure near Cliffwood, N. J.
   Am. Geol., vol. 34, pp. 253–260, 1 pl., 1904.
   Discusses the correlation of the Cretaceous clays at Cliffwood, N. J., in the
   light of the evidence of the fossil plants. Gives a table showing the geo­
   logic distribution of the fossil species from the Matawan.

Beyer (S. W.).
1. Mineral production of Iowa in 1902.
   Iowa Geol. Surv., vol. 14, pp. 7–26, 1904.
Beyer (S. W.) and Williams (I. A.).
1. Technology of clays.
   Iowa Geol. Surv., vol. 14, pp. 29-318, 7 pls., 30 figs., 1904.
   Discusses the classification, origin, and properties of clays, and manufacture of clay wares.
2. The geology of clays.
   Describes in detail the occurrence by counties of clays in Iowa, and their geologic horizons.

Bilgram, Hugo.
1. Inclusions in quartz.

Bishop (Irving P.).
   Gives notes on the occurrence of economic products, particularly building stone, clays, salt, natural gas, and petroleum.

Blake (William P.).
   Describes character and occurrence of gypsum deposits in Arizona.
2. Superficial blackening and discoloration of rocks, especially in desert regions.
   Am. Inst. Mg. Engrs., Trans. (Lake Superior meeting, September, 1904), 5 pp., 1904 [advance separate].
   Describes superficial blackening of rocks and discusses its origin.
3. Copper ore and garnet in association.
   Describes various occurrences of copper ore and garnet in association and discusses their origin.
5. Tombstone [Arizona] and its mines.
   See no. 87 of the Bibliography for 1903, U. S. Geol. Surv., Bull. no. 240.
6. Evidences of plication in the rocks of Cananea, Sonora [Arizona].

Blakemore (William).
1. Graham Island coal [British Columbia].
   Describes the occurrence of workable coal beds.
Blatchford (John).
1. The Bald Mountain district in the Black Hills. A description of the flat formation and some of the ore bodies found in connection with it.
Describes the occurrence of gold ore deposits.

Blatchley (W. S.).
1. The petroleum industry in Indiana in 1903.
Describes the geologic occurrence of petroleum and natural gas, the geologic structure of the oil fields of Indiana, and in detail the production of and exploration for oil by counties.
2. The lime industry in Indiana.

Bleiningher (Albert Victor).
1. The manufacture of hydraulic cements.
Ohio Geol. Surv., 4th ser., Bull. no. 3, 391 pp., 81 figs., 1904.
Includes a discussion of the occurrence and character of clays and other materials in Ohio suitable for the manufacture of cements.

Boehmer (Max).
1. Some practical suggestions concerning the genesis of ore deposits.
See no. 94 of the Bibliography for 1903, U. S. Geol. Surv., Bull. no. 240.

Bøggild (O. B.).
1. Samples of the sea-floor along the coast of east Greenland 74°-70° N. L.
Describes the character and origin of the material deposited on the sea bottom east of Greenland.

Boright (Sherman H.).
1. Notes on the geology of the northern portion of the Boisclale Hills anticline [Cape Breton Island].
Describes the location, geographic and topographic features, the general geology, and the character and occurrence of igneous rocks, and Cambrian and Carboniferous strata and economic resources of the region.

Böse (Emilio).
1. Informe sobre el origen probable de los temblores de Zanatepec a fines de septiembre de 1902, y sobre el estado actual del volcán de Tacaná.
México, Inst. Geol., Par., t. 1, pp. 5-25, 4 pls., 1903.
Discusses the probable origin of the earthquakes of Zanatepec of September, 1902, and the present condition of the volcano of Tacaná.
Böse (Emilio)—Continued.

2. El área cubierta por la ceniza del volcán de Santa María, octubre 1902.


Describes the area covered by ashes ejected by the volcano of Santa María in October, 1902.

3. Sobre las regiones de temblores en México.


Discusses regions in Mexico subject to earthquake movements.

Böse (E.) and Angermann (E.)

1. Informe sobre el temblor, del 16 de enero de 1902 en el Estado de Guerrero [México].


Describes an earthquake occurring in January, 1902, in Guerrero, Mexico.

Boutwell (J. M.)

1. Gypsum deposits in Utah.


Describes character, occurrence, economic development, and geologic relations of gypsum deposits in Utah.

2. Progress report on the Park City mining district, Utah.


Describes the character and occurrence of sedimentary, igneous, and metamorphic rocks in this area, the geologic structure, and the occurrence and mining of silver-lead ores.

3. Iron ores in the Uinta Mountains, Utah.


Describes the general geologic structure and stratigraphy of the region, and the occurrence and character of the iron-ore deposits.

4. Rock gypsum at Nephi, Utah.


Describes the character, occurrence, and development of rock gypsum near Nephi, Utah.

5. Notes on the wells, springs, and general water resources of New Hampshire.

U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 56–72, 1904.

Bowman (Isaiah).

1. A typical case of stream capture in Michigan.


2. Deflection of the Mississippi.


Describes changes in the channel of the Mississippi and discusses their cause.

Boyer (C. S.)


Bradford (William).
1. Gold deposition by drainage.
   Eng. & Mg. Jour., vol. 78, pp. 554-555, 8 figs., 1904.
   Discusses the origin of gold ores.

Branner (J. C.).
1. Memoir of James E. Mills.
   Includes a list of papers written by the subject of the memoir.

Breger (C. L.), Kindle (Edward M.) and.
1. Paleontology of the Niagara of northern Indiana.
   See Kindle (Edward M.) and Breger (C. L.), 1.

Brent (Charles).
1. Notes on the gold ores of western Ontario.
   See no. 124 of U. S. Geol. Surv., Bull. no. 240.

Brewer (W. M.).
1. Mineral resources of Vancouver Island.
   Describes the general geology and the occurrence and character of ore bodies, mainly gold, copper-gold, and magnetite.

2. White Horse copper camp, Yukon Territory.
   Describes the location, general geology, and occurrence of the copper ores.

Brezina (Aristides).
1. The arrangement of collections of meteorites.

Brezina (Aristides) and Cohen (Emil).
1. Ueber Meteoreisen von De Sotoville [Alabama].
   Describes occurrence, characters, and composition.

Broadhead (Garland C.).
1. Bitumen and oil rocks.
   A general account of the occurrence of bituminous rocks and the origin and utilization of bituminous products.

2. The loess.
   Am. Geol., vol. 33, pp. 393-394, 1904.
   Describes distribution and character of the loess along the Missouri River and discusses its origin.

   Am. Geol., vol. 34, pp. 66-67, 1904.
   Describes the distribution of flint gravels in Missouri and Kansas.
**Broadhead** (Garland C.)—Continued.
4. The saccharoidal sandstone.
   Am. Geol., vol. 34, pp. 105-110, 1904.
   Describes the occurrence and character of the saccharoidal sandstone in Missouri.

**Brock** (R. W.).
1. Original native gold in igneous rocks.
   Describes occurrences of native gold in igneous rocks of British Columbia.
2. Poplar Creek and other camps of the Lardeau district [British Columbia].
   Gives a general account of the geology of the district and describes the occurrence of gold-ore deposits.
   Describes the occurrence, character, and geological relations of ore deposits of British Columbia in which platinum occurs.

**Brock** (R. W.), **McConnell** (R. G.) and.
   See McConnell (R. G.) and Brock (R. W.), 1.

**Broili** (Ferdinand).
1. Permische Stegocephalen und Reptilien aus Texas.
   Gives systematic descriptions and discusses the relationships and classification of Stegocephala and reptiles from the Permian of Texas.
3. Pelycosaurierreste von Texas.
   Describes remains of Pelycosaurians from the Permian of Texas.

**Brooks** (Alfred H.).
1. Placer mining in Alaska in 1903.
   Describes occurrence of gold and the mining developments.
2. The investigation of Alaska's mineral wealth.
   Am. Inst. Mg. Engrs., Trans. (Lake Superior meeting, September, 1904), 20 pp., 1 fig., 1904.

**Brown** (Barnum).
1. Stomach stones and food of plesiosaurs.
   Gives observations upon the occurrence of "stomach stones" in connection with the remains of plesiosaurs and their probable use by the animal.
Bryan (William Alanson).
1. A monograph of Marcus Island.
   Bishop Mus., Honolulu, Occasional Papers, vol. 2, no. 1, pp. 77-139, 8 figs., 1904.
   Includes an account of the physical features, and the general geology and mode of formation of the island.

Buckley (Ernest Robertson).
1. Biennial report of the state geologist [of Missouri].
   Administrative report for the year 1902. Includes an outline of the mineral resources of the state and an index to the publications of the Missouri Geological Survey.

2. Introduction to the geology of Miller County, Missouri.
   Discusses the stratigraphy, correlation, etc., of geologic formations in Miller County, Missouri.

3. A system of keeping the records of a state geological survey.

Buckley (E. R.), Ball (S. H.), and Smith (A. F.).
1. Glacial boulders along the Osage River in Missouri.

Buckley (E. R.) and Buehler (H. A.).
1. The quarrying industry of Missouri.
   Gives an account of investigations upon the occurrence, geologic relations, qualities, and utilization of the building stones of Missouri. Includes a brief geological history of Missouri.

Buehler (H. A.), Buckley (E. R.) and.
1. The quarrying industry of Missouri.
   See Buckley (E. R.) and Buehler (H. A.), 1.

Burchard (Ernest F.).
1. Lignites of the middle and upper Missouri Valley.
   Describes prospecting for coal in northeastern Nebraska, the character and occurrence of lignite seams and the character of the lignite; also the occurrence and character of the lignite of North Dakota.

2. Geology of Dakota County, Nebraska, with special reference to the lignite deposits.
   Describes the physiography and drainage features, the character and occurrence of Cretaceous and Quaternary deposits, the geologic history, the economic resources, and the occurrence and character of lignite not of workable quality.
Bureau (Ed.).
1. Sur une collection de végétaux fossiles des Etats-Unis.
   Gives a brief account of a collection of fossil Cretaceous plants from Kansas
   and Colorado.

Burns (David).
1. On the phenomena accompanying the volcanic eruptions in the
   West Indies.

Burrows (John Shober).
1. The Barnesboro-Patton field of central Pennsylvania.
   Describes location and stratigraphy of the field, the character and occurrence
   of the coal seams, composition and value of the coal, and the mining
   developments.

Butts (Charles).
1. Coal mining along the southeastern margin of the Wilmore basin,
   Cambria County, Pa.
   Describes the location and geologic structure of the field and the mining oper­
   ations.

   Describes physiographic features, the character, occurrence, and relations of
   Carboniferous strata and particularly of the coal beds, the geologic structure
   and geologic and geographic history, and the economic resources, mainly
   coal, petroleum, and natural gas. The section on glacial gravels is contrib­
   uted by Frank Leverett.

Byrne (John).
1. Geography, history, production, fissure systems, distribution of
   ores, character of ores [of the Butte, Montana, mining district].
   Includes a brief account of the general geology of the vicinity of Butte, Mont­
   ana, of the fissures and veins, and the occurrence of the ore deposits of silver
   and copper ores.

Caballero (Gustavo de J.).
   Describes the occurrence and character of deposits containing vanadium in the
   state of San Luis Potosi, Mexico.

Cahill (Edward G.).
1. The method used in working the silver-lead mines of Santa Eulalia,
   Chihuahua, Mexico.
   Gives notes on the occurrence and geologic relations of the silver-lead ore
   deposits.
Calkins (Frank C.), Smith (George Otis) and.
1. A geological reconnaissance across the Cascade Range near the Forty-ninth Parallel.
See Smith (George Otis) and Calkins (Frank C.), 1.

Calvin (Samuel).
1. Twelfth annual report of the State geologist [Iowa].
   Iowa Geol. Surv., vol. 14, pp. 1-6, 3 pls. (maps), 1904.

Campbell (Marius R.).
1. Conglomerate dikes in southern Arizona.
   Describes the general geologic structure of the region, the occurrence and character of the dike, and the source of its material.
2. The Deer Creek coal field, Arizona.
   Describes location, stratigraphy, and geologic structure of the field, the character and occurrence of coal seams, and the composition and value of the coal.
3. The Meadow Branch coal field of West Virginia.
   Describes location of the field, the stratigraphy and geologic structure, the character and occurrence of the coal beds, the quality of the coal and the mining developments. Includes a short report by David White on the fossil plants.
   Describes physiographic features, the general geologic structure and history of the area, the character and occurrence of Devonian and Carboniferous strata and Quaternary deposits, and the mineral resources, chiefly coal.
5. Glacial erosion in the Finger Lake region, New York.
   Discusses the origin of the present physiographic features of this region.

Capilla (Alberto).
1. Los yacimientos de fierro de “Tatatila,” Cantón de Jalapa, E. de Vera Cruz [México].
   Describes the character and occurrence of iron-ore deposits in the state of Vera Cruz, Mexico.

Capps (S. R.) and Leffingwell (E. D. K.).
1. Pleistocene geology of the Sawatch Range, near Leadville, Colo.
   Jour. Geol., vol. 12, pp. 698-706, 2 figs., 1904.
   Discusses the extent in this region of the ice during the Glacial epoch, and describes the drift deposits, terraces, and drainage changes.

Carlyle (E. J.).
1. The Pioneer iron mine, Ely, Minn.
   Includes some account of the general geology of the region, and of the character, occurrence, and geologic relations of the iron-ore deposits.
Carnew (Frank).
   Discusses criticisms of Professor Fairchild upon the writer’s paper, “A type case in diversion of drainage.”

Carpenter (Franklin R.).
1. The new geology and vein formation.
   Discusses ore formation from the standpoint of the planetesimal hypothesis.
2. Vein formation and the new geology.

Carter (Oscar C. S.).
1. The petrified forests and Painted Desert of Arizona.
   Gives observations upon the physiography and geology of the region.

Carter (W. E. H.).
1. The mines of Ontario.
   Includes observations on the occurrence in Ontario of deposits of gold, silver, copper, nickel, iron, lead, and zinc ores, corundum, graphite, mica, and other minerals.

Case (E. C.).
1. On some vertebrate fossils from the Permian beds of Oklahoma.
2. The osteology of the skull of the pelycosaurian genus, Dimetrodon.
   Jour. Geol., vol. 12, pp. 304–311, 6 figs., 1904.
3. On the structure of the fore foot of Dimetrodon.
   Jour. Geol., vol. 12, pp. 312–315, 3 figs., 1904.
   Md. Geol. Surv., Miocene, pp. 3–70, 18 pls., 1904.
5. A remarkably preserved specimen of a pelycosaur collected during the last summer in Texas.

Casey (Thomas L.).
1. Notes on the Pleurotomidae, with description of some new genera and species.
2. On the probable age of the Alabama white limestone.
   Discusses the geologic age and relations of the Alabama white limestone, Jackson and Vicksburg stages and other Tertiary formations in the light of evidence of their fossils.
Catlett (Charles).
1. Cement resources of the Valley of Virginia.
   Describes location, geologic relations, and character of the raw materials.

2. Geological relations of the manganese ore deposits of Georgia.
   [In discussion of paper of Thomas L. Watson.]

Chalmers (R.).
1. The geomorphic origin and development of the raised shore lines of the St. Lawrence Valley and Great Lakes.
   Describes high-level shore lines and discusses their origin and geologic history.

2. Peat in Canada.
   Discusses the occurrence and utilization of peat in Canada. Includes notes upon the geology and physical features of peat bogs.

Chamberlin (T. C.).
1. [The geological survey of the Lake Superior region.]
   Jour. Geol., vol. 12, pp. 276-277, 1904.
   Reviews the work and publications of the U. S. Geological Survey upon the Lake Superior ore-bearing series.

2. Fundamental problems of geology.
   Discusses lines of research upon fundamental problems of geology.

3. A contribution to the theory of glacial motion.

4. Origin of ocean basins on the planetesimal hypothesis.
   See no. 184 of U. S. Geol. Surv., Bull. no. 240.

Chamberlin (Thomas C.) and Salisbury (Rollin D.).

Chazal (Philip E.).
1. The century in phosphates and fertilizers. A sketch of the South Carolina phosphate industry.
   Charleston, S. C., 71 pp., 1904.
   Includes an account of the occurrence, geologic relations, character, origin, and economic development of the phosphate deposits of South Carolina.

Cirkel (Fritz).
1. Mica deposits.
   Describes the occurrence and character of mica and phlogopite deposits in Canada and elsewhere and their economic development in Canada.
Clapp (Frederick G.).
1. Relations of gravel deposits in the northern part of Glacial Lake Charles, Massachusetts.
   Jour. Geol., vol. 12, pp. 198-214, 3 figs., 1904.
   Describes sand plains, gravel, and other Glacial deposits in the valley of the Charles River in Massachusetts, and discusses their characteristics and formations, the disappearance of the Glacial ice and connected events.

Clapp (Frederick G.), Fuller (Myron L.) and.
   See Fuller (Myron L.) and Clapp (Frederick G.), 1.

Clark (William Bullock).
1. The Matawan formation of Maryland, Delaware, and New Jersey, and its relations to overlying and underlying formations.
   Includes a table showing correlation of Atlantic coast Cretaceous formations with Cretaceous formations of Europe.

2. The Miocene deposits of Maryland. Introduction and general stratigraphic relations.
   Md. Geol. Surv., Miocene, pp. xxiii-xxxii, 1 pl., 1904.


Clarke (F. W.).
1. Analyses of rocks from the laboratory of the United States Geological Survey.
   U. S. Geol. Surv., Bull. no. 228, 375 pp., 1904.
   Note.—The analyses of rocks have not been listed in the index of this bibliography.

Clarke (John M.).
   Am. Geol., vol. 34, pp. 1-13, 1 pl. (por.), 1904.
   Includes a chronologic list of Beecher’s published papers, prepared by Lucy P. Bush.

Clarke (John M.) and Luther (D. Dana).
1. Stratigraphic and paleontologic map of Canandaigua and Naples quadrangles [New York].
   N. Y. State Mus., Bull. 63, 76 pp., geol. map, 1904.
   Describes in detail the occurrence, and the lithologic and faunal characters of the Silurian and Devonian formations included in the area of the map, and gives lists of the fossils of the several formations.

Clearman (Harriet M.).
1. A geological situation in the lava flow, with reference to the vegetation.
   Includes observations upon the lava beds of Idaho.
   Bull. 271—05—3
Clements (J. Morgan).
1. Spherulitic texture in the Archean greenstones of Minnesota.

Cohen (E.).
1. Die Meteoreisen von Ranchito und Casas Grandes [Mexico].
   Describes occurrence, characters, and composition of meteorites from Mexico.
2. Die Meteoreisen von Nenntmannsdorf und Persimmon Creek; Unterscheidung von Cohenit und Schreibersit.
   Mittheilungen des Naturwissenschaftlichen Vereins für Neu-Vorpommern und Rügen zu Greifswald, Jahrg. 35, 4 pp., 1903.
   Describes occurrence and characters of a meteorite found in North Carolina.
   Mittheilungen des Naturwissenschaftlichen Vereins für Neu-Vorpommern und Rügen zu Greifswald, Jahrg. 35, 4 pp., 1903.
   Describes occurrence and characters of a meteorite from Pennsylvania.
   Mittheilungen des Naturwissenschaftlichen Vereins für Neu-Vorpommern und Rügen zu Greifswald, Jahrg. 34, 5 pp., 1902.
   Describes occurrence, characters, and composition of meteorites from Mexico and Texas.
5. Meteoreisen-Studien. XI.
   Describes meteorites from Illinois Gulch, Mont.; Hammond, Wis.; Cacaria, Mex.; Mesquital, Mex.; Murphy, N. C.; Saint Francois County, Mo.; Cosby's Creek, Tenn.; Canyon Diablo, Ariz.; Kendall County, Tex.; and Mount Joy, Pa.

Colburn (E. A.).
1. A peculiar ore deposit.
   Describes the occurrence, character, and geologic relations of ore bodies.

Cole (A. D.).
1. Clarence L. Herrick.

Coleman (A. P.).
1. Iroquois beach in Ontario.
   Describes location and character of the beach in Ontario of Lake Iroquois and discusses the levels and tilting of the beach, the outlet of the lake, and its geological and time relationships.
Coleman (A. P.)—Continued.
2. The Iroquois beach in Ontario.
3. The northern nickel range [Ontario].
   Describes the topography, general geology, and the occurrence, character, and
   geological relations of nickel and iron ore deposits.
4. The Sudbury nickel-bearing eruptive.
   vol. 77, p. 73, 1904.

Collier (Arthur J.).
1. Tin deposits of the York region, Alaska.
   Describes the general geology of the York region, and the occurrence and
   character of stream and lode tin deposits.
2. The tin deposits of the York region, Alaska.
   U. S. Geol. Surv., Bull. no. 229, 61 pp., 6 pls., 5 figs., 1904.
   Describes the general geology, the character and occurrence of sedimentary
   rocks of Silurian age and igneous rocks, and the character and occurrence in
   detail of tin-ore deposits and the mining operations. Gives a resume of the
   occurrence of tin in the United States and other parts of the world.
3. The coal fields of Cape Lisburne, Alaska.
   Am. Geol., vol. 34, pp. 401-402, 1904.
   Gives a brief account of the situation and geologic age of the coal fields, and
   the occurrence and character of the coal beds.

Collins (Henry F.).
1. Notes on the wollastonite rock mass, and its associated minerals of
   the Santa Fe mine, State of Chiapas, Mexico.
   Describes occurrence, origin, and crystallographic features of a rock mass of
   wollastonite.

Comstock (Frank M.).
1. Ancient lake beaches on the islands in Georgian Bay.
   Am. Geol., vol. 33, pp. 312-318, 2 pls., 1 fig., 1904.
   Describes the occurrence and character of elevated beaches.

Comstock (Theo. B.).
1. Superficial blackening and discoloration of rocks, especially in
   desert regions.
   Am. Inst. Mg. Engrs., Trans. (Lake Superior meeting, September, 1904), 4
   pp., 1904. (Advance separate.)
   Discusses the occurrence of these features and their explanation.

Condra (G. E.).
1. Stratigraphic delineation of the Benton and Niobrara formations of
   Nebraska.
Cook (Alfred N.).
1. A new deposit of fuller's earth.
   Describes the chemical composition of a specimen of fuller's earth from the
   Black Hills of South Dakota.

Cooper (W. F.).
1. Notes on the wells, springs, and general water resources of lower
   Michigan.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 489-512,
   1904.

Corkill (E. T.).
1. Notes on the occurrences, production, and uses of mica.
   Describes the occurrence and mining of mica in India, the United States, and
   Canada, particularly the occurrence and geologic relations of deposits in
   Quebec and Ontario.

Corsé (Frederic).
1. The buried valley of Wyoming [Pennsylvania].
   Describes the position, formation, and filling of a pre-Glacial valley at
   Wyoming.

Coste (Eugene).
1. Volcanic origin of natural gas and petroleum.
   Can. Mg. Inst., Jour., vol. 6, pp. 73-123, 1904.
   Gives a full presentation of facts confirmatory of the theory of the volcanic
   origin of natural gas and petroleum.

2. The volcanic origin of oil.

3. Volcanic origin of oil.
   Discusses volcanic origin of oil with particular reference to the Texas-Louisiana
   oil district.

Cowan (John L.).
1. The arsenic mines at Brinton, Virginia.
   Describes the occurrence of arsenic ores at Brinton, Virginia, and their eco­
   nomic development.

Cragin (F. W.).
1. A study of some teleosts from the Russell substage of the Platte
   Cretaceous series.

Crane (W. R.), Adams (George I.), Haworth (Erasmus), and.
   See Adams (George I.), Haworth (Erasmus), and Crane (W. R.), 1.
Crook (A. R.).
1. Missouri lead and zinc regions visited by the Geological Society of America.
   Describes the occurrence of ore deposits.
   Describes the occurrence, relations to surrounding rocks, and character of molybdenite ore at Crown Point, Washington.

Crosby (W. O.).
1. Memoir of Alpheus Hyatt.
   Includes a list of papers published by the subject of the memoir.
2. Structure and composition of the delta plains formed during the Clinton stage in the Glacial lake of the Nashua Valley. [Continuation.]
   Describes the structure and process of building of Glacial delta plains and the character and occurrence of various Glacial deposits, and discusses their origin.
   For previous part of the paper, see no. 249 of U. S. Geol. Surv., Bull. no. 240.
   Describes the character and occurrence of the rocks in the tunnels of the Weston aqueduct and discusses their geologic relations and their age.
4. Notes on the wells, springs, and general water resources of Rhode Island.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 119-125, 1904.

Crosby (W. O.) and La Forge (Lawrence).
1. Notes on the wells, springs, and general water resources of Massachusetts.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 94-117, 1904.

Crosby (W. O.) and Loughlin (G. F.).
1. A descriptive catalogue of the building stones of Boston and vicinity.
   Describes the geologic and geographic occurrence, character, and use in Boston of various building stones.

Cross (Charles Mortimer).
1. The underground water circulation.
   Discusses ore deposition by circulating waters.
Cross (Whitman).
   Describes character, occurrence, and geologic relations of Devonian strata in the San Juan region of Colorado.

   Jour. Geol., vol. 12, pp. 510-523, 1 fig., 1904.
   Describes the occurrence and character of a trachyte rock from the Island of Hawaii, gives chemical analyses of this and allied rocks and its norm, and discusses its bearing upon the geologic history of the island, and the general significance of the occurrence.

Culbert (M. T.).
1. The iron belt west of Hutton [Ontario].
   Gives observations upon the geology of the region traversed and the occurrence of iron ores.

Cumings (Edgar Roscoe).
1. Development of some Paleozoic bryozoan.
   Describes development stages in recent bryozoan and in the fossil genera Fenestella, Unitrypa, and Polyopora.

Cumings (Edgar R.), Prosser (Charles S.) and.
1. The Waverly formations of central Ohio.
   See Prosser (Charles S.) and Cumings (Edgar R.), 1.

Curtis (George Carroll).
1. Evidence of recent differential movement along the New England coast.

Cushing (H. P.).
1. Memoir of Peter Neff.

Cushman (Joseph A.).
   Am. Geol., vol. 33, pp. 154-156, 1 pl., 1904.

2. Pleistocene foraminifera from Panama.
   Describes occurrence and gives a list of species identified, with notes as to the occurrence of living forms of the same species.

   Am. Geol., vol. 34, pp. 169-174, 1904.
   Gives a section of the strata and a table showing the occurrence of the fossils in the various beds, and discusses the relations of these faunas.

   Am. Geol., vol. 34, pp. 293-296, 3 figs., 1904.
Dale (T. Nelson).
1. The geology of the north end of the Taconic Range.
   Describes the areal distribution and structural relations of Cambrian and
   Ordovician formations in the area and gives an explanation of these facts.

2. Note on Arkansas roofing slates.
   Describes the occurrence and megascopic and microscopic characters.

3. Geology of the Hudson Valley between the Hoosic and the Kinder-
   hook.
   U. S. Geol. Surv., Bull. no. 242, 63 pp., 3 pls., and 17 figs., 1904.
   Describes the occurrence, general and petrographical characters, and geologic
   structure and relations of lower Cambrian, Ordovician, and Silurian strata,
   and the general geologic structure and history of this region.

4. Note on the geological relations of the Brandon lignite deposit.

Dall (William Healey).
1. Neozoic invertebrate fossils. A report on collections made by
   [Harriman Alaska] expedition.
   Gives systematic descriptions of Eocene fossils from Alaska Peninsula and of
   Miocene fossils from the Shumagin Islands, and a list of Pleistocene fossils
   from Douglas Island, and describes the localities from which fossils were
   obtained.

2. On the geology of the Hawaiian Islands.
   A note in regard to the explanation of certain geologic formations on the Island
   of Oahu.

3. A singular Eocene Turbinella.
   Nautilus, vol. 18, pp. 9-10, 1904.

4. An historical and systematic review of the frog shells and tritons.
   Includes observations on Tertiary forms.

5. The relations of the Miocene of Maryland to that of other regions
   and to the recent fauna.
   vol. 19, pp. 502-503, 1904.

6. On the true nature of Tamiosoma.
   Science, new ser., vol. 15, pp. 5-7, 1902.

Darton (N. H.).
   Describes physiographic features, the geologic history and structure, the occurrence,
   character, and stratigraphic relations of Carboniferous, Triassic (?),
   Jurassic, and Cretaceous strata and Quaternary deposits, and the economic
   resources, artesian water, coal, petroleum, gypsum, etc.
Darton (N. H.)—Continued.
2. Gypsum deposits in South Dakota.
   U. S. Geol. Surv., Bull. no. 223, pp. 76-78, 1 pl., 2 figs, 1904.
   Describes character, occurrence, and economic development of gypsum deposits
   in the Black Hills region.
3. Comparison of the stratigraphy of the Black Hills, Bighorn Mountains,
   and Rocky Mountain front range.
   Describes in detail the occurrence, character, etc., of geologic formations of
   Cambrian, Ordovician, Carboniferous, Triassic, Jurassic, and Cretaceous age,
   and discusses their relations and correlations.

Darton (N. H.) and Smith (W. S. Tangier).
1. Edgemont folio, South Dakota-Nebraska.
   Describes the geography, topography, and drainage, the geologic history and
   structure of the area, the occurrence, character, and relations of Carboniferous,
   Triassic, Jurassic, Cretaceous, and Tertiary sedimentary strata, and
   the soils and water resources.

Davidson (George).
1. The glaciers of Alaska that are shown on Russian charts or mentioned
   in older narratives.

Davis (R. O. E.).
1. Analysis of kunzite.

Davis (W. M.).
1. The relations of the earth sciences in view of their progress in the
   nineteenth century.
   Jour. Geol., vol. 12, pp. 669-687, 1904.
2. Fresh-water Tertiaries at Green River, Wyoming.
   See no. 288 of U. S. Geol. Surv., Bull. no. 240.

Day (Arthur L.).
1. The study of minerals in the laboratory.
   Describes experiments upon the melting-point determinations of feldspars.

Day (David T.).

Contains:
   Iron ores, by John Birkinbine, pp. 41-73.
   General statistics of iron and steel, iron ore, and coal, to the year 1901, inclusive, for five
   leading iron and steel producing countries, by James M. Swank, pp. 101-122.
Day (David T.)—Continued.

Manganese ores, by John Birkinbine, pp. 133-161.
Copper, by Charles Kirchoff, pp. 163-203.
Lead, by Charles Kirchoff, pp. 205-216.
Aluminum and bauxite, by Joseph Struthers, pp. 231-238.
Platinum, by Joseph Struthers, pp. 239-243.
Platinum in the Rambler mine, Wyoming, by J. F. Kemp, pp. 244-256.
Quicksilver, by Joseph Struthers, pp. 251-259.
Nickel and cobalt, by Joseph Hyde Pratt, pp. 263-270.
Antimony, by Joseph Struthers, pp. 271-277.
Arsenic, by Joseph Struthers, pp. 279-282.
Bismuth, by Joseph Struthers, pp. 283-284.
Coal, by Edward W. Parker, pp. 289-447.
Coke, by Edward W. Parker, pp. 449-515.
Gas, coke, tar, and ammonia at gas works, and in retort coke ovens, by Edward W. Parker, pp. 517-533.
Asphaltum and bituminous rock, by Joseph Struthers, pp. 657-664.
Stone, pp. 665-701.
Cement in foreign countries, pp. 777-787.
Precious stones, by George F. Kunz, pp. 813-865.
Talc and soapstone, by Joseph Hyde Pratt, pp. 867-872.
Borax, by Joseph Struthers, pp. 891-896.
Bromine, by Joseph Struthers, pp. 897-898.
Fluorspar and cryolite, by Joseph Hyde Pratt, pp. 899-902.
Phosphate rock, by Joseph Struthers, pp. 915-920.
Sulphur and pyrite, by Joseph Struthers, pp. 933-943.
Barites, by Joseph Hyde Pratt, pp. 945-948.
Asbestos, by Joseph Hyde Pratt, pp. 963-966.
Chromite, or chromic iron ore, by Joseph Hyde Pratt, pp. 967-969.
Flint and feldspar, by Heinrich Ries, pp. 971-973.
Graphite, by Joseph Struthers, pp. 975-982.
Magnesite, by Joseph Struthers, pp. 983-984.
Mica, by J. A. Holmes, pp. 985-991.
Mineral waters, pp. 993-1002.
Monazite, by Joseph Hyde Pratt, pp. 1003-1006.


Contains:

Iron ores, by John Birkinbine, pp. 41-73.
Statistics of the American iron trade for 1903, by James M. Swank, pp. 75-127.
Manganese ores, by John Birkinbine, pp. 129-156.
Gold and silver, pp. 157-199.
Copper, by Charles Kirchoff, pp. 201-229.
Zinc, by Charles Kirchoff, pp. 263-264.
Aluminum and bauxite, by Joseph Struthers, pp. 265-270.
Quicksilver, pp. 281-284.
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Antimony, by Joseph Struthers, pp. 317-326.
Arsenic, by Joseph Struthers, pp. 327-334.
Tin, by Joseph Struthers and Joseph Hyde Pratt, pp. 335-349.
Day (David T.)—Continued.

Coal, by Edward W. Parker, pp. 351-538.
Coke, by Edward W. Parker, pp. 539-608.
Gas, coke, tar, and ammonia at gas works, and in retort coke ovens, by Edward W. Parker, pp. 609-634.
Natural gas, by F. H. Oliphant, pp. 719-743.
Asphaltum and bituminous rock, by Edmund Otis Hovey, pp. 745-754.
Stone, pp. 755-789.
Cement in foreign countries, pp. 900-903.
Precious stones, by George F. Kunz, pp. 911-977.
Talc and soapstone, by Joseph Hyde Pratt, pp. 979-987.
Borax, by Charles G. Yale, pp. 1017-1028.
Fluorspar and cryolite, by Joseph Hyde Pratt, pp. 1029-1032.
Gypsum and gypsum products, pp. 1033-1045.
Phosphate rock, by Edmund O. Hovey, pp. 1047-1058.
Salt, by Edmund O. Hovey, pp. 1059-1071.
Sulphur and pyrite, by Joseph Hyde Pratt, pp. 1073-1087.
Barytes, by Joseph Hyde Pratt, pp. 1089-1094.
Flint and feldspar, by Heinrich Ries, pp. 1117-1119.
Magnesite, by Charles G. Yale, pp. 1131-1135.
Mineral waters, pp. 1137-1162.


Occurrence and character of a gypsum deposit near Panasoffkee, Florida.

Deckert (Emil).

1. Martinique und sein Vulkanismus.

Petermanns Mittheilungen, Band 48, pp. 133-136, 1 pl. (map), 1902.
Gives a description of Martinique and the volcanic eruption of Mont Pelé.

Demaret (Léon).

1. Les principaux gisements de minerais de zinc des États-Unis d'Amérique.

Revue universelle des Mines [Liége and Paris], 4e sér., t. 6, pp. 221-256, 6 pls., 1904.
Describes the principal deposits of zinc ore in the United States, including observations on the character, occurrence, geologic relations, origin, etc.

2. Les principaux gisements des minerais de mercure du monde.

Annales des Mines de Belgique, t. 9, 80 pp., 3 pls., 28 figs., 1904.
Gives an account of the deposits of quicksilver ores in the world, their occurrence, geologic relations, production, etc. In the United States deposits in California, Oregon, and Texas are considered.

Dern (George H.).

1. The geology of Mercur [Utah]. A history of the region. Description of the ores and their peculiar formations. How they were deposited.

Describes the general geology, the occurrence and character of the gold and silver ledges, and discusses the origin of the ores.
Dickson (Charles W.).
1. The ore deposits of Sudbury, Ontario.

Diehl (O. C.).
1. Gypsum.
   Describes the occurrence of gypsum in Michigan and Utah.

Diller (J. S.).
1. Mining and mineral resources in the Redding Quadrangle, California, in 1903.
   Describes the occurrence and character of deposits of gold, silver, copper,chromite, and iron ores.
2. The composition and structure of the Klamath Mountains.

Dominian (Leon).
   Describes briefly the geologic structure and history of the region, and discusses the genesis of the gold and silver ores.
2. The Goldfield district, Nevada.
   Discusses the general geology, and the character and occurrence of veins containing gold-ore deposits.

Dominian (Leon), Smith (E. Percy) and.
1. Notes on a trip to White Oaks, New Mexico.
   See Smith (E. Percy) and Dominian (Leon), 1.

Douglass (Earl).
1. The Neocene lake beds of western Montana and descriptions of some new vertebrates from the Loup Fork.
   Mont. Univ., Missoula, Mont., 27 pp., 4 pls., 1899. (Published by the University.)

Dowling (D. B.).
1. Report on geological explorations in Athabaska, Saskatchewan, and Keewatin districts, including Moose Lake and the route from Cumberland Lake to the Churchill River, and the upper parts of Burntwood and Grass rivers.
   Can. Geol. Surv., Ann. Rept., new ser., vol. 13, 44 pp., 2 pls., and map, 1903. (Published separately, 1902.)
   Gives observations upon the occurrence and character of Laurentian, Huronian, Cambro-Silurian, Silurian, and Pleistocene deposits and the economic resources, and upon physiographic and geologic features of the region examined.
Drake (N. F.), Lindgren (Waldemar) and.
   See Lindgren (Waldemar) and Drake (N. F.), 1.
2. Silver City folio, Idaho.
   See Lindgren (Waldemar) and Drake (N. F.), 2.

Draper (Marshall D.).
1. The district of Goldfield, Nevada.
   Gives observations upon the general geology, and the occurrence of the gold-
   ore deposits.

Dresser (John A.).
1. Report on the geology and petrography of Shefford Mountain, Quebec.
   map, 1903. (Published separately, 1902.)
   Describes the general geology, and the occurrence, relations, and composition
   of the igneous rocks of this area.
2. Geology of Brome Mountain, one of the Montereigan Hills.
   Describes the position and physiographic origin of the Montereigan Hills and
   in detail the petrography of Brome Mountain.
3. A new area of copper-bearing rocks in the eastern townships of
   the Province of Quebec.
   separate, 4 pp., 1904.
   Describes the occurrence and geologic relations.

Dryer (Charles Redway).
   Describes physiographic features and glacial deposits, particularly moraines,
   of this region, and discusses their interpretation.

Duerden (J. E.).
1. The morphology of the Madreporaria. V. Septal sequence.
2. Recent results on the morphology and development of coral polyps.
3. The antiquity of the zoanthid actinians.
4. The development and relationships of the Rugosa (Tetracoralla).

Dutton (Clarence Edward).
1. Earthquakes in the light of the new seismology.
   New York, G. P. Putnam’s Sons, 314 pp., 10 pls., 63 figs., 1904.
   A general treatise upon earthquakes, their nature, causes, etc. The Charles­
   ton and other American earthquakes are considered.
Dyar (W. W.).
1. The colossal bridges of Utah. A recent discovery of natural wonders.
   Century Mag., vol. 68, pp. 505-511, 1904.

E.

Eakle (Arthur S.).
1. Mineral tables for the determination of minerals by their physical properties.
   New York, John Wiley & Sons, 73 pp., 1904.
2. Phosphorescent sphalerite.
   Describes the occurrence and characters of a sphalerite from Mariposa County, California, and its property of phosphorescence.

Eakle (A. S.) and Sharwood (W. J.)
1. Luminescent zinc-blende.
   Describes occurrence in Mariposa County, California, composition, and physical qualities.

Eastman (C. R.).
1. On the nature of Edestus and related forms.
   A critical discussion based upon new material lately discovered.
2. On the dentition of Rhynchodus and other fossil fishes.
   Includes a description of Rhynchodus pertenuis n. sp.
3. A recent paleontological induction.
   Discusses the association of pebbles with the remains of plesiosaurs.
4. On upper Devonian fish remains from Colorado.
   Describes the occurrence and character of fish remains from Devonian strata in the San Juan region of Colorado, and gives a systematic description of a new form.
5. Fossil plumage.
   Md. Geol. Surv., Miocene, pp. 71-93, 5 pls., 1904.

Eaton (George F.).
1. Characters of Pteranodon (second paper).
2. Obituary—John Bell Hatcher.
BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY, [BULL. 271.

Eckel (Edwin C.).
   Describes economic development and geologic relations of the gypsum deposits
   in the Salina group.
2. Gypsum deposits in Virginia.
   U. S. Geol. Surv., Bull. no. 223, pp. 36-37, 1 pl., 1 fig., 1904.
   Describes economic development and geologic relations of gypsum beds occurring
   in Carboniferous strata.
3. The slate deposits of California and Utah.
   Describes the occurrence and character of slate deposits in Eldorado County,
   California, and near Provo, Utah.
   Describes location and general geology of the district, the stratigraphic position
   and character of the cement rock, methods of manufacturing and character
   of the product.
5. The salt industry in Utah and California.
   Describes character and source of materials used and methods of manufacture
   employed.
6. On a California roofing slate of igneous origin.
   Describes occurrence and character of slate deposits in California and discusses
   their origin.
7. On the chemical composition of American shales and roofing slates.
   Jour. Geol., vol. 12, pp. 25-29, 1904.
8. The nonmetallic mineral products of the United States.
   Mg. Mag., vol. 10, pp. 167-174, 1 pl., 1904.
   Contains notes on the occurrence of nonmetallic mineral products.
   Describes the general geology of the region, and the character and occurrence
   of the iron ores, and discusses their origin.
10. The materials and manufacture of Portland cement.
    Ala. Geol. Surv., Bull. no. 8, pp. 1-59, 1904.
    Includes a discussion of the origin and general characters of limestone and
    other raw materials used in cement manufacture.

Eckel (E. C.), Johnson (L. C.) and.
1. Notes on wells, springs, and general water resources of Mississippi.
   See Johnson (L. C.) and Eckel (E. C.), 1.
Edwards (W. F.).
1. The new geology and vein formation. Discussion.
   Describes the history of the nebular hypothesis and discusses the relative merits of this and the planetesimal hypothesis.

Eggleston (Julius Wooster).
1. Physiography—an outline of its scope and applications.
   Describes physiographic areas of the United States and various local physiographic features as illustrative of principles set forth in the paper.

Emerson (Benjamin Kendall).
   Harriman Alaska Expedition, vol. 4, pp. 11-56, 5 pls., 13 figs., 1904.
   Describes the geology of points visited by the Harriman Alaska expedition, including the occurrence and character of igneous, metamorphic, and sedimentary rocks in Alaska, the petrographic characters of various rocks collected, and the age and correlation of fossil-bearing formations.

2. Note on a calcite-prehnite cement rock in the tuff of the Holyoke Range.
   Describes the character and occurrence of this rock.

Emerson (Benjamin Kendall), Loomis (F. B.) and.
1. On Stegornus longipes, a new reptile from the Triassic sandstones of the Connecticut Valley.

Emerson (Philip).
1. Note on glacial topography in central New Hampshire.
   Describes physiographic features in central New Hampshire.

Emmons (S. F.).
1. Theories of ore deposition historically considered.
   Reviews in chronologic order the various theories held at different periods of time regarding the origin of ore deposits.

2. The Virginius mine.
   Gives observations upon the occurrence and geologic relations of the ore bodies of copper and galena.

3. Investigation of metalliferous ores.
   Gives a short summary, statement respecting the economic publications of the preceding year relating to metalliferous ores and the field work carried on in this division.
Emmons (S. F.)—Continued.


Emmons (S. F.), Hayes (C. W.).
1. Contributions to economic geology, 1903.

Emmons (S. F.), Irving (John Duer) and.
1. Economic resources of the northern Black Hills. Part II. Mining geology.

See Irving (John Duer) and Emmons (S. F.), 1.

Evans (Herbert M.).
1. A new cestraciont spine from the lower Triassic of Idaho.

Eyerman (John).
1. Contributions to mineralogy.
Am. Geol., vol. 34, pp. 43-48, 1904.
Describes the occurrence, characters, and composition of some minerals from New Jersey and Pennsylvania.

F.

Fairbanks (H. W.).
1. Gypsum deposits in California.
U. S. Geol. Surv., Bull. no. 223, pp. 119-123, 1 pl., 1904.
Describes character, occurrence, and geologic relations of the gypsum deposits of California.

2. San Luis folio, California.
Describes topography and drainage, climate and vegetation, the character, occurrence, and relations of Jurassic (?), Cretaceous, and Tertiary sedimentary rocks and included igneous rocks, the geologic structure and history of the area, the development of the physiographic features, and the economic resources and soils.

Fairchild (Herman Le Roy).
Am. Geol., vol. 33, pp. 43-45, 1904.

2. Geology under the new hypothesis of earth origin.
Am. Geol., vol. 33, pp. 94-116, 1904.
Compares the sufficiency of the nebular and planetesimal hypotheses and discusses the explanation given by the latter of the origin of the atmosphere and ocean, volcanic phenomena, deposits of hydrocarbons, ores, salt, and gypsum, climate in geologic time, glaciation, crustal movements, and life on the earth.

3. Geology under the planetesimal hypothesis of earth origin.
See preceding entry. Includes discussion by Edward H. Kraus, Willis T. Lee, Israel C. Russell, and Frederick W. Sardeson.
Fairchild (Herman Le Roy)—Continued.
4. Glacial waters from Oneida to Little Falls [New York].
   Describes the position and extent of waters along the ice front, and the drain­
   age at different stages of the Glacial epoch in north central New York, as
determined from the occurrence, character, etc., of Glacial deposits.

5. Glacial drainage in central western New York.


Falconer (J. D.).
1. The evolution of the Antilles.
   Discusses the general geologic history of America and more particularly that
   of Central America and the West Indies.

Farrington (Oliver Cummings).
1. Gems and gem minerals.
   Chicago, A. W. Mumford, 229 pp., 16 pls., 61 figs., 1903.
2. Observations on the geology and geography of western Mexico,
   including an account of the Cerro Mercado.
   Field Col. Mus., Geol. sér., vol. 2, pp. 197–228, 16 pls., 5 figs., 1904. Abstract:
   Describes physiographic features, climatic conditions, the general geology and
   silver-mining developments of this part of Mexico, and in detail the Cerro
   Mercado (Iron Mountain), particularly the occurrence and characters of the
   iron ore, minerals, and rocks.

3. The geographical distribution of meteorites.

Fenneman (N. M.).
1. Structure of the Boulder oil field, Colorado, with records for the
   year 1903.
   Describes the location and geologic structure of the field, and the occurrence
   and production of petroleum.

Finch (Grant E.).
1. Notes on the position of the individuals in a group of Nileus vigi­
lans found at Elgin, Iowa.

Finch (John W.).
1. The circulation of underground aqueous solutions and the deposi­
ton of lode ores.
   Discusses underground water and the formation of ore deposits.
   Bull. 271—05—4
Finlay (George I.).
1. The geology of the San José district, Tamaulipas, Mexico.
   Geol. Dept., Contr., vol. 11, no. 100, 1904.
   Describes the topography and the general geologic structure of the region, the
   field relations of the igneous rocks, and in detail their petrographic char­
   acters.

Finlay (George I.) and Kemp (J. F.).
1. Nepheline syenite area of San José, Tamaulipas, Mexico.
   See no. 397 of U. S. Geol. Surv., Bull. no. 240.

Finlay (J. R.).
1. The mining industry of the Coeur d’Alene district, Idaho. The ore
   formation. The production and methods of operating.
   Abstract of paper read before the American Institute of Mining Engineers in
   1902, together with comments by Arthur Lakes.

Fisher (Cassius A.).
1. Coal fields of the White Mountain region, New Mexico.
   Describes the location of the field and the occurrence and character of the
   coals.
   Describes the geologic structure of the field, the character and occurrence of
   the coals, and the mining operations.

Fletcher (Hugh).
1. Limits of the workable coals of the Cumberland coal fields in Nova
   Scotia.
   Includes observations upon the geology of the region, and discusses the possi­
   bility of workable coal seams being found at certain points in the light of
   geological facts presented.

Fluck (Frank).
1. Lower Coal Measures of central Pennsylvania.
   Describes occurrence and character of coal seams of central Pennsylvania.

Flynn (Benjamin H.) and Flynn (Margaret S.).
1. The natural features and economic development of the Sandusky,
   Maumee, Muskingum, and Miami drainage areas in Ohio.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 91, 130 pp., 11 figs.,
   1904.
   Includes a brief account of the topography and general geology of the areas
   considered.
Foerste (August F.).
1. Variation in thickness of the subdivisions of the Ordovician of Indiana. With notes on the range of certain fossils.
   Am. Geol., vol. 34, pp. 87-102, 1 pl., 1904.
2. The Ordovician-Silurian contact in the Ripley Island area of southern Indiana, with notes on the age of the Cincinnati geanticline.
   Discusses the stratigraphic evidence for the time of formation of the Cincinnati geanticline, the occurrence, character, and relations of Ordovician and Silurian formations in Ohio, Indiana, and Kentucky, and gives observations upon the stratigraphic position of various fossils, the relationships of Silurian faunas of Indiana with those of New York, and lists of Niagara fossils of Indiana.
3. Description of the rocks formed in the different geological periods in Indiana: Ordovician and Silurian.

Foote (W. M.).

Forstner (William).
1. Genesis of ore deposits at the Royal mine, Hodson, Cal.
   Describes the occurrence and geologic relations of the ore bodies and discusses their origin.
2. The quicksilver deposits of California.
   Discusses the occurrence and origin of quicksilver ore deposits of California.

Fowler (George L.).
1. The coals and coal-mining methods of the Pocahontas field.
   Describes the geologic occurrence, fuel value, and mining methods of the Pocahontas coal.

Fraas (E.).
   Contains observations on the Jurassic strata of Wyoming and their vertebrate fossils, and the Bad Lands of South Dakota.
Frazer (Persifor).
1. Geogenesis and some of its bearings on economic geology.
   Reviews theories of the origin of the earth, and discusses the planetesimal theory and the origin of the hydrocarbons.

Frech (Fritz).
1. Die geographische Verbreitung und Entwicklung des Cambrium.
   In discussing the geographic distribution and development of the Cambrian, includes the Cambrian of North America.

Fuller (H. T.).
1. Corundum and emery.
   Describes occurrence and character of deposits of corundum in Ontario, Canada.

Fuller (Myron L.).
1. Ice-retreat in Glacial Lake Neponset and in southeastern Massachusetts.
   Jour. Geol., vol. 12, pp. 181-197, 4 figs., 1904.
   Describes occurrence and character of Glacial deposits in a part of eastern Massachusetts and discusses the disappearance and accompanying events of the Glacial ice.

2. Hyner gas pool, Clinton County, Pa.
   Describes the occurrence of natural gas in this field and gives the record of one of the borings.

3. Water supplies from wells in southern Louisiana.

4. Rice irrigation in southern Louisiana.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 101, pp. 82-98, 2 pls., 2 figs., 1904.

5. Contributions to the hydrology of eastern United States, 1903.
   Introduction.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 9-13, 1904.

6. Organization of the Division of Hydrology and work of the eastern section.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 15-20, 1904.
   Outlines the work of the United States Geological Survey in the investigation of underground water resources.

7. Notes on the wells, springs, and general water resources of certain eastern and central states.
   Introduction.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 21-28, 1904.
   Describes the collection, preparation, and utilization of data relating to underground waters, as an introduction to a series of papers by different writers on the underground water resources of certain eastern and central states.
Fuller (Myron L.)—Continued.
8. Notes on the wells, springs, and general water resources of Florida.
9. Experiments on the pollution of deep wells in Georgia.

Fuller (Myron L.) and Clapp (Frederick G.).
   Describes topographic features, the general geologic relations, the character and occurrence of Carboniferous, Tertiary, and Quaternary formations, the geologic structure and history, the economic resources, coal, clay, and building stone, the soils, forest reserves, and water supply.

Furlong (E. L.).
1. An account of the preliminary excavations in a recently explored Quaternary cave in Shasta County, California.
   Describes occurrence of vertebrate remains and gives lists of forms identified.

Furlong (E. L.), Sinclair (William J.) and.
1. Euceratherium, a new ungulate from the Quaternary caves of California.
   See Sinclair (William J.) and Furlong (E. L.), 1.

Ganong (W. F.).
1. Notes on the natural history and physiography of New Brunswick.
   Describes physiographic history of various rivers of New Brunswick.

Garrison (F. Lynwood).
1. The genesis of limonite ores in the Appalachians.
2. The iron ores of Shady Valley, Tennessee.
   Describes the general geology and the occurrence, character, and geologic relations of the iron-ore deposits.
3. Tin in the United States.
   Discusses the occurrence of tin deposits.

Gidley (J. W.).
1. Proper generic names of Miocene horses.

Gidley (J. W.), Matthew (W. D.) and.
1. New or little-known mammals from the Miocene of South Dakota.
   American Museum expedition of 1903.
   See Matthew (W. D.) and Gidley (J. W.), 1.
Gilbert (Grove Karl).
   Describes the occurrence and characters of the glaciers and physiographic fea-
   atures of Alaska.
2. Geology and paleontology [of the Harriman Alaska expedition].
   Introduction.
   Harriman Alaska Expedition, vol. 4, pp. 1-8, 1 pl., 1904.
   Describes briefly the itinerary of the Harriman Alaska expedition and the gen-
   eral results obtained.
3. Regulation of nomenclature in the work of the U. S. Geological
   Survey.
   Am. Geol., vol. 33, pp. 138-142, 1904.
   Notes some of the changes made in the regulations given in the Tenth Annual
   Report of the U. S. Geological Survey. The revised regulations appear in
4. The mechanism of the Mont Pelée spine.
   Science, new ser., vol 19, pp. 927-928, 1904; Eng. & Mg. Jour., vol. 78, p. 27,
   1904.
   Offers an explanation of the formation of the spine of Mont Pelé.
5. Domes and dome structure of the high Sierra.
   Describes dome structure and discusses its origin.
6. Variations of Sierra glaciers.
7. Systematic asymmetry of crest lines in the high Sierra of California.
   Jour. Geol., vol. 12, pp. 579-588, 8 figs., 1904.
   Discusses the relations of glaciers and physiographic features in the Sierra
   Nevada Mountains.
   See no. 448 of U. S. Geol. Surv., Bull. no. 240.

Gillette (Halbers Powers).
1. Osmosis as a factor in ore formation.
   See no. 710 of the Bibliography for 1903, U. S. Geol. Surv., Bull. no. 240.

Girty (George H.).
1. New molluscan genera from the Carboniferous.
2. Note on the Carboniferous fossils [of the Bisbee Quadrangle, Arizona].
   Gives lists of identified fossils with notes upon their occurrence and relations.
   Some of the more characteristic are figured.
3. The typical species and generic characters of Aviculipecten, McCoy.
   Am. Geol., vol. 33, pp. 291-296, 1 fig., 1904.
Girty (George H.)—Continued.

4. The type of Aviculipecten.
   Am. Geol., vol. 34, pp. 332–333, 1904.

5. Triticites, a new genus of Carboniferous foraminifers.

   Discusses the equivalency of certain Carboniferous formations.

Glenn (L. C.).

1. Devonian and Carboniferous rocks of southwestern New York.
   See no. 459 of U. S. Geol. Surv., Bull. no. 240.

2. Notes on a new meteorite from Hendersonville, N. C., and on additional pieces of the Smithville, Tenn., fall.

3. Notes on the wells, springs, and general water resources of Tennessee.

4. Notes on the wells, springs, and general water resources of Kentucky.

5. Systematic paleontology of the Miocene deposits of Maryland: Pelecypoda.

6. The more common minerals of the region about Nashville [Tennessee].
   Discusses the general principles controlling occurrence of minerals, and describes the occurrence and character of minerals from central Tennessee.


Goldthwait (James Walter), Huntington (Ellsworth).

1. The Hurricane fault in the Toquerville district, Utah.
   See Huntington (E.) and Goldthwait (J. W.), 1.

Gordon (C. H.).

1. On the paramorphic alteration of pyroxene to compact hornblende.
   Am. Geol., vol. 34, pp. 40–43, 1904.

2. On the pyroxenites of the Grenville series in Ottawa County, Canada.
   Jour. Geol., vol. 12, pp. 316–325, 5 figs., 1904.
   Describes the occurrence and characters of these rocks and discusses their origin and nomenclature.
Gordon (C. H.)—Continued.

3. The work of rivers.

Northwest Jour. of Education, vol. 15, no. 7, pp. 3-6, 2 figs., 1904.
Discuss erosion and sedimentation by running waters.

Gould (Charles Newton).


Describes the drainage, the occurrence, character, and relations of igneous rocks and sedimentary rocks of Carboniferous, Cretaceous, and Tertiary age, including an extended and detailed account of the Red Beds in Oklahoma, and a historical review of investigations upon their stratigraphic position and geologic age in Texas, Kansas, and Oklahoma.

2. Oklahoma gypsum.

Describes the occurrence, character, and utilization of the gypsum deposits in Oklahoma, and discusses their geologic relations and origin.


Describes character, occurrence, economic development, and geologic relations of gypsum deposits occurring in Permian strata.

4. Geology of Jacobs Cavern, McDonald County, Missouri.


5. Geology of the Wichita Mountains of Oklahoma.

Describes the physiography of the region, and the character and occurrence of igneous rocks, and of sedimentary rocks of Cambrian, Ordovician, and Carboniferous age.

Gowling (F. A.).

1. Notes on geology of Mineral Creek district, Pinal County, Arizona.

Describes the stratigraphy of the region and the occurrence of the ore deposits.

Grabau (Amadeus W.).

1. On the classification of sedimentary rocks.

Proposes a classification of sedimentary rocks and sets forth the principles upon which it is based.

2. Phylogeny of Fusus and its allies.

Includes descriptions of American Tertiary forms.

Grabau (A. W.), Johnson (C. W.), and.

1. A new species of Clavilithes from the Eocene of Texas.

See Johnson (C. W.) and Grabau (A. W.), 1.

Grant (C. C.).

1. Notes on past collecting season.

Gives notes on the occurrence of Silurian fossils near Hamilton, Ontario.
Grant (U. S.).
1. Investigations on the Lake Superior iron ore deposits.
   Mg. Mag., vol. 10, pp. 175-183, 6 figs., 1904.
   Describes the general geology of the region, and the occurrence, geologic relat-
   ions, character, and origin of the iron ore deposits.

2. Field work in the Wisconsin lead and zinc district.
   Jour., vol. 77, p. 74, 1904.
   Describes briefly the method adopted in a combined topographic, geographic,
   and geologic survey in this region.

3. A pre-Glacial peneplain in the driftless area.
   23446, 1904.

Gratacap (L. P.).
   a chapter on the development of mineralogy.
   New York, The Broadway Press, no date. 178 pp., illus.

2. Geology of the City of New York (Greater New York), with geo-
   logical map. Second edition. For use in schools, institutes,
   and classes.
   New York, Brentano's, 1904. 119 pp., 35 figs. and geol. map.

Greene (George K.).
1. Contribution to Indiana paleontology. Part XVII.
   New Albany, Ind., pp. 168-175, 3 pls., 1904.
   Contains descriptions of Devonian and Carboniferous corals by George K.
   Greene, and of Carboniferous echinoderms by R. R. Rowley.

2. Contribution to Indiana paleontology. Part XVIII.
   New Albany, Ind., pp. 176-184, 3 pls., 1904.
   Contains descriptions of Devonian and Carboniferous corals by George K.
   Greene, and of Devonian and Carboniferous echinoderms by R. R. Rowley.

3. Contribution to Indiana paleontology. Part XIX.
   New Albany, Ind., pp. 185-197, 3 pls., 1904.
   Contains descriptions of Devonian, Silurian, and Carboniferous corals by G. K.
   Greene, and of Carboniferous and Devonian echinoderms by R. R. Rowley.
   The latter contributes a review of Dr. G. Hambach's Revision of the Blas-
   toideae.

4. Contribution to Indiana paleontology. Part XX.
   Contains specific descriptions of Devonian corals by George K. Greene.
   Parts I-XX, February, 1898, to September, 1904, form volume 1 of the "Con-
   tribution to Indiana paleontology."

Greger (D. K.).
1. The distribution and synonymy of Ptychospira sexplicata (White and
   Whitfield).
   Am. Geol., vol. 33, pp. 15-17, 1904.
Greger (D. K.)—Continued.
2. On the genus Rhynchopora, King, with notice of a new species.
   Am. Geol., vol. 33, pp. 297–301, 12 figs., 1904.

Gregory (H. E.).
1. Notes on the wells, springs, and general water resources of Connecticut.

Gregory (W. M.).
1. The alabaster area [Michigan].
   Describes the glacial geology, the physiographic features, and the Paleozoic geological formations exposed in this area.

Griffith (William).
1. A Missouri coal field.
   Describes the occurrence and character of coal in Morgan County, Missouri.

Grimsley (G. P.).
   Describes occurrence, character, economic development, and geologic relations of the gypsum deposits.

2. Gypsum deposits in Kansas.
   U. S. Geol. Surv., Bull. no. 223, pp. 53–59, 1 pl., 3 figs., 1904.
   Describes character, occurrence, economic development, and geologic relations of the gypsum deposits in Kansas.

   Describes the general geology of lower Michigan and the geological history of the Michigan basin, and discusses the conditions under which the gypsum deposits of this area were produced.

4. The gypsum of Michigan and the plaster industry.
   Gives an account of the occurrence and utilization of gypsum deposits in other countries and states, describes the geology and topography of the Michigan series gypsum, and the mining of the gypsum deposits and manufacture into plaster, and discusses the origin of gypsum and its various uses.

Gulick (Addison).
1. The fossil land shells of Bermuda.
   Describes the occurrence and gives systematic descriptions of fossil land shells of Bermuda.

Gulliver (F. P.).
1. Nantucket shorelines. I.
   Outlines a proposed investigation to determine changes in shore lines.

2. Nantucket shorelines. II.
   Describes recent changes in the shore lines of Nantucket Island.
Gwillim (J. C.).
1. Notes on some western coals.
   Gives observations upon the occurrence and character of coals in Alberta and
   British Columbia, and their geologic horizons.

Haanel (Eugene).
1. Discussion of Mr. W. M. Brewer's paper on "The rock-slide at
   Frank, Alberta Territory, Canada."
   See no. 125 of U. S. Geol. Surv., Bull. no. 240.

Haas (Hippolyt).
1. Der Vulkan. Die Natur und das Wesen der Feuerberge im Lichte
   der neueren Anschauungen fur die Gebildeten aller Stande in
   gemeinfasslicher Weise dargestellt.
   Berlin, Alfred Schall. 340 pp., 32 pls., [1904].
   A general discussion of volcanic activity, its causes, nature, etc. One chapter
   is devoted to volcanic eruptions in the Lesser Antilles in 1902.

Haehl (H. L.) and Arnold (Ralph).
1. The Miocene diabase of the Santa Cruz Mountains in San Mateo
   County, California.
   Describes character and occurrence of Tertiary formations and included igneous
   rocks, and the petrographic characters of the latter. Includes lists of fossils
   contained in the Tertiary formations.

Hager (Lee).
1. The mounds of the southern oil fields.
   Describes the general geology of the Gulf coastal region of Louisiana and
   Texas, and the geologic structure of the mounds and salines, discusses the
   theories of their origin, and presents a new hypothesis.

Hall (Benjamin M.).
1. Water powers of Alabama, with an appendix on stream measure­
   ments in Mississippi.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 107, 253 pp., 9 pls.,
   9 figs., 1904.
   Includes a brief account of the topographic and geologic features of the state.

Hall (Charles E.).
1. Notes on a geological section from Iguala to San Miguel Totolapa,
   State of Guerrero, Mexico.
   1903.
   Describes character and occurrence of Tertiary and Cretaceous strata and of
   igneous rocks, and gives several sections showing the geologic relations of
   these formations.
Hall (C. M.), Todd (James E.) and.
1. Geology and water resources of part of the lower James River Valley, South Dakota.
   See Todd (James E.) and Hall (C. M.), 1.
2. DeSmet folio, South Dakota.
   See Todd (James E.) and Hall (C. M.), 2.

Hall (C. W.).
1. Notes on the wells, springs, and general water resources of Minnesota.

Halse (Edward).
1. Some silver-bearing veins of Mexico.
   Describes occurrence, characters, and geologic relations of silver-ore deposits of Mexico.

Hamilton (W. R.), Kessler (H. H.) and.
1. The orbicular gabbro of Dehesa, California.
   See Kessler (H. H.) and Hamilton (W. R.), 1.

Harris (Gilbert Dennison).
1. Underground waters of southern Louisiana.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 101, 98 pp., 11 pls.,
   15 figs., 1904.
   Includes an account of the topography and stratigraphy of southern Louisiana.
2. The Helderberg invasion of the Manlius.
   Describes sections of Devonian rocks at a number of localities in New York,
   and discusses their correlation, and the occurrence and faunal relations of the fossils.

Hartzell (Joseph Culver).
1. Das Oberdevon Europas und Nordamerikas.
   Inaugural Dissertation, Ludwig Maximilians-Universität zu München.
   München, Kastner & C"allwey, 73 pp., 1904.
   Discusses the occurrence and correlation of Devonian strata in Europe,
   North America, and other parts of the world.

Hasse (Adelaide R.).
1. Reports of explorations printed in the documents of the United States government. (A contribution toward a bibliography.)
   Contains titles of papers bearing on geology.
Hatcher (J. B.).
1. An attempt to correlate the marine with the nonmarine formations of the middle west.
Discusses conditions governing the formation of marine, brackish, and fresh-water beds, and their application to the correlation and relative age of various Jurassic and Cretaceous horizons of the middle west. A note discussing the views advanced in the paper is added by Mr. T. W. Stanton.

Haworth (Erasmus).
1. The Kansas River flood of 1903.
Describes geologic effects of the flood of 1903 upon the flood plain of the Kansas River.

Haworth (Erasmus), and Crane (W. R.), Adams (George I.).
See Adams (George I.), Haworth (Erasmus), and Crane (W. R.), 1.

Hay (O. P.).
1. On some fossil turtles belonging to the Marsh collection in Yale University Museum.
2. Descriptions of two species of extinct tortoises, one new.
3. On two new species of turtles from the Judith River beds of Montana.
4. An important but not well-known locality furnishing Cretaceous fishes.
See no. 520 of U. S. Geol. Surv., Bull. no. 240.
5. On the finding of skulls of Trionychidae in the Bridger deposits of Wyoming.
6. A new gigantic tortoise from the Miocene of Colorado.

Hayes (C. Willard).
1. Introductions to "Contributions to economic geology, 1903."
U. S. Geol. Surv., Bull. no. 225, pp. 11-17, 1904.
Gives a brief statement regarding the publications of the United States Geological Survey bearing upon economic geology. Includes a list of the geologic folios showing the mineral resources described in each.
2. Investigation of nonmetalliferous economic minerals.
A brief summary statement regarding investigations of nonmetalliferous economic minerals completed during the past year or in progress.
Hayes (C. W.), Emmons (S. F.).
1. Contributions to economic geology, 1903.
   See Emmons (S. F.), Hayes (C. W.), 1.

Hays (Mabel).
1. Winoka gravels, supposed Tertiary deposits. Description of deposits.
   Describes the character and occurrence of gravel deposits in southwestern Missouri.

Heilprin (Angelo).
1. The nature of the Pelée tower.
   Discusses the mode of formation of the spine of Mont Pelé.
2. The tower of Pelée: new studies of the great volcano of Martinique.

Henderson (Junius).
1. The Arapahoe glacier in 1903.
   Jour. Geol., vol. 12, pp. 30-33, 1 fig., 1904.
   Compares the status of the Arapahoe glacier of Colorado in 1903 with that of 1902.
2. The overturns in the Denver basin [Colorado].
3. Paleontology of the Boulder area [Colorado].
   Gives lists, with notes on their occurrence and character, of fossils found in formations of Cretaceous age in the Boulder, Colorado, area.

Henrich (Carl).
1. The Guanajuato mining district [Mexico].
   Describes the occurrence, geologic relations, and mining of the silver ores of this region.

Herrick (Clarence Luther).
1. A Coal-Measure forest near Socorro, New Mexico.
   Jour. Geol., vol. 12, pp. 237-251, 10 figs., 1904.
   Describes the general geologic structure of the Rio Grande Valley, and the occurrence, character, and fauna of Coal-Measure strata in vicinity of Socorro, New Mexico.
2. Laws of formation of New Mexico mountain ranges.
   Am. Geol., vol. 33, pp. 301-312, 393, 2 pls., 1904.
   Describes the geologic structure and physiographic features of various mountain ranges of New Mexico.
   Am. Geol., vol. 33, pp. 378-381, 1 fig., 1904.
   Describes the character, occurrence, and origin of clinoplains in the vicinity of Socorro, New Mexico.
Herrick (Clarence Luther)—Continued.

4. Lake Otero, an ancient salt lake basin in southeastern New Mexico.
Am. Geol., vol. 34, pp. 174-189, 1 pl., 3 figs., 1904.
Describes the geologic structure and history, physiographic features, and economic resources of the region, the character and relations of the formations present, and the extent and history of the ancient lake Otero.

Herrick (H. N.)
1. Gypsum deposits in New Mexico.
Describes character, occurrence, and geologic relations of the gypsum deposits of New Mexico.

Hershey (Oscar H.).
1. The Bragdon formation in northwestern California.
 Discusses the occurrence, character, and geologic relations of the Bragdon and associated formations, and presents evidences of the age of the Bragdon, which is affirmed to be Jurassic.

2. The river terraces of the Orleans basin, California.
Outlines briefly the bed-rock geology and geomorphogeny of the region, gives detailed descriptions of the occurrence and characteristic features of the terrace remnants, and discusses the problems presented by them and their correlation with the Quaternary terrace system of other portions of California.

Hill (Benjamin F.).
1. Gypsum deposits in Texas.
U. S. Geol. Surv., Bull. no. 223, pp. 68-73, 1 fig., 1904.
Describes character, occurrence, and economic development of gypsum deposits in Texas.

2. Das Vorkommen der texanischen Quecksilbermineralien.
Describes the occurrence in Texas of minerals containing quicksilver.

Hill (Robert T.).
1. The Guanajuato mining district [Mexico].
Includes observations on the geology of the region and the occurrence and character of the gold and silver ores.

2. Report upon the geology of the Santo Domingo placer fields, Magdalena district, Sonora, Mexico.
Greene Consolidated Gold Company [Prospectus], New York, pp. 12-24, 10 pls., 1904.
Describes the location and general geology of the district, and the character, occurrence, and geologic relations of sedimentary formations, of igneous rocks, and of placer gold deposits, and discusses the source of the gold.

Hille (F.).
1. The Baraboo iron ore.
Discusses the geologic age and origin of the iron ores of Baraboo, Wisconsin.
Hille (F.)—Continued.
2. Genesis of the Animikie iron range [Ontario].
   Discusses the geologic data bearing-upon the presence and amount of iron ore
   north of the International Boundary in this region, the character, occurrence,
   classification, and nomenclature of Archean and Algonkian formations, the
   origin, constituents, and metamorphism of their rocks, and the origin of the
   iron ores.

Hillebrand (W. F.).
1. Emmonsite (?) from a new locality.
   Describes the occurrence, optical and other characters, and chemical compo­
   sition of a mineral, provisionally regarded as emmonsite, from Cripple Creek,
   Colorado.

Hillebrand (W. F.), Lindgren (Waldemar) and.
   See Lindgren (Waldemar) and Hillebrand (W. F.), 1.

Hillebrand (W. F.), Schaller (W. T.) and.
1. Crystallographical and chemical notes on lawsonite.
   See Schaller (W. T.) and Hillebrand (W. F.), 1.

Hind (Wheelton).
1. The type of Aviculipecten.
   Am. Geol., vol. 34, pp. 200-201, 1904.

Hitchcock (A. S.).
1. Controlling sand dunes in the United States and Europe.

Hitchcock (C. H.).
1. New studies in the Ammonoosuc district of New Hampshire.
   Describes the occurrence, with lists of forms identified, of Silurian fossils, and
   the occurrence, characters, and geologic relations of Silurian and perhaps
   other Paleozoic sedimentary strata, in large part metamorphosed, and of
   igneous rocks. The paper includes a description of Dalmanites lunatus by
   Avery E. Lambert.

2. Glaciation of the Green Mountains.
   Montpelier, Vt., Argus and Patriot Press, 1904. 21 pp. [Private publication.]
   Describes various evidences of glacial action upon high summits in the Green
   Mountains in Vermont and the Adirondacks of New York, and discusses
   glaciation in New England and New York.


Hobbs (William Herbert).
1. Lineaments of the Atlantic border region.
   Describes the orientation of earth lineaments, namely, mountain ranges, ridges,
   borders of plateaus, drainage lines, coast lines, boundary lines of geologic
   formations, fall lines, boundaries of physiographic provinces, etc.
Hobbs (William Herbert)—Continued.
   Discusses the relations of fault systems to one another in the area considered, and related geographic features.

Hoernes (Rudolf).
1. Die vulkanischen Ausbrüche auf den Kleinen Antillen.
   Describes the volcanic eruptions and the attendant phenomena that took place in the Lesser Antilles in 1902.

Hoffmann (G. Christian).
1. Report of the section of chemistry and mineralogy.

Holder (Charles F.).
1. Meteorites and their collectors.

2. Natural monuments.
   Describes pillars and other features resulting from erosion.

Holland (W. J.).
1. In memoriam, John Bell Hatcher.

Hollick (Arthur).

2. Additions to the paleobotany of the Cretaceous formation on Long Island. No. II.

3. Some recently discovered facts in regard to Silver Lake [Staten Island, New York].
   Gives records of borings at this locality, and notes upon the character of the material passed through.

   Gives notes upon the occurrence of a submerged peat bed near Staten Island, New York.

5. A recent discovery of amber and other fossil plant remains at Kreischerville [Staten Island, New York].
   Bull. 271—05——5
Hollick (Arthur)—Continued.
6. Fossil plants from Kansas.
   N. Y. Bot. Garden, Jour., vol. 4, pp. 66-68, 4 figs., 1903.
   Gives a brief account of a collection of Cretaceous fossil leaves from Kansas.
7. A canoe trip down the Yukon River from Dawson to Anvik [Alaska].
   Gives observations upon the geology of the region traversed.

Hollister (G. B.),
1. Physiographic features of the Susquehanna basin.
   Describes physiographic features of the Susquehanna basin.

Holway (Ruliff S.),
1. Eclogites in California.
   Jour. Geol., vol. 12, pp. 344-358, 5 figs., 1904.
   Reviews previous work upon eclogites (garnetiferous augite or hornblende) and describes the occurrence and petrographic characters of eclogites from localities in California and Oregon.

Hopkins (T. C.),
1. Mineral resources of Onondaga County, New York.
   Describes the occurrence and production of building stones, clays, and other economic resources.
2. The geological map of Indiana.
   Describes the preparation of the geologic map of the State of Indiana (scale: 4 miles to the inch) accompanying the Twenty-eighth Annual Report of the Department of Geology and Natural Resources of Indiana.
3. A short description of the topography of Indiana, and of the rocks of the different geological periods; to accompany the geological map of the State.
   The part on the Ordovician and the Silurian (pp. 21-39) was written by A. F. Foerste.
4. Contents of the published volumes of reports of the Indiana Geological Survey, the Department of Geology and Natural History, and the Department of Geology and Natural Resources.
5. General index to all the publications of the Indiana Geological Survey, the Department of Geology and Natural History, and the Department of Geology and Natural Resources.

Hosea (R. M.),
1. Tercio and Cuatro mines. A description of the coal washing and coking plants of the Colorado Fuel & Iron Co. at Tercio and Cuatro [Colorado].
   Includes observations on the general geology of the region.
Hovey (Edmund Otis).

1. The Geological Society of America.
   Eng. & Mg. Jour. vol. 77, pp. 73-74, 1904.
   Gives abstracts of papers read at the sixteenth annual meeting.

2. A remarkable slab of fossil crinoids [from the Cretaceous of Kansas].

3. Mont Pelé from October 20, 1903, to May 20, 1904.

   Describes the condition of the volcano at the date given.

5. The Grand Soufrière of Guadeloupe.
   Gives observations upon the geology of the island, and the physical features and volcanic activity of the Grand Soufrière.


7. Some erosion phenomena observed on the islands of Saint Vincent and Martinique in 1902 and 1903.

   Describes briefly the present condition of this volcano.


11. The Crystal Cave of South Dakota.


Hovey (Horace C.).

1. Colossal cavern (Kentucky).
   Spelunca, t. 5, pp. 57-61 (247-251), 2 figs., 1904.
   In the author's separates a copyright plate has been added showing route in the cave.
Howe (Ernest).
1. An occurrence of greenstone schists in the San Juan Mountains, Colorado.
   Describes the occurrence and character of greenstone schists in the San Juan Mountains, discusses their age, and compares them with similar rocks from other localities.

Hubbard (George D.).
   Describes distribution of Illinoian and Wisconsin drift deposits in southern Illinois and various physiographic features of the Embarras Valley, and discusses its physiographic history.

Huntington (Ellsworth) and Goldthwait (James Walter).
1. The Hurricane fault in the Toquerville district, Utah.
   Describes geographic and physiographic features of the region, the character and occurrence of the geologic formations, the geologic history, embracing deposition, uplift, folding, faulting, erosion, and vulcanism, and the occurrence and effects of lava flows.

Hyde (Jesse E.).
1. Changes in the drainage near Lancaster [Ohio].
   Ohio Naturalist, vol. 4, pp. 149–157, 4 figs., 1904.
   Discusses changes in drainage produced by the ice invasions of the Glacial period.

Iddings (Joseph P.).
1. A fracture valley system.
   Jour. Geol., vol. 12, pp. 94–105, 1 pl., 1904.
   Discusses the relations subsisting between systems of drainage and fractures, and describes in illustration the drainage system and geologic structure of the Livingston Quadrangle, Folio 1 of the Geologic Atlas of the United States.

2. Quartz-feldspar-porphyry (graniphyro liparose-alaskose) from Llano, Texas.
   Describes petrographic characters and chemical composition, and discusses its position in the quantitative system of classification.

Irving (John Duer).
1. The ore deposits of the northern Black Hills.
   Describes the general geology and the occurrence, geologic relations, and character of the gold, silver, tin, and wolframite ore deposits.

2. Ore deposits of the northern Black Hills.
   Describes the general geology and the character and occurrence of ore deposits, chiefly gold, lead-silver, and wolframite, in Algonkian, Cambrian, Carboniferous, and eruptive rocks.
Irving (John Duer)—Continued.
3. Microscopic structure and origin of certain stylolitic structures in limestone.
   Discusses the character and origin of stylolites.

Irving (John Duer) and Emmons (S. F.).
1. Economic resources of the northern Black Hills. Part II. Mining geology.
   Describes the character, occurrence, and geologic relations of the gold, silver, copper, tin, and tungsten ores, and their economic development.

Ishikawa (S.).
1. Latest eruption of Colima volcano, Mexico. [In Japanese.]

Jackson (Robert T.).
   Gives an account of his life and work, and a list of his published papers.

Jacobs (E.).
   Eng. Mag., vol. 27, pp. 36-57, ill., 1904.
   Describes the location of the field, the occurrence of the coal, and the mining operations.

Jaggar (Thomas Augustus, jr.).
   Describes topography, stratigraphy, lithology, geologic structure, and characteristic sections.

2. The eruption of Mount Pelee, 1851.
   Translated from the French of LePrieur, Peyrand and Ruifs.

3. The initial stages of the spine on Pelee.
   Describes occurrence and appearance of spines in the crater of Mont Pelé and gives an explanation of their origin.

4. The eruption of Pelée, July 9, 1902.
   Gives details of observations on the eruption of July 9, 1902, and discusses the causes of the phenomena.

Jeffrey (Edward C.).
1. A fossil Sequoia from the Sierra Nevada.
Jennings (E. P.).
1. The copper deposits of the Kaibab Plateau, Arizona.

2. Origin of the magnetic iron ores of Iron County, Utah.
   Am. Inst. Mg. Engrs., Trans. (Atlantic City meeting, February, 1904), 5 pp., 1904 [advance separate].
   Describes the occurrence and character of the magnetic iron ore deposits and discusses their origin.

Jennison (W. F.).
1. Notes on the history of manganese mining in part of Nova Scotia and on some of the geological conditions of the manganese belt running through Hants County.
   Discusses the occurrence and geologic relations of the manganese ore deposits.

Johnson (Charles W.).
1. Description of two new Tertiary fossils.

Johnson (C. W.) and Grabau (A. W.).
1. A new species of Clavilithes from the Eocene of Texas.

Johnson (L. C.) and Eckel (E. C.).
1. Notes on wells, springs, and general water resources of Mississippi.

Johnson (Willard D.).
1. The profile of maturity in Alpine glacial erosion.
   Discusses physiographic characteristics due to glacial erosion of the Sierra Nevada Mountains, and the agencies by which they were produced.

Joly (Henri).
1. Notice sur le Dr. Professor Charles Othoaniel Marsh (29 octobre 1831–18 mars 1899).

Jones (Fayette Alexander).
1. New Mexico mines and minerals. World's Fair edition, 1904.
   Santa Fe, N. M., The New Mexican Printing Company, 1904. 349 pp., 50 figs.
   Includes a brief account of the general geology, and observations on the occurrence, geologic relations, and character of various ore deposits, mining and production of metals, etc. Gives a list of minerals occurring in New Mexico.

Jones (T. Rupert).
1. Note on a Paleozoic Cypridina from Canada.
   Describes a new species under the name Cypridina antiqua.
Julien (Alexis A.).
1. The occlusion of igneous rock within metamorphic schists.
   Defines the term "occlusion" and discusses some of the phenomena of occluded igneous rocks.

Kain (Samuel W.).
1. Recent earthquakes in New Brunswick.

Kay (George F.).
1. The Abitibi region [Ontario].
   Includes observations upon the geology, topography, drainage, etc., of the region traversed, and a discussion of the petrography.

Keeley (Frank J.).
1. Inclusions in quartz.

Keith (Arthur).
1. Recent zinc mining in east Tennessee.
   Describes the general geology, character, occurrence, and origin of the zinc ore deposits.
   Describes the geographic relations and drainage, the geologic history, the character, occurrence, and relations of Archean, Algonkian (?), Cambrian, and Ordovician rocks, the geologic structure, and the mineral resources of the area.
3. Folded faults of the southern Appalachians.
   Congr. géol. intern., Compte rendu IX. Sess., pp. 541-545, 1904.
   Discusses the character and occurrence of overthrust faulting in the southern Appalachian region.

Kemp (James Furman).
1. Ores from igneous magmas.
2. Graphite in the eastern Adirondacks, N. Y.
   Describes occurrence and character of deposits of graphite.
3. The formation of veins: a brief statement of general principles.
   Mg. Mag., vol. 10, pp. 89-93, 1904.
   Discusses the general principles of ore deposition.
4. A handbook of rocks for use without the microscope. With a glossary of the names of rocks and of other lithological terms.
   Third edition, revised.
Kemp (James Furman)—Continued.
   Describes the occurrence of platinum in the ores of the Rambler mine, the
geology of the vicinity, and the character and occurrence of the ore bodies.

Kemp (J. F.), Finlay (George I.) and
1. Nepheline syenite area of San José, Tamaulipas, Mexico.
   See Finlay (George I.) and Kemp (J. F.), 1.

Kessler (H. H.) and Hamilton (W. R.).
1. The orbicular gabbro of Dehesa, California.
   Am. Geol., vol. 34, pp. 133-140, 5 pls., 1904.
   Describes the occurrence, geologic relations, megascopic and microscopic
characters, and constitution.

Keyes (Charles Rollin).
1. Note on block mountains in New Mexico.
   Am. Geol., vol. 33, pp. 19-23, 1904.
   Discusses structure and formation of block mountains in New Mexico.
2. Bolson plains and the conditions of their existence.
   Am. Geol., vol. 34, pp. 160-164, 1904.
   Describes the characters of bolson plains and discusses their origin.
3. Remarkable occurrence of aurichalcite.
   Describes an occurrence of aurichalcite in the Magdalena Mountains in New
   Mexico.
4. Certain basin features of the high plateau region of southwestern
   United States.
   Describes features of bolson plains of New Mexico, and discusses their origin.
5. Note on the Carboniferous faunas of Mississippi Valley in the
   Rocky Mountain region.
   Notes the identity of many of the fossils from the two regions, although they
   have been described under different names.
6. Iron deposits of the Chupadera Mesa [New Mexico].
   Describes the occurrence and geologic relations of iron ores in central New
   Mexico and explains their origin.
7. The Hagan coal field [New Mexico].
   Describes the occurrence and geologic relations of coal beds in central New
   Mexico.
8. Unconformity of the Cretaceous on older rocks in central New
   Mexico.
   Describes the relations of the Cretaceous rocks to the underlying formations.
   Includes a table giving a general geological section for New Mexico, showing
   the sequence, thickness, and lithologic character of the geologic
   formations.
Kindle (Edward M.).
1. A series of gentle folds on the border of the Appalachian System.
   Jour. Geol., vol. 12, pp. 281-289, 1 fig., 1904.
   Describes the occurrence and character of anticlinal folds in the Watkins Glen quadrangle in southern New York.
2. Note on some concretions in the Chemung of southern New York.
   Am. Geol., vol. 33, pp. 360-363, 3 figs., 1904.
   Describes the occurrence in the Chemung of a bed of concretions in connection with a fossiliferous band and gives an explanation of their origin.
3. The stratigraphy and paleontology of the Niagara of northern Indiana.

Kindle (Edward M.) and Breger (C. L.).
1. Paleontology of the Niagara of northern Indiana.

Kinney (Bryce A.).
1. Annual report of the State natural-gas supervisor.

Kinzie (Robert A.).
1. The Treadwell group of mines, Douglas Island, Alaska.
   See no. 690 of the Bibliography for 1903, U. S. Geol. Surv., Bull. no. 240.

Kirby (Edmund B.).
1. The ore deposits of Rossland, British Columbia.
   Describes the geologic occurrence, relations to surrounding rocks, and character of the gold, silver, and copper ore deposits of this locality.

Kirk (Charles Townsend).
1. A preliminary report on the contact of the Permian with the Pennsylvanian in Oklahoma.
   Describes physiography of the region examined, the occurrence, character, and economic products of Carboniferous strata in Oklahoma and their differentiation into Pennsylvanian and Permian.

Kirk (M. P.) and Malcolmson (J. W.).
1. A new quicksilver mining district [Texas].
   Describes occurrence, character, geologic relations, and economic development of quicksilver ore deposits in Texas.

Klein (Carl).
1. Über die am 7. Mai 1902 vom Vulcan Soufrière auf St. Vincent ausgeworfene vulkanische Ashche.
   Describes the fall of volcanic ash in St. Vincent and its composition.
**Klein (Carl)—Continued.**

   
   
   Describes characters of this meteorite.

**Klem (Mary J.).**

1. A revision of the Paleozoic Paleechinoidea, with a synopsis of all known species.
   

**Knapp (George N.).**


   N. J. Geol. Surv., Ann. Rept. for 1903, pp. 73-93, 2 pls., 1904.
   
   Describes extent and character of the physiographic provinces of New Jersey and their water supply, and gives data regarding wells drilled in 1903.

2. The Cliffwood clays and the Matawan.

   
   Discusses stratigraphic position of the formations occurring at Cliffwood, N. J.

**Knapp (George N.), Kümmel (Henry B.) and.**

1. The stratigraphy of the New Jersey clays.

   See Kümmel (Henry B.) and Knapp (George N.), 1.

**Knight (C. W.).**

1. Notes on some deposits in the eastern Ontario gold belt.

   
   Describes the general geology of the district, and in detail the occurrence and character of the gold ore deposits and associated rocks of the Belmont and Star of the East gold mines, and discusses their origin.

**Knight (Nicholas).**

1. The dolomites of eastern Iowa.

   
   Describes investigations upon the composition of dolomites.

2. Some features in the analysis of dolomite rock.

   
   Describes composition of examples of dolomite rock from the Niagara of Iowa.

**Knight (Wilbur C.).**


   U. S. Geol. Surv., Bull. no. 223, pp. 79-85; 1 pl., 2 figs., 1904.
   
   Describes character, extent, occurrence, economic development, and geologic relations of the gypsum deposits occurring in the Red Beds in Wyoming.

**Knowlton (Frank Hall).**

1. Fossil plants from Kukak Bay [Alaska].

   Harriman Alaska Expedition, vol. 4, pp. 149-162, 12 pls., 1904.

2. Fossil floras of the Yukon.

**Kraus** (Edward H.).
1. A new exposure of serpentine at Syracuse, N. Y.
   Describes occurrence, character, and relations to other dike exposures.

2. The occurrence of celestite near Syracuse, N. Y., and its relation to the vermicular limestones of the Salina epoch.

3. Some interesting mineral occurrences in the Salina epoch.
   Describes occurrence of hematite and celestite.

4. See Fairchild (H. L.), 4.

**Krebs** (Wilhelm).
1. Flutschwankungen und die vulkanischen Ereignisse in Mittelamerika.
   Globus, Bd. 84, pp. 72-74, 1903.
   Discusses connection between high tides in the Pacific Ocean and the volcanic activity in Central America in 1902.

**Kümmel** (Henry B.).
1. Administrative report of the State geologist.
   Outlines the work of the New Jersey Geological Survey for the year ended October 31, 1903.

**Kümmel** (Henry B.) and **Knapp** (George N.).
1. The stratigraphy of the New Jersey clays.
   N. J. Geol. Surv., vol. 6, pp. 117-209, 10 pls., 1904.
   Describes the occurrence and geologic relations of clays of Pleistocene, Tertiary, Cretaceous, and older systems of New Jersey.

**Kunz** (George F.).
1. Gem minerals of southern California.
   Describes the occurrence and characters of some gem minerals recently discovered.

2. Clackamas meteoric iron.
   Describes the occurrence and characters of a meteoric mass recently discovered.

**Lacroix** (A.).
1. La Montagne Pelée et ses éruptions.
   Paris, Masson et Cie., 1904. xxii, 662 pp., 30 pls. and 238 figs., 4to.
   Gives a full account of the volcanic phenomena connected with the eruptions of La Montagne Pelée in 1902.

**La Forge** (Lawrence), **Crosby** (W. O.) and.
1. Notes on the wells, springs, and general water resources of Massachusetts.
   See Crosby (W. O.) and La Forge (Lawrence), 1.
BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY,

Lakes (Arthur).

   U. S. Geol. Surv., Bull. no. 223, pp. 86-88, 2 figs., 1904.
   Describes character, occurrence, and economic development of the gypsum deposits of Colorado.

2. The coal fields of Colorado.
   Describes the formation of the coal, the location, character, and geologic age of the coal fields and the character and occurrence of the coals.

3. Field notes concerning ore shoots and the influence of downhill pressure on the outcrop of veins.

4. Grand Encampment copper district of Wyoming. Some notes on the geology, and a description of some of the development work.

5. The Yampa coal fields. A description of the anthracite, bituminous and lignite field traversed by the Moffatt Road in Routt County, Colorado.
   Describes the occurrence, character, and geologic relations of the coal beds.

6. The Book Cliff coal mines. Coal seams near Grand Junction, Colorado, which exhibit interesting peculiarities in their locations and formations.
   Describes the occurrence, character, geologic relations, and economic development of these coal beds.

7. A trip through Arizona. Interesting desert scenery and the relation it bears to the geology and mining interests of the region.
   Gives observations on the physiography and geology of parts of Arizona.

8. Tonopah mining camp. Some notes on its location, the geological formations of the region, and the mines in operation.

   Gives observations upon the physiography and geology of a part of western Nevada.

10. Schists and slates as ore carriers.
    Discusses the occurrence of ore deposits.

11. Ore in anticlinals, as at Bendigo, Australia, and Tombstone, Arizona.
Lakes (Arthur)—Continued.

12. The Lone Mountain district, near Tonopah, Nevada.
   Describes physiographic and geologic features of the region and the occurrence
   of silver-ore deposits.

13. Some of the ore deposits of Colorado.
   Describes the character and occurrence of some ore deposits.

14. Ore shoots and veins that do not come to the surface.
   Describes occurrences of ore bodies.

15. Organic remains in ore deposits.
   Mg. Rep., vol. 50, pp. 113-114, 1904.

16. Ore deposition in the cement of rocks.

17. Volcanic craters and ore deposits.

18. Shear zones or zones of impregnation vs. true quartz fissure veins.
   Discusses the character of veins containing ore deposits.

19. Epitome of geologic literature.
   Gives abstracts of papers by Gardner F. Williams on the genesis of the dia­
   mond, I. E. Todd on the geology of South Dakota, Arthur C. Spencer on the
   geology of the Treadwell ore deposits, Douglas Island, Alaska, and Waldemar
   Lindgren on the genesis of the copper deposits of Clifton, Morenci, Arizona.

Lambe (Lawrence M.).

1. On Dryptosaurus incrassatus (Cope), from the Edmonton series of
   the Northwest Territory.

2. The grasping power of the manus of Ornithomimus altus, Lambe.
   19, p. 254, 1904.

3. On the squamoso-parietal crest of two species of horned dinosaurs
   from the Cretaceous of Alberta.
   Ottawa Nat., vol. 18, pp. 81-84, 2 pls., 1904.

4. On the squamoso-parietal crest of the horned dinosaurs Centrotosaurus
   apertus and Monoclonius canadensis from the Cretaceous
   of Alberta.

5. The progress of vertebrate paleontology in Canada.
   Gives a review of work upon vertebrate fossils discovered in Canada, with a
   list of Canadian species occurring in each of the systems of the geological
   scale, and a list of papers containing references to these species.
Lambert (Avery E.).
1. Description of Dalmanites lunatus.

Lane (Alfred C.).
1. The theory of copper deposition.
   Mich. Miner, vol. 6, no. 2, pp. 9-11, no. 3, pp. 9-11, 1904. Am. Geol., vol. 34,
   pp. 297-309, 1 fig., 1904.
   Discusses the theory of copper deposition with especial reference to the copper
   ore deposits of the Lake Superior region.
2. The science of raw materials.
   Discusses scope and utility of economic geology.
   Mich. Miner, vol. 6, no. 5, pp. 9-12, no. 6, pp. 9-11, 1904.
   Gives notes on the occurrence, character, and use of materials for Portland
   cement and cement brick manufacture, and road making.
4. Recent explorations for oil and gas. Advance sheets from the
   Mich. Miner, vol. 6, no. 8, pp. 9-12, no. 9, pp. 9-13, 1904.
   Includes records of borings and discussion of the strata passed through.
5. The rôle of possible eutectics in rock magmas.
   Discusses the quantitative classification of igneous rocks.
6. Magnetic phenomena around deep borings.
7. Our underground wealth. Michigan clay, shales, and paving
   materials.
   The Gateway, vol. 1, no. 6, pp. 49-51, 1904.
   Discusses the occurrence and utilization of clays and shales for paving material.
8. Gold near Lake Superior.
   Gives observations upon the geology along the international boundary and the
   occurrence and mining of gold ores in Ontario and Michigan.
   Gives a review of the investigations upon the geology of Michigan, a general
   outline of the geological structure and stratigraphy of the state, and a list of
   publications bearing upon the geology of the state.

Lasswitz (Rudolf).
1. Die Kreide-Ammoniten von Texas. (Collectio F. Roemer.)
   Geol. und Pal. Abh. (Koken), N. F., Bd. 6, Heft 4, 40 pp., 8 pls., 1904.
   Gives systematic descriptions of Cretaceous ammonites from Texas, a graphic
   section of strata at Austin, and correlation tables of Cretaceous formations.
Lawson (Andrew C.).
1. The geomorphogeny of the upper Kern basin.
   Describes the occurrence and general petrographic characters of the rocks and
   the glaciation and physiographic features of the region, and discusses the
   origin of the latter.
2. The orbicular gabbro at Dehesa, San Diego Co., California.
   Describes the general geology of the region, the occurrence of the orbicular
   gabbro and its petrographic characters and composition.

Le Couppey de la Forest (Max).
1. Quelques grottes des Etats-unis d’Amerique.
   Spelunca, t. 35, no. 35, pp. 3 (117)–21 (135), 2 figs., 1904.
   Describes Mammoth and Colossal caves in Kentucky, Wyandotte Cave in
   Indiana, and Wind Cave and Grand Cavern in Colorado. Includes some
   account of the Carboniferous formations in which the caves occur.

Lee (Willis T.).
1. The underground waters of Gila Valley, Arizona.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 104, 68 pp., 5 pls.,
   9 figs., 1904.
   Includes sections of wells showing thickness and character of strata passed
   through.
2. Age of the Atlantosaurus beds.
   See no. 785 of the U. S. Geol. Surv., Bull. no. 240.
3. See Fairchild (H. L.), 3.

Leffingwell (E. D. K.), Capps (S. R.) and.
1. Pleistocene geology of the Sawatch Range, near Leadville, Colo.
   See Capps (S. R.) and Leffingwell (E. D. K.), 1.

Leith (Charles Kenneth).
1. Summaries of pre-Cambrian literature for 1902–1903.
2. The Lake Superior iron region during 1903.
   Describes the geologic occurrence of the iron ore deposits in the different dis­
   tricts of the Lake Superior iron region.
3. Iron ores in southern Utah.
   Describes distribution, geologic relations, and character of the iron ores and
   discusses their origin.
4. Lake Superior iron region in 1903.
   Mg. World, vol. 21, pp. 198–200, 3 figs., 1904.
   Includes observations on the general geology and the occurrence and char­
   acter of the iron-ore deposits.
5. Rock cleavage.
   U. S. Geol. Surv., Bull. no. 239, 216 pp., 27 pls., 1905.
Leverett (Frank).
1. The loess and its distribution.
   Am. Geol., vol. 33, pp. 56-57, 1904.
   Discusses the physical features of the southern peninsula, the possible extension
   of the Keewatin ice field over Michigan, evidences in Michigan of successive advances of the Labrador ice field, the location of the ice margin, structure of the drift in Michigan, Glacial lakes, origin of the Great Lakes, and gives a bibliography.
4. Glacial gravels [of the Kittanning quadrangle, Pennsylvania].

Levison (W. G.).
1. Notes on fluorescent gems.
   Am. Geol., vol. 33, pp. 57-58, 1904.

Lindgren (Waldemar).
1. Gypsum deposits in Oregon.
   Describes character, occurrence, economic development, and geologic relations
   of gypsum deposits in eastern Oregon.
2. A geological reconnaissance across the Bitterroot Range and Clearwater Mountains in Montana and Idaho.
   Describes topography and drainage, character, occurrence, and geologic relations
   of igneous and sedimentary rocks of Quaternary, Tertiary, and pre-Tertiary age, the geologic structure and history of the area, the character and occurrence of gold, silver, copper, and lead ore deposits, and the mining developments.
3. The genesis of the copper deposits of Clifton-Morenci, Arizona.
   Am. Inst. Mg. Engrs., Trans. (Lake Superior meeting, September, 1904),
   Describes the general geology, and the character and occurrence of copper ore deposits, and discusses their origin.

Lindgren (Waldemar) and Drake (N. F.).
1. Nampa folio, Idaho-Oregon.
   Describes the geography, the geologic history, the occurrence and character
   of Tertiary strata and igneous rocks and Quaternary deposits, and the
   economic resources, chiefly placer gold.
2. Silver City folio, Idaho.
   Describes geography, topography, and drainage, the general geologic history and structure, the character and occurrence of igneous rocks and sedimentary deposits of Tertiary and Quaternary age, and the economic resources, chiefly precious metals.
Lindgren (Waldemar) and Hillebrand (W. F.).


Describes the occurrence, optical and other characters, and chemical composition of some minerals from copper deposits in Arizona.

Lindgren (Waldemar) and Ransome (Frederick Leslie).


U. S. Geol. Surv., Bull. no. 254, 36 pp., 1904.
Describes the general geology and the occurrence and character of the gold-ore deposits.

Lloyd (John Uri).

1. When did the American mammoth and mastodon become extinct?


Logan (W. N.).

1. Economic products of St. Lawrence County [New York].

Describes the occurrence and production of economic products of this area.

2. Geology of Oktibbeha County [Mississippi].

Describes drainage, topography, and physiography, the character, occurrence, and relations of the Cretaceous, Tertiary, and Quaternary formations, and the economic resources of the county.

Loomis (F. B.).

1. Two new river reptiles from the Titanotheria beds.


2. On some marine fossils in the Titanotheria beds.


Loomis (F. B.), Emerson (B. K.) and.

1. On Stegomas longipes, a new reptile from the Triassic sandstones of the Connecticut Valley.

See Emerson (B. K.) and Loomis (F. B.), 1.

Louderback (George Davis).

1. Basin range structure of the Humboldt region [Nevada].

Describes the character, occurrence, and general relations of sedimentary and igneous rocks of the Basin ranges of western Nevada, particularly those of the Humboldt Lake mountains, and their geologic structure, discusses the mode of their formation and the evidences therefor, and gives an outline of the geologic history of the region.

2. Gypsum deposits in Nevada.

U. S. Geol. Surv., Bull. no. 223, pp. 112-118, 1 pl., 1 fig., 1904.
Describes character, occurrence, economic development, and geologic relations of gypsum deposits in northwestern Nevada.

Bull. 271—05—6
Loughlin (G. F.), Crosby (W. O.) and.
1. A descriptive catalogue of the building stones of Boston and vicinity.
   See Crosby (W. O.) and Loughlin (G. F.), 1.

Low (A. P.).
1. Report on an exploration of the east coast of Hudson Bay from Cape Wolstenholme to the south end of James Bay.
   (Published separately, 1902.)
   Gives observations on the general geology, the occurrence and character of igneous, Archean, and Cambrian rocks, and economic resources of the area explored. Includes a list of Glacial striae.

2. Report on the geology and physical character of the Nastapoka Islands, Hudson Bay.
   Describes the general geology of the Nastapoka Islands, and gives detailed descriptions of the physical features and the geologic formation of each of the larger islands of the group.

Lucas (Frederic A.).
1. A new batrachian and a new reptile from the Trias of Arizona.


3. The dinosaur Trachodon annectens.
   Describes occurrence and characters of fossil remains, and restorations.

4. Eocene whales.
   Note on the occurrence in Eocene deposits of southern United States of fossil remains which may throw light upon the ancestry of the whale.

Lull (Richard Swan).
1. Fossil footprints of the Juratrias of North America.
   Reviews previous work upon fossil footprints, describes their geologic occurrence, gives a classification and systematic descriptions of genera, species, and higher groups.

2. Note on the probable footprints of Stegomus longipes.

   Pop. Sci. Mo., vol. 66, pp. 139-149, 8 figs., 1904.
   Gives a general account of the footprints in the Triassic rocks of the Connecticut Valley and of the animals by which they were made.
Lunt (Horace F.).
1. The copper deposits of the Kaibab Plateau, Arizona.
   Describes the occurrence and character of copper deposits in this region.

Luquer (Lea McI.).
1. Bedford cyrtolite.
   Describes occurrence of this mineral at Bedford, New York, and its characters.
   Appends a list of additional minerals collected from this locality.
2. Ramosite not a mineral.
   Shows from analysis and structure that ramosite is a basic scoria and not a mineral.

Luquer (Lea McI.), Moses (Alfred J.) and.
1. Notes on recent mineralogical literature.
   See Moses (Alfred J.) and Luquer (Lea McI.), 1.

Luther (D. Dana), Clarke (John M.) and.
1. Stratigraphic and paleontologic map of Canandaigua and Naples quadrangles.
   See Clarke (John M.) and Luther (D. Dana), 1.

Lyman (Benjamin Smith).
1. Biographical notice of J. Peter Lesley.
2. Lodel Creek and Skippack Creek.
   Describes the occurrence of ripple marks, footprints, etc., in shales of the New Red in southeastern Pennsylvania.

M.

McCalley (Henry), Smith (Eugene Allen) and.
1. Index to the mineral resources of Alabama.
   See Smith (Eugene Allen) and McCalley (Henry), 1.

McCallie (S. W.).
1. Notes on the wells, springs, and water resources of Georgia.
   Ga. Geol. Surv., Bull. no. 12, 121 pp., 14 pls., 60 figs., 1904.
   Describes the general geology and topography of the northwestern part of Georgia, the geologic structure of the coal fields of that region, the character and occurrence of the coal beds, and the composition of the coals, and in detail the coal deposits and mining developments of Walker, Chattooga, and Dade counties.
Macaulay (A. B.).
1. The paleochemistry of the ocean in relation to animal and vegetable protoplasm.
   Discusses the relative abundance of certain chemical elements in sea water at present and in remote geological ages, and the origin of the physiological relation of the chemical elements in blood plasma.

McCarn (H. L.).
1. The Planet copper mines [Arizona].
   Describes the general geology and the occurrence and character of copper ores on Big Williams Fork, Arizona.

McConnell (R. G.) and Brock (R. W.).
   Describes the general geology of Turtle Mountain, and in detail the slide of April 29, 1903, and discusses its cause.

McEvoy (James).
1. Notes on the special features of coal mining in the Crow’s Nest, B. C.
   Discusses the geologic occurrence and character of the coals of this field.

McGregor (J. H.).
1. The relationships of the Phytosauria.

McKee (G. W.).
1. Prismatic crystals of hematite.
   Describes the crystallographic characters.

Macco (Albr.).
1. Die Eisenerzlagerstätten am Lake Superior.
   Describes general geology, and occurrence and character of the iron-ore deposits.

Malcolmson (J. W.), Kirk (M. P.) and.
1. A new quicksilver mining district.
   See Kirk (M. P.) and Malcolmson (J. W.), 1.

Mallery (Willard).
1. Native gold in igneous rocks.
   Describes the occurrence of native gold in Oregon.

Manson (Marsden).
1. The evolution of climate.
**Marbut** (C. F.).
1. Recent studies in the physiography of the Ozark region in Missouri.
   

2. Geology and physiography [of Missouri].
   
   The State of Missouri, pp. 63–70, ill. (incl. geol. map), 1904.
   Describes the physiographic features and general geology of the State of Missouri.

**Marsters** (W. F.).
1. A preliminary report on a portion of the serpentine belt of Lamoille and Orleans counties [Vermont].
   
   Describes the occurrence and relations of asbestos to surrounding rocks, and discusses the character and origin of the serpentine.

**Martin** (G. C.).
1. Petroleum fields of Alaska and the Behring River coal fields.
   
   Describes the location, general geology, and structure of the petroleum fields and the Behring River coal field, and the character and occurrence of the petroleum and coal.

2. Systematic paleontology of the Miocene deposits of Maryland:
   Malacostraca and Cirripedia.
   
   Md. Geol. Surv., Miocene, pp. 94–97, 2 pls., 1904.

3. Systematic paleontology of the Miocene deposits of Maryland:
   Mollusca, except Pelecypoda.
   

4. Systematic paleontology of the Miocene deposits of Maryland:
   Brachiopoda.
   

5. Systematic paleontology of the Miocene deposits of Maryland:
   Vermes.
   
   Md. Geol. Surv., Miocene, p. 430, 1 pl., 1904.

6. Systematic paleontology of the Miocene deposits of Maryland:
   Radiolaria.
   

**Maso** (Saderra).
1. Volcanoes and seismic centers of the Philippine Archipelago.
   
   Describes briefly the distribution of active and dormant volcanoes, the occurrence and character of the volcanic rocks, the general geology, and in detail the seismic activity in the islands.
Mathews (Edward Bennett).
1. The structure of the Piedmont Plateau as shown in Maryland.
   Discusses the character and occurrence of the rocks, reviews the explanations
   by previous writers of the geologic structure and describes in detail the
   structural features of the Piedmont Plateau.

Matson (George C.).
   Jour. Geol., vol. 12, pp. 133-151, 2 pls., 6 figs., 1904.
   Describes physiographic features of the Finger Lake region of New York and
   discusses the origin of the gorges in the streams of that region.

Matthes (Francois E.).
1. The Alps of Montana.
   Contains observations on the physiography, general geology, glaciers, and
   glaciation in the Rocky Mountain region of Montana.
2. The significance of U-shaped glacier and stream channels.

Matthew (G. F.).
1. An attempt to classify Paleozoic batrachian footprints.
   Discusses generic terms proposed for Paleozoic batrachian footprints, and gives
   a classification in tabular form of genera and species hitherto described.
2. Note on Oliver’s cave.
   Describes the cave and discusses its origin and age.
5. Physical aspect of the Cambrian rocks in eastern Canada, with a
   catalogue of the organic remains found in them.
   Describes the occurrence and character of Cambrian rocks and gives a table of
   the fossils occurring in them, showing place of publication, locality, and
   horizon.

Matthew (W. D.).
1. A complete skeleton of Merycodus.
2. Notice of two new Oligocene camels.
3. The arboreal ancestry of the mammalia.
Matthew (W. D.)—Continued.

4. Exhibition of the series of foot bones illustrating the evolution of the camel, recently installed in the Hall of Vertebrate Paleontology of the American Museum of Natural History.


5. Outlines of the continents in Tertiary times.


Matthew (W. D.) and Gidley (J. W.).

1. New or little known mammals from the Miocene of South Dakota. American Museum expedition of 1903.


Describes occurrence, character, origin, and faunal contents of Loup Fork beds of South Dakota, and gives systematic descriptions of vertebrate fossils from these beds.

Maxwell (Henry V.).

1. Tennessee iron ores.

Eng. & Mg. Jour., vol. 78, p. 742, 1904.

Describes the occurrence, character, and geologic relations of iron-ore deposits in eastern Tennessee.

Merriam (John C.).

1. The John Day fossil beds [Oregon].


Describes the general geology and the occurrence of vertebrate fossils.


Describes the character and occurrence of faunas in different beds of Miocene age in California.

3. A new marine reptile from the Triassic of California.


Describes Thalattosaurus alexandrse new genus and species.

4. Primitive characters of the Triassic ichthyosaurs.


See no. 885 of the U. S. Geol. Surv., Bull. no. 240.

Merrill (Frederick J. H.).

1. [Administrative] 56th report of the director of the State Museum and 22d of the State geologist [New York].


Merrill (George P.).

1. The non-metallic minerals, their occurrence and uses.


Note.—The large number of chemical analyses in this work have not been listed in the index.

2. On the Glacial pothole in the National Museum.


See no. 891 of U. S. Geol. Surv., Bull. no. 240.
Michel-Lévy (Auguste).
1. L’érup tion de la montagne Pelée et les volcans des Petites Antilles.
   Discusses the broad problems of volcanic activity in the West Indies and other parts of the world.

Mickle (G. R.).
1. Volcanic origin of natural gas and petroleum.

Miller (G. W.).
1. Geology of the Butte mining district [Montana].
   Describes the mining of silver and copper ores, the general geology and the occurrence, character, and origin of the veins and fissures.

Miller (Willet G.).
1. Cobalt-nickel arsenides and silver.
   Describes the occurrence, character, and geological relations of ore deposits of nickel-cobalt arsenides and silver in the northern part of Ontario.
2. Undeveloped mineral resources of Ontario.
   Canadian Mg. Inst., Jour., vol. 7 (advance separate), 20 pp., 1904.
   Discusses the occurrence of minerals of economic value in the Province of Ontario.

Mills (S. Dillon).
1. Some recent rock movements in the Laurentian and Huronian areas [Ontario].

Mills (W. Magoon).
1. A physiographic and ecological study of the Lake Eagle (Winona Lake) region, Indiana.
   Includes observations on the physiographic features of the region.

Moffit (Fred H.).
1. The Kotzebue placer-gold field of Seward Peninsula, Alaska.
   Describes the general geology, and the occurrence and mining of placer gold.

Moissan (Henri).
   Describes the chemical analyses of gas from fumaroles of Guadeloupe.
   Describes the characters and composition of this meteorite.
Monckton (G. F.).
1. Cinnabar-bearing rocks of British Columbia.
   Describes the general geology and the occurrence of quicksilver ores.

Moore (Charles J.).
1. Geology applied to mining, or the practical use of geology in mining.

Morgan (William Conger).
1. The origin of bitumen.
   Discusses various theories proposed to explain the origin of bitumen.

Morgan (William Conger) and Tallmon (Marion Clover).
1. A fossil egg from Arizona.
2. A peculiar occurrence of bitumen and evidence as to its origin.
   Describes the occurrence, mode of fossilization, and character and origin of the mineralization of a fossil egg from Arizona.

Morscher (L. N.).
1. Corroding action of river water during high floods.
   Kans. Univ. Geol. Surv., Min. Res. for 1902, pp. 82-97, 8 figs., 1903.
   A study of river erosion based largely upon observations made upon the effects of the Kansas River flood of 1903.

Moses (Alfred J.).
1. The crystallization of molybdenite.
   Describes crystallographic measurements of material from several sources.
2. Eglestonit, Terlinguait und Montroydit, neue Quecksilbermineralien von Terlingua in Texas.
   Describes the composition and crystallographic characters of quicksilver minerals from Texas.

Moses (Alfred J.) and Luquer (Lea McL.).
1. Notes on recent mineralogical literature.
   Sch. of Mines Quart., vol. 25, pp. 412-427, 1904.

Musgrave (Robert).
1. Copper deposits of Mt. Sicker, Vancouver [British Columbia].
   Describes the occurrence, character, and geologic relations of copper-ore deposits.
Nansen (Fridtjof).
1. The bathymetrical features of the north Polar seas, with a discussion of the continental shelves and previous oscillations of the shore line.
   Includes in the discussion an account of the continental shelves of Greenland and the North American coast.

Neumayer (L.).
1. Die Koprolithen des Perms von Texas.
   Describes the occurrence and character of coproliths from the Permian of Texas.

New York State Museum.
1. Economic geology of New York.
   N. Y. State Mus., Handbook 17, 40 pp., 1904.
   Gives brief accounts of the occurrence and utilization of mineral products of the state of New York.

Nicol (William).
1. Spinel twins of pyrite.

Nordenskjöld (Otto).
1. Notes on some specimens of rocks collected by C. Kruuse on the east coast of Greenland, between lat. 65° 35' and 67° 22' N.

Obalski (J.).
1. On a mineral containing radium in the Province of Quebec.
   Describes the occurrence and characters of a mineral, cleveite, containing radium.

Ogilvie (I. H.).
1. Geological notes on the vicinity of Banff, Alberta.
   Jour. Geol., vol. 12, pp. 408-414, 4 figs, 1904.
   Describes the general geology and the character and origin of physiographic features of this region.

2. The effect of superglacial débris on the advance and retreat of some Canadian glaciers.
O'Harra (Cleophas C.).
1. The geology and mineralogy of the Black Hills region.
   Black Hills, South Dakota. Papers read before the Black Hills Mining Men's
   Assoc., pp. 119-127, 1904.
   Describes the general topographic and geologic features and character of the
   rocks of the region, and gives notes upon the occurrence, character, and
   geologic relations of the ore deposits, chiefly gold ores.

Oliphant (F. H.).
1. [In discussion of paper by R. Pearson on "The discovery of natural gas in Sussex, Heathfield district."]
   A short note in regard to the distribution of natural gas in the United States.

2. Petroleum.
   Includes a table showing the stratigraphic position of petroleum-producing
   horizons in the Appalachian and Lima-Indiana fields.

Ordóñez (Ezequiel).
1. El mineral de Angangueo, Michoacan [México].
   Discusses vein phenomena and the occurrence of silver veins in a matrix of
   pyrite and galena.

   2. Las aguas subterráneas de Amozoc [México].
   Discusses the occurrence of underground water in the State of Puebla, Mexico.

   3. Las cenizas del volcan de Santa Maria.
   Describes ashes from the volcano Santa Maria, Guatemala.

Ortmann (A. E.).
1. Ueber die Decapoden-Gattungen Linuparus und Podocrates.
   Discusses the relationships of these genera of crustacea.

Orton (Edward, jr.) and Peppel (S. V.).
1. The lime resources of Ohio available for Portland cement manufacture.
   Discusses the occurrence, character, and geologic relations of limestones in
   Ohio suitable for use in manufacture of cements. Gives a table with many
   analyses of limestone.

Osann (A.).
1. Beiträge zur Geologie und Petrographie der Apache (Davis) Mts.,
   Westtexas.
   Tschermak's Min. & Petrogr. Mitt., N. F., Bd. 15, pp. 394-456, 2 pls. and 1
   fig., 1896.
   Describes the general geology of the region, the occurrence of igneous and
   Carboniferous and Cretaceous sedimentary rocks, and the petrographic charac-
   ters of the igneous rocks.
Osborn (Henry Fairfield).

1. Reclassification of the Reptilia.
   Reviews the history and principles of classification of the Reptilia, proposes a
   new classification, and gives definitions of the higher groups.

2. Paleontological evidence for the original tritubercular theory.

3. Recent zoopaleontology. Field expeditions during the past season.

4. Recent advances in our knowledge of the evolution of the horse.
   vol. 19, p. 717, 1904.

5. An armadillo from the middle Eocene (Bridger) of North America.


7. Manus, sacrum, and caudals of Sauropoda.

8. Teleorhinus browni—a teleosaurus in the Fort Benton.

9. New Miocene rhinoceroses with revision of known species.

10. The great Cretaceous fish Portheus molossus Cope.

11. Revised list of casts, models, photographs, and restorations of fossil vertebrae of the Department of vertebrate paleontology of the American Museum of Natural History.

12. On the position of the bones of the forearm in the Opisthocoelica
    or Sauropoda.

13. On the use of the sandblast in cleaning fossils.


15. On the primary components of vertebrae and their relations to ribs.

Osmont (Vance C.).
1. A geological section of the Coast Ranges north of the Bay of San Francisco.
   Describes the occurrence, character, and relations of stratified rocks of Jurassic, Cretaceous, Tertiary, and Quaternary age, and of igneous rocks observed in cross sections of the Coast Ranges of California, and the petrographical characters of the igneous rocks, and discusses the correlation of the Eocene strata, the geological structure along the sections and the geologic history of the region.

2. Areas of the California Neocene.
   Gives systematic descriptions and discusses the occurrence of associated fossils, giving faunal lists.

Otsuka (S.).
1. A short sketch on the petroleum industry of Europe and America.
   [In Japanese.]
   Includes observations on the petroleum industry in the Appalachian region, Texas, and California.

Owen (Luella Agnes).
1. The loess at St. Joseph [Missouri].
   Am. Geol., vol. 33, pp. 223-228, 2 pls., 1904.
   Describes the occurrence and character of loess deposits at this point and discusses the origin of the loess.

2. Cave regions of the Ozarks and Black Hills.
   Cincinnati, The Editor Publishing Co., 228 pp., ill., 1898.

P.

Palache (Charles).
   Describes the general geology, the occurrence and petrographic characters of the rocks, the occurrence of the gold ore deposits, and the mining operations.

2. Geology about Chichagof Cove, Stepovak Bay, with notes on Popof and Unga Islands.
   Harriman Alaska Expedition, vol. 4, pp. 69-88, 2 pls., 3 figs., 1904.
   Describes the general geology, the character and occurrence of sedimentary and igneous rocks, and the petrographic characters of the latter.

3. Notes on the minerals collected [by the Harriman Alaska expedition].
   Harriman Alaska Expedition, vol. 4, pp. 91-96, 1904.
   Describes the occurrence and characters of some minerals, and gives a list of minerals obtained and their localities.

Palache (Charles) and Wood (H. O.).
1. A crystallographic study of millerite.
Palmer (T. S.).
   Includes also the fossil forms.

Park (Emma J.).
   Describes gravel deposits of southwestern Missouri and discusses their age.

Parker (Charles A.).
1. Evidences of rheumatoid arthritis in the Lansing man.
   Am. Geol., vol. 33, pp. 39-42, 1 fig., 1904.
   Describes anatomical features of the fossil human bones discovered near Lansing, Kansas.

Parks (William Arthur).
1. Devonian fauna of Kwataboahegan River [Ontario].
   Describes the occurrence of Devonian fossils in the Moose River basin of Ontario, and gives systematic descriptions of new species.
2. A remarkable parasite from the Devonian rocks of the Hudson Bay slope.
3. The study of stratigraphy.
   Discusses the necessity of stratigraphy and paleontology in the geologic investigations of economic resources.

Parsons (A. L.).
1. The gypsum deposits of New York state.

Patton (Horace B.).

Pearson (Herbert W.).
1. The place of the great raised beaches in geology.
   Discusses the occurrence and elevation of raised beaches, the explanation of subsidences and elevations, and the formation and location of coal mines.

Peck (Frederick B.).
   Describes the character and occurrence of this formation in the area under consideration.
Peck (Frederick B.)—Continued.
2. The Atlantosaur and Titanotherium beds of Wyoming.
   Describes a geologic excursion in this region. Includes observations on the
geology and paleontology of Jurassic and Cretaceous strata.

3. The cement belt in Lehigh and Northampton counties of Pennsyl-
   vania. A description of the geological formations.
   Describes the physiographic features and the general stratigraphy of the region
   and the character and occurrence of the cement rock.

Peet (Charles Emerson).
1. Glacial and post-Glacial history of the Hudson and Champlain
   valleys.

Penhallow (D. P.).
1. Notes on Tertiary plants from Canada and the United States.
   Describes two new species and gives notes upon the occurrence of a number of
   others in Tertiary and Pleistocene deposits.

Peppel (S. V.).
1. Gypsum deposits in Ohio.
   Describes character and distribution, economic development and geologic rela-
tions of gypsum deposits occurring in Silurian strata of Ohio.

Peppel (S. V.), Orton (Edward, jr.) and.
1. The lime resources of Ohio available for Portland cement manufac-
ture.
   See Orton (Edward, jr.) and Peppel (S. V.), 1.

Perkins (George H.).
1. Notes on the wells, springs, and general water resources of Vermont.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 73-93, 1904.

2. List of works on the geology of Vermont.

3. Mineral resources of Vermont.
   Reviews the economic resources and the mining and quarrying industries of
   Vermont.

4. Geology of Grand Isle County [Vermont].
   Describes the topographic and physiographic features and general geology, and
   the occurrence, character, and relations of Ordovician strata and Glacial
deposits.

5. On the lignite or brown coal of Brandon and its fossils.
   Gives a historical sketch of the investigations upon the lignite fossils.
Perkins (George H.)—Continued.
6. Description of species [of fossil fruits] found in the Tertiary lignite of Brandon, Vermont.
7. Hydrology of Vermont. A summary of investigations upon the drinking waters of Vermont.

Perry (Joseph H.).
   Jour. Geol., vol. 12, pp. 1–14, figs. 1–5, 1904.
   Describes character, occurrence, and relations of the granites, schists, and other rocks of the Monadnock Mountain, and discusses their age and the reasons for the survival of the mountain.

Peter (Alfred M.).
1. Report of the Division of Chemistry [of the Kentucky Agricultural Experiment Station].
   Includes chemical analyses of crude petroleum, phosphatic limestone, and mineral waters.

Peters (W. J.).
1. Itinerary and topographic methods [of a reconnaissance in northern Alaska].

Peterson (O. A.).
1. Osteology of Oxydactylus, a new genus of camels from the Loup Fork of Nebraska, with descriptions of two new species.
2. Recent observations upon Dtemonelix.

Phalen (W. C.).
1. Notes on the rocks of Nugsuaks Peninsula and its environs, Greenland.
   Describes characters and occurrence of rocks from northern Greenland.
   Describes the occurrence and characters of unakite and associated rocks at Milams Gap, Virginia.

Phillips (Alexander H.).
1. Radium in an American ore.
   Describes the occurrence and composition of carnotite from Utah and Colorado, and the extraction of radium therefrom.
WEEKS.] PALEONTOLOGY, PETROLOGY, AND MINERALOGY, 1904. 97

**Phillips (William B.)**

1. Report of progress of the University of Texas Mineral Survey for the year ending December 31, 1903.
   
   Tex. Univ. Min. Surv., Bull. no. 7, 14 pp., 1904.
   
   Gives an outline of the geologic work of the survey.

2. A new quicksilver field in Brewster County, Texas.
   
   
   Describes the occurrence of the ore and the general geology of the district in which it occurs.

3. Lead ore in Burnett County, Texas.
   
   
   Describes the occurrence of lead ore and gives observations upon the geology of the region.

4. Extension of the quicksilver district in Brewster County, Texas.
   

5. Condition of the quicksilver industry in Brewster County, Texas.
   
   
   Contains notes on the occurrence of the quicksilver ores of this region.

6. The coal, lignite, and asphalt rocks of Texas.
   
   
   Describes the occurrence of coal, lignite, and asphalt in Texas.

**Poole (Henry S.)**

   
   
   Describes the geologic structure of the Carboniferous field in New Brunswick, its correlation with that of Nova Scotia, and the probable location of coal beds and their character. In an appendix gives detailed records of borings.

2. A trip to West Virginia.
   
   
   Includes observations upon the coals and coal fields of West Virginia.

**Powers (H. C.)**

1. The smoking bluffs of the Missouri River region.
   
   
   Describes the phenomenon and explains it as due to disintegration under atmospheric action of the iron pyrites in Cretaceous deposits.

**Pratt (Joseph Hyde).**

1. The mining industry in North Carolina during 1900.
   
   N. C. Geol. Surv., Economic Papers, no. 4, 36 pp., 1901.
   
   Contains notes on the occurrence of economic products and minerals.

2. The mining industry in North Carolina during 1902.
   
   
   Contains notes on the occurrence of economic products and minerals.
Pratt (Joseph Hyde) and Sterrett (Douglass B.).
1. The tin deposits of the Carolinas.
   N. C. Geol. Surv., Bull. no. 19, 64 pp., 8 figs., 1904.
   Describes the occurrence, character, geologic relations, origin, and economic
development of the tin-ore deposits of North Carolina and South Carolina.

Pratt (Joseph Hyde), Struthers (Joseph) and
1. Tin.
   See Struthers (Joseph) and Pratt (Joseph Hyde), 1.

Prichard (William A.).
1. Observations on Mother Lode gold deposits, California.
   See no. 980 of the Bibliography for 1903, U. S. Geol. Surv., Bull. no. 240.

Prindle (L. M.).
   U. S. Geol. Surv., Bull. no. 225, pp. 64-73, 1 fig., 1904.
   Describes the general geology and the occurrence of placer gold and the min­
ing operations.

Prosser (Charles S.).
1. Description and correlation of the Romney formation of Maryland.
   Describes character and occurrence of the Romney formation and its members
in Maryland, and discusses their correlation with Devonian formations of
New York on stratigraphic and faunal evidence; discusses also the correla­
tion of American Devonian formations with those of Europe.

Prosser (Charles S.) and Beede (J. W.).
1. Cottonwood Falls folio, Kansas.
   Describes the physiography, the occurrence, character, geologic relations, and
stratigraphy of Carboniferous formations, the geologic structure and eco­
monic resources.

Prosser (Charles S.) and Cumings (Edgar R.).
1. The Waverly formations of central Ohio.
   Am. Geol., vol. 34, pp. 335-361, 3 pls., 1904.
   Describes the occurrence, character, and relations of the various members of
the Waverly series in central Ohio, giving numerous detailed sections of the
strata.

Prutzman (Paul).
1. Production and use of petroleum in California.
   Cal. State Mg. Bur., Bull. no. 32, 230 pp., 64 figs., 1904.
   Describes the general geology, and the occurrence, character, production, and
utilization of petroleum from southern California.

Pultz (John Leggett).
1. The Big Stone Gap coal field of Virginia and Kentucky.
   Includes a description of the geologic conditions existing in the Big Stone Gap
coal field of Virginia and Kentucky, and the occurrence and character of
workable coal seams, with a generalized section of the strata.
Purdue (A. H.).
1. Notes on the wells, springs, and general water resources of Arkansas.

R.
Ransome (Frederick Leslie).
1. The geology and ore deposits of the Bisbee quadrangle, Arizona.
   U. S. Geol. Surv., Professional Paper no. 21, 168 pp., 29 pls., 5 figs., 1904.
   Describes physiographic features and the general geology, the character, occurrence, and geological relations of pre-Cambrian, Cambrian, Devonian, Carboniferous, and Cretaceous strata and igneous rocks, the geologic structure and history, and the character, occurrence, economic development, and origin of the copper ore deposits.

2. The geology and copper deposits of Bisbee, Arizona.

   Describes the physiographic divisions of Arizona, the topography, climate and vegetation, and general geology of the area, the occurrence, character, and geological relations of pre-Cambrian, Cambrian, Devonian, Carboniferous, Tertiary, and Quaternary deposits and igneous rocks, the geologic structure and history, the occurrence, character, origin, geologic relations, and mining of the ores, chiefly gold, silver, and copper.

   Describes the topography and drainage, the general geology, the character, occurrence, and relations of pre-Cambrian metamorphic rocks, Cambrian, Devonian, Carboniferous, and Cretaceous strata, Quaternary deposits, and igneous rocks, the geologic structure and its expression in topography, the geologic history, and the economic resources, principally copper ores.

5. The geographic distribution of metalliferous ores within the United States.
   Mg. Mag., vol. 10, pp. 7-14, 1 pl., 1904.
   Describes the physiographic divisions of the United States, and the occurrence and production of ores in them.

Ransome (Frederick Leslie), Lindgren (Waldemar) and.
   See Lindgren (Waldemar) and Ransome (F. L.), 1.

Raymond (Percy E.).
1. The developmental changes in some common Devonian brachiopods.
Raymond (Percy E.)—Continued.
2. The Tropidoleptus fauna at Canandaigua Lake, New York, with the ontogeny of twenty species.
Describes the developmental changes of some Devonian brachiopods from the Tropidoleptus fauna at Canandaigua Lake, New York, and gives a comparative faunal study of this faunule.

Raymond (William James).
1. A new species of Pleurotoma from the Pliocene of California.

Read (Thomas T.).
1. The alkali deposits of Wyoming.
Am. Geol., vol. 24, pp. 164-169, 1904.
Describes their occurrence and discusses their origin.
Describes the general geology and the occurrence and character of the copper ores.

Reid (Harry Fielding).
1. Les variations périodiques des glaciers. Etats-Unis. VIIIme rapport, 1902.
2. Les variations périodiques des glaciers. Etats-Unis. IXme rapport, 1903.
3. The variations of glaciers. IX.
Jour. Geol., vol. 12, pp. 252-263, 1904.
Gives a summary of the eighth annual report of the International Committee on glaciers. Includes observations on the glaciers of the United States.
4. The relation of the blue veins of glaciers to the stratification, with a note on the variations of glaciers.
Congr. géol. intern., Compte rendu IX. Sess., pp. 703-706; 1904.

Reid (John A.).
1. Preliminary report on the building stones of Nevada, including a brief chapter on road metal.

Rice (William North).
1. The physical geography and geology of Connecticut.
Describes the physiographic features of Connecticut and their relation to the geologic structure of the state.
2. The proper scope of geological teaching in the high school and academy.
Richards (Ralph W.).
1. A new habit for chalcopyrite.
   Describes occurrence and crystallographic features.

Richardson (George Burr).
1. Indiana Folio, Pennsylvania.
   Describes physiographic features, the character, occurrence, and relations of Carboniferous strata, and general geologic structure, the character and occurrence of the coals, natural gas, and other economic resources.
   Tex. Univ., Min. Surv., Bull. no. 9, 119 pp., 11 pls., 4 figs., 1904.
   Describes the topography, the character, occurrence, and geologic relations of pre-Cambrian, Cambrian, Ordovician, Silurian, Carboniferous, Triassic, Jurassic, Cretaceous, and Quaternary deposits, the mineral resources, and underground water supply of the region.
3. The stratigraphic sequence in trans-Pecos Texas, north of the Texas and Pacific Railway.

Rickard (Forbes).
1. Copper deposits in Sinaloa and southern Sonora [Mexico].
   Describes the occurrence, geologic relations, and economic development of copper ore deposits in this part of Mexico.
2. Notes on tungsten deposits in Arizona.
   Describes the general geology of the Little Dragoon mountains in Arizona, and the geologic relations, occurrence, character, and mining of the deposits of tungsten ores.

Rickard (T. A.).
1. Copper mines of Lake Superior.
   Includes a description of the general geology of the region, the character and occurrence of the copper-ore deposits, and the mining operations.

Ries (Heinrich).
1. Notes on mineral developments in the region around Ithaca [New York].
   Gives notes on the occurrence of economic materials and a geological section of a deep well.
2. Notes on recent mineral developments at Mineville [New York].
   Brief notes on the occurrence and production of iron ore at this locality.
Ries (Heinrich)—Continued.
   N. J. Geol. Surv., vol. 6, pp. 1-115, 15 pls., 34 figs., 1904.
   Discusses mode of occurrence, methods of working, chemical and physical
   properties.
4. The manufacture of clay products, with especial reference to the
   New Jersey industry.
   N. J. Geol. Surv., vol. 6, pp. 211-533, 32 pls., 5 figs., 1904.
   Includes notes on the occurrence and properties of clays.

Riggs (Elmer S.).
1. Dinosaur footprints from Arizona.
   Describes occurrence and character of footprints.
2. Structure and relationships of Opisthocoelian dinosaurs. Part II.
   The Brachiosauridae.

Rivers (J. J.).
1. Descriptions of some undescribed fossil shells of Pleistocene and
   Pliocene formations of the Santa Monica Range [California].

Robertson (William Fleet).
1. Summary report on the valley of the Flathead River [British
   Columbia].
   Includes observations upon the physiography, geology, and economic resources
   of the region examined.
   Includes observations upon the geology and economic resources of the region.
   Includes observations upon the geology of the region.
4. Petrography of rock samples from British Columbia.
   Gives reports upon examinations of rock specimens from British Columbia by

Robinson (Neil).
1. The Kanawha and New River coal fields of West Virginia, U. S. A.
   Charleston, W. Va., 23 pp., 3 pls., 1904. [Private publication.]
   Includes notes upon the occurrence, geologic relations, composition, fuel
   values, and production of coal in the Kanawha and New River coal fields of
   West Virginia.

Rogers (Austin F.).
1. A method for the exact expression of crystal habit.
   Sch. of Mines Quart., vol. 25, pp. 199-203, 22 figs., 1904.
Rogers (Austin F.), Beede (J. W.) and.
1. Coal Measure faunal studies, III. Lower Coal Measures.
   See Beede (J. W.) and Rogers (Austin F.), 1.

Rolfe (Charles W.).
1. The geology of Illinois as related to its water supply.
   Ill. Univ., Chemical Survey of the waters of Illinois, pp. 41-56, 2 pls. (geol.
   maps), 1903.
   Gives an outline of the general geology and the geological history of Illinois.

Rose (Robert Selden).
1. The geology of some of the lands in the Upper Peninsula [Michigan].
   Mg. World, vol. 21, pp. 205-207, 1904; Eng. & Mg. Jour., vol. 78, pp. 343-344,
   1904.
   Describes the general geology and the occurrence and character of the iron-ore
   deposits.

Rowe (J. P.).
1. Nodular barite and selenite crystals of Montana.
   Am. Geol., vol. 33, pp. 198-199, 1904.
   Describes occurrence and composition of selenite crystals and nodular barite
   in Montana.
2. Pseudomorphs and crystal cavities.
   Describes material from Shoshone, Idaho.

Rowley (R. R.).
1. The echinodermata of the Missouri Silurian and a new brachiopod.
   Am. Geol., vol. 34, pp. 269-282, 1 pl., 1904.

Ruedemann (Rudolf).
   Gives a review of investigations upon the graptolites, discusses their structure,
   morphology, classification, phylogeny, range and distribution, and gives
   systematic descriptions of the graptolites from the upper Cambrian and lower
   Ordovician of New York.

Ruhl (Otto).
1. The King-Ritter fault.
   Describes occurrence and character of faulting along the northern slope of the
   Ozark uplift in southwestern Missouri.
2. Observations at Pegmatite Hill [Camden County, Missouri].
   Describes the geologic structure at this locality.

Russell (Israel C.).
1. Criteria relating to massive-solid volcanic eruptions.
   Describes massive-solid volcanic eruptions and discusses the character of the
   evidence necessary to determine that volcanic masses have been extruded
   in a solid state.
2. Physiographic problems of to-day.
   Discusses the scope, nomenclature, and field of investigation of physiography,
   the use of ideal physiographic types, the primary and secondary features of
   the earth’s surface, and the relations of physiography to life and man.

3. North America (Appleton’s World Series: The regions of the
   world).
   Includes chapters on the margin of the continent, the topography of the land,
   climate, plant life, animal life, geology, the aborigines, and political geogra­
   phy. In the chapter on geology describes the growth of the continent, the
   distribution and character of the rocks of which it is composed, and the
   occurrence of economic products.

4. Douglass Houghton.
   Gives a brief account of his life.

5. Bela Hubbard.
   Gives a brief account of his life.


S.

Salisbury (Rollin D.).
1. Three new physiographic terms.
   Defines, discusses, and illustrates the application of the physiographic terms
   topographic unconformity, topographic and structural adjustment, and
   superimposed youth.

Salisbury (Rollin D.), Chamberlin (Thomas C.), and.
   results.
   See Chamberlin (Thomas C.) and Salisbury (Rollin D.), 1.

Sapper (Karl).
1. Die Alta Verapaz (Guatemala).
   Describes the general geology, the character and occurrence of pre-Paleozoic,
   Paleozoic, Mesozoic, Tertiary, and Cenozoic formations, the geologic history,
   and the petrology of this region.

2. Die südlichsten Vulkane Mittel-Amerikas.
   Describes volcanoes in the southern part of Central America.

3. Das Erdbeben in Guatemala vom 18. April 1902.
   Petermanns Mitteilungen, Band 48, pp. 193-195, 1 pl. (map), 1902.
   Describes the earthquake of April 18, 1902, in Guatemala.

   Describes volcanic eruptions of 1902 in Central America.
Sapper (Karl)—Continued.

5. Neuere vulkanische Ereignisse in Mittelamerika.
   
   
   Notes the activity of some volcanoes in several States of Central America.

   
   
   Discusses volcanic and related phenomena of the Lesser Antilles that took place in 1902 and 1903, the character and occurrence of the volcanic rocks ejected, and the forms of the Antillean volcanoes.

7. St. Vincent.
   
   Globus, Bd. 84, pp. 297-303, 377-383, 1903.
   
   Describes the eruption and its effects of the Soufrière on St. Vincent.

Sardeson (Frederick W.).
1. See Fairchild (H. L.), 3.

Sarle (Clifton J.).
1. Economic geology of Monroe County and contiguous territory [New York].
   
   
   Describes the general geology of the county, and the occurrence and utilization of stone, clays, sand, gravel, gypsum, and peat.

Savage (T. E.).
1. A buried peat bed in Dodge township, Union County, Iowa.
   
   
   Describes occurrence and geologic relations of a peat bed in Glacial deposits, and discusses its origin.

Schaller (Waldemar T.).
1. Notes on some California minerals.
   
   
   Describes the character, occurrence, and composition of halloysite, amblygonite, boothite, pisanite, and a quartz pseudomorph.

2. The tourmaline localities of southern California.
   
   
   Describes the occurrence and character of tourmaline deposits.

Schaller (W. T.) and Hillebrand (W. F.).
1. Crystallographical and chemical notes on lawsonite.
   

Schmeckebier (Laurence F.).
   
   U. S. Geol. Surv., Bull. no. 222, 208 pp., 1904.
Schmitt (Joseph).
   Paris, A. Hermann, 1904. vi, 367 pp., 12 figs. and map. (Not seen.)

Schneider (Philip F.).
1. South Onondaga geology.
   Gives a sketch of the geological history of the region around South Onondaga, New York.

Schrader (Frank Charles).
1. Reconnaissance in northern Alaska across the Rocky Mountains, along Koyukuk, John, Anaktuvuk, and Colville rivers, and the Arctic coast to Cape Lisburne, in 1901.
   Reviews previous exploration of the region, describes the geography, character and occurrence of Silurian, Devonian, Cretaceous, Tertiary, and Quaternary strata, and the mineral resources, principally gold and coal.

Schramm (Eck Frank).

Schuchert (Charles).
1. Dall’s Contributions to the Tertiary Fauna of Florida.
2. Charles Emerson Beecher.
   Gives an account of his life and paleontologic work, and a list of his published papers.
3. The stratigraphy and paleontology of the Niagara of northern Indiana.
   Reviews a paper with the above title in the Twenty-eighth Annual Report of the Geological Survey of Indiana by E. M. Kindle, and discusses the subject-matter of the paper.
4. On Siluric and Devonic Cystidea and Camarocrinus.
   Describes the occurrence near Keyser, West Virginia, of a cystid fauna, and gives a section of the strata of the Manlius formation at this locality and systematic descriptions of Silurian and Devonian cystids.

Schwarz (T. E.).
1. Notes on an occurrence of mica in Boulder County [Colorado].

Scott (W. B.).
1. John Bell Hatcher.
   Gives an account of his life and work.
Sebbin (E. W.).
1. Geology of Mexico.
   Gives a brief account of the general geology of Mexico.

Seely (Henry M.).
2. The Stromatoceria of Isle La Motte, Vermont.

Sellards (E. H.).
1. A study of the structure of Paleozoic cockroaches, with descriptions
   of new forms from the Coal Measures.

Shaler (N. S.).
1. A comparison of the features of the earth and the moon.

Sharwood (W. J.), Eakle (A. S.), and.
1. Luminescent zinc-blende.
   See Eakle (A. S.) and Sharwood (W. J.), 1.

Shattuck (George Burbank).
1. Papers read before the Geological Society of America.
2. The Miocene deposits of Maryland. Geological and paleontological
   relations, with a review of earlier investigations.
   Gives a historical review of investigations upon the Maryland Miocene deposits
   and a bibliography of literature relating thereto, and describes in detail the
   character, occurrence, relations, etc., of the Miocene formations in Maryland,
   with sections of strata and a tabular list of fossils, showing geographic
   and geologic distribution and range.

Shepard (Edward M.).
1. Table of geological formations.
   Gives in tabular form the geologic formations of Missouri correlated with those
   of Arkansas.
2. Notes on the wells, springs, and general water resources of Mis­
   souri.
   U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 389–440,
   1904.
Sheridan (Jo E.).
1. Annual report of the mine inspector for the Territory of New Mexico.
   Includes a description of the New Mexico coal fields, showing the occurrence, character, geologic relations, etc., of the coal seams.

Shimek (B.).
1. Fresh-water shells in the loess.
2. Helicina occulta Say.
   Discusses the geographical and geological distribution of this mollusc, which occurs in a fossil state in the loess.
3. Papers on the loess.
   Includes the five following papers.
4. The loess of Natchez, Miss.
   This paper appeared in the American Geologist, vol. 30, 1902. See no. 961 of U. S. Geol. Surv., Bull. no. 221, 1903.
5. The loess and the Lansing man.
6. The Lansing deposit not loess.
   Discusses the characters which distinguish loess deposits, and their bearing upon the kind and age of the deposits containing the Lansing human remains.
7. Loess and the Iowan drift.
   Discusses the position of loess deposits with reference to drift deposits, and the bearing of these facts upon the question of the formation of the loess, and points out the stratigraphic position of various loess deposits.
8. Evidences (?) of water-deposition of loess.
   Discusses the evidences advanced for the theory of the deposition of loess by water action.

Simmons (Jesse).
1. Tungsten ores in the Black Hills.
   Describes the occurrence and character of tungsten ores and discusses their origin.
Sinclair (William J.).
1. The exploration of the Potter Creek cave [California].
   Describes the general geology and physiography of the region, the stratigraphy
   of the cave deposits, the occurrence of the remains of Quaternary vertebrates,
   with a list of identified forms, and their relations to other faunas.

Sinclair (William J.) and Furlong (E. L.).
1. Euceratherium, a new ungulate from the Quaternary caves of California.

Skeat (Ethel G.).
1. The Jurassic rocks of East Greenland.
   Gives an historical review of geological exploration in East Greenland,
   describes the general geologic structure and the occurrence of Jurassic strata
   and their fossil contents, and discusses the distribution of land and sea during
   Jurassic time.

Smith (A. F.), Ball (Sydney H.) and.
1. The geology of Miller County.
   See Ball (Sydney H.) and Smith (A. F.), 1.

Smith (A. F.), Buckley (E. R.), Ball (S. H.), and.
1. Glacial boulders along the Osage River in Missouri.
   See Buckley (E. R.), Ball (S. H.), and Smith (A. F.), 1.

Smith (Alva J.).
1. A bulletin on Lyon County geology.
   Emporia, Kansas. 11 pp., 4 pls., 1902. (Private publication.)
   Describes the topography and general geology of Lyon County, Kansas. Parts
   of the paper were presented to the Kansas Academy of Science, and published
   in its Transactions, vols. 16 and 17.

Smith (Dwight T.).
1. The geology of the upper region of the main Walker River, Nevada.
   Describes the physical features of the region, the occurrence, character, and
   geologic relations of the sedimentary Tertiary and igneous rocks, the unconformities
   between formations, the geological structure of the area, and the character
   and occurrence of gold and copper ore deposits.

Smith (E. Percy) and Dominian (Leon).
1. Notes on a trip to White Oaks, New Mexico.
   Gives observations on the economic resources and geology of the region.

Smith (Eugene Alien).
1. The cement resources of Alabama.
   Describes location, geologic horizon, character, and availability for cement
   manufacture of the limestones and clays of Alabama.
Smith (Eugene Allen)—Continued.

2. The cement resources of Alabama.

Ala. Geol. Surv., Bull no. 8, pp. 61-93, 16 pls. (incl. geol. map), 1904.
Describes the occurrence, character, and geological relations of limestones in Alabama available for cement manufacture.

3. Notes on the wells, springs, and general water resources of Alabama.

U. S. Geol. Surv., Water-Supply and Irrigation Paper no. 102, pp. 276-331, 1904.

Smith (Eugene Allen) and McCalley (Henry).

1. Index to the mineral resources of Alabama.

Ala. Geol. Surv., 79 pp., map and 6 pls., 1904.
Describes the occurrence, geologic relations, and character of the economic resources of Alabama.

Smith (George Otis).


Describes physiographic features, the geologic history and structure, the occurrence, character, and relations of pre-Tertiary and Tertiary strata and igneous rocks, and the economic resources, chiefly gold and coal.

2. Quartz veins in Maine and Vermont.

Describes the occurrence and character of quartz veins carrying precious metals.

3. Stratigraphic problems in the northern Cascades.


Smith (George Otis) and Calkins (Frank C.).

1. A geological reconnaissance across the Cascade Range near the Forty-ninth Parallel.

Describes the topography and general geology of the region, the occurrence, character, and relations of the pre-Cretaceous, Cretaceous, Tertiary, and Quaternary formations, and the occurrence and petrographic characters of the metamorphic and igneous rocks.

Smith (James Perrin).

1. Periodic migrations between the Asiatic and the American coasts of the Pacific Ocean.

Discusses geographic distribution and relations, and evidences of migrations and derivations of faunas in various provinces in Paleozoic, Mesozoic, and Tertiary time, and physiographic changes.

2. The comparative stratigraphy of the marine Trias of western America.

Describes the general development of Triassic formations in the various geographic provinces of the world, their correlation and faunal characteristics, and in detail the Triassic strata of western North America, and gives systematic descriptions of Triassic genera and species of cephalopods.
Smith (Philip S.), Smyth (Henry Lloyd) and.
1. The copper deposits of Orange County, Vermont.
See Smyth (Henry Lloyd) and Smith (Philip S.), 1.

Smith (W. S. Tangier), Darton (N. H.) and.
1. Edgemont folio, South Dakota-Nebraska.
See Darton (N. H.) and Smith (W. S. Tangier), 1.

Smyth (C. H., jr.).
1. Notes on the economic geology of Oneida County [New York].
Describes occurrence and production of the economic resources of this county.

Smyth (Henry Lloyd) and Smith (Philip S.).
1. The copper deposits of Orange County, Vermont.
Describes the general geology of the region, and the character, occurrence, and origin of the copper ores.

Souder (Harrison).
1. Mineral deposits of Santiago, Cuba.
Am. Inst. Mg. Engrs., Trans. (Atlantic City meeting, February, 1904), 14 pp., 11 figs., 1904.
Describes the occurrence and mining of manganese, copper and iron ores in the vicinity of Santiago, Cuba.

Spencer (Arthur Coe).
1. The Juneau gold belt, Alaska.
Describes the general geology and the occurrence and mining of gold.

2. The copper deposits of the Encampment district, Wyoming.
Describes the general geology and the character and occurrence of Mesozoic, Tertiary, pre-Cambrian, and igneous rocks, and copper and silver ore deposits, and discusses the origin of the copper ore bodies.

3. The geology of the Treadwell ore deposits, Douglas Island, Alaska.
Describes the general geology, the occurrence, character, and relations of intrusive, igneous, and sedimentary rocks, and the occurrence, geologic relations, character, and origin of the gold ore deposits.

Mg. Mag., vol. 10, pp. 377–381, 4 figs., 1904.

Spencer (J. W.).
1. A rejoinder to Dr. Dall’s criticism on Dr. Spencer’s hypothesis concerning the late union of Cuba with Florida.
Am. Geol., vol. 34, pp. 110–119, 1904.

2. The submarine great canyon of the Hudson River.
Am. Geol., vol. 34, pp. 292–293, 1904.
Describes the course, depth, etc., of the Hudson River channel.
Spencer (W. K.).
1. On the structure and affinities of Palæodiscus and Agelacrinus.
   The investigation described is based in part upon specimens of Agelacrinus
   from the Ordovician of Ohio.

Spinks (Charles H.).
1. Magnesite and its uses.
   Describes the occurrence and geologic relations of magnesite deposits in south-
   ern California, and discusses their origin.

Springer (Ada).
1. On some living and fossil snails of the genus Physa, found at Las
   Vegas, New Mexico.

Spurr (Josiah Edward).
1. Preliminary report on the ore deposits of Tonopah, Nevada.
   U. S. Geol. Surv., Bull. no. 225, pp. 89-110, 1 pl. (geol. map), 4 figs., 1904.
   See no. 1158 of U. S. Geol. Surv., Bull. no. 240.
2. Ore deposits of Silver Peak quadrangle, Nevada.
   Describes the general geology and the character and occurrence of the gold
   and silver ore deposits and the mining operations.
   Describes the general geology and the occurrence of gold-bearing quartz veins.
4. Coal deposits between Silver Peak and Candelaria, Esmeralda
   County, Nev.
   Describes the general geology of the region, the character and occurrence of
   the coal, and the outlook for development.
5. Alum deposit near Silver Peak, Esmeralda County, Nev.
   Describes location, occurrence, character, and origin of this deposit.
6. The Silver Peak region, Nevada.
   Describes the character, occurrence, and origin of the gold and silver ore
   deposits.
7. Geology applied to mining. A concise summary of the chief
   geological principles, a knowledge of which is necessary to
   the understanding and proper exploitation of ore deposits for
   mining men and students.
   New York, The Engineering and Mining Journal, 326 pp., 70 figs., 1904.
8. Faulting at Tonopah, Nevada.
Stanton (T. W.).
1. Note on the Cretaceous fossils [of the Bisbee quadrangle, Arizona].
   Gives a list of species identified and notes on their occurrence. A few of the
   more characteristic are figured.
2. See Hatcher (J. B.), 1.

Sterrett (Douglas B.).
1. Tourmaline from San Diego County, California.
   Describes crystallographic features of this mineral.
2. A new type of calcite from the Joplin mining district.
   Describes the occurrence and crystallographic characters.

Sterrett (Douglas B.), Pratt (Joseph Hyde) and.
1. The tin deposits of the Carolinas.
   See Pratt (J. H.) and Sterrett (D. B.), 1.

Stevens (Blamey).
1. On the differentiation of igneous magmas and formation of ores.
2. Acidic magmas, their exhalations and residues

Stevenson (John J.).
1. Carboniferous of the Appalachian basin.
   Describes in detail the distribution, character, and geologic relations of the
   various beds of the Pottsville of the Pennsylvanian series in the Appalachian
   region, giving numerous detailed sections, and discusses their nomenclature
   and correlation.
2. Memoir of J. Peter Lesley.
   Includes a list of his published writings.

Stevenson (Robert).
1. The deposition of ores from an igneous magma.
2. The deposition of ores from an igneous magma.
   Illustrates the formation of an igneous magma by an example based upon
   geologic structure in Alaska.

Stone (Ralph W.).
1. The Elders Ridge coal field, Pennsylvania.
   U. S. Geol. Surv., Bull. no. 225, pp. 311-324, 1904.
   Describes location and geologic structure of the field and the occurrence and
   character of the coals.
   Bull. 271—05—8
Stone (Ralph W.)—Continued.
2. Oil and gas fields of eastern Greene County, Pa.
   Describes the location and general geology of the field, the stratigraphic position and character of the oil and gas producing strata, the geologic structure of the region, and the production of oil and gas.

Stoneham (W. J.).
1. A Nevada coal field.
   Describes location and general geology of the field and the occurrence and character of the coal.

Storms (W. H.).
1. The genesis and character of ore deposits.
2. The Mother Lode in Tuolumne County, California.
   Describes the geologic relations, occurrence, and character of the Mother Lode, the occurrence of the gold-ore bodies, and the mining operations.

Stose (George W.).
   Describes the stratigraphy and geologic structure of the Cumberland Valley and the occurrence of barite in this region; describes also the occurrence and quarrying of limestone at Martinsburg, W. Va.
2. Physiographic studies in southern Pennsylvania.
   Jour. Geol., vol. 12, pp. 473–484, 3 figs., 1904.
   Describes physiographic features in the Chambersburg and Mercersburg quadrangles and their origin, including the peneplains and their age.

Stretch (R. H.).
1. The Montezuma district, Nevada.
   Eng. & Mg. Jour., vol. 78, pp. 5–6, 1904.
   Describes the general geology and the occurrence of silver-lead ore deposits.
2. Copper ores in the Cascade Mountains.
   Describes the occurrence, character, and geologic relations of copper-ore deposits in the State of Washington.

Struthers (Joseph) and Pratt (Joseph Hyde).
1. Tin.
   Includes an account of the occurrence, character, and geologic relations of the rocks in which the tin ores of North Carolina and South Carolina occur, and of the mineralogical and chemical character of the ores.
Stübel (Alphons).
Leipzig, Max Weg, 1903. 36 pp., 6 figs., 4to.
2. Rückblick auf die Ausbruchsperiode des Mont Pelé auf Martinique 1902–1903 vom theoretischen Gesichtspunkte aus.
Leipzig, Max Weg, 1904. 24 pp., 20 figs., 4°. (Not seen.)

Stubbs (Wm. C.).
1. Report on the agricultural resources and capabilities of Hawaii.
U. S. Dept. Agric., Office of Exper. Stations, Bull. no. 95, 100 pp., 27 pls., 1901.
Includes a brief account of the geology of Hawaii.

Stupart (R. F.).
1. Seismology in Canada.
Describes briefly earthquake observations by seismographs in Toronto and Victoria, Canada.

Sutton (W. J.).
1. The geology and mining of Vancouver Island.
Describes the general geology and the occurrence and economic development of coal and copper ore deposits.

T.

Taff (Joseph A.).
1. Maps of segregated coal lands in the McAlester district, Choctaw Nation, Indian Territory, with descriptions of the unleased segregated coal lands.
Describes the character and occurrence of the coal beds and the quality of the coal.
2. Maps of segregated coal lands in the Wilburton-Stigler district, Choctaw Nation, Indian Territory, with descriptions of the unleased segregated coal lands.
Describes the occurrence and character of the coal beds and quality of the coal.
3. Maps of segregated coal lands in the Howe-Poteau district, Choctaw Nation, Indian Territory, with description of the unleased segregated coal lands.
Describes the occurrence and character of the coal beds and quality of the coal.
U. S., Dept. Interior, Circular no. 4, 54 pp., 2 maps, 1904.
Describes the occurrence and character of the coal beds and the quality of the coal.
Taff (Joseph A.)—Continued.
5. Maps of segregated coal lands in the Lehigh-Ardmore districts, Choctaw and Chickasaw Nations, Indian Territory, with descriptions of the unleased segregated coal lands.
Describes the occurrence and character of the coal beds and the quality of the coal.
6. Description of the unleased segregated asphalt lands in the Chickasaw Nation, Indian Territory.
U. S., Dept. Interior, Circular no. 6, 14 pp., 1904.
Describes the occurrence and character of asphalt deposits.
7. Preliminary report on the geology of the Arbuckle and Wichita Mountains in Indian Territory and Oklahoma.
U. S. Geol. Surv., Professional Paper no. 31, pp. 11-81, 8 pls., 1 fig., 1904.
Describes the physiographic features and history of the region, the occurrence, character, and relations of pre-Cambrian igneous rocks and Cambrian, Ordovician, Silurian, Devonian, Carboniferous, and Cretaceous sedimentary rocks, and the geologic structure of the Arbuckle and Wichita Mountains.
Tallmon (Marion Clover), Morgan (William Conger) and.
1. A fossil egg from Arizona.
See Morgan (W. C.) and Tallmon (M. C.), 1.
2. A peculiar occurrence of bitumen and evidence as to its origin.
See Morgan (W. C.) and Tallmon (M. C.), 2.
Tarr (Ralph S.).
1. New physical geography.
2. Artesian well sections at Ithaca, N. Y.
Jour. Geol., vol. 12, pp. 69-82, 4 figs., 1904.
Gives records of well borings, describes the materials (Glacial deposits) passed through and discusses the geologic history of the Ithaca delta.
Am. Geol., vol. 33, pp. 271-291, 5 pls., 19 figs., 1904.
Describes various physiographic features bearing on the question of the origin of these valleys.
Tassin (Wirt).
1. The Persimmon Creek meteorite [North Carolina].
Describes occurrence, characters, and composition.
Thomas (Kirby).
1. Methods of mining in the Vermilion iron district of Minnesota.
Describes the occurrence, character, and methods of mining the iron ores.
2. Notes on the geology of a new iron district in Minnesota.
Discusses the occurrence of iron-bearing formations.
**Tippenhauer** (L. Gentil).
1. *Beiträge zur Geologie Haitis.*
   Petermanns Mitteilungen, Bd. 45, pp. 25-29, 153-155, 201-204, 3 pls. (maps), 2 figs., 1899.
   Describes the geology of portions of the Island of Hayti.

2. *Beiträge zur Geologie Haitis.*
   Petermanns Mitteilungen, Bd. 47, pp. 121-127, 169-178, 193-199, 5 pls. (maps), 5 figs., 1901.
   Describes the general geology of portions of the Island of Hayti, and the occurrence and character of deposits of iron and copper ores and lignite.

**Todd** (James E.).
1. The newly discovered rock at Sioux Falls, South Dakota.
   Describes occurrence and characters of a diabasic rock discovered at Sioux Falls.

2. Benton formation in eastern South Dakota.
   Describes the character and occurrence of the Benton formation and its subdivisions in South Dakota, and corrects the former erroneous interpretation of the Greenhorn chalky limestone.

3. Geology of South Dakota.
   Gives a general account of the geology of the State of South Dakota.

4. Huron folio, South Dakota.
   Describes the topography, drainage, and general geology, the character, occurrence, and relations of Cretaceous strata and Quaternary deposits and the geologic history, and discusses the underground water resources of the area.

**Todd** (James E.) and **Hall** (C. M.).
1. Geology and water resources of part of the lower James River valley, South Dakota.
   Describes occurrence and character of Algonkian, Cretaceous, and Quaternary formations, the geologic history of the region, and the water supply, especially from artesian wells, giving records of borings.

2. De Smet folio, South Dakota.
   Describes the general geology, the character, occurrence, and relations of Cretaceous strata and Quaternary deposits, the geologic history, and the economic resources, and discusses in detail the water resources of the area.

**Tower** (W. S.).
1. The development of cut-off meanders.
Turnbull (J. M.).
   Describes the general geology, the occurrence of the coal beds of Cretaceous age, and the character and mining of the coal.

Turner (H. W.).
1. Native copper in greenstone from the Pacific coast.
   Discusses the occurrence and origin of native copper.

2. Notes on contact-metamorphic deposits in the Sierra Nevada Mountains.

3. The geological features of the gold production of North America.
   [In discussion of paper of Waldemar Lindgren.]
   A note in regard to the geologic position of gold ores in the vicinity of Silver Peak, Nevada.


Tuttle (George W.).
1. Recent changes in the elevation of land and sea in the vicinity of New York City.
   Discusses detailed investigations upon tidal variation and their bearing upon the question of the elevation or subsidence of the land.

Tyrrell (J. Burr).
1. Report on explorations in the northeastern portion of the district of Saskatchewan and adjacent parts of the district of Keewatin.
   (Published separately, 1902.)
   Describes the occurrence and characters of Pleistocene deposits and Cambro-Silurian and pre-Cambrian rocks, includes a list of Glacial strata and observations on the geologic structure, igneous rocks, and minerals of the region examined.

2. Crystosphenes or buried sheets of ice in the Tundra of northern America.
   Jour. Geol., vol. 12, pp. 232-236, 1 fig., 1904.
   Describes the occurrence, character, and mode of formation of the masses of ice for which the names crystophene and crystocrene are proposed.
Udden (J. A.).
1. The geology of the Shafter silver-mine district, Presidio County, Texas.
Tex. Univ. Min. Surv., Bull. no. 8, 60 pp., 11 figs., 2 pls., 1904.
Describes the physiographic features briefly and in detail the occurrence, character, and geologic relations of Carboniferous and Cretaceous strata, igneous rocks, and mineral deposits, mainly silver ores.

Ulrich (Edward Oscar).
1. Fossils and age of the Yakutat formation. Description of collections made chiefly near Kadiak, Alaska.
Discusses the geologic age of the Yakutat formation from the evidence of its fossils and gives systematic descriptions of these.
2. Determination and correlation of formations [of northern Arkansas].
Discusses the occurrence, character, geologic relations, and correlation of Ordovician, Silurian, Devonian, and Carboniferous formations of northern Arkansas.

Ulrich (Edward Oscar) and Bassler (Ray S.).

United States Geological Survey.
1. The United States Geological Survey, its origin, development, organization, and operations.
U. S. Geol. Surv., Bull. no. 227, 205 pp., 9 pls., 5 figs., 1904.
Describes the organization and work of the U. S. Geological Survey and gives a full list of its publications.
Upham (Warren).
1. Moraines and eskers of the last glaciation in the White Mountains.
   Am. Geol., vol 33, pp. 7–14, 1904.
   Calls attention to previous work in this region and describes the character and occurrence of moraines and eskers and distribution of boulders.

2. Boulders due to rock decay.
   Describes occurrence and origin of boulders at Butte, Montana, concludes that many Glacial boulders are the result of rock decay, and discusses the occurrence and distribution of Glacial boulders.

3. Erosion on the Great Plains and on the Cordilleran Mountain belt.
   Am. Geol., vol. 34, pp. 35–39, 1904.
   Discusses the physiographic history of the Great Plains and Cordilleran regions during Tertiary and Quaternary times.

4. Age of the Missouri River.
   Am. Geol., vol. 34, pp. 80–87, 1904.
   Includes observations on the geologic history and physiographic features of the interior portion of the North American continent.

   Am. Geol., vol. 34, pp. 151–162, 1904.
   Reviews the work of tracing drift boundaries across the United States, and describes the occurrence and character of the Glacial drift deposits in the northwestern States.

   Am. Geol., vol. 34, pp. 203–214, 1 pl., 1904.
   Describes the probable successive stages in glaciation, and the character and occurrence of Glacial drift deposits.

Vaillant (Léon).
1. Sur la présence du tissu osseux chez certains poissons des terrains paléozoïques de Canyon City, Colorado.
   Notes the presence of osseous tissue in certain fish remains from paleozoic strata near Canyon City, Colorado.

Van Hise (Charles Richard).
1. A treatise on metamorphism.

   Discusses establishment of a geophysical laboratory and the work to be done therein.

3. Lake Superior geological work.
   Gives general observations on geologic work in the Lake Superior iron region.
   Extract from paper read before the Lake Superior Mining Institute.
Van Hise (Charles Richard)—Continued.
4. The problems of geology.
   Jour. Geol., vol. 12, pp. 589-616, 1904.

Van Vleet (A. H.).
1. [Second biennial report of the Department of Geology and Natural History of Oklahoma.]
   Outlines the work and status of the Department of Geology and Natural History of the Territory of Oklahoma.

Vaughan (T. Wayland).
1. Fuller's earth of southwestern Georgia and western Florida.
   Describes the occurrence of fuller's earth deposits in Georgia and Florida, and discusses their geologic age from the evidence of fossils.

2. Some recent changes in the nomenclature of West Indian corals.


Vaux (George) and Vaux (William S.)

Veatch (A. C.).
1. Some peculiar artesian conditions on Long Island, N. Y.

Vicaire (A.).
1. Développements récents des industries minière et métallurgique en Colombie britannique.
   Ann. des Mines, 10e sér., t. 5, pp. 297-388, 10 figs., 1904.
   Includes an account of the geology of the Crow's Nest Pass coal field and the Boundary mining district.

Villarello (Juan D.).
1. Análisis y clasificación de un granate procedente del mineral de Pihuamo, Jalisco [México].
   México, Inst. Geol., Par., t. 1, pp. 75-80, 1904.
   Describes the chemical composition and discusses the systematic position of a garnet occurring at Pihuamo, Mexico.

2. Estudio de la teoría química propuesta por el Sr. D. Andrés Almaraz para explicar la formación del petróleo de Aragón, México.
   Discusses the chemical theory for the origin of the petroleum of Aragon, proposed by Andrés Almaraz.
Villarello (Juan D.)—Continued.
3. Estudio de una muestra de mineral asbestiforme procedente del rancho del Ahuacatillo, Distrito de Zinapécuaro, Michoacán [México].
   Gives a description and an analysis, and discusses the classification of an asbestiform mineral occurring in the State of Michoacán, Mexico.

4. Estudio de la hidrología interna de los alrededores de Cadereyta Mendez, Estado de Queretaro [México].
   Discusses the hydrology and geology of the region.

5. Descripción de los criaderos de mercurio de Chiquilistán (Jalisco) [México].
   Describes the occurrence, geologic relations, and character of ore deposits containing mercury in the State of Jalisco, Mexico.

Villasenor (F.).
1. Análisis de las cenizas de la erupción del volcán de Santa María (Guatemala), ocurrida el 24 de octubre de 1902, recogidas en Comitán.
   Discusses the composition of cinders ejected by the volcano of Santa María in Guatemala.

Vogdes (Anthony W.).
1. A bibliography relating to the geology, paleontology, and mineral resources of California.

W. 

Walcott (Charles D.).
   Gives an account of the work of the U. S. Geological Survey during the fiscal year 1903–4.

Walker (T. L.).
1. The Geological Survey of Canada as an educational institution.

Ward (Henry A.).
1. The Canyon City meteorite from Trinity County, California.
   Describes source, character, and composition.
   Describes the discovery, location, and characters.
Ward (Henry A.)—Continued.


- Chicago, 113 pp., 9 pls., 1904. (Private publication.)
- Contains notes on the character and occurrence of meteorites.

Warren (C. H.).

1. Petrographical notes on the rocks of the Weston aqueduct [Massachusetts].

- Describes their occurrence and petrographic characters.

Warwick (A. W.).

1. The iron ores of the Uintah Mountains.

- Describes the geology and the character and occurrence of iron-ore deposits.

Washburne (C. W.).

1. The distribution of placer gold in Oregon.

2. Beach gold and its source.

- Describes the occurrence of gold in the sands of the coast of Oregon and discusses its source.

Washington (Henry Stephens).

1. The superior analyses of igneous rocks from Roth’s Tabellen, 1869 to 1884, arranged according to the quantitative system of classification.

- Note.—The analyses in this paper have not been listed in the index of this bibliography.

- Describes fully methods of analysis of rocks.
3. Quantitative distribution of rock magmas.

- See no. 1268 of U. S. Geol. Surv., Bull. no. 240.

Watson (Lawrence W.).

1. Francis Bain, geologist.

- Includes a list of his papers.

Watson (Thomas Leonard).

1. Geological relations of the manganese ore deposits of Georgia.

2. The yellow ocher deposits of the Cartersville district, Bartow County, Georgia.

3. The leopardite (quartz porphyry) of North Carolina.


Describes occurrence, megascopic and microscopic characters, and chemical composition.

4. Orbicular gabbro-diorite from Davie County, North Carolina.


Describes the occurrence and the megascopic and microscopic characters.

5. Granites of North Carolina.

Jour. Geol., vol. 12, pp. 373–407, 7 figs., 1904.

Describes types of granite occurring in North Carolina, their lithologic characters, structural features, and geographic distribution in the State.

6. The Seminole copper deposit of Georgia.


Describes the general geology, structural features, and the character and occurrence of the copper ores.


Ga. Geol. Surv., Bull. no. 11, 169 pp., 12 pls., 3 figs., and map, 1904.

Describes the general geology of the bauxite region of Georgia, the character, occurrence, and origin of bauxite deposits, and the mining operations.

8. Structural relations of the granites of North Carolina.


Weatherbe (D’Arcy).

1. Boring machines.


Contains records of strata passed through in borings in Nova Scotia.

Weed (Walter Harvey).

1. Gypsum deposits in Montana.


Describes character, occurrence, and geologic relations of gypsum deposits in Montana.

2. Copper deposits in Georgia.


Describes occurrence and character of copper ores.

3. The Griggstown, N. J., copper deposit.


Describes the general geology and the occurrence and character of the copper ore deposits.

4. Notes on the copper mines of Vermont.


Describes the general geology, the character and occurrence of the copper ore deposits, and the mining developments.

5. Original native gold in igneous rocks.

Weed (Walter Harvey)—Continued.
   Mg. Mag., vol. 10, pp. 185–193, 1 pl., 10 figs., 1904.
   Describes the occurrence, formation, and geologic relations of copper ores in
   various parts of the United States.
7. Dilation fissures and their contained ores.

Weeks (Fred Boughton).
1. Bibliography and index of North American geology, paleontology,
   petrology, and mineralogy for the year 1903.
2. Notes on the wells, springs, and general water resources of New
   York.

Weidman (Samuel).
1. Widespread occurrence of fayalite in certain igneous rocks of cen­
   tral Wisconsin.
   Jour. Geol., vol. 12, pp. 551–561, 3 figs., 1904.
   Describes the occurrence in Wisconsin, character, chemical composition, and
   relations to associated rocks, and discusses the origin and occurrences else­
   where of fayalite.
2. Preliminary report on the soils and agricultural conditions of north
   central Wisconsin.
   Wis. Geol. & Nat. Hist. Surv., Bull. no. 11, 68 pp., 10 pls., 1903.
   Describes topography, general geology, water supply, and character and origin
   of soil formations.
3. The Baraboo iron-bearing district of Wisconsin.
   Wis. Geol. & Nat. Hist. Surv., Bull. no. 13, 190 pp., 23 pls. (includ. geol. map
   in pocket), 1904.
   Describes the occurrence, megascopic and microscopic characters, and geologic
   relations of pre-Cambrian igneous rocks and sedimentary strata, and gives a
   general account of Cambrian and Ordovician sedimentary rocks and Glacial
   drift deposits, and discusses the ground water and the occurrence, character,
   and origin of the iron-ore deposits.
4. Iron ores of Wisconsin, with special reference to the Baraboo
   district.
   Describes the character, occurrence, and geologic relations of the iron-ore
   deposits of Wisconsin and the geology of the Baraboo Range.

Wells (J. Walter).
1. Molybdenite—its occurrence, concentration, and uses.
   See no. 1292 of U. S. Geol. Surv., Bull. no. 240.
Wendeborn (B. A.).
1. Die Tätigkeit heißer Quellen in den Gängen von Wedekind, Nevada, V. S. N.-A.
   Discusses the ore deposits and their formation by the agency of heated water.
2. Die Quecksilberablagerungen in Oregon.
   Describes occurrence, character, and geologic relations of quicksilver-ore deposits in Oregon.

Wenstrom (Olof).
1. Mineral deposits of Santiago, Cuba. [In discussion of paper of Harrison Souder.]
   Contains observations on the geologic structure of the copper deposits.

Wheeler (H. A.).
1. Notes on the source of the southeast Missouri lead.
   Discusses the origin of the lead-ore deposits of this region.

White (Charles H.).
1. The Appalachian River versus a Tertiary trans-Appalachian River in eastern Tennessee.
   Discusses the evidences for the drainage system of the southern Appalachian region in Cretaceous and Tertiary time.

White (David).
1. Deposition of the Appalachian Pottsville.
   Describes character and occurrence of Carboniferous deposits of Pottsville age in the Appalachian region, and the extent, figure, and general characteristics of the basin in which the sedimentation took place, and sketches the geologic history of the Appalachian region in Pottsville time.
2. Permian elements in the Dunkard flora.
   See no. 1297 of U. S. Geol. Surv., Bull. no. 240.
3. Notes on the deposition of the Appalachian Pottsville.
5. The seeds of Aneimites.

White (Israel C.).
1. Map showing occurrence of coal, oil, and gas in West Virginia.
White (Israel C.)—Continued.

2. Petroleum and natural gas. Precise levels.


Gives a historical sketch of the subject and describes the occurrence of petroleum and natural gas, including many records of borings and precise surface levels.

3. [In discussion of paper by R. Pearson on “The discovery of natural gas in Sussex, Heathfield district.”]


A short note in regard to the occurrence of natural gas in the United States.

Whiteaves (J. F.).

1. The Canadian species of Trocholites.


2. Description of a new genus and species of rugose corals from the Silurian rocks of Manitoba.

Ottawa Nat., vol. 18, pp. 113-114, 1904.

3. Uintacrinus and Hemiaster in the Vancouver Cretaceous.


Describes the occurrence and character of fossil echinoderms from Vancouver Island and gives a description of Hemiaster vancouverensis n. sp.

Whitfield (R. P.).

1. Notice of a new genus and species of Lower Carboniferous bryozoan.


2. Notice of a remarkable case of reproduction of lost parts shown on a fossil crinoid.


3. Note on some worm (?) burrows in rocks of the Chemung group of New York.


Whitney (Milton).

1. Field operations of the Bureau of Soils, 1903.


Contains the following papers:


Soil survey of the Syracuse area, New York, by F. E. Bonsteel and others, pp. 63-89.

Soil survey of the Long Island area, New York, by J. A. Bonsteel and party, pp. 91-128.


Soil survey of the Norfolk area, Virginia, by J. E. Lapham, pp. 233-252.

Soil survey of the Craven area, North Carolina, by William G. Smith and George N. Coffey, pp. 253-278.

Whitney (Milton)—Continued.

Soil survey of the Campobello area, South Carolina, by A. W. Mangum and Aldert S. Root, pp. 299-315.
Soil survey of Gadsden County, Fla., by Elmer O. Fippin and Aldert S. Root, pp. 331-353.
Soil survey of Ouachita Parish, La., by Thomas D. Rice, pp. 419-438.
Soil survey of Acadia Parish, La., by Thomas D. Rice and Lewis Griswold, pp. 461-485.
Soil survey of the Woodville area, Texas, by J. E. Lapham and party, pp. 511-520.
Soil survey of the Jacksonvile area, Texas, by W. Edward Hearn and James L. Burgess, pp. 521-531.
Soil survey of the Pikeville area, Tennessee, by Henry J. Wilder and W. J. Geib, pp. 577-603.
Soil survey of Davidson County, Tenn., by William G. Smith and Hugh H. Bennett, pp. 605-617.
Soil survey of the Pontiac area, Michigan, by Henry J. Wilder and W. J. Geib, pp. 659-685.
Soil survey of Madison County, Ind., by R. T. Avon Burke and La Mott Ruhlen, pp. 687-702.
Soil survey of Sangamon County, Ill., by George N. Coffey and party, pp. 703-719.
Soil survey of Johnson County, Ill., by George N. Coffey and party, pp. 721-736.
Soil survey of Knox County, Ill., by George N. Coffey and party, pp. 737-752.
Soil survey of Winnebago County, Ill., by George N. Coffey and party, pp. 753-775.
Soil survey of McLean County, Ill., by George N. Coffey and party, pp. 777-797.
Soil survey of Story County, Iowa, by Herbert W. Maren and Grove B. Jones, pp. 833-851.
Soil survey of Cerro Gordo County, Iowa, by Herbert W. Maren and Grove B. Jones, pp. 853-873.
Soil survey of Shelby County, Mo., by R. T. Avon Burke and La Mott Ruhlen, pp. 875-899.
Soil survey of the Parsons area, Kansas, by J. A. Drake, pp. 891-909.
Soil survey of the Grand Island area, Nebraska, by W. Edward Hearn and James L. Burgess, pp. 927-945.
Soil survey of the Stanton area, Nebraska, by W. Edward Hearn, pp. 947-962.
Soil survey of the Brookings area, South Dakota, by Frank Bennett, jr., pp. 963-977.
Soil survey of the San Luis Valley, Colorado, by J. Garnett Holmes, pp. 1099-1119.
Soil survey of the Provo area, Utah, by Alfred M. Sanchez, pp. 1121-1150.
Soil survey of the Salem area, Oregon, by Charles A. Jensen, pp. 1171-1182.
Soil survey of the San Jose area, California, by Macy H. Lapham, pp. 1183-1217.
Soil survey of the Imperial area, California, by J. Garnett Holmes and party, pp. 1219-1248.
Soil survey of the Indian area, California, by J. Garnett Holmes and party, pp. 1249-1262.
Soil survey of the Los Angeles area, California, by Louis Mesmer, pp. 1265-1286.
Wiel (Samuel C.).
1. A Nevada ore deposit.
   Describes occurrence, character, and geologic relations of a deposit of man­
   ganese, and discusses its origin.

Wieland (G. R.).
2. Structure of the upper Cretaceous turtles of New Jersey: Lytoloma.
3. The proembryo of the Bennettitea.

Wilder (Frank A.).
1. Gypsum deposits in Iowa.
   U. S. Geol. Surv., Bull. no. 223, pp. 49-52, 1 pl., 1 fig., 1904.
   Discusses character, occurrence, economic development, and geologic relations
   of the gypsum deposits in this State.
2. The Laramie and Fort Union beds in North Dakota.
   Jour. Geol., vol. 12, pp. 290-293, 1904.
   Discusses the evidences observed in field work in regard to the relations of the
   Fort Union beds and the Laramie.

Willcox (O. W.).
1. On certain aspects of the loess of southwestern Iowa.
   Jour. Geol., vol. 12, pp. 716-721, 1 fig., 1904.
   Describes the character and occurrence of loess deposits in this region differ­
   ing in color and character, and discusses their origin.

Willey (Day Allen).
1. New Texan oil deposits.
   Contains notes on the occurrence of petroleum deposits.

Williams (Henry S.).
1. Note on the Devonian fossils [of the Bisbee quadrangle, Arizona].
   Gives a list of fossils identified with their occurrence by localities. A few of
   the more characteristic are figured.
2. Preliminary report on the classification of the rocks of the Watkins
   Glen (30') quadrangle (U. S. Geological Survey).
   Discusses some of the results obtained and the methods, largely paleontologic,
   used in the stratigraphic work.

Bull. 271—05——9
Williams (I. A.), Beyer (S. W.), and.
1. Technology of clays.
   See Beyer (S. W.) and Williams (I. A.), 1.
2. The geology of clays.
   See Beyer (S. W.) and Williams (I. A.), 2.

Willis (Bailey).
1. Überschiebungen in den Vereinigten Staaten von Nordamerika.
   Congr. géol. intern., Compte rendu IX. Sess., pp. 529-540, 2 figs., 1904.
   Defines various kinds of overthrust, and discusses their origin and time relations.

Williston (S. W.).
1. The relationships and habits of the Mosasaurs.
   Jour. Geol., vol. 12, pp. 43-51, 1904.
   Discusses taxonomy in the vertebrates, and the phylogeny, classification, and mode of life of extinct saurians.

2. Wilbur Clinton Knight.
   Am. Geol., vol. 33, pp. 1-6, pl. i (por.) 1904.
   Includes a bibliography of the scientific papers published by the subject of the sketch.

3. The fingers of pterodactyls.

4. The stomach stones of the plesiosaurs.

5. Notice of some new reptiles from the upper Trias of Wyoming.
   Jour. Geol., vol. 12, pp. 688-697, 6 figs., 1904.

Willmott (A. B.).
1. The contact of the Archean and post-Archean in the region of the Great Lakes.
   Describes the character of the line of contact of the Archean and overlying formations in the Great Lakes region in Canada and discusses the origin of this character.

2. The exploration of the Ontario iron ranges.
   Advance separate, 13 pp., 1904.
   Describes the general geology of the iron ranges, the character of the rocks, and the occurrence of iron ore deposits.

1. Trent River system and St. Lawrence outlet.
   Describes physiographic features of the country east and northeast of Lake Ontario, and discusses their bearing upon the pre-Glacial drainage of that region.
Wilson (Alfred W. G.)—Continued.
2. Cuspate forelands along the Bay of Quinte [Ontario].
   Jour. Geol., vol. 12, pp. 106-132, 12 figs., 1904; McGill Univ., Papers from the
   Dept. of Geol., no. 18, 1904.
   Describes physiographic features in this vicinity, and discusses the mode of
   their formation by wave action.

Wilson (E. B.).
1. The theory of ore deposits applied to prospecting.

Winchell (Horace V.).
   Eng. & Mg. Jour., vol. 78, pp. 7-8, 1 fig., 1904.
   Describes the general geologic structure and the character and occurrence of
   the copper-ore deposits.

Winchell (Newton H.).
1. The evolution of climates.
   Am. Geol., vol. 33, pp. 116-122, 1904.
   States the fundamental ideas involved in the hypothesis of climate in Marsden
   Manson's "Evolution of Climates" (see no. 838 of U. S. Geol. Surv., Bull.
   no. 240) and discusses the objections which have been raised against it.

2. Where did life begin?
   Am. Geol., vol. 33, pp. 185-189, 1904.
   Reviews works by Wm. F. Warren and G. Hilton Scribner and statements of
   others regarding the origin of life in the north Polar regions and its distri­
   bution southward.

3. Peléoliths.
   Am. Geol., vol. 33, pp. 319-325, 8 figs., 1904.
   Applies the term peléolith to massive-solid volcanic extrusions of the type of
   the recently formed cone of Mont Pelé and describes various examples of
   peléoliths.

4. The colossal bridges of Utah.
   Am. Geol., vol. 34, pp. 189-192, 1 fig., 1904.
   Describes briefly these arches produced by erosion, situated in San Juan
   County, Utah.

5. The Baraboo iron ore.
   Am. Geol., vol. 34, pp. 242-253, 1904.
   Discusses a report by Dr. Weidman on the Baraboo iron-bearing district of
   Wisconsin.

6. The geology of the iron ores of Minnesota, U. S. A.
   Discusses the character and occurrence of the iron ores of Minnesota and the
   age and character of the rocks in which they occur.

7. Notes on the geology of the Hell gate and Big Blackfoot valleys,
   Montana.
   Gives a provisional general section of the rocks of the region and brief notes
   upon the stratification, geologic structure, and igneous rocks.
Winchell (Newton H.)—Continued.
8. Note on the geology of the Hellgate Valley between Missoula and Elliston, and northward to Placid Lake, in Montana.
   Describes briefly the stratigraphy and general geology of the region.

Wolff (John E.).
1. Cambrian and pre-Cambrian of Hoosac Mountains, Massachusetts.

Wood (Edgar).
1. Eruption of Mauna Loa, 1903.
   Am. Geol., vol. 34, pp. 62–64, 1 fig., 1904.
   Describes phenomena observed during an eruption of Mauna Loa in October, 1903.

Wood (Elvira).
1. On new and old middle Devonic crinoids.

Wood (H. O.), Palache (Charles) and.
1. A crystallographic study of millerite.
   See Palache (Charles) and Wood (H. O.), 1.

Woodman (J. Edmund).
   Describes character and occurrence of certain geologic formations in southern Nova Scotia, discusses their nomenclature, and proposes new terms.

   Am. Geol., vol. 34, pp. 13–34, 1904.
   Describes the occurrence and character and the geologic relations and history of the metamorphic formations of southern Nova Scotia.

Woodworth (J. B.).
1. The Brandon clays.
   Describes the fuel value, occurrence, and geologic relations of the lignites in the Brandon clays of Vermont, and discusses fossil fruits occurring in them.

Woolsey (Lester H.).
   Describes occurrence, character, and utilization of the clays of this region.

2. Extra-morainic pebbles in western Pennsylvania.

Wortman (J. L.).
Wright (Charles W.).
1. The Porcupine placer mining district, Alaska.
   Describes briefly the general geology and the occurrence and mining of placer gold.

2. The Porcupine placer district, Alaska.
   U. S. Geol. Surv., Bull. no. 236, 35 pp., 10 pls., 4 figs., 1904.
   Describes the general geology, the character and occurrence of placer gold deposits, and the mining operations.

Wright (Fred Eugene).
1. Two microscopic-petrographical methods.
   Describes methods of determining index of refraction and optical character of minerals.

2. Der Alkalisyenit von Beverly, Massachusetts, U. S. A.
   Describes crystallographic characters and composition of an alkali-syenite from Beverly, Massachusetts.

Wright (G. Frederick).
1. Evidence of the agency of water in the distribution of the loess in the Missouri Valley.
   Am. Geol., vol. 33, pp. 205-222, 3 pls., 1904.
   Discusses the distribution of the loess and the evidences of its deposition by the agency of water. Includes a note by Professor Lane on the flow of flooded rivers.

2. Another Glacial wonder.
   Describes the occurrence of Glacial boulders in the vicinity of Tuscumbia, Mo., and gives an explanation as to how they came there, and its bearing on the origin of the loess.

Yates (William).
1. Natural history, meteorological and geological notes from Burford township [Ontario].
   Includes observations upon glacial phenomena in this region.

Yates (Lorenzo Gordin).
1. Prehistoric California.
   See no. 1365 of U. S. Geol. Surv., Bull. no. 240.

Zirkel (Ferdinand).
1. Ueber die gegenseitigen Beziehungen zwischen der Petrographie und angrenzenden Wissenschaften.
   Discusses the scope and methods of petrography and relations to connected sciences.
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**tequalis** Ulrich, Ulrich and Bassler, 2.

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**Monticulipora D'Orbigny** Ulrich and Bassler, 2.

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**desiderata** Hall, Parks, 1.

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**dance** Meek and Worthen, Klem, 1.

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Orthis flabellites Foerste, Kindle and Breger, 1.
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