BIBLIOGRAPHY
OF
NORTH AMERICAN GEOLOGY
FOR
1915
WITH SUBJECT INDEX
BY
JOHN M. NICKLES

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BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY FOR 1915, WITH SUBJECT INDEX.

By JOHN M. NICKLES.

INTRODUCTION.

The bibliography of North American geology, including paleontology, petrology, and mineralogy, for the year 1915 follows the plan and arrangement of its immediate predecessors. It includes publications bearing on the geology of the Continent of North America and adjoining islands; also Panama and the Hawaiian Islands. Papers by American writers on the geology of other parts of the world are not included. Textbooks and papers general in character by American authors are included; those by foreign authors are excluded unless they appear in American publications.

As heretofore, the papers, with full title and medium of publication and explanatory note when the title is not fully self-explanatory, are listed under the authors, arranged in alphabetic order. The author list is followed by an index to the literature listed. In this index the entries in one alphabet are of three kinds—first, subject, with various subdivisions, to enable the specialist to ascertain readily all the papers bearing on a particular subject or area; second, titles of papers, many of them abbreviated or inverted, under their leading words; and third, cross references, which have been freely used to avoid too much repetition. The subjects have been printed in black-faced type, the titles of papers and cross references in ordinary type. As it may not be always obvious which subject headings have been adopted, an outline of those used immediately precedes the index.

Miss Isabel P. Evans has given efficient assistance in the work.

The bibliography of North American geology is comprised in the following bulletins of the United States Geological Survey: No. 127 (1732–1892); Nos. 188 and 189 (1892–1900); No. 301 (1901–1905); No. 372 (1906–7); No. 409 (1908); No. 444 (1909); No. 495 (1910); No. 524 (1911); No. 545 (1912); No. 584 (1913); No. 617 (1914); and No. 645 (1915).
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OUTLINE OF SUBJECT HEADINGS.

In the following index the subject headings are printed in black-faced type. An outline of these is here given that it may be quickly seen which subject heading of two or more synonyms has been adopted. Thus “petroleum” and not “oil” nor “rock oil” has been chosen. That the specialist may see at a glance under what headings to find cognate literature, subject headings that are more or less closely related have been grouped together under the following heads: Areal or regional, general, economic, dynamic and structural, physiographic, stratigraphic or historical, paleontology, petrology, mineralogy, underground water. In the index the specific entries under the areal or regional subject headings are alphabeted under these same heads arranged in the same order, namely, general, economic, etc.

AREAL OR REGIONAL.

The States and Territories of the Union, Alabama, Alaska, etc.; The Provinces of Canada, Alberta, etc.; Greenland; Arctic regions; Mexico; the countries of Central America; the West Indies, and the single islands; the Hawaiian Islands.

GENERAL.

Associations, meetings; Addresses; Philosophy; History; Biography; Bibliography; Education; Textbooks.
Surveys; Fieldwork; Excursions; Technique; Cartography.
Classification; Nomenclature.
Geochemistry; Chemical analyses (list); Geophysics; Atmosphere; Radioactivity. Experimental investigations; Borings; Miscellaneous.

ECONOMIC.

Ore deposits, origin; Contact phenomena.
Gold; Placers; Black sands; Silver; Quicksilver; Nickel; Cobalt; Copper; Lead; Zinc; Iron; Magnetite; Manganese; Tin.
Aluminum; Bauxite; Antimony; Bismuth; Tungsten; Vanadium; Uranium; Carotite ores; Molybdenum; Chronic iron ore.
Platinum; Palladium; Titanium; Rutile; Rare earths; Monazite; Zircon.
Coal; Anthracite; Lignite; Peat.
Petroleum; Natural gas; Oil shales; Asphalt; Albertite; Gilsonite; Bituminous rock.
Stone; Building stone; Granite; Trap; Bluestone; Limestone; Marble; Lime; Gypsum.
Sand; Glass sand; Silica; Quartz; Quartzite; Sandstone; Gravel; Cement and cement materials; Concrete materials; Road materials.
Clay; Kaolin; Bentonite; Fire clay; Genister; Slate; Shale; Pyrophyllite. Serpentine; Asbestos; Steatite; Soapstone; Talc.
Precious stones; Diamonds; Sapphires; Turquoise; Tourmaline; Onyx.
Abrasive materials; Corundum; Emery; Garnet; Diatomaceous earth; Tripoli; Volcanic ash; Pumice; Millstones; Whetstones; Novaculite; Feldspar.
Phosphate; Apatite; Potash; Alunite; Nitrate; Glaucnite; Marl.
Salt; Salines; Bromine; Calcium chloride; Borax; Fluorspar.
Barite; Strontium; Mineral paints.
Arsenic; Fuller's earth; Infusorial earth; Magnesite; Mica; Graphite.
Phosphorus; Sulphur; Pyrite.

**DYNAMIC AND STRUCTURAL.**

Earth, genesis of; Earth, age of; Earth, interior of; Earth, temperature of.
Volcanism; Volcanoes; Earthquakes; Seismology; Seimographs; Mud volcanoes.
Isostasy; Orogeny; Changes of level.
Magmas; Magmatic differentiation; Laccoliths; Intrusions; Dikes; Contact phenomena.
Deformation; Folding; Faulting; Unconformities.
Conglomerates; Concretions; Stalactites; Jointing; Cleavage.
Denudation; Erosion; Coast changes; Coral islands and reefs; Weathering; Caves;
Sink holes; Wind work; Dunes; Loess; Landslides.
Glaciers; Glacial erosion; Glacial striae; Potholes; Kettle holes.
Sedimentation; Eskers; Kames; Moraines.
Drainage changes.

**PHYSIOGRAPHIC.**

Geomorphy; Relief maps.
Plains; Prairies; Penneplains; Valleys; Cirques; Deserts; Alluvial fans; Deltas;
Mounds, natural; Sink holes; Karsts; Natural bridges.
Rivers; Stream piracy; Meanders; Falls; Lakes; Swamps; Marshes; Everglades.
Terraces; Beaches; Shore lines.

**STRATIGRAPHIC OR HISTORICAL.**

Geologic history; Geologic time; Paleogeography; Paleogeographic maps; Paleoclimatology.
Geologic maps; Geologic formations described (list); Tables of formations; Unconformities; Borings.
Pre-Cambrian; Paleozoic (undifferentiated); Cambrian; Ordovician; Silurian;
Devonian; Carboniferous; Mesozoic (undifferentiated); Triassic; Jurassic; Cretaceous; Tertiary; Quaternary; Recent.
Glacial geology; Glaciation; Drift deposits; Glacial lakes; Erratic bowlders; Ice ages (ancient).

**PALEONTOLOGY.**

Geographic distribution; Evolution; Restorations.
Vertebrata; Man, fossil; Mammalia; Aves; Reptilia; Amphibia; Piscis; Footprints.
Invertebrata; Arthropoda; Crustacea; Trilobita; Ostracoda; Insecta; Arachnida;
Myriapoda.
Mollusca; Cephalopoda; Gastropoda; Pelecypoda.
Molluscoidea; Brachiopoda; Bryozoa; Vermes.
Echinodermata; Echinoidea; Asteroidea; Crinoidea; Cystoidea.
Ccelenterata; Anthozoa; Hydrozoa; Graptolites.
Protozoa; Spongida; Foraminifera.
Paleobotany; Diatoms; Algae.
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PETROLOGY.
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MINERALOGY.
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