

BIOGRAPHIES OF GEOLOGISTS

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Ten years ago, one of us published *A list of books on the personalities of geology* in this journal (vol. 47, 192–200, 1947). At the time it was noted that such a list was certainly incomplete, and the intervening years have shown that this was decidedly an understatement. Since then we have found many more such books, new ones have been published, and interested friends (especially J. V. Howell and F. S. Colliver) have suggested important additions. Only 78 biographies were included originally, and since some 132 more can now be added, it seems worthwhile to present a more complete listing, even though it is probably still incomplete. We have added brief comments on all the biographies except those few we have not been able to examine. In the original list, books of geologists' travels, histories of geology, and "miscellaneous" books were included. These are omitted here, only biographical and autobiographical books being admitted. Even with this restriction, choice in some instances has not been easy. As in the first list, we have included only items that have appeared as books, deliberately excluding all but a very, very few biographical notices, memoirs, and obituaries that were published in various journals.

All those seriously interested in geology and its branches as a profession or avocation cannot fail to win something from the reading of their predecessors' struggles and triumphs. Who can work with the great quarto volumes of the *Palaeontology of New York* without wondering about the character of a man with enough fortitude to produce them? Who can notice the constant allusions to Sir Charles Lyell in hundreds of geological works without wondering how he lived and worked? Who can read of the first geological exploration of the Grand Canyon of the Colorado without a thought to the motives that pushed John Wesley Powell into the unknown? Who can read *The Old Red Sandstone* without wondering what sort of geologist could write such elegant and lucid prose? Who can discover that a mineral, such as dolomite, was named for one Deodat Dolomieu without wondering who this man was to merit such an honor? And who can contrast the great volumes on the zoology of the United States Exploring Expedition with the many editions of *A System of Mineralogy* without wondering at the versatility of James Dwight Dana? Or at the even greater versatility of Louis Agassiz—from ice to jungle exploration, from fossil fish to embryology?

We hope that geologists and other scientists will find this compilation a useful guide to books about the men who have labored on the main fabric or in the dark corners of the vast edifice of minerals, volcanoes, glaciers, fossils, mountains and rivers that is geology.

BIOGRAPHIES

AGASSIZ, Alexander. 1835–1910. Agassiz, G. R. *Letters and Recollections of Alexander Agassiz*. Houghton Mifflin, Boston, New York, and London, 1913.—Son of Louis Agassiz, an accomplished zoologist, oceanographer and geologist, who made a fortune in Keweenaw copper and expended much of it on the Museum of Comparative Zoology and long geological and biological expeditions in the Pacific.

AGASSIZ, Louis. 1807–1873. Agassiz, E. C. *Louis Agassiz, his Life and Correspondence*. 2 vols., Macmillan, New York and London, 1885.—Student of glaciers and glaciation, author of the greatest work on fossil fishes, founder of the Museum of Comparative Zoology at Cambridge. The "official" biography.

- Agassiz, E. C.** *Louis Agassiz, sa Vie et sa Correspondence*. (transl. by A. Mayor.) Librairie Fischbacher, Paris, 1887.—French edition, with slight additions, of the preceding.
- Cooper, L.** *Louis Agassiz as a Teacher*. Comstock Publishing Co., Inc., Ithaca, 1945. (First edition 1917).—Illustrative extracts from writings of his students and a summary of his life.
- Gould, Alice Bache.** *Louis Agassiz*. Beacon Biographies: Small, Maynard & Co., Boston, 1901.
- Holder, C. F.** *Louis Agassiz, his Life and Work*. Putnam's, New York, 1893.—Parson Weemsish, fulsome, derivative, unimportant.
- Marcou, J.** *Life, Letters and Works of Louis Agassiz*. 2 vols. Macmillan and Co., New York and London, 1896.—Louis Agassiz seen through the eyes of his erratic but brilliant friend; valuable geological emphasis.
- Robinson, M. L.** *Runner of the Mountain Tops; the Life of Louis Agassiz*. Random House, New York, 1939.—A recent study, much less definitive than the preceding.
- Teller, J. D.** *Louis Agassiz. Scientist and Teacher*. Ohio State Univ. Press, Columbus, 1947.—A history and analysis of Agassiz' influence on scientific education in America.
- AGRICOLA, Georg. 1494–1555. Beecher, F. L.** *Die Mineralogen Georg Agricola und A. G. Werner*. Freiberg, 1819.—An early study of the man who was physician, mining engineer, mining geologist and scholar. He was the first of the "moderns."
- Darmstaedter, E.** *Georg Agricola, Leben und Werk*. Muenchen, 1926.
- Hartman, H.** *Georg Agricola, 1494–1555, Begründer dreier Wissenschaften, Mineralogie—Geologie—Bergbaukunde*. Wissenschaftliche Verlagsgesellschaft M.B.H., Stuttgart, 1953.—Not the definitive life, but an analysis of Agricola's place in science.
- Hofman, R.** *Dr. Georg Agricola, Ein Gelehrtenleben aus dem Zeitalter der Reformation*. F. A. Perthes, Gotha, 1905.—Short, scholarly study of Agricola's life and work.
- AMEGHINO, Florentino. 1854–1911. Cabarera, A.** *El pensamiento vivo de Ameghino*. Editorial Losada, Buenos Aires, 1944.—A little on the life and much on the work of the self-taught Argentinian vertebrate paleontologist.
- ANDREWS, Roy Chapman. 1884–. Andrews, R. C.** *Under a Lucky Star, a Lifetime of Adventure*. Viking Press, New York, 1943.—Lively autobiography of the leader of the American Museum's expeditions to the Gobi Desert.
- ARGYLL, George Douglas, Duke of. 1823–1900. Duchess of Argyll, ed. George Douglas, Eighth Duke of Argyll, autobiography and memoirs.** Dutton, New York, 2 vols., 1906.—"Few men of the duke's era displayed more versatility of intellect." In the field of science, especially geology, he endeavoured to harmonize the new discoveries and theories with religion.
- BAGG, Rufus Mather. 1869–1946. Taber, Gladys.** *Especialy Father*. Victor Gollancz, London, 1950.—A professional writer produces a bitingly witty biography of her geologist-professor father without once mentioning his name.
- BAILEY, Loring Woart. 1839–1925. Bailey, J. W.** *Loring Woart Bailey*. J. & A. McMillan, St. John, N.B., 1925.—Son of early West Point professor of chemistry, mineralogy and geology and microscopist; student at Harvard and Brown who spent his entire professional life at the University of New Brunswick. Interesting comments on Canadian geologists of the time.
- BALL, Valentine. 1843–1895. Ball, V.** *Jungle life in India; or the journeys and journals of an Indian Geologist*. De La Rue, London, 1880.—Entertaining recollections of fifteen years' field work for the Geological Survey of India.
- BECK, Theodorice Romeyn. 1791–1855. Hamilton, F. H.** *Eulogy on the life and character of Theodorice Romeyn Beck, M.D., LL.D.* Albany, 1856.—Beck was the scientific leader of Albany in the early 19th Century, amateur geologist, and friend of Amos Eaton.
- BELL, Robert. 1864–1934. Stendall, J. A. S.** *Robert Bell, geologist: a biographical sketch*. Quota Press, Dublin, 1938.

- BONNEY, Thomas George. 1833-1923.** Bonney, T. G. *Memories of a Long Life.* Metcalfe and Co. Ltd., Cambridge, 1921.—Mainly reminiscences of university experiences with almost no mention of his important work in geology.
- BRONGNIART, Alexandre. 1770-1847; and Adolphe. 1801-1876.** Launay, L. de. *Les Brongniart, une grande Famille de Savants.* Rapilly et Fils, Paris, 1940.—A fine study of a brilliant family. Alexandre was a geologist and mineralogist, director of the Sevres porcelain factory and son of an eminent architect. Adolphe, his son, was famous as a botanist and paleobotanist.
- BROOM, Robert. 1866-.** Broom, R. *Finding the Missing Link.* C. A. Watts & Co. London, 1950.—Broom, physician and vertebrate paleontologist, was the great discoverer of the African ape-men.
- BROWN, Alfred. 1834-1920.** Drennan, M. R. *Gogga Brown, the Life Story of Alfred Brown, South Africa's Hermit-Naturalist.* Maskew Miller, Capetown, n.d.—Brown was the Robert Dick of South Africa, but the author is no Samuel Smiles.
- BUCKLAND, William. 1784-1856.** Gordon, Mrs. *The Life and Correspondence of William Buckland, D.D., F.R.S.* John Murray, London, 1894 (Also a New York edition).—One of the best geological biographies, about one of the great figures in geology in the early years of the 19th Century, professor of geology at Oxford, later Dean of Westminster.
- BUFFON, George-Louis Leclerc, comte de. 1707-1788.** Roule, L. *Buffon et la description de la nature.* Flammarion, Paris, 1924.—A good sketch of the career of the celebrated naturalist, author of *Les Epoques de la Nature*, a remarkable attempt at a synthesis of geologic history based on the fossil record.
- Condorcet, J.-A.-N. de** *Eloge de M. le comte de Buffon.* Paris, 1790.
- L. Bertin et al.** *Buffon.* Paris (Mus. Nat. Hist. Nat.) 1952.
- Anon.** *Vie privée de M. le comte de Buffon.* Lausanne, 1788.
- BUNBURY, Charles James Fox. 1809-1886.** Lyell, Katherine M. *Life, letters, and journals of Sir Charles James Fox Bunbury, Bart.* Murray, London, 2 vols., 1906.—Although himself merely an amateur geologist and botanist, Bunbury's letters provide many interesting sidelights on his wife's sister's husband, Sir Charles Lyell.
- CALVIN, Samuel. 1840-1911.** Thornton, H. J. *Samuel Calvin.* U. of Iowa Press, Iowa City, 1947.—Professor at University of Iowa and state geologist.
- CLARKE, Edward Daniel. 1769-1822.** Otter, W. *The Life and Remains of Edward Daniel Clarke.* J. F. Dore, London, 1824. (other editions London 1825 and New York 1827).—Professor of mineralogy at Cambridge, famous traveller in the Levant.
- CLOOS, Hans. 1885-1951.** Cloos, H. *Gesprach mit der Erde.* R. Piper, Munchen, 1947; *Conversation with the Earth.* (translation of the above by E. B. Garside, edited by Ernst Cloos and Curt Dietz). Alfred Knopf, New York, 1953.—At once autobiography, geologic description and illustration. Only Germans can write personalized description like this; may well become a classic.
- CONDON, Thomas. 1822-1907.** McCornack, E. C. *Thomas Condon, Pioneer Geologist of Oregon.* Univ. Press, Eugene, Ore., 1928.—Life of a lesser figure who worked valiantly in a formerly remote region.
- CONRAD, Timothy Abbot. 1803-1877.** Wheeler, H. E. *Timothy Abbot Conrad, with Particular Reference to his Work in Alabama One Hundred Years Ago.* Paleont. Res. Inst., Ithaca, 1935.—The pioneer paleontologist of the coastal plain Tertiaries.
- COPE, Edward Drinker. 1840-1897.** Osborn, H. F. *Cope: Master Naturalist; the Life and Letters of Edward Drinker Cope.* Princeton Univ. Press, 1931.—Definitive life of the driving figure of one of the greatest vertebrate paleontologists.
- CROLL, James. 1821-1896.** Irons, J. C. *Autobiographical Sketch of James Croll, with Memoir.* Edward Stanford, London, 1896.—Croll is noted for his contributions to the problem of the causes of continental glaciation.

- CUVIER, George L. C.F.D. 1769-1832. Lee, Sarah (Mrs. R.)** *Memoirs of Baron Cuvier*. J. & J. Harper, New York, 1833. (also London).—Biography by one who knew him of the great student of natural history and founder of vertebrate paleontology.
- Vienot, J.** *Le Napoleon de l'Intelligence: George Cuvier, 1769-1832*. Fischbacher, Paris, 1932.
- DANA, James Dwight. 1813-1895. Gilman, D. C.** *The Life of James Dwight Dana*. Harper's, New York, 1899.—Accurate, but dull and lifeless biography of one of the most important nineteenth century geologists; founder of modern system of mineral classification.
- DARWIN, Charles. 1809-1882. Darwin, F., ed.** *Life and Letters of Charles Darwin*. 3 vols., Murray, London, 1887, 1892; 2 vols; Appleton, New York, 1896.—Darwin needs no mention here. He was by all odds the greatest figure in biological science of the 19th century, for he finally focussed and gave meaning to the chaos of paleontological and neontological facts.
- Bettany, G. T.** *Life of Charles Darwin*. Scott, London, 1887.—Short but well-written biography.
- Geikie, A.** *Charles Darwin as Geologist*. Univ. Press, Cambridge 1909.—Excellent short summary set against background of the times; valuable notes. Deserves reprinting.
- West, G.** *Charles Darwin, a Portrait*. Yale Univ. Press, New Haven, 1938.—One of the best modern studies of Darwin.
- Kingston, R. W. G.** *Darwin*. London, 1934.
- Barlow, Nora, ed.** *Charles Darwin and the Voyage of the Beagle*. Philos. Library, New York, 1946.—Contains much previously unpublished material on the celebrated voyage.
- DARWIN, Erasmus. 1731-1802. Pearson, H.** *Doctor Darwin*. J. M. Dent & Sons, London, 1930.—Grandfather of Charles Darwin who was an evolutionist in his own right. Lively biography of a positive person.
- DAVID, T. W. Edgeworth. 1858-1934. David, M. W.** *Professor David, the Life of Sir Edgeworth David*. Arnold, London, 1937.—Very readable life of Australia's great field geologist and teacher.
- DAWSON, John William. 1820-1899. Dawson, J. W.** *Fifty Years of Work in Canada, Scientific and Education*. (ed. by Rankine Dawson). Ballantyne, Hanson and Co., London & Edinburgh, 1901.—Discoverer of air-breathers in the Carboniferous of Nova Scotia, of Eozoon, professor of geology and principal of McGill University.
- DERBY, Orville Andelbert. 1851-1915. Lamego, A. R. et al.** *Orville A. Derby, 1851-1915. Alguns aspectos da sua obra*. Ministerio da Agricultura, Rio de Janeiro, 1951.—Derby accompanied Charles F. Hartt on his famous Brazilian expeditions in the early 1870's, and remained in Brazil the rest of his life, helping to found the Comissao Geologica, the Museu Nacional, and the Instituto Historico e Geografico.
- DICK, Robert. 1811-1866. Smiles, S.** *Robert Dick, Baker, of Thurso, Geologist and Botanist*. Murray, London, 1878.—Appealing and sympathetic account of the keen naturalist, discoverer of many new plants and fossil fishes, baker by trade, friend of Hugh Miller, Peach, and Geikie, but unknown to most of his contemporaries. Includes interesting engravings of Caithness and Thurso.
- DOLOMIEU, Deodat (Dieudonne-Sylvain-Guy-Tancrede de Gratet de). 1750-1801. Lacroix, A.** *Deodat Dolomieu: Sa vie aventureuse—sa captivité—ses oeuvres—sa correspondance*. Perrier, Paris, 2 vols. 1921.—Definitive work on Dolomieu, who travelled widely in the Mediterranean region—"a careful and indefatigable observer, and provided copious material towards the establishment of the principles of geology" (Geikie).
- EATON, Amos. 1776-1842. McAllister, E. M.** *Amos Eaton, Scientist and Educator, 1776-1842*. Univ. Pennsylvania Press, Philadelphia, 1941.—Remarkably thorough study of one of the pioneer teachers of science in America, the first great American geologist, writer of geological textbooks and founder of Rensselaer Polytechnic Institute.
- EHRENBERG, Christian Gottfried. 1795-1876. Laue, M.** *Christian Gottfried Ehrenberg. Ein Vertreter deutscher Naturforschung in neunzehnten Jahrhundert*. Springer, Berlin,

1895.—Factual account of the life and work of Ehrenberg, famous for his pioneer studies of the coral reefs of the Red Sea and on Foraminifera and other protists.

ESCHER VON DER LINTH, Arnold. 1807–1872. Heer, O. *Arnold Escher von der Linth, Lebensbild eines Naturforschers.* Friederich Schulthess, Zurich, 1893.—Swiss geologist who did pioneer work in Alpine stratigraphy and structure.

EVANS, Lewis. 1700–1755. Gipson, L. H. *Lewis Evans, to which is added Evans' A Brief Account of Pennsylvania Together with Facsimiles of His Geographical, . . . Essays, Numbers I and II . . . an Analysis of a General Map of the Middle British Colonies. . . .* Historical Society of Pennsylvania, Philadelphia, 1939.—Evans was a surveyor, engineer, engraver, traveller and map maker. He made many important geological observations and gave the first description of physiographic divisions of the United States. This finely printed book includes facsimiles of Evans' Map and "Analysis."

FORBES, Edward. 1815–1854. Wilson, G. and Geikie, A. *Memoir of Edward Forbes, F.R.S.* Macmillan and Co., Cambridge and London, 1861.—Edward Forbes was a pioneer in the study of animal ecology and geography.

FORBES, James David. 1809–1868. Shairp, J. C.; Tait, P. G.; and Adams-Reilly, A. *Life and Letters of James David Forbes, F.R.S.* Macmillan, London, 1873.—Forbes, professor of natural philosophy at Edinburgh, later at St. Andrews, is famous for his studies of glaciers.

FORSTER, Westgarth. 1772–1835. Nall, W. (*Memoir of Westgarth Forster*, in Forster, Westgarth, *A Treatise of the Section of the Strata from Newcastle-upon Tyne to Cross Fell with remarks on Mineral Veins . . . Third edition, revised and corrected to the present time by the Rev. W. Nall, M.A. . . .* Andrew Reid, Newcastle: Edward Stanford, London, 1883.—Forster was a mining engineer and geologist (financially unsuccessful) who first recognized cyclic sedimentation in Carboniferous rocks, produced elaborate stratigraphic columns and described relation to lead ore to stratigraphy and structure. His work is mainly known from the second edition (1821) as the first (1809) is very rare. The three editions vary considerably. Forster deserves a modern study and evaluation.

FRENCH SAVANTS. Lacroix, A. *Figures de Savants.* 2 vols., Gauthiers-Villars, Paris, 1932.—Short studies of the lives and work of 31 French mineralogists and geologists, from Desmarest to Haug, with portraits and facsimiles of handwriting. Important source of information on French scientists.

GEIKE, Archibald. 1832–1924. Geikie, A. *A Long Life's Work, an Autobiography.* Macmillan, London, 1924.—Geike was an outstanding figure in British geology, long director of the Geological Survey of Great Britain; prolific biographer and writer on history of geology.

GEIKE, James. 1839–1915. Newbiggin, M. I., and J. S. Flett. *James Geikie, the Man and the Geologist.* Oliver and Boyd, Edinburgh, 1917.—Brother of Archibald, professor at Edinburgh, glacial and structural geologist.

GILBERT, Grove Karl. 1843–1918. Davis, W. M. *Biographical Memoir Grove Karl Gilbert 1843–1918.* Memoirs of the National Academy of Sciences, vol. 21. Washington, 1927.—A geological biography of possibly America's greatest geologist by another great geologist who himself deserves a book length biography. One of the three outstanding American biographies.

GOETHE, Johann Wolfgang. 1749–1832. Magnus, R., with a foreword by Gunther Schmid, translated by Heinz Norden. *Goethe as a Scientist.* Henry Schuman, New York, 1949.—(Translation of *Goethe als Naturforscher.* Leipzig, 1906). Contains a chapter on Goethe's contribution to geology and mineralogy. Some asserted his priority in the idea of evolution and of the Ice Age.

GREENLY, Edward. 1861–1951. Greenly E. *A Hand Through Time: Memories—Romantic and Geological; Studies in the Arts & Religion, and the Grounds of Confidence in Immortality.* Thomas Murby & Co., 2 vols. London, 1938.—At once autobiography, biography of Mrs. Greenly and sketches of geologists and geologic activities of the time. Keen geological observations and maudlin biography. Must be seen to be believed.

- GRESSLY, Amand. 1814-1865. Rollier, L.** *Amand Gressly's Briefe: Lettres d'Amand Gressly, le Geologue Jurassien.* Soc. Jur. D'Emul., Actes, 1911.—The only book-size work on Gressly, whose study of the Swiss Jurassic is the foundation of paleoecology and the stratigraphic concept of facies. Gressly is almost unknown in America!
- GUNN, John. 1801-1890. Woodward, H. B., ed.** *Memorials of John Gunn.* Norwich, 1891.—Rector of Irstead, keen amateur geologist, leader in early geological studies in Norfolk, best known for his work on the Cromer Forest Bed.
- HAAST, Sir Julius von. Haast, H. F.** *The life and times of Julius von Haast.* Gov't Printer, New Zealand. n.d.
- HALL, James. 1811-1898. Clarke, J. M.** *James Hall of Albany, Geologist and Palenotologist, 1811-1898.* Albany, 1921. (reprinted 1924).—One of the best biographies of a scientist. Excellent study of the great Paleozoic paleontologist and lively account of the early days of geologic study of the classic ground in New York and adjoining areas. Much material on contemporary associates and geological activities.
- HAMMOND, John Hays. 1855-1936. Hammond, J. H.** *The autobiography of John Hays Hammond.* 2 vols. Farrar & Rinehart, New York, 1935.—Interesting and well-written accounts of mining ventures over the world by the Freiberg-trained successful engineer and consultant of the select group of Pumpelly, Penrose, and Hoover.
- HARRISON, Benjamin. 1837-1921. Harrison, E. R.** *Harrison of Igham.* Oxford Univ. Press, London, 1928.—The Robert Dick of Kent, discoverer of the "eoliths." A must for all students of the Pleistocene.
- HARTT, Charles Frederick. 1840-1878. Menezes, C. A. de** *Biographia do Professor Carlos Frederico Hartt.* Rio de Janeiro, 1878.—Brief study of the first professor of geology at Cornell University and pioneer in the geology of Brazil.
- Wright, A. H.** *Pre-Cornell and Early Cornell II. Letters to C. F. Hartt, first Professor of Geology at Cornell. A cross-section of the Agassiz Period.*—Letters of 1863-1879 to Hartt, by many important scientists which pertain to science of the time.
- HEILPRIN, Angelo. 1853-1907. Pollock, G.** *Michael Heilprin and his sons.* Dodd, Mead, New York, 1912.—Michael was editor of the *Nation*. Louis, the encyclopedist, was his first son; Angelo, the geologist, his second.
- HEIM, Albert. 1849-1937. Brockmann-Jerosch, Marie; Heim, A.; and Heim, Helene.** *Albert Heim, Leben und Forschung.* Wepf & Co., Basel, 1952.—Definitive biography and summaries of scientific work of the great authority on Alpine tectonics and glacial geology.
- HITCHCOCK, Edward. 1793-1864. Reminiscences of Amherst College, historical, scientific, biographical and autobiographical; also of other and wider life experiences.** Bridgman and Childs, Northampton, Mass., 1863.—Professor of geology at Amherst, sometime state geologist of Massachusetts and Vermont. Did excellent work in many kinds of geology, including early work on glacial drift.
- HOBBS, William Herbert. 1864-1953. Hobbs, W. H.** *An Explorer-Scientist's Pilgrimage, the Autobiography of William Herbert Hobbs.* J. W. Edwards, Inc., Ann Arbor, 1952.—Hobb's activities in several fields of geology, in geography and in international affairs make us wish his book had been longer and more detailed.
- HORNER, Leonard. 1785-1864. Lyell, K. M.** *Leonard Horner.* 2 vols., Women's Printing Society, Ltd., London, 1890.—Horner was a Scottish geologist and merchant, the father-in-law of Charles Lyell.
- HOUGHTON, Douglass. 1809-1845. Bradish, A.** *Memoir of Douglass Houghton.* Raynor & Taylor. Detroit, 1889.—Includes reprints of geological writings of Houghton, pioneer Michigan geologist, who was also physician and explorer.
- Rintala, E. K.** *Douglass Houghton, Michigan's Pioneer Geologist.* Wayne Univ. Press, Detroit, 1954.—Supplements Bradish somewhat in personal details of Houghton.
- HUBBARD, Bela. 1814-1896. Hubbard, B.** *Memorials of a Half-Century in Michigan and the Lake Region.* Putnam's, New York, 1888.—Early Michigan geologist, naturalist and meteorologist. Pleasant, rambling reminiscences.

- HUMBOLDT, Alexander von. 1769-1859. Anonymous.** *The Life, Travels and Books of Alexander von Humboldt.* With an Introduction by Bayard Taylor. Rudd & Carelton, New York, 1859.—There are many biographies of this German geologist, traveller, explorer, botanist and philosopher who wrote 74 books on these subjects. This is not the best one.
- Assing, L., ed.** *Letters of Alexander von Humboldt to Varnhagen von Ense, from 1827 to 1858* (Transl. F. Kapp). Rudd and Carleton, New York, 1860 (from 2d German edition).—Interesting but of little geological import.
- Banse, E.** *Alexander von Humboldt. Erschliesser einer neuen Welt.* Wissenschaftliche Verlagsgesellschaft M.B.H., Stuttgart, 1953.—Straightforward biography; emphasizes Humboldt's geographical importance.
- Bruhns, K., ed.** *Life of Alexander von Humboldt* (Transl. by J. and C. Lassell). Longman, Green, London, 2 vols., 1873.—Compiled in commemoration of the centenary of Humboldt's birth by J. Lowenberg, R. Arc-Lallemand, and A. Dove.
- Buchner, W.** *A. von Humboldt, ein Lebensbild.* Lahr, 1882.
- De Terra, H.** *Humboldt; the life and times of Alexander von Humboldt, 1769-1859.* Alfred A. Knopf, New York, 1955.—Well-written modern work on Humboldt's "long and fabulous life" with some summary of his scientific work; stresses American connections.
- Klenche, H. and G. Schlesien.** *Lives of the brothers Humboldt, Alexander and William,* transl. by Juliette Bauer. Ingram, Cooke & Co., London; Harper, New York (1854), 1852. *Eine biographisches Denkmal.* A. von Humboldt. Leipzig, 1859.
- Wittwer, W. C.** *A. von Humboldt, sein wissenschaftliche Leben und Wirken.* Leipzig, 1860.
- HUTTON, James. 1729-1797. Playfair, J.** *Biographical Account of the Late Dr. James Hutton, F.R.S., Edin.* Royal Soc. Edinburgh Trans., vol. 5, pt. 3, pp. 39-99, 1805; also collected works of John Playfair, Esq., vol. 4, pp. 33-118, 1822.—Sympathetic biography stressing Hutton's methods of geologic observation and induction.
- Various Authors.** *James Hutton 1726-1797. Commemoration of the 150th Anniversary of his Death.* Proc. Sect. B. Royal Soc. Edinburgh, vol. 63, pt. 4, 1950.—Hutton, "The Founder of Modern Geology," deserves a modern biography: the two listed are excellent for the areas they cover.
- HUXLEY, Thomas Henry. 1825-1895. Huxley, L.** *Life and Letters of Thomas Henry Huxley.* 2 vols., Macmillan and Co. London. 1900. (Also American edition 1901).—Huxley, celebrated biologist and forensic scientist, was the friend of Darwin and champion of the theory of evolution.
- JEFFERSON, Thomas. 1743-1826. Martin, E. T.** *Thomas Jefferson: Scientist.* Henry Schuman, New York, 1952.—Jefferson's scientific activities were remarkable. His interests in vertebrate paleontology are well known.
- JOLY, John. 1857-1933. Reminiscences and anticipations.** Fisher Unwin, London, 1920.—Professor of geology and mineralogy at the University of Dublin, Joly is perhaps best known to geologists as the author of the salt-content method of estimating the age of the oceans. This volume contains only scattered reminiscences.
- JORDAN, David Starr. 1851-1931. The days of a man: being memories of a naturalist, teacher and minor prophet of democracy.** World Book Co., Yonkers-on-Hudson, 1922.—Vivid autobiography of the founding president of Stanford University and great student of fossil and recent fish.
- JUKES, Joseph Beete. 1811-1869. Jukes, Miss., ed.** *Letters and extracts from the addresses and occasional writings of J. B. Jukes.* Chapman & Hall, London, 1871.—Professor in the Royal College of Science in Dublin, and local director of the Geological Survey of Ireland. An early student of coral reefs.
- JUNGHUHN, Franz. 1809-1864. Gedenkboek Franz Junghuhn.** Nijhoff, 'S-Gravenhage, 1910.—Pioneer geologist and botanist in the Dutch East Indies.
- KANE, Elisha Kent. 1820-1857. Elder, W.** *Biography of Elisha Kent Kane.* Childs & Peterson, Philadelphia: Sheldon, Blakeman & Co., New York, 1868.—The Arctic explorer who made some geological and glaciological observations. His own books on explorations are more interesting than the biography.

- KARPINSKY, Alexander P. 1847-1936.** Lichkov, S. L. *Karpinskiy i Sovremennost.* Akademii Nauk SSSR, Moscow, 1946.—Brief outline of Karpinsky's life and work (in Russian).
- KEITH, Arthur. 1866-1955.** *An autobiography.* Wells and Co., London; Philos. Library, New York, 1950. Revealing account of a great comparative anatomist and student of fossil man.
- KING, Clarence, 1842-1901.** Various authors. *Clarence King Memoirs (The Helmet of Mambrino.)* Putnam, New York, 1904. (Publ. for King Memorial Comm. of Century Ass'n.)—A series of fulsome articles about this complex person who inspired many friendships. King was first director of U. S. Geological Survey. He flowered early and enjoyed life.
- KOWALEVSKY, Vladimir Onufriyevich. 1842-1883.** Davidaschvili, L. S. *Biography,* in Russian. Acad. Sci., Moscow and Leningrad, 1946.—Life and work of the Russian vertebrate paleontologist.
- LAMARCK, J. B. P. A. de M. de. 1744-1829.** Packard, A. A. *Lamarck, the Founder of Evolution, his Life and Work, with Translation of his writings on organic Evolution.* Longmans, Green, New York, 1901.—Apparently the first book devoted to the life and work of the celebrated zoologist, paleontologist, and evolutionary pioneer.
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- LESLEY, J. Peter. 1819-1903.** Ames, M. L. *Peter and Susan Lesley.* 2 vols., Knickerbocker Press, New York, 1909.—Geologist turned minister turned geologist. Consultant, state geologist of Pennsylvania, expert cartographer. Fine example of old-fashioned, slow-paced, but gradually revealing life and letters.
- LHWYD, Edward. 1660-1709.** Gunther, R. T. *Life and Letters of Edward Lhwyd,* Early Science in Oxford, vol. 14. University Press, Oxford, 1945.—Second keeper of the Ashmolean Museum; acquaintance of all the scientific men of his time; author of first English book of fossils.
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- Stoever, D. H.** *The life of Sir Charles Linnaeus.* Transl. by J. Trapp from the Swedish. London, 435 p., 1794.—An early study of the great systematist whose work is the starting point for modern systematics of fossil and living organisms.
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- Bonney, T. G.** *Charles Lyell and Modern Geology.* Macmillan, New York, 1895.—Based upon the "Life and Letters," but a more connected biography.
- LYMAN, Benjamin Smith. 1835-1920. Gonpei, K.** *Biography of Benjamin Smith Lyman.* Sanseido, Tokyo, 1937.—A short appreciation of Lyman's life and geological work by one of his many Japanese friends.
- MCGEE, William John. 1853-1912. McGee, E. R.** *Life of W. J. McGee.* Farley, Iowa, 1915.—McGee was a self-educated geologist, anthropologist, hydrologist and scientific organizer. He was not noted for modesty.
- MACLURE, William. 1763-1840. Morton, S. G.** *Memoir of William Maclure, Esq.* Academy of Natural Sciences of Philadelphia, printed by T. K. and P. G. Collins, 1841.—Brief (37 pp.) biography of the so-called "Father of American Geology." It is high time for a comprehensive biography of Maclure, altho his thoroughly Wernerian work was no better than that of Volney, Mitchell, and others.
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- Bingham, W.** *The Life and Writings of Hugh Miller, an oration . . .* G. W. Wood, New York, 1859.—Unimportant.
- Brown, T. N.** *The Life and Times of Hugh Miller.* Rudd and Carleton. New York, 1859.—A poor biography.
- Leask, W. K.** *Hugh Miller.* Oliphant, Anderson and Ferrier, Edinburgh, 1896.—Excellent brief biography.
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- MURCHISON, Roderick Impey. 1792-1871. Geikie, A. *Life of Sir Roderick I. Murchison*. 2 vols., John Murray, London, 1875.—Well-written, like all of Geikie's works. Murchison was one of the great figures of the formative years of geology and elaborator of the Silurian System.
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- OWEN, Richard. 1804-1892. Owen, R. *The Life of Richard Owen*. 2 vols., Murray, London, 1894.—The letters and journals of the great English 19th Century anatomist and vertebrate paleontologist, celebrated for his deductions from fragmentary fossil bones.
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- La Rocque, A. *The Admirable Discourses of Bernard Palissy*. Univ. of Illinois Press, Urbana, 1957.—A critical translation of Palissy's great work of 1580, with extensive notes and introductory essay dealing with Palissy's life and scientific contributions.
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- PLAYFAIR, Lyon. 1818-1898.** Reid, W. *Memoirs and Correspondence of Lyon Playfair, first Lord Playfair of St. Andrews*. Harper and Brothers, New York and London, 1899.—Early organic chemist (studied under Liebig) who was chemist to Geological Survey, knew royalty and all the great and was politically rewarded. Distant connection of John Playfair.
- POWELL, John Wesley, 1834-1902.** Darrah, W. C. *Powell of the Colorado*. Princeton Univ. Press. Princeton, N. J. 1951.—Excellent and completely documented biography with geological emphasis.
- Gilbert, G. K., ed.** *John Wesley Powell; a Memorial to an American Explorer and Scholar*. Chicago. 1903. (Reprinted, with slight changes, from *The Open Court*, vols. 16, 17.)—Powell was one of the founders of the United States Geological Survey, famous for his geological explorations in the West.
- Stegner, W. E.** *Beyond the Hundredth Meridian; John Wesley Powell and the Second Opening of the West*. Houghton Mifflin. Boston, 1954.—Well documented biography stressing Powell's arid land studies, and his relation to history of the times.
- PRESTWICH, Joseph. 1812-1896.** Prestwich, Mrs. Joseph. *Life and Letters of Sir Joseph Prestwich*. William Blackwood and Sons, London and Edinburgh, 1899.—Curiously reticent biography of geologist who was first a business man and late in life was professor at Oxford.
- PUMPELLY, Raphael. 1837-1923.** Pumpelly, R. *My Reminiscences*. 2 vols. Henry Holt, New York, 1918.—One of the most readable of scientific autobiographies, well-known for its real adventure and anecdotes of this pioneer economic geologist.
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- Fitzpatrick, T. J.** *Rafinesque, a sketch of his Life, with Bibliography*. Historical Department of Iowa, Des Moines, 1911.—Brief but excellent biography and bibliographic description of 941 Rafinesque publications and 134 items referring to him.
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- RAO, B. Rama. 1893-.** *Recollections of an Indian geologist*. Mysore Geologists' Assoc., Bangalore, 1953.—One of India's distinguished geologists, Director of the Mysore Geological Department and later Director of the Indian Bureau of Mines.
- RASPE, Rudolph Erich. 1737-1794.** Carswell, J. *The Prospector, being the Life and Times of Rudolph Erich Raspe*. Cresset Press, London, 1950.—Best known as author of "Baron Munchausen's Travels," Raspe was scholar, antiquarian, scientist—one of the first to recognize igneous origin of basalt in 1769—author, mining manager, expatriate, expelled Fellow of the Royal Society and petty scoundrel.
- RAY, John. 1628-1705.** Derham, W. *Select Remains of the Learned John Ray*. M. A. and F. R. S., with his *Life*. George Scott, London, 1740.—Summary of Ray's life with some additional material. Ray is known primarily as a botanist, but his geological observations and writings—not sufficiently recognized by historians of geology—were extensive, penetrating and essentially modern.
- Lankester, E., ed.** *Memorials of John Ray*. Ray Society, London, 1846.—Reprinting of Derham's biography with bibliography, and notices by J. E. Smith, Cuvier, and other materials.—*Correspondence of John Ray*. Ray Society, London, 1848.—Interesting letters of Ray, some originally published by Derham, in Latin and English. Explanatory notes would have increased their value.

- Raven, C. E.** *John Ray Naturalist, his Life and Works.* University Press, Cambridge, 1942. (second ed. 1950).—The definitive biography and summary of Ray's scientific contributions. A great scientific biography.
- RAYMOND, Rossiter Worthington. 1840–1918.** **Rickard, T. A., ed.** *Rossiter Worthington Raymond, a Memorial.* Am. Inst. Min. Engr., New York, 1920.—Trained at Freiberg as were Pumpelly and other Americans, Raymond was mining engineer, metallurgist, lawyer, churchman, author, editor, and organizer and long-time guiding officer of the American Institute of Mining Engineers. His work touched economic geology and geologists at many points.
- Various.** *Dinner Given to Rossiter Worthington Raymond by his Friends in Commemoration of his seventieth Birthday, April 27, 1840. Saturday April the thirtieth, one thousand nine hundred and ten, The Plaza, New York.* 1910.—Sumptuous report of laudatory speeches. (Copies may have guest's name imprinted on leather cover.)
- RICKARD, Thomas Arthur. 1864–.** *Retrospect, an autobiography.* Whittlesey House, New York, 1937.—Very readable recollections of an eminent mining geologist.
- ROGERS, William Barton. 1804–1882.** **Rogers, Mrs. W. B., assisted by W. T. Sedgwick.** *Life and Letters of W. B. Rogers.* 2 vols., Houghton, Mifflin and Co. Boston and New York, 1896.—Teacher of chemistry, natural philosophy and geology; state geologist of Virginia, noted for early work (with his brother H. D.) on Appalachian structures. Founder and first president of Massachusetts Institute of Technology.
- SAUSSURE, Horace Benedict de. 1740–1799.** **Freshfield, D. W.** *The Life of Horace Benedict de Saussure.* Edward Arnold, London, 1920.—Explorer, Alpinist, and great Alpine geologist and writer on the Alps. Good biography, well illustrated.
- Sennebie, Jean.** *Memoire historique sur le Vie et les Ecrits de Horace Benedict De Saussure.* J. J. Paschoud, Geneve, 1800.—Brief biography by a contemporary.
- SAY, Thomas. 1787–1834.** **Weiss, H. B., and G. M. Ziegler.** *Thomas Say, early American Naturalist.* Thomas, Springfield, Ill., 1931.—Say, who thought little of anything but his invertebrates, was a wistful and gentle figure in the roaring times when the midwest was the frontier.
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- SEDGWICK, Adam. 1785–1873.** **Clarke, J. W. and T. McK. Hughes.** *The Life and Letters of the Reverend Adam Sedgwick.* Cambridge Univ. Press. 2 vols., 1890.—Exhaustive record of one of the great figures ("the first of Men") in British Paleozoic geology.
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- SMITH, William. 1769–1839.** **Phillips J.** *Memoirs of William Smith. LL.D.* John Murray, London, 1844.—Biography of the "Father of English Stratigraphy," author of the classic map, by "his nephew and pupil."
- Sheppard, T.** *William Smith: his Maps and Memoirs.* A. Brown and Sons, Ltd., Hull, 1920. (Reprinted from Proc. Yorks. Geol. Soc. vol. 19, pt. 3).—Contains summary of pre-Smith geological maps and elaborate descriptions of Smith's maps and publications, and later references to them.

- Cox, L. R.** *New Light on William Smith and his Work.* Proc. Yorks. Geol. Soc., vol. 25.—Many interesting new details of Smith's life and work derived from study of a long neglected packing case in the Oxford University museum.
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- Scherz, G.** *Vom Wege Niels Stensen.* Munkesgaard, Copenhagen, 1956. (Acta Hist. Sci. Nat. Mee., vol. 14).—The latest appraisal of Steno's scientific work, including a German translation of Steno's MS catalogue of the geological collection in the Pitti Palace, Florence.
- STERNBERG, Charles Hazelius. 1850–1943. Sternberg, C. H.** *The Life of a Fossil Hunter.* Henry Holt. N. Y., 1909.—Sternberg was the great professional fossil collector in the western United States.
- Sternberg, C. H.** *Hunting dinosaurs in the bad lands of the Red Deer River, Alberta, Canada.* San Diego, 261 p., 1932.—Further reminiscences.
- STOPPANI, Antonio. 1824–1891. Tomaselli, R. Stoppani.** "La Scuola," Editrice, Brescia (Italy), 1948.—Short study of a famous Italian geologist and paleontologist.
- STOW, George B. William. 1822–1882. Young, R. B.** *Life of G. B. Stow, South African Geologist and Entomologist,* Longmans, Green, London, 1908.—Stow was another Robert Dick of South Africa.
- STRICKLAND, Hugh Edwin. 1811–1853. Jardine, W.** *Memoirs of Hugh Edwin Strickland, M.A.; selection from the scientific writings.* Van Voorst, London, 1858.—Geologist, paleontologist, and ornithologist, oriental traveller, and leader in early attempts to establish rules of zoological nomenclature, he was tragically killed while studying a section in a railroad cut.
- Suess, Eduard. 1831–1914. Suess, E.** *Eduard Suess: Errinerungen.* Hirzel, Leipzig, 1916.—Suess' *Das Anlitz der Erde* stands as one of the greatest syntheses of geological science.
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- SYMONDS, William Samuel. 1818–1887. La Touche, J. D.** *William S. Symonds, Rector of Pendock. Sketch of his life.* Gloucester, n.d.—Another of the devoted band of amateur geologists who flourished in England in the 19th Century, friend of Murchison and Lyell, and student of the geology of the Malvern Hills.
- TENISON-WOODS, Julian Edmund. 1832–1889. O'Neill, G.** *Life of the Reverend Julian Edmund Tenison-Woods.* Pellegrini, Sydney, Melbourne, & Brisbane, 416 p., 1929.—Dedicated and indefatigable Jesuit missionary-priest of Australia, who first made known many of the curious Tertiary fossil corals of that land.
- TYRRELL, Joseph Burr. 1858–1957. Loudon, W. J.** *A Canadian Geologist.* Macmillan Company of Canada, Toronto, 1930.—Tyrrell was survey geologist, Arctic explorer, Klondike mine manager and famous consulting mining geologist. His life spans much of development of Canadian geology.
- Tyrrell, J. W.** *Across the Subarctics of Canada, A Journey of 3,200 Miles by Canoe and Snowshoe Through the Barren Lands.* T. Fisher Unwin, London n.d. (ca. 1900?).—Matter-of-fact report of an exciting geological journey by J. B. Tyrrell and his brother.
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- WARD, Lester Frank. 1841-1913.** Chugarmann, S. *Lester Ward, the American Aristotle*. Duke Univ. Press, Durham, N. C., 1939.—This pretentious book on Ward's sociological diversions barely mentions this self-made, indomitable and indefatigable polyhistor's extensive work in geology and paleobotany.
- Cape, E. P.** *Lester F. Ward, A Personal Sketch*. Putnam's, New York, 1922.—Completely ignores Ward's work in paleobotany, useless from a scientific standpoint, hardly readable otherwise.
- WERNER, Abraham Gottlob. 1749-1817.** Beck, C. R. *Abraham Gottlob Werner, eine kritische Würdigung des Begründers der modernen Geologie, zu seinem hundertjährigen Tode-stage*.—Werner was the great neptunist. A great teacher, classifier and mineralogist, his attempts to explain all geology on the basis of a small area in Germany actually retarded geological advances for many years.
- Frisch, S. G.** *Lebensbeschreibung Abraham Gottlob Werner*. Leipzig, 1825.
- WESTON, Thomas C. 1832-1910.** Weston, T. C. *Reminiscences Among The Rocks in Connection With the Geological Survey of Canada*. For the author by Warwick Bros. and Butler, Toronto, 1898.—Autobiography of a Canadian geologist who was not always in agreement with his more famous contemporaries. Iconoclastic.
- WHEWELL, William. 1794-1866.** Douglas, Mrs. Stair. *The Life and Selections from the correspondence of William Whewell, D. D., late Master of Trinity College, Cambridge*. C. Kegan Paul & Co., London, 1881.—Professor of mineralogy at Cambridge; active in geology, mathematics and philosophy; academic administrator who knew all the scientific greats of the time. Carefully selected correspondence and a biography which tells far too little of Whewell's scientific work.
- WILLIAMS, George Huntingdon. 1856-1894.** Williams, T. *Biography of George H. Williams*. New York, 150 p., 1896.—Professor of geology at Johns Hopkins, mineralogist, petrographer, and student of metamorphic geology.
- WRIGHT, George Frederick. 1838-1921.** Wright, G. F. *Story of my Life and Work*. Bibliotheca Sacra, Oberlin, Ohio. 1916.—Not very geologically revealing autobiography of a clergyman and professor of theology at Oberlin who worked extensively and independently in glacial geology, but not always in agreement with all others.
- WHITNEY, Josiah Dwight. 1819-1896.** Brewster, E. T. *Life and Letters of Josiah Dwight Whitney*. Houghton Mifflin, New York, 1909.—Whitney was primarily an economic geologist known for his work in New England, the Lake Superior region, Iowa and California. Excellent biography relating the man to his times and fellow geologists.