

A LIST OF BOOKS ON THE PERSONALITIES OF GEOLOGY

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INTRODUCTION

Geological textbooks, memoirs, monographs, and reports properly deal with the facts, principles, deductions and applications of the science of the earth. Here and there the reader or student catches glimpses of the men who gathered the facts, made the deductions, and originated the philosophical principles; or finds fragments of the history of the development of geology. But aside from this vast storehouse of scientific information, there is a small but precious number of books recording the lives of geologists, their letters, travels, and history of their building our knowledge of the earth and its past.

The writer has not seen any lists¹ of this aspect of geology,—its “human side,” to overwork a tired phrase, and presents below a list of those which have come under his notice, with some annotations which may be of use to those who wish to read something about their predecessors, how they worked, their troubles and triumphs, their friends and adversaries. What geologist or enthusiast will not feel a glow of pleasure after having been, vicariously—

With the versatile Scottish editor, Hugh Miller, on the Island of Hoy, Orkney, as, wrapped in his plaid, he carved his initials of the Dwarfie Stone, under which he had sought shelter from the boreal rain; or with him and his friend the Parson of the Small Isles, as they cruised the waters of the Hebrides in the church yacht “Betsey”; or with him as he tramped the shores of Cromarty and discovered the weird fish of the Old Red Sandstone?

With the young and uncertain Charles Darwin, bitterly seasick as the “Beagle” battled her way through the Straits of Magellan towards the South Seas where first germinated in his mind the seed of evolutionary theory; or with him in Chile as he sees a rare fox intently watching officers working a theodolite and by quietly walking up behind, kills it with a blow of his geological hammer?

With the brilliant but hasty William Buckland as he crawled into Kirkdale Cavern in 1821 to discover a veritable boneyard of ancient mammal bones; or with him as he announces to his class at Oxford: “The next lecture will take place in the fields above the quarry at Stonesfield”?

With the eager young clergyman Adam Sedgwick, knowing little or nothing of geology, as he accepts the Woodwardian Professorship at Cambridge; or with him soon after as he struggles to unravel the Cambrian succession in North Wales?

With lofty-seeming but excitable Charles Lyell as he jolted and bounced by stage-coach from Cincinnati to Cleveland in 1842; or with him on his first trip to Switzerland as he walked from Chamonix over the Mer de Glace and other glaciers to Le Jardin and back—48 miles—“too much for one day”; or with him when he hired a smith to carve his initials and date on the rocks at water level on the Swedish coast so that later geologists might measure the rate of uplift; or with him again, now a baronet and the leading geologist of Britain, as he visits his queen at Osborne and expounds the Darwinian theory?

With the choleric titan of Albany, James Hall, as he took passage on the night steamer to New York and quietly threw overboard the entire edition of a geological chart on which his name failed to appear; or with him in horse and buggy, jogging

¹There are many biographical references, especially to periodicals, in Merrill's *Contributions to the History of American Geology*, Appendix B, pp. 689-715.

over the roads of the Finger Lake region of New York, unravelling the stratigraphy of the Devonian rocks and turning out their treasure-trove of fossils from which he wrested international fame?

With the young red-bearded giant, Raphael Pumpelly, as he posted across Siberia in the dead of winter, squeezed with another passenger, a handsome and mysterious young woman, in a sledge drawn by relays of galloping ponies?

With bold and ambitious Major Powell as he launched his boats on the Colorado River at Green River City for the first trip down the Grand Canyon,—a trip from which no one expected his return?

With the wealthy bachelor, Othniel Charles Marsh of Yale and his group of adventurous students as they braved the very real dangers of the West in 1870 to plunder the vast Tertiary mammal deposits; or with him as he awaited a reply to a cablegram sent to Professor Geinitz in an effort to buy the second specimen of *Archeopteryx*?

Or with zealous Amos Eaton in 1826 as he took a party of students on a geological tour by canal boat ("The School Flotilla") on the new Erie Canal,—one of the first summer field courses?

ANNOTATED LIST

In the list below, divided into five groups: *biographies*, *journals* and *diaries*, *travels*, *histories of geology*, and *miscellaneous*, the arrangement is alphabetical by authors except for the biographies which are listed according to the name of the subject of the book. With one or two exceptions, the list includes only those which have appeared as *books*, and thus deliberately excludes the numerous short biographical notices and memoirs, and sketches which have appeared in various journals. It is certainly incomplete, and the writer will welcome additions and corrections.²

BIOGRAPHIES

Agassiz, A. Agassiz, G. R. *Letters and Recollections of Alexander Agassiz*. Houghton Mifflin, 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, L. Agassiz, E. C. *Louis Agassiz, his Life and Correspondence*. 2 vols., Macmillan, 1885.

Founder of studies of glaciation, author of the greatest work on fossil fishes, founder of the Museum of Comparative Zoology at Cambridge.

———. *Louis Agassiz, sa Vie et sa Correspondence*. (transl. by A. Mayor.) Paris, 1887. French edition, with slight additions, of the preceding.

Holder, C. F. *Louis Agassiz, his Life and Work*. Putnam's, N. Y., 1893.

Parson Weemsish, fulsome, derivative, unimportant.

Marcou, J. *Life, Letters and Works of Louis Agassiz*. New York, 1896.

Louis Agassiz seen through the eyes of his erratic but brilliant friend.

Robinson, M. L. *Runner of the Mountain Tops; the Life of Louis Agassiz*. Random House, N. Y., 1939.

A recent study, much less definitive than the preceding.

Andrews, R. C. Andrews, R. C. *Under a Lucky Star, a Lifetime of Adventure*. Viking Press, 1943.

Lively autobiography of the leader of the American Museum's expeditions to the Gobi Desert.

Bailey, L. W. Bailey, J. W. *Loring Woart Bailey*. J. & A. McMillan, St. John, N. B., 1925.

²Many important additions to the writer's original list were made by Dr. George W. White, of the University of Illinois; for which, sincere thanks are here given.

- Barbour, T.** Barbour, T. *Naturalist at Large*. Little, Brown, 1943.
Extremely readable anecdotes, mostly zoological, by the late Director of the Museum of Comparative Zoology.
- Brongniarts Launay, L. de.** *Les Brongniarts, 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 Sèvres porcelain factory and son of an eminent architect. Adolphe, his son, was famous as a botanist and paleobotanist.
- Buckland, W.** Gordon, Mrs. *The Life and Correspondence of William Buckland, D.D., F.R.S.* Appleton, 1894.
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.
- Clarke, E. D.** Otter W. *The Life and Remains of Edward Daniel Clarke*. 2 vols., London, 1825.
Professor of Mineralogy at Cambridge, famous traveller.
- Condon, T.** 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, T. A.** 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, E. D.** 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, J.** Croll, James. *Autobiographical Sketch, with Memoir, by J. Campbell*. London, 1896.
Croll is noted for his contributions to the problem of the causes of continental glaciation.
- Cuvier, G.** Lee, Sarah. *Memoirs of Cuvier*. London, 1833.
- Dana, J. D.** Gilman, D. C. *The Life of James Dwight Dana*. Harper's, 1899.
Accurate, but dull and lifeless.
- Darwin, C.** (Darwin, F., ed.). *Life and Letters of Charles Darwin*. 3 vols., London, 1887.
Bettany, G. T. *Life of Charles Darwin*. Scott, London, 1887.
Short but well-written.
West, Geoffrey. *Charles Darwin, a Portrait*. Yale Univ. Press, 1938.
One of the best modern studies of Darwin.
Kingston, R. W. G. *Darwin*. London, 1934.
- David, T. E.** David, M. E. *Professor David, the Life of Sir Edgeworth David*. Arnold, London, 1937.
Very readable life of Australia's great field geologist and teacher.
- Dawson, J. W.** Dawson, J. W. *Fifty Years of Work in Canada*. (ed. by Rankine Dawson.) London & Edinburgh, 1901.
Discoverer of air-breathers in the Carboniferous of Nova Scotia, of *Eozoon*, professor of geology and principal of McGill University.
- Dick, R.** 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.
- Eaton, A.** McAllister, E. M. *Amos Eaton, Scientist and Educator, 1776-1842*. Univ. Pennsylvania Press, 1941.
Remarkably thorough study of one of the pioneer teachers of science in America, builder of Rensselaer Polytechnic Institute.
- Forbes, J. D.** Shairp, Tait & Adams-Reilly. *Life and Letters of James David Forbes, F.R.S.* Macmillan, 1873.
Forbes, professor of natural philosophy at Edinburgh, later at St. Andrews, is famous for his studies of glaciers.

- Forbes, E.** Wilson, G., & A. Geikie. *Memoir of Edward Forbes*. 1860.
Edward Forbes was a pioneer in the study of animal ecology and geography.
- Geikie, A.** Geikie, A. *A Long Life's Work, an Autobiography*. Macmillan, London, 1924.
Geikie was an outstanding figure in British geology, long director of the Geological Survey of Great Britain.
- Geikie, J.** Newbiggin, M. I., and J. S. Flett. *James Geikie, the man and the geologist*. Edinburgh & London, 1917.
- Hall, J.** Clarke, J. M. *James Hall of Albany, Geologist and Paleontologist, 1811-1898*. Albany, 1921.
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.
- Horner, L.** Lyell, K. M. *Leonard Horner*. 2 vols., London, 1890.
Horner was a Scottish geologist and merchant, the father-in-law of Charles Lyell.
- Houghton, D.** Bradish, A. *Memoir of Douglas Houghton*. Detroit, 1889.
Includes reprints of early geological writings of Houghton, pioneer Michigan geologist.
- Hubbard, B.** Hubbard, B. *Memorials of a Half-Century in Michigan and the Lake Region, 1814-1896*. Putnam's, N. Y., 1888.
- Huxley, T. H.** Huxley, L. *Life and Letters of Thomas Henry Huxley*. 2 vols., Appleton, 1901.
Huxley, celebrated biologist and forensic scientist, was the friend of Darwin and champion of the theory of evolution.
- King, C.** *Clarence King Memoirs (The Helmet of Mambrino)*. Putnam, 1904. (Publ. for King Memorial Comm. of Century Ass'n.).
- Kornitzer, L.** Kornitzer, L. *Gem Trader*. Sheridan House, 1939.
The commerce of gem-stones, by an old and skilled dealer.
- (French Savants).** Lacroix, A. *Figures de Savants*. 2 vols., 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.
- Lamarck, J. B. P.** Roule, L. *Lamarck et l'Interpretation de la Nature*. Paris, 1927.
Lamarck was the famous zoologist and paleontologist, proposer of an important pre-Darwinian evolutionary hypothesis.
- Packard, A. S. *Lamarck, the Founder of Evolution, his Life and Work, with Translation of his writings on organic Evolution*. Longmans, Green, N. Y., 1901.
- LeConte, J.** (Armes, W. D., ed.) *Autobiography of Joseph LeConte*. Appleton, 1903.
Very readable reminiscences of the student of Louis Agassiz and early professor of geology at the University of California.
- Lesley, J. P.** Ames, M. L. *Peter and Susan Lesley*. 2 vols., Knickerbocker Press, N. Y., 1909.
- Linnaeus, C.** Hagberg, K. *Carl Linné, "Le Roi des Fleurs."* (transl. from Swedish by Hammar and Metzger.) Paris, 1944.
- Logan, W. E.** Harrington, B. J. *Life of Sir William E. Logan*. London, 1883.
Good biography of a pioneer in Canadian geology.
- Lyell, C.** (Lyell, Mrs., ed.) *Life, Letters, and Journals of Sir Charles Lyell, Bart.* 2 vols., Murray, London, 1881.
Thoroughly readable selections from the letters and journals of the celebrated British geologist, scientific descendant of Hutton and expounder of uniformitarianism.
- Bonney, T. G. *Charles Lyell and Modern Geology*. Macmillan, N. Y., 1895.
Based upon the "Life and Letters," but a more connected biography.
- Mantell, G.** Spokes, S. *Gideon Algernon Mantell*. London, 1927.
- Marsh, O. C.** Schuchert, C., & C. M. LeVene. *O. C. Marsh, Pioneer in Paleontology*. Yale Univ. Press, 1940.
An excellent companion volume to Osborn's "Cope." Marsh and Cope, the outstanding American vertebrate paleontologists, were bitter rivals.

- Michell, J.** Geikie, A. *Memoir of John Michell*. Cambridge Univ. Press, 1918.
Michell was "Fellow of Queen's College in Cambridge, 1749, Woodwardian Professor of Geology in the University, 1762."
- Miller, H.** Brown, T. N. *The Life and Times of Hugh Miller*. New York, 1859.
Poor.
Miller, H. *My Schools and Schoolmasters; or, the Story of my Education*. Boston, 1863.
The best extant account of the early life of Hugh Miller.
- Bayne, P. *The Life and Letters of Hugh Miller*. 2 vols., London, 1871.
A long, prosy, dull, poorly-documented, and generally unsatisfactory biography.
- Leask, W. K. *Hugh Miller*. Edinburgh & London (Famous Scots Series), 1896.
Excellent brief biography.
- Mitchell, S.** Hall, C. R. *A Scientist in the Early Republic, Samuel Latham Mitchell, 1764-1831*. Columbia Univ. Press, 1934.
A fair study of one of the more important early "all-round" scientists of America, friend and helper of many others.
- Murchison, R. I.** Geikie, A. *Life of Sir Roderick I. Murchison*. 2 vols., 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.
- Owen, D. D.** Hendrickson, W. B. *David Dale Owen, Pioneer Geologist of the Middle West*. Indiana Historical Collections, vol. 27, 1943.
Owen was one of the most tireless and able of the early American geologists.
- Owen, R.** 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.
- Pengelly, W.** Pengelly, H. *A Memoir of William Pengelly of Torquay, F.R.S., Geologist*. Murray, London, 1897.
Schoolmaster and keen "amateur" geologist.
- Percival, J. G.** Ward, J. H. *Life and Letters of James Gates Percival*. Ticknor and Fields Boston, 1866.
Poet and first state geologist of Connecticut.
- Powell, J. W.** (Gilbert, G. K., ed.) *John Wesley Powell; a Memorial to an American Explorer and Scholar*. Chicago, 1903.
Powell was one of the founders of the United States Geological Survey, famous for his geological explorations in the West.
- Prestwich, J.** Prestwich. *Life and Letters of Sir Joseph Prestwich*. London & Edinburgh, 1899.
- Pumpelly, R.** Pumpelly, R. *My Reminiscences*. 2 vols., Henry Holt, 1918.
One of the most readable of scientific autobiographies, well-known for its real adventure and anecdotes.
- Rafinesque, C.** Rafinesque, C. R. *A Life of Travels*. *Chronica Botanica*, vol. 8, 1944. (1st ed., Phila., 1836.)
Fascinating self-portrait of one of the eccentrics of natural history, prodigious laborer among the hosts of new animals, plants, and fossils of America.
Fitzgerald, T. *Rafinesque, a Sketch of his Life, with Bibliography*. Des Moines, 1911.
- Ramsay, A. C.** Geikie, A. *Memoir of Sir Andrew Crombie Ramsay*. Macmillan, 1895.
Excellent for its summaries of work of the period and portraits of geologists of the time.
- Rogers, W. B.** Rogers, W. B. *Life and Letters of W. B. Rogers*. 2 vols., Riverside Press, Cambridge, Mass.
- Saussure.** Freshfield, D. W. *The Life of Horace Benedict de Saussure*. 2 vols., London, 1920.
- Say, T.** Weiss, H. B., & 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.

- Scott, W. B.** Scott, W. B. *Some Memories of a Paleontologist*. Princeton Univ. Press, 1939.
Highly interesting, and in places equally diverting, recollections of one of our great vertebrate paleontologists.
- Sedgwick, A.** Clarke, J. W., & T. McK. Hughes. *The Life and Letters of the Reverend Adam Sedgwick*. 2 vols., Cambridge Univ. Press, 1890.
Exhaustive record of one of the great figures in British geology.
- Shaler, N. S.** Shaler, N. S. *The Autobiography of Nathaniel Southgate Shaler, with a supplementary Memoir by his Wife*. Houghton Mifflin, 1909.
- Silliman, B.** Fisher, G. P. *Life of Benjamin Silliman*. 2 vols., Scribner's, N. Y., 1866.
Life of the chemist, mineralogist, and founder of the *American Journal of Science* ("Silliman's Journal"), valuable for letters from other scientists of the early decades of the 19th Century.
- Sherborn, C. D.** Norman, J. R. *Squire. Memories of Charles Davies Sherborn*. Harrap, London, 1944.
A fine account of one of the interesting figures at the British Museum (N. H.), famous bibliographer, indexer, and ferret of scarce scientific books.
- Smith, W.** Phillips, J. *Memoirs of William Smith, LL.D.* London, 1844.
Cox, L. R. *New Light on William Smith and his Work*. Proc. Yorks. Geol. Soc., vol. 25.
- Sternberg, C. H.** 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.
- Stow, G. B.** Young, R. B. *Life of G. B. Stow*. London, 1908.
Stow was the Robert Dick of South Africa.
- Werner, A. G.** Frisch, S. G. *Lebensbeschreibung Abraham Gottlob Werner*. Leipzig, 1825.
Beck, R. *Abraham Gottlob Werner, eine kritische Würdigung des Begründers der modernen Geologie, zu seinem hundertjährigen Todestage*. Berlin, 1918.
- Ward, L. F.** Cape, E. P. *Lester F. Ward, a personal Sketch*. Putnam's, 1922.
Completely ignores Ward's work in paleobotany, useless from a scientific standpoint, hardly readable otherwise.
- Whitney, J. D.** Brewster, E. T. *Life and Letters of Josiah Dwight Whitney*. Houghton Mifflin, N. Y., 1909.
- Wright, G. F.** Wright, G. F. *Story of my life and work*. Bibliotheca Sacra, Oberlin, Ohio, 1916

JOURNALS AND DIARIES

- Barlow, N.** *Charles Darwin and the Voyage of the Beagle*. Philosophical Library, N. Y., 1946.
Selected series of letters, many hitherto unpublished, by Darwin, with extracts from his diary, during the voyage of the *Beagle*.
- Curwen, E. C.** *The Journal of Gideon Mantell, Surgeon and Geologist*. Oxford Univ. Press, 1940.
The revealing journal of the discoverer of Iguanodon, especially interesting for its candid remarks on famous geologists of the early 1800's.
- Darwin, C.** *Journal of Researches into the Geology and Natural History of the various Countries visited during the Voyage of H. M. S. Beagle*. First Ed., 1839 (many other editions).
One of the "musts" for every student of earth sciences.

TRAVELS

- Agassiz, E. C.** *A Journey to Brazil*. Boston & N. Y., 1895.
- Agassiz, L.** *Lake Superior: its Physical Character, Vegetation, and Animals . . . With a Narrative of the Journey by J. Elliott Cabot, and Contributions by other Scientific Gentlemen*. Boston, 1850.
Agassiz's first geological work in the United States.
- Ansted, D. T.** *Scenery, Science and Art*. London, 1854.
". . . extracts from the note-book of a geologist and mining engineer."
- Campbell, J. F.** *My Circular Notes*. 2 vols., Macmillan, London, 1876.
Letters from a leisurely round-the-world jaunt, with geological and other observations, by the author of "Frost and Fire." Interesting for the author's somewhat eccentric outlook.

- Collini, M.** *Journal d'un Voyage, qui contient different Observations minéralogiques.* Mannheim, 1776.
Account of a trip through the Rhine Valley region searching for materials for the cabinet of the Elector of the Palatinate; interesting observations on the columnar basalts which Collini discovered in the Rhine Gorge.
- De Luc, J. A.** *Geological Travels.* 3 vols., London, 1810–11.
Geological Travels in some parts of France, Switzerland and Germany. 2 vols., London, 1813.
- Dennison, L.** *Caroni Gold.* Hastings House, 1943.
Adventures of a mining geologist in the gold-workings on the Caroni river in south-eastern Venezuela.
- Faujas de Saint Fond, B.** *A Journey through England and Scotland to the Hebrides in 1784* (transl. by A. Geikie). 2 vols., Glasgow, 1907.
Very readable account of a geological tour by a famous geologist of the 18th Century. Faujas was one of the first geologists to visit Fingal's Cave, Island of Staffa.
- Forbes, J. D.** *Travels in the Alps of Savoy and other parts of the Pennine Chain, etc.* Black, Edinburgh, 1843.
Classical reading for students of glaciation; early theory of glacial movement.
- Lyell, C.** *Travels in North America in the Years 1841–42.* 2 vols., New York, 1845.
Lyell came to America to give the Lowell lectures and took the opportunity to travel widely, studying not only the geology but also the manners and ways of the New World,—he found much that was good, some that was bad.
A Second Visit to the United States of North America. 2 vols., London, 1849.
- Miller, H.** *The Cruise of the Betsy; or, a Summer Ramble among the fossiliferous Deposits of the Hebrides.* (With: *Rambles of a Geologist; or, Ten Thousand Miles over the fossiliferous Deposits of Scotland.*) Boston, 1858.
Perhaps the most readable of Hugh Miller's works. If one does not long to visit the Hebrides and the Orkneys after reading this, he does not much love geology.
- Pfritzenmayer, E. W.** *Les Mammouths de Sibérie* (transl. from Russian by G. Montandon.) Payot, Paris, 1939.
Absorbing story of two expeditions to northeastern Siberia to recover frozen mammoth carcasses.
- Pumpelly, R.** *Across America and Asia. Notes of a five years' Journey around the World and of Residence in Arizona, Japan and China.* New York, 1870 (several eds.).
Pumpelly's famous trip around the world via an unusual route. Also re-counted in shorter form in his "Reminiscences" (see *Biographies*).
- Rainier, P.** *My vanished Africa.* Yale Univ. Press, 1940.
American Hazard. Murray, London, 1942.
Green Fire. Random House, N. Y., 1942.
Exciting account of a mining geologist's work re-opening some of the celebrated emerald mines of Colombia.
- Schoepf, J. D.** *Beyträge zur mineralogischen Kenntniss des ostlichen Theils von Nord Amerika.* Erlangen, 1787.
One of the first, if not the first, books on the geology of North America.
Travels in the Confederation (1783–84). (Transl. by A. J. Morrison.) 2 vols. Campbell, Phila., 1911.
- Tavernier, J.-B.** *Travels in India by Jean-Baptiste Tavernier, Baron of Aubonne.* 2 vols., Oxford Univ. Press, 1925.
Tavernier made several trips to the Orient in the 17th Century. Much valuable first-hand information on the mines of Golconda and famous precious stones now lost.
- Willis, B.** *Living Africa, a Geologist's Wanderings in the rift Valleys.* Whittlesey House, N. Y., 1930.

HISTORY OF GEOLOGY AND RELATED SCIENCES

- Adams, F. B.** *The Birth and Development of the Geological Sciences.* Baltimore, 1938.
Thoroughly documented and exhaustive, but weak in the field of paleontology.

Berkey, C. P. (ed.). *Geology, 1888-1938. Fiftieth Anniversary Volume, Geological Society of America, 1941.*

Contains useful summaries of progress in the fields of geology during the first 50 years of the Geological Society of America.

Fenton, C. L., and M. A. Fenton. *The Story of the great Geologists.* Doubleday Doran, 1945.

Not as broad as the title indicates. Good, brief account of the founders of geology, but concentrating almost wholly on American geologists after reaching the middle of the 19th Century.

Flett, J. S. *The first Hundred Years of the Geological Survey of Great Britain.* London, 1937.

Geikie, A. *The Founders of Geology.* Macmillan, London, 1897; 2nd ed., 1905.

The best account of the development of geology during the 18th and 19th Centuries.

Kobell, F. von. *Geschichte der Mineralogie von 1650-1860.* Munich, 1864.

Margerie, E. de. *Critique et Géologie. Contribution à l'Histoire des Sciences de la Terre.* vol. 1, Paris, 1943.

Autobiographical review of de Margerie's great contributions to geology and geography, with many portraits, illustrations and facsimiles.

Merrill, G. P. *Contributions to the History of American Geology.* U. S. Nat. Mus. Rep. (1904), 1906.

Contributions to a History of American State Geological and Natural History Surveys. U. S. Nat. Mus., Bull. 109, 1920.

The first one hundred Years of American Geology. New Haven, Yale Univ. Press, 1924.

Peattie, D. C. *Green Laurels, the Lives and Achievements of the great Naturalists.* Lit. Guild, 1936.

Mainly about the great botanists and zoologists, but important to students of paleontology.

Ramsay, A. C. *Passages in the History of Geology.* London, 1848, 1849.

Rickard, T. A. *A History of American Mining.* McGraw-Hill, N. Y., 1932 (A. I. M. E. Series).

Woodward, H. B. *History of the Geological Society of London.* London, 1907.

History of Geology. Putnam's, N. Y., 1911.

Brief but comprehensive.

Zittel, K. A. von. *Geschichte der Geologie und Paläontologie.* 1899.

History of Geology and Paleontology (transl. by M. M. Ogilvie-Gordon). London & N. Y., 1901.

Brief, but still the best over-all history of geologic science. The German edition is longer.

MISCELLANEOUS

Benfield, E. *Purbeck Shop, a stonemason's Story of Stone.* Cambridge Univ. Press, 1940.

Well-written story of the ancient craft of winning and working Purbeck stone in England.

Barbour, T. *A Naturalist's Scrapbook.* Harvard Univ. Press, 1946.

More anecdotes, posthumously published, by the late director of the Museum of Comparative Zoology.

Digby, Bassett. *The Mammoth, and Mammoth-Hunting in North-East Siberia.* Appleton, N. Y., 1926.

Dohm, B. *Stielauge der Urkrebs, eine Kronik aus Urzeiten unserer Erde.* Leipzig, 1933, 1942.

The somewhat anachronistic but amusing life and loves of Stalkeye the Trilobite (*Cyphaspis ceratophthalmus*).

Geikie, A. *Geological Studies at Home and Abroad.* Macmillan, 1882.

Scottish reminiscences. Maclehose, Glasgow, 1904.

Lee, J. E. *Note-Book of an amateur Geologist.* Longmans, Green, 1881.

Mostly reproductions of sketches of geological structures from the notebook of a widely-travelled "amateur."

Lees, E. *Pictures of nature in the Silurian region around the Malvern hills and vale of Severn.* London & Malvern, 1856.

- Miller, Hugh.** *The Old Red Sandstone; or, new Walks in an old Field.* Boston, 1860 (1st ed., 1841).
One of the few literary classics of geology. Hugh Miller here first made known to the layman the ichthyological wonders of the Old Red Sandstone.
- Monnickendam, A.** *Secrets of the Diamond.* Frederick Muller, London, 1941.
One of the best recent books on the fascinating history of the diamond trade.
- Murdoch, A.** *Boom Copper.* Macmillan, N. Y., 1943.
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