

inference, but by the direct association of morainic deposits with the lake beds. The volcanic manifestations during and after the existence of the lakes, and the faults occurring in the shore deposits, add interesting complications to this remarkable region.

— Professor J. C. Smock, lately appointed chief of the New Jersey Geological Survey, where he some time ago served as assistant under the late director, Professor Cook, has prepared a report on the building-stones of New York, issued in the second volume of the bulletins of the University of the State of New York, where Professor Smock has been engaged as economic geologist of the State Museum for several years past. Reference is made to previous works of the kind, such as Julien's "Report on the Building-Stones of New York" in the Tenth Census, Merrill's "Building and Ornamental Stones in the United States National Museum," the author's quarry list in a previous bulletin, and others. The bulletin contains an introductory statement of the classification adopted: namely, crystalline rocks, embracing granites and gneisses, trap rocks, and limestones and marbles; second, fragmental rocks, including sandstones, conglomerates, and slates. The limestones and sandstones are further arranged according to the geological formations from which they are obtained. A hundred pages are then given to a recital of the localities of quarries throughout the State. The uses, tests, and durability of the different kinds of stones occupy as many more pages. Under the first of these headings, we find a list of stones used in the more

important buildings all over the State. A map is given at the end of the volume, with the names of quarry districts underlined in red.

— The first geological survey of Ohio was undertaken in 1836, and continued for two years. The work then lapsed until 1869, when it was begun again with greater vigor, Professor Newberry being in charge; and under his direction and that of his successor, Professor Edward Orton, numerous reports were issued down to 1888. Owing to the reckless and irregular method of distributing these volumes, complete sets are not often found, although editions of 20,000 of certain volumes were printed. In 1889 a third organization of the survey was made, and it is now regarded as a continuous official department of the State. Professor Orton is still in charge. The first annual report under these new conditions is just issued. It gives a brief review of the previous surveys, from which the above notes are taken; a general sketch of the results of the previous surveys, with corrections of certain earlier statements in the light of recent explorations; and a large amount of material concerning the natural gas and oil, which have attracted so much attention during the past six years. The extraordinary abundance of the natural gas is only equalled by the reckless manner in which it has been wasted. It is already decreasing, and, in Professor Orton's opinion, should be reserved chiefly for domestic uses. An excellent review of the theories accounting for the occurrence of oil and gas is given. This report

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—The "Investigations of the New England Meteorological Society" for 1889, includes, besides the usual tabular summaries, three essays on "Weather-Types in New England," "The Sea-Breeze on the New England Coast," as observed in 1887, and the "Characteristics of the New England Climate." The greater part of these are contributed by the director, Professor W. M. Davis of Harvard College, and Professor W. Upton of Brown University. The essay on weather types opens a line of writing that might be taken up to advantage in other State weather services, where some addition to the monotony of the annual tabular reports would be refreshing. The study of the sea-breeze is based on the reports of about a hundred volunteer observers on and near the eastern coast of Massachusetts, from Newburyport to Plymouth. The irregularity of the occurrence of the breeze is so great that it does not appear a hopeful subject for further study. Professor Upton

summarizes the climate of New England under the following headings: changeable and unsettled weather; great ranges of temperature, both daily and annual; variation of seasons from year to year; equable distribution of temperature; and variety of local features from the low southern coast to the mountainous northern interior.

—In *Lippincott's Magazine* for March, 1891, the first instalment of "Some Familiar Letters by Horace Greeley" form an interesting feature. This is a series of letters written by Horace Greeley to an intimate friend, and covers the period immediately preceding and during his political campaign. These letters are expected to remove many unfounded prejudices. Another of the series of "Round-Robin Talks" appears in this number. Among the guests are Paul B. Du Chaillu, George W. Childs, T. P. Gill, M.P., George Parsons Lathrop, Julian Hawthorne, and others. The *pièce de résistance* of this instalment is the story told by Paul Du Chaillu of his discovery of the gorilla in the wilds of Africa.

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