

NATIONAL GEOGRAPHIC SOCIETY, REGULAR
TECHNICAL MEETING, WASHINGTON,
D. C., FRIDAY EVENING, NOVEMBER 15.

The meeting was devoted to the discussion of the subject of the hydrography of the United States, in which five Government officers engaged in that work took part.

Mr. F. H. Newell, in charge of the Division of Hydrography in the U. S. Geological Survey, referred to the hydrographic work done by the Government through the agency of the Coast and Geodetic Survey, the Hydrographic Office, the Engineers' Office of the Army, and one or two other organizations, and pointed out the difference between that work and the work of the Geological Survey, the work of the organizations first named having reference in the main to the interests of commerce, while that of the last named Bureau is for the purpose of obtaining data of value relating to land irrigation, water power, and the supply of potable water. He then discussed in general terms the important work that the Geological Survey is doing in this line, with the small appropriation that it has for the purpose, and the methods followed.

Mr. Newell was followed by Prof. Willis L. Moore, Chief of the Weather Bureau, who outlined the objects and methods of the work of the flood-forecasting division of his Bureau in forecasting floods on the principal rivers, giving instances of how the people in certain regions had been warned of approaching floods, and how many lives and millions of property had thus been saved. He referred to the limited scope of the work, due to lack of funds.

Prof. Moore was followed by Mr. A. P. Davis and Mr. Cyrus C. Babb, both of the Geological Survey, in charge of stream measurements in the West and in the South and East, respectively. Mr. Davis stated the conditions which had governed the location and selection of gauging stations, mentioning State and private coöperation, necessitated by demands of economy, and describing the hydrographic basins, etc. Certain railroads and irrigation companies, he said, are making systematic stream measurements in the West. Two States, Kansas and Colorado, are coöperating by devoting a small sum of money to the work. Mr. Babb similarly

discussed the work done in connection with the streams of the Southern Appalachian region and on the Potomac. His work, which was begun but a few months ago, is the first of the kind yet done in the southern part of the country, and his paper was of particular interest.

The meeting closed with a paper by Mr. Marcus Baker, formerly of the Coast Survey, on the hydrography of the navigable waters, which was an interesting presentation of the subject from the point of view of navigation and commerce.

W. F. M.

GEOLOGICAL CONFERENCE OF HARVARD UNIVERSITY,
NOVEMBER 5, 1895.

The Great Barrier Reef of Australia. By J. B. WOODWORTH. Mr. Woodworth spoke of the work of Mr. Saville Kent. A selection of about forty stereopticon views from the set of photographs of the great coral reef was shown. The views, it was pointed out, illustrated the way in which lowly-organized animals in coral seas take the place of plants, and even of inorganic debris on coasts like those of New England. The leafy alcyonarians grow attached to the bottom and act as the sea-weeds do in fending off the waves, and in harboring free crawling forms of marine life. The coral heads and blocks torn up by hurricanes take the place of boulders along the shore line. This reef further shows how great limestones, such as the Trenton and Corniferous of the North American palaeozoic sea, could have been made at no great distance from land. The great limestone-making zone is at sea level and a few feet below. The conditions now existing in the Great Barrier Reef, where islets and lagoons form, permit of the existence of land vegetation, and the record of various forms of shallow water and surface species in the midst of processes of limestone-making, which geologists have been accustomed to consider indicative of deep sea. It is now clear, as Dr. Murray has pointed out, that there are two great classes of marine calcareous deposits; those of the deep sea proper not developed in the continental areas, except locally, and those of a strictly continental type, of which the fossil reefs of the New York State system and the Great Barrier Reef of Australia are past and present examples.