McGANN. 8vo. Trenton, N. J., 1899. Pp. 205. This Report contains a relief map of New Jersey, prepared by the Geological Survey of the State, with the note: "The influence of the diversified topography of New Jersey upon its climate is apparent by comparing this relief map with the temperature and rainfall charts which follow." This plan of publishing topographic maps of the different States in the Annual Reports of the Weather Services is an excellent one, and should be generally adopted.

Rivers of Oregon, Washington, Idaho and Western Montana. B. S. PAGUE. River Bulletin No.
I., 1899, U. S. Department of Agriculture, Weather Bureau. Portland Ore., 1899.

This valuable Bulletin, the first of its series, concerns the precipitation over the Pacific Northwest and the possibility of high water from the melting snow in the mountains. It contains a general forecast of the probable height of the Columbia River in May and June, as dependent upon the temperature conditions and the resulting more or less rapid melting of the snow on the mountains.

Monthly Rainfall Chart for Fifty Years at San Francisco. Compiled by HERMAN SCHUSSLER, C. E. Published by the Central Pacific Railroad Company.

A graphic representation of the monthly rainfalls for each year during the past fifty years.

R. DEC. WARD.

HARVARD UNIVERSITY.

A BRYOLOGICAL MEMORIAL MEETING.

COLUMBUS was the home for many years of William S. Sullivant and Leo Lesquereux, two names which will awaken love and reverence from all students of North American mosses and hepatics. It is twenty-six years since Sullivant died, and this last quarter of a century has seen a marked extension of the limits of bryological study and a large increase in the number of students. It seems a fitting time and place to take a survey of the field, review the past and make plans for the future. Hence it is proposed to make the coming meeting of the American Association for the Advancement of Science, which is to be held at Columbus, the occasion for a Memorial Day in honor of the Nestors of American Bryology and to call on all botanists and scientific magazines to help to make the occasion a memorable success. It is proposed to present a series of papers, illustrated by photographs, specimens and microscopical slides, books and pamphlets under the following topics:

Historical papers and collections showing the bryological work of Hedwig, Palisot de Beauvois, Michaux, Muhlenberg, Bridel, Torrey, Drummond, Hooker and Wilson, Greville, Sullivant and Lesquereux, James and Watson, Austin, Ravenel, Wolle, Eaton, Faxon and Müller; supplementing these there will be shown collections of specimens, macroscopic and microscopic, illustrating the monographic work of recent American students.

If foreign students who have worked on North America bryophytes can be persuaded to cooperate with us the following will be asked to contribute: Bescherelle, Brotherus, Cardot, Dixon, Kindberg, Mitten, Pearson, Roll, Stephani and Warnstorf.

An effort will be made to secure the loan of type specimens and illustrations from the following sources: The Academy of Natural Sciences of Philadelphia, Academy of Sciences of New York, Columbia University, The National Museum, The Ohio State University, The University of Wisconsin and Yale University, as well as from private collections. It is also intended to exhibit any portraits, autograph letters and type specimens and drawings of special interest, which may be loaned for the occasion, as well as presentation copies of books and pamphlets.

The following committee of organization will gladly answer questions and give assistance to those who wish to contribute : Professor Charles R. Barnes, University of Chicago; Mrs. N. L. Britton, New York Botanical Gardens; Professor W. A. Kellerman, Ohio State University; Dr. George G. Kennedy, Readville, Mass.; Professor L. M. Underwood, Columbia University.

SCIENTIFIC NOTES AND NEWS.

THE Royal Institution of Great Britain, in commemoration of its centenary, has elected a number of honorary members, including Professors S. P. Langley, Carl Barus, A. A. Michelson, R. H. Thurston, J. S. Ames and George F. Barker, and President W. L. Wilson.

THE American delegates to the Congress of Tuberculosis now meeting at Berlin are Dr. Boyd, of the Navy; Dr. Vaughan, of the Marine Hospital Service; Dr. De Schweinitz, of Department of Agriculture; Dr Stiles, scientific attaché to the embassy at Berlin.

MR. FRANK A. FLOWER, Chief Statistician of the State of Wisconsin, has been appointed Chief of the Agricultural Division of the Census.

OXFORD University has conferred the honorary degree of M.A. upon Mr. Roland Trimen, F.R.S., formerly Curator of the South African Museum, Cape Town, and late President of the Entomological Society of London.

LORD JAMES, of Hereford, has been elected chairman of the governing body of the Imperial Institute, London, in the room of the late Lord Herschel.

PROFESSOR GEORGE F. BARKER, of the University of Pennsylvania, and Professor Carl Barus, of Brown University, are among the American delegates attending the Jubilee of Sir George Stokes, of Cambridge.

PRESIDENT WILLIAM L. WILSON, of Washington and Lee University, has been chosen by the Regents of the Smithsonian Institution to represent them at the approaching celebration of the centennial of the Royal Institution of Great Britain.

THE St. Petersburg Geographical Society has awarded its great gold medal to Dr. G. Radde, Director of the Caucasian Museum at Tiflis.

MAJOR Ross, who has recently been appointed lecturer at the newly established school of tropical diseases at University College, Liverpool, has given a lecture before the Biological Society of that city on the relations of the malarial parasite to the mosquito, to which his own researches have been such an important contribution.

THE death is announced of Sir Frederick McCoy, F.R.S., professor of natural sciences at Melbourne University. We learn from the London *Times* that he was born in Dublin in 1823 and that he was educated for the medical profession at Dublin and Cambridge Universities, but early devoted himself to natural science. Sir R. Griffith invited him to make the paleontological investigations for the Geological map of Ireland for the boundary survey, the results of which he published in 1844. Afterwards he joined the Imperial Geological Survey of Ireland, and Sir R. Peel's government appointed him professor of geology in the Queen's University in 1850. Professor McCov undertook, in conjunction with Professor Sedgwick, a large work on paleozoic rocks and fossils based on the Woodwardian collection at Cambridge. In 1854 he was appointed the first professor of natural science in Melbourne University, and held the chair till his death. His services to Victoria were considerable, notably in regard to the Geological Survey of the colony, as a member of various commissions, and as the founder of the Melbourne National Museum. In 1880 he was elected F.R.S., and was one of the first to receive the honorary degree D.Sc. from Cambridge. In 1886 he was made a C.M.G., and in 1891 he was promoted to be K.C.M.G. Sir F. McCoy also received the Order of the Crown of Italy from King Victor Emanuel, the Emperor of Austria's great gold medal for arts and sciences, the Murchison medal of the Geological Society of London, and many similar distinctions.

DR. LUDWIG STRÜMPELL, professor of philosophy and pedagogy at Leipzig, has died at the age of 87 years. He was an eminent representative of the Herbartian School.

MR. H. B. HEWETSON, an eminent English oculist, has died at the age of 49 years. He was the author of numerous scientific contributions, being a member of the Zoological, Linnæan and Geographical Societies and a member of the Ornithologists' Union.

DR. THEODOR VON HESSLING, formerly professor of anatomy in the University of Munich, has died at the age of 83 years.

THE Rev. T. Neville Hutchinson, died on May 6th at the age of 73 years. Mr. Hutchinson was science master at Rugby from 1866–83 and did much to introduce the study of science in the English public schools.

THE Secretaries of the Sections of the American Association for the Advancement of Science are sending to members notices of the Columbus meeting, which opens on August 21st. It is hoped that good programs may be arranged for the various sections at an early date.

THROUGH elections at the annual meeting on May 19th, and designations at the ensuing meeting of the Board of Managers, the organization of the National Geographic Society for the ensuing year was made as follows: President, Alexander Graham Bell; Vice-President, W J McGee; Treasurer, Henry Gannett; Recording Secretary, F. H. Newell; Corresponding Secretary, Willis L. Moore; Foreign Secretary, Eliza Ruhamah Scidmore; additional members of the Board, Marcus Baker, Charles J. Bell, Henry F. Blount, F. V. Coville, G. K. Gilbert, General A. W. Greely, Assistant Secretary David J. Hill, John Hyde, S. H. Kauffmann, Director C. Hart Merriam, Superintendent W. B. Powell, Superintendent Henry S. Pritchett and J. Stanley-Brown.

THE 12th International Congress of Orientalists will meet at Rome on October 12, 1899. Cards of membership (\$4.00) may be obtained from Mr. Cyrus Adler, Smithsonian Institution, Washington, D. C.

THE New York State Civil Service Commission announces that examinations will be held on June 9th and 10th, which will include the position of assistant in zoology in the State Museum, with a salary of \$900; the positions of sanitary, electrical and heating experts in the office of the State Architect, with salaries from \$1,200 to \$1,500; and the position of bridge designer and inspector in the State Engineer's Office, with a salary of from \$1,800 to \$2,400. The examination for an assistant in dietary experiments has been postponed to June 10th.

DR. DANIEL G. BRINTON, professor of American archæology and linguistics at the University of Pennsylvania, has presented to the University his collection of books and manuscripts relating to the aboriginal languages of North and South America. The collection represents a work of accumulation of twenty-five years, and embraces about 2,000 volumes, in addition to nearly 200 volumes of bound and indexed pamphlets bearing on the ethnology of the American Indians. Many of the manuscripts are unique. A number of the printed volumes are rare or unique and of considerable bibliographical importance. The collection of works on the hieroglyphic writings of the natives of this country embraces nearly every publication on the subject. The special feature of the library is that it covers the whole American field, North, Central and South, and was formed for the special purpose of comparative study.

THE collection of shells of the late Mr. Henry D. Van Nostrand, recently given to Columbia University, is well known among malacologists as one of the most valuable of private collections in the country; it contains the larger and better portion of the land shells of the West Indies collected by Thomas Bland, including many types, together with many of the rarest specimens of the Perry Expedition.

THE Technical Education Board of the London County Council is cooperating with the Asylums Committee in offering a scholarship of £150 a year, tenable for two years, for students of either sex (preferably qualified practitioners), to enable them to carry on investigations into the preventible causes of insanity. The scholar will carry on investigations in the pathological laboratory attached to Claybury Asylum.

PROFESSOR A. G. NATHORST, of the Imperial Museum of Natural History of Stockholm, with several scientific companions, sailed from Helsingfors on May 25th to search along the northeast coast of Greenland for Andrée. Professor Nathorst hopes to meet the *Fram* with Captain Otto Sverdrup.

MR. A. C. HARRISON, JR., Mr. W. H. Furness and Dr. H. M. Hiller, who recently returned from an exploration of Borneo, with collections for the University of Pennsylvania, are about to start on another expedition. They expect to make explorations in the northern part of Burmah and make archæological and ethnological collections.

WE announced last week the laying of the foundation stone of the new building which is to complete the South Kensington Museum, hereafter to be officially known as the Victoria and Albert Museum. This building will contain the art and industrial collections, while new buildings for the Royal College of Science will be begun at once. The sum of $\pounds 300,000$ has been appropriated for these buildings, which will occupy a position directly facing the Imperial Institute.

THE new building erected in the Dublin Zoological Gardens in memory of the late Professor Samuel Haughton was formally opened on May 19th by the Lord-Lieutenant, in the presence of a large gathering. Field-Marshal Lord Roberts, President of the Royal Zoological Society, described the purpose of the meeting and said that the new building was intended as a tribute to the memory of Dr. Haughton, whose name was intimately connected with many of the leading institutions in Dublin, but with none more closely than with the Royal Zoological Society, of which he had been five years President and 21 years Honorary Secretary.

THE City of Philadelphia has appointed a committee of expert engineers consisting of Rudolph Hering, of New York, Samuel Gray, of Providence, R. I., and Joseph L. Wilson, of Philadelphia, to make an investigation of the water supply of Philadelphia.

An institute for the study of tropical medicine will be established at Berlin, with Dr. Koch as Director.

THE Electrical World abstracts from English journals an account of the early work of Professor Huges (inventor of the microphone), in wireless telegraphy by means of etheric waves; it appears to be the first published account of his experiments, which were made in 1879. He was experimenting with his microphone and induction balance, and found that the microphone produced a sound in the receiver even when it was placed several feet distant from the coils through which an intermittent current was passing and not in any other way connected. He found that the whole atmosphere, even in several rooms distant from there, would be invisibly changed and that this could be noticed with a microphone and telephone receiver. He experimented on the best form of receiver for these invisible electric rays, which he found would pass over great distances through walls, etc. He found that carbon contacts or a piece of coke resting on bright steel were very sensitive and self restoring receivers. A loose con-

tact between metals, while equally sensitive, required restoring. He also used the microphone as a relay in detecting such rays. He endeavored to discover the best receiver so as to utilize such waves for the transmission of messages. He showed his experiments to a number of well-known physicists at that time. The distance was 60 feet in the building, but he also took the instrument on the street, and walked away from the transmitter, obtaining signals up to 500 yards. He claimed the existence of the waves at that time, but was unable to convince others of their presence. He also calls attention to still earlier experiments of Professor Henry, of Princeton (U.S.), which were published by the Smithsonian Institution, Vol. I., p. 203, the date being probably about 1850; he magnetized a needle in a coil 30 feet. distant; also by a discharge of lightning eight, miles distant.

UNIVERSITY AND EDUCATIONAL NEWS.

THE election of Professor Arthur T. Hadley to the presidency of Yale University by the Corporation on May 25th marks the beginning of a new era in the development of a great university. Yale has adhered more closely than most of our larger institutions to the clerical and classical traditions of the American college, and President Hadley, while conserving what is good, will undoubtedly use his influence to make Yale, as a university, the equal of Harvard. Like the Presidents of Harvard, Johns Hopkins and Stanford Universities, President Hadley may be claimed as a man of science, his work on railway transportation and other subjects being strictly scientific in character.

CLARK University proposes to celebrate its decennial by special exercises beginning on July 5th. These will include lectures by eminent foreign men of science. Invitations to speak having been accepted by M. Émile Picard, professor of mathematics at the University of Paris and a member of the Institute; Dr. Angelo Mosso, professor of physiology at the University of Turin; and Dr. Santiago Ramon y Cajal, professor of histology and pathological anatomy at the University in Madrid.

A SPECIAL course in the fundamental problems of geology intended particularly for college