

and Hay Creek regions, general observations on the Cretaceous flora, fossil cycadean trunks, fossil forests, lower Cretaceous plants other than cycadean trunks and silicified wood, and the flora of the Dakota group proper.

PROFESSOR VIRCHOW'S JUBILEE.

THE Berlin correspondent of the *British Medical Journal* writes: It was to be expected that Rudolf Virchow's Jubilee—the 50th anniversary of his tenure of office as Professor Ordinarius—would not be passed over in silence by the University of which he is, perhaps, the most illustrious member. No banquet or similar social function took place, it is true; nor was there any array of State delegates or representatives of foreign universities. In the hall of the Pathological Museum (Virchow's own creation) the Senate of the University, its Rector, Professor Fuchs, at their head, assembled to greet their revered and honored colleague, and to present an illuminated and illustrated address, the text of which had been written by Professor Waldeyer. In it Virchow's wonderful many-sidedness, and his achievements as scientist, archæologist, and politician were recounted in glowing terms. "We all know, however," the address went on to say, "that the roots of your strength lie in your work as a German Professor, and ever the 'Professor' has been foremost with you. We know that, even in your 78th year when the day's work is done, the night hours are devoted by you to scientific research * * * Thus we see you to-day in our midst, the Professor Ordinarius of five decades, active among the most active, beloved, honored and admired by thousands of pupils, colleagues, and men of all orders in every part of the world. In honoring you, who in your long, laborious life have ever had at heart the honor and weal of the German universities, and above all of the Alma Mater, Friederica Guilelma Berolinensis, we honor ourselves. May your strength be long preserved to us!" Virchow, who was surrounded by his family and many personal friends, in his reply gave expression to his thanks for the support which he had always met with on the part of the university, and said it was true that his chief feel-

ing had ever been that of 'the Professor.' In cases of conflicting interests he had always chosen the course of 'Professor.' He said that, like others of his age, he was sometimes conscious of a certain isolation, many friends and fellow-workers having gradually fallen out of the ranks. But the best results of his work had always been due to the independent efforts of his pupils, and he had the firm hope that the pathological school of Berlin would retain its distinguished position. In the evening the Berlin Medical Society did homage to its President (Virchow) by a graceful little spontaneous ceremony. The Presidential chair was wreathed and decorated with flowers and garlands, and the Vice-President, Professor v. Bergmann, greeted Virchow with a speech full of hearty good feeling, respect and admiration. Virchow seemed sincerely touched, and expressed his thanks in a short speech. Subsequently, he took a prominent part in the evening's debate on Organo-therapeutics, thus proving mental unimpaired activity even at the end of a day of ovations and congratulatory speeches.

SCIENTIFIC NOTES AND NEWS.

THERE will be a meeting of the general committee of the American Association for the Advancement of Science at Yale University, New Haven, Conn., on December 28th at 4:30 p. m. It will be the sad duty of the committee to elect a president to fill the vacancy caused by the death of Professor Edward Orton. Immediately following the meeting of the committee a meeting of the Council will be held to consider the general business of the Association.

THE desirability of forming a western branch of the American Society of Naturalists, with the same objects and conditions of membership as the main society, has long been under consideration by the naturalists of the Central and Western States. For the purpose of starting such a branch, if it seems, on discussion, desirable (the main Society acquiescing), a call has been issued for a meeting of members of the American Society of Naturalists and affiliated scientific societies living west of the Alleghanies and of others interested in providing for an annual meeting of the western naturalists; the

present meeting to be held at the Hull Biological Laboratories, University of Chicago, Thursday and Friday, December 28 and 29, 1899.

The provisional programme is as follows:

Thursday: 10 A. M.—General meeting in Botany Building, for organization and reading of papers. 3 P. M., Discussion: Methods and Results of Limnological Work. 6:30 P. M., Dinner at the Quadrangle Club. *Friday*: 9:00 A. M.—General meeting for reading of papers.

Naturalists are requested to send titles of papers to C. B. Davenport, 5725 Monroe Avenue, Chicago.

The committee in charge of the arrangements consists of Professors C. R. Barnes, H. H. Donaldson, S. A. Forbes, Wm. A. Locy and Jacob Reighard.

PROFESSOR S. W. STRATTON, of the University of Chicago, has recently been appointed Inspector of Standards, Bureau of Weights and Measures, in the corps of which the Superintendent of the United States Coast and Geodetic Survey is the official head. In accepting this position Professor Stratton takes immediate charge of the United States Office of Weights and Measures at a most opportune time. This Office has long had in its custody the national standards of length and mass and has done much valuable work for science and the arts, which has been the logical outcome of this custody. Within the last two years the Office has taken up vigorously the matter of standards for electrical measurements, has acquired apparatus and made special studies, and is now ready to do valuable work along that line. It is especially well supplied for measurements of resistance of the highest degree of accuracy. Aside from this departure from the traditional policy of the Office there is a strong, well-founded and steadily-growing demand for a radical extension of the scope of the Office, which will doubtless be answered in the affirmative in the near future under the leadership of Professor Stratton.

THE deputation which was appointed to visit the United States and Canada with the view of inquiring into the working of some of the lead-

ing universities returned to Birmingham on December 7th. When Mr. Andrew Carnegie made his donation of £50,000, he suggested that some of the features of the American universities should be incorporated in the proposed Birmingham University, and Mr. G. H. Kenrick, Professor Poynting, Professor of Physics, and Professor Burstall, Professor of Engineering at Mason University, were deputed to make the necessary inquiries. They left Birmingham on November 1st, and visited Cornell University, the Massachusetts Institute of Technology, McGill University, and the leading colleges and schools in Chicago, Baltimore and Philadelphia, concluding their tour at New York. The deputation will present a report to the University Committee embodying their views.

DR. YERSIN, well known for his researches on the plague, has been charged by the Government of Cochin China with a special mission to Java.

PROFESSOR JOSIAH ROYCE goes to Europe again this Christmas to complete his course of Gifford lectures at the University of Aberdeen.

DR. HERBERT M. RICHARDS, instructor in botany at Barnard College, has unfortunately been compelled by ill health to relinquish his courses and has sailed for Europe.

PROFESSOR HELMERT, director of the Geodetic Institute of Berlin, has been elected a member of the Royal Astronomical Society of London.

PROFESSOR JOHN M. COULTER, who is spending his vacation at Washington, will shortly publish *Plant Structures*, a book for secondary schools and colleges, this following his other recent publication, entitled *Plant Relations*. Professor Coulter has just completed *Synopsis of Mexican and Central American Umbelliferae*, now in the hands of the government printer. He expects a revision of *North American Umbelliferae*, a large volume, to be published by the Smithsonian Institution. Before he returns to the university in April, Professor Coulter expects to publish *Special Morphology of the Seed Plants*, a university text-book upon which he has been working for a number of years.

DR. T. E. THORPE has been appointed to succeed the late Sir Edward Frankland in the work of analyzing the water supplied by the London water companies. Dr. Thorpe is Principal of the Laboratory Department in connection with the Inland Revenue Offices, and was formerly Professor of Chemistry of the Royal College of Science of South Kensington.

FREDERIK MAURITZ VAN DER WULF, the celebrated Dutch dipterologist, has died at the age of 80 years.

THE death is announced of Frau Anna von Helmholtz, the widow of the late Hermann von Helmholtz.

A CABLEGRAM to the New York *Herald* from Lima, Peru, reports that Professor Miguel Fort, of the Lima School of Mines, lectured on December 3d before a large audience on the discoveries made during his recent visit to Cerro de Pasco. He brought forward evidence of the existence in Cerro de Pasco of rich deposits of gold, silver and copper.

DURING the past summer the University Geological Survey of Kansas made extended examinations in the lead and zinc mining district in the vicinity of Galena, preparatory to issuing a full report on the subject. Professor Haworth and five assistants from the State University spent the entire summer in the field, and were successful in gathering a large amount of data, much of which will be entirely new to the mining world.

It is announced that the plague has appeared at Lourenco Marques, the Port of Delagoa Bay. The spread of the disease among the armies in South Africa is thus rendered possible. The plague is now also reported from Algeria. The deaths in India still amount to about 5000 a week.

A MUSEUM for children to illustrate the sciences has been opened in Bedford Park, by the Brooklyn Institute. It contains exhibits in botany, mineralogy, geology and zoology.

DR. G. A. DORSEY, curator of anthropology, Field Columbian Museum, accompanied by an assistant and the Rev. H. R. Voth, left Chicago December 6th for the Pueblo of Oraibi, Arizona. The aim of the expedition is to secure additional ethnological material, to witness the

approaching solstice ceremony in order to get suggestions for new groups, and also to start a systematic and somewhat extended excavation in order to strengthen the archaeological exhibit from this interesting region. The expenses are covered by Mr. Stanley R. McCormick, of Chicago, who has placed \$5000 at the disposal of the Museum in addition to the \$10,000 already expended on the Hopis. The splendid exhibit filling three large halls is drawing crowds of visitors and attracting wide attention.

MR. GEORGE BYRON GORDEN started for Central America, December 5th, on an archaeological expedition under the auspices of the Peabody Museum of Harvard University. It is hoped that an arrangement may be made by which explorations can be renewed at the ruins of Copan, where the museum has done such important work during previous years.

ARCHÆOLOGICAL explorations have been carried on, along the Sound and lower Hudson Valley during the past season, by Mr. M. Raymond Harrington, son of Professor Mark Harrington. These have been for the American Museum of Natural History and have brought to light a number of Indian burials as well as specimens from the shell-heaps.

CAPTAIN DESY has returned to London after two years spent in exploring in Central Asia more especially the unknown parts of the Yarkand River.

THE Goldsmith's Company has made a further grant of £1,000 to the Royal Institution of Great Britain, for the continuation and development of original research, and especially for the prosecution of further investigations of the properties of matter at temperatures approaching that of the absolute zero of temperature.

LADY PRESTWICH, widow of Sir Joseph Prestwich, has bequeathed £500 for the public museum at Forres.

A COMMERCIAL museum is planned for Berlin under government auspices. Branches may be established at Hamburg and Stuttgart.

AN Industrial Museum is soon to be established in the City of Mexico under the auspices of the Government. The museum will occupy the old church edifice of Betlemitas, on San

Andres Street. It will contain extensive exhibits of the mineral, agricultural and manufacturing products of Mexico.

THE fourth annual meeting of the New York State Science Teachers' Association will be held at Syracuse, N. Y., on December 28th and 29th. A varied and interesting program is promised. The address by the President Professor LeRoy C. Cooley, of Vassar College, will be given on Thursday evening. The subject for discussion for the first morning is the sequence of the sciences in the secondary school curriculum, opened by Principal T. B. Stowell of the Potsdam Normal School. On Thursday afternoon sub-committees will report on the teaching of zoology and of chemistry in the secondary schools. On Friday morning the subjects to be taken up are 'Earth Science in the Secondary Schools,' by W. H. Snyder, Worcester Academy; 'College Entrance Requirements in Science,' Dean W. H. Crashaw, Colgate University; and 'The Training of Science Teachers for the Secondary Schools,' Professor Edward L. Nichols, Cornell University. On Friday afternoon the equipment of laboratories and the management of laboratory classes will be discussed with separate sections for the biological, physical and earth sciences. Several committees will report at the final session on Friday afternoon.

THE Physics Club of New York, which is composed of teachers of physics in the secondary schools of the city, held its fifth meeting at the physical laboratory of Columbia University on Dec. 16th.

Natural Science gives the following particulars in regard to Mr. E. R. Waite's trawling and dredging cruise under the control of Mr. F. Farnell. The cruise, or rather series of four cruises, lasted from February 18th to April 9th. The coast-line covered extended from Jervis Bay to the Manning River, and except for a trip to Lord Howe Island, the greatest distance from land was 25 miles. The depth at which the trawl was lowered ranged between 10 and 90 fathoms. The fishes were the chief objects of study; about 100 species, represented by 365 specimens were collected, and Mr. Waite's preliminary 'Scientific Report on the Fishes' was

published last year as an appendix to Mr. Farnell's 'Report upon Trawling Operations.' Several species are new to the colony, while a few are new to science. The entire scientific collections have been deposited in the Museum, and the results will be published as a Museum Memoir, towards the expense of which £400 was voted. On the last cruise to Lord Howe Island heavy weather was encountered, and the passage occupied seventy hours instead of the usual thirty-six. Mr. Waite and Mr. Ethridge, who also was on this trip, were left on the island for eleven days, since the *Thetis* was blown to sea in the gale. They collected here some additional very interesting remains of *Meiolania platyceps*, the peculiar extinct chelonian, which is also found in Patagonia. Also by the help of Mrs. T. Nicholls they obtained an additional collection of shells. A large number of sponges, anemones, corals, gorgonias, echinoderms, crustaceans and polyzoa were collected during the cruise. The number of species was very great, and included many new or hitherto unrecorded from the coast of New South Wales.

THE *British Medical Journal* states that at a meeting of the delegates 'degli ordini medici' attending from all parts of Italy, held on October 24th, under the presidency of Professor Durante, it was resolved to send a deputation to the Prime Minister (General Pelloux) to ask him to bring in a bill withdrawing the right to practice, even among their countrymen, from all foreign medical men (not holding Italian degrees), whose own country did not grant Italian graduates reciprocal rights of practice. General Pelloux informed a deputation next day that he would introduce such a bill immediately on the opening of the Italian Parliament, which has been summoned to meet on November 14th.

UNIVERSITY AND EDUCATIONAL NEWS.

MRS. J. H. CHAPIN has endowed the chair of mineralogy and geology at St. Lawrence University, Canton, N. Y., with \$30,000. This chair was occupied at the time of his death by the late Dr. J. S. Chapin.

EX-MAYOR CHESTER WARD KINSLEY, of