

gion between the equator and lat. 25° N., and between the meridian of Greenwich and long. 40° W. A new edition of these charts has now been issued ('Observations océanographiques et météorologiques dans la Région du Courant de Guinée,' 1855-1900. (1) Texte et Tableaux, pp. iv + 116, (2) Planches, VIII. Utrecht, 1904).

R. DEC. WARD.

#### SCIENTIFIC NOTES AND NEWS.

SIR PATRICK MANSON has been invited to give the Lane lectures at the Cooper Medical College, California, this year. He will lecture on some aspect of tropical diseases.

PROFESSOR J. N. LANGLEY, of Cambridge, will give one of the general lectures at the meeting of the Association of German Scientific Men and Physicians, which opens at Meran on September 24. His subject will be 'Recent Researches on the Nervous System.'

LORD RAYLEIGH is about to retire from the professorship of natural philosophy at the Royal Institution, which he has held for eighteen years. He will be made honorary professor. Lord Rayleigh has given twenty-three Friday evening discourses and twenty-one courses of afternoon lectures at the institution.

LORD LISTER celebrated his seventy-eighth birthday on April 5.

PROFESSOR EUGENE W. HILGARD, of the department of agriculture of the University of California, has been granted leave of absence for next year. Professor Hilgard, who is seventy-two years of age and has held his chair in California for thirty-one years, is privileged to retire with two thirds salary, according to the statutes of the university.

A MARBLE portrait bust is to be installed at Brussels in honor of Dr. Beco, secretary-general of the Belgian Department of Public Health.

A GOLD medal in honor of Professor Pozzi, the eminent French surgeon, by the sculptor Chaplain, is to be presented to him by his colleagues and pupils.

THE students of Jefferson Medical College will at the approaching commencement pre-

sent to Dr. Forbes a life-size portrait of himself. Dr. Forbes has taught anatomy in Philadelphia for forty-nine years.

THE health of Lord Kelvin is much improved and he was expecting to be able to leave London shortly for a change of air.

PROFESSOR H. E. GREGORY, who has been ill with inflammatory rheumatism, has much improved, and expects to resume his university duties in the course of several weeks.

SIR RICHARD DOUGLAS POWELL has been elected president of the Royal College of Physicians in succession to Sir William Church.

MR. JOHN GAVEY, C.B., engineer-in-chief to the Post Office, has been nominated for election as president of the British Institution of Electrical Engineers for 1905-6. Dr. R. T. Glazebrook, F.R.S., director of the National Physical Laboratory, and Mr. J. E. Kingsbury, of the Western Electric Company, have been nominated for the office of vice-president.

PROFESSOR THOMAS M. GARDNER has resigned his chair in the faculty of mechanical engineering at Cornell University.

MR. E. T. NEWTON, F.R.S., paleontologist to the British Geological Survey, retired on May 4, after forty years of service. He is succeeded by Dr. F. L. Kitchin.

WE learn from *Nature* that the Baly medal, given every alternate year on the recommendation of the president and council of the Royal College of Physicians of London for distinguished work in the science of physiology, especially during the two years immediately preceding the award, has been awarded to Professor Pavlov, of St. Petersburg. The Bisset Hawkins gold medal for 1905, given triennially for work deserving special recognition as advancing sanitary science or promoting public health, has been awarded to Sir Patrick Manson, K.C.M.G.

THE Jacksonian prize of the Royal College of Surgeons has been awarded to Mr. H. J. Patterson for his essay on 'The Diagnosis and Treatment of such Affections of the Stomach as are Amenable to Direct Surgical Interference.'

DR. NETTIE MARIA STEVENS, of San Jose, California, associate in experimental morphology at Bryn Mawr College, has been awarded the prize of \$1,000 offered every two years by the Association for Maintaining the American Woman's Table at the Zoological Station at Naples and for Promoting Scientific Research by Women. This is the second award of the prize which is offered for the best thesis written by a woman on a scientific subject. Miss Stevens graduated from Stanford University in 1899, and received the degree of doctor of philosophy from Bryn Mawr College in 1903. During the past year she has held a Carnegie assistantship in addition to her position at Bryn Mawr. The thesis which won the prize is on 'The Germ Cells of the *Aphis rosea* and the *Aphis anotheræ*.'

THE Smithsonian Institution has made a grant of \$250 from the Hodgkins Fund to Professor W. P. Bradley, of Wesleyan University, for an experimental study of the flow of air at high pressure through a nozzle. The subject of this investigation is of fundamental importance in connection with the usual method of liquefying air.

DR. RAYMOND PEARL, instructor in zoology at the University of Michigan, has been granted leave of absence for a year. He will spend the year abroad, continuing his work on variation from the biometrical standpoint, having received a grant for this purpose from the Carnegie Institution.

SIR WILLIAM HUGGINS, president of the Royal Society, made one of the speeches at the anniversary banquet of the Royal Academy of Arts, held on April 29.

PROFESSOR JOHN ADAMS, head of the department of education of the University of London, is to deliver a course of lectures in the School of Education of the University of Chicago during the summer quarter.

PROFESSOR JOHN DEWEY, of Columbia University, lectured at Harvard University on May 5, his subject being 'Knowledge and Action.'

THE following provisional program of public evening lectures at the Marine Biological Laboratory, Woods Hole, Mass., has been ar-

ranged; other lectures will be announced later:

June 30, Miss Adele M. Fielde, 'The Power of Recognition among Ants.'

July 5, Dr. A. J. Carlson, 'The Physiology of the Heart.'

July 7, Professor A. P. Mathews, 'The Chemical Basis of Life.'

July 12, Professor H. S. Jennings, 'The Behavior of Lower Organisms.'

July 14, Dr. R. M. Yerkes, 'The Behavior of Higher Organisms.'

July 19, Professor A. D. Mead, 'Some Observations on the Natural History of Marine Animals.'

July 21, Miss Katherine Foot and Miss E. C. Strobell, 'Maturation and Fertilization of the Egg of *Allolobophora fetida*.'

July 26, Professor W. B. Scott, 'Miocene Ungulates of South America.'

A MARBLE memorial of the late Professor Giulio Bizzozzero is to be placed in the Institute of General Pathology at Turin.

DR. JOSEPH EVERETT DUTTON died in the Congo on February 27 at the age of twenty-nine years. He was sent to Africa by the Liverpool School of Tropical Medicine to investigate trypanosomiasis and tick fever.

WE regret also to learn of the death of Professor Otto Struve, director of the Poulkova Observatory from 1862 to 1890, which took place on April 14, at the age of eighty-five years.

PLANS have been filed for a fifteen-story building to cost \$975,000, which Mr. Andrew Carnegie is to present to the Associated Societies of Engineers of New York. It is to be erected on the large plot from 25 to 33 West Thirty-ninth Street, and immediately adjoining it in the rear, facing at 32 and 34 West Fortieth Street, will be a thirteen-story club-house, which is to cost an additional \$375,000, also part of Mr. Carnegie's gift.

M. EMMANUEL DRAKE DEL CASTILLO has bequeathed to the Paris Natural History Museum a herbarium, a botanical library and the sum of \$5,000.

THE London *Times* says that an offer has been made by certain of the companies engaged in the production of phonographic records to deposit in the British Museum

records of the voices of distinguished living men, and that the trustees have expressed their willingness to receive, under special restrictions and with very careful selection, such records, which will be for posterity only and will in no circumstances be available for contemporary use.

A GEOLOGICAL excursion to Syracuse, N. Y., for the purpose of examining the glacial-marginal channels, first explained by Gilbert and later more fully described by Fairchild, was made on April 15-17; professors and students to the number of twenty-five from six institutions, Harvard, Colgate, Syracuse, Cornell, Rochester and Rutgers, participating. Professors Davis, Hopkins, Fairchild and Lewis were present. The weather was inclement, high wind with snow squalls blowing cold all three days; but the channels were of repaying interest. They were examined in three north-sloping spurs of the upland or plateau country, and found to recur repeatedly in systematic sequence; but the deltas expectably associated with them in the intermediate valleys seemed to be deficient in volume, as if much reduced by subsequent erosion.

It is stated in *Nature* that the president of the Board of Agriculture and Fisheries has appointed a departmental committee to inquire, by means of experimental investigation and otherwise, into the pathology and etiology of epizootic abortion, and to consider whether any, and, if so, what, preventive and remedial measures may with advantage be adopted with respect to that disease. The chairman of the committee is Professor J. MacFadyean, principal of the Royal Veterinary College.

THE Congress on Quackery, which was to have been opened in Paris on May 8 under the presidency of Professor Brouardel, has been postponed till April 30, 1906.

LIEUTENANT PEARY has chartered at St. John's the sealer *Erik* to convey coal and stores to Greenland and act as auxiliary vessel to his projected Arctic expedition.

THE Boston Society of Natural History announces subjects for the two annual Walker prizes in 1906 as follows:

An experimental field study in ecology.

A contribution to a knowledge of the nature of competition in plants.

A physiological life history of a single species of plant.

Phylogeny of a group of fossil organisms.

A study in stratigraphy.

A research in mineral physics.

A study on entectics in rock magmas.

A study in river capture.

A REGION that is new to both geologists and topographers is described by Professor Israel C. Russell in a preliminary report on the geology and water resources of central Oregon, recently published by the United States Geological Survey. No description of the physical features, water resources or geology of this region is in print, and the only map that Professor Russell found available for use during his reconnaissance, which took place in the summer of 1903, was a map of the state of Oregon, drawn to a scale of 12 miles to the inch, published by the General Land Office. The route followed by Professor Russell and his assistants led from Burns, Oregon, westward through the western part of Harney County, across the southeastern and central portions of Crook County, by way of Prineville and Sisters, thence southward through the northwest portion of Klamath County to Fort Klamath, and thence westward across the Cascade Mountains to Medford, in Jackson County. The region examined includes the extreme northern part of the Great Basin (an area of about 210,000 square miles situated principally in Oregon, Nevada, Utah and southeastern California, from which no streams flow to the ocean) and a part of the drainage area of Deschutes River and of its principal tributary, Crooked River, which joins it from the east.

DR. JOSEPH HYDE PRATT's annual report to the U. S. Geological Survey on the production of asbestos shows that the principal changes to be noted in the asbestos industry at the close of 1904 were the increase in the production in the United States of the amphibole variety, the development of the Grand Canyon chrysotile asbestos deposits, and the increase in the demand for the chrysotile variety. The many new uses which have been devised for

chrysotile asbestos have created a demand for it that is now in excess of the supply. The high price which can be obtained for the chrysotile asbestos when it is in fibers of sufficient length for spinning permits the mining of this mineral in some places where the cost of mining would become prohibitory with any material decrease in price. One of the most interesting features of Dr. Pratt's report this year is a description of the results of certain experiments that have been made on asbestos building board by Mr. George F. Sever, of New York City, for the Keasbey and Mattison Company, of the same city. The tests were made on asbestos building lumber and magnesia building lumber and show conclusively that both these materials are superior to wood for the purposes for which they are manufactured, but that the asbestos lumber is much better than the magnesia. Such asbestos lumber, when employed in the construction of street railway and standard railway cars, for covering the end framing, should prevent the cars from taking fire by any derangement of the electrical apparatus. Another type of asbestos building material that is beginning to be extensively used is asbestos board or sheathing, for roofing and for side walls. An asbestos shingle recently patented by Messrs. Keasbey and Mattison is composed of asbestos fiber and hydraulic cement. These shingles are much stronger than slate and lighter in weight. They are made in three colors, gray, slate and tile red, in squares  $4\frac{1}{2}$  inches on a side, with two corners of the square truncated. The use of asbestos materials in building has been considered chiefly from the standpoint of fireproofing; yet there is another and perhaps as important a reason for their employment, and that is for preserving an even temperature in the building erected. Houses so built as to be surrounded by asbestos should be cooler in summer and warmer in winter than other houses.

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#### UNIVERSITY AND EDUCATIONAL NEWS.

THE McCormick family have added \$1,000,000 to the endowment of the McCormick Theological Seminary of Chicago.

MR. ANDREW CARNEGIE has offered to give Radcliffe College \$75,000 for a library building on condition that an equal sum be collected for its endowment.

LORD CURZON has laid the foundation stone of the Agricultural College at Pusa. This college and experiment station were made possible by a gift of \$150,000 which Mr. Henry Phipps gave Lord Curzon to use for the good of the people of India.

BIRMINGHAM UNIVERSITY has received £20,000 under the will of the late Mr. Thomas Best.

THE Boston *Transcript* reports that the faculty of the Massachusetts Institute of Technology has adopted by a vote of fifty-seven to six a report adverse to the proposed alliance with Harvard University.

DR. JULIUS STIEGLITZ, of the department of chemistry of the University of Chicago, has been appointed to a professorship of chemistry in that institution.

AT the University of Colorado, Dr. M. E. Miles, who has been demonstrator of anatomy, has been appointed professor of anatomy; Dr. E. H. Robertson, professor of bacteriology and pathology, has resigned to engage in other work; and Mr. G. S. Dodds has been appointed instructor in zoology.

MR. WILLIAM E. BROOKE has been promoted to an assistant professorship of engineering mathematics in the University of Minnesota.

DR. J. CARLTON BELL has been appointed instructor in experimental psychology in Wellesley College.

MR. STANLEY DUNKERLEY, M.Sc., head of the department of applied mathematics in the Royal Naval College, Greenwich, has been appointed professor of engineering in the University of Manchester.

AT King's College, London, Mr. Peter Thompson, M.D., has been elected professor of anatomy; and Professor Arthur Dendy, D.Sc., South African College, Cape Town, has been elected professor of zoology.