

are to be used for greater elevations. Meteorographs after the Blue Hill pattern are to be sent up with the kites. Spirit thermometers, for dry and minimum readings, graduated to -90° F.; special screens; low-reading thermographs; sunshine recorders adapted to the peculiar conditions which are to be met with in the high latitudes; earth thermometers, etc.—are also provided. A Dines pressure anemometer and an anemograph of similar pattern are to be used at land station on the Antarctic continent.

CHARLES MELDRUM.

THE death, on August 28 last, of Dr. Charles Meldrum, for many years director of the Royal Alfred Observatory, Mauritius, should not be passed by without at least a brief mention in these Notes. Dr. Meldrum did a work of the greatest importance for meteorology in connection with the cyclones of the Indian Ocean, to the study of which he devoted a large part of his life. His name will also always be associated with the question of the relation of sun-spots and rainfall, a subject in which he was much interested. Dr. Meldrum was one of the founders of the Meteorological Society of Mauritius, Government Meteorological Observer, Director of the Royal Alfred Observatory, and, during the last ten years of his life, a member of the Government Council of Mauritius.

BIBLIOGRAPHY.

THE annual bibliographical number of the *Annales de Géographie* (No. 10, for the year 1900) contains the usual notices of climatological publications bearing the date 1900. The reviews are arranged by subjects as well as by countries, and there is an author and a subject index. This bibliography is chiefly geographical, but climatology is given its proper share of attention. R. DEC. WARD.

HARVARD UNIVERSITY.

SCIENTIFIC NOTES AND NEWS.

THE Elisha Kent Kane Medal of the Geographical Society of Philadelphia has been presented to Dr. A. Donaldson Smith, the African explorer.

PROFESSOR E. RAY LANKESTER has been elected a corresponding member of the Göttingen Society of Sciences.

DR. RICHARD P. STRONG has been appointed director of the Government Biological Laboratory recently established in Manila.

SIR WILLIAM WHITE, since 1885 director of naval construction in the British Navy and the author of important publications on naval architecture, is about to resign.

It is said that Dr. Wolf Becher, of Berlin, is preparing a biography of Professor Rudolf Virchow.

A LECTURESHIP in moral science will be established at Cambridge University as a memorial to the late Professor Sidgwick. The sum of £2,450 has been subscribed for this purpose.

A DIFFICULTY has arisen, says *Nature*, concerning the site on which the new Pasteur statue in Paris shall be erected. The use of a space in the Square Médicis in the Quartier Latin has been granted, but this spot is being tunneled for a railway, and it is feared, in consequence, that the statue may be too weighty for it. Other places, such as the Place du Panthéon, the Place de la Sorbonne and the entrance of the Avenue de l'Observatoire, are under consideration.

CHARLES A. BACON, professor of astronomy at Beloit College and director of the Smith Observatory, died on November 6, aged forty-one years.

PROFESSOR M. MAERCKER, director of the agricultural experiment station at Halle, Germany, and professor of agricultural chemistry in the Agricultural Institute, died on October 19, 1901.

THE preliminary plans have been accepted for a new building for the Department of Agriculture at Washington. These plans contemplate a magnificent marble structure of classic design, something over 300 feet long, with wings at either end extending to the rear to accommodate the various laboratories of the department. It is expected that the details of interior arrangement will need to be changed to some extent to suit the needs of the various bureaus and divisions of the department, but these plans will serve as a working basis. About 158,400 square feet of space are provided. Lord & Hewlett, of New York, are the architects.

THE American Morphological Society will meet in Chicago in affiliation with the American

Society of Naturalists, beginning on Wednesday, January 1.

THE American Psychological Association has fixed the first day of its Chicago meeting for December 31. The Western Philosophical Association will this year meet in conjunction with the American Psychological Association. Professor Josiah Royce, of Harvard University, is president of the Psychological Association, and Professor Frank Thilly, of the University of Missouri, is president of the Philosophical Association.

THE Society for Plant Morphology and Physiology will hold its fifth annual meeting at Columbia University, New York City, on December 31 and January 1 and 2.

THE Association of American Agricultural Colleges and Experiment Stations meets in Washington on November 12, 13 and 14. It will be followed by the meeting of the Association of Official Agricultural Chemists on November 15, 16, and 18.

THE sixth celebration of Founder's Day at the Carnegie Institute, Pittsburgh, took place on November 7. The principal speaker was Ex-President Grover Cleveland. The occasion was made memorable by the opening of the Sixth International Exhibition of Contemporary Paintings and by the display of a larger number of new exhibits in the Carnegie Museum. Among the latter are the skeleton of *Titanotherium*, and portions of the skeleton of *Diplodocus Carnegii*, recently restored under the care of Professor J. B. Hatcher, a fine specimen of *Rhinoceros simus* Burchell, a collection of petroglyphs from western Pennsylvania, and large additions to the collections of mammals and birds, as well a long array of exhibits in other departments of the Museum.

MR. C. W. GILMORE, who has been employed during the past summer in continuing the excavation at Camp Carnegie, on Sheep Creek, Wyoming, begun two years ago by the Carnegie Museum, completed his work last week. A carload of fossils, consisting principally of the remains of a very large and perfect specimen of *Brontosaurus* has been shipped to Pittsburgh and will shortly be delivered at the Museum.

THE collection of land, marine and fresh-

water shells, belonging to the estate of the late W. D. Hartman, M.D., of West Chester, Pa., has been purchased by the Carnegie Museum in Pittsburgh. Over nine thousand species are represented in the collection, which contains many types and cotypes. It is particularly rich in North American species and in the species found on the islands of the Southern Pacific. The addition of the Hartman collection to the other conchological collections which have in recent years been secured by the Carnegie Museum gives this institution one of the largest assemblages of conchylia in the United States.

IN September the Wisconsin Natural History Society sent two expeditions to the neighborhood of the Fox River in Waukesha County for the purpose of making surface surveys of a number of still unrecorded mound groups which are liable to be destroyed when the land is put under cultivation as is to be done next year. The first expedition surveyed and plotted four groups and several isolated works in the vicinity of Big Bend. One of them is indicated on Dr. Laphan's map, but no description is given by him. The second expedition was sent to the neighborhood of Mukwanago, about four miles from the first party. It surveyed a number of burial and oblong mounds. Nearly all the burial mounds were found to have been disturbed by farmers and others living in the region.

THE Russian Imperial Geographical Society has received news from the Kozloff expedition, sent out to explore the headwaters of the Hoang River. It is said that valuable collections have been obtained.

A COPENHAGEN despatch says that Dr. Nansen, the Arctic explorer, is arranging for biological research in northern waters; Norway, Sweden, Denmark, England, Holland, Russia and Germany to take part in it. The Danish Government has resolved to invite the interested states to hold a conference at Copenhagen to discuss the subject.

THE Twentieth Century Club of Boston has arranged for six lectures on 'The Needs of Popular Education in the United States.' The opening lecture was delivered by President Eliot, of

Harvard University, on November 9, with a general introduction and survey. The succeeding lectures will be as follows: 'The Public School System,' Dr. William DeWitt Hyde, president of Bowdoin College, November 16; 'Supplementary Educational Agencies,' Dr. George Harris, president of Amherst College, November 23; 'The Place of Industrial and Technical Training in Popular Education,' Dr. Henry S. Pritchett, president of the Massachusetts Institute of Technology, December 7; 'The Place and Function of Science in Popular Education,' Dr. Ira Remsen, president of Johns Hopkins University, December 14; 'Comparison of American and Foreign Systems of Popular Education,' Dr. G. Stanley Hall, president of Clark University, December 21.

THE National Geographic Society has issued its program of lecture courses for the coming season. The popular course consisting of thirteen lectures will be delivered in the National Rifles Armory, on Friday evenings at 8 o'clock, commencing November 8, and alternating with the Technical Meetings which will be held in the Assembly Hall of Cosmos Club. The following dates have been definitely assigned:

November 8, 'The Twelfth Census,' HONORABLE FREDERICK H. WINES, Assistant Director of the Census.

November 22, 'The Interior of Borneo,' PROFESSOR A. C. HADDON, Cambridge University.

December 6, 'Peary's Progress toward the Pole,' HERBERT L. BRIDGMAN, Vice-President Arctic Club of America.

December 20, 'The Trans-Siberian Railway,' HONORABLE E. J. HILL.

January 3, 'The New Mexico,' HONORABLE JOHN W. FOSTER, Ex-Secretary of State.

January 17, 'American Progress and Prospects in the Philippines,' GENERAL A. W. GREELY, Chief Signal Officer, U. S. A.

Arrangements have also been made for the following popular lectures, at dates to be announced later.

'The Appalachian Forest Reserve,' HONORABLE JAMES WILSON, Secretary of Agriculture.

'The Warship and its Work,' REAR-ADMIRAL W. S. SCHLEY.

'Fifty Years of Immigration,' HONORABLE E. F. MCSWEENEY, Asst. Com. Immigration.

'Cliff Dwellings of Mesa Verde,' MRS. JOHN HAYS HAMMOND.

'Explorations in New York City,' MR. JACOB A. RIIS.

'Finland,' MR. GEORGE KENNAN.

Provisional arrangements have been made for lectures on Pacific Cables, Actual and Proposed; Our Coming Oceanic Canal; America before the Advent of Man; Chinese Problems; Lands and Life in Ocean Depths; Columbia; Danish West Indies, and Afghanistan—the Buffer State. Regular meetings of the Society for the reading of technical papers and discussions will be held in the Assembly Hall of Cosmos Club on Friday evenings, at 8 o'clock, and alternating with the popular lectures. The following are announced:

November 1, 'Symposium on the Growth and Prospects of the Society,' President A. GRAHAM BELL followed by Professor Heilprin and others.

November 15, 'The Lost Boundary of Texas,' MARCUS BAKER, Cartographer, U. S. Geological Survey.

November 29, 'The Best Isthmian Canal Route,' ARTHUR P. DAVIS, Chief Hydrographer, Isthmian Canal Commission.

THE Christmas course of six lectures to young people, at the Royal Institution, will this winter be delivered by Professor J. A. Fleming, F.R.S., professor of electrical engineering in University College, London. His subject is 'Waves and Ripples in Water, Air and Ether.' Sir H. Trueman Wood will deliver the next Christmas Juvenile Lectures at the Society of Arts, the subject being 'Photography and its Applications.'

A STATEMENT concerning the vital statistics of the city of Havana for the month of September, 1901, compiled from official reports on file in the division of insular affairs of the War Department and abstracted in the daily papers, shows that the health conditions were decidedly the best attained in any month. The least number of deaths occurring in any previous September since 1889 was 496 in 1899; the greatest number, 2,397, in 1898; average, 877. For September, 1901, there were 339 deaths. The least number of deaths occurring in any one preceding month during the last eleven years was in February, 1901, when there were 408 deaths. The lowest death rate for Sep-

tember in the years referred to was in 1899, when the death rate was 34.48 per thousand. For September, 1901, the death rate was 15.64 per thousand. Taking the yellow fever year as commencing April 1, the record of the past eleven years shows that for the six months up to the first of October the smallest number of deaths from this disease occurred in 1899, when there were 36 deaths; the greatest number in 1897, when there were 659 deaths—average, 296 deaths. This year, during the same period, there were only five deaths.

SIR CLEMENTS A. MARKHAM, president of the Royal Geographical Society, has given out for publication a communication stating that despatches received from the Cape give details of the voyage of the *Discovery* and announce the departure of the Antarctic expedition from Simon's Bay on October 14 on the voyage to Lyttelton, the last port of call before entering the ice. Experience of the performances of the ship has been acquired during a voyage of 58 days—33 under steam and 25 under sail. She might make a reasonably good passage under sail with a fair wind, but she makes excessive leeway when close hauled; her canvas area is too small, and she must be accounted a poor sailer. She is, however, an excellent sea boat, which is the main point, and in a fresh breeze with a heavy sea she is very stiff and dry. She has, on the whole, done as well as can be expected for a vessel of her type. Her coal consumption is, however, disappointing. The economy of the engines is less than expected, and the necessity for nursing coal in future operations is proportionately increased. Officers and men have had a very trying time in the tropics. The ship leaked, from causes which can no doubt be obviated. But as the provision cases were stowed in the holds down to the keelson and the water rose amongst them it was necessary to clear the holds, to construct floors with an amply sufficient bilge space beneath and to restore the holds again—all this under a tropical sun. The engineering department had still more severe work, owing to the long spell of steaming with the thermometer at 140° F. in the engine-room, and the engines, being new, required more than ordinary care and adjustment.

UNIVERSITY AND EDUCATIONAL NEWS.

THE council of New York University has decided to celebrate the seventy-fifth anniversary of the founding of the University in October, 1905. An effort will be made to collect \$2,000,000 for an endowment fund.

DR. OSLER, of the John Hopkins University, has given to the medical library of McGill University a number of rare books on medicine. The medical library has been much improved in the alterations of the building.

THE Library of the Chemical Department of the University of Vermont has just been augmented by the addition of some 400 volumes, chiefly German chemical journals. These are mainly the gift of F. W. Ayer, of New York, who subscribed \$1,000 to the special fund.

It is announced that Andrew Carnegie will give \$500,000 to build and equip a technical college in southern Scotland. The institution will probably be located at Galashiels, counties of Roxburgh and Selkirk.

THE widow of the late professor of the history of medicine at Vienna, Dr. Puschmann, has bequeathed her entire property, about a quarter of a million dollars, to the University of Leipsic.

THE Liverpool City Council has unanimously resolved to make application to Parliament for powers to enable the council to contribute money from the rates toward the formation and maintenance of a university in the city.

BEGINNING with the academic year 1905-06 all students desiring to enter the first year of the medical course of the University of California, and all new students seeking advanced standing must present evidence of having completed at least two full years of preliminary training in the undergraduate department of a college or university of recognized standing. Satisfactory evidence must also be presented that during these two years the applicant has completed courses in chemistry (12 hours for a year), physics (13 hours), biology (6 hours), and has a reading knowledge of French and German.

THE new chemical laboratory of the University of Oregon, for which appropriations