

largely a matter of air drainage, and every owner is urged to make a detailed study of the movement of local air currents in his own district. Various methods of protection are briefly described, including those based on mixing the air; warming the air; cloud or fog formation; irrigation; spraying, and screening. A 'warm water method,' adopted by Mr. E. A. Meacham, of Riverside, Cal., by which water, after being heated in a small boiler, is allowed to run in furrows through the orchard, is stated to have been successfully tried. The *Bulletin* contains a weather map showing the pressure and temperature conditions which are followed by heavy or killing frosts within 12 hours in southern California, and also gives plates illustrating the different methods of protection.

R. DEC. WARD.

HARVARD UNIVERSITY.

#### SCIENTIFIC NOTES AND NOTES.

HARVARD UNIVERSITY has conferred its LL.D. of Dr. W. H. Welch, professor of pathology in the Johns Hopkins University.

THE University of Cracow has conferred an honorary degree on Professor Simon Newcomb, U. S. A., on the occasion of the celebration of its five hundredth anniversary.

THE Paris Academy of Sciences has elected Professor L. Boltzmann a corresponding member in the place of the late Professor Beltrami.

WE regret that we are unable to secure or to find in any of our exchanges any account of the third biennial conference on an International Catalogue of Scientific Literature beyond the fact that the delegates had a dinner.

BY the action of the Massachusetts Senate on June 28th there will be no appropriation this year for the destruction of the gypsy moth.

IT is proposed to celebrate the 70th birthday of Professor Wilhelm Wundt, which will occur on the 16th of August, 1902, by the publication a *Festschrift*, to which his former students are invited to contribute. The manuscripts must be forwarded to Professor Külpe, Würzburg, not later than January 1, 1902.

THE directorship of the Paris Natural History Museum, vacant by the death of Professor

Milne-Edwards, has been filled by the appointment of Professor Edmund Perrier.

DR. ALFRED GOLDSBOROUGH MAYER, assistant of Mr. Alexander Agassiz, and in charge of Radiates at the Museum of Comparative Zoology, Cambridge, has been appointed curator of the Department of Natural Science in the Museum of the Brooklyn Institute of Arts and Sciences. He will assume his new position in September.

SIR GEORGE F. HAMPSON, Bart., who accepted an invitation to become an assistant in the Insect-room of the British Museum five years ago, has just been promoted to the post of first-class assistant, under a treasury regulation to which we have recently referred. He is the only assistant in the Natural History section of the museum to whom the benefits of this regulation have as yet been extended. But since there are many of his colleagues, men of equal reputation, who have served in the second class for twice, if not thrice, as long, it is anticipated that this good example will soon be followed. It is pleasing to find that after all, the Trustees of the British Museum are able to recognize exceptional merit, when they have special facilities for becoming personally acquainted with it.

THE Geological Society of London has elected Professor Paul Groth, of the University of Munich, a foreign member, and Professor A. Issel, of Genoa, a corresponding member.

THE Society of Arts has awarded its Albert medal for the present year to Mr. Henry Wilde, F.R.S.

THE third of the biennial Huxley Lectures, founded in commemoration of the late Professor Huxley in connection with the Charing Cross Medical School, will be delivered by Lord Lister, President of the Royal Society, on Tuesday, October 2d.

LORD AVEBURY has been elected president of the Royal Statistical Society. The Society announces as the subject for its Howard medal 'The history and statistics of tropical diseases with special reference to the bubonic plague.'

WE regret to record the death of Dr. Willy Kühne, professor of physiology and director of

the Physiological Institute of the University of Heidelberg, at the age of 62 years; of Dr. Reinhold Hoppe, docent in mathematics in the University of Berlin, aged 84 years, and of M. Bontain the French physicist.

It is proposed to erect a monument in Simons-town in memory of the late Miss Mary Kingsley, the African explorer and botanist, who died of fever while engaged in nursing the Boer prisoners.

THE United States Civil Service Commission announces that on July 24, 1900, an examination will be held for the position of assistant ethnologist in the Smithsonian Institution at a salary of \$50 a month. The examination will be chiefly on Indian languages and especially on Siouxan languages.

ON August 14th, there will be an examination for the position of assistant, Division of Entomology, Department of Agriculture, at a salary of \$840 per annum. The examination will be on entomology and especially on the orthoptera.

A MEETING of the Anatomical Society of Great Britain and Ireland was held at Owens College Manchester on June 21st and 22d.

It is stated that there has been a meeting of cardinals and other ecclesiastical dignitaries at the Vatican to discuss the expediency of taking an active part in the movement for the prevention of tuberculosis.

At the Blue Hill Observatory on June 19th a kite used in the exploration of the air was sent to the height of 14,000 feet, which exceeds the greatest height previously obtained there by 1440 feet. The temperature at this height was 15 degrees below the freezing point, the wind velocity was about 25 miles an hour from the northeast, and the air was extremely dry, although clouds floated above and below that level. The kites remained near the highest point from 5 to 8 p. m. They were then reeled in rapidly by a small engine. On the way down they passed through a stratum of thin ragged clouds at the height of  $1\frac{1}{2}$  miles. These were moving with a velocity of about 30 miles an hour. At this time the wind at the observatory, about 600 feet above the general level of the surrounding country, had fallen to a calm.

The highest point was reached with  $4\frac{1}{2}$  miles of music wire as a flying line, supported by 5 kites attached to the line at intervals of about three-fourths of a mile. The kites were Hargrave or box kites of the improved form devised at the Observatory. They have curved flying surfaces modeled after the wings of a bird. The three kites nearest the top of the line had an area of between 60 and 70 square feet each, and the 2 others about 25 feet each. The total weight lifted into the air, including wire, instruments and kites, was about 130 pounds. This flight was one of a series being carried on by Messrs. Clayton, Ferguson and Sweetland. On June 18th the kites reached a height of 11,500 feet. They were sent up a second time the same evening and remained throughout the night at a height of nearly 10,000 feet. At this height the temperature remained from 5 to 10 degrees below freezing.

THE *Philadelphia Medical Journal* reports that the plague is increasing in Australasia. Many cases are reported in Victoria, which probably started in the slums of Melbourne. In the city of Sydney, 239 cases have been reported, with 82 deaths. The extension of the plague to Sydney has caused much disturbance to business. The number of cases is rapidly increasing, in spite of the efforts at destruction of rats and disinfection. The government distributes free to all householders a special rat-poison and sends men to remove dead rats. About 8000 persons have been inoculated with Haffkine's prophylactic. A few days later two or three of those inoculated were attacked by the disease. Dr. Tidswell, the bacteriologist of the New South Wales Health Department, is said to have found plague-bacilli in the alimentary canal of fleas taken from plague-infected rats. The *British Medical Journal* reports 100 deaths daily in Calcutta, and the total mortality is double that number. The local government interferes as little as possible with the domestic affairs of the people. No pressure is used to send cases to the hospitals and many remain untenanted. This system has one advantage—that it does not cause a panic and consequent flight of a large portion of the inhabitants, which would result in spreading the disease over the province. On the other hand, no de-

crease of the disease in the city can be expected to follow such measures, and it is not surprising that the usual annual increase is greater this year.

#### UNIVERSITY AND EDUCATIONAL NEWS.

THE total amount of the bi-centennial fund of Yale University is now \$1,090,000. This sum includes \$490,000 subscribed or pledged unconditionally to the general building fund; \$250,000 pledged conditionally in case three additional subscribers can be found to give \$100,000 each, thus making possible the carrying out of the building plan and \$350,000 given or pledged for special purposes other than those of the general building fund. During the year the university has received also the Vanderbilt bequest of \$100,000 free of tax; \$50,000 from the estate of Charles J. Stillé; \$30,000 from the estate of Professor O. C. Marsh, and \$15,000 from the estate of Catherine W. Jarman, making, with minor legacies, about \$200,000. The University has further just received from Mr. W. E. Dodge of New York City the sum of \$30,000 "for the purpose of promoting among its students and graduates and among the educated men of the United States an understanding of the duties of Christian citizenship and a sense of personal responsibility for the performance of those duties." The income of the fund will be paid each year for a series of lectures.

THE sum of \$109,000 covering the debt of Wellesley College has been raised making available a gift of \$100,000 from Mr. John D. Rockefeller.

THE daily papers contain a dispatch from Havana regarding an alleged scandal in the University, where some of the best known men in Cuba are said to have received \$24,000 a year each as professors. There were 72 of these professors and 24 assistants, some of them having no classes at all and others only one or two students. Many of the professors drew other government salaries. When this was called to General Wood's attention he immediately inaugurated reforms, which resulted in cutting down the list to 46 professors and assistants. So at least runs a cablegram from Havana on which perhaps not very much reliance should be placed.

THE United States transport *McPherson*, having on board 231 of the Cuban teachers who will attend the summer school at Harvard University, arrived in Boston harbor on June 30th.

PROFESSOR CHARLES L. EDWARDS, recently of the University of Cincinnati, was elected on June 26th to the professorship of natural history, in Trinity College, Hartford. The new Hall of Natural History, just completed at a cost of \$60,000, is a building of three stories above a high basement, and is designed for the various needs of biology and geology. There are suites of laboratories for anatomy, physiology, experimental morphology, zoology, botany and geology, together with a vivarium. The southern half of the building, provided with a large central light well extending from the first floor to the arched roof, is the museum. The already valuable collections of Trinity College, including the Ward series of invertebrates, vertebrate skeletons and Blascke models will be largely augmented in the near future. Professor Edwards will supervise the equipment of the laboratories during the summer.

THE following appointments are also announced: H. T. Cory, a graduate of Purdue University, now in charge of the engineering courses in the University of Missouri, professor of civil engineering in the University of Cincinnati; Dr. Franz Pfaff, assistant professor of pharmacology and therapeutics of the Harvard Medical School; Dr. L. E. Dickson has resigned his position as associate professor of mathematics in the University of Texas, to accept a call to the University of Chicago; Dr. Grace N. Dolson, a graduate of Cornell University, has been made professor of philosophy at Wellesley College; at Princeton University, Professor E. O. Lovett has been promoted to a full professorship of mathematics, and Mr. A. A. H. Lyba has been called to a professorship of mathematics at Roberts College, Constantinople; Dr. George V. N. Dearborn has been appointed assistant professor of physiology in the Tufts College Medical School. He succeeds Dr. Albert P. Mathews, who has been called to an instructorship in physiology in the Harvard Medical School.