

establishment of a meteorological laboratory at the high school in Chattanooga, Tenn., a citizen, whose name is not given, having provided the means for the purchase of the necessary meteorological apparatus.

GERMAN METEOROLOGICAL SOCIETY.

THE tenth meeting of the Deutsche Meteorologische Gesellschaft was held in Berlin, on April 7-9, 1904, and an account of the proceedings, with abstracts of the papers read, is found in the July number of the *Meteorologische Zeitschrift*. The papers of most general interest were the following: The influence of forests upon climate, by J. Schubert, in which the results obtained recently at the forest experiment station in Eberswalde, Prussia, were discussed. The temperature is found to average lower in the forest than in the open, the maximum cooling effect coming in September, at the 8 A.M. observation. The relative humidity in the forest may exceed that in the open by seven per cent. O. Steffens showed a new form of snow gauge ('ombrograph') in which an oil lamp is included and the snow is melted. P. Polis discussed the distribution of precipitation in cyclones and anticyclones at Breslau and on the Schneekoppe, this being a scheme of investigation which might well be extended. W. Meinardus considered the changes in temperature of the ocean surface off the west coast of Europe, a subject to which he has already given much attention.

NOTES.

THE 1904 volume of the *Annuaire Météorologique* of the Royal Observatory of Belgium contains the usual meteorological summaries, together with the following papers of general interest: H. Arctowski: 'Aperçu des Résultats Météorologiques de l'Hivernage antarctique de la Belgica'; E. Vanderlinden: 'Le Tir contre la Grêle,' a subject which is rapidly assuming a less and less prominent place in the minds of scientific men. The latter paper contains a full bibliography.

The Yearbook of the Department of Agriculture for 1903 (Washington, 1904), contains the following contributions of meteorological

interest: James Kenealy, 'Weather Bureau Stations and their Duties'; J. Warren Smith, 'Relation of Precipitation to Yield of Corn'; H. J. Cox, 'Use of Weather Bureau Records in Court.'

Weather Bureau Bulletin No. 34 (1904) is a reprint of an article on climate, written by the chief of the weather bureau for the 'Encyclopedia Americana.' The title is 'Climate: its Physical Basis and Controlling Factors.' In the bibliography one can not help noticing the omission of Hann's 'Handbuch der Klimatologie.'

Smithsonian Miscellaneous Collections, Quarterly Issue, Vol. 2, Part I., 1904, contains 'The Absorption of Water Vapor in the Infra-Red Solar Spectrum,' by F. E. Fowle, Jr.

R. DEC. WARD.

SCIENTIFIC NOTES AND NEWS.

A LARGE number of the eminent European scientific men and scholars, who came to this country to attend the International Congress of Arts and Science, at St. Louis, have been visiting eastern cities and universities. They were received at Washington by President Roosevelt and entertained by Professor Simon Newcomb, the president of the congress; at Cambridge, they were entertained by Professor Münsterberg, vice-president of the congress. Many of them have also visited Johns Hopkins, Pennsylvania, Princeton, Columbia, Yale and other institutions.

DOCTORATES of science have been conferred by the University of Leeds as follows: Lord Kelvin, Lord Rosse, chancellor of the University of Dublin, Sir Isaac Lowthian Bell, Sir James Kitson, M.P., Sir William Henry Broadbent, Sir Arthur W. Rücker, principal of London University, Dr. Thorpe, C.B., director of the government laboratories, Mr. Claudius G. Wheelhouse, LL.D., president of the council of the British Medical Association, Mr. Jonathan Hutchinson, Mr. J. Pridgin Teal, Dr. Hughlings Jackson, Professor Miall, Dr. Tempest Anderson and Professor A. W. Mayo Robson.

A COMMISSION has been appointed by the New York Board of Health to study the causes of pneumonia, with a view to checking the

increasing mortality. It consists of Drs. W. H. Welch and William Osler, of Johns Hopkins, Baltimore; E. G. Janeway, L. E. Holt and T. M. Prudden, of New York; Theobald Smith, of Harvard; Frank S. Billings, of Chicago, and John H. Musser, of Philadelphia.

PROFESSOR RONALD ROSS, of the University of Liverpool, will after his return from Panama, deliver a series of lectures in the Medical Department, of the University of Pennsylvania, on 'Causes and Cure of Malarial Fever.'

SIR CLIFFORD ALLBUTT, regius professor of medicine at Cambridge, Dr. Horatio C. Wood and Dr. John H. Musser made addresses at the opening of the medical department of the University of Pennsylvania, on September 30.

THE RT. HON. JAMES BRYCE, M.P., will deliver the Godkin lectures in Sanders Theater, Harvard University, on October 24, 26, 28, 31, and November 3. He will speak on 'The Study of Popular Governments.' He has accepted the invitation of Columbia University to deliver the first series of lectures upon the Carpentier foundation. The lectures will be given at 4 P.M., on October 10, 12, 14, 17, 19 and 21. Mr. Bryce's general subject will be: 'The Law in its Relations to History.'

PROFESSOR FREDERICK STARR, who holds the chair of anthropology, at the University of Chicago, has given a summer course of five weeks in studying the savage tribes as shown in the various exhibits at the St. Louis Fair.

PROFESSOR A. C. ABBOTT, of the University of Pennsylvania, gave the opening address before the faculty of medicine of McGill University, his subject being 'The Study of Medicine and Recent Advances in Medical Science.'

DR. I. C. WHITE, state geologist of West Virginia, sailed for Brazil, on July 5, where he will examine and report on the coal fields of Rio Grande do Sul.

DR. G. W. LEWIS, of the department of chemistry at Harvard University, has been given a two years' leave of absence to accept a government position in the Philippines.

MR. A. J. COX, instructor in chemistry in Stanford University, has returned after two years spent at the University of Breslau.

MR. ERNST BESSEY, who for three years has been studying abroad, has resumed his duties in the Bureau of Plant Industry at Washington. During Mr. Bessey's stay abroad he has acted in various capacities for the government. Several expeditions have been made by him into southwestern Russia and the Mediterranean coast region in search of new plants and seeds. A number of the promising forage crop seeds secured by him in Turkestan are now being grown and tested under the direction of the Bureau of Plant Industry.

WE learn from *The American Geologist* that at a recent meeting of the Virginia Board of Agriculture an appropriation was voted for a Geological Survey of the mineral resources of Virginia. The survey will be conducted jointly by the State Department of Agriculture and the Virginia Polytechnic Institute. Dr. Thomas L. Watson, professor of geology in the Polytechnic Institute, was appointed geologist in charge of the survey.

DR. A. E. McDONALD retired on October 1, 1904, from the superintendency of the Manhattan City Hospital, Ward's Island, N. Y.; Dr. J. T. W. Rowe is retained as acting superintendent.

A MEMORIAL tablet to Dr. Jesse Lazear, who died in Cuba in 1900 while investigating the causes of yellow fever, has been unveiled at the new surgical building of the Johns Hopkins Hospital.

MAJOR HENRY F. ALVORD, chief of the dairy division of the United States Department of Agriculture, died at St. Louis on October 1, as the result of a stroke of paralysis.

MR. CLARENCE M. DALY, for sixteen years employed in the experimental department of Mr. Edison's laboratory, has died as a result, it is said, of cancerous growths on his hand caused by work with X-rays.

DR. O. REMBOLD, formerly professor of medicine at Innsbrück, has died at the age of seventy-one years.

MR. RONALD WILLIAM HENRY TURNBULL HUDSON, lecturer in mathematics at the Uni-

versity of Liverpool, with Mr. J. F. Cameron, lecturer of Caius College, Cambridge, was climbing a difficult *couloir*, near Bethesda, in north Wales, on September 20, when he dislodged a mass of rock, and, falling with it, was instantly killed. Mr. Hudson was twenty-eight years of age, and was the son of Professor W. H. H. Hudson, of King's College, London.

THERE will be a civil service examination on November 10 to fill the position of assistant to the agrostologist in the Bureau of Plant Industry at a salary of \$1,400. On November 16 examinations will be held for the position of technical assistants in chemistry, pharmacology and zoology in the public health and marine hospital service, with salaries of not less than \$1,000.

KING EDWARD has been pleased, upon the recommendation of the secretary for Scotland, to confer the title 'Royal' upon the Edinburgh Museum of Science and Art, and to approve its designation being altered to 'The Royal Scottish Museum.'

FOURTEEN large houses in Bloomsbury, London, have been demolished for the British Museum extension.

THE private herbarium of Dr. John K. Small, consisting of 21,900 sheets, fully representing his collections in the southern United States, has, we learn from the *Botanical Gazette*, been acquired by the Field Columbian Museum.

THE autumn intercollegiate geological excursion for professors, teachers and advanced students will be held at Worcester, October 22. The party will meet on the evening of October 21, at 8 o'clock, in the rooms of the Worcester Natural History Society, 12 State street, when explanation of the work of the next day will be given. The party will start at 8:30 A.M., October 22, from the Bay State House, on a special trolley car; and, after visiting localities in the eastern and northern parts of the city, will return to the hotel for dinner—price, 75 cents. In the afternoon the party will go on the trolley car to the southeastern part of the city, visiting interesting localities there. The works—'The Physical Geography of Southern New England,' by Wm. M. Davis;

'Physical Geography of Worcester,' by J. H. Perry; 'Geology of Worcester,' by J. H. Perry and B. K. Emerson—will make known the points of geological interest in the region. Those proposing to take part in the excursion will please inform Mr. J. H. Perry, 76 Highland street, Worcester, Mass., on or before October 18.

THE Liverpool School of Tropical Medicine proposes to despatch a second yellow fever expedition to the Amazon in view of the necessity of investigating still further this malady. The late Dr. Walter Myers was selected by the school, together with Dr. Herbert Durham, to undertake an expedition to Para to investigate the disease, only a few years ago. Both members of the expedition were attacked by the malady and Dr. Myers died. The expedition will probably start at the end of the year.

WE learn from *Nature* that extensions made to Millport Marine Biological Station, including a new laboratory, research rooms, a tank-room and a library, the gifts of Mr. James Coats, Jr., of Paisley, were opened on September 27, by Sir John Primrose, lord provost of Glasgow.

WE learn from *Popular Astronomy* that in a circular accompanying the last issue of the *Astronomische Rundschau*, the sale of the instruments and library of Manora Observatory is announced. The telescope is spoken of as one of great excellence. Application should be made to Manora-Sternwarte 'Lussenpico' (Istri).

ACCORDING to the *Experiment Station Record*, it is proposed to hold an International Congress of Agricultural Mechanics at the Universal Exposition of Liège in 1905, under the patronage of the Belgian Government. The organization has, however, not yet been perfected nor the program completed. A. Lonay, director of the provincial school of agricultural mechanics at Mons, is in charge of the preliminary arrangements. Among the topics which have been suggested for the program are instruction in agricultural mechanics, testing stations for agricultural machinery, exhibition and tests of machinery, application of electricity, the traction auto-

mobile, and the establishment of a review of agricultural mechanics.

THE exhibition of the Institute of Hygiene, recently opened in London, differs, according to the *Times*, from any exhibition previously held. It is under the auspices of a medical council and is controlled by medical experts. The intrinsic value of every exhibit is investigated by an examining board. Exhibits only of a high standard of merit are admitted. Every product, article, or appliance passed by the board is 'hall-marked' as to its purity, quality and excellence. Great care is exercised in maintaining the standard of exhibits—alike in the interest of the public health as of the exhibitors. It is recognized that any exhibit passed by the examining board may be used and recommended by medical practitioners. A certificate is granted to exhibitors by the institute, which constitutes a valuable award of merit. The exhibition is intended—(1) to supply medical men with practical information so as to enable them to keep abreast of the times in regard to the value and progress made in the various manufactured products and articles which affect health; (2) to supply matrons and nurses with useful knowledge in regard to those products and appliances required by invalids; (3) to supply the general public, and especially that large and increasing number who take an interest in dietetics, clothing, appliances and articles which are correlated with the health of the person or the home, with authoritative information as to their value and use. The exhibition is situated in Devonshire street, Harley street, in the west end of London and in the heart of the chief medical center of the country. Sample spaces only are allotted to exhibitors, so as to enable a large number and great variety of exhibits to be on view. The exhibition is a permanent one—open daily throughout the year, and is free to the public as well as to the medical profession.

THE *Experiment Station Record* states that the order establishing the soil and fertilizer laboratory in the Bureau of Chemistry, U. S. Department of Agriculture, has been abrogated, and in lieu of this laboratory one to be

known as the plant analysis laboratory has been established. The laboratory is charged with the examination of fertilizers and will collaborate in this work with the referees of the Association of Official Agricultural Chemists, and with the investigation of the constitution of plants. It is authorized to collaborate with the Bureau of Plant Industry in the chemical investigation of problems in which the two bureaus are mutually interested. A leather and paper laboratory and a micro-chemical laboratory have also been established in this bureau. The latter is charged with micro-chemical investigations relating to the investigations of the Bureau of Chemistry, and especially the examination of food products with respect to their composition and adulteration. To the leather and paper laboratory will be assigned analyses and investigations relating to tannins and tanning material, all technical problems of a chemical nature relating to the production of leather, chemical and physical examinations of papers with reference to their fitness for use in this and other departments, and problems relating to the production of paper with a view to promoting the agricultural industries connected with the production of the raw materials and to the improvement of the quality of papers made.

UNIVERSITY AND EDUCATIONAL NEWS.

It is said that Yale University will receive by the will of Mr. Levi Clinton Veits the sum of about \$200,000.

THE veterinary department of the University of Pennsylvania has received an anonymous gift of \$100,000.

COLUMBIA UNIVERSITY has received a gift of \$16,250 from Mr. H. E. Garth for the establishment of a scholarship, and \$10,000 from an anonymous donor for the purchase of books.

It is said that the University of Chicago has received \$250,000 for a building for the divinity school.

ACCORDING to the *Boston Transcript*, the Yale University Museum has received from the Royal Museum of Decorative and Industrial Arts at Brussels a large gift of antiquities collected in southern Spain. The collec-