Orville H. Ensign has been appointed to the professorship of electrical engineering, in place of D. C. Jackson, now head of the department of electrical engineering at Massachusetts Institute of Technology. Professor Ensign has been general electrical and mechanical engineer of the United States Geological Survey Reclamation Service, in charge of the work on electrical and pumping problems on the Pacific coast.

A. M. Winchell, who comes from the Montana School of Mines, is assistant professor of mineralogy and petrology. Otis A. Gage, Cornell, is the new assistant professor in the physics department, and James H. Wolton, University of Illinois, is assistant professor of chemistry. Among the lecturers secured for the coming year in various departments are W. A. Richards, chemical engineer, and Charles H. Hawes, anthropologist, of Cambridge University, England.

In the department of chemistry R. K. Brewer, W. G. Wilcox, Edward Wolesensky, C. W. Hill and Charles B. Gates have been made assistants, the latter to take the place of W. H. Doughty, resigned. James T. Bowles is sanitary chemist in the hygienic laboratory, S. K. Susiski is research assistant in agricultural chemistry, and E. V. McCollum is instructor in agricultural chemistry.

John R. Roebuck, who is a graduate of Toronto University and for the past year has been professor of physics at McGill Medical College, Toronto, has been appointed instructor in physics in place of A. L. Colton. Two other instructors appointed in this department are A. W. Smith, Haverford College, and H. C. Heil, and as assistants W. A. Titsworth, of Rutgers College, W. F. Steve, H. J. Plagge, D. S. Dye, O. H. Gaarden, F. W. Forsythe, F. K. Brainard and L. B. Aldrich were named. Raymond Schulz was made assistant in pharmacy in place of Florence Gage, resigned, and C. C. LeFebre is the assistant. The resignation of G. M. Reed as instructor of botany was accepted, and the following assistants in the department were named: E. G. Artzburger, J. M. Brannon, Mary A. Hickman and Hallie D. M. Jolivette. The assistantship made vacant through the resignation of A. B. Clawson is filled by Robert W. Hegner. The new assistant in bacteriology, in place of N. W. Wayson, resigned, is O. O. Nelson, and C. W. Smith is instructor in the department. E. L. Eaton was made instructor in astronomy in the correspondence department. In the mathematics department, George D. Berkhoff and A. L. Underhill are instructors and Bruce Bartholomew, assistant. Edward Steidtman is the new assistant in mineralogy and petrology.

In the College of Engineering the following changes have been made: Ernst Flanner is instructor in electrical engineering, vice John C. Potter, resigned, and H. B. Sanford is assistant in the same subject. W. L. Dobney is instructor in mechanical practise, and J. B. Kommers and A. H. Miller are instructors in mechanics, the latter succeeding H. F. Moore, resigned. W. C. Penn is instructor in topographical engineering, and John C. Wied in steam engineering. E. E. Parker has been made instructor in bridge engineering. Paul Sladky succeeds B. S. Anderson as assistant in machine design. Robert E. Egelhoff is instructor in mechanical drawing, and M. R. Hammar succeeds J. E. Boynton in the same Frank W. Warner is instructor in drawing and descriptive geometry. F. W. Lawrence is instructor in hydraulics, with W. A. Gattiker as assistant.

The changes in the College of Agriculture include the appointment of Miss Louise Jahns as instructor in soils, and J. F. Reubensaal as instructor in pasteurizing.

## SCIENTIFIC NOTES AND NEWS

Dr. RICHARD WETTSTEIN, Ritter von Westerheim, professor of systematic botany at Vienna, has been elected president of the Association of German Men of Science and Physicians for the meeting to be held next year at Cologne.

DR. EMIL FISCHER, professor of chemistry in the University of Berlin, gave the Faraday lecture before the London Chemical Society on October 18. On the preceding day he received the degree of doctor of science from the University of Cambridge.

An oil portrait of Dr. John Guiteras has been hung in the position of honor in the eastern amphitheater of the medical laboratories of the University of Pennsylvania, where he was professor of pathology until his return to Havana in 1900. The painting is by Armando Menocal, of Havana.

DR. ALBERT E. LEACH, formerly of the Massachusetts Board of Health, has accepted the position of chief of the new United States Food Inspection Laboratory to be established at Denver.

THE following appointments have been made to the staff of the Rockefeller Institute for Medical Research: Dr. Hideyo Noguchi, promoted to associate in pathology; Dr. G. W. Heimrod, assistant in biological chemistry; Dr. W. A. Jacobs, fellow in biological chemistry; Mr. P. A. Kober, scholar in biological chemistry; Dr. R. V. Lamar, scholar in pathology.

Professor R. M. Wenley, of the University of Michigan, has been appointed to the Baldwin lectureship for the year 1908-9.

Dr. MAZYCK P. RAVENEL, who had just returned to Philadelphia from Berlin, where he took part in the Fourteenth International Congress of Hygiene and who has now left for Madison, to take the chair of bacteriology at the University of Wisconsin, was given a farewell dinner at the University Club on October 17.

Dr. Robert Koch has returned from his work at Uganda on the sleeping sickness, and was expected to arrive in Berlin about November 1.

Professor William Bateson is about to return to Cambridge after giving a number of lectures in this country. On November 2 he will lecture at Harvard University on "Heredity, as illustrated by Mendel's Law"; on October 30 he lectured before the New York Academy of Sciences on "The Inheritance of Color in Animals and Plants."

At the request of the government of Mauritius, the colonial office has arranged with Major Ronald Ross, professor of tropical medicine in the University of Liverpool, to

proceed to Mauritius in order to advise the government of that colony as to the best methods of dealing with malaria.

Professor Charles Schuchert, the curator of the geological department of Peabody Museum, Yale University, spent the greater part of the summer collecting fossils and studying the geology of New Jersey, Maryland, Virginia and western Tennessee.

Dr. George B. Gordon has reached Seattle, after spending the summer in archeological explorations in Alaska for the archeological department of the University of Pennsylvania. He cabled from Nome that he had been adrift in Behring Sea for twenty days.

Dr. Charles Peabody, of the anthropological department of Harvard University, has returned from a four-months' archeological tour abroad. He officially represented the Peabody Museum and the Division of Anthropology at the Prehistoric Congress of France held at Autun, and at the International Reunion of Anthropologists held at Cologne.

Professor W. B. Cannon, of the Harvard Medical School, addressed the Academy of Medicine, Cleveland, O., October 11, on "Some Physiological Processes in the Region of the Pylorus."

Dr. Hector Mackenzie opened a discussion on the complications and sequelæ of pneumonia and the possibilities of treatment by serum or vaccine at the first meeting of the medical section of the newly-established Royal Society of Medicine, which met on October 22, at 5:30 p.m.

Mr. A. Henry, reader in forestry at Cambridge University, gave his inaugural lecture on October 15, the vice-chancellor presiding. Mr. Henry dwelt upon the causes which had retarded the scientific development of forestry in Great Britain, pointed out the necessity of reafforesting the waste lands and described the course he purposed to pursue in developing the teaching of and research in forestry in the university.

Friends of the late Walter Frank Raphael Weldon, M.A., D.Sc., formerly Linacre professor of comparative anatomy at Oxford and

fellow of Merton College, have offered the university a sum of about £1,000 for the foundation of a prize, with a view to perpetuate the memory of Professor Weldon and to encourage biometric science. The prize will be called the Weldon memorial prize and will be awarded every three years. It will consist of a bronze medal and a grant of money.

The Geographical Society of Philadelphia will hold a meeting on November 6, in memory of the late Angelo Heilprin, founder of the society. Institutions and societies with which Professor Heilprin was connected will be represented by speakers, as follows: Mr. Alba B. Johnson, president of the Geographical Society of Philadelphia; Mr. Henry G. Bryant, Geographical Society of Philadelphia; Mr. Herbert L. Bridgman, American Geographical Society and Peary Arctic Club, New York; Mr. Gilbert H. Grosvenor, National Geographic Society, Washington, D. C.; Professor Russell H. Chittenden, director of the Sheffield Scientific School, Yale University; Dr. Edward J. Nolan, Academy of Natural Sciences, Philadelphia; Dr. Edgar F. Smith, American Philosophical Society, Philadelphia: Dr. Theodore Le Boutillier, Geographical Society of Philadelphia.

A MEMORIAL meeting in honor of the late James Carroll was held by the Johns Hopkins Hospital Historical Club on October 14. Addresses were delivered by Drs. William H. Welch, Howard A. Kelly and William S. Thayer.

SIR DAVID GILL and Major P. A. MacMahon represented the Royal Society and the Royal Astronomical Society at the funeral of the late M. Maurice Loewy, director of the Observatory of Paris.

Mr. Allen H. Curtiss, a collector and student of the plants of the southern United States and of the West Indies, died in Jacksonville, Fla., on September 1, in the sixtythird year of his age.

The death is announced of Dr. J. Grancher, professor of the diseases of children at Paris and eminent for his work on tuberculosis among children.

Dr. WILLIAM MARSHALL, associate professor of zoology at the University of Leipzig, has died at the age of sixty-two years.

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THERE will be a civil service examination on November 13 to fill a number of vacancies in the position of constructing engineer, in the Forest Service, at salaries ranging from \$1,500 to \$2,000 per annum. These positions are for field service in the western part of the United States, with no permanent station, and require much travel.

THE administration building of the Mount Weather Meteorological Observatory of the Weather Bureau was destroyed by fire on October 23. The loss is said to be \$25,000, including some valuable instruments.

An imperial edict issued on October 9 ordered the Board of Revenue and Commerce forthwith to introduce a uniform system of weights and measures throughout the Chinese empire, the standards, whose character is not stated, to be fixed within six months.

It was announced at the International Congress of Psychiatry and Neurology, held recently at Amsterdam, that arrangements had been made for an International Institute for the Study of Causes of Mental and Nervous Affections. The king of Italy has offered the use of a villa near Lugano, but the institute will later be transferred to Zurich.

During the academic year 1907-8 Columbia University, in cooperation with the officers of the United States Navy and the United States Coast and Geodetic Survey, offers a series of public lectures in navigation and nautical science. They are intended for yachtsmen, officers of merchant vessels in New York harbor, and all persons interested in the safe navigation of the seas. The lectures will be given in 309 Havemeyer Hall on Tuesday afternoons at 4:30, and will be illustrated.

November 12—Rear-Admiral C. F. Goodrich, U.S.N.: Introductory Address.

November 12—Lieut.-Commander W. S. Crosley, U.S.N.: "Dead Reckoning and Coastwise Navigation."

November 19—Lieut.-Commander W. S. Crosley, U.S.N.: "The Bottom of the Sea and its Uses in Navigation."

November 26—Lieut.-Commander R. H. Leigh, U.S.N.: "Deep-sea Navigation: Latitude."

December 3—Lieut.-Commander R. H. Leigh, U.S.N.: "Deep-sea Navigation: Longitude."

December 10—Professor Poor: "The Sun and its Motions."

December 17—Professor Poor: "The Making of an Almanac."

January 14—Dr. R. A. Harris: "Tides: their Characteristics, Observation and Prediction."

January 21—Dr. R. A. Harris: "The Causes and Representation of the Tides."

January 28—Dr. R. A. Harris: "Tidal Currents and Meteorological Tides."

February 4—"How Charts are made and used." Lecturer to be announced.

February 11—Dr. L. A. Bauer: "The Magnetic Survey of the Pacific Ocean by the Carnegie Institution."

February 18—Professor Hallock: "Finding the North Magnetic Pole."

February 25—Capt. Howard Patterson: "The History of the Compass and its Errors."

THE Reed collection of heads, horns and skins of Alaskan big game animals, which for three years has been on exhibition at the Union Club in Victoria, B. C., has been secured for the New York Zoological Park. The collection was formed by Mr. A. S. Reed, an English sportsman, during an extensive series of hunting adventures in the northwest, and contains the finest lot of heads of giant moose, caribou, Alaskan brown bear, white mountain sheep and walrus ever brought together. Owing to the disappearance of the big game of Alaska, it is doubtful whether it would now be possible for any one to bring together such a collection of extra large specimens. Several of the objects are, by experts, believed to be the finest of their kinds in existence. The collection is widely known among the sportsmen of America and Europe. It arrived at the Zoological Park on October 16, and was temporarily stored in the horn room of the lion house. The collection was secured through the efforts of Dr. W. T. Hornaday, who last winter was instrumental in founding the National Collection of Heads and Horns, owned by the New York Zoological Society. It comes to New York as the gift of Emerson McMillin, Esq., a prominent member of the Camp-fire Club of New York. The collection is valued at \$10,000; but by reason of the purpose to which it will be devoted, it was finally acquired at a total cost of \$5,500. It was secured barely in time to forestall its sale abroad. A German sportsman passed through New York City on his way to Victoria to purchase the collection, when he learned that it had been secured two weeks previously by the authorization of Mr. McMillin.

Nature states that a meeting of the International Meteorological Committee was held at Paris on September 10 and following days. The committee consists of seventeen members, appointed at the conference at Innsbruck in Ten members were present, including the director of the Japanese service. places were vacant by death. The principal subjects discussed were the scheme of organization of international meetings for meteorological purposes; marine charts and weather signals; a number of items of the international daily weather service, including reports by wireless telegraphy; and various propositions concerning the meteorology of the globe, in which were included one on the necessity for observing stations in the regions of centers of action of the atmosphere, another on the necessity for new charts of isotherms for the globe, and a third on the desirability of daily observations from selected stations, in order to trace the course of meteorological changes over the globe. A number of special commissions were appointed to report upon, or carry out, the various proposals. M. Mascart, president of the committee, was unfortunately prevented by illness from attending the meetings with the exception of one held at his house for the discussion of the question of international organization. At the close of the session he resigned the office of president, and Dr. Shaw, director of the British Meteorological Office, was elected president. M. Angot, M. Mascart's successor at the Bureau Central, takes his place also as a member of the committee. Dr. Hellmann, director of the Prussian Meteorological Institute, was elected secretary, in succession to Professor Hildebrandsson, who retires upon his withdrawal from the post of director of the Royal Meteorological Observatory at Upsala. Dr. Hamberg, director of the Swedish Meteorological Office, was elected to succeed Professor Hildebrandsson as a member of the committee. The other vacant places were filled by the appointment of Dr. Maurer, director of the Swiss office, and Mr. Stupart, director of the Canadian office.

THE lime produced in the United States in 1906 amounted to 3,197,754 short tons, valued at \$12,480,653, an increase over the production for 1905 of 213,654 tons in quantity and of \$1,130,425 in value. The average price per ton in 1906 was \$3.90, against \$3.67 in 1905, an increase of \$0.23. These figures are reported by Mr. E. C. Eckel, in an advance chapter from "Mineral Resources of the United States, 1906," published by the U.S. Geological Survey and now ready for distribution. The distribution of the production by states shows that Pennsylvania, with 624,060 tons valued at \$1,857,754, has first place, its nearest competitor being Ohio, with 331,972 tons valued at \$1,100,133. Maine, Wisconsin and Minnesota each produced more than 200,000 tons, with values approximating \$1,-000,000; and Maryland, Illinois, Massachusetts, New York and Vermont follow in the order named, with productions of more than 100,000 tons. West Virginia, Alabama and Connecticut each exceeded 90,000 tons. The value per ton increased in almost every state, the producers giving as the cause the increased cost of fuel, supplies and labor. Of the total production, 2,647,724 tons were sold for structural uses as building lime, hydrated lime, for sand-lime brick manufacture, for slag cement, and for quick-lime brick; 550,030 tons were used in various chemical industries.

## UNIVERSITY AND EDUCATIONAL NEWS

The will of Robert N. Carson provides for the establishment of an industrial school for girls at the death of Mrs. Carson. The school, which is to be on the model of Girard College, will, it is said, have an endowment of five million dollars.

A FELLOWSHIP in physics of the value of \$500 annually has been established at the University of Cincinnati in memory of the late

Henry Hanna, of Cincinnati, who was the giver of one of the university halls. The foundation was made by his widow and daughter.

A COLLEGE OF MEDICINE, in which for the present only the first two years of the medical course will be given, has been formally organized at the University of Wisconsin. The entrance requirements include at least two years of college work. There are specific requirements in Latin, French and German and in physics, chemistry and biology. Dr. C. R. Bardeen is dean.

Dr. Ezra Brainerd has resigned the presidency of Middlebury College, which he had held for the past twenty-three years, having been in all instructor, professor and president of the institution for forty-three years. Dr. Brainerd is known for his work on the geology of the Champlain Valley and the botany of Vermont. Dr. John M. Thomas, pastor of the Presbyterian church at East Orange, N. J., has been elected president of the institution.

Dr. Emery Taylor, associate in anatomy at the Wistar Institute of Anatomy, has been elected assistant professor of anatomy at Cornell University.

DR. F. W. THYRIG has been appointed Bullard Fellow in embryology at the Harvard Medical School, and will devote himself to researches on the anatomy of human embryos and on the comparative embryology of the pancreas.

Mr. L. E. EMERSON, Ph.D. (Harvard), has been appointed instructor in philosophy in the University of Michigan.

Professor J. J. Charles has retired from the chair of anatomy and physiology at Queen's College, Cork, which he has held since the establishment of the college. The chair has been divided—Dr. B. C. A. Windle, president of the college, having been made professor of anatomy and Dr. David Barry, professor of physiology.

Dr. Ludwig Brunner, has been promoted to an associate professorship of chemistry in the University of Krakau, and Dr. Erich Marx, to an associate professorship of physics in the University of Leipzig.