

of light of some interest on the great subject of American collegiate education.

FREDERICK C. FERRY

SCIENTIFIC NOTES AND NEWS

THE statue of Lord Kelvin, erected in Kelvin Grove Park, Glasgow, was unveiled on October 8. Mr. Augustine Birrell, rector of Glasgow University, made the address, and at the luncheon which followed an address was made by Mr. Arthur Balfour. The statue, which is of bronze, is the work of A. McF. Shannan.

COLONEL GEO. W. GOETHALS, chairman of the Isthmian Canal Commission and chief engineer of the Panama Canal, has accepted the honorary presidency of the International Engineering Congress and will preside over the general session to be held in San Francisco, September 20-25, 1915.

PROFESSOR THEOBALD SMITH, of Harvard University, has accepted membership on an International Committee with Professor Gaffky, of Berlin, and Professor Calmette, of Lille, to award in 1914 the first Emil Chr. Hansen Prize for researches in medical microbiology.

THE Warren triennial prize for 1913, amounting to \$500, has been awarded to Dr. Arrigo Visentini, instructor in pathologic anatomy in the Royal University, Pavia, Italy, for his essay entitled, "Function of the Pancreas and its Relation to the Pathogenesis of Diabetes."

AT its last meeting the Rumford Committee of the American Academy made the following appropriations: To Professor W. O. Sawtelle, of Haverford College, \$300, in addition to a former appropriation, in aid of his research on "The spectra of light from the spark of an oscillatory discharge"; to Professor G. N. Lewis, of the University of California, \$300, in addition to a former appropriation, in aid of his researches on the "Free energy changes in chemical reactions"; to Professor H. N. Davis, of Harvard University, \$200, in aid of his various thermodynamical researches.

DR. CARL VOEGTLIN, associate professor of pharmacology in the Johns Hopkins Univer-

sity, has been appointed professor of pharmacology in the hygienic laboratory, U. S. Public Health Service, to succeed Professor Reid Hunt, now head of the department of pharmacology at Harvard University.

PRIVATDOZENT DR. CARL TIGERSTEDT, of the physiological institute of the University of Helsingfors, Finland, recently appointed as research associate of the Carnegie Institution of Washington, is spending the winter in the Nutrition Laboratory in Boston.

ALBERT W. WHITNEY has resigned his position of associate professor of insurance and mathematics in the University of California to become assistant actuary in the Insurance Department of the State of New York.

PROFESSOR GAFFKY, director of the Institute for Infectious Diseases, Berlin, retired from his position on October 1. His successor will probably be Professor Loeffler, of Greifswald.

PROFESSOR A. OBRECHT has been appointed director of the Santiago Observatory in succession to the late Dr. Ristenpart.

DR. ROGER CROISSANT, Paris, is visiting the United States, to study the system of training nurses with a view of organizing similar work in France.

DR. JOSEF SCHUMPETER, professor of political economy in the University of Graz, Austria, has been named as the Austrian exchange professor for the winter semester of 1913-14 at Columbia University. He is a graduate of the University of Vienna in 1906, and studied later in Berlin and England, in which latter country he remained until 1908. Dr. Schumpeter writes and speaks the English language perfectly.

DR. RHODA ERDMANN, of the department of protozoology of the Berlin Institute for Infectious Diseases, has been appointed Seesel research fellow in zoology at Yale University, to enable her to study Professor Woodruff's pedigreed race of *Paramœcium*.

DR. BURT G. WILDER, emeritus professor of neurology and vertebrate zoology in Cornell University, will reside hereafter in Brookline, Mass., the home of his boyhood. His address

this winter is 60 Park St. For the present he has given up scientific research in order to complete his "Records and Recollections of the Civil War," based upon his daily letters, which were all preserved.

PROFESSOR W. M. DAVIS, of Harvard University, lectured on "The Lessons of the Colorado Canyon," at Denison University, October 6; at Ohio Wesleyan University, October 7; at Ohio State University, October 8; at State Normal College, Ypsilanti, October 10, and at the University of Rochester, October 13. He also spoke on "Glacial Erosion in Montana" at Ohio Wesleyan; on "The Bearing of Physiography on the Theories of Coral Reefs," at Columbus, and on "Experiences of an Exchange Professor at Berlin and Paris," at Ypsilanti.

"THE Physical Basis and Determination of Sex" was the subject of an illustrated address given on October 18 by Associate Professor H. H. Newman, of the department of zoology of the University of Chicago, at Fullerton Hall, Art Institute of Chicago, under the auspices of the Field Museum of Natural History.

DR. HIDEYO NOGUCHI gave a demonstration at a meeting of the Royal Society of Medicine, London, on October 13, of the results of his recent investigations, most of them carried out at the Rockefeller Institute of Medical Research, of which he is an associate. He showed pure cultures of various pathogenic and saprophytic spirochetes, demonstrated the presence of *Treponema pallidum* in the brain in cases of general paralysis, and showed experimental general paralysis in rabbits. He also gave a demonstration of his recent cultural studies of the virus of rabies.

MR. CLAYTON D. MELL, of the U. S. Forest Service, sailed on October 16 from New York for British Guiana to inspect greenheart timber to be used in the construction of docks and other marine works for the Panama Canal.

MR. R. A. ROWLEY, assistant professor of geology in the University of the Philippines, has recently returned from an expedition to the northern part of the Island of Palawan,

and is engaged in working up a suite of rocks from that little known region.

It is stated in *Nature* that Major Barrett-Hamilton, accompanied by Mr. Stammwitz, one of the taxidermists on the staff of the British Museum (Nat. His.), has sailed in a whaler for South Georgia, on a mission from the Colonial Office, to report on the whaling stations leased by the British government to a Norwegian firm.

A BRANCH laboratory of the United States Bureau of Mines has been established in Morse Hall, Cornell University, in connection with the department of chemistry. Investigations will be made of problems related to the manufacture of brass and other alloys of copper by Dr. H. W. Gillett and Dr. J. M. Lohr under the direction of Dr. Charles Lathrop Parsons, chief mineral chemist of the Bureau of Mines, and Professor Bancroft.

THE sixty-seventh anniversary of Ether Day was celebrated at the Massachusetts General Hospital, Boston, on October 16, when the principal address was delivered by Dr. Milton J. Rosenau.

WE learn from *Nature* that at the recent International Congress of Pharmacy held at the Hague, a proposal to form an international pharmacopœial bureau was discussed, and a commission was appointed to consider the question, and to submit to the International Pharmaceutical Federation at an early date a scheme for the establishment of such a bureau. The commission is composed of seven members, representing, respectively, Great Britain, the United States, Germany, France, Holland, Belgium and Switzerland; most of the members are associated with the revision of their national pharmacopœias, the English representative being Professor H. G. Greenish, joint editor of the "British Pharmacopœia," and the American, Professor J. P. Remington, editor of the "United States Pharmacopœia." Among the duties of such a bureau as that proposed would be the collection and examination of all literature relating to pharmacopœial revision and the experimental investigation of new drugs and preparations, and no doubt the

influence of the bureau would tend to encourage the work already commenced in the direction of the unification of pharmacopœias.

At the request and with the cooperation of the Massachusetts Society for the Prevention of Cruelty to Animals, the faculty of medicine of Harvard University offers a course of free public lectures, to be given at the Medical School, on Sunday afternoons, beginning October 5 and ending December 21, 1913. The lectures begin at four o'clock.

October 5, "The Protection of Domesticated Animals," Professor Veranus A. Moore, of Cornell University.

October 12, "Our Increased Knowledge concerning the Nature of Animal Diseases," Dr. George W. Pope, of the Bureau of Animal Industry, Washington.

October 19, "The Dangers of Live-stock Traffic," Professor Karl F. Meyer, of Philadelphia.

October 26, "Stable Ventilation" (with lantern-slide demonstration), Professor James B. Page, of Amherst.

November 2, "Modern Operative Methods applied to Veterinary Surgery," Professor Harvey Cushing, of Boston.

November 9, "The Relation between Human and Animal Tuberculosis," Professor Theobald Smith, of Boston.

November 16, "Protection of Animals from Infective Diseases," Dr. Charles H. Higgins, of Ottawa.

November 23, "The Diseases and Care of Poultry and the Pig," Dr. Austin Peters, of Boston.

November 30, "The Diseases and Care of the Dog and the Cat," Dr. Arthur W. May, of Boston.

December 7, "The Diseases and Care of the Horse and the Cow," Dr. F. H. Osgood, of Boston.

December 14, "Rabies and Glanders," Dr. Langdon Frothingham, of Boston.

December 21, "The Relationship between Human and Animal Diseases in the Tropics," Professor R. P. Strong, of Boston.

THE VIENNA correspondent of the British Medical *Journal* writes that the events of the past year have forced the senate of the University of Vienna to the unwelcome conclusion that the university no longer occupies the posi-

tion it once held in the esteem of foreign scientific men. This has been proved by the fact that the well-known physiological chemist, Professor Abderhalden, refused the directorship of the chemical institute left vacant by the departure of Professor Ludwig, whilst the post of director of the medical clinic, formerly held by Professor von Noorden, has likewise been declined by Professor His, of Berlin. These refusals, which were totally unexpected and caused very great surprise, are in themselves sufficient to prove that the university is to blame for this loss of prestige; whilst the resignation of two such eminent German scientific men as Professor von Strümpell and von Noorden, both men in the prime of life, seems to point to the existence of some grave cause for dissatisfaction on the part of foreign professors. It is said that the matter has provoked much comment among the medical profession in Austria, which is beginning to express its disapproval of a régime that has had the effect of driving strangers away from Vienna, instead of attracting them to it. It is evident that some reformation of the existing conditions is needed, and it rests with the profession to see that this is properly carried out. In the meantime, temporary substitutes have been appointed to vacant posts in the persons of Professor Nauthner to the chemical institute and Professor Salomon to von Noorden's clinic. Public opinion is said to be in favor of the reservation of these posts in future for Austrians but religion, race and politics play as important a part in their selection as scientific attainments.

STATISTICS of the electrical machinery, apparatus and supplies industry in the United States for 1909 are presented in detail in a bulletin soon to be issued by the Bureau of the Census. It was prepared under the supervision of W. M. Steuart, chief statistician for manufactures. This industry includes the manufacture of the machines and appliances used in the generation, transmission and utilization of electric energy, together with most of the parts, accessories and supplies for them. It does not include, however, the production of poles, whether of wood, iron or steel; nor

does it include the manufacture of glass and porcelain were made expressly for electrical purposes, that of bare iron and copper wire, or any of the group of electrochemical and electrometallurgical products. The total number of establishments in the United States in 1909 engaged in the manufacture of electrical machinery, apparatus and supplies, was 1,009. The total number of persons engaged in the industry was 105,600, of whom 102,950 were wage earners. The total capital employed was \$267,844,432, and the total value of products was \$221,308,563. The industry in 1909 was largely centralized in the six states of New York, Pennsylvania, New Jersey, Massachusetts, Illinois and Ohio. These states together reported 83.9 per cent. of the total average number of wage earners, 82.6 per cent. of the total value of products and 83.1 per cent. of the total value added by manufacture.

UNIVERSITY AND EDUCATIONAL NEWS

THE Graduate College of Princeton University was formally dedicated on October 22. Professor Andrew F. West, dean of the graduate school, made the principal address, his subject being "The Household of Knowledge." Addresses of congratulation were made by Dr. Alois Riehl, professor and former rector in the University of Berlin; Dr. Arthur Shipley, master of Christ's College, Cambridge; Dr. Arthur Denis Godley, fellow of Magdalen College and public orator in the University of Oxford; M. Emile Boutroux, honorary professor in the University of Paris and president of the Foundation Thiers, and by President Nicholas Murray Butler, of Columbia University. The Cleveland Memorial Tower was then presented by Mr. Richard V. Lindabury, president of the Cleveland Monument Association, and accepted on behalf of the university by President John Grier Hibben. A memorial address on "Grover Cleveland" was then made by ex-President William Howard Taft. Earlier in the week the foreign guests gave public lectures, the subject of Dr. Shipley's address being "The Origin of Life."

DR. CHRISTIAN B. HOLMES has been appointed dean of the medical department of the

University of Cincinnati, succeeding Dr. Paul G. Woolley.

At the University of California, Frank LeRoy Peterson has been appointed assistant professor of farm mechanics, and Dr. Max Morse, instructor in physiology.

CHARLES T. KIRK, Ph.D. (Wisconsin, '11), has been appointed professor of geology in the University of New Mexico.

MISS FANNY C. GATES, formerly head of the department of physics at Goucher College, has been appointed dean of women and professor of mental and physical hygiene in Grinnell College.

MR. GEORGE R. JOHNSTONE, A.B. (Illinois, '13), has been appointed instructor in botany at the Michigan Agricultural College, making four instructors in addition to professor and assistant professor, who give the full time to instruction in botany, with two research assistants giving a quarter of their time respectively to plant pathology and plant physiology. Five hundred and twenty-one students have registered for work in the botanical department, being an increase of twenty-five per cent. over last year.

MR. WILLIAM C. WILLARD, C.E., M.Sc., Lehigh University, has been appointed assistant professor of railway engineering at McGill University, Montreal.

At Birmingham University Dr. F. C. Lee has been nominated to the chair of civil engineering vacated by Professor S. M. Dixon. Professor P. F. Frankland, F.R.S., has been elected dean of the faculty of science in succession to Professor Dixon.

DISCUSSION AND CORRESPONDENCE

COMMENTS ON PROFESSOR BOLLEY'S ARTICLE ON CEREAL CROPPING

It is now rather late to refer to Professor Bolley's article on "Cereal Cropping," published in *SCIENCE* on August 22, but I can not refrain from calling in question his statements in regard to the deterioration in the quality of wheat grown on soils which are "exhausted"