for 1908. The committee has considered 107 applications for assistance from this research fund. Some of these, it is mentioned, do not comply with the conditions laid down by the founder, Prince Roland Bonaparte, and others are for work entirely outside the field of the Academy of Sciences. The committee excludes also demands for assistance in researches in medicine, surgery and general biology, since the funds of the Caisse des Recherches scientifiques are exclusively reserved for biological studies. Ten grants are recommended as follows: (1) 2,000 francs to L. Blaringhem for a continuation of his important studies on the variation of species and the experimental methods for the creation of new species of plants; (2) 2,000 francs to Dr. Billard to enable him to pursue his studies on the hydroids; (3) 2,000 francs to Dr. Estanave to furnish him with a means of continuing his researches on direct vision projection in relief, with special reference to radiography; (4) 2,500 francs to MM. Fabry and Buisson for a continuation of their work on the establishment of a system of standard wave-lengths. The grant is to be applied to the purchase of a plane grating, a metal concave mirror of large diameter, and two plane mirrors required for a study of the differences between the lines of the solar spectrum and those of the electric arc; (5) 5,000 francs to M. Gonnessiat for the purchase of astronomical intruments for the observatory of Algiers; (6) 2,000 francs to Dr. Loisel for the continuation of his actinometric observations at the Observatory of Juvisy; (7) 2,000 francs to M. Dongier for the establishment of apparatus for the simultaneous study of the rainfall and atmospheric potential; (8) 2,500 francs to M. Perot for the spectroscopic study of the light from the sun by interferential methods; (9) 2,000 francs to M. Matignon for the determination of specific heats at high temperatures; (10) 3,000 frances to P. Colin for the publication of a map of South recommendations Imerina. These were adopted by the academy.

A COMMISSION, appointed by the crown to investigate the condition of Ireland's forests

and to suggest measures for bettering it, has just made public its report. The commission became convinced that there was imperative need for afforestation on a large scale, that the time had come when the "let alone" doctrine applied to the woods could no longer be The commission outlines and endured. vigorously urges the adoption of a large scheme for the state to plant about 700,000 acres with forest trees. This, with the 300,-000 acres of existing forest, would give Ireland 1,000,000 acres of forest land, an area which the commission considers essential for the agricultural and industrial requirements of the country. About 20,000 acres of this would be purchased by the state in mountainous and rough regions and managed as state forest, while 500,000 acres, chiefly in small' blocks, would be planted by the state, but managed by private owners or by county councils. The facts that under the Land Purchase Acts much woodland formerly held in large blocks is being sold in small parcels and lumbered, and that there is now opportunity for the government to acquire woods and land suitable for forests, make it specially urgent for the state to take immediate action. To show that such a scheme of land acquisition and planting is not impracticable, the Commission cites the case of Denmark, an agricultural country half the size of Ireland, which, since 1881, has increased her forests by 175,000 acres. Another case is that of little Belgium, which, in spite of her dense agricultural and industrial population and already large forests, has added 70,000 acres to her forests in the last twenty-five years. Though Ireland is particularly suited in soil and climate for the growth of forests, and some of her area is much better adapted for forests than agricultural crops, yet only 306,-000 acres, or one and one half per cent. of hertotal area is forested.

## UNIVERSITY AND EDUCATIONAL NEWS

AN anonymous gift of \$100,000 has been made to the Vienna Academy of Sciences for the establishment of a "Radium Institute" in connection with the new physical laboratories of the University of Vienna. It is announced that hereafter women who are subjects of the German empire will be admitted to the universities on the same footing as men. Women of other countries will require the permission of the minister of public instruction for matriculation.

THE governors of University College, Bristol, have approved the draft charter for establishing a University of Bristol.

ACCORDING to the daily papers, the salaries paid to instructors and professors at the University of Chicago will be increased by about twenty-five per cent. An official statement of the changes in the salaries will doubtless be made shortly.

JAY WILLIAM HUDSON, Ph.D. (Harvard), has been appointed assistant professor of philosophy in the University of Missouri.

ALFRED EDWARD TAYLOR, M.A., Frothingham professor of philosophy in McGill University, has been appointed professor of moral philosophy in the University of St. Andrews, in succession to Professor Bosanquet.

DR. HENRY ALEXANDER MIERS, F.R.S., fellow of Magdalen College, Oxford, and Waynflete professor of mineralogy in Oxford University, has been appointed principal of the University of London, from October 1, upon the resignation of Sir Arthur W. Rücker.

AT the University of Manchester Dr. J. E. Petavel, F.R.S., has been elected professor of engineering; Mr. T. G. B. Osbern, lecturer in economic botany; Mr. C. H. Lander, lecturer in engineering drawing; and Dr. F. H. J. A. Lamb, senior demonstrator in physiology.

## THE COLLEGE OF ENGINEERING OF THE UNIVERSITY OF ILLINOIS

THE college announces the following new appointments for the college year beginning September 16, 1908:

F. D. Crawshaw, B.S. in electrical engineering, Worcester Polytechnic Institute, '96, who has served as head of the manual training department of the Central High School, Minneapolis, Minn.; as first assistant, manual arts department, Bradley Polytechnic Institute, and as principal of the Franklin School, Peoria, Ill., to be assistant dean of the College of Engineering. Frank B. Sanborn, B.S. Dartmouth, '87, C.E. Dartmouth, '89, M.S. Harvard, '98; for nine years past professor in charge of the department of civil engineering, Tufts College; has been granted leave of absence for one year by that institution and during this time will act as assistant professor of civil engineering with the University of Illinois, doing work not otherwise provided for during the prospective temporary absence on leave of Professor I. O. Baker.

Shelby S. Roberts, B.S. Rose Polytechnic Institute, '98, C.E. Rose, '07; for the past ten years engaged in railway work, chiefly with the St. Louis, Peoria & Northern Railway, the Louisville & Nashville, and the Illinois Central, has been appointed assistant professor of railway civil engineering. Mr. Roberts will give his entire attention to instructional and research work with reference to railway track construction and maintenance and with reference to railway signaling.

William F. Schulz, a graduate of the Baltimore Polytechnic Institute in 1890, an honor man at Johns Hopkins University, '93, bachelor of science in electrical engineering, University of Illinois, '00, Ph.D. Johns Hopkins University, '08. For five years assistant and instructor in physics at the University of Illinois, has been appointed assistant professor of physics.

Kenneth G. Smith, A.B. University of Chicago, '96, B.S. in mechanical engineering, University of Illinois, '05; for three years with the Kerr Turbine Company, has been appointed to have charge of the engineering experiment station extension work, with the rank of assistant professor of mechanical engineering.

A. St. J. Williamson, University of Illinois, B.S. in mechanical engineering, '98, M.E. '02, and for the past seven years engaged in railway work, chiefly with the Mexican Central Railway, has been appointed instructor in railway mechanical engineering.

C. F. Kelley, A.B. Harvard University, '06, a student with De Camp and other noted artists, has been appointed instructor in architecture.

C. C. Albright, B.S. Purdue University, '03,