

Applications of Physics," at Long Eaton; Professor J. Walton, on "Coal and its Origin," at Mansfield; and T. M. Herbert, on "Transport of Food," at Newark.

The Lord Mayor and members of the City Council will hold a civic reception at Nottingham Castle on Thursday evening, September 2, and the College Council will give a garden party on September 7.

AWARDS OF THE ELLA SACHS PLOTZ FOUNDATION

DURING the thirteenth year of the Ella Sachs Plotz Foundation for the Advancement of Scientific Investigation, ninety-two applications for grants were received by the trustees, thirty-five of which came from the United States, the other fifty-seven coming from twenty-one different countries in Europe, Asia, Africa, Australia and North America. The total number of grants made during this year was thirty, one of these being a continued annual grant. Eighteen of the new grants were made to scientists outside of the United States.

In the thirteen years of its existence the foundation has made two hundred and eighty-two grants, which have been distributed to investigators working in Argentina, Austria, Belgium, Canada, Chile, China, Czechoslovakia, Denmark, Esthonia, France, Germany, Great Britain, Greece, Hungary, Italy, Jugoslavia, Latvia, Netherlands, North Africa, Palestine, Poland, Portugal, Roumania, South Africa, Sweden, Switzerland, Syria, Venezuela and the United States. The maximum size of the grants is usually less than \$500.

The list of investigators and the purpose of their researches aided in 1936 is as follows:

Dr. Melville Arnott, Edinburgh, for research into the connection between renal damage and hypertension.

Dr. Zoltan Aszodi, Budapest, for work on slowly absorbed insulins.

Professor B. P. Babkin, Montreal, for continuation of histo-physiological investigation of the digestive glands.

Professor Dr. H. K. Barrenscheen, Vienna, for study of free nucleotides in various animal organs.

Professor Howard H. Beard, New Orleans, for continuation of studies on the origin of creatine.

Professor Leon Binet, Paris, for study of the rôle of glutathione in the animal organism.

Dr. Matilda Moldenhauer Brooks, University of California, for study of infra-red and ultra-violet absorption spectra of various hemoglobin compounds.

Professor R. Courrier, Algiers, for research on sexual physiology in monkeys.

Professor Paul L. Day, University of Arkansas School of Medicine, for investigations on nutritional anemia and leukopenia in the monkey.

Dr. H. B. Fell, University of Cambridge, for nutritional studies by Miss Glasstone.

Professor M. Florkin and Dr. Z. M. Bacq, Liège, for work on: (1) Metabolism of phenylamines in the mammalian

body. (2) Action of drugs and the autonomic nervous system on blood potassium. (3) Action of anti- and pro-oxidant substances on adrenaline and sympathetic action on smooth muscle.

Dr. Ludwik Gross, Paris, for cancer research.

Professor Laurence Irving, Toronto, for experiments on vestibular-vasomotor relations.

Professor George Karagunis, Athens, for work upon the production of an optically active substance from inert material under the influence of an asymmetrical force.

Dr. Esben Kirk, Copenhagen, for research on the lipid content of the red blood cells under normal conditions and in anemias.

Dr. John S. Lawrence, Strong Memorial Hospital, Rochester, N. Y., for work on problems dealing with the development of an antineutrophilic serum in order to learn more about leukemia.

Professor C. Levaditi, Paris, for work of determining certain physical properties of ultraviruses.

Dr. John R. Murlin, University of Rochester, for investigations into the mechanism of secretion: (1) The secretion of the intestinal glands. (2) The secretion of the mammary gland.

Professor W. C. W. Nixon and Professor L. T. Ride, Hong-Kong, China, for investigation of the hematological and dietary aspects of a high (10 per cent.) incidence of œdema of pregnancy, both before and after parturition, in Hong-Kong.

Dr. Eric Ponder, The Biochemical Laboratory, Cold Spring Harbor, L. I., for study of white cells under various conditions.

Dr. Samuel Proger, the Boston Dispensary, for continuation of work on the effect on patients with heart disease of lowering the level of energy metabolism by means of prolonged dietary restriction.

Dr. Wilhelm Raab, Vienna, for research on proteolytic enzymes of carcinoma tissue, also on the influence of hormones upon the development of arteriosclerosis and high blood pressure.

Professor Louis Rapkine, Paris, for work on the oxidation-reduction potentials of cells and the mechanism of cell division.

Dr. William T. Salter, Huntington Memorial Hospital, Boston, for study of the enzyme production and physiologic effect of the plasteins of thyroglobulin and of insulin.

Dr. Francis Schwentker, Baltimore, City Health Department, for study of the biological mechanisms involved in postscarlatinal nephritis.

Dr. Yellapragada SubbaRow, Harvard Medical School, for further study of the structure of the compounds active in pernicious anemia; continuation of work on experimental black tongue; and, if possible, to try the curative properties of these substances on human pellagra.

Thorndike Memorial Laboratory, Boston City Hospital, (Professor George R. Minot, director), continued since 1927 in recognition of Dr. Francis W. Peabody's services to the foundation.

Professor Dr. F. Verzar, Basel, for continuation of physiological research on absorption connected with adrenal cortex, by Dr. Laszt.

Professor Dr. Ernst Wertheimer, Jerusalem, for continuation of the study of the relationship between free and bound glycogen in normal and pathological conditions. Dr. M. M. Wintrobe, the Johns Hopkins Hospital, for continuation of studies of macrocytic anemia in animals.

DEGREES CONFERRED BY THE UNIVERSITY OF EDINBURGH

AMONG the honorary degrees conferred at the graduation ceremonial of the University of Edinburgh were the doctorate of laws on Dr. Leo Hendrik Baekeland, president of the Bakelite Corporation, honorary professor of chemical engineering at Columbia University, and on Sir William (Henry) Bragg, president of the Royal Society. The degrees were conferred by Sir Thomas Holland, vice-chancellor and principal of the university. Candidates for the degree of doctor of laws were presented by Professor James Mackintosh, dean of the faculty of law. The citations were as follows:

"Born in Ghent in 1863, Leo Hendrik Baekeland, having won his doctorate in chemistry and the hand of his professor's daughter, emigrated to America, where he engaged in chemical research. The first fruit of his investigations was Velox printing paper, long prized for its sensitive qualities by photographers throughout the world. After effecting certain improvements in the apparatus used in the production of caustic soda and chlorine, Dr. Baekeland turned his attention to synthetic resins. He found that phenol and formaldehyde interacted to yield an insoluble, infusible material, which looked like amber, but had much more serviceable properties. Here was a super-resin which nature had not furnished; it had been built to specification in the research laboratory. This substance, called Bakelite after its parent, now meets us at every turn in our daily life. It is there when we turn on the electric light, the wireless set, or the gramophone record; it provides us with fountain pens, billiard balls, even artificial dentures—in truth, it enters into every modern contrivance for our convenience or discomfort. Meanwhile, its genial inventor dives for sponges from his yacht off the coast of Florida and

continues to devise fresh methods for their utilization. His career is indeed a striking example of the romance of applied science, which has brought him high honor in the land of his adoption, and is eminently worthy of being crowned with our academic laurel."

"Sir William Bragg won his earliest laurels in the Cavendish School at Cambridge, the greatest nursery of experimental physics in this country. After Cambridge he found for a time a quiet haven for reflection and experiment at the Antipodes. It was felt, however, when his fame came to be noised abroad, that he should not be left too long to 'waste his genius on the desert air,' and he was brought back to occupy the chair of physics in the Universities of Leeds and London successively, and was ultimately promoted to the directorship of the Royal Institution of Great Britain, a position for which he was eminently fitted by his zeal for the application of scientific methods to new problems and his gift of infecting others with the same enthusiasm. His early work on x-ray diffraction, leading up to the design of a spectrometer applicable to the study of crystals, was undertaken in collaboration with his son, Professor W. L. Bragg, and was recognized by the joint award of the Nobel Prize for Physics in 1915. During the war the Admiralty placed Sir William in charge of an experimental station for the investigation *inter alia* of methods for the detection of submarines. Since that time a band of crystal gazers under his supervision have perfected a technique for determining the structure of crystals, and they now form the acknowledged vanguard in crystallographic research. The high position Sir William has attained in the world of science is shown by the many distinctions that have been bestowed upon him, and he enjoys the special gratification of seeing the directorship of another great national institution—the National Physical Laboratory—in the hands of the son who inherits his talents. Unfortunately, science has not shown us how to split the doctorate of laws; for the present we must be content to award it *pro indiviso*—as a birthday gift, I am happy to say—to the distinguished President of the Royal Society."

SCIENTIFIC NOTES AND NEWS

DR. ROSS G. HARRISON, Sterling professor of biology at Yale University, has been elected a foreign honorary member of the Royal Academy of Medicine of Belgium.

THE University of Belfast on the occasion of the recent meeting there of the British Medical Association conferred the degree of doctor of laws on the president of the association, Sir E. Farquhar Buzzard, professor of medicine in the University of Oxford.

THE James E. Stacey award of the University of Cincinnati, consisting of a gold medal and \$100, was recently presented to Dr. Edward C. Rosenow, professor of bacteriology and immunology in the Graduate School of Medicine of the University of Minnesota, Rochester, Minn., "because of recent establishment of the fact that certain types of spasmodic disease—such as chronic hiccup, torticollis and other types of spasm involving particularly the respiratory muscle group—