

Division of Mineral Technology, under the charge of the chief chemist.

Division of Fuels, under the charge of the chief mechanical engineer.

Division of Petroleum and Natural Gas, under the chief petroleum engineer.

Division of Mineral Leasing, to have charge of all work of the bureau relating to leases other than oil and gas, on the public and Indian lands. This division will be under the direction of an engineer-in-charge, headquartered at Washington, who may serve coincidentally as chief mining supervisor.

Division of Mining Research, charged with the duty of conducting field and laboratory research as to mining methods in relation to safety, economy and efficiency in mining. This division will be under the supervision of an engineer-in-charge who will have technical supervision over all employees engaged in studies within its field and administrative control of the Urbana, Ill., staff, the Alaska staff, and such district and resident engineers as may be assigned to the work. The Division of War Mineral Supplies is abolished and its duties, records and personnel are transferred to this division. The present chief of the Division of War Mineral Supplies is detached from duty and will report to the director for special service.

The Safety Service, charged with the duty of disseminating throughout the mining and mineral industries the safety practices developed in or approved by the Bureau of Mines, will include the study, development and introduction of special mine rescue apparatus, the mine rescue work of the bureau, the mine rescue and first-aid training, the making of safety service reports, the holding of safety meets and rallies, and of mine rescue and first-aid meets and contests, and all extension work of the bureau devoted to increasing safety in the mineral industries. It will be in charge of the safety service director.

Chief Surgeon's Office, to be conducted by the chief surgeon, who will have technical supervision of all medical studies and studies of health hazards conducted by the bureau, and administrative control of all medical officers assigned to it. He will represent the bureau in cooperation with the Public Health Service.

Chief Explosives Chemist's Office, to be conducted by the chief explosives chemist, who will act as consultant in all studies of explosives conducted by the bureau, will approve all specifications for and tests made of permissible explosives, and will have technical supervision of the cooperation with the army, navy and other departments or institutions where the work relates to explosives.

Two Administrative Divisions, consisting of the Office of Chief Clerk, and the Information Service, as now organized, shall be recognized.

The present mine safety committee at the Pittsburgh station is abolished and in lieu thereof there is constituted a general mine safety board under the chairmanship of the chief mining engineer. It will include in addition the representatives of the Mine Safety and Mining Research divisions and of the chief surgeon and the chief mechanical engineer.

George S. Rice, chief mining engineer, is relieved of most of his administrative duties and will serve as advisor to the director and assistant director on mining matters with such special duties as may be from time to time assigned to him. For the present he will be in entire charge of matters relating to co-operation with the British government in studies of safety in mines. He will serve as chairman of the Mine Safety Board, and will have technical supervision over the studies conducted at the experimental mine at Bruceeton, Pa.

NEW ENDOWMENT FOR THE JOHNS HOPKINS UNIVERSITY

A HALF century program involving \$16,350,000 for education and research at the Johns Hopkins University and the Johns Hopkins Hospital was announced to-day by Daniel Willard, president of the Baltimore & Ohio Railroad and chairman of the committee appointed by the trustees to finance a series of developments laid out in a survey begun in 1920 and undertaken in connection with the close of the university's first half century in 1926.

Toward this program \$8,385,000 has already been raised, leaving a little less than \$8,000,000 to be secured within the next twelve months.

The projects yet to be financed in the raising of the remaining \$8,000,000 include a new chemical laboratory, an alumni memorial dormitory, general endowment for the academic and scientific departments of the university, endowment for the department of children's diseases, construction of a new central heating and power plant, construction of a new nurses' home, endowment for the School of Nurses, endowment for the Medical School, endowment for the hospital, construction and endowment of a new medical library and the construction and endowment of a new medical clinic.

The \$8,385,000 which already has been contributed includes the following gifts: Eighty-five thousand dollars from graduates of the hospital's school for nurses for endowment of the school, \$400,000 from the General Education Board for a pathological laboratory, \$400,000 from Mrs. Lucy Wortham James for a woman's clinic, \$2,000,000 from the Carnegie Corporation for a new dispensary, \$2,000,000 from Mr. and Mrs. Henry Phipps, the General Education Board, Edward S. Harkness and interested Balti-

moreans for the Phipps psychiatric clinic, and \$3,500,000 from the General Education Board toward the expansion program of the medical school.

The entire program outlined in the survey, which has been carefully prepared during the past four years, includes a series of projects which ultimately will involve \$50,550,000—\$16,450,000 for building developments and \$34,100,000 for endowment—of which \$13,300,000 is to be devoted to the academic and scientific departments of the university and \$20,800,000 to the needs of the medical school, the hospital and the school of hygiene and public health.

The original gifts of Johns Hopkins, the founder, amounted to \$6,450,356.88. The present assets include \$23,857,021.84 for the university and \$10,974,934.08 for the hospital. The university's endowment, \$19,386,702.91, is the sixth largest in the country, exceeded only by those of Harvard, Columbia, Chicago, Yale and Stanford.

SCIENTIFIC NOTES AND NEWS

WE print in this issue of *SCIENCE* the address of Sir David Bruce, president of the British Association for the Advancement of Science now meeting in Toronto. The subjects of the addresses of the section presidents, some of which we hope to print, are as follows:

Mathematical and Physical Sciences. Sir William H. Bragg, Quain professor of physics, London University: "Crystal structure."

Chemistry. Sir Robert Robertson, chemist to the British Government: "Chemistry and the state."

Geology. Professor W. W. Watts, professor of geology, Imperial College of Science and Technology: "Geology in the service of man."

Zoology. Professor J. W. Gamble: "Construction and control in animal life."

Geography. Professor J. W. Gregory, professor of geography, University of Glasgow: "The relation of white and colored races in reference to white colonization in the tropics."

Economic Science and Statistics. Sir William Ashley, vice-principal University of Birmingham: "A retrospect of free trade doctrine."

Engineering. Professor G. W. O. Howe, professor of electrical engineering, University of Glasgow: "A hundred years of electrical engineering."

Anthropology. Dr. F. C. Shrubbsall, principal assistant medical officer, London County Council: "Health and physique through the centuries."

Physiology. Dr. H. H. Dale, head of the department of biochemistry and pharmacology, Medical Research Council, London: "Progress and prospects in chemotherapy."

Psychology. Professor W. McDougall, professor of psychology, Harvard University: "Purposive action as a fundamental conception in psychology."

Botany. Professor V. H. Blackman, professor of plant physiology and pathology, Imperial College of Science, London: "The physiological aspects of parasitism."

Educational Science. Dr. Ernest Barker, principal of King's College, London: "The nature and conditions of academic freedom in universities."

Agriculture. Sir John Russell, director of the Rothamsted Experiment Station: "Present-day problems in crop production."

THE ninety-second annual meeting of the British Medical Association opened at Bradford, England, on July 22, when Dr. Basil Hall delivered his presidential address and the Stewart prize of £500 was presented to Professor E. Mellanby, of the University of Sheffield, for his work on the relation between rickets and dietetic deficiency.

FOR the newly organized American Society of Plant Physiologists, Dr. Charles A. Shull, of the University of Chicago, has been elected president; Dr. R. P. Hibbard, of the Michigan Agricultural College, vice-president, and Dr. R. B. Harvey, of the University of Minnesota, secretary-treasurer.

SIR WILLIAM POPE, professor of chemistry in the University of Cambridge, has been elected a foreign member of the Accademia dei Lincei of Rome.

ON the occasion of the centenary celebration of the Medical and Surgical Society of Bologna, held from May 23 to 25, a number of foreign members were elected, including Dr. Harvey Cushing, of Boston; Dr. John C. Hemmeter, of Baltimore, and Dr. William J. Mayo, of Rochester, Minn.

THE University of Maine has conferred the degree of *Sc.D.*, *honoris causa*, upon Hugh K. Moore, chief chemist of the Broun Company, makers of paper pulp.

SIR ST. CLAIR THOMSON was recently elected president of the Royal Society of Medicine of London.

DR. J. H. JEANS, formerly lecturer at the University of Cambridge and professor of mathematics at Princeton University, has been appointed research associate at the Mount Wilson Observatory.

DR. GEORGE F. REDDISH, of the microbiological laboratory of the Bureau of Chemistry, has been appointed an associate bacteriologist to work on the bacteriological problems of the insecticide and fungicide board.

PROFESSOR WILLIAM HARMON NORTON, geologist, for forty-nine years a member of the Cornell College faculty at Mount Vernon, Iowa, has retired.

PROFESSOR GILBERT VAN INGEN, assistant professor of geology at Princeton University, is retiring from active service.