

the direction of Dr. William H. Welch the school has made substantial progress in the four years since it was established. Twenty-seven states and ten foreign countries are now represented in the student body numbering 131. The faculty of the school comprises scientists in the fields of bacteriology and immunology, sanitary engineering chemical hygiene, physiological hygiene, medical zoology, epidemiology, vital statistics and public health administration.

The regular courses of study lead to the degrees of doctor of public health, doctor of science in hygiene, and bachelor of science in hygiene. A certificate in public health is given to those completing certain special courses. Short courses or institutes are provided for health workers in service who cannot be absent from their positions for more than a few weeks at a time. Last year thirty-six health officers from eight states took these short intensive courses.

Up to this time the school has been housed in old buildings, situated in the center of the city of Baltimore, and formerly used by Johns Hopkins University for laboratories of physics, chemistry and biology. The present gift, in addition to providing endowment, will make possible the erection of the new building for the school on a site adjacent to the Johns Hopkins Medical School and Hospital.

Work on the main building, the plans for which already have been drawn, is expected to start this summer. It will be located on a site which has already been acquired at the southeast corner of Monument and Wolfe streets and is so designed as to admit of its liberal expansion. The contract for its erection will be let as soon as the architects, Archer & Allen, of Baltimore, have completed drawing the detailed specifications.

The enterprise will be part of a general scheme of building to be started by the university this year, including in addition to the new school of hygiene, which will cost \$1,000,000, \$800,000 for the new Woman's Clinic and a new pathological building, the contracts for which have already been let; \$500,000 for a new chemical laboratory at Homewood and between \$400,000 and \$500,000 for dormitories at Homewood.

SCIENTIFIC NOTES AND NEWS

DR. JOHN CASPER BRANNER, the distinguished geologist, president emeritus of Leland Stanford University, died on March 1 at the age of 71 years. He was the second president of the university, succeeding Dr. David Starr Jordan, who now is chancellor emeritus.

A MEETING to initiate the Gorgas Foundation Memorial was held at Birmingham, Ala., on March 4. Among the speakers was Sir Auckland Geddes, the British ambassador, who said: "The name Gorgas will live long after the peoples of earth have forgotten the heroes of the world's greatest war."

DR. HUBERT WORK has taken the oath of office as postmaster general. Dr. Work, whose home is at Pueblo, Colorado, is president of the American Medical Association. President Harding's cabinet contains a physician and an engineer, which represents a new development of political institutions in the United States.

PROFESSOR SOLON I. BAILEY, of the Harvard College Observatory, sailed on March 1 from New York to Peru to take charge of the Harvard astronomical station at Arequipa. He is accompanied by Mrs. Bailey and by Miss Annie J. Cannon of the observatory staff.

DR. HENRY H. RUSBY, who was forced through illness to quit the leadership of the Mulford Biological Exploration of the Amazon Basin, has arrived in New York, his health being now much improved. Dr. Rusby turned the leadership over to Dr. W. M. Mann, assistant curator of the Division of Insects, National Museum. Dr. O. E. White, of Brooklyn Botanical Gardens, has charge of the botanical work.

PROFESSOR DOUGLAS W. JOHNSON, of Columbia University, delivered the Heilprin Memorial Lecture before the Geographical Society of Philadelphia on March 1. Preceding the lecture, Professor Johnson received from President Bryant the Elisha Kent Kane Medal, awarded to him by the council of the society.

ACCORDING to a press dispatch the Belgian geologist, Professor Scoupe, of the University of Ghent, has just returned from the Belgian Congo where he located two radium deposits,

said to be the richest in the world. Professor Scoupe christened the mineral "Curite." The Belgian authorities have started the construction of a plant at Hoboken near Antwerp, which, it is said, will produce one gram of radium from nine tons of the mineral.

At a meeting of the C. M. Warren Committee of the American Academy of Arts and Sciences, held on Tuesday, February 21, it was voted to make the following grants: To Professor R. F. Brunel, of Bryn Mawr College, \$200 to assist him in his work on the study of the action of halogen hydrides on unsaturated compounds. To Professor V. K. Krieble, of Trinity College, \$100 to aid his investigation of the nature of asphalts. It was voted by the committee that applications for grants would be considered at three stated meetings of the committee each year. Applications for grants should be in the hands of the chairman of the committee, Professor James F. Norris, Massachusetts Institute of Technology, Cambridge, by the first of February, May or November.

MR. G. V. COLCHESTER has been appointed to the post of geologist on the Geological Survey of the Anglo-Egyptian Sudan in succession to Mr. C. T. Madigan, who now holds a lectureship in geology at Adelaide University.

MR. HOWARD T. GRABER has been elected secretary of the Digestive Ferments Company, Detroit. Mr. Graber retains his former duties as director of the Chemical Laboratory and chairman of the publicity committee.

MR. EDMUND B. STILES, formerly with the Subsurface Department of the Bureau of Economic Geology of the University of Texas, and W. Armstrong Price, formerly paleontologist for the West Virginia Geological Survey and lately with the Transcontinental Petroleum Company in Tampico, are now engaged in subsurface studies for F. Julius Fohs, chief geologist of the Humphreys Oil Company, at Dallas, Texas.

THE fifth Hanna lecture was delivered on February 24 at the Medical Library, Cleveland, by Professor Joseph Barcroft, F.R.S., fellow of Kings College, Cambridge, England, on the

subject of "The physiology of life at high altitudes."

DR. A. C. CREHORE, of the Nela Research Laboratory, gave a series of lectures from February 14 to 23 at the University of Illinois on the general subject: "Modern theories of the structure and behavior of atoms."

DR. LYMAN J. BRIGGS, of the Bureau of Standards, gave an illustrated lecture before the Franklin Institute in Philadelphia on February 15, on "The resistance of the air."

DR. HENRY S. WASHINGTON gave recently a series of four lectures to the students in the Geological Department of McGill University on the subjects of "The distribution of metals in the earth's crust," "Isostasy and rock deformation," "Petrographical classification," and "Co-magmatic regions."

PROFESSOR ROGER ADAMS, of the University of Illinois, lectured before the Columbus Section of the American Chemical Society on February 20 on "Synthetic drugs."

MR. B. G. LAMME, chief engineer of the Westinghouse Company, lectured at the Ohio State University on February 24, under the auspices of the University Branch of the American Institute of Electrical Engineers. Following the lecture, there was a smoker by the members of the Society for the Promotion of Engineering Education. Mr. Lamme, Mr. C. S. Coler, of the educational department of the Westinghouse Company, and Dr. W. H. Kennerson, of Brown University, addressed this meeting on various phases of engineering education.

ADDITIONAL lectures at the Brooklyn Botanic Garden this spring are as follows: On March 23 at 3:30 p.m., "The flora of Greenland: Its affinity to surrounding Arctic lands and probable history," Dr. Morton P. Porsild, director of the Danish Arctic Station, Disko, Greenland; and on April 16 at 4 p.m., "The virgin forest of Java," by Professor J. P. Lotsy, director of the Museum, Haarlem, Holland.

MAJ. JAMES E. MILLS, U. S. Army, delivered the following series of lectures at the University of North Carolina on February 24 and 25:

"Chemical warfare," to the student body; "The properties of a substance that determine its use in chemical warfare," to the students of chemistry; "Chemical warfare—methods of attack and defense," to the Elisha Mitchell Scientific Society.

DR. FRANK BOTTOMLEY died of pneumonia on January 16 at the age of 47. Dr. Bottomley had done valuable work in chemistry and physics. As *Nature* notes, heredity and environment conspired to make him a man of science. His great-grandfather was Dr. James Thomson, professor of mathematics in Glasgow University; his great-uncles were Lord Kelvin and James Thomson, F.R.S., professor of engineering in Queen's College, Belfast, and Glasgow University; while his father is the present Dr. James Thomson Bottomley, F.R.S., of Glasgow University.

THE President has approved a joint resolution accepting the invitation of Brazil to participate in an international exposition to be held in Rio de Janeiro, from September to November, 1922, in commemoration of the centenary of the independence of Brazil. A deficiency appropriation act approved December 15, 1921, carries an appropriation of \$1,000,000 for this purpose. Under the terms of the joint resolution exhibits are provided of farming, cattle industry, mining, mechanics, transportation, communication, commerce, science, fine arts, forestry, fisheries, and manufacturing.

ACCORDING to the *Journal* of the American Medical Association, a society has been organized at Freiburg i. B., the headquarters in the publishing house of T. Fischer, which aims to publish the *Bildarchiv*, the purpose of which is to collect and make possible the rational utilization of scientific illustrations for teaching and other purposes. Besides a central headquarters for negatives and illustrations, it is proposed to make possible the publication of illustrations in a more perfect form than would be possible for private individuals.

THE topics appointed for discussion at the next international congress on the history of medicine are: (1) The principal foci of epidemic and endemic diseases of the middle ages

in the Occident and the classic Orient, and (2) The history of anatomy. The congress is to be held at London on July 24-29, 1922, Professor Singer, of Oxford, to preside. The officers of the International Society for the History of Medicine are Giordano, of Venice; Singer, of Oxford; Jeanselme and Menetrier, of Paris, with Tricot-Royer, president. Laignel-Lavastine is the secretary. His address is rue de Rome, 45, Paris.

THE Tenth International Congress of Otolaryngology will be held in Paris from July 19 to July 22, 1922, under the patronage of M. Bernard, minister of education, and will be presided over by Professor Pierre Sebileau.

PUBLICATION of the *Geographic News Bulletins*, distributed weekly to schools for the past two years by the National Geographic Society through the Bureau of Education, but recently discontinued because of restriction of franking privilege by the Government, will be resumed. A charge will be made for postage.

THE trustees of the American Medical Association have made an appropriation of \$1,500 to further meritorious research in subjects relating to scientific medicine and of practical interest to the medical profession, which otherwise could not be carried on to completion. Applications for small grants should be sent to the Committee on Scientific Research, American Medical Association, 535 North Dearborn Street, Chicago, before March 15, 1922, when action will be taken on the applications at hand.

THE *Journal* of the Washington Academy of Science reports that by a proclamation of President Harding, signed January 24, a 593-acre tract in the Nevada National Forest has been set aside as the Lehman Caves National Monument. The area remains a part of the National Forest, but can be used for no purpose which interferes with its preservation as a national monument. The caves are in a limestone formation at the base of Mt. Wheeler, at an altitude of 7,200 feet, and contain a remarkable series of stalactites and stalagmites.

FOR the purpose of encouraging research work on glass, the research committee of the

Glass Division of the American Ceramic Society has made arrangements for providing glass of desired composition and desired form for investigators in this field. The material will be supplied free of charge and no limitations as to the nature of the research will be imposed. The recipients of the material will be under no obligations except that of publication of the results of their investigations. The committee, however, requests that wherever possible the *Journal* of the American Ceramic Society be given preference in reporting the results. Persons who are interested are requested to address their inquiries to one of the following members of the committee on research: E. C. Sullivan, Corning Glass Works, Corning, New York; E. W. Washburn, University of Illinois, Urbana, Illinois; R. B. Sosman, Geophysical Laboratory, Washington, D. C.

UNIVERSITY AND EDUCATIONAL NOTES

WILLIAMS COLLEGE alumni are planning to raise \$1,500,000 during the coming spring. One million of this sum, of which \$200,000 has been pledged as a contingent gift by the General Education Board, is to provide adequate endowment for professors' salaries. The remaining \$500,000 is to be used towards more complete facilities for physical education.

NORTHWESTERN UNIVERSITY has been notified that the General Education Board, of New York (the Rockefeller Foundation) has appropriated \$600,000 for increase of faculty salaries, provided the university raises \$1,400,000.

At the Tulane University of Louisiana School of Medicine, New Orleans, it is planned to erect a new modern hospital on the university campus at a cost of between \$1,000,000 and \$2,000,000. The hospital will be in connection with the medical school of the university.

STATE appropriations of the New York legislature for the College of Agriculture at Ithaca include \$83,000 for the construction of a new wing on the main building of the Veterinary Building, and \$183,000 for equipment for the

new Dairy Building. This budget is somewhat larger than usual and will permit more extension work by the college.

DR. MARION EDWARDS PARK, dean of Radcliffe College, has been elected president of Bryn Mawr College, to succeed M. Carey Thomas, who retires at the end of the present academic year.

PROFESSOR WILLIAM F. OSGOOD, of the mathematics department, has been appointed acting dean of the Graduate School of Arts and Science of Harvard University for the second half year. Dean Haskins is on leave of absence for that period so that he may recuperate after an attack of influenza.

PROFESSOR J. W. BARTON, associate professor of psychology in the School of Education of the University of Idaho, has been promoted to a full professorship of psychology. Mr. C. W. Chenoweth (M.A., Harvard) has been elected associate professor of philosophy.

DR. HENRI CLAUDE, associate professor and physician to the Saint-Antoine Hospital, has been appointed to the chair of clinical mental diseases and diseases of the brain in the Paris School of Medicine, to succeed the late Professor Dupré.

DR. GEORGE J. HEUER, associate professor of surgery at the Johns Hopkins Medical School, has accepted the professorship of surgery in the Medical College of the University of Cincinnati.

DISCUSSION AND CORRESPONDENCE

PRACTICABLE SUBSTITUTES FOR GRAIN ALCOHOL

USE of ethyl or grain alcohol for laboratory purposes has long involved certain difficulties connected with securing it tax-free and preserving it for its intended uses only. Since the passage of the various prohibition statutes the observance of the necessary regulations governing its use occasions far more trouble, while those who are interested in putting it to unscientific uses make the guardianship of the precious fluid a serious responsibility. Sub-