

search, U. S. Forest Service; Livingston Farrand, president, Cornell University; Henry S. Graves, dean, Yale School of Forestry; William B. Greeley, secretary and manager, West Coast Lumbermen's Association; Lewis R. Jones, professor of plant pathology, University of Wisconsin; Raymond E. Marsh, branch of research, U. S. Forest Service, and secretary of the Society of American Forests (*ex-officio*); David T. Mason, consulting forester; Barrington Moore,

editor of *Ecology*; Charles Lathrop Pack, president, American Tree Association; W. A. Pickering, Pickering Lumber Company; John F. Preston, Hammermill Paper Company; Paul Redington, chief of the U. S. Biological Survey and president of the Society of American Foresters (*ex-officio*); R. B. Robertson, president, Champion Fiber Company; Ward Shepard, branch of public relations, U. S. Forest Service, and E. O. Siecke, state forester of Texas.

## SCIENTIFIC NOTES AND NEWS

THE one hundredth anniversary of the birth of Dr. S. Weir Mitchell will be commemorated on November 6 in Mitchell Hall at the College of Physicians of Philadelphia, by an address by Dr. Frederick Tilney, of New York, on "The Structural Basis of Behaviorism."

A PORTRAIT of the late Arthur Loevenhart, former head of the department of pharmacology of the medical school of the University of Wisconsin, has been hung in the auditorium of the Memorial Institute of the Wisconsin General Hospital. The portrait is an expression of appreciation for the service that Dr. Loevenhart has rendered to the university and to the nation. The donors are colleagues, friends and students. The portrait is by R. S. Stebbins, of the art department of the university.

A BAS-RELIEF in memory of Dr. John Howland was unveiled on October 17, in the amphitheater of the Harriet Lane Home for Invalid Children of Johns Hopkins Hospital, Baltimore. Dr. Howland, before his death in London in 1926, was director of the home for fourteen years and head of the department of pediatrics at the Johns Hopkins University School of Medicine. Dr. Joseph S. Ames, president of the university; Dr. William S. Thayer, past president of the American Medical Association; Mr. Charles H. Baetjer, president of the board of managers of the Harriet Lane Home, and Dr. Edward A. Park, who succeeded Dr. Howland, were the speakers. The bas-relief of stained marble has a likeness of Dr. Howland in the center, and that of a child on each side.

AMONG paintings presented to Columbia University on the occasion of the celebration of its one hundred and seventy-fifth anniversary are portraits of Dr. Henry Fairfield Osborn, research professor of zoology (artist, Kenneth Frazier); Dr. Michael I. Pupin, class of 1883, professor of electromechanics (artist, Mrs. Emmett Rand), and Dr. Edmund B. Wilson, DaCosta emeritus professor of zoology in residence (artist, William Steene).

DR. SIMON FLEXNER, director of the Rockefeller Institute for Medical Research, will deliver the anniversary

discourse at the eighty-third annual meeting of the New York Academy of Medicine on November 7 at 8:30 P. M. His subject will be "The Infinitely Small in Biology and Medicine."

THE gold medal of the Mining and Metallurgical Society of America has been awarded to Cornelius F. Kelly, president of the Anaconda Copper Mining Company, for "distinguished services in expanding and stabilizing the industry."

THE John Scott medal has been awarded by the city of Philadelphia to C. P. Dubbs "for the discovery and development of a process for economically producing gasoline on a large scale."

QUEENS UNIVERSITY recently conferred the honorary degree of doctor of laws on Charles Le Geyt Fortescue, chief consulting transmission engineer for the Westinghouse Electric and Manufacturing Company.

DR. REGINALD A. FESSENDEN, consulting engineer and inventor, has been chosen to receive the *Scientific American* gold medal for promoting safety at sea awarded through the American Museum of Safety. The medal will be presented to Dr. Fessenden by Arthur Williams, president of the American Museum of Safety, at a luncheon at the Union League Club on November 7. Dr. Fessenden's inventions include the fathometer, a device for obtaining quick and accurate soundings for vessels, direction finders, electrical and radio devices and compasses.

DR. LOUISE PEARCE, of the Rockefeller Institute for Medical Research, New York, has been elected an honorary member of the British Medical Society for the Study of Venereal Diseases.

DR. KARL BURCKHARDT, the geologist, of Mexico; Dr. David Hilbert, Dr. I. Hadamard and Dr. Salvatore Poncheile, professors of mathematics at Göttingen, Paris and Boulogne, respectively, have been elected foreign members of the Swiss Scientific Association.

THE council of the British Institution of Civil Engineers has awarded the Indian premium for the ses-

sion 1928-29 to Mr. H. N. Colam (Simla) and a Webb prize to Mr. C. Gribble (London).

PROMOTIONS to the rank of rear-admiral have been made in the Navy of Captain Charles Edward Riggs, at present chief of the bureau of medicine and surgery, and of Captain Norman Jerome Blackwood, at present in command of the Naval Hospital at Puget Sound, Washington.

DR. J. HUBERT VON POURTALES, clinical pathologist at the New York Foundling Hospital, has been appointed to the newly created office of assistant director of laboratories at the New York Neurological Hospital, Medical Center, New York City.

DR. LYMAN F. KEBLER has resigned from the Office of Collaborative Investigations of the Food, Drug and Insecticide Administration, U. S. Department of Agriculture, to become medical director for commercial companies.

PROFESSOR J. J. DAVIS, Purdue University; Professor E. O. Essig, University of California; Dr. W. H. Larrimer, U. S. Department of Agriculture; Dr. L. S. McLaine, Canadian Department of Agriculture; Dr. F. E. Lutz, the American Museum of Natural History; Dr. C. L. Metcalf, University of Illinois, and Professor T. H. Parks, the Ohio State University, are members of a committee that is making a study of the best methods by which the progress made in entomological research in the United States in the past one hundred years can be demonstrated at the Chicago World's Fair Centennial in 1933. Dr. W. P. Flint, economic entomologist in the state natural history division of the University of Illinois, is chairman of this committee.

THREE-YEAR reappointments on the Forest Research Council have been made as follows: Professor J. W. Toumey, Yale Forest School; Mr. W. R. Brown, The Brown Company, Berlin, N. H.; Mr. R. S. Kellogg, secretary, News Print Service Bureau, New York City, and D. W. L. Slate, Jr., director of the Connecticut Agricultural Experiment Station, New Haven, Conn. The council serves in an advisory capacity in developing the research program of the Northeastern Forest Experiment Station, with headquarters at Amherst, Mass. This station is engaged in working out the best methods of forest protection, reforestation, timber growing and other forestry practices in the New England states and New York.

PROFESSOR HOWARD E. SIMPSON, of the department of geology of the University of North Dakota and state water geologist, served with the Canadian Geological Survey during a portion of the past summer in making a survey of the ground-water resources of Regina, Saskatchewan, with a view to improving the public water supply of that city.

DR. H. MCE. KNOWER is spending the winter as a guest of the Wistar Institute. He is completing drawings and writing up the results of investigations on the lymphatics and blood vessels of amphibian embryos.

DR. RAY S. BASSLER, of the U. S. National Museum, has returned from Prague, Czechoslovakia, where he has spent some time making casts of types of species of fossils described in Barrande's "Système Silurien du Centre de la Bohème."

DR. JOHN K. SMALL, head curator of the New York Botanical Garden, spent part of August and September in Florida and other gulf states, continuing his studies of the genus *iris*, certain palms and other southern plants. Dr. A. B. Stout, of the same institution, recently returned from Maine, where he has been investigating hybrid poplars and forestation.

DR. WILLIAM BEEBE, director of the tropical research division of the New York Zoological Society, has returned to New York from his thirty-second expedition, known as the Bermuda Oceanographic Expedition, with 100,000 specimens of deep-sea fish. Dr. Beebe also brought a detailed description of marine life a mile beneath the surface of the water.

DR. AND MRS. KENYON L. BUTTERFIELD have sailed *en route* for India, where Dr. Butterfield will study agricultural and rural conditions. Dr. Butterfield, who was formerly president of the Massachusetts Agricultural College and of the Michigan State College, has been appointed counselor on rural work by the International Missionary Council, of which Dr. John R. Mott is chairman. In India he will study the needs of rural communities, help to teach better methods of farming and make recommendations to the government for raising the standard of living. After a year there he will go to China to repeat his work. Dr. Butterfield returned recently from South Africa where, as visiting professor of the Carnegie Foundation, he was engaged in similar activities.

DR. E. K. MARSHALL, professor of physiology in the Johns Hopkins Medical School, will deliver the second Harvey Society Lecture at the New York Academy of Medicine on Saturday evening, November 2. His subject will be "The Minute Output of the Heart in Health and Disease."

A JOINT meeting of the Philosophical Society of Washington with the Geological Society of Washington was held on October 23, when Dr. Beno Gutenberg, professor of geophysics in the University of Frankfurt, delivered an address on "Some Hypotheses on the Development of the Earth's Crust."

PROFESSOR KARL SUDHOFF, director emeritus of the institute of the history of medicine of the University

of Leipzig, gave an illustrated lecture on "Cos and Cnidos," on October 22, at the Rockefeller Institute for Medical Research, New York, under the auspices of the institute, the History of Science Society, the section of historical and cultural medicine of the New York Academy of Medicine and The Charaka Club.

A DINNER on October 31 marked the opening of the annual campaign of the New York City committee of the American Society for the Control of Cancer, and a meeting at the academy of medicine on November 8 will close the campaign. During the week, meetings will be held in churches, settlement houses and high schools. The dinner, at which Madame Curie was to be the guest of honor, was one of three public events at which she appeared during her visit to this country. The meeting at the New York Academy of Medicine will be addressed by Dr. Clarence C. Little, Dr. Matthias Nicoll, Jr., and Dr. Francis Carter Wood, who will present the Canti Cancer film showing the effect of radium on normal and cancerous tissues.

THE Chi Chapter of the Tri Beta Biological Fraternity will be installed at Drury College, Springfield, Mo., November 15, 1929. Dr. William M. Goldsmith, president of the fraternity, will make the principal address of the occasion.

THE Allegany School of Natural History at Quaker Bridge, New York, completed its third summer season of seven weeks during July and August. The school, in a forest in Allegany State Park, offers combination field and laboratory courses in several fields of biology and geology. Its enrolment last season comprised chiefly teachers, college students and university graduate students from ten states, including the District of Columbia.

THE Wistar Institute has been advised by Commissioner-General Harry E. Hull, of the U. S. Department of Labor, Bureau of Immigration, that it has been approved by the secretary of labor as an institution of learning for immigrant students, in accordance with the immigration act of 1924. Foreign investigators who wish to enter the institute as laboratory guests should communicate with the director and obtain the permission and information that will be necessary in making application to American consuls for necessary visas.

A NEW park of 500 acres and a lake of 225 acres have been acquired by New York State as the result of a gift of D. McRae Livingston, of New York City. The area is in Columbia County, forty miles southeast of Albany, near the Massachusetts line, and is in a mountainous region.

THE British Medical Research Council announces that they have received from Mrs. Odo Cross a sum of £40,000 as the endowment of a trust for the establishment of research fellowships for the study of tuberculosis, to be known as the "Dorothy Temple Cross Research Fellowship Fund." The amount in question is the total sum received by Mrs. Cross in respect of her daughter's estate, no part of which does she desire to retain for her own benefit.

DR. HENRY FAIRFIELD OSBORN, president of the American Museum of Natural History, has received a letter from Dr. William K. Gregory, of the expedition sent out under the auspices of Columbia University and the American Museum to study and photograph gorillas and obtain anatomical studies of them, together with similar studies of chimpanzees and other African primates. Dr. Gregory states that on August 20 Mr. H. C. Raven, the leader, secured a big male gorilla. Mr. Raven said after two "fake charges" the animal came straight at him and he shot it in the face. The party, which left New York in May, 1929, consists of Dr. J. H. McGregor and Dr. E. T. Engle, of Columbia University, and Mr. H. C. Raven and Dr. William K. Gregory, of the American Museum. In addition to the study of gorillas, special studies of the unshod feet of natives will also be made. Inasmuch as the party can collect but two specimens of gorillas, great care was exercised in the selection. This feature was complicated by the fact that they live in the thickest bush where one can seldom see more than an indefinite shadow. After the second gorilla is obtained, the work of photographing living gorillas will begin, but, Dr. Gregory continues, "the conditions are most difficult and only a fortunate chance can yield us any photos of value. The gorillas are masters in the art of concealment and of disappearance. The big males have a mean habit of charging the observer and they seem to realize that there is a fine of 5,000 francs for killing a gorilla without a permit. Nevertheless, McGregor got within speaking distance of a family party of them nearly a week ago and we are all hoping for similar opportunities soon."

*Nature* reports that at the eighth annual general meeting of fellows of the National Institute of Agricultural Botany at Cambridge on July 26, the chairman of the council, Dr. E. S. Beaven, reviewed in turn the principal activities of the institute in the past year. Two important branches of the work, the Official Seed Testing Station, and the Wart Disease of Potatoes Immunity Trials, are delegated to the institute by the Ministry of Agriculture, and these functions are supplemented by cognate investigations

into germination problems, potato virus diseases, and the yield and maturity of potato varieties. The potato Synonym Committee, of which Dr. Salaman is the chairman, has reported a substantial improvement in the nomenclature of potatoes; the council hopes to win the cooperation of seed men in extending this work to cereals. Dr. Beaven referred to the encouragement offered in the last century by the Royal Agricultural Society to plant-breeders and, after tracing the relationship between animal and plant breeding and the influence of Mendel's work, pointed out that field trials of the kind undertaken by the institute would be needed for many years. The difficulty of the task

and the value of the results were illustrated by the series of barley trials completed in the past year. Two varieties raised by systematic methods of plant breeding were shown to be generally and significantly more profitable to farmers than any others, and records collected independently by the Official Seed Testing Station and the Essex County Farmers Union not only confirmed this conclusion but also showed that these two varieties are now grown more widely than any others. The study by competent critics of these and the similar results now being obtained at the institute should win for it the support of agriculturists.

## UNIVERSITY AND EDUCATIONAL NOTES

THE dedication of the new Markle Museum Engineering Building at Lafayette College will take place on December 6. During the week there will be a conference on mining engineering and a series of lectures by prominent engineers.

A GIFT of \$100,000 to the building fund of Boston University has been made by Dr. William E. Chenery and Mrs. Chenery. Dr. Chenery is a nose and throat specialist of Boston and a lecturer at the medical school of the university, of which he is also a trustee.

DR. L. V. HEILBRUNN has become associate professor in the department of zoology at the University of Pennsylvania. Last year the courtesies of the department of biology at the Washington Square College of New York University were extended to him

and he carried out there work on the effect of temperature on the viscosity of amoeba.

EARL W. HENDERSON, of the University of Missouri, has been appointed head of the department of poultry husbandry at the Iowa State College.

PROFESSOR P. H. H. GRAY, a graduate of Queen's College, Oxford, has been appointed head of the department of bacteriology at Macdonald College (faculty of agriculture, McGill University) and has recently arrived to assume his duties. He goes to Macdonald from the Rothamsted Experimental Station, where he has been engaged in research work in soil microorganisms and general microbiology.

DR. H. W. DAVIES, lecturer in physiology in the University of Leeds, has been appointed to the chair of physiology in the University of Sydney.

## DISCUSSION

### IS THERE AN AGE DEAD-LINE IN THE SCIENTIFIC AND ENGINEERING PROFESSIONS?

RECENT articles in various periodicals have called attention to an age dead-line, not only in manual occupations, but also in sedentary positions. Among the causes to which this situation is attributed are physical condition, retirement pensions, decreased productivity, liability to injury, and group insurance, all of which are said to militate against the employment of men over forty.

The general subject of unemployment in the scientific and engineering professions has aroused considerable discussion recently, as evidenced by several notes in the scientific journals. It is, therefore, of timely interest to consider whether or not conclusions regarding an age dead-line drawn from mass data on employment as a whole can be accepted without question as applying to the scientific world, since in cer-

tain respects the technical man occupies a position apart.

The comparative newness of the technical professions and the remarkable expansion of industries involving science and engineering have resulted, in the past few years, in an unprecedented demand for scientists and engineers. This demand has been augmented by the fact that many manufacturers have come to realize that research and development work are an investment. Such executives now adopt a more patient and sympathetic attitude toward the technical man. Experience has shown them that just as industrial research has made many important contributions to theory, so does disinterested investigation often give findings of great commercial value. That is to say, any research whatever has a reasonable chance of being profitable.

At this point it should be noted that the organization and personnel of the scientific and engineering