

The incumbent shall not engage in work for remuneration or receive salary from other sources than the institution or its branches during the period of occupancy of the scholarship.

C. G. ABBOT,
Secretary

SUMMER SCHOOL FOR ENGINEERING TEACHERS

THE Society for the Promotion of Engineering Education announces that two sessions of its Summer School for Engineering Teachers will be held in 1931.

The first, on the teaching of chemical engineering, will be held at the University of Michigan from June 24 to July 14, inclusive. This session is being held in response to a suggestion by the American Institute of Chemical Engineers. Professor Alfred H. White, chairman of the department of chemical engineering of the University of Michigan, will serve as the local director.

The second, on the teaching of mathematics to engineering students, will be held at the University of Minnesota from August 24 to September 5, inclusive, in conjunction with meetings of the American Mathematical Society and the Mathematical Association of America, to be held at Minneapolis beginning September 7. This session of the school will be under the direction of Dean O. M. Leland, of the College of Engineering and Architecture, University of Minnesota.

The two sessions for 1931 will bring the total number of sessions held since the establishment of the

school to eleven. This undertaking, which was begun in 1927, has now attracted 750 teachers to its sessions. The attendance has represented all parts of the United States and Canada and all teaching ranks. From small beginnings, with attendances of 40, the sessions have grown in numbers, 190 teachers attending those of 1930.

The programs are devoted primarily to principles and methods of teaching the principal subjects of engineering curricula. The contents of courses, including classroom procedure, examinations and tests, departmental organization and other topics relating directly to the major purposes of the school, are presented through lectures, informal discussions and in seminar periods. Incidental attention is also given to the history of the subject, coordination with other subjects of the curriculum, advanced phases of the subject, relationship with engineering practice and other topics.

Members of the school, including the staff, live together for the duration of the sessions in a dormitory of the institution acting as host. Recreational features are provided as a part of each session. It is expected that from 50 to 100 teachers will attend each of the sessions of 1931 as "students." The teaching staffs, as in the past, will be recruited from among the leading teachers, engineers and scientific men of the country. Professor H. P. Hammond, of the Polytechnic Institute of Brooklyn, is the general director of the school.

SCIENTIFIC NOTES AND NEWS

THE University of Paris presented honorary doctorates on November 8 to Dr. John Dewey, professor of philosophy at Columbia University, and to Professor P. Zeeman, professor of physics at the University of Amsterdam.

ON his return to Stockholm from China, in the spring of 1931, where he has been making explorations in Tibet and Mongolia, Dr. Sven Hedin will be presented with the first "Hedin Medal" by the Swedish Anthropological and Geographical Society.

AT a dinner on October 31 on the occasion of the presentation to Mr. Daniel C. Jackling by the American Institute of Mining and Metallurgical Engineers of the William Lawrence Saunders Gold Medal, Mr. John Hays Hammond, the 1929 Saunders medallist, was the toastmaster. The speakers were Mr. Newcomb Carlton, president of the Western Union Telegraph Company; Mr. Lafayette Hanchett, president of the Utah Light and Power Company and Mr. W. S. Boyd, assistant managing director of the Nevada Consolidated Copper Company.

THE REVEREND T. E. R. PHILLIPS, rector of Headley, Surrey, has been awarded the Goodacre medal and gift of the British Astronomical Association, in recognition of his work generally for the association and particularly of his observations and researches on Jupiter. Mr. Phillips already holds the Jackson-Gwilt medal and gift of the Royal Astronomical Society, of which body he has been president and secretary.

Nature reports that the Horace Brown Medal of the Institute of Brewing is awarded by the council for "eminent services on the scientific or technical side of the fermentation industries." The first award was made to Professor H. E. Armstrong in 1926, and the next recipient of the medal is to be Dr. E. S. Beaven, known for his work on barley. The presentation will be made by the president, Mr. Percy Gates, in the lecture theater of the Institution of Electrical Engineers, on November 21, when Dr. Beaven will deliver the memorial lecture on "The Culture of Barley for Brewing."

At the centenary celebration of the Royal Geographical Society, Mr. E. John Voûte, Amsterdam, one of the foreign delegates, presented to Sir Francis Younghusband the gold medal of the K. Nederlandsch Aardrijkskundig in recognition of his work in geographical research and his services to the Royal Geographical Society, of which he was honorary secretary and president. Diplomas conferring honorary membership of the Dutch society were presented to Sir Charles Close, Mr. Douglas W. Freshfield and Mr. A. R. Hinks, secretary of the Royal Geographical Society. Commander Maury, a delegate of the Belgian Geographical Society, presented diplomas of honorary membership to the president and secretary.

REAR ADMIRAL RICHARD E. BYRD will be presented the gold medal of the Geographical Society of Chicago on November 16 in recognition of his expeditions to the North and South Poles. Admiral Byrd will be the ninth person to receive the medal since its inception in 1913.

DR. HUGO ECKENER has been elected president of the Aero Arctic Society, Berlin, as successor to the late Fridtjof Nansen.

DR. ROBERT TAIT MCKENZIE will retire as professor of physical education and physical therapeutics at the University of Pennsylvania on the completion of a survey of student health, but will retain an affiliation with the university. He will devote most of his time to sculpture. He was sculptor of the Franklin statue at the University of Pennsylvania, the Scottish-American War Memorial at Edinburgh and the War Memorial in the Parliament Building at Ottawa.

DR. LYNDY JONES, professor of animal ecology and curator of the zoological museum of Oberlin College, has retired from active service. He has been asked to give his full time during the current year to recataloguing and rearranging the museum.

AFTER forty-seven years' service to Vassar College, Dr. Elizabeth B. Thelberg, of the department of physiology and hygiene and resident physician of the college, has retired.

LORD D'ABERNON has been elected president of the National Institute of Industrial Psychology, in succession to the late Earl of Balfour, its first president.

UNDER the Order in Council dated February 6, 1928, the Lord President of the Council has appointed Dr. E. J. Butler, Dr. Kenneth Lee and Dr. N. V. Sidgwick to be members of the Advisory Council to the Committee of the Privy Council for Scientific and Industrial Research. The following members of the Advisory Council have retired on completion of their

terms of office: Professor V. H. Blackman, Professor F. G. Donnan and Professor F. A. Lindemann.

DR. RALPH H. CHENEY, chairman of the biology department at the College of Arts and Sciences, Long Island University, has been awarded a grant by the American Academy of Arts and Sciences for further study of the action of caffeine on the neuro-muscular mechanism.

PROFESSOR R. C. ARCHIBALD, of the department of mathematics at Brown University, has been appointed a lecturer in mathematics at Harvard University for the second semester.

DR. WILLARD C. RAPPLEYE, professor of hospital administration at Yale University and director of the New Haven Hospital, has been made associate professor of medical economics at the Harvard University School of Public Health, beginning in February.

DR. CARL H. LENHART was recently added to the faculty of the School of Medicine of Western Reserve University, Cleveland, as professor of clinical surgery and as chief of the division of surgery of the City Hospital. Dr. Lenhart will retain his office as director of the surgical division of St. Luke's Hospital, but will give half his time to the new position at City Hospital.

DR. CLAUDE S. BECK, assistant professor of surgery in the School of Medicine of Western Reserve University, was given the title of "professor *pro tempore* of surgery" by Emory University at Atlanta, Georgia, where he was acting as an exchange professor from November 2 to 9, as a substitute for Dr. Daniel Elking. On November 6, Dr. Beck addressed the Fulton County Medical Society in Atlanta on "Surgery of the Pericardium."

PROFESSOR R. B. THOMSON, head of the department of botany of the University of Toronto, who has been granted a year's leave of absence on account of his health, is spending the winter in the south, visiting Trinidad, Jamaica, British Guiana, etc.

DR. A. W. HILL, the director of the Royal Botanic Gardens, Kew, has left England to make a tour in the Union of South Africa on the invitation of the Government of the Union of South Africa. Dr. Hill expects to visit the botanical and allied institutions around Capetown, Port Elizabeth, Johannesburg and Pretoria and to pay a visit to Natal. The government has deputed Dr. I. B. Pole Evans, chief of the division of botany of the Department of Agriculture, Pretoria, to arrange for the tour and to accompany Dr. Hill. On leaving South Africa on January 2, Dr. Hill will proceed to Uganda and Kenya, by arrangement with the Colonial Office and the respective gov-

ernments. He will then go to the Amani Institute, Tanganyika Territory, to attend the Conference of Directors of Agriculture to be held at Amani at the end of January. He will be attending this meeting with Mr. F. A. Stockdale, agricultural adviser to the Secretary of State for the Colonies. Dr. Hill expects to return to Kew early in March, going home from Mombasa by the East Coast.

THE twenty-fourth Hanna Lecture of Western Reserve University was delivered at the Institute of Pathology on October 31 by Professor M. Weinberg, of the Pasteur Institute, Paris. His lecture was on "The Rôle Played by the Anaerobes in the Etiology, Pathogenesis and Evolution of Infectious Diseases." Dr. Weinberg will lecture on November 19 and 20 at Iowa State College, where he will speak on the relation of anaerobic bacteria to infectious diseases and on the seral therapy of polymicrobial infections.

DR. K. S. LASHLEY, professor of psychology at the University of Chicago, will deliver the second Harvey Society Lecture at the New York Academy of Medicine, on Thursday evening, November 20. His subject will be "Mass Action and Localization of Functions in the Cerebral Cortex."

THE Science Forum of the New York Electrical Society, jointly with the Museums of the Peaceful Arts and the New York section of the American Institute of Electrical Engineers, has arranged a demonstration and a lecture entitled "Play-o-fine Crink-a-nope" (a sample of scrambled speech), by Mr. Sergius P. Grace, assistant vice-president of the Bell Telephone Laboratories, on November 19 at 8:15 P. M., at Mecca Temple, 133 West Fifty-fifth Street, New York City. Owing to the demand for seats the lecture will be repeated the following evening.

THE Fifth Pacific Science Congress will be held in Victoria and Vancouver, British Columbia, Canada, between May 23 and June 4, 1932, under the auspices of the National Research Council of Canada. Previous congresses in this series were held at Honolulu, 1920; at Sidney and Melbourne, Australia, 1923; at Tokyo, Japan, 1926, and at Batavia and Bandoeng, Java, 1929.

THE Society of American Foresters will hold its thirtieth annual meeting in Washington, D. C., from December 29 to 31. It is expected that Colonel W. B. Greeley, former chief of the Forest Service; Dr. Ray Lyman Wilbur, Secretary of the Interior, and Dr. John C. Merriam, president of the Carnegie Institution, will give their views on the public-land policy of the United States, and that foresters, including Inman F. Eldredge, forester of the Superior Pine Products Company; E. F. Jones, forest engineer of the Great

Northern Paper Company, and J. E. Rothery, forest engineer of the International Paper Company, will set forth the accomplishments of private forestry enterprises.

DR. JOHN A. FERRELL, of the Rockefeller Foundation, New York, was elected president of Delta Omega, the honorary public health society, at the annual meeting held in Fort Worth, Texas, on October 29. Dr. Ferrell succeeds Dr. C. C. Young, of Lansing, Michigan. Other officers elected were Drs. James A. Tobey, New York, *vice-president*, and Professor Ira V. Hiscock, of the Yale School of Medicine, New Haven, *secretary-treasurer*. Dr. George W. McCoy, director of the National Institute of Health, Washington, D. C., was elected an honorary member of the society. Delta Omega now has 316 members, distributed in six chapters at the Johns Hopkins School of Hygiene and Public Health, the Harvard School of Public Health, the Massachusetts Institute of Technology, the University of Michigan, the Yale School of Medicine and the University of California. The honorary members of the society include President Hoover, Surgeon General H. S. Cumming, Dr. Charles V. Chapin, Dr. F. F. Russell, Sir Arthur Newsholme, Dr. W. S. Rankin and Dr. S. Josephine Baker. The society has made arrangements with the American Public Health Association for the reprinting of Dr. William Budd's classic work on typhoid fever, which first appeared in 1873.

SECTION I (Psychology) of the American Association for the Advancement of Science will hold its sessions on Friday, January 2, in Cleveland at a place to be designated later. Professor Madison Bentley, of Cornell University, the retiring vice-president of the section, will give the vice-presidential address at the afternoon session on January 2 on "Psychology's Family Relations among the Sciences." The meeting of Section I has been set on January 2 so as not to interfere with the meetings of the American Psychological Association on December 29, 30 and 31 at Iowa City. It is possible for persons who wish to attend both meetings to reach Cleveland easily in time for the meetings of Section I. All fellows and members who wish to read papers should submit titles with an estimate of the time required up to a limit of 20 minutes, to the secretary of the section not later than November 22. The preliminary announcement of the section meetings will appear in *SCIENCE*, and the final program will appear in the general program of the association. The headquarters of Section I will be in Hotel Winton.

At the meeting on November 7 of the Johns Hopkins Fellowship Conference, President Joseph S. Ames announced the endowment of eight new fellowships in

the national chemical fellowship plan. The purpose of the department of chemical education, of which Dr. Neil Gordon is the head, is to obtain fellowships which will bring a student to Johns Hopkins from every state and from foreign countries. The Coca Cola Company, of Atlanta; G. A. Pfeiffer, of New York, and the Central Chemical Company of Chicago, each gave one of the new fellowships; the American Can Company, three, and the Chemical Foundation of New York, two. Thirty fellowships have now been founded. Two fellowships at large, contributed by Mr. Francis P. Garvan, who endowed the chair of chemical education under which the national fellowship plan is operating, will also soon be put into effect.

PLANS to unite the engineering profession, educational institutions and the industries in improving engineering education are announced by H. Hobart Porter, chairman of the Engineering Foundation. A Research Committee on Education, headed by Dr. Harvey N. Davis, president of Stevens Institute of Technology, will frame a program whose objective will be to meet the demands of industry and public service for professional education of high quality. Dr. Davis's associates on the committee are Professor William B. Plank, of Lafayette College; Professor Harold B. Smith, of the Worcester Polytechnic Institute; Professor Alfred H. White, of the University of Michigan; Mr. Robert E. Doherty, consulting engineer of Scotia, New York, and General R. I. Rees, of the American Telephone and Telegraph Company.

PLANS have been announced for the erection of a new building at the Massachusetts Institute of Technology, housing unusually complete physics and chemistry laboratories. Funds are available from the gift of \$2,500,000 given by Mr. George Eastman in 1916. Beside the laboratories, the new structure will include a shop for the construction and maintenance of delicate instruments used in research work, a large lecture room, and a joint library and reading room for the use of students in physics and chemistry.

THE State Department of Public Welfare and the College of Medicine of the University of Illinois recently dedicated four buildings—The State Orthopedic Institute, The Institute for Juvenile Research, The Nurses Home and The Research and Educational Hospital Service Building between Lincoln and Wood Streets, Chicago, on October 29. These buildings are units of the Research and Educational Hospital operated by the University of Illinois. Mr. A. L. Bowen, superintendent of charities of the State of Illinois, presided. Addresses were given by Governor Louis L. Emmerson, Dr. Harry Woodburn Chase, president of the University of Illinois, and Rodney H. Brandon,

director of the Department of Public Welfare. After the dedication the cornerstone of the Medical and Dental Laboratory Building, to be erected at a cost of \$1,500,000, was laid. These laboratories are designed to accommodate two hundred students in a class. The Research and Educational Hospital has a capacity of four hundred and fifty beds.

APPLICATIONS for associate biochemist (animal body fluids) must be on file with the United States Civil Service Commission, Washington, D. C., not later than December 10. The entrance salaries range from \$3,200 to \$3,800 a year. This examination is to fill vacancies in the Bureau of Animal Industry, Department of Agriculture, for duty in Washington, D. C., and in the field. Competitors will not be required to report for examination at any place, but will be rated on their education, training and experience, and on a thesis or published writings.

DR. CLARENCE J. WEST sends the following correction to the article on doctorates in the sciences 1929-30: "The Registrar of the State University of Iowa informs us that an error was made in transmitting to us the number of doctorates conferred in the sciences by Iowa in 1929-30. Instead of nine, as reported in Table V (SCIENCE, 72: 357, Oct. 10, 1930), Iowa should be credited with twenty-eight. The new data make necessary the following correction in Tables III and IV: Chemistry, 317; zoology, 102; psychology, 97; physics, 91; mathematics, 75; metallurgy, 4; total, 1,074.

Nature reports that the twenty-first Annual Exhibition of Electrical, Optical, and other Physical Apparatus will be held by the Physical Society and the Optical Society from January 6 to 8, 1931, at the Imperial College of Science and Technology, South Kensington. As on previous occasions, there will be a trade section and a research and experimental section, and the section for the work of apprentices and learners, introduced at the last exhibition, is to be continued. The research and experimental section will be arranged in three groups: (a) exhibits illustrating the results of recent physical research; (b) lecture experiments in physics; (c) historical exhibits in physics. No charge will be made for space or catalogue entries in the research and experimental section.

THE *Journal* of the American Medical Association reports that on recommendation of the Royal Commission on Public Welfare in Ontario, Premier Ferguson has announced the creation of a department of public welfare with the Honorable W. G. Martin as minister. The commission advises that public funds finance the general hospitals, which now receive for indigent patients a grant of 60 cents daily

per patient from the province, and \$1.75 daily per patient from the municipality. The total general hospital revenue last year was \$10,140,782. The commission emphasized the need of a government owned psychiatric hospital and to assist institutional schools in caring for Ontario's 6,000 crippled children, 2,000 blind and 3,000 deaf and dumb persons, recommended the division of the province into ten districts, in each of which will be stationed a graduate nurse or social worker supervised by a special government officer. It was recommended that the raising of funds to effect other recommendations of the commission should be patterned after the Quebec plan, in which more than \$600,000 is raised annually by a hospital tax of 5 per cent. of the cost of all meals over \$1, levied in hotels and restaurants. Among the recommendations was one which advised that a special conference of medical men be convened to study cancer treatment and that the province establish a cancer hospital and purchase a supply of radium. Emphasis was laid on the need of preventive clinics, provisions for occupational training for convalescents, and aid in the rehabilitation of tuberculosis patients on discharge.

ACCORDING to *Nature*, with the cooperation of the authorities of various national museums, the British Museums Association organized a short training course for curators during the week of October 6-11. The course was attended by thirty-three students from provincial museums, for the most part junior assistants, though a few seniors were glad to avail themselves of this opportunity. The gathering was welcomed in the new Conference Hall at the Science Museum by Sir Henry Lyons, when an opening address on first principles of museum work was given by Dr. F. A. Bather, and Dr. E. E. Lowe discussed some fundamental points in museum practice. Succeeding days were devoted to the Victoria and Albert Museum, with demonstrations on textiles, wood furniture, ceramics, prints and the circulation department; the Natural History Museum, with demonstrations on habitat groups, casting of whales, preparing spirit specimens, and preparation of fossils for exhibition; the National Galleries in Trafalgar Square and at Millbank, with talks on storage, cataloguing and the explanation of pictures; the laboratory of the British Museum, with a lecture on restoration of Egyptian relics.

DISCUSSION

SOME CRITICISMS OF "RACE CROSSING IN JAMAICA"

IN *SCIENCE*, No. 1850, Castle criticizes Jennings and me for certain conclusions drawn by Steggerda and me in "Race Crossing in Jamaica" (1928) and utilized by Jennings in his book "The Biological Basis of Human Behavior." The vigor of Castle's criticism reminds me of a boyhood experience, when absorbed in watching a procession. A woman next to me let out a shriek, crying, "You are stepping on my corns." Castle has two well-developed scientific corns: one, that size factors in mammals are general factors affecting all parts of the skeleton simultaneously (Castle, 1914); the other, that no disharmony results from race crossing.

The first corn is irritated by the finding of Steggerda and me (1929) that blacks have longer legs than whites, both absolutely and relatively to stature. Castle had previously¹ criticized me for finding a difference in leg length between Negro and Amerind. While in our Table 67 the difference in absolute leg length between blacks and whites is not much greater than the probable error of the means, the differences in relative leg length amount to 2 per cent., which strikes us as considerable, as anthropometric differences go. Also, the superiority of blacks in length of the leg and its segments is shown in all the other germane tables, namely, relative kneeling height,

stature minus kneeling height and tibiale height (length of lower leg + foot). The difference between blacks and whites in these tables is consistent and in some cases considerable. The differences in absolute length of lower leg is 5 times the probable error.

That the proportions of trunk to leg do differ in different races of mankind is indisputable. If Castle will refer to Martin's "Lehrbuch der Anthropologie," 2d Aufl., pp. 411 and 412, he will find conclusive evidence of this. From his tables Martin draws the conclusion: "The relative leg-length of Negroes, Veddahs, some East Indians and Australians is especially large."

That Castle apparently still maintains his old position, though with some shifts (Castle, 1924, p. 20), is the more remarkable in view of the keen analysis of Wright (1918), who shows that in Castle's rabbits bone lengths vary to a certain extent independently. Also there are groups of bones that vary together and independently of the rest of the body. "Again," says Wright, "the bones of the hind leg (femur and tibia) form a group subject to common influences which do not affect the humerus, a bone of the fore leg."

The second irritating conclusion of mine is that in individual browns there occurs a deviation from the average proportions of leg length to arm length that is found in the parent races, white and black. Castle doubts if such a disharmony is possible. Not all the

¹ In Publication No. 320 of the Carnegie Institution.