

ing he makes researches in archeology. He is now conducting some most important work in the study of the remains of the ancient peoples of the north.

APPLIED PSYCHOLOGY AT THE CARNEGIE INSTITUTE OF TECHNOLOGY

PROFESSOR G. M. WHIPPLE has leave of absence from the University of Illinois for the first semester of the coming year to serve as professor of applied psychology at the Carnegie Institute of Technology and acting director of the Bureau of Salesmanship Research.

Professor Walter Dill Scott, who had originally planned to return to Northwestern University for the next semester, has been given further leave of absence and will remain at Carnegie throughout the year.

A. J. Beatty, Ph.D., Illinois, has been appointed research assistant in the Bureau of Salesmanship Research, and is already engaged in a study of methods used in corporation schools for developing salesmen.

Fellowship appointments include the following: N. L. Hoopingarner, University of Texas; Franklyn Meine, University of Chicago; H. G. Kenagy, University of Minnesota; and C. E. Brundage, Tuck School, Dartmouth.

Beardsley Ruml, Ph.D. Chicago, has been appointed instructor in psychology. L. L. Thurstone has been advanced from assistant to instructor. These, together with Professor J. B. Miner, Professor Kate Gordon and Professor W. V. Bingham, head of the department, will be primarily concerned with mental measurements of students and with research and instruction in vocational psychology.

SCIENTIFIC NOTES AND NEWS

THE late Mr. W. Hudson Stephens, of Lowville, N. Y., a life member of the American Association for the Advancement of Science since its eighteenth meeting held in Salem in 1869, by the terms of his will has bequeathed the sum of \$5,000 to the association.

DR. JAMES MASON CRAFTS, distinguished for his chemical researches and for a time presi-

dent of the Massachusetts Institute of Technology, has died in his sixty-ninth year.

YALE UNIVERSITY has conferred the doctorate of science on Dr. Theobald Smith, director of the department of animal pathology of the Rockefeller Institute, and Sir Ernest Rutherford, director of the physics laboratories of the University of Manchester, former Silliman lecturer at Yale. William T. Hornaday, director of the New York Zoological Park, received the degree of master of arts.

PROFESSOR ROBERT A. MILLIKAN, professor of physics at the University of Chicago, has been made doctor of science by Amherst College. The doctorate of laws was conferred on Nathaniel M. Terry, of the class of 1867, professor of physics and chemistry in the U. S. Naval Academy.

THE degree of doctor of science has been conferred by Dartmouth College on Allen Hazen, the civil engineer of New York City.

BOWDOIN COLLEGE has conferred the doctorate of science on A. H. Sabin (class of '76), consulting chemist of the National Lead Company and lecturer in New York University, and on Dr. F. H. Albee, of the class of '99, the New York surgeon.

PROFESSOR JOHN E. BUCHER, who holds the chair of chemistry at Brown University, has been given the doctorate of science by that institution.

DR. CHAS. H. HERTY, editor of the *Journal of Industrial Chemistry*, has been given the degree of doctor of chemistry at the University of Pittsburgh.

THE Société Russe de Minéralogie de Petrograd, which before the revolution carried the title Société Imperiale de Minéralogie de St. Petersbourg, held its centenary jubilee in January, 1917, on which occasion John M. Clarke, of Albany, was elected to honorary membership.

THE forty-six knighthoods conferred on the occasion of King George's fifty-second birthday include Dr. H. P. Waterhouse and Mr. R. Jones, surgeons, and Mr. R. T. Glazebrook, director of the National Physical Laboratory.

ENGINEER REAR-ADMIRAL G. G. GOODWIN, C.B., has been appointed engineer-in-chief of the British fleet in succession to Engineer Vice-Admiral Sir Henry J. Oram, K.C.B., F.R.S.

FORMER and present graduate students of the department of psychology of Cornell University and a number of his more intimate friends among the faculty met with Professor E. B. Titchener in the Psychological Laboratory on the evening of June 22, to celebrate the completion of twenty-five years of his service to Cornell. A volume of "Studies in Psychology," edited by Professors W. B. Pillsbury, J. W. Baird and M. F. Washburn, was presented to him on the occasion. After the presentation, Professor Titchener responded with some reminiscences of the early days of the Cornell Laboratory, and in conclusion announced that he had declined acceptance of the chair of psychology recently tendered him by Harvard University.

In the annual report of the visitors of the Oxford University Observatory they express their sorrow at the death of the late Professor Esson, who acted as secretary to the visitors during the whole forty-two years of the work of the observatory. Several lectures to military bodies have been given by the director, Professor H. H. Turner, including lectures in France and in the camps on Salisbury Plain.

THE fifteenth annual session of the South African Association for the Advancement of Science, as we learn from *Nature*, will be held at Stellenbosch, from July 2 to 7, under the presidency of Professor J. Orr. The sectional committees and their presidents will be as follows: A: Astronomy, Mathematics, Physics, Meteorology, Geodesy, Surveying, Engineering, Architecture and Irrigation, Professor W. N. Roseveare; B: Chemistry, Geology, Metallurgy, Mineralogy and Geography, Professor M. M. Rindl; C: Bacteriology, Botany, Zoology, Agriculture, Forestry, Physiology, Hygiene and Sanitary Science, J. Burt-Davy; D: Education, History, Mental Science, Political Economy, General Sociology and Statistics, Rev. Professor N.

J. Brümmer; E: Anthropology, Ethnology, Native Education, Philology and Native Sociology, Rev. N. Roberts. The local secretary is Professor B. van der Riet, Victoria College, Stellenbosch.

PROFESSOR HUGO DE VRIES is preparing, as has been noted in *SCIENCE*, a new experimental garden and laboratory in Lunteren. He has now transplanted to it the young rosettes of his cultures of *Oenothera*. He plans to continue at Lunteren the work which he had been doing at Amsterdam.

THE official duties of Professor Robert A. Millikan, of the department of physics at the University of Chicago, who has been in Washington during the spring quarter as vice-chairman of the National Research Council, which is acting in close relations with the Council of National Defense, have delayed the appearance of his new volume on *The Electron*, but the University of Chicago Press announces its publication early in July.

PROFESSOR CARL E. SEASHORE, of the University of Iowa, is giving courses at the summer school of the University of California. He offers special work on the relation of psychology to music.

PROFESSOR JOHN WEINZIRL, head of the department of bacteriology of the University of Washington, Seattle, has obtained leave of absence for the coming year and will study preventive medicine with Dr. M. J. Rosenau, of the Harvard Medical School.

A PORTRAIT of the late Professor Raphael Meldola is being painted by Mr. Solomon J. Solomon, in order that copies may be presented to the Royal Society and the Institute of Chemistry.

A MEMORIAL tablet to the late Dr. S. Weir Mitchell was unveiled at the recent commencement exercises of the University of Pennsylvania.

THE death on June 22 is announced of Professor Leverett Mears, head of the department of chemistry at Williams College.

DR. JØRGEN BRUNCHORST, Norwegian minister at Rome, known for his publications in bot-

any and as director of the Bergen Museum, and editor of *Naturen*, died in Rome on May 20, aged fifty-five years.

The American Medical Journal writes: K. A. H. Mörner, professor of chemistry and pharmacy at the Karolinska Medico-Chirurgical Institute of Stockholm, died recently, aged sixty-two. Since 1892 he has been rector of the institute, in which position he participated in drawing up the regulations for the prizes of the Nobel prize committees, and since has been president of the Nobel Medical Committee. Mörner's research and publications in chemistry, especially physiologic chemistry, toxicology and chemical analysis, were notable.

THE United States Civil Service Commission announces an open competitive examination for scientific assistant, for men only, on July 25. Vacancies in the Bureau of Fisheries, at entrance salaries ranging from \$900 to \$1,400, including a vacancy in the position of fishery expert on the *Albatross*, at \$1,200 a year, will be filled from this examination. Further information may be obtained by addressing the Civil Service Commission, or the Bureau of Fisheries, Washington, D. C.

THE New Jersey State Board of Health on June 7 denied the application of Rutgers College, at New Brunswick, for permission to teach and practise vivisection under a law of the state. The denial was based on an opinion from the Attorney General's department that the law in question could not be applied to Rutgers. The act was drawn particularly for the Rockefeller Institute. The Attorney General's department held that it applied only to institutions for scientific research and not to educational colleges or schools.

By the will of the late Mr. Washington S. Tyler, of Cleveland, \$200,000 is designated for Lakeside Hospital. Half of this is to be used for construction, and the income from the other half for the maintenance of a maternity hospital to be conducted in connection with Lakeside Hospital.

WE learn from *Nature* that the late Lord Justice Stirling's herbarium, consisting chiefly of about 6,000 varieties of mosses and liverworts from many parts of the world, has been presented by Lady Stirling to the Tunbridge Wells Natural History Society.

AN opportunity for research work in sociology with some time for other graduate work if desired, awaits a suitable applicant at the University of Chicago and for this \$1,200 has been set aside for each of the two years it is expected the investigation will require. By this announcement it is hoped to secure some one already specializing in sociology. Inquiry for further details may be addressed to Professor Albion W. Small, University of Chicago, or to Dr. E. R. LeCount, Rush Medical College, Chicago.

THE *Weekly Bulletin* of the New York department of health has received a condensed report of the vital statistics of the city of Petrograd for the year 1915. The population for that year was 1,850,000. What stands out most prominently in the report is the fact that there were 2,100 more deaths than births reported during the year, thus showing the effect of the war upon the status of the population. The death rate from typhoid fever was over forty (40) per one hundred thousand, as against six (6) for the city of New York during the same period. Four hundred and fifty deaths were reported from smallpox. The death rate for measles, scarlet fever, diphtheria and croup was far above that of the city of New York. Tuberculosis had a death rate double that of New York. Two hundred and fifty, out of every 1,000 born, died during the first year, as compared with 95 in the city of New York.

RECENT accessions to the University of Arizona Museum include ethnological collections as follows: Eighty-five representative Apache baskets from Governor G. W. P. Hunt, Phoenix; 300 representative Pima baskets from Perry M. Williams, Maricopa; 9 representative Paluate baskets; 12 representative Hopi baskets; 10 representative Hopi pottery; native and ceremonial Hopi costumes; native Navajo costumes, by the University of Arizona

expedition of 1916. The archeological collections include more than a thousand specimens of prehistoric pottery, textiles, weapons and implements from the Cliff and Pueblo ruins of northern Arizona, by the University of Arizona.

THE university senate of Western Reserve University has voted to establish a committee on research to be affiliated with the National Research Council. The committee is composed of Dr. George N. Stewart, chairman, School of Medicine; Dr. Torald Sollmann, vice-chairman, School of Medicine; Professor H. P. Cushing, secretary, Adelbert College; Professor H. W. Springsteen, Adelbert College; Professor F. H. Herrick, Adelbert College; Professor O. F. Tower, Adelbert College; Professor H. A. Aikins, College for Women; Professor Edward Spease, School of Pharmacy.

THE Duke of Bedford, who presided at the annual meeting of the Zoological Society of London, on April 30, explained the steps taken by the council to save food. He said that the total number of animals had been very greatly reduced; first, because they had not replaced any of the large animals which had died during the war; and, secondly, because they had destroyed a number of those which could be replaced in normal times. With the reduction of the number of animals came a corresponding reduction in the amount of food consumed. The principle adopted had been, wherever possible, to cease using food which was also human food. The following details were given:

Meat is limited to horseflesh purchased from the army. Never was the supply more abundant or the quality better, on account of the enormous number of horses in government service.

Potatoes.—We used to use over 15,000 pounds a year—we use none now.

Bread formerly used for the apes and monkeys and some small mammals has been replaced by flour not up to the Board of Trade standard for human consumption, and by ship's biscuits which have made one or two voyages unused and are then rejected as no longer fit for issue. The sale of bags of stale bread to the public for feeding the animals has been stopped.

Wheat is no longer used for any of the mammals

or water-fowl. As substitutes we use dari, paddy rice and locust beans.

Oats.—The quantity used has already been very greatly reduced and the remainder is being successfully replaced by a mixture of split horse beans and maize.

Hay.—The hay used in the gardens consists of those trusses which the army buyer, who buys first, has not selected. Arrangements have been made to use the cut grass from the London parks and squares, and to use larger quantities of foliage.

Fish.—The fish used is unsuitable for human food, except some small quantities required by birds to which salted or stale fish is fatal.

Eggs.—The eggs used for small soft-billed birds are Chinese pickled eggs or undersized imported eggs.

Fruit.—Bananas, formerly used for a very large number of the small mammals and birds, have been, to a great extent, replaced by boiled man-gold wurzels and beetroots. Some few small and delicate mammals and birds refuse to take beetroot, but these exceptions are insignificant. The bananas which are still used, as far as possible, are over-ripe ones, unfit for table purposes, but quite nutritious for animals. The dates used are of a quality not up to the Board of Trade standard for human food.

Sugar.—The sugar used for the animals consists of what is known to the trade as "foot" sugar, which is not suitable for human food, and the total quantity amounts to about 5 pounds a week.

Greens.—About 11 bushels are used a week, but these consist of those not sold for human consumption.

UNIVERSITY AND EDUCATIONAL NEWS

THE American Association of University Professors will hold its next annual meeting at Chicago, probably on December 27 and 28.

As has been noted in SCIENCE, Governor Ferguson has vetoed the legislative appropriation for the University of Texas, amounting to one million six hundred thousand dollars for the next two years. It is said that this was done because the board of regents was unwilling to dismiss the president and members of the faculty. There have been various lawsuits, and the attorney general has now given an opinion that the veto is ineffective.