

be used as follows: Two professorships in the graduate school will be established, and several fellowships founded, and a memorial building, costing about \$250,000, will be built.

JULIUS ROSENWALD, of Chicago, has offered six scholarships of \$1,200 each for negro graduates of American medical schools who desire to take post-graduate work in pathology, bacteriology, physiology, pharmacology or physiological chemistry. Appointments in 1920 will be made by a committee comprising: Dr. William H. Welch, Johns Hopkins School of Public Health, chairman; Dr. David L. Edsall, dean of the Harvard Medical School, and Dr. Victor C. Vaughan, dean of the medical department, University of Michigan. Abraham Flexner, secretary of the General Education Board, will be secretary of the committee.

THE trustees of Vassar College have announced an increase in salaries ranging from 50 per cent. in the lowest grade to 12½ per cent. for full professors. It applies to all teachers who have served the college a year or more.

THE salaries of professors and other members of the teaching force of the University of Mississippi have been uniformly raised on a scale of about fifty per cent.

THE department of anatomy at the Johns Hopkins Medical School has been organized as follows: Lewis H. Weed, professor of anatomy; Florence R. Sabin, professor of histology; George W. Corner, associate professor of anatomy; Charles C. Macklin, associate in anatomy; Robert S. Cunningham, associate in anatomy; Chester H. Heuser, associate in anatomy; Jean Firket, instructor in anatomy; William A. McIntosh, assistant in anatomy.

WILLIAM McDougall, reader in mental philosophy in Oxford University, has been elected professor of psychology at Harvard University to fill the chair vacant by the death of Hugo Münsterberg.

DR. HERMAN MORRIS ADLER, formerly assistant professor of psychiatry in Harvard University, has been appointed professor of

criminology and head of the department of social hygiene, medical jurisprudence and criminology in the medical college of the University of Illinois.

LIEUTENANT SAMPSON K. BARRETT, U. S. N. R. F., who served as electrical officer on the dreadnaught *Wyoming* with the Grand Fleet in the North Sea, has been discharged from active service to accept an appointment as assistant professor of electrical engineering at New York University.

PROFESSOR F. B. PADDOCK, state entomologist of Texas, has accepted the position as state apiarist of Iowa and as associate professor in the department of zoology and entomology in the Iowa State College, to fill the vacancy caused by the resignation of F. Eric Millen, who took charge of the apicultural work in the Ontario Agricultural College on July 1.

DR. T. G. YUNCKER, of the Michigan Agricultural College, has been appointed assistant professor of biology at DePauw University, Greencastle, Indiana. He will have charge of the botanical work.

DR. OTTO STUHLMAN, JR., associated with the department of physics at the State University of Iowa for the period of the war, has accepted an assistant professorship in physics at West Virginia University.

VICTOR E. NELSON, associate in chemistry, Johns Hopkins University, has accepted a position as assistant professor in charge of physiological chemistry at the Iowa State College.

DR. FRANCIS M. VAN TUYL, associate professor of geology and mineralogy in the Colorado School of Mines, has been appointed professor and head of the department of geology and mineralogy in that institution.

DISCUSSION AND CORRESPONDENCE

BIRTHS AND DEATHS IN THE CIVIL POPULATION OF FRANCE IN THE WAR-TIME

TO THE EDITOR OF SCIENCE: In the current number of SCIENCE (September 12) just received there are published the figures from

the "Journal Officiel" of the birth and deaths for 1913, 1914, 1915, 1916 and 1917 in the French departments not included in the zone of occupation and military occupations. These show a terrible increase of deaths over births. To give the whole picture of the serious effects of the war on the French civil population the figures are needed for the occupied territory. I can provide a few as a result of opportunities offered while at work in occupied France for the Commission for Relief in Belgium and North France.

In Lille, by far the largest city in occupied France, there was in the two years 1915 and 1916 a 47 per cent. decrease in births and a 45 per cent. increase in deaths as compared with pre-war ratios. This determination takes into account the difference in population of the city between the pre-war and the war years produced by an escape of one fourth of the city's inhabitants before the German forces occupied it, but it does not take into account the fact that this diminution of population was not effected by a simple random selection among the whole population (*i. e.*, by a proportionate lessening of all age groups and both sexes) but resulted largely from the removal for military service of almost all physically fit men of the age-group twenty to forty-five years. Part of the diminution also was caused by the emigration at the time of the invasion of entire families of the well-to-do class able to afford the expense of removal. This last group may perhaps be taken to be, on the whole, a particularly healthy group. In making, therefore, direct comparison of the mortality ratios for the two periods (war and pre-war) these special facts should be taken into account.

The increased percentage of deaths occurred especially in the age-groups 1 to 19 years, where it was 81 per cent. more in 1915-1916 than in 1913-1914, and 60 years and over, where it was 85 per cent. The principal immediate causes of the increased deaths were tuberculosis, brain hemorrhages and heart affections. The ultimate causes were of course certain war-produced conditions, especially the insufficient amount and variety of food and

the necessity for a renewed return to hard work in the fields by old men and women to make up for the absence of the able-bodied men.

Data with regard to Charleville, another French city in the occupied territory, but one in an agricultural rather than an industrial region—Lille is the center of North France's principal industrial region—show almost identical conditions. And I believe from my personal observations during 1915 and 1916 over the whole of the occupied territory that the death-ratios in these two cities are a fair sample of those for the whole of the occupied region. The occupation extended, of course, for a much longer period than merely 1915 and 1916. It extended from late in 1914 until late in 1918. Undoubtedly these ratios of lessened birth-rate and increased death-rate in the occupied territory of France for 1915-1916 are not greater, but probably because of the increase of exhaustion and difficulties with food, fuel, clothing, medical service and supplies, less than those for 1917 and 1918.

VERNON KELLOGG

NATIONAL RESEARCH COUNCIL,
WASHINGTON

INSTINCTIVE BEHAVIOR IN THE WHITE RAT

IN confirmation of Mr. Griffith's observation of a possible case of instinctive behavior in the white rat reported in *SCIENCE* for August 15, 1919, I wish to add a somewhat similar observation which I made a few months ago.

Upon placing a few handfuls of fresh dandelions into a cage of some twenty white rats of various ages which had been reared in the laboratory for several generations, much to my surprise I found the rats at once ran away from the greens and gathered in one corner of the cage and behaved in a thoroughly frightened manner. At first I could not account for this strange behavior, for hitherto the rats had fed with avidity on fresh dandelions and seized the plants as soon as they were placed in reach. On further thought, I recalled that I had gathered the dandelions on this occasion in an old basket which had recently been used for bringing a