

circle of personal friends. Mr. Chamberlain was instrumental in the bringing to the surface many hundreds of strange new mollusks, crustaceans and echinoderms, yet apparently his name has not been bestowed upon a single one. Two fishes and an Alaskan bird, however, have been named for him.

During the seasons of 1911 and 1912, Mr. Chamberlain filled the position of Alaska salmon agent and worked in the northern territory. In 1913 he was appointed naturalist of the Fur-seal Service and reached the Pribilof Islands just three days before the severe attack from which he never fully recovered. He was conveyed to the states, desperately ill, and the climate of Arizona again helped to only a partial recovery.

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SCIENTIFIC EVENTS

MOVEMENT OF THE POPULATION IN THE GERMAN EMPIRE

DURING 1919 and 1920, according to data recently published by the government statistical bureau and quoted in the *Journal* of the American Medical Association, the number of marriages in the German empire exceeded, by a considerable margin, the figures for the prewar period. In the five years from 1914 to 1918, inclusive, almost half a million marriages less were contracted than would normally have been the case. However, this notable falling off in marriages during the years of the war was compensated for, in the main, during 1919 and 1920; for in these two years the number of marriages reached the high figures of 842,787 and 851,508, respectively. Whereas in 1913 there were only 7.7 marriages to 1,000 inhabitants, in 1920 there were 14.8. Normally, forty marriages to 1,000 inhabitants could have been expected during the five years of the war, but, instead, only 25.1 marriages were entered upon. Eighty-two per cent. of the decrease has been made up during the last two years.

In 1914, the number of children born was 1,830,892. In 1915 it had fallen to 1,040,209

and in 1917 to 939,938. In 1918 the number had risen again to 956,251. In place of the normal 8,950,000 births in the period from 1914 to 1918, we find only 4,550,000 recorded, which signifies a loss of 4,400,000 due to the war. In 1919 the total number of children born was still about 400,000 below normal. Not until 1920 was the number of births again about normal, the records showing 1,512,162 births, or 27.1 to every 1,000 inhabitants, as compared with 1,707,834 births, or 28.5 per thousand inhabitants in 1913. The number of deaths in 1920 was 888,795, 16.3 deaths to every 1,000 inhabitants, the mortality for 1919 having been 16.1 per thousand. The last year before the war (1913) showed a mortality of 924,919, or 15.8 per thousand inhabitants. Especially during the first three months of 1920 the mortality rate was very high. More particularly, diseases of the respiratory organs and influenza exacted many victims during this period. In Berlin, more than a third of all deaths, namely, 37.7 per cent., were due to diseases of the respiratory organs, whereas during the first quarter of 1913 only one seventh of all deaths in Berlin were ascribable to such causes. During the last three quarters of 1920, the mortality rate fell considerably, having been 14.9, 14.5 and 15.4 per thousand inhabitants, as against mortality rates of 19.9, 22.0, 19.7, 20.8 and 25.1 for the five-year period from 1914 to 1918, inclusive. The year 1919 showed a slight excess of births over deaths and the year 1920 a still greater excess.

ACCIDENTS DUE TO EYE DEFECTS

THE Committee on Elimination of Waste in Industry of the American Engineering Council has made public a report on accidents due to eye defects. The total number of industrial blind in the United States is given as 15,000 or 13.5 per cent. of the total blind population, this type of injury being the leading causative factor of blindness, according to the report, which was prepared by Earle B. Fowler. The eye is involved in 10.6 per cent. of all permanently disabling accidents.

The report stresses the importance of correcting subnormal vision among employees, saying that excess eye fatigue results in conditions which must produce a time labor loss from reduction in quantity and quality production. Substandard vision was found to be of great frequency. One investigation showed that out of 2,906 garment workers only 743 or a little over 25 per cent. had bilateral normal vision, 17 per cent. having normal vision in one eye, with the other defective. The highest percentage of defective vision was in the class of workers who made the greatest use of their eyes.

An examination of more than 10,000 employees in factories and commercial houses found 53 per cent. with uncorrected faulty vision. Of 675 employees in a typewriter company, 58 per cent. were found to be in need of correction by glasses. Of the rejections in the National Army, 21.7 per cent. were because of eye trouble. An examination of the vision of 3,000 employees in a paper box factory in Brooklyn, N. Y., showed that the percentage of normal was only 28. In every group of workers examined there were a large number who fell below the line and this number becomes appreciably greater if those who have subnormal vision are taken into account. The report continues:

As in the correcting of other factors of occupational hygiene, standards have been set, so, after further study, visual acuity standards will have to be determined for each grade of workers and readjustments made, with alterations in our methods of testing acuity to suit conditions, until these standards give us the necessary minimum for each kind of work. As examinations are made at present, any set level would exclude workers shown by practical test to be very efficient producers.

Many subnormal eyes will work well even for fairly trying work if conditions are good. Therefore, it is first of all urgent to bring the working conditions up to the best, on the basis now understood.

Even the most superficial survey of lighting conditions reveals that in the majority of plants there is much improvement possible, in spite of the actual increase in production quantity and quality when poor illumination is corrected to standards now con-

sidered satisfactory. There seems to be no question of loss due to faulty conditions.

One estimate, the report stated, placed the loss due to faulty conditions in this country as above the entire cost of illumination. In 446 plants investigated only 8.7 per cent. were found to be in excellent condition, the other ratings being: Good, 32 per cent.; fair, 29.1 per cent.; poor, 18.8 per cent.; very poor, 3.5 per cent.; partly good, partly poor, 7.8 per cent.

THE YALE FOREST SCHOOL

STUDENTS from twenty-four universities and colleges, including four foreign countries, will attend the Yale Forest School at New Haven this year. Twenty-one men are candidates for the degree of Master of Forestry. The institutions represented in this attendance include the state universities at Cornell and Syracuse, N. Y., Maine, Minnesota, Montana, Washington, California, Pennsylvania, Missouri and Michigan. The foreign students come from the University of Christiania, Norway, Melbourne University, Australia, South African College, Capetown, South Africa, and University of Nanking, China. Yale continues to equip Chinese students to carry on the work started by former graduates—this year two will be in attendance. The students from Australia and South Africa are sent by their respective governments.

Owing to the growth of the school, new quarters were needed, and these will be secured through the recent gift of \$300,000 from William H. Sage, B.A., Yale, '65, of Albany, N. Y., which will be devoted to the erection of a forest school building in memory of his deceased son, DeWitt Linn Sage, of the class of 1897.

During the fiscal year 1920-21, graduates of the Yale Forest School were chosen to fill 49 positions in forestry, including 10 in government work, 9 in state forestry departments, 11 as teachers in other schools of forestry, 11 as managers of forest estates or for corporations owning forest land, 5 with lumber companies, 2 in forest products and 1 in