

and 695,000 maps, of which 562,000 maps were sold.

The Geological Survey is a scientific bureau which has to do with the mineral resources of the earth rather than with men. Therefore it is known to but comparatively few, for to most people its reports seem to lack human interest. The work of its large topographic force, for instance, is recorded in lines on paper—maps—which do not lend themselves especially well to columns in the newspapers. Where the Geological Survey leaves off others take hold. Thus the geologist may carefully explore and outline on a map the structure of an oil field, and so advise the wildcatter where or where not to drill; yet little public interest attaches to the region until the oil man sets up his rig and begins to drill. So it is with all the work of the organization; it is basic, foundation work, upon which many kinds of development may rest later, after the Geological Survey has moved on to new fields of investigation.

An example of the forward-looking policy of the Geological Survey is seen in its anticipation last winter of the coal strike, when as a measure of preparedness, in cooperation with the census, it made an inventory of the amount of coal stored in the United States, and also prepared and published a map of the United States showing the coal mining districts.

The work of the Geological Survey in connection with oil, says the director, continues to be of increasing value, and the application of geology to practical affairs is shown by the fact that in four oil fields that have been extensively developed the early geologic mapping indicated the existence of oil in the ground, which was later proved by commercial development. Other activities of the Geological Survey included examination of deposits of oil-shale in four states; comprehensive studies of the Colorado and San Juan rivers in Utah and Arizona with reference to reservoir sites; the completion of studies of radium-bearing carnotite ores and tungsten deposits of the United States; the preparation of timely reports on the production of coal and other fuels; making nearly 2,000 detailed analyses of rocks and minerals, and 700 analyses of surface and underground waters; the preparation of special physical and shaded relief maps of Alaska, California, Kentucky and several other areas;

continuation of the preparation of the United States portion of the international map of the world, for which maps of 46 states have now been completed and are on sale at nominal prices; the preparation of monthly reports on the production of electricity and consumption of fuel by public utility power plants; and the publication of maps of 14 states showing the location of power sites and transmission lines. These in common with all the 3,000 or more different maps of the Geological Survey are for sale at nominal prices.

SCIENTIFIC EVENTS

VITAL STATISTICS OF PRUSSIA BEFORE AND AFTER THE WAR¹

THE Prussian Statistical Department issued last year the second part of Vol. 10 of *Medizin-statistische Nachrichten*. It is a comparative study of the last complete pre-war and the first complete post-war year (1913 and 1919). Prussia is closely comparable with England and Wales in population, and as it has been exposed to different wartime and post-wartime conditions, it is interesting to compare the results. The estimated population of Prussia in 1913 at all ages was 20,596,269 males and 21,052,793 females. In the first completed post-war year (1919) the census showed a decrease in the males to 18,816,849 and females to 20,523,598. The mean age of males in 1913 was 26.6 years, and 28.7 in 1919. There was very little change in infant mortality, the death rate per 1,000 births in the first month of life being 48.7 for 1913 and 48.3 for 1919. The births numbered 1,209,385 in 1913 and 827,335 in 1919, giving rates of 29.0 and 21.0 per 1,000 living. In England and Wales the birth rates were 23.9 per 1,000 living in 1913 and 18.5 in 1919, and the death rates in the first month of life were 44.39 and 44.49 per 1,000 births. In both countries there was an increase in the deaths in childhood, but the third wave of the great pandemic of influenza in 1919 may be assumed to account for some increase. In Prussia the decline in infantile diarrhoea was considerable; the mortality under 1 year was 134.6 per 10,000 live births in 1913 and 44.55 in 1919. Excluding typhoid fever and influenza, the infectious diseases showed a decrease. The

¹ *The British Medical Journal*.

number of deaths from scarlet fever in 1919 was less than half that of 1913, being 2,213 against 4,506. In England and Wales 2,100 deaths were registered in 1913 and 1,221 in 1919. The deaths from measles showed a greater decline, from 7,286 to 1,270. The figures for England and Wales were 10,673 and 3,563. There was little change in the deaths from diphtheria and croup, the actual deaths being 7,550 and 7,054, and the rates of mortality at ages up to 15 were 5.42 in 1919 and 5.20 in 1913 (mortality per 10,000 living). The figures for England and Wales were 4,494 for 1913 and 4,916 for 1919, and the rates of mortality under 15 years 3.84 and 4.36 per 10,000. In Prussia the death rates from typhoid fever increased from 0.34 to 0.74 (actual deaths being 1,433 and 2,911). There was a decline in the figures for England and Wales from 1,505 to 577 (0.41 to 0.16 per 10,000). The greatest increase in the causes of deaths was under the head of tuberculosis. The totals were 56,861 in 1913 and 85,996 in 1919, and the crude rate per 10,000 increased from 13.65 to 21.86. The rates for urban districts increased from 15.81 to 27.16 and the rural from 11.65 to 16.84. In England and Wales the total deaths were 49,464 in 1913 and 46,310 in 1919. "The special characteristic of the mortality from tuberculosis in the years under consideration and that which gives rise to the greatest anxiety is the increase of mortality at young ages. Despite the end of the war, the partial improvement of feeding, clothing and heating, normal facilities for medical treatment, and above all the declining birth rate, which would give reason to suppose that more and better attention under the more favorable external conditions of a smaller family would lead to a decline of the death rate, the number of deaths has not in fact declined but increased, a result which is doubtless to be attributed to the aftermath of the hunger blockade." The statistics of pneumonia and influenza show the effect of the great pandemic in 1919. The deaths from influenza were 1,592 in 1913 and 29,141 in 1919. In England and Wales the figures were 6,387 in 1913 and 44,789 in 1919, but the two sets of figures are not comparable owing to the differences in tabulation. The total mortality from influenza and pneumonia was 53,094 and 85,990 in 1913 and 1919, and the corre-

sponding figures for England and Wales were 44,002 and 83,909. The cancer rate shows very little change, 10.13 in 1913 and 10.03 in 1919 for 10,000 persons at ages 30 to 60, and for persons over 60, 54.16 and 51.14. In 1920 the rate increased to 10.22 (ages 30 to 60), and 55.05 (60 and over), the latter being the highest yet recorded.

THE AMERICAN SCHOOL IN FRANCE OF PREHISTORIC STUDIES

FOR the year's work from July 1, 1922, to July 1, 1923, three scholarships were offered of five thousand, three thousand and two thousand francs, respectively. There were over fifteen applicants representing nearly as many states of the Union. The successful applicants are Miss E. L. Bayles, Smith College 1921, of Cincinnati; Mr. Noguera, formerly at Harvard University, of Mexico City, and Mr. J. H. Goff, Oglethorpe University 1920, of Macon, Georgia. Besides these three, three other students completed the summer's work, and one more spent a month in study in the field.

The work consisted in excavation at the station of La Quina in the forenoon, and in attendance at lectures in the laboratory of Dr. Henri Martin, near by, in the afternoon: of these, one was given by Dr. Martin, who accepted a position on the staff as lecturer in paleontology, and a second by the director on prehistoric archeology in general.

The results of the excavations themselves may be said to be satisfactory. The trench continued in 1921 under Director MacCurdy, was extended and proved of somewhat varying richness. The specimens found were predominantly Mousterian, but Acheulean tendencies were not lacking, nor were those of Aurignacian quality (in the upper part). In addition, a small grotto was excavated to a distance of eight meters; the somewhat scanty (though interesting) specimens found here proved almost exclusively Aurignacian. Animal bones, particularly those of the horse, bison and reindeer, were abundant and (as is usually the case) a large number of teeth were preserved.

Excursions were made to Les Eyzies, Teyjat, a neighboring Merovingian cemetery, etc., and at the end of September the students undertook an excursion to the caves of Gargas, Mas