

ages is passing; they suggest a return to the average experience in 1905-14. The birth-rate was 22 per 1,000. This is 3.5 below the average for the preceding ten years and 1.8 below the rate in 1914. The rate in England and Wales, however, compared "very favorably" with the experience of other belligerent countries. The provisional rate for 1916 is lower still—21.6 per 1,000.

The infant mortality during the year was 110 per 1,000 births. This is five per 1,000 above the rate in 1914, but is below the average of the years 1905-14. The provisional infant mortality rate for 1916 shows a fall to 91 per 1,000, the lowest on record. The civilian death-rate was 15.7 per 1,000, which is 1.2 per 1,000 above the average for the previous 10 years. Various factors, however, affect this figure, including the withdrawal of young men from civilian life. Most of the principal causes of death show increased mortality, but scarlet fever, typhoid fever and diarrhoeal diseases are exceptions to this rule. The disease, cerebro-spinal fever, "spotted fever," showed an abnormally high death-rate. There was a remarkable decrease in male suicides. The position with regard to tuberculosis remained serious. There was a marked increase among males and a slight increase among females. These rates refer only to the civil population and are swollen by the fact that healthy males have been taken away from civil life in great numbers.

There were 360,885 marriages, an extraordinary number. The average age of bachelors marrying spinsters was 27.33 and of spinsters marrying bachelors 25.47, these being, as stated above, the highest recorded in each case. The number of births recorded was 814,614, of which 36,245 were illegitimate. Males numbered 415,205, females 399,409, the ratio being 1,040 to 1,000. This ratio for the whole year does not represent the true situation as regards "war babies." The March quarter, for example, which was unaffected by the war, showed a ratio of 1,032 males to 1,000 females. The December quarter, on the other hand, showed a ratio of 1,044 males to 1,000 females. For 1916 the ratios are known to be: March

quarter, 1,050 males to 1,000 females; June quarter, 1,051; September, 1,045; and December, 1,050.

For the year from July 1, 1915, to June 30, 1916, that is for the first complete year during which the births registered have been fully affected by war conditions, the ratio is 1,047 males to 1,000 females. This figure is considerably—so far as males are concerned—above any recorded during the preceding 50 years and approximates to the European rate which has for many years been in excess of our own. A rise in mortality among the aged of both sexes has occurred. It is a feature which has appeared in the statistics of other belligerent countries and may be a reflex of the unusual stress and anxiety of the times.

THE COMMITTEE ON COAL PRODUCTION OF THE COUNCIL OF NATIONAL DEFENSE

THE Council of National Defense has appointed Mr. Francis S. Peabody, chairman of and with authority to appoint a committee on coal production, representative of the coal-producing districts throughout the United States. It is the intention that the members of this committee shall act as chairmen of subcommittees to be appointed by them in their respective districts.

The committee convened in Washington on May 9, at which time, in addition to the members of the committee, there were present Secretary of the Interior Franklin K. Lane, Mr. W. S. Gifford, director of the Council of National Defense, and Mr. Bernard M. Baruch, chairman of the committee on raw materials, minerals and metals, of the advisory board of the Council of National Defense, from which an outline of the proposed scope of the committee's work was received.

In approving the appointment of this committee and laying before it the work that it was expected to do, Secretary Lane referred to the cooperative spirit already shown by the business men of the country in this mobilization of the resources of the United States.

It would surprise the nations of Europe to know how intense is the spirit of loyalty on the part of our business men and capitalists. . . . You are at the very root and foundation of the great industry

—the war industry—that presents itself on the other side of the water. . . . Now, there are two ways of dealing with a problem of this kind. One way is by the hearty cooperation of the men already engaged in the industry. The other way is by compulsion. My experience in the Interstate Commerce Commission led me to believe that the larger men in the railroad industry had quite as much vision as I had, and if I could show them the importance of an occasion they would try to meet it. So, instead of resorting to compulsion, instead of taking over mines and great operating plants we are endeavoring to put you men at your best. This war is a challenge to us.

The chairman of the committee writes:

Notwithstanding the increased production of coal from practically every district, the increasing requirements to meet the needs of all classes of industry, as well as for the comfort and welfare of the people and the transportation of troops, munitions, food and other products, together with the supplying of our allies, and for our national protection—all these demands are liable to surpass the capacity of our mines unless the full cooperation of the mining, transporting and distributing agents of this country is secured. This emergency requires not only the development of the highest efficiency, especially on account of a diminished supply of labor used in the production of coal, but also in more comprehensive methods of cooperation by the coal producers with the transporting and distributing agencies, so that not only a full production will be secured, but also that this production finds its way over our railroads into those centers where the most urgent need exists. If the demand for this product continues to increase it may be necessary that active steps be taken to so far as possible confine the distribution and use of it to those activities which are more nearly vital to the welfare and protection of the nation. That this may not effect an unnecessary hardship upon the domestic welfare of our people it is necessary to promote the closest cooperation, and because of the duty laid upon us to promote this welfare we urge upon you that you cooperate with this committee in its efforts to promote the largest production, the most equitable distribution and the highest use to produce the best economic results. No doubt an emergency exists, but it is the belief of this committee that with your hearty support and the assistance of the public in conserving supply, sufficient fuel can be had to meet public necessity.

FOOD EXHIBITS AT THE AMERICAN MUSEUM OF NATURAL HISTORY

MANY foods, hitherto not eaten by the people of the United States, or which have only a limited vogue, are shown at the Food Values and Economies Exhibition opened on May 23 in the American Museum of Natural History.

An especially interesting feature of the exhibition is the division devoted to unutilized seashore foods, such as filet of shark, gray fish, mussels, skate, many kinds of edible seaweeds and periwinkles. The history and usefulness of the king of American cereals—corn—is graphically demonstrated. There are numerous products of corn and also cornmeal dishes and preparations.

The values by calories of portions in the popular restaurants are visualized and there are specimen meals suitable for serving in the home. How the population fares in lands beyond the sea will be shown by samples of war bread and of the rations prescribed by European food dictators. The housewife may also obtain from this exhibition many practical suggestions as to how to stop the leaks and to promote table economy. Several hotels of the city are to exhibit new dishes specially adapted for the conditions of the present day and from them many helpful hints may be obtained by the general public.

The exhibition will be open for about one month. It was introduced by a special meeting devoted to conservation for war, held in the auditorium of the museum on Wednesday. According to the program the president of the institution, Dr. Henry Fairfield Osborn, presided and addresses were to be delivered by Mr. George W. Perkins, chairman of the Mayor's Food Commission; Dr. Graham Lusk, professor of physiology, Medical College of Cornell University; Dr. Hermann N. Biggs, New York State commissioner of health; and Dr. Walter B. James, president, New York Academy of Medicine.

SCIENTIFIC NOTES AND NEWS

DR. CHARLES R. CROSS, Thayer professor of physics at the Massachusetts Institute of Technology, will become professor emeritus at the