

ice in these interglacial intervals had no greater extent than at present.

Evidence of four glacial stages has been found in the Alps, and of at least four stages in North America. There is some division of opinion as to whether there were five glacial stages, which it is to be hoped will be cleared up in the near future. The controversy is as to the relation of the Iowan drift to the third or Illinoian drift. No serious difference of opinion has been expressed as to the place and rank of the three other drifts.

The students of the northern European glaciation are still battling over the question whether there were any intervals of complete deglaciation, such as are considered established in the Alps and in North America. Those who are favorable to the view that such intervals of deglaciation occurred have in most cases been unable to differentiate clearly more than three drifts. Intense interest in the matter is shown by German, Polish and Russian glacialists, so it is probable that the succession of ice invasions in that field will soon be satisfactorily settled.

From what has been already stated, it seems clear that a lowering of temperature, rather than an increase of precipitation, was the chief factor in bringing on the glacial stages. But the cause for the lowering of temperature is still a matter of wide difference of opinion, and will not be entered into at this time.

FRANK LEVERETT

U. S. GEOLOGICAL SURVEY

SCIENTIFIC EVENTS

THE LENGTHENED LIFE OF THE GERMAN POPULATION

ACCORDING to the Berlin correspondent of the *Journal* of the American Medical Association, the mortality statistics, as set forth in the new German mortuary tables for the years 1924 to 1926, may be regarded as comparatively favorable. The mortality of all age groups, in comparison with the decade 1901-1910, has been greatly diminished. The mortality for the first year of life for the years 1924 to 1926 was 115.4 and 93.9, respectively, per thousand living births (boys and girls), as compared with 202.3 and 170.5, respectively, for the decade 1901 to 1910, and 252.7 and 217.4, respectively, for the period 1871 to 1880. It is evident, therefore, that infant mortality has decreased, since the beginning of the twentieth century, by about 44 per cent., and since the founding of the German reich (1871), by more than 50 per cent. Still greater has been the decline of mortality among young children aged 1 to 5. Of 1,000 children

who have withstood the dangers of infancy, 16.2 boys and 14.9 girls die in the second year of life, or only two fifths as many as twenty years ago and only one fourth as many as during the period 1870 to 1880. In the 3 to 6 age group the mortality of boys and girls has dropped to from one fifth to one sixth of what it was formerly. The mortality of 10-year-olds has decreased from 2.4 per thousand, for boys, in the years 1901 to 1910, to 1.4 per thousand, and from 2.6 per thousand, for girls, to 1.2 per thousand.

The mortality of men of the 45 and the 50 age groups also is about 40 per cent. lower, according to the recent tables, than it was according to the tables for the period 1901 to 1910. In the age groups above 50, however, the improvement in the mortality rates becomes less and less with increasing age. Nevertheless, the attained reduction of the mortality of 70-year-old men and women from 69.4 and 62.1, respectively, to 58.1 and 52.0, respectively, per thousand, and likewise the lowered mortality of 80-year-old men and women are noteworthy. The marked diminution in the mortality of all age groups results naturally in a considerable lengthening of the life of the population as a whole. Corresponding to the especially marked reduction of mortality in infancy and the early years of childhood, the lengthening of life is most noticeable in the first five years of life. Starting with a given number of new-born (omitting stillbirths), 12 per cent. more reach the self-supporting age than in the decade from 1901 to 1910, and even 23 per cent. more than under the mortality conditions of the period 1871 to 1880.

According to the mortality conditions of the period 1871 to 1880, the new-born boys reached an average age of 35.6, and, according to the conditions that prevailed during the decade 1901 to 1910, they attained an average age of 44.8. Under the present conditions, however, the average length of life of boys is 56. The entire reduction in mortality brought about since 1870 amounts, therefore, to an average lengthening of the life of new-born boys of 20.4 years. During the same period of fifty years, the life expectancy of new-born girls has increased from 38.5 years to 58.8 years, or a net gain of 20.3 years. In Denmark, England and Wales, Australia and New Zealand, the new-born, chiefly because of a lower infant mortality and a lower mortality of young children, attain, on the average, a still higher age than in the German reich.

THE USE OF ETHYL GASOLINE AS MOTOR FUEL

THE use of gasoline containing ethyl fluid as an automobile engine fuel does not affect materially the percentage of carbon monoxide contained in the exhaust gases, says the Department of Commerce, fol-