

Characteristics of Precipitation in Saskatchewan and Alberta", in which it is apparent that the author's investigations and their results may have a wider application than the merely agricultural (*Canadian J. Res.*, 14, No. 9, Sept. 1936). In previous agricultural meteorological investigations, Mr. Hopkins demonstrated statistically significant correlations between annual variations in rainfall and temperature, and the yield and nitrogen content of wheat crops grown in central and southern Saskatchewan and Alberta. In the present paper, the author gives the results of a study complementary to the previous one, dealing with some average characteristics of the seasonal precipitation in these districts, and also analysing the fluctuations which past experience has shown to occur from year to year in the precipitation at a given place, and from place to place in the same district during a given year. The investigations appear to be based on observations carried on between 1898 and 1934, the stations being Edmonton, Calgary, Battleford and Swift Current. "In spite of irregularities, to be expected in the limited sample of years available," says the author, "the frequency of distribution of seasonal precipitation at the stations showed no gross asymmetry, seasons with precipitation in the vicinity of the average being on the whole more numerous." The average (1916-32) percentage of days on which rain fell showed a distinct seasonal trend during spring and summer, being lowest in April and highest in June. Similar variation was noted in the average amount of rain per rainy day, which was lowest in April and highest in June and July. It would be of interest if in future observations some data could be collected on the subject of the possible influence of the forests on the atmospherical moisture content in these regions.

Plant Pathology in Devon and Cornwall

THE twelfth annual report of the Department of Plant Pathology at the Seale-Hayne Agricultural College, Newton Abbott, Devon, considers the pests and diseases of plants from an essentially local aspect, which should be much appreciated by growers in Devon and Cornwall. Mr. L. N. Staniland, the advisory entomologist, contributes a general section upon the more common pests of farm and garden. He has made a special study of eelworm troubles. Methods of combating this pest are discussed at considerable length, and a thorough revaluation of the usual hot-water treatment has been made. It has been found that although eelworms are killed by seventeen minutes exposure to a temperature of 110° F., the technique of commercial treatment varies greatly. The usual period of three hours heating is shown to be inadequate in some cases, and various recommendations as to improved methods are made. Mr. A. Beaumont, the advisory mycologist, has made a further detailed study of the relation of potato blight to the weather of Devon, and has separate articles on "Tulip Fire and the Weather", "Snapdragon Rust; Trials of Resistant Varieties", and "Apple and Pear Fruit-rotting Fungi".

Vital Statistics for England and Wales for 1934

THE text volume of the Registrar-General's Statistical Review of England and Wales for 1934, recently issued, contains the official commentary on the two volumes of vital statistics already published (London: H.M. Stationery Office. 3s. 6d. net). The report deals with the statistics of births, deaths and marriages registered in 1934, estimates of population, and other matters. The estimated population of England and Wales in the middle of 1934 was 40,467,000 persons, of whom 19,412,000 were males and 21,055,000 females. The total is 117,000, or 0.29 per cent greater than the estimate for the previous year, and 515,000 or 1.3 per cent greater than the population at the census of 1931. The average ages of the estimated population, which are gradually increasing, are 32.4 years for males and 34.2 for females. In addition to reviewing the mortality from various causes, the report also contains several studies of mortality. One of these deals with the handicaps suffered by the winter-born compared with the summer-born child, and another with the mortality rate from pregnancy and child-bearing for the wives of men in various social groups.

Fall in French Birth-Rate

THE annual number of births in France reached its maximum towards the end of the Second Empire, when it was so high as 1,034,000 in 1868. In 1934 it had fallen to 677,000 and in 1935 to about 650,000, of which nearly 50,000 were the children of foreigners. The birth-rate has therefore diminished by 384,000 or nearly a third, although the population has increased since 1868 by three million immigrants or naturalized persons, which has resulted in increasing the population from 38 to 48 million inhabitants. During the period 1900-35, the birth-rate has decreased by nearly 100,000. The number of births per marriage has decreased even more rapidly. In 1800 the average number of births in France was 4.5 per marriage, at the end of last century it was 3, and to-day only 2.2, or a diminution of about fifty per cent.

The Value of Experiments on Animals

THE autumn issue of the *Fight against Disease* (24, No. 4), the quarterly journal of the Research Defence Society, contains extracts from the evidence given by Lord Justice Fletcher Moulton before the Royal Commission on Vivisection, 1906-8. The considered opinion of Lord Moulton, whose scientific knowledge and clarity of thought must have materially assisted the Commission in forming an opinion upon the anti-vivisection controversy, should help those who have to address meetings on the question, or have to deal with anti-vivisection propaganda.

Physics in Industry

AT the meeting at the end of October commemorating the fifth anniversary of the founding of the American Institute of Physics, the replies of fifty leading industrial physicists to the question: what