

per cent Jews and 10 per cent Christians and others. The birth-rate was twice as high among Moslems (46.4 per cent) as among the Jews (23.0 per cent). Both rates were falling, but that of the Jews more rapidly than that of the Moslems. The death-rate of the Moslems was much more than double that of the Jews. Infantile mortality was 121.5 per 1,000 live births among the Moslems and 54 among the Jews; for Christians the rate was 101. These rates were the lowest ever recorded and showed a sharp decline from previous years. Of the various diseases diarrhoea caused 1,336 deaths and pneumonia 1,258, then in order of frequency came heart disease 617, cancer 364, cerebral hæmorrhage 311, and nephritis 276. 3,394 cases of malaria were reported with 15 deaths, 1,235 cases of typhoid with 134 deaths, and 175 cases of paratyphoid with 2 deaths. There has been no increase in tuberculosis in the last ten years. Ophthalmias are a formidable problem.

Piezo-Electro Crystal Filters

A BRIEF outline of the history of the crystal filter has been published by J. E. Benson (*A.W.A. Tech. Rev.*, 5, 191; 1941). The earliest application of piezo-electric crystals to frequency-selective circuits appears to have been made in 1920 by W. G. Cady, whose patent describes the behaviour of piezo-electric elements near resonance and their consequent use in the selection and measurement of high frequencies. L. Ezpenschied (Jan. 3, 1927) described the quartz-crystal band-pass filter having recurrent sections. This was followed by W. A. Marrison's patent (June 7, 1927) for a balanced crystal-gate filter designed for sharp response at a single frequency. In the same year, C. W. Hansell developed a similar bridge-balanced system, in which the parallel capacity of the crystal was balanced out of an equal capacity supplied from the input circuit in opposite phase to the crystal. Single-frequency rejection filters of the *T*-section type having a piezo-electric element in the shunt arm were described at about the same time by I. F. Byrnes. J. Robinson's stenode radiostat using a balanced crystal-filter circuit appeared in 1929.

Recent Earthquakes

ACCORDING to a radio message from Tokyo, the largest earthquake since 1930 shook southern Formosa on December 17. The epicentre is likely to have been near the town of Kagi around which most of the damage was done. Seventy-seven people were seriously injured and eighty-seven slightly hurt when 612 houses were destroyed and 918 badly damaged. Railway and telephone communications were temporarily severed. On the same day a violent earthquake occurred in the Mughla district of south-western Anatolia in Turkey. Damage was done to about eight hundred houses and a hospital, but only a few persons were injured. On December 20 an earthquake of moderate intensity shook Quetta. The shock lasted, according to human perception, for about ten seconds and was accompanied by a low rumbling sound. No damage has been reported, probably due to the new town having been built according to earthquake-proof design.

Institute of Physics Planning Committee

THE Board of the Institute of Physics has appointed a planning committee with the following terms of reference: "To watch and to advise the Board on matters affecting Physics and Physicists, including their education and training, and on post-war planning." The constitution of the Committee, which has power to co-opt, is as follows: Sir Lawrence Bragg, Prof. J. A. Crowther, Mr. E. R. Davies, Dr. H. Lowery, Major C. E. S. Phillips, Dr. C. Sykes, Dr. F. C. Toy. At the request of the Board the Committee will proceed at once to consider certain matters concerning the education and training of physicists. Close contact will be maintained with the participating societies of the Institute, namely the British Institute of Radiology, the Faraday Society, the Physical Society, and the Royal Meteorological Society, as well as with other bodies concerned with the application of physics to industry.

Announcements

PROF. HENRY NORRIS RUSSELL, research professor of astronomy at the University of Princeton, has been elected to an honorary fellowship at King's College, Cambridge. Prof. Russell, who is the doyen of American astronomers, graduated as Ph.D. at Princeton, after which he entered King's College, Cambridge, as an advanced student in 1902, and was in residence at Cambridge for three years. During that time he carried out research in collaboration with Mr. A. R. Hinks, now secretary of the Royal Geographical Society, upon parallax, and the methods they developed have become standard. This no doubt was a first step on the way to some of Prof. Russell's most notable work.

THE Harrison Memorial Prize, which is awarded by a selection committee consisting of the presidents of the Chemical Society, the Institute of Chemistry, the Society of Chemical Industry and the Pharmaceutical Society, has been awarded for 1941 to Dr. Henry Norman Rydon. This prize is given to a chemist of either sex who is a natural-born British subject, not more than thirty years of age, who, in the opinion of the selection committee, shall during the previous five years have conducted the most meritorious and promising original investigations in chemistry. The Prize is to be regarded as an exceptional distinction to commemorate an exceptional man.

THE Town and Country Planning Association has arranged a series of fortnightly lunch-time meetings at 1.20 on "Post-War Reconstruction", beginning on January 8, at the Dome Lounge, Messrs. Dickins and Jones, 224 Regent Street, London, W.1. Admission is by ticket obtainable from the Association. The first meeting will be addressed by Mr. George Hicks, parliamentary secretary to the Ministry of Works and Buildings, who will discuss the part the Ministry can take in reconstruction.

REFERRING to the obituary notice of Mr. R. T. Baker in *NATURE* of December 13, p. 718, Prof. John Read writes that Mr. Baker died at Cheltenham, New South Wales, on July 14, aged eighty-six years.