

plan which would assist international co-ordination of comparative results. The projected investigations are aimed at determining the relation between nutritional requirements and different occupations, the economic and social effects of different policies of improving the standard of nutrition of workers and their families, and at defining the principles on which the regulation of wages, where it exists, is based and methods of fixing benefits under social insurance or assistance schemes. Other studies will deal with the nutrition of apprentices and young persons and of the unemployed, etc.

Rural Electrification

At the present time many people are interested in the supply of electricity for thinly populated districts, but they are only beginning to realize that it is a very safe commercial venture. There is a great demand for an electric supply at a reasonable cost and the expense of advertising by demonstration vans, etc., is not great. In a paper on this subject read by J. S. Pickles to the Institution of Electrical Engineers on December 2 it is pointed out that in many countries abroad the public supply of electricity is regarded as a necessity. As a practical example of what can be done by borough councils, he gives a description of the Dumfries scheme, which covers the whole of a geographical county of 1,070 square miles in area. With the exception of only one town, no electrical development had previously taken place in the supply area. The scheme was begun six years ago, the electric supply being purchased by the borough from the Central Electricity Board. The policy adopted aimed at providing supply to every consumer without asking him to make a contribution towards the capital cost, no matter what was the length of his necessary service main. Neither was he asked to pay any guaranteed minimum revenue. The adopted scheme provided for the immediate erection of a comprehensive system of overhead wires with the necessary transformers, etc., capable of giving a supply practically to all prospective consumers within the area. It was recognized that the expenditure of large capital sums in the early years would lead to commercial deficits unless the development amongst consumers was very rapid.

THERE is an assisted wiring scheme extending over five years for the consumer and no initial payments of any kind are required. A two-part tariff is usually adopted. The consumer pays $\frac{1}{2}d.$ per unit for running costs and 5 shillings per room per quarter, no charge being made for sculleries, bath rooms, box-rooms, etc., and 20 is the maximum number of rooms for which a charge is made. A radiator can be hired for 1s. 6d. per quarter and a wash boiler for 2s. 6d. A two-part tariff meter has been adopted, which collects both the fixed and the running charges. Very few of the consumers go for long holidays, and so the supply is never cut off for long periods. As many of the consumers have 'all-mains' wireless sets they never allow their supply to be cut off for long. During the first five years of working the scheme

there have been small deficits in the year's working, but it is estimated that from the sixth year onwards there will be a profit. Doubtless later on there will be a reduction in the consumer's charges, as the demand seems constantly increasing.

The Modern Quarterly

WE welcome the first number of the *Modern Quarterly* (offices: 2 Parton Street, London, W.C.1), because throughout it proclaims the supreme importance and the social function of science in the contemporary world. But we must add a qualifying regret that it appears both from its contents and the personnel of its editorial council to be inclined to identify the progress of science with one form of the organization of society and especially of industry. This must prejudice many readers against the suggestive ideas and generally high aims of the promoters. Must we accept Marx, Lenin and Russia, it will be asked, as the gospel and best exemplification of science in society? Are not the more liberal, though more slowly moving societies, like our own, perhaps doing the work of human evolution even more effectively in the long run, certainly without the bitterness and the bloodshed of the revolutionary method? But these are large questions impossible to discuss in a note. Of the articles in this number, two should be especially mentioned: the first, by Prof. H. Levy, acutely criticizing the mechanistic explanation of the universe, and the fourth, by Dr. Joseph Needham (the bulk of his Herbert Spencer Lecture at Oxford), in which he attempts a revaluation of Spencer's presentation of the idea of progress. This is the most valuable part of this first number and deserves careful study, none the less because it contains conspicuous examples of the communistic doctrines referred to above. Mr. Max Black has an article carefully considering and criticizing the doctrines of Wittgenstein and the logical positivists. It is rather a remarkable feat to be able to write a complete, though short, account of "The Evolution of Positivism" (including the nineteenth century) without even mentioning the man who first systematized that way of thinking and gave it its name.

Earthquake in the East Indies

ONE of the greatest earthquakes for several months past occurred on February 1. The first movements were recorded at Kew at 7 h. 19 m. 52 s., p.m., and the largest oscillation about three-quarters of an hour later. According to Mr. J. J. Shaw, it was a very deep-seated earthquake. The records at Kew and Bombay show that the distances of the origin from these two places are respectively 8,250 and 4,250 miles. Thus, the earthquake occurred in the Banda Sea in about lat. 5° S., long. 130° E., at 7.5 p.m., G.M.T. (February 2, 1.45 a.m., local time). Three earthquakes, with a focal depth of about 260 miles, occurred close to the spot indicated (in lat. 5.5° S., 130° E.) on May 10, 1920, and March 23 and 24, 1921; while two others, with the same focal depth, originated in a centre lying five degrees to the east on October 10, 1921, and February 19, 1923.