

## ELECTRICITY :

### ITS POTENTIALITIES IN RURAL ECONOMY.

C. J. DREWITT.

OF the benefits which science and mechanical invention have conferred on the modern farmer, it is now being realized that electricity will be the principal means of revolutionizing country life and work, and thereby bringing about such an amelioration of farming conditions that the rural exodus will cease to be a national danger.

The more the great question of maintenance of soil-fertility is studied—it is the dominant problem in the world to-day—the more the need is realized of thorough cultivation; not only the constant stirring and aeration of soils long in use, but the repeated working of swamp lands (following drainage) and intractable soils. This implies labour—or, rather, a simplified, effective, and economical power. This electricity promises to provide. In the coming days of intensive farming, when fewer but more profitable stock will be kept on smaller but better-worked areas, electricity will become a dominant factor in farming operations; and in no country should this truth become better exemplified than in New Zealand, with its many sources of potential water-power.

In the tilling of the soil electricity promises to play its most important part. With a good supply of current passing through a district from harnessed water-power it would be possible—indeed, the principle is already in operation in England—to have a main line running through farms near the supply route, with every pole (or post) carrying the wire a power-point. With 500 yards of armoured trailing cable attachable with ease between one of these many points and the electrically driven implements, the cheapest and best of all forces for cultivating and other farm operations will be at the farmer's command.

With power delivered under this system compared with the petrol-driven or steam tractor there is a vast difference. In the former case the capacity is very much extended. When the electrically driven implement gets into a soft place, or encounters an obstacle demanding exceptional force to overcome it, the series or three-phase motor will proceed, though, of course, at a slower pace, but it will operate; while with the petrol or steam tractor there is a limit beyond which one