

REGULATIONS.

The regulations governing the erection of electric lines have been under revision during the year, and the revised draft has been submitted to the different supply authorities' engineers for criticism. Much helpful advice has been received in this way, particularly at the general conference of supply authorities' engineers held recently in Wellington. In previous issues of regulations this Department has not issued detailed rules dealing with the installations on consumers' premises, but has been content to embody in its regulations the rules issued by the Council of Fire Underwriters' Association. Some dissatisfaction with this action has been expressed from time to time by supply authorities, who consider that all regulations relating to electrical apparatus should be issued by the one authority. Negotiations are now taking place with the authorities concerned to see if the Rules for Wiring now being revised, and which would shortly be reissued, cannot be issued by the Public Works Department as part of our regulations covering the other sections of work.

Another matter somewhat allied with the regulations is the question of testing and approving of all kinds of apparatus brought into the country for use by consumers. A certain amount of this inspection is being done by the local authorities and by the fire underwriters, but the electrical development in the past few years has been so great that it is extremely doubtful if this important matter has been receiving the attention that is necessary to maintain a high standard of installation throughout the country. Consideration is being given to the establishment of a central testing laboratory and Approval Board, specially to deal with all types of appliances imported into the country, to carry out tests on plant and apparatus for local authorities, and at the same time to do a certain amount of experimental and research work on problems peculiar to electrical development in the country.

REGISTRATION OF ELECTRIC WIREMEN.

The Bill which was prepared for the last session of Parliament, but which it was not possible to introduce last year, has been revised and is ready for introduction this session. There has been such an enormous increase in the number of electrical installations throughout the country that the question of maintaining a proper and uniform standard throughout the country has become of the utmost importance. The fact that all wiremen after the passing of this Act will be required to work to the same standard, and be subject to inspection by registered Inspectors, should do much to improve the general standard of installation.

GROWTH OF LOAD.

Most of the newly formed Boards, particularly on the Mangahao system, are building up their loads at a faster rate than was contemplated, and the loads will considerably exceed the amounts they have guaranteed. It is anticipated that there will be a considerable increase in the domestic loading, particularly in electric ranges and hot-water heaters. Returns have been obtained of the electric ranges in service in the areas of the different electric-supply authorities. The total number of ranges connected is 1,526, which means that 1.02 per cent. of the total number of consumers are enjoying the advantages of electric cooking. The total number of supply authorities is eighty-seven, and of these fifty-five, or 62.5 per cent., have electric ranges connected to their systems. One supply authority has no less than 475 ranges connected. The total number of consumers in this district is 22,491, which gives a figure slightly in excess of two ranges to every 100 consumers. Three other supply authorities, however, have figures corresponding to over five ranges to every 100 consumers.

When it is realized that some of the largest percentages are being obtained in districts in which power has only been available for a few months, it is evident that a large increase in demand can be looked for in this direction once the authorities embark on an active canvas for this type of load. It is also particularly gratifying to see that the advent of electric power is bringing conveniences to the rural districts which should greatly improve the conditions of living therein.

A return of the number of electrified milking-machines in different districts gives an indication of the extent to which electric power is being utilized in this most important New Zealand industry. In the Thames Valley Power Board district there are already 1,083 electrified machines in operation, or one to every three consumers in the district. The total number of milking-machines throughout the Dominion in 1923 was 14,553, and allowing for an increase equivalent to that of previous years, the number for 1925 should be approximately 18,750. Of this total number no less than 3,581 were electrified at March, 1925, or a percentage of 19 per cent. compared with 9 per cent. in 1923; and this percentage will be still further increased during the present year.

ELECTRICAL ACCIDENTS.

With the very rapid increase in the length of lines and uses of electric power it is inevitable that there must be an increase in the number of accidents resulting from electric shock. Supply authorities are required to supply to the Department reports of all electrical accidents occurring in their districts. The particulars of these accidents are considered in detail with a view to making any amendments in the regulations, &c., which may be indicated as being necessary to safeguard consumers and the general public. During the past year there have been seven fatal accidents. Of these three were to workmen working on electric lines, and four were due to persons coming into contact with fallen or broken wires or material made alive by contact with power wires.

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