

When electric-supply authorities actively canvass their areas for the above class of load the response is generally favourable, and it is only reasonable to anticipate that in the near future the demand on the available stations will be such as to warrant further extensions to keep up with the requirements. This development of load is particularly noticeable in rural and country areas, where the facilities for more congenial living-conditions are being brought into line with those already existing in the metropolitan areas.

As regards electrically-driven milking-machines, the figures this year show a steady advance over those of previous years — viz., 1925, 3,581; 1926, 4,856; 1927, 6,738; 1928, 8,514. The collection of these statistics was inaugurated in 1923, when the total number of electrically-driven machines was only 1,310. The increase in five years is thus 550 per cent.; and, as there are still about 9,500 machines which are fuel or water driven, the work of conversion is not yet half completed, and the electric-supply authorities have still this additional load of approximately 12,000 horse-power in prospect and ready for canvassing.

ELECTRICAL SUPPLY AND WIRING REGULATIONS.

Since the above regulations were gazetted the work of the Advisory Committee has continued to be of valuable assistance to the Department in reviewing the regulations in connection with questions raised by the supply authorities and others. With the issuing of Wiring Regulations, hitherto published by the Fire Underwriters' Association, there has been a lot of work associated with interpretations of certain clauses, all of which has been indexed for future reference when the time arrives for a revision of the present issue. The working of the new regulations has, however, been comparatively smooth, and the supply authorities are showing a live interest in seeing that the spirit of same is given effect to.

INSPECTION OF ELECTRIC LINES.

Since the staff has been strengthened by the appointment of two Electric-line Inspectors the periodic inspection of the electric lines throughout the Dominion has been maintained in conjunction with inspections necessitated by the addition of 2,088 miles of new lines erected during the year. It is satisfactory to record that the supply authorities are co-operating with the Department in facilitating these inspections, followed in most cases by prompt attention to the removal of defects brought under their notice. The idea previously held by some supply authorities that no attention be paid to maintenance of lines until a disregard of the regulations was made apparent either by accidents or arising out of departmental inspections, is disappearing, and they are recognizing more than hitherto the obligations imposed by the conditions of the license issued to them.

Investigations into the voltage of supply to consumers to ascertain if electric lines are being properly designed and maintained to comply with the permissible voltage variation, and the matter of seeing that the relay protective devices are operating effectively, have not yet been finally organized, but it is anticipated being able to devote more attention to this in the near future. Cognizance of these matters by supply authorities is already in evidence, and it is hoped that with the full co-operation of the Public Works Department the public will eventually enjoy the benefits of efficient electric supply.

Inspections of interior wiring have on occasion been carried out by the Public Works Department during the year (more particularly in public garages), and the defects scheduled as a result of such inspections have revealed a lack of supervision by the supply authority concerned. In my report of last year attention was directed to the necessity for all electric-supply authorities recognizing the responsibility resting on them, through their Inspectors, who are registered under the Wiremen's Registration Act, and to take active steps to detect bad workmanship and unregistered wireman. This matter has again been brought under the notice of all supply authorities by means of a circular letter, with a request that their staffs be instructed to make more frequent and stricter inspections to see that the regulations are being complied with.

The following is a list of the various electric-supply authorities and companies whose lines have been inspected during the past year:—

Power Boards (35).

Ashburton (extensions)	Hawke's Bay (part)	South Canterbury	Wairarapa
Auckland (part)	Hutt Valley	Southland	Wairere
Banks Peninsula	Malvern	Springs-Ellesmere	Wairoa
Cambridge (part)	Manawatu-Oroua	Taranaki	Waitaki (part)
Central (part)	Marlborough (part)	Tararua	Waitemata (extensions)
Central Hawke's Bay	Opunake	Tauranga (part)	Waitomo (extensions)
Dannevirke	Otago	Te Awamutu (part)	Wanganui-Rangitikei.
Franklin (extensions)	Otago Central	Teviot	
Grey	Poverty Bay (part)	Thames Valley	

Cities (1).

Wellington (part).

Boroughs (31).

Hastings	New Plymouth	Rangiora	Tauranga
Hamilton	Ohakune	Riccarton	Te Aroha
Inglewood	Opotiki	Rotorua	Thames
Kaipoi	Picton	Stratford	Wairoa
Lytelton	Palmerston North	Sumner	Waitara
Motueka	Patea	Timaru (part)	Westport
Mataura	Queenstown	Taihape	Whakatane.
Napier	Raetihi	Taumarunui	