

Concrete Telegraph Poles

Timber as a Competitor—New Zealand's Experience—Concrete Scores in Durability and Maintenance.

The use of concrete for telegraph poles is a well established engineering practice, and the New Zealand Post and Telegraph Department has adopted the material for some of its lines. We recently made inquiries of the Department to ascertain the results of its experience. It is using a patented method of manufacture, and we are therefore unable

stood the test, and even if the wires had been smashed by falling branches, the reconstruction work would have been materially lessened.

Concrete poles, in the Department's opinion, give an increasing factor of safety within certain limits, whereas wood has a decreasing factor due to deterioration during useful life. Low maintenance cost is



CONCRETE POLES ON THE LOWER HUTT-MASTERTON TELEGRAPH LINE

to go into that aspect. However, some notes on the use of concrete in the Department's work have been placed at our disposal, from which it seems that there are four important advantages of reinforced concrete poles. First there is the question of durability, their freedom from rot at the ground line, which is one of the principal defects in wooden poles. Their non-inflammability is important in bush and scrub countries such as New Zealand, where wooden poles are liable to destruction by fire. The telegraphic communication between the North Island and most places in the South Island was almost suspended for two days not long ago in consequence of damage done to the telegraph lines in the neighbourhood of Kaikoura by a bush fire. No doubt concrete poles would have

also an advantage. Concrete poles do not require the same strutting and reinforcing, etc., as age increases, due to deterioration at ground line, etc.

On the other hand, there are disadvantages associated with the material which, in a timber-growing country like New Zealand, will delay the complete adoption of concrete for telegraph poles. The weight of concrete poles increases handling and erection charges. They are less flexible than lighter poles for use in developing districts. Wood, being lighter and handling charges consequently lower, may be replaced by taller or stouter poles when desirable, without incurring such heavy costs. The breaking weight of concrete poles is less than that of hardwoods, etc., of similar dimensions.