ELECTRIC POWER TRANSMISSION POLES.

EUCALYPT SPECIES FOR NEW ZEALAND CONDITIONS.

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NEW ZEALAND needs increasing thousands of supports for carrying electric wires. In theory, the supports may consist of reinforced concrete, or bolted steel bars, or wood. In practice, general preference is being given, and seems likely to be given, to wood. The concrete pole is heavy and easily fractured. The steel tower may come into favour for main lines; it may be best for very steep country where material can be delivered in sections more easily than in long lengths; but for the rapidly expanding reticulations it apparently cannot compete in economy and convenience with the wood pole.

The wood poles now being distributed by our engineers for the new power-lines, though so crude and plain, bear impressive witness to the genius and progress of civilized man. They tell of learned research into the secrets of nature, and of well-instructed planning to convert the energy of falling water into light and heat and mechanical movement. They tell of forests and skilled woodmen in far-off Australia. They tell of freighted ships crossing the Tasman Sea, and of strong-limbed men and powerful appliances doing the work of landing and distribution in our own country. A hundred years ago British men were here gathering kauri spars for the masts and yards of ships; to-day we are importing hardwood poles for the transmission of electricity. As we still look at these great shafts of wood and try to estimate their cost we find ourselves asking why they are being brought from Australia instead of being grown in our own forests. The question is pertinent and must be competently answered.

The botanical genus that yields these poles has been made known to the world under the strange Greek compound *Eucalyptus*. It is a genus unique and apart in the earth's manifold flora. It belongs to the great myrtle family, but is easily distinguished from all other myrtles. In multitude of species it holds second place only to the genus *Acacia*. Though restricted in natural habitat to the island continent of Australia and adjacent islands, it is unsurpassed in climatic range by any single genus of the forests — indigenous and locally adapted species being found in every available climatic region from the southern capes of Tasmania to the tropical jungle of New Guinea, and from genial lowlands on the seaboard to alpine heights above the winter snow-line. Some of the species are humble shrubs; some are bushy mallees. At least one hundred are timber-yielders of medium to large dimensions, and of these twenty or more easily hold place in the first rank of forest giants. Many are very beautiful, and from the foliage of a large number there may be extracted fragrant and valuable essential oil.

As exotics distributed by the hand of man many of the species are showing wonderful capacity for acclimatization. Planting was begun in countries outside of Australia over sixty years ago; and, speaking generally, it has since then been continued with steadily increasing enthusiasm and success. Many countries have contributed