The principle object of this section of my report is to discuss the introduction into New Zealand of the wattle-bark as a marketable commodity and prolific source of income. The North Island is admirably suited to the purpose of wattle-growing, and I was particularly struck with the pumice-plains of Lake Taupo, also the immense area along the Upper Waikato, stretching to Ruapehu and Tongariro, as country specially adapted for plantations of this tree. The bare hills around Wellington and Nelson, as also the waste lands of Auckland, too, might be profitably used for this purpose.

There are many species—mostly Australian—of the genus *Acacia*, but of these it is only necessary to mention three. These are: *Acacia decurrens*, var. *mollissima* (the black feather-leaf wattle), *Acacia dealbata* (the (silver) feather wattle), and *Acacia pycnantha* (the broad- or golden-leaf wattle). *Acacia decurrens* is a tree reaching to 20 ft. or 30 ft., with rounded form of head and branching in habit. The leaves are small, decurrent, and folding, with golden tips to the young shoots, and yellow or golden tinge to the branches and twigs. The flower is a soft ball, yellow, and not very crowded on the stalks. The silver wattle (*A. dealbata*) is so called from the silvery white of its bark and leaves on the underside. The leaves are decurvent, pinnate, and glaucous, somewhat larger than those of *A. decurrens*. The bark closely resembles that of *Fagus solandri* (silver-beech). In Australia this is the first wattle to bloom, coming out about July or August, the black feather-leaf wattle following in September. The flowers of the silver wattle are smaller and lighter in colour than those of *A. decurrens*. Both are feather-leaved, but the bark of the last named is dark-brown, and often—in old trees—of a rusty black colour. Trees of all three species range in height from 20 ft. to 35 ft., and mature from seven to nine years, when they should be stripped and cut down. *A. pycnantha* (broad-leaf wattle) is in Australia a most valuable tree. Though it does not produce so much bark as either of the other two *Acacias* named above, its proportion and strength of tannic acid are much greater.

The habit of all these trees is littoral, and they should be grown well within the influence of sea-air. There is little difficulty in distinguishing *A. pycnantha* by its broad leaf, not unlike that of a gum, lanceolate in form, with prominent veins and midrib. The tree is well named the golden wattle. Its bright fluffy golden balls are most striking and beautiful in appearance, and give off a delicate though powerful perfume. The upper branches and twigs are tinted with a brownish-yellow colour, which gives the whole tree that golden look that suggests its Australian name. The brilliant blossoms are much admired by all lovers of flowers. Of the three species, the first and third are most in favour with tanners and buyers, *A. dealbata* having a small percentage of tannic acid. This tree, moreover, is apt to become a troublesome scrub, sending up suckers from the roots very freely. In its mountain form, however, it becomes a fine tree, and in moist cool gullies often runs up to 80 ft., producing timber very valuable for cask-making and other purposes. *A. decurrens* and *A. pycnantha* thrive best in undulating fern (bracken) country and deep sandy loam.

In Australia the price of black or broad-leaf wattle-bark ranges from £5 to £7 per ton, and sometimes 1 cwt. of bark is obtained from a single tree of *A. decurrens*.

All of the Acacias are valued by bakers and confectioners as firewood, because they make a quick fire, and throw out great heat.

Methods of Cultivation.

Acacias are cultivated under several different systems:—

1. By ploughing the ground, sowing the seed broadcast—2 lb. to 3 lb. to the acre—as is done with wheat and other grains. The seed should be prepared by pouring boiling hot water upon it, and letting it stand to cool before sowing. Care should be taken, however, not to thus prepare more seed than can be sown on the same day. After being prepared, the seed should be mixed with dry sand, in the proportion of 1 lb. of seed to half a bushel of sand, and the mixture broadcast over the ploughed ground.

2. Another method adopted is more suitable for land on which are stumps and fallen timber. This is, lining out rows of spit-holes 8 ft. apart each way, and dibbling two or three seeds into each hole.

In forming wattle plantations ample provision should be to minimise the danger from fire. Hence plantations should be laid out in blocks of from 25 to 50 acres, bounded on all sides by broad roadways as fire-breaks.

Trees, as a rule, may be stripped at the age of eight or nine years, as they then attain maturity, and if left longer may be attacked by grubs and die. In Australia the stripping season begins in September, and lasts until January. The bark when taken from the trees should be carefully stacked, and protected from wet. The trees, of course, perish after being stripped.

The wattle is a very heavy seeder, and tons of seed are scattered each season over the ground. To reproduce a plantation nothing more is necessary than to cut down the dead timber and burn off grass and rubbish, and the young trees will then spring up in great profusion. These, of course, require thinning about the second or third year to a standard distance of 8 ft. *Acacia decurrens*, being the largest, showed be thinned to 10 ft. apart.

The broad-leaf wattle and the black feather-leaf grow best in dry uplands, the former in sandy soils or granite detritus, but will not thrive in low-lying wet soils. The bark is highly valued in England and Germany, and generally commands ready sale at high rates. It is prepared for export by being chopped or ground in a mill, and is shipped in sacks.

I noticed some flourishing wattle plantations on the railway between Rotorua and Auckland, and from the appearance of these I formed the opinion that there is a splendid opportunity for profit in the culture of wattles in New Zealand.

The enemies of the wattle are not numerous, but when they do appear they are very injurious. The first and worst is a very small green beetle. This attacks the feather-leaf wattle only, swarms