C.-4.

débris is commonly known as pukahu (usually corrupted into "bookow"), and is a compound of vegetable fibre intermingled with fallen leaves, particles of gum, and scales from the resinous bark which forms round the base of the trees, and sometimes reaches several feet in height. Not only this, but, owing to the fact that a very small touch of fire will kill a kauri-tree, the efforts of the Department to preserve clumps of kauris have been more or less frustrated. However, the Waipoua Kauri Forest is still withheld from sale in its entirety, and presents an unequalled specimen of that variety of forest in the Auckland District. (Photographs of kauri-trees may be found opposite pages 16 and 17.)

With regard to the other timbers in the district, totara is largely used, and particularly so in the (See photograph of totara-tree opposite southern parts of the district, in the vicinity of Taupo.

Kahikatea is found all over the district, and its cutting and export in the Northern Wairoa is one of the staple industries of that locality, though recently the demand has been very small. (See photo-

graph opposite page 34.)

Rimu is in general request, but very few other trees are used for building purposes commercially to any extent. Although tawa is a very fine timber indeed, yet it is reported to be almost unsaleable at the present time, and beech or birch, although used for mining purposes, is not required otherwise. Puriri is in fairly constant demand, and, although its supply is somewhat limited, still there is a chance of its being more used in the future than in the past. (See photograph of puriri opposite page 41.)

It is estimated that the export of timber in the Auckland District amounted to 60,422,521 sup. ft. for the year 1908-9, the value being given as £280,446, being a decrease from the previous year of 3,000,000 sup. ft., and an increase in value of £4,000; whilst for the year 1908 the imports of timber into the district were given at a little over 10,000,000 sup. ft., of a value of £62,000, being an increase of 7,500,000 sup. ft. over the previous year, and an increase in value of £36,000. At the present time there are sixty-two mills in the various parts of the district, employing 2,356 men, the output in 1908 being 184,145,852 sup. ft. The production of these mills will soon be 200,000,000 sup. ft. per annum. Judging from the known supply of 485,000,000 sup. ft. of kauri, and the fact that last year's export alone was 23,464,065 sup. ft., and taking into consideration the fact that the demand is constantly increasing, whilst fires annually destroy a large quantity of trees, the difficulty of milling trees in somewhat inaccessible positions, and the unavoidable waste that attends all sawmilling operations, it is evident that the kauri-milling industry cannot last much longer than about fifteen to twenty years, and it is highly probable that in another ten years there will be very little kauri available for commercial purposes. Although other timbers are now being largely used where up to recently kauri was always employed, yet it is impossible to replace this magnificent timber in many respects, and, although rimu is now a great stand-by of the district, yet foreign timbers, such as Douglas fir, are beginning to enter into competition with it, and their use is not nearly so profitable as the milling of kauri.

One of the great difficulties the sawmillers have to contend with is, in some instances, the comparatively small quantity of milling-timber that grows to the acre. For instance, one milling company which gave evidence before the Royal Commission stated that the average quantity of milling-timber to the acre milled by them was 8,000 sup. ft.; and, although the general average is from ten to fifteen thousand sup. ft. per acre, yet, if the country is at all broken and far from a suitable waterway or railway-line, the expense of getting out the timber makes a large portion of the forest unsuitable for sawmilling operations on a profitable basis. (In some parts of the Dominion as much as 50,000 sup. ft.

per acre has been milled, but this is very unusual.)

Generally speaking, the sawmillers in the district run on up-to-date methods, and employ modern machinery as far as practicable, and it is doubtful if the forests can be worked with less waste than is now occasioned.

The supply in Hawke's Bay in 1909 is apparently as large as it was in 1907, but this is probably

caused by more accurate measurement of the various timber areas.

The bulk of the Hawke's Bay timbers consists of rimu, over a thousand million superficial feet being supposed to exist. This timber is largely used for building purposes in place of totara, which formerly was the pre-eminent timber of Hawke's Bay; but there is only a hundred million superficial feet of totara now left, and its coming disuse is unavoidable.

Hawke's Bay was formerly one of the chief milling districts of New Zealand, and the great "Seventymile Bush" was its glory, as it contained such a large amount of valuable milling-timber. However, the mills around Dannevirke (which for years was the centre of the sawmilling industry) have now swept away the greater part of this forest, and the remainder chiefly exists on the slopes of the great Ruahine Ranges and the continuation of the range in the Poverty Bay portion of the district.

There is no particular area of milling-timber that now stands pre-eminent, as it is all scattered in localities more or less difficult of access, and consequently the greater part of the timber is now used chiefly for local purposes, and the export of timber from Hawke's Bay may be expected to be small There still remain extensive forests in the Motu and the north portion of for some time to come. Poverty Bay that may eventually prove of great use to sawmillers, and the completion of the Gisborne-Rotorua Railway, with a branch through the north part of Poverty Bay, is expected to create a keen demand for the timber in these districts.

In Taranaki, also, the bulk of the milling-timber is rimu, there being 400,000,000 sup. ft. now growing, of which, however, about one-quarter is situated within the Egmont National Park, and is therefore unavailable for commercial purposes. Only 18,000,000 sup. ft. is estimated to be on Crown land, the balance being on private and Native land. As about 90,000,000 sup. ft. of kahikatea is available, although under ordinary circumstances it is not used for buildings, yet, if the "Powellising process described in Part II of this report proves as successful as it is claimed to be, it is highly probable that it will augment the failing supply of building-timbers in the future.

The amount of totara is thought to be 35,000,000 sup. ft., of which over one-quarter is in the Egmont

National Park.