Now, there is no supervision or control by the State either in New Zealand or abroad over the handling of this valuable product, nor any attempt made to exercise any check on the manipulations it is subjected to by the foreign dealer. No other staple product of New Zealand could have withstood the indifference to which kauri-gum has been subjected. Indeed, it may be said that the trade in kauri-gum is not a New Zealand business in the ordinary sense at all, but a business dependent almost entirely upon foreign influence and management for its progress and prosperity. When this fact is properly appreciated it is not difficult to understand why the production, export, and sale of gum have given rise to so much dissatisfaction to the producers in this country, and to the reiterated request that the State should take over the whole control of the industry.

With such conditions obtaining at the consumer's end it may be well asked, to what end are any attempts in the direction of producing and preparing the gum under better methods, and so endeavouring to increase the demand for it, if all the benefits likely to be so derived are lost to all engaged in the industry in the Dominion owing to the machinations of foreign rings? It seems to be essential in the interests of the industry that decisive action should be taken to counteract such detrimental influences. Unless such action is taken it is almost futile to consider improved methods of production, grading, and the general improvement of the product for export. No gum stands so high in the consumer's estimation as kauri. A few gums are superior, but these are produced in very small quantities. Kauri-gum for quantity and quality easily takes first place.

*The Future Demand for Kauri-gum, and the Estimated Value of Gum still to be recovered.*

The almost universal use of linoleum and the ever-increasing demand for high-grade varnishes tend to increase the value of a rare fossil gum like kauri, and the probability is that the kauri-gum will in the course of a few years become more valuable than it has ever been. Unfortunately, there is no second crop coming on, and this fact alone is an important factor operating to increase the price of the gum. It is therefore important that these aspects of the industry should not be lost sight of. It is suggested that had a reasonable foresight been exercised twenty years ago the country would have derived sufficient wealth from the kauri-gum to have thoroughly roaded the North of Auckland Peninsula. It is estimated that there is quite as much gum still remaining in the ground as has been taken out of it—that is to say, that there is still another £20,000,000 sterling worth of gum to be recovered even by pursuing the primitive methods adopted in past years. It is quite possible to increase this amount by a considerable sum if sufficient attention is given to the adoption of more scientific processes in the recovery of the gum and the various by-products contained in the extensive kauri-peat-swamp areas throughout the Northern Peninsula.

*Kauri-swamp Peat.*

Considerable attention has been directed during the past twelve months by private enterprise to the economical development of the peat-deposits in the North. At various intervals during the past twenty years experiments and investigations in connection with the extraction of oil and other products from the kauri-peat swamps have been conducted. One of the pioneer investigators was Mr. Rosse Trevor, of Auckland, who has devoted many years to the special study of this question, and who is at the present time making further investigations on the gumfields of the North.

Within the past three months Mr. A. N. Macnicol, consulting engineer, of Melbourne, has been making an examination of the various peat swamps north of Mangonui, and has made several tests of the peat and the commercial products contained in the swamps. Mr. Macnicol represents a Victorian company formed specially for the purposes which he is at present engaged in. These peat-deposits vary in depth from a few inches to 25 ft. In the case of the deeper deposits the upper 10 ft. seems to be made up of three zones—the upper consisting of fine leaves and twigs, black in appearance; the middle layer being of a brownish-red colour, of an earthy appearance, and contains much organic material; the lower zone commences with the first appearance of timber, and contains kauri-gum, branches, twigs, and leaves intermixed with a few specimens of other timbers. Much of the timber is of considerable size. These layers have been examined separately by Mr. Macnicol for their oil-producing qualities. He found that the amount of water contained in the peat from top to bottom was 80 per cent., and by breaking up the peat and exposing it to the sun and air it was possible to reduce the moisture to 25 per cent., in which condition it appeared quite dry, and the sticks contained therein were quite brittle. Up to the present time sufficiently large areas have not been worked to determine with any degree of accuracy the average amount of gum which may be recovered from these areas. It may be pointed out that in some of the deep swamps near Waiharara, in holes varying from 12 ft. to 14 ft. deep, the weight of gum recovered amounted to $\frac{3}{5}$ lb. per cubic yard. In the course of Mr. Macnicol's investigation no rich patches of gum were struck, as the intention was to avoid such if possible, in order to give a safe average basis of value for the whole of the area examined. In the deep ground just referred to there was no kauri-gum visible to the naked eye in the top layer, nor in the upper part of the middle layer. It was found difficult to define exactly where the middle and lower joined, as they imperceptibly merged into one another. The maximum amounts of oil obtained by Mr. Macnicol as a result of his tests were—Upper layer, 5 gallons per ton; middle layer, 12 gallons per ton; bottom layer, 44 gallons per ton: these returns in all cases being obtained from the dry sample of peat. At the present time it is not possible to give any correct idea of the average content of the various zones of peat. Mr. Macnicol said that it appeared likely that from the bottom layer of peat an average of 25 gallons of oil per ton of dry material treated may be obtained.