

“There is every reason to believe that peat and its products will be a valuable addition to the industries of New Zealand; but there is still much work to be done both by the chemist and the engineer before it can be established on a solid basis. Test work has been going on in Auckland since the beginning of the year, and the company has now two retorts on the premises of the Auckland Gas Company under the supervision of Mr. James Lowe, A.M.I.C.E., engineer and manager. Analyses are being conducted by Professor F. P. Worley, D.Sc. (Lond.), of Auckland University College. The company is also much indebted to Dr. J. S. Maclaurin, the Dominion Analyst. Our High Commissioner, Sir Thomas Mackenzie, has kindly furnished much valuable information in regard to peat-works at Dartmoor and other places in the United Kingdom; and statistics and useful data have been obtained from the Governments of Canada and the United States, as also from savants and firms in Russia, Sweden, Denmark, and Italy.”

In regard to the extraction of oils from kauri-peat: Work has been carried on by private enterprise at different times during the past thirty years. Probably up to the present time £25,000 has been expended in these investigations, and I think the time has come when the Government should offer a fairly substantial bonus for the encouragement of this industry. In my opinion, there has been enough preliminary work done to show a good prospect of a payable industry being established. As before pointed out, the companies which have been carrying on the work have been labouring under great disabilities owing to no research work having been done in the past; especially have they been working under great difficulties during the past five years owing to the general disorganization caused by the war.

With reference to the suggestion that the Government should offer a bonus: I have conferred from time to time with Dr. Maclaurin, Dominion Analyst, who for many years past has taken a very keen interest in the industry and the work of this Department. Dr. Maclaurin has gone into the matter very fully, and makes the following proposals as to the conditions under which the bonus should be offered:—

- A. A bonus of £1,000 for the best plant and process for the production and refining of oil from kauri-peat. No plant and process shall be considered eligible for the bonus unless the plant is capable of treating at least 5 tons of dry peat per day, and unless it has produced at least 50,000 gallons of crude oil (free from water) and 5,000 gallons of refined light oil suitable for use as a substitute for petrol in the light-oil engines of motor-cars.
- B. A bonus of 3d. per gallon of crude oil (free from water) on all oil produced by the distillation of kauri-peat: Provided that the total bonus shall not exceed £2,000, and that no bonus shall be paid to any person or company whose plant has produced less than 20,000 gallons. In the event of the total production of oil exceeding 160,000 gallons, the bonus shall be divided among the persons or companies manufacturing the oil in proportion to the amounts produced by them.
- C. A bonus of 3d. per gallon of refined light oil produced from crude kauri-peat oil, and suitable for use as a substitute for petrol in the light-oil engines of motor-cars. In the event of the total production of oil exceeding 80,000 gallons, the bonus shall be divided among the persons or companies manufacturing the oil in proportion to the amounts produced by them.
- D. No bonus shall be paid under B and C unless the Government is satisfied that the area being worked is suitably situated for the transport of products, and that it contains sufficient kauri-peat yielding not less than 25 gallons of oil per ton of dry peat to produce at least 1,000,000 gallons of crude oil free from water.

Of course, these proposals are only tentative, and in the event of the Government agreeing to the recommendation it may be deemed advisable to fix the bonus on a more liberal scale, and with probably a time-limit fixed.

Dr. Maclaurin has drawn my attention to the fact that a bonus was offered for the production of mineral oil in 1910 on the following lines: The bonus offered amounted to £10,000, and was payable on the following conditions:—

- (a.) £2,500 to be paid on proof being submitted that not less than 250,000 gallons of marketable crude oil had been won;
- (b.) £2,500 to be paid on proof being submitted that not less than 500,000 gallons of marketable crude oil had been won;
- (c.) £2,500 to be paid on proof being submitted that not less than 1,000,000 gallons of marketable crude oil had been won;
- (d.) The balance of £2,500 to be paid to the person or company who first produced by his or its refining plant 500,000 gallons of refined mineral oil.

IMPROVED PLANTS AND PROCESSES FOR GUM-DIGGING OPERATIONS.

During the last few years much time and thought have been given in the gum-producing districts to the evolving of processes and plants designed to deal with the gum-bearing soils more speedily than at present, and at the same time not only to recover a greater percentage of small gums, but also to grade gums recovered mechanically according to size and weight. This work has been carried on purely by private enterprise, and large sums of money have been expended in this direction. At present the output of kauri-gum is very much below what it was in years before the war. During the war a large number of gum-diggers left on active service, and many of those who have returned will not go back on the gumfields again, preferring some calling which gives greater scope for ambition and a more constant and certain recompense for the labour expended.