To Mr. Luke. It would be necessary to make allowance for a number of young men turning into other trades. I have assumed a percentage to give a general idea of what I think the percentage might be. I am not familiar with the scheme put forward at Home by Mr. Fisher. With regard to manganese-steel manufacturing in New Zealand, a short time ago I tested some castings which came from the Bluff, and I was surprised at the advance that has been made in the manufacture. I believe that tin has been found at Stewart Island.

Leslie W. A. Macarthur, Metallurgist and Electrician, Christchurch, examined.

The company I represent is the Dominion Marine Electro-Solar Salt Works Company. I produce a sample of the sea-salt which was obtained from two pints of salt water. This salt could be utilized in dairies, by butchers, and for agriculture. Unless the company has a lease of an area of land [plan produced] it cannot put its prospectus before the public. The Borough Council is willing to give a lease, but the Attorney-General will not give a permit.

The Chairman: We will communicate with Wellington on the matter and ascertain the

## DUNEDIN.

THURSDAY, 20TH FEBRUARY, 1919.

SAMUEL NICOLSON, Engine-driver, Mataura, examined.

I wish to bring under the notice of the Committee my invention in the shape of a flaxdressing machine. I have been actively engaged on the machine for eight or ten years, but for want of technical knowledge I could not get ahead very well. The Government graders came to see my crude machine, and though it was opposed to their ideas they were much impressed with it, and said I was on the right lines if I could get a proper machine built. The Government, although offering a bonus, can do nothing for any one requiring assistance until a complete machine is built. I have brought samples of what we can turn out. [Samples produced]. We can do away with all loose-end fibre, and the gum that comes away from the leaf is like an oil, which could be made of commercial value. The Government bonus has now lapsed. The machine does not break the fibre. I have not sold any quantity of it to enable me to tell the commercial value of it. I can obtain the flax in the full length of the leaf—tip and butt. I have had no reports from experts yet—we are not so far on. The gum from the outside of the leaf comes away like a black oil. There is very little tow, as the fibre is not broken by the machine. The machine does away with the beating-bar. I would like the Government bonus to be reinstated. It was advertised in America to be £12,000. I have protected myself.

With regard to the papermaking, I produce some samples of paper made from such things as broom, thistle, ragweed, and Canadian thistle, boiled with caustic soda. The brown paper I here produce is so made. We had 5 cwt. made at the mill. The cost is very little. It would make beautiful writing-paper if treated with a chemical process. There are tens of thousands of tons of gorse and the like burnt every year. The machine is fitted up like a chaff-cutter behind a traction-engine. We use the foliage, sticks, and everything as it is cut. The local paper-mills are practically obsolete, and it will take a large amount of money to bring their plant up to date. Everything that is required in connection with the machine could be made in the Dominion. Out of a ton of gorse or broom you will get 60 per cent. of material for paper. If the Government were to offer a bonus it would help me in the work. I am only a working-man, and for the last four years everything I have earned has been put into the machine. As far as my inquiries go, there is no other place in the world where they make paper from scrub. The machine can treat big timber as well as small material. The traction and the mill can go to any place where there is a supply of gorse. At present 8,000 tons of paper come into the country

every year.

The Hon. G. M. Thomson, M.L.C., examined.

I appear in a dual capacity—as chairman of the Fish-hatchery Board, and as president of the Otago Institute. The fish problem is one that has never received the national consideration it deserves, and it is one that the Government and Parliament should do everything to encourage. First, I refer to the question from the cost-of-living point of view. With perhaps the exception of Japan, there is no country equal to New Zealand in its riches from a fishery point of view. We have about 50,000 square miles of fishing-ground, where there are enormous quantities of edible fish, and we hardly touch them at all. Yet fish ought to be one of the commonest articles of food in the country. The reason for this scarcity is the difficulty of distribution, and if we can make the distribution a success we shall largely solve the problem. I consider that in this matter the Railway Department has failed to realize one branch of its powers. The railways ought to be employed for the benefit of the community and for the fostering of public interests, and their co-operation will have to be ensured if we wish to ensure proper distribution. described a scheme at present before the Dunedin City Council to secure a supply of fish for the public.] The fishermen as a class are very poor men. Assistance has been given to them by middlemen, but the Government have never helped them. The boats all over the country are too small for fishing on any extensive scale. There is perhaps not one trawler in New Zealand not even in the Napier district—which could be called an up-to-date trawler. the aspect of the possibility of an enormous export trade in fish and the dealing with the by-products.