

of £235,000 per annum in bounties. The bonus per ton was about 10s. for pig iron. If they were manufacturing from the pig iron to barbed wire or wire nails the bonus rose considerably higher. The price of the production of pig iron in New Zealand has been referred to before the Committee, and I wish to refer to it. Dr. Bell, when Government Geologist, sent a report to the Government showing that the cost would run to £2 ls. 9d. per ton at Parapara. The report is dated the 13th March, 1909. I have a report from Messrs. Harrison, Sons, and Jobson, of Sheffield, who went into the question. They calculated that pig iron could be produced from Parapara iron-ore at £1 13s. 11d. per ton. I will supply the details to the Committee. A report on pig iron from the Lake Superior ores, by an accountant in New York, allowing for an output of 10,000,000 tons per annum, shows that, taking the whole cost of the pig iron and delivering the iron complete at New York, the cost is £3 ls. 2d. per ton. I give these figures because the statement has been made that we cannot produce pig iron in New Zealand to compete with other centres of manufacture. If it costs £3 to produce at the rate of 10,000,000 tons it would cost a great deal more to produce a lesser quantity in America. I have figures, too, by Mr. Hubert Chamberlain, who went into the Parapara project. Calculating on 36,000 tons of pig iron per annum, and allowing 6d. per ton of royalty to the Government, he calculates that it would cost £1 19s. 7d. per ton. That was in 1907. I am unable to give the cost of production of pig iron in Australia. We have a valuable report that we received from the Broken Hill people a little while ago, but they are not prepared to divulge any of their costs. Alongside of those returns you will find from the Government returns year by year the pig iron on the average costs £5 per ton. This is the pre-war price. During the war it has run up to £22. My contention is that the position offers facilities for the development of the industry if the Government would be sympathetic. We in the iron trade recognize the importance of the development of the industry, because we are at the mercy of any manufacturing centre in the world. The amount of labour involved in the production of pig iron is 70 per cent. of its cost, therefore it is a large employer of labour. I wish to stress that point, for the reason that the Government have largely assisted the fruit industry in Nelson, where the difficulty is labour. If the industry was established in Collingwood the overplus of labour—women and children—would be available for the fruit industry. The deposit at Parapara is almost unique in character. There are no engineering difficulties. There are harbour facilities. The lime is within a stone's throw. The necessary coal is there of good quality. I have a report from the Government Mines Department dealing with the Pakawau mines. I will submit it to the Committee. It is by Dr. Maclaurin, who has another report on Mataura coal.

1. *To Mr. Hornsby.*] The date of Professor Maclaurin's report is the 2nd February, 1909. I do not know that he has reported since. I have not seen by the evidence before the Committee that that report has been contradicted by Government officials. The quality of the Parapara ore is on the average 50 per cent. of hæmatite iron, and properly smelted it would produce first-class pig iron.

2. *To Mr. Luke.*] I think it would be well for the Government to establish a bonus system in respect to the industry, and also to become a partner in the venture, under somewhat similar conditions to those put forward by the Ethelburga Syndicate. I favour the Government getting a thoroughly reliable expert to go into the whole question of Parapara instead of taking the opinions of different people who have no fixed knowledge of the question. The Parapara Company has written to the Broken Hill Company to know if it can get Mr. Delprat's services. His word would stand in any part of the world. Unfortunately, his services cannot be obtained. We then made representations to the Government to know if they would take steps to get a reliable man to advise not only as to the quality of the ore, but as to the machinery and the probable results. There is conflict between the scientists and the people carrying on the iron-manufacture. The scientists are not sympathetic towards the development of Parapara, but practical men are distinctly of opinion that something could be profitably developed there. The trade can get pig iron from Bengal, largely made with Native labour, and we can, I think, produce pig iron at Parapara that would compete against the conditions either in Bengal or in China. In support of that I wish to read part of a report from Messrs. Harrison, Sons, and Jobson, who say, "We are sending pig iron to China and Japan. The freight from your ports should be much less than from here. The price of our pig iron is £2 9s., against your cost of £1 14s., which allows for a good deal of contingencies, as well as a handsome profit." These people are consulting engineers. I do not think they are brokers. I think there is a possibility of an export trade from New Zealand, and that we would be able to convert the pig iron into steel blooms at a better profit to the manufacturer than raw pig iron. We could ship the steel blooms to the Old Country. As to the prospect of keeping rolling-mills going if we established them at Parapara I wish to say this: New Zealand uses about 100,000 tons of raw iron per annum, and that would keep fair-sized mills going, without saying anything about our plain wire. The consumption of iron must go up in New Zealand. Take the position of our telegraph-poles. The hardwood piles from Australia are very expensive, and even before the war it was admitted that the price was nearly that of iron girders. Then the question of reinforced concrete is pressing on the Government and on local bodies, and, seeing that we have facilities unlimited for manufacturing cement and iron, I am satisfied that the iron-production will go up by leaps and bounds. Further, the Railway Department are relaying practically the whole system with heavier rails. Along the sea-coast a rail becomes second-class in seven years, and in the centre of the Island in fourteen years. Taking a period of forty years, I find that we will want in rails alone 850,000 tons, allowing for the rate at which we are putting our railways down at fifty miles per year. That would be a big output from rolling-mills in New Zealand. I contend that the State should, either on its own initiative or by the encouragement of other capital, establish works at Parapara