

for the production of pig iron and for rolling-mills for rails, as a first measure. Bars and plates would be a development of the undertaking.

3. *To Mr. Craigie.*] If works were established at Parapara we would not aim at anything like the plant in Australia, which cost a million and a quarter. Probably a plant costing £250,000 would do all that was required at present. The consumption in New Zealand would not keep a large plant going, but we are in a good position to export. In addition to places already named, South America might import. We use from 11,000 to 15,000 tons per year, and we would want works to turn out that amount. Failing its development as a private industry, I am in favour of the Government taking it up and running it as a national industry.

4. *To Mr. Sidey.*] I have other reports on Parapara by Professor Park, Mr. J. Hayes, Mr. H. E. Hooper, Mr. G. J. Shelus, Mr. R. Price Williams, Sir F. Siemens, Mr. H. Allen, Mr. W. Dunstan, and Sir F. Abel. These reports were furnished years ago, but that does not affect the value of the ore. I am not aware of reports furnished by Mr. Morgan, the present geological expert. If coal had to be taken to Parapara from Greymouth it would have a bearing on the cost of production. The question as to whether a blast furnace could be kept going in New Zealand all the year round would depend upon the size of the furnace. There is a minimum below which it would be dangerous to go. The consumption of pig iron in New Zealand is from 9,000 to 12,000 tons a year. That would keep a decent-sized blast furnace going. In addition to pig iron, iron of other classes runs into over 100,000 tons a year. I favour obtaining another report from a distinguished iron expert who could be brought from the Old Country or from America. Most of the machinery in Australia used in their works came from America. A considerable sum of money has been expended at Taranaki. The extraordinary thing is that during the syndicate stage we produced pig iron which was smelted at the Crown Works and there was turned out some of the finest castings you ever saw. When they got to the larger company there arose a difficulty. According to the last report the works have been stopped in order to get Government assistance. It has all the elements of success in it. I am quite sure of that.

5. *To Mr. Hudson.*] The total requirements of iron for the Dominion would be about 100,000 tons a year. As to producing the different varieties required, the difficulty would be in connection with the different rolls and sizes required. There are broad lines on which you can deal in iron; probably 60 per cent. represents the established merchants' requirements—in use all over the country. I think 50,000 tons would be quite sufficient to make it a success. I would not be afraid to go into such a company. I would not be afraid of the labour difficulty.

6. *To Mr. Poland.*] The only offer of Government assistance was contained in the Bill providing for the bonus—an offer of £150,000 spread over a period of years; £75,000 of that was to be paid for pig iron. The bonus was to be paid at the rate of £30,000 a year. The company had to produce 30,000 tons of pig iron to be entitled to the bonus; 12s. for pig iron and £1 4s. for steel. I think the bonus in Canada is 10s. In Australia I think it is £1 8s. on manufactured stuff. I will supply the Committee with the Australian and Canadian figures in regard to the bonus given in those countries.

7. *To Mr. Poland.*] Even if the supply of coal ran out we have still a wonderful asset in water-power for electrically producing the pig iron.

8. *To Mr. Veitch.*] Dr. MacLaurin's report was furnished to Mr. William Wood, of Christchurch, chairman of the Parapara Company.

9. *To Mr. Forbes.*] The company has a right of renewal of its lease as long as it carries out the conditions. They had to expend so much money every year. The provisions of the Bill were not considered such as would induce capital to come into the venture. We have not tried to get capital really at all beyond the Ethelburga people; their proposal was not accepted.

10. *To the Chairman.*] I am not connected with the Parapara Company; I am not a shareholder. I think the production of basic slag from the Parapara deposits is feasible. Parapara ore is suitable for the production of basic slag. Mr. Chamberlain's estimate of the cost of production—£1 19s. 7d.—was based on a production of 36,000 tons a year; the cost of £1 13s. 11d. is on a turnover of 52,000 tons a year. A furnace with an output of 10,000 or 12,000 tons a year could be run continuously and profitably, but you are only dealing with the turnover of pig iron. I would not suggest that works should be put up at Parapara for the purpose of producing pig iron only. The estimate of £125,000 does not include the rolling-works. A blast furnace with the necessary equipment would cost £125,000. These are pre-war estimates. A rolling-mill would probably cost £50,000. As to what we want the Committee to do, we want to get your sympathy. We want you in your report to say you recognize the importance of establishing our industry. A concrete scheme would, I think, be this: to ask the Government to get a thoroughly qualified man out to New Zealand to report on the whole question, and, if the Government is satisfied on his report, to take such steps as they deem fit to establish ironworks, either by giving assistance by means of debentures or by a partnership. The owners of the leases have either got to raise the money or forfeit the leases.

11. *To Mr. Hudson.*] Parapara ore is a hæmatite ore and contains phosphorus, and the experience throughout the world is that the by-product of a steel blast furnace produces the best basic slag. In some cases where the percentage of phosphorus is low it is introduced extraneously to make the basic slag. Dr. Bell's report is based on getting the coal on the site, and the reports from the Old Country are on the same basis. They had a report on Parapara coal, and it was said to be a good coking-coal.

12. *To Mr. Luke.*] I think it would be a good thing to send Home a shipment for trial, but I think a first-class man can be obtained from Home to grasp the whole position on the site.

13. *To Mr. Veitch.*] The company has already expended £35,000 in developing the property, and they hold a lease—that is their equity. They will find half the capital in New Zealand if the Government will find the other half.