

15. You say that the working of ironsand has been commercially a failure—that it has resulted in a dead loss?—It has not been payable as worked hitherto.

16. Does that apply to the recent tests?—I cannot say how Mr. Smith has worked it out. I have had certain things reported to me in connection with the recent test that lead me to think it will be more expensive to work ironsand anywhere than to work the ore at Parapara.

17. Do I understand that you are not prepared to give an opinion with regard to the recent experiments with ironsand?—Well, not exactly so. I have an opinion. My opinion is that it will cost very much more to work the ironsand than to work the Parapara ore. I may be mistaken in that opinion, but it is the opinion I hold at present.

18. I understood you to say that the iron produced from the ironsand is good iron?—Yes.

19. But not so good as iron produced from Parapara ore?—It has not, I understand, stood the same test as iron from Parapara ore.

19A. Can you in any way account for that?—I suppose it must be of a less fibrous nature, and not so ductile; but I am not an expert in iron by any means.

20. *Hon. Mr. Mitchelson.*] Was there not a test made of the pure iron manufactured from the Parapara ore—that it was doubled up by the striking of a steam-hammer, and did not break?—Yes; it did not break when so doubled up cold; it was doubled and bent quite close without fracture in the bend.

21. *Mr. Tanner.*] Has any attempt been made to smelt the Parapara ore in that locality?—Not that I am aware of. I should like to mention, in addition to the answer I gave to the question you asked me with regard to the relative cost of smelted Parapara ore and ironsand ore, that the Parapara ore would cost, placed in the furnace, about 3s. 6d. a ton.

22. *Hon. Mr. Mitchelson.*] Is that at Parapara?—Yes. In the recent tests at Onehunga with this ore I am informed by the people in charge of the works that 5 tons of pig-iron were drawn off in twelve hours, whereas, in treating the ironsand, the same people informed me that only 4½ tons were drawn off from the same furnace in twenty-four hours.

23. *Mr. E. M. Smith.*] You have referred to the tests of pig-iron made in the Onehunga works; was that bar-iron made from scrap iron taken from my produce at previous tests, or was it bar-iron produced from recent tests of ironsand?—The test to which I refer was one made yesterday, the result of which was telegraphed to me last evening. It was made on some of the pig-iron that was recently run from ironsand. That is the iron I referred to as not having stood so good a test as iron made from Parapara ore.

24. *Hon. Mr. Mitchelson.*] Who did you receive that telegram from?—From the present Managing Director of the Onehunga Ironworks.

25. *Mr. E. M. Smith.*] Are you aware, with regard to the difference in the production of the ironsand and the Parapara iron-ore, that in the latter there was a large amount of furnace tap-cinder used?—I think I can answer that question. There were two tests made of Parapara ore—one with the pure ore without any admixture, and one with some tap-cinder with it.

26. Are you aware that the furnace, when working the New Zealand ironsand, or my patent ore, never ran long enough to give the full charges?—I do not know that such was the case. The furnace was placed in your charge, and you were left to deal with it entirely at your own unfettered discretion.

27. I suppose you have no objection to be kind enough to attend this Committee, and hear the evidence I will give which will entirely rebut this?—Not the slightest, if I am in Wellington at the time. I do not wish to appear before the Committee as giving evidence against the ironsand. The questions were asked, and I have answered them to the best of my knowledge and belief.

28. Are you also aware that some sheet-iron has been made at your works of the New Zealand ironsand, and that a test has been made? What is the result of the test applied to the sheets?—I understand, from my advices, that the ironsand-iron has been subjected to the same tests as were applied to the Parapara iron in all details, and has proved inferior to the latter.

29. *Mr. Buckland.*] Are you aware whether there was a test of the Parapara iron-ore made with the addition of any extraneous matter?—There was.

30. And that test was a good one?—I have furnished the particulars of that test. There were tests made with tap-cinder and without. 55 tons 6cwt. of pure ore, without any admixture, produced 35 tons 18cwt. of grey and mottled pig-iron of the very finest quality; and 118½ tons of ore, with the addition of 60 tons 5cwt. tap-cinder, produced 98 tons 2cwt. of grey, mottled, and white pig. It states in this report of the working of the iron that for practical purposes there is no difference in the quality of the iron produced by either of these processes.

30A. Are you aware whether there has been any test made of the iron-ore obtained in Bombay, in the Whangarei District?—We have been working ironstone from various places in the North. I am not prepared to say precisely where it came from.

31. *Hon. Mr. Mitchelson.*] I know a very large quantity has been taken from Whangarei: is that so?—I cannot exactly name the places. There was a lot of ironstone sent from the North to be tried, but it was very poor in quality, and produced a very inferior iron.

32. *Mr. Buckland.*] What effect would an increased price of coal have on this industry?—It would have a very damaging effect.

33. *Mr. Duncan.*] With regard to the tests of the iron-ore, did you see them conducted?—I did not see the smelting of the ore conducted in all its stages, but saw some of the resulting pig-iron run off. The whole of this process was conducted under the supervision of Government officials. I saw the pig puddled, rolled into bars and sheets, and doubled. Some of it was made into horse-shoes. That was not done on the works, but was done by a neighbouring blacksmith, to whom some of the iron, puddled and rolled in my presence, was delivered for the purpose.

34. *Mr. Buckland.*] Did you see the iron when going through the smelting process?—I did not see the iron when going through the process, beyond seeing some of it drawn off into pig.

35. *Mr. Lawry.*] You have no desire whatever to discourage the test of ironsand?—None at all. Any assistance I can give I shall be most happy to give.