

No. 108.

Evidence of Mr. RICHARD WILSON before Messrs. Commissioners Tinne and Murray, at Auckland, 7th May, 1880.

My name is *Richard Wilson*. I have been in New Zealand since 4th December last. I was employed for fifteen years as iron-roller at Consett, in the County of Durham, England. I have been in Dunedin most of the time since I landed in New Zealand, where I examined iron ores and coal from various places. From the samples I saw, I consider those from the neighbourhood of the Westport Colliery the most promising, as likely to be capable of developing local industry in iron smelting and rolling. I consider the cost of erecting and working blast-furnaces—say two—on the smallest scale capable of affording a practical and paying result would be £50,000, and the additional cost of rolling-mill and accessories could be well done on a small scale for £12,000. Such furnaces would be capable of yielding about 500 tons of iron weekly for each furnace; and the rolling-mill, with two furnaces, would turn out from 8 to 10 tons finished iron per day. I have not seen the mine, and therefore do not know how accessible the ore may be; but, from what I have heard, I believe the pig-iron could be produced at £2 per ton, and bar-iron, on the average, under £8 per ton. I have not the slightest doubt that, if such works were started in New Zealand, plenty of skilled hands could be easily induced to emigrate from England; and I know that there are numerous hands, now in New South Wales, who would gladly come here if employment were likely to be had. While in Port Chalmers, I was informed that the Government were building there two of Siemens's gas-furnaces for the purpose of smelting the Taranaki iron-sand. From what I know of these furnaces, I am quite satisfied that they are unsuitable for the work, from the fact that even the best fireclays used in England are found to be not sufficiently refractory to stand the work required of them. Ordinary furnaces are worked at 1,800° Fahrenheit, while Siemens's furnaces generate a heat of 3,000°. I have been informed that it is the intention of the Government to utilize the old rails from the railways in making fish-plates in a Government rolling-mill: this fact, together with that of the Government establishing furnaces and rolling-mills at all, is necessarily detrimental to the starting of rolling-plant by any private firm. I would refer the Commissioners to Mr. Burkett, of Kaikorai Valley, Dunedin, for further information on this subject. I may state that fencing-wire requires comparatively little labour, and could be readily manufactured here from scrap-iron, at a cost not exceeding £8 per ton, and of first-class quality.

RICHARD WILSON.

The estimate of a 14-inch mill (showing the cost of producing 10 tons of finished iron):—Fifteen tons of coal, at £1 per ton, £15; 12 tons of scrap-iron, at £2 10s. per ton, £30; labour, &c., £15; total, £60. Ten tons, at £10 per ton, £100. A capital of £12,000. Showing a profit of £40 on 10 tons of iron at £10 per ton, per day.

RICHARD WILSON.

No. 109.

Evidence of Mr. ANDREW WILD before Messrs. Commissioners Tinne and Murray, at Auckland, 7th May, 1880.

My name is *Andrew Wild*. I have been for the last twenty-four years engaged in iron-making at Consett, County of Durham, and in Yorkshire, England. I have had experience in blast-furnaces, and rolling-mills for plate and bar iron—that is, in the erection and supervision of the machinery. From what I have seen of the ores of New Zealand, I feel satisfied that they are capable of producing plate-iron equal in quality to that from Lowmoor in Yorkshire, and at a much cheaper price. I put down one of the finest plate-mills in England, capable of turning out 350 tons of finished iron per week, just before I left England; and, including taking out old foundations, the whole was erected and ready for work in ten weeks. A small mill, suitable for New Zealand, I could put down—if I had all the plant ready—in six weeks. I consider that a bonus, offered in a similar way to that recommended by the Colonial Industries Committee of 1873, or, preferably, by a percentage on the various sizes of iron made, would be very effective in stimulating this industry. I would suggest that a bonus of £1 per ton be offered on finished bars, fencing-wire, rails, and angle-iron; to last for three years from the commencement of the output, or not longer than five years from the time the bonus is offered. And I recommend that, for the manufacture of pig-iron from the ore, a bonus of 5s. per ton should be offered for three years from the commencement of the output, or six years from the time the bonus is offered.

ANDREW WILD.

No. 110.

Evidence of Mr. THOMAS KENNEDY MACDONALD before Mr. Commissioner Burns, Wellington, 31st May, 1880.

My name is *Thomas Kennedy Macdonald*. I am secretary to the New Zealand Titanic Steel and Iron Company (Limited). I have been secretary to the Company since the Company was established. The Company has spent a sum of £18,000 in building a furnace and other erections, and in giving a fair trial to produce iron from the iron-sand at Taranaki. The original anticipations of the Company as to the cost of works and cost of producing iron at a reasonable price have proved quite fallacious. The Company have solved the debatable question whether it was possible to produce iron from the iron-sand through an ordinary blast-furnace. This they accomplished by mixing the iron-sand with a certain proportion of clay and other ingredients, and baking them into the form of rough bricks, and charging the furnace in the ordinary manner with certain proportions of the compound, lime, and charcoal. At the starting-point the Company were led to believe that charcoal could be delivered at the furnace for 5d. per bushel; it cost 2s.: coke, £5 per ton; it cost £7 per ton: lime, 1s. per cwt.; it cost 2s. per bushel, or about 4s. per cwt.: compound, 5s. per ton; it cost 18s. 9d. per ton. The Company were by no means satisfied with their smelting operations, and their own dissatisfaction was shared by a number