

of the plant and rolling-stock for the railways and other public works could be made in the colony out of colonial material, at a cheaper rate and of a better quality than that which is imported from England and America. I wish to state for your information that I was born in Stafford, England, and that for ten years I worked in the Staffordshire iron and steel trade; and for thirty years I have been connected with the iron and steel trade; and that I have passed an examination at the Royal Small-arms Factory, London; the Royal Enfield Factory, the largest machine gun-making factory in the world; and at the Royal Woolwich Arsenal; and after passing a successful examination at these three first-class and leading establishments, I hold a first-class Government certificate. And, in addition to the above qualifications, for twenty-five years I have studied the science of metallurgy, and for twenty-five years have been a constant reader and have studied the English *Engineer*, which publication contains all and every improvement in engineering and metallurgy; and I know every process discovered, or invented, or patented for making iron and steel; and have had or have now in my library all the leading standard works on metallurgy; and for sixteen years I have been experimenting with the New Zealand iron-sand. In that time I have sent samples of my product all over the world. It has been exhibited at the Vienna and Philadelphia, Paris and Sydney, and other Exhibitions. I have communicated with some of the leading chemists and metallurgists, and iron and steel masters of the day; and I am the patentee of a new and approved process for smelting the Taranaki iron-sand. I have been successful in smelting the same in a modern charcoal blast-furnace. I have made bars of iron, and steel springs, chisels, hammers, drills, engravers, and punches—castings large and small. I have made railway-discs, 4 cwt. each, to the order of the late Minister for Public Works, Mr. Macandrew, which are now in the Sydney Exhibition, and engine-bogie wheels, which are now in the possession of Mr. Harris, railway manager, New Plymouth. I have plans, maps, reports, samples of metal, wood, wood-charcoal, kiln-dried wood, coal, coke, limestone, firebricks, fireclay, plumbago, compound, sand, &c., and could give your honorable Commission all the information as would convince them that the time has come when we could make all our own railway-plant and rolling-stock in the colony, out of colonial material, at a cheaper rate and of a better quality than the imported; and, by doing this, it would keep the large sum of £400,000 a year in the colony that the Government are now sending out of the colony. I could give you all and every information as would prove to you that what I have stated is true in every particular, and by following out my advice, remember, the greatness of a country depends on developing its natural resources. Neglect its natural resources, and you have stagnation and depression as we have now in the colony; but develop the natural resources of the colony, permanent happiness and prosperity will reign within the colony. It will find employment for the population, present and to come; it will enable them to pay the taxes put on them by the Government, thereby enable the Government to have funds to carry on the government of the colony. I could prove all I have stated by the Commission coming to New Plymouth, or by sending for me to Wellington. Hoping this will meet with your earliest and earnest consideration, and I hope your approval, waiting your reply,

I have, &c.,

EDWARD METCALF SMITH,
Practical metallurgist, New Plymouth.

No. 107.

Evidence of Mr. JOHN MARSHALL before Mr. Commissioner A. J. Burns, at Collingwood,
17th April, 1880.

My name is *John Marshall*. I have been residing about ten years in the Collingwood District. I was connected with the late Parapara Company, being coal-mining manager under Mr. Anderson, the general manager for the Company. I know the locality. There is an unlimited supply of iron ore running back for miles from the outcrop near to high-water mark. It can be easily and cheaply worked; it can be put on board barges in the Parapara Inlet for 2s. 6d. per ton; and if a deep-water wharf was constructed near to the mouth of the Parapara stream—where it runs into Golden Bay—large ships could be loaded with this ore at 2s. 6d. to 3s. per ton. I think about 1,000 to 1,200 feet of wharf would lead into 20 feet of water at low water. But there are the foundations of an iron-smelting furnace already laid, 40 feet by 40 feet, at Ferntown; and, if the furnace was erected on this foundation, the ore could be delivered alongside the furnace at from 3s. to 3s. 6d. per ton. The barges would load in the Parapara Inlet and be towed to Ferntown by a suitable steamer; and coal could be delivered at the furnace at from 12s. to 15s. per ton. Two tons of this coal should produce one ton of pig-iron; and first-class limestone can be procured in abundance alongside the tramway already constructed, and delivered at the furnace at 3s. per ton. I ought to mention a fact that is generally overlooked in connection with this iron—viz., that the pig produced is not common pig-iron, but is a hematite of a quality admirably adapted for the manufacture of Bessemer steel. This I know from reports of this ore, tested and manufactured in Britain and Melbourne. The limestone referred to as being in abundance is nearly a pure marble, white in colour, with blue streaks running through it. An industry other than lime-manufacture might be developed from this marble, as I think it is suitable for mantelpieces and ornamental work generally, and would be shipped from a wharf if it was erected at Timatie Point. According to all the analysis procurable, the coal of this district is admirably adapted for iron-smelting, being almost clear of sulphur; it makes a first-class coke, and burns with a clear, bright flame. Several individuals have been round looking at the field lately, and several of the freeholds and leaseholds have lately changed hands; so it is to be hoped that this industry is now about being developed, notwithstanding the failures that have already taken place in connection with this field. Any assistance the Commissioners can give towards the development of this industry will be a great boon, not only to this district, but to the whole of New Zealand.

JOHN MARSHALL.