

“The pig-iron which we obtain in agglomerating the sand by itself, and treating the agglomerated mineral according to the Esteve process, gives this analysis, viz. :—

“No. 2.—*Pig-iron made with New Zealand Sand by the Esteve Process.*”

Iron...	...	...	...	...	...	...	98·00
Carbon combined	...	...	...	...	...	...	0·70
Carbon total	...	...	...	...	...	...	0·87
Silicon	...	...	...	...	...	...	0·07
Sulphur	...	...	...	...	...	...	0·01
Phosphorus	...	...	...	...	...	...	0·03
Manganese	...	...	...	...	...	...	0·33
Titanium	...	...	...	...	...	...	Nil.

100·01

“As you see by the figures of the analysis, we give 5 per cent. of iron, we eliminate completely the titanium, and we reduce the silicon, the sulphur, and the phosphorus to its lowest expression; and, on the other hand, we increase the manganese 0·13.

“According to the analysis of the pig-iron which we have obtained from New Zealand sand, we get a pig-iron superior to the best Swedish pig. We can guarantee that we can obtain a pig-iron of the quality of No. 2 in the blast-furnace. We can guarantee that the agglomeration of sand by the Esteve process is cheaper than the agglomeration actually done in making briquettes. We can send you some sand agglomerated by itself by the Esteve process.”

Colonel Esteve believes that if he had opportunities for carrying his experiments further he would not only succeed in agglomerating the sand and making it into pig-iron available for making steel in a Siemens-Martin furnace, but that he could make steel of all qualities direct from New Zealand sand in such a furnace.

If your Government is disposed to bear the expense of carrying on some practical experiments in the agglomeration of the sand, and in the making in a Siemens-Martin furnace of tool-steel and soft steel, both from the sand so agglomerated and from the sand in its natural state, by the Esteve process, we shall be happy to arrange for them under an agreement by which you would have a right to acquire these processes also for New Zealand at certain prices.

Yours, &c.,

The Agent-General for New Zealand.

HERBERT MOTT, Secretary.

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