

FLAX.

I submitted some flax fibre to Professor Abel, of the Royal Arsenal, Woolwich, with a view to the consideration of its adaptability for the manufacture of explosive compounds, such as gun-cotton; but the Professor's brief report, which I forward to you, was not of a favourable nature.

In accordance with the request of the Flax Commissioners, I placed myself in communication with Mr. Christie, of the firm of Messrs. R. Christie and Co., London, with a view to arrange for the manufacture of certain fabrics from flax fibre. The letter received from Mr. Christie will inform you of the result of his exertions in the matter.

There seems every reason to believe that the New Zealand fibre might be most profitably used for rope-making purposes, and probably in the manufacture of small cordage, of which, as I am informed, the consumption, particularly in the United States, is enormous. But the general recognition of the value of the fibre has been very much prejudiced, and is likely to be more so, by its admixture with Manilla hemp, for rope-making; because, owing to their different shrinkage, their combination, instead of being a source of strength, is one of weakness.

It seems to me, that whilst we may consider that for rope-making there is an assured use for the New Zealand fibre, it would be desirable to institute investigations as to other uses to which the fibre might advantageously be put. Care should, however, be taken, that such investigations are not allowed to cast doubt upon, or in any way to prejudice, the constantly-growing conviction that the New Zealand fibre is excellently suited for rope-making.

Amongst the causes tending to make the flax unpopular, are the great variety of conditions under which it is sent to market, and, in many cases, the utter worthlessness of shipments on account of bad preparation. Were it possible, at the chief New Zealand ports, to appoint skilled examiners, whose duty it should be to affix a stamp on each bale, indicative of the quality of the fibre, or the mode of preparation to which it has been subjected, I am convinced that a very great deal would be done in the direction of facilitating the sale of the flax, and its profitable adaptation for manufacturing purposes.

I found it quite impossible to give much personal attention to the question of flax, or to other questions relating to industries, which were referred to me by the Government, or by Dr. Hector on behalf of the Flax Commissioners. But my Secretary (Mr. E. Fox) took interest in, and devoted a great deal of time to, such questions; and I have much pleasure in calling your attention to his carefully prepared and very valuable reports, forwarded from America, upon Sorghum Cultivation, Flax and Flax Machinery, &c., and (forwarded from England, or which will be handed to you without delay) upon Photozincography, Flax Machinery, the preparation of other fibres, and the prices of various kinds of machinery.

SUBMARINE TELEGRAPH.

I instituted inquiries as to the possibility of carrying out the provisions of "The Submarine Telegraph Act, 1870," and thus connecting New Zealand with Australia by means of a cable. I found that there was no prospect of Her Majesty's Government entertaining any proposition for the construction of a cable; nor, in presence of the not decided opinion as to the permanence of long ocean lines, any prospect of private capital being forthcoming for the work, unless a guarantee were given.

It is possible that confidence in such undertakings may soon be so restored as to cause the monopoly of the line to be a sufficient inducement to private capitalists to undertake its construction and maintenance. Should such not be the case, it will be for the Colony to consider whether other steps should be taken for the construction of the line, and, if so, whether a guarantee should be given, or a cable be provided by means of borrowed capital. My own opinion is, that a delay of twelve months, before coming to a decision, will not be disadvantageous to the Colony.

THOMSON'S ROAD ENGINE.

Being aware of the interest felt in the Colony concerning Thomson's Road Engine, I procured from the Crown Agents for the Colonies, copy of a voluminous report made to the War Office by officers of that Department, after many and careful trials of the engine. From all the inquiries I was able to make, I conclude that the general opinion is, that Thomson's engine is the germ of what will ultimately prove a most useful mechanical adaptation; but there are various circumstances—especially the many and strenuous efforts which are being made in the direction of improving road engines—the small extent to which they are as yet used for purposes for which it was supposed they were exceedingly well adapted—and their admitted failure in some instances—which lead to the conclusion that at present they are not altogether a success; and that it will be well for the Colony to pause before committing itself to any considerable expense in the introduction of road engines.

RECIPROCITY BILL.

I had several interviews with the Secretary of State for the Colonies on the subject of the Reciprocity Bill, which, as you will remember, was passed last Session by the Assembly, and reserved for the signification of Her Majesty's pleasure. The first question to be considered was the old one, whether a Bill of the kind was not in conflict with the New Zealand Constitution Act, on account of its conferring powers inconsistent with the treaty obligations of Great Britain. I represented to Lord Kimberley that a satisfactory answer on this point was to be found in the fact of Canada having constantly passed measures enabling it, by agreement with the United States, to impose differential duties. I believe I am at liberty to state that, after lengthened investigation, the conclusion was arrived at that the Bill was not open to the objection of being inconsistent with treaty obligations. You are aware that the only restriction imposed by the New Zealand Constitution Act in reference to a measure such as the Reciprocity Bill is, that its provisions shall not be inconsistent with treaty obligations; whilst in the case of the majority, if not all, of the Australian Colonies, the Constitution Acts provide specifically that the Colonies shall not impose differential duties. Technically, therefore, the New Zealand Reciprocity Bill may be considered