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Manilla the standard.

The correspondence with Messrs. Noble on the subject, leaves no doubt that at the present time the *Phormium* fibre is more eagerly competed for in the London market as it approaches nearer the appearance of Manilla hemp. Attention must also be called to the correspondence with Mr. Thorne, (see App. pp. 7, 17, & 96.) forwarded at the same time and subsequently, relative to the manufacture of rope from *Phormium* fibre improved by a new method. These letters prove that many defects which have hitherto been imputed to the rope can be removed, and that, in the opinion of those who are well qualified to judge, New Zealand rope is in many respects, when properly prepared, preferable even to Manilla.

An endeavour was also made to procure information relative to the preparation of the Manilla hemp, with which object the Commissioners communicated with Mr. J. C. Ricketts, H.B.M. Consul at Manilla, and have received from that gentleman a short account of the method in use, which appears extremely simple, no machinery whatever being used in the process. (App. p. 10.) Papers furnished by Dr. Forbes Watson, relative to the manufacture of the Rheea fibre in India, have been re-published (App. p. 11) with the view of indicating the efforts which the Indian Government is making to promote a kindred industry

to that which is the subject of this commission.

Market in America.

Copious reports have also been received from the Hon. Mr. Vogel (App. p. 14.) of the state of the fibre market in America, and of the estimation in which New Zealand fibre is held by various manufacturers to whom it is known, and from which it appears that a sufficient quantity of fibre has not yet been circulated in America for manufacturers to judge of its qualities; though in all cases in which a good sample was shown, it seemed to draw forth favourable remarks from mercantile men.

Flax Machinery.

In a further report by the Hon. Mr. Vogel, received through the Colonial Secretary, is embodied the result of investigations made by Mr. E. Fox (App. p. 19) as to the qualities of various flax and hemp dressing machines, which will interest flax-dressers in the Colony, although none of them are of a kind adapted without modification to the New Zealand fibre.

Microscopic and Chemical reports.

A report is shortly expected from Dr. McNab and Mr. Church, Professors of Botany and Chemistry in Circnester Agricultural College, who have agreed, at the request of Dr. Hooker, to undertake conjointly the chemical and microscopic examination of the *Phormium tenax*, which the Commissioners were directed in their instructions to obtain. (App. pp. 2-4.)

Manufactures other than rope.

An application for articles other than rope, to which the *Phormium* fibre is at present applied in England, was made through Mr. Morrison; but, excepting some small quantities of yarn and cloth made in 1850, and a small sample of paper made about five years ago, no manufactured articles could be obtained

(App. p. 17).

The endeavours of Messrs. Christie & Co. to induce manufacturers to make experiments, with a view of testing the textile qualities of the fibre, even when the Commissioners undertook to defray all expenses, were equally unsuccessful App. p. 21.). At a subsequent date, however, it will be seen from a letter of Mr. Thorne (App p. 96), that he had succeeded in getting the fibre, and also the tow of the *Phormium* made into yarn, and that although some little difficulty was at first experienced in getting the flax machinery to work, yet, as the spinner took interest personally and watched the causes of failure, these were overcome, and a very strong canvas obtained, samples of which have been received, and are now in the Exhibition. From the inspection of these samples, it is evident that a very inferior description of fibre was employed in the first instance, and that the result is not so favourable as may be achieved in future, the softening having been effected by the use of alkalies, which have not been entirely removed.

It will be seen that Mr. Thorne considers that fibre may be prepared by the particular process which he follows for £200 a ton, and that the value which has

been set upon it in London is £56 for the fibre, and £28 for the tow.

To the above may be added that very valuable data respecting the position occupied by the *Phormium* fibre in the London market have been obtained from monthly detailed reports of the flax sales, which have been furnished

Reports of the Flax Sales.