

The above sums of money are only prizes, and are given with a view of ascertaining who can produce the best article. The people must not think that these amounts are the prices which the flax will bring. This matter is arranged in the same way as cattle shows, &c., are arranged, where the Europeans and Maoris send their beasts, &c., every year.

I know that you, the Maoris, are ignorant of the prices of flax, &c., in England; therefore I think that, if you will again turn your attention to these industries, you will obtain the benefit of prosperity. That is all.

Your friend,
DONALD McLEAN.

(No. 29)—CHAIRMAN to the Hon. the NATIVE MINISTER.—21st December, 1870.

I have the honor to acquaint you that the Flax Commission have arranged with Wi Tako to procure from the Natives of Waikanae, half-a-ton of flax, dressed according to sample placed in the Museum by him; £20 to be paid on delivery, with any further nett balance, after valuation in the London market. The order to be completed by the 31st January, 1871.

Colonel HAULTAIN to CHAIRMAN.—6th December, 1870.

There are but two varieties of flax growing on the flat land about Otaki, Manawatu, &c., called by the Natives *Harakeke* and *Wharariki*. The latter is apparently a variety of *Phormium Colensoi*, found on the sand hills near the beach, growing from six to eight feet high, with a palish green leaf and edges of the same colour, and small flowers with yellowish-green sepals, but as it was not in fruit I could not determine whether the capsules were "twisted" or "drooping." It is not common (I had to walk more than a mile before my guide could show me a plant), and it is rarely cut by the Natives, who say that the fibre is weak and useless. An examination with the microscope proved that the quantity of fibre was very small in comparison with other varieties. The *Harakeke* is abundant, and the leaves are often twelve and thirteen feet long. It grows luxuriantly on any dry ground round the edges of swamps, or when away from stagnant moisture. It is subdivided by the Natives into *Tuhora* and *Tukura*, according to the length of the leaf, the former being the longer; but I could not perceive any difference between the fibres either in strength or in colour. It cannot be stripped without the aid of a shell, in which it differs from the *Tihore*.

There are no Native plantations of flax in this district; the choice leaves of the *Harakeke* are fine and white enough even for their best mats; and any *Tihore* that is wanted for special purposes is brought from the upper part of the Wanganui River or from Kawhia.

In preparing flax for the finer purposes, the Natives select clean unspotted leaves of a year's or eighteen months growth, and use the upper portion only, cutting off the leaf about six inches below the point where the two blades adhere together, and rejecting the coloured edges and keel also. They strip the fibre from the upper surface only (that surface which is inside when the two blades are together), cutting the under side across, and then, with the round edge of a mussel-shell, tear up the whole row of upper fibres, bringing away the cuticle also, which has to be removed afterwards.

I asked the woman, Annie Kanara, who was working for me, to strip the other side of some of the leaves; she laughed at such an idea, but tried, and after failing several times succeeded with about a dozen leaves, and then objected to waste time on any more. This under fibre is not as abundant as the other, but extends the whole length of the leaf from the butt to the point; it is equally fine and strong, and there was apparently no difference in the ultimate fibres when microscopically examined, but it is too green in colour to mix with the other, as it is difficult to separate it from the cuticle and surrounding cellular tissue. The breaking strain of the only strands I could prepare was 198 lbs.*

After stripping the fibre of the upper (or right) side, it was well scraped with the edge of the shell to remove as much of the cuticle as possible; and when a small hank of a dozen or twenty leaves had been finished, it was thrown into a tub of water to be kept moist until a sufficient quantity was ready to be taken down to a running stream, where it was washed and scraped with the shell over and over again till all the cuticle, gum, &c., had been removed, when it was hung up to dry, and afterwards worked and twisted with the hand. It took Annie Kanara the greater part of two days to gather leaves and prepare four or five pounds weight, and she would not part with it for less than 1s. per pound.

It was very white and soft and bright, for the leaves had been carefully selected, and the breaking strain was from 210 lbs. to 275 lbs. But what an amount of hand-labour is necessary to produce a ton of this fine quality, and what a waste of fibre! At least one-half the leaf is discarded, and the fibre from one side of the other half is rejected, so that the Maori obtains from each leaf only one-fourth the quantity that would be secured in machine-dressing; and as he would not select more than one in four of the leaves of any full-grown bush, the European mill-owner, who cuts down the whole plant, could in the first year produce sixteen tons of his fibre from the same ground that would give only one ton of fine Native-dressed flax.

In preparing flax for their mats, the Natives take much more time and trouble than has just been described; they soak the fibre in running water for four days, and then beat it with a stone or mallet; and this process is repeated over and over again for four or five weeks, or even for much longer periods. But I have no doubt that this excessive manipulation weakens the fibre, though it makes it very soft and durable.

I dare say that a few tons of the ordinary washed fibre could be procured from the Natives for less than 1s. per lb., but not at Otaki. The Commissioners endeavoured to procure one ton through Mr. Bevan, an old settler and rope-spinner at that place, but he said he could not get it for less than 1s. per lb.; and the Rev. Mr. McWilliam, who kindly assisted me in securing the services of Annie

* The breaking strain here given was obtained in the manner described in the experiments performed by Dr. Hector, the results of which were given in the Report of the Flax Commission, 1870.