

Mr. J. L. MORRISON, of Wellington, examined.

451. *The Chairman.*] You are an expert in flax and textile fabrics?—Yes; in all fibres throughout the world.

452. In the Old Country?—Yes, and up to the last twelve months in Sydney. All fibres sent out for rope-spinning and weaving, of all grades, I have had under my supervision to classify them, and tell what they are suitable for.

453. You have been classifying for various merchants in Wellington since your arrival?—I have. When there have been disputes between the millers and their own people who were supposed to classify the flax it was passed over to me, and I had to settle the disputes between them if they were of a serious nature. I was paid by the people who asked me to classify it.

454. Can you give any information about the advisability of a bonus being granted by the Government for improvement in machinery?—I should strongly recommend it.

455. You think that by a system of that kind the machinery used for flax would be improved?—Without a doubt.

456. But you are not a flax-miller yourself?—I have been. I may say that I was also manager for the New Zealand Fibre Company seventeen years ago. I was brought out from Home to manage the rope-making affair in Auckland—in the Northern Wairoa—by Mr. Tinney, of the firm of Fraser and Tinney.

457. Then, you have had considerable experience in the manufacture of Phormium fibre?—I have. I have had as much as £20,000 to experimentalise upon.

458. *Major Steward.*] With regard to offering a bonus for machinery, you think that if a bonus were offered it would lead to the development of improved machinery?—Without a doubt; I am sure of it.

459. With regard to the machinery that is now used, can you state what is the reason that it does not turn out the very best possible sample of flax? What is the fault of the present machinery?—Well, in the first place the fibre is run through fluted rollers, smashing the fibre up, and then coming down on a beating-bar, with a drum set very keen, so as at times to hash the fibre up.

460. So that if that fibre were looked at through a microscope it would be seen to be much broken?—Yes, I have examined it frequently.

461. How does that compare with the fibre that used to be prepared by the Maoris by hand?—Well, the Maori-dressed fibre is superior without a doubt.

462. The Maori-dressed flax is superior to that which is turned out of the machines?—Yes.

463. Is it very much superior?—About 100 per cent. in value.

464. That is to say, double the value?—Yes.

465. Well, is the Maori process a process of scraping?—Yes, it is.

466. Then it follows, does it not, that if we could invent a machine which would prepare the flax by some process of scraping, instead of beating as now, we should turn out a fibre equal to that prepared by hand?—Without a doubt.

467. If flax at present is worth £20 or £22 a ton as turned out from the present machines, and we could turn out flax by a process of scraping that would be complete, we should command something like £40 a ton?—Well, close upon it.

468. Have you ever experimented at all as to chemical processes? There are some persons who say that flax can be prepared by chemical processes—by using solvents and so on—and get rid of the vegetable matter and gum: have you ever made experiments in that direction?—I have not; but I have spun fibre that has been prepared in that way.

469. What is the effect upon the fibre of these chemical processes?—The chemical process used to prepare the fibre I spun was potash, and the rope did not stand the salt water. We put a manila rope of the same size with it on board the vessel, and tried the two together to see how it stood.

470. Then, in point of fact, your experience comes to this: that, as far as any chemical process you have seen, the fibre is deteriorated and cannot be prepared in that way?—Yes; but you must understand that this chemical process was tried sixteen years ago. Since that time we have advanced in chemicals and science.

471. But so far as your own opinion is concerned, you think we are more likely to succeed in the direction of improved machinery?—I think so.

472. Now then, supposing we had this improved machinery as the result of a bonus, do you, or do you not, think that flax could be turned out of a quality suitable for manufacture into different kinds of fabrics?—Without a doubt; I have seen it.

473. What class of fabrics would they be—merely rough fabrics, such, for instance, as hessian?—I had a shirt on my back sixteen years ago that was manufactured from flax from our own mill. It was sent out from Manchester.

474. Then, shortly, you think that the flax can be properly prepared, and can be used for fine fabrics such as linen?—Yes, without a doubt I do.

475. Then, could it also be used for the rougher fabrics, such as hessian cloth, sackings and bagging, and so on?—Yes, I have done it. I have spun it nearly sixteen years ago.

476. So that in point of fact your opinion is that if the flax is developed to its highest capacity it is capable of being used for the whole range of fabrics, from the coarse article right up to the finer linen?—Yes, and also for all grades of rope.

477. And in that event, would or would not our fibre command a higher price in the London market?—Without a doubt.

478. How much higher do you think?—It would realise from £34 to £50 a ton.

479. *Mr. Mackenzie.*] You say that from £25 to £50 a ton could be obtained for the flax?—Yes.

480. What knowledge have you of those fabrics that are made from the flax at Home?—I have a knowledge of the common canvas used for tarpaulins, horse-covers, &c., which is made from jute and Italian flax mixed; good canvas is made from the Italian flax. This is the fibre [sample