

being made to get away from the bad old traditions of the past which have done so much to throttle the industry, and that any inquiry should look to the future, ignoring the mistaken past.

#### As Others see us.

Everybody is supposed to know that one of the weak points in New Zealand hemp's position on the Home market at present is due to the smallness of the crop, compared with that of Manila hemp; that being so, every effort must be made, by united action, to reduce this disadvantage, by extended cultivation, co-operative milling, and by producing a higher grade hemp.

The cost of production is another source of weakness, (waiving the questions of royalties and arbitration) which can also be combated by enhancing the value in every way possible, and by utilisation of the by-products; for it is only as a "superior fibre" that Phormium has a future.

If permitted to remain in a position in competition with manila and jute and similar fibres Phormium will be of comparatively little value to New Zealand.

other leaf fibre. On the contrary not suspecting their own shortcomings, many of them firmly believe they have in their methods a "trade secret" of national importance, to be carefully guarded from uitlanders.

This illusion they will not part with so long as they can keep it, though recurring periods of depression like the present ought to make them wonder "who threw that brick?" They suspect black labour, capitalism, royalties, arbitration, anything, except their own ignorance. However, I am persuaded that all the measures of relief of the situation, likely to be suggested at the proposed inquiry, will amount to a fraction of what can really be easily done by application of a knowledge of the methods in use elsewhere with leaf fibres instead of those clung to in New Zealand.

The palpable errors of treatment of Phormium leaf and fibre, and neglect of by-products are many, and known to many persons, and the time has apparently arrived when these are to be tackled.

"Grading" was a most important step in the right direction, and has given lasting stability to the fibre.

equal quantities of hay, is a very valuable cattle and horse food, superior to most hays, and relished by all farm animals. If consideration is given to the fact that about eight tons of stripper waste is produced to each ton of fibre, some attention is surely due to this waste: Well, assuming it to contain 75 per cent. of water (which is much too high), there remains over two tons of a highly nutritious cattle-food, fully equal to the same weight of the best hay, per ton of fibre turned out.

Now, with one ton of fibre as a base, we get:—

Increased price of Hemp due to better handling, per ton ...	£5	0	0
(Which is much too low)			
Value of two tons of dried stripper waste, per ton £3 ...	6	0	0
Increased value of Tow, say ...	0	5	0
			£11 5 0

Value of Willow Screenings balanced by extra handling.

Now if £10 instead of £11 5s. be deducted from the cost of production for ton of fibre, in the manner and by the means indicated, surely it is about time to begin.

Trusting the contemplated movement may directly or indirectly rescue this most valuable industry from its degraded position.—I am, etc.,

TOM DREWET.

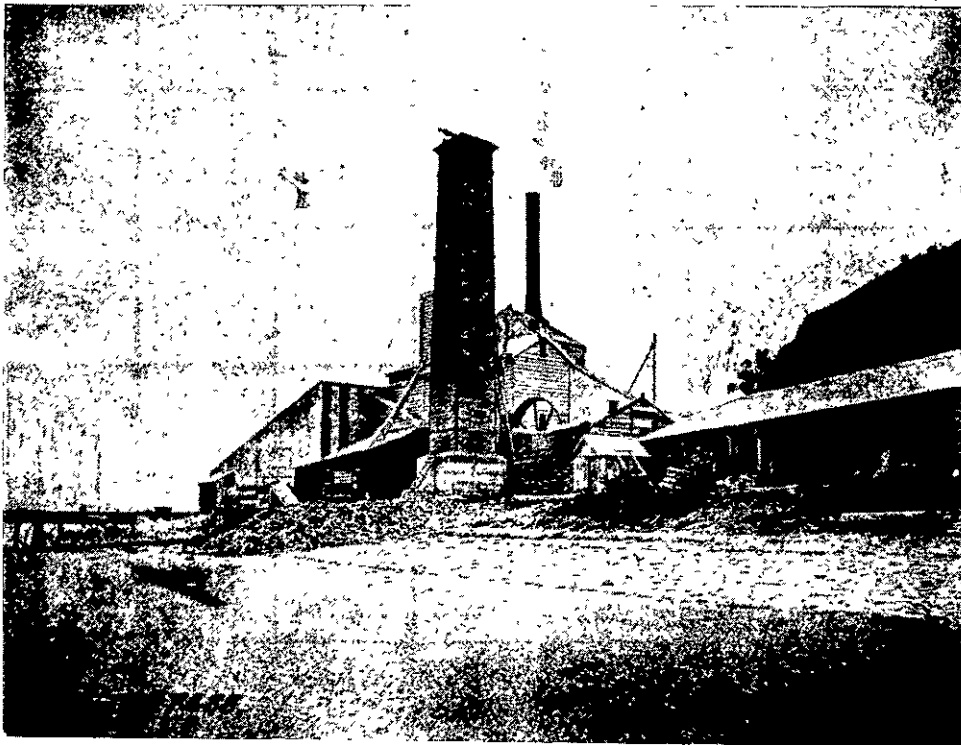
### Phormium Tenax.

We publish just above a letter from Mr. Drewet of Auckland, on the treatment of that grand asset of the Dominion, the Native Flax. He has attacked the question in a most illuminating manner, showing what may be done by a common sense method of working, and indicating the great value of the by-products now going to waste, and suggesting further improvements of mechanical treatment calculated to give this fibre the leading position in the economical life of the Dominion to which it is entitled. We commend the letter to the careful study of every practical man in the Dominion.

Many engineers and architects who make blue prints from their tracings experience difficulty in obtaining printing paper which will give good results.

The following description will enable PROGRESS readers to make first-class sensitised blue print paper at a very low cost. Two solutions are required (a) a solution of potassium ferricyanide, 1 ounce to 5 ounces of water, and (b) a solution of 1 ounce of citrate of iron and ammonia in 5 ounces of water. The solutions will keep for a long period in separate bottles.

To sensitise the paper equal parts of each solution are mixed and applied to the surface of the paper by a wide, soft brush, the liquid being applied evenly all over the paper without leaving any flow lines or drip. The solutions, when mixed, are sensitive to light, and consequently after the mixture is made the rest of the work must be done by gaslight or in very feeble light. The paper, when coated, is suspended by pins or upon a line, in the dark, to dry. It is then ready for use. Printing should be done in bright sunlight, and after exposure the paper should be thoroughly washed until the white lines of the print appear thoroughly clear.



N. Z. PORTLAND CEMENT CO.'S WORKS, LIMESTONE ISLAND, WHANGAREI.

If this fibre during the last generation had been in the hands of a people with technical knowledge of cordage and textile fibres and fibre extracting machinery, the price to-day on the Home market for Phormium would be considerably ahead of the price of Manila hemp, for naturally it is finer, cleaner and stronger. But instead, having been that time in the hands of amateurs, that time has been lost, its possibilities are still undeveloped, and the aid of fibre machinists with their specialist knowledge, must be sought to bring out the fibre's qualities.

One big stumbling-block in the way of progress with New Zealand hemp (other than insufficient area under cultivation and inclusion of unfit leaves) appears to me to lie in the fact that local millers believe that their crude, makeshift ways of handling this, their only fibre, are perfection; unfortunately, through being quite sure on this point, no effort is made to learn anything from methods in use elsewhere with

"Gradual stripping" must follow; with its introduction, chopped fibre will disappear.

"Wringing" the steeped fibre before paddocking will ensue a stainless fibre and quicker drying.

"Hand heckling" and "machine brushing" instead of scutching, will turn out clean, white, long, strong fibre as straight and smooth as a bank of carded flax.

This "new" New Zealand hemp, scientifically baled in a high-density press, covered in a protective wrapper, will bring a price at Home that the amateurs have never dreamed of.

#### The By-products.

Then the tow requires "willowing" and "carding," and such tow will fetch £10 a ton any time.

The "willow screenings" dried and curled have a value for upholstery.

The "stripper waste" dried in the sun, and passed through a chaffcutter with