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# VIII.—MEMORANDUM FURNISHED BY COLONEL HAULTAIN ON THE FLAX MILLS VISITED BY HIM.

# THOMAS MACFFARLANE, Henderson's Mill, Auckland, November, 1870.

Was formerly a large saw mill, driven by water power. Six machines can be kept at work, but only two were in operation. After stripping, the flax was steeped on wooden floats in the mill pond for two hours and a half, and occasionally beaten with a wooden rammer. Each machine could turn out more than one ton per week. The green leaf was brought by boat from all parts of the Waitemata harbor, at a cost of 20s. to 25s. per ton, according to distance. Men's wages were 5s. a day, and boys' from 1s. 3d. to 2s. 6d. The cost of scutching was 22s. a ton, and of packing and screwing, 22s. 6d.; and the total expense per ton, delivered in Auckland, was about £17 16s. Some flax had been planted in a cleared gully, and also amongst some manuka scrub; the former was doing well, but the other was getting choked up, and could not thrive.

#### MURRAY, Mauku, near Auckland, May, 1871.

The fibre from this mill is considered as good as any that comes into the Auckland market; its good quality is due to the care taken in its preparation, and to an abundant supply of water for washing purposes. There is a 12-foot water wheel, 5 feet broad, which works one of Price's machines, and the scutching is carried on at another mill a little lower down the stream. After passing through the stripper, the hank of flax is hung on to a peg in the mill race, where it remains for some minutes. The stripping machine (Price's) has been running for two years, and has required little or no repair; about 26 cwt. of green leaf, per day, can be passed through it. It takes about seven tons of green leaf to one of fibre, and he pays 22s. a ton for it, delivered at the mill; and has to give 30s. a week as rent for the mill site and machinery, and cannot turn out more than one ton per week; so that his flax costs him £19 a ton, delivered in Auckland, where it sells at from £18 to £20; but as he works himself, and is assisted by four or five of his children, it gives the family good wages; and the tow, which sells at £5 a ton, is some further profit.

#### Potter, Henderson's Mill, near Auckland.

Is not at work at present, as a recent flood has broken the mill dam, and done other damage. Has tried wet-scutching, but did not find it answer, and there is an extra loss of 25 per cent. in hackling, which the rope-spinners object to, although they consider the fibre superior, and will pay £3 a ton more for it; but it costs from £8 to £10 a ton to wet scutch as, in addition to the labour, it requires more green leaf. After hackling, as an experiment, there were only 74 lbs. left out of 1 cwt. It takes eight tons of green leaf to make one ton of ordinary fibre; if the flax is young it will take more—as much as ten tons. The bleaching requires from four to fourteen days, according to the weather; but the shorter time it is exposed to the sun the better, as the fibre is injured by too long exposure. Instead of wet-scutching, he has now put up a set of stampers, under which the flax is passed, after coming from the stripper, with a flow of water over it, being carried under the stampers by a travelling band.

## KELEHER, Waiuku, May, 1871.

Uses a water wheel 14 feet in diameter, and 4 feet broad, which cost him £200, and one of Gibbon's double machines; has also one of Price's, but prefers the former. Carefully washes the fibre in the mill race after stripping, and then soaks it for an hour; bleaches in the sun for about five days in summer, and seven in winter, and finishes with a barrel scutch. All his hands are paid by the day, and he employs twenty for the double machine—eight men, at 4s.; six women, at 2s. 6d.; and six boys, at 1s. 6d.; besides two men cutting the flax. He gets £20 a ton for his fibre, delivered in Auckland, which pays all expenses. Flax which was cut eighteen months ago, has now six full grown leaves; and that cut seven months ago has three leaves, besides the centre one. His flax is chiefly from high ground, and is preferred by the rope-spinners on that account.

### DUGALD, Queen's Redoubt, Waikato.

Uses the machinery of an old flour mill, belonging to the natives, and has plenty of water, but a limited supply of flax. Has a machine of his own construction, an improvement on Price's, and can put through 30 cwt. a day, or more; and makes  $1\frac{1}{2}$  tons of fibre in the week: Washes in the mill race with the assistance of a small wheel, which is turned by the stream, and beats the flax which is held underneath. Employs only eight hands, and pays the men £1 a week, and the boys 10s. and 12s. The green leaf costs about 16s. a ton at the mill, and it is chiefly long swamp flax; cartage into town is £1 10s; and the fibre costs him about £16 a ton delivered in Auckland, where he gets from £20 to £22 a ton. Is himself a good mechanic and engineer, so can keep his machinery in good order and repair.

# MELLSOP, Waiuku, May, 1871.

Uses water power, and has a wheel 18 feet in diameter, and 2 feet 10 inches broad, but has not sufficient water in summer, nor sufficient green flax to keep the mill constantly going; makes 25 or 30 tons a year, and finds that he must receive £20 a ton for his fibre to pay fair wages. His flax is chiefly from the Karaka hills, and is of better quality than that which grows in the gullies. It takes seven tons of green flax, now nineteen months old, to one of fibre, and he pays 12s. a ton for cutting it. He uses one of Dugald's machines, made by McIntyre, of Onehunga, which will put through 30