

of the process from the sorting of the rags, to the Fourdrinier machine, and the collection of the continuous web with its accumulated electricity after its passage over the drying cylinders. Much curiosity is also excited on witnessing the operation of ruling the paper, and the no less interesting action of the almost self-regulating machine, attended by a child, for cutting the paper web to the required sizes.

Linen rags are well known to make the best paper stock. With a view to encourage a more extensive use of this fabric, and also to procure material for the manufacture of twine, the proprietors of this establishment have erected a scutching-mill capable of finishing 100 bundles of flax per day, each weighing 16 lbs. Flax-seed is furnished to those farmers that have none, and the straw is contracted for at £2 per 100 bundles. Three pounds of fibre are usually obtained from one bundle of straw. The grower is charged 2d. per lb. for scutching, a higher rate than can in future be maintained, but which it was necessary to impose in the infancy of the manufacture. The tow waste valued at 7 per cent., is made into paper, but those having flax scutched at the mill are entitled to half the tow.

In this County, and in Lower Canada generally, flax is sown, if on low grounds, on old pasture or meadow-land; on upland, it is sown after oats or barley. One ploughing only is given, and that in spring. This preparation of the soil is far from what the flax crop demands. The crop is never weeded, at least in the acceptance of that term as used in Europe. A large thistle may be occasionally pulled. This accounts for the state in which flax-seed is seen at oil mills before screening, containing a great variety of seeds which would never find their way there with ordinary attention to early management.

The seed is invariably allowed to ripen, and the reason assigned is, that otherwise the fibre could not bear its subsequent treatment in scutching and heckling. The fibre of those plants that are not matured at the time of pulling is said to be lost in scutching. After pulling, the flax is spread for three or four weeks, or until it is sufficiently dew-rotted, on the ground on which it grew; meadow or pasture land is always to be preferred. It is turned occasionally to prevent germination of the seed, and before lifting, that it may be dry. When taken up it is bound in bundles with withes, and the seed threshed off before drying.

Water-rotting is seldom practised, but a rottery on Schenck's principle is likely to be got up, and the flax then saved on the Courtrai system.

Drying by fire, which all must condemn, is a common practice. Three forked stakes are driven into the earth with three others about nine feet distant. Poles are laid on these on which the flax is evenly spread about four feet from the ground. A fire is applied beneath which renders the flax brittle for the brake. This is a very simple implement used before scutching which greatly facilitates that operation. A good hand-scutcher can finish five or six bundles per day, yielding from fifteen to eighteen pounds of fibre. The heckle consists of coarse iron spikes, about twenty four in number driven through a thick board in parallel rows. These serve to separate the fibre. A correct estimate of the per centage of heckled flax obtained by hand-labour from well cleaned fibre cannot be made as applicable to this country from the fact that little attention is given to the collection of data serving as material for calculation or comparison, combined with inferior management. Flax growers here can hardly give an approximation to the quantity of straw or weight of fibre grown per acre, or of the expenses attending its cultivation.

If the produce of an acre is estimated at two tons of straw, and the price at £3 per ton, the farmer will receive for straw £6. Estimating the seed at sixty-four bushels at sixpence per bushel will be £1 12, making a total of £7 12 per acre. Deduct from this the cost of seed, say two bushels at five shillings per bushel, all the other expenses £2, leaves £5 2s. per acre, on an average crop of flax.

The embryo of a large manufacture of flax is even now visible in this section of country. Its cultivation in small patches for domestic use is gradually giving place to its growth for market on an extended scale, mainly owing to the enterprise of Messrs. McDonald and Logan an eminent manufacturing firm, in whose hands its introduction as a staple is secure.

I am, Sir,

Your Obt. Servt.

A. KIRKWOOD.

Port Neuf, Aug. 12.

#### MODEL FARMS—AGRICULTURAL EDUCATION.

STAMFORD, C. W. Aug. 30.

To the Editor of the Canadian Agriculturist.

SIR,—In the August number is the report of the United Counties of Middlesex and Elgin recommending the establishment of a model farm with a good and well selected agricultural library, as one of the best means of increasing true and correct information on the theory and practice of the art.