

feeding stock, of all kinds, at least £4 per acre. The apparatus is very simple. The ripple consists of a row of iron teeth screwed into a block of wood. This can be procured in Belfast, or may be made by any handy blacksmith.* It is to be taken to the field, where the flax is being pulled, and screwed down to the centre of a nine-foot plank, resting on two stools. The rippers may either stand, or sit astride at opposite ends. They should be at such a distance from the comb, as to permit of their striking it properly and alternately. A winnowing sheet must be placed under them, to receive the bolls as they are rippled off; and then they are ready to receive the flax just pulled,—the handfuls being placed diagonally, and bound up in a sheaf. The sheaf is laid down at the right hand of the rippler, and untied. He takes a handful with one hand, about six inches from the root, and a little nearer the top, with the other. He spreads the top of the handful like a fan, draws the one-half of it through the comb, and the other half past the side; and, by a half-turn of the wrist, the same operation is repeated with the rest of the bunch. Thus the flax can be rippled without being passed more than once through the comb. He then lays the handfuls down at his left side, *each handful* crossing the other, when the sheaf should be carefully tied up and removed. The object of crossing the handfuls so carefully, after rippling, when tying up the beets for the steep is, that they will part freely from each other, when they are taken to spread out on the grass, and not interlock, and be put out of their even order, as would otherwise be the case. If the weather be dry, the bolls should be kept in the field, spread on winnow-cloths, or other contrivance for drying; and, if turned, from time to time, they will win. Passing the bolls first through a coarse riddle, and afterwards through fanners, to remove straws and leaves, will facilitate the drying. If the weather is moist, they should be taken in-doors, and spread out thinly and evenly on a barn floor, or in a loft, leaving windows and doors open, to allow a thorough current of air; and turned twice a-day. When *nearly dry*, they may be taken to a corn-kiln (taking care not to raise it above summer heat), and carefully tumbled, until no moisture remains. By the above plan of *slow drying*, the seed has time to imbibe all the juices that remain in the husk, and become perfectly ripe. If it be taken, at once, from the field, and dried *hurriedly* on the kiln, these juices will be burned up, and the seed will become shrivelled and parched, little, nutritious matter remaining. In fine seasons, the bolls should always

be dried in the open air, the seed threshed out, and the heaviest and plumpest used for sowing or crushing. The light seeds and chaff form most wholesome and nutritious feeding for cattle. Flax ought not to be allowed to stand in the field, if possible, even the second day; it should be rippled as soon as pulled, and carried to the water, as soon as possible, that it may not harden.

WATERING.

This process requires the greatest care and attention. River water is the best. If spring water has to be used, let the pond be filled some weeks, or months, if possible, before the flax is put in, that the sun and air may soften the water. That containing iron, or other mineral substances, should never be used. If river water can be had, it need not be let into the pond sooner than the day before the flax is to be steeped. Place the flax in the pool, in one layer, somewhat sloped, and in regular rows, with the root end uppermost. Cover with moss sods, or tough old lea sods, laid perfectly close, the sheer of each fitted to the other. Before putting on the sods, a layer of rushes or rag-weeds is recommended to be placed on the flax, especially in new ponds. Thus covered, it never sinks to the bottom, nor is it affected by air or light. A small stream of water allowed to run through a pool has been found to improve its colour. It will be sufficiently steeped, in an average time, from eight to fourteen days, according to the heat of the weather, and the nature of the water. Every grower should learn to know when the flax has had enough of the water, as a few hours too much may injure it. It is, however, much more frequently *under-watered* than *over-watered*. The best test is the following:—Try some stalks of average thickness, by breaking the *shove*, or woody part, in two places, about six or eight inches apart, at the middle of the stalk; catch the broken bit of wood, and if it *will pull freely out, downwards, for that length, without breaking or tearing the fibre, and with none of the fibre adhering to it*, it is ready to take out. Make this trial every six hours, after fermentation subsides, for sometimes the change is rapid. Never lift the flax roughly from the pool, with forks or grapes, but have it carefully handed out on the bank, by men standing in the water. Spread on the same day it is taken out, unless it be raining heavily; light rain does little harm. If it cannot be spread, let it be set on end, or separated into small parcels, to prevent it heating in the heap. It is advantageous to let the flax drain for a few hours, after being taken from the pool, by placing the bundles on their ends, close together, or on the flat with a slope.

SPREADING.

Select when possible, clean, short, thick

pasture ground for this operation; and mow down, and remove any weeds that rise above the surface of the sward. Lay the flax evenly on the grass, and spread thin, and very equally. If the directions, under the head of rippling, have been attended to, the handfuls will come readily asunder, without entangling. Turn it two or three times, while on the grass (with a rod about eight feet in length, and an inch-and-a-half in diameter,) that it may not become of different shades, by the unequal action of the sun, which is often the case, through inattention to this point. Turn it when there is a prospect of rain, that the flax may be beaten down a little, and thus prevented from being blown away.

LIFTING.

A good test of its being ready to lift is, to rub a few stalks from the top to the bottom; and, when the wood breaks easily, and separates from the fibre, leaving it sound, it has had enough of the grass. Also, when one stalk in fifty is perceived to form a *bow and string*, from the fibre contracting and separating from the woody stalk. But, the most certain way is, to prove a small quantity with the hand-break, or in a flax mill. In lifting, keep the lengths straight, and the ends even, otherwise great loss will occur in the rolling and scutching. Tie it up in small bundles; and if not taken soon to be scutched, it will be much improved by being put up in small stacks, loosely built, with stones or brambles in the bottom, to keep it dry, and allow a free circulation of air. Stacks built on pillars would be the best.

DRYING.

By fire, is *always most pernicious*. If properly steeped and grassed, no such drying is necessary; but to make it ready for breaking and scutching, exposure to the sun is sufficient. In some districts, it is put to dry *on kilns*, in a damp state, and is absolutely burnt, before it is dry, and the rich oily property of the flax is always greatly impaired. On this point, the Society can scarcely speak too strongly, as the flax is either destroyed, or rendered not worth one-half of what it would be, if properly dried.

BREAKING AND SCUTCHING.

If done by hand, should be on the *Belgian* system, which is less wasteful than that practised in Ireland. If by milling, the farmer will do well to select those mills in which the improved machinery has been introduced. The Society would also recommend, that the farmer should endeavour to have his flax scutched by a mill-owner who pays his men by the day, and not by the stone, even if it should cost him higher in proportion—the system of paying the scutchers by the stone, rendering them more anxious to do a large

* The best ripples are made of $\frac{1}{2}$ inch square rods of iron, placed with the angles of iron next the ripples, $\frac{3}{4}$ -16ths of an inch asunder at the bottom, $\frac{1}{2}$ inch at the top, and 19 inches long, to allow a sufficient spring, and save much breaking of flax.