

The rippers may either stand, or sit astride at opposite ends of the plank; but they must be sufficiently near to the comb, to enable them to strike the flax properly and alternately. A winnowing-sheet should be placed under them, to receive the bolls as they are ripped off. The rippers, moreover, should be sufficiently near to receive the flax as it is pulled and laid down at their right hand in sheaves. When the sheaf is untied the rippler takes up a certain quantity, holding it about six inches from the root with one hand, and near the top with the other. He then spreads the top of the handful like a fan, and draws one-half of it through the comb, the other passing by the side; with a half-turn of the wrist he then performs the same operation upon the remainder. Some rippers, however, prefer rippling without turning the hand, by giving the flax one or two pulls through the comb; but this depends upon the quantity of the bolls. The straw, when stripped of its bolls, is carefully laid down by the rippler, placing each handful diagonally, after which it is tied up into sheaves and removed. The object of crossing the handfuls, after rippling, is that the bolls or sheaves should separate easily when taken out of the steep to spread on the grass for drying. If the weather be dry, the bolls should be kept in the field, spread on the winnow-cloths, and, if turned occasionally, they will soon *win*, or dry. Passing the bolls, however, first through a coarse riddle, and afterwards through *fanners*, which remove the straws and leaves, will facilitate the drying process. If, on the contrary, the weather be moist, the bolls should be taken in-doors and spread out thinly and evenly on a barn-floor, or loft, and turned twice a day, leaving the windows and doors open, to allow a thorough current of air. When nearly dry, they are removed to a corn-kiln, care being taken not to raise the kiln above summer heat, where they are turned gently until no moisture remains. This slow-drying process enables the seed to imbibe all the juices that remain in the husk, and to become thoroughly ripe. If the bolls be taken direct from the field, and dried in a hurried manner on the kiln, the juices will be absorbed, the seed become shrivelled and parched, and little nutritious matter will remain in them. In fine weather, the bolls should be dried in the open air, the seed thrashed out, and the heaviest and plumpest portion of it reserved for sowing or crushing. The light seed and the chaff contain exceedingly wholesome food for cattle, and can be always profitably applied. Flax, however, ought not to remain in the field, if possible, even the second day, unless the Belgian system, which we shall shortly notice, be adopted. As soon as pulled it ought to be ripped, and then carried to the water to prevent it becoming too hard.

Watering or Steeping.

The operation of steeping requires the greatest care, as it is very critical in its results. River water is the best, and may be let in the pond the day before the flax is steeped; but if spring water is used, the pond should be filled some weeks before the flax is put in, so that the sun and air may soften the water. Water containing any mineral substance must be studiously avoided. The dimensions of the pool are from twelve to eighteen feet broad, and three and a half to four feet deep. The

flax is placed in a sloping direction in the pool, the root-end downwards, and in regular rows, forming a single layer. The root of one row of sheaves should reach the tie of the next, and, when thus placed, they are covered with moss-sod, or old lea-sod, cut thin and laid close together. In new ponds, a layer of rushes, or rag-weeds, is generally placed on the flax, with the sods above it; and, where sods are not always available, a light covering of straw is used, which, when pressed with stones, keeps the flax just under the water. In this condition fermentation takes place, and, as it continues, additional weight is applied, which is removed when the fermentation ceases, to prevent the flax sinking too deep in the pool. In this state the flax is neither affected by light or air. A small stream of water, however, if allowed to run through the pool, sometimes improves the colour of the flax. The average time of steeping is from eight to fourteen days; but it varies according to the heat of the weather and the condition of the water; and great nicety is required to ascertain when the flax has received sufficient water, a few hours, more or less, being liable to injure it. The farmers, however, more frequently *under-water* than *over-water* their flax. The usual test to ascertain the condition of the flax is to try a few stalks, of average thickness, by breaking the *shove*, or woody part, in two places, about six or eight inches apart, in the middle of the stalk; the woody part is then taken out, and if it comes freely downwards, without breaking or tearing the fibre, the flax is ready to be taken out of the pool. This test is tried about every six hours after fermentation has ceased, as the change is sometimes rapid. The flax should never be lifted roughly from the pool, either with forks or grapes, but carefully handed out of the drain by men standing in the water; and it is generally an advantage to let the flax drain from twelve to twenty-four hours when taken out of the pool, the bundles being placed on their root-ends close together. Care, however, must be taken not to place the crop in heaps, or it will be injured by heating.

Spreading.

The place selected for this operation is, if at hand, a clean, short, and thick pasture-ground, with the weeds carefully mown down to the level of the sward, or removed altogether. The flax is laid evenly on the grass, in thin but equal layers; and, if care has been taken in the rippling process, the bundles will readily separate without being entangled. While on the grass, it is turned two or three times with a rod, about a foot in length and an inch and a half in diameter, to prevent it being discoloured by the unequal action of the sun upon its surface. When there is a prospect of rain, the flax is turned, in order that it may be beaten down a little, and prevented from being blown about.

Lifting.

When the flax has been upon the grass from six to twelve days, it is considered ready for lifting; and, if the weather be showery, the shorter time will be sufficient to prepare it. The general test of its being ready to lift is, to rub a few stalks from top to bottom; if the wood breaks easily, and separates from the fibre, leaving it sound, it has received a sufficient grassing. The most cer-