

I know of no cure, except thorough-draining, after which these narrow ridges—6 feet only, many of them—might be thrown two or three together. I farmed too long in our heavy lands in England to advise the rashly increasing the width of ridges in really stiff clay soils. Still, I think it would be wise to plough them a little flatter on the crowns, and not to leave such tremendously wide open-furrows between them. However, this is a fault to be met with more markedly in the older French districts than in the more modern Townships country.

The quantity of seed to the acre is a very important consideration. Quality, too, must be regarded. Sow thick: if you don't, the barley, especially if early sown, will tiller, and however desirable it may be for any other grain to behave in that way, it is a most undesirable quality in barley, since tillering necessarily induces inequality in ripening. "If thin-sowing be practised, the plant, soon after its appearance above ground, begins to throw out side-shoots, and as the ears from these are some days longer in coming to maturity, than those from the parent stock, it follows that the latter start to grow from 36 to 48 hours sooner than the former, and when the whole steep is put on the kiln, the sample of malt will be uneven, and the extract from the mash will fail both in quantity and flavour." v. Jenner *Fust on Barley*—Jan. 1888, p. 4.

I should sow from 2½ to 3 bushels an acre of good sound 2-rowed barley; but this would depend upon the earliness of the seed-time and the preparation of the land. In a well prepared loam, with the drill, in April, 2½ should be enough; in rough land, in the latter half of May, broadcast, 3 bushels will not be too much; but I would never sow barley in such land: oats would pay better. Early sown barley *ceteris paribus*, always produces the best quality.

Sow grass-seed after the barley is up, if early sown.

Always roll barley, but after the frost is off the leaf.

(4) *Allowed to lie too long on the ground after cutting.*—As to this point, I think it is not one very likely to occur in this province. As a rule, most of our grain-crops are caught up as soon as possible after they are down. The old rule in England, that barley ought to pass through *three dews* between cutting and carting, may have been a good one, but I confess that, if there is not much grass in the piece, I should be inclined to let the grain stand till dead-ripe and carry it as soon as it was fit. We never tie barley in the East of England, for the straw would not make bands—too brittle—; we supply turn it over once out of the swath, with a long light pole, then roll it together into cocks with a large fork consisting of a pair of teeth below and one tooth above, and get it into stack as soon as possible.

(5) *Not sweated in the stack.*—The maltster's opinion is: unless barley has had at least six weeks good sweating in the stack, it won't work freely out of the couch. By this is meant, it will not put forth its rootlets as fast as it ought to do, and consequently will need the tiresome operation of watering on the floors or pieces, an operation that every working maltster hates. I never made a steep of 2-rowed barley during my ten years experience in Canada; that did not require watering the 8th day out of the couch. The *sweating* mellowes the grain, and increases its power of imbibing water; so much is it desired in England, that if a maltster, from not having reserved a sufficient supply from the previous season is obliged to work with new barley before the 1st November, he will, if he understands his business, and most of them do, give the grain a gentle sweat on the kiln before steeping.

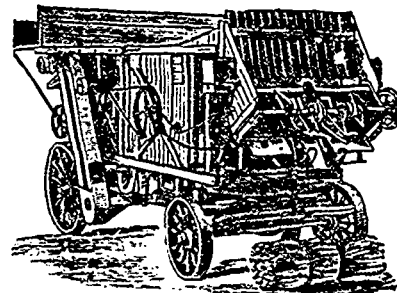
(6) *Threshing.*—Forty years ago, no maltster in the Eastern counties would buy any barley for pale-malt that had been threshed by horse-power: they preferred flail-threshing. The idea was that the beaters of the machine pulled off the bran from the end of the grain and thus allowed the escape

of the acrospire or plumule before it had converted the whole grain into malt. They said the beaters broke off the acrospire, but that was not the case. In 1852, I took the first portable steam-engine and threshing-machine into Essex that had been used there, and I had great trouble in persuading the farmers to use it when I was not employing it myself; but a little experience soon taught the maltsters of Suffron-Walden that a *drum* and *concave* like those made by Clayton and Shuttleworth of Lincoln, or by any of the great agricultural implement makers, do not injure the most delicate grain. I confess that many of our common *moulins à battre* are not calculated to turn out a really first-rate sample of the large-grained 2-rowed barley.

I give an engraving of Howard's threshing-machine. This firm and Clayton's people have had many a severe contest at the R. A. S. of England's exhibitions; as for saying which is the better implement, it would be absurd to try. The feed-mouth is five feet six inches in width, to take our long-strawed wheat in side-ways, and they are fitted with blowers, screens, &c., and with *hummellers* to knock off the beards of the barley. By the bye, the seed-barley I mentioned as having been tested by me had a great many more beards on it than necessary—there were 4 beards in the 50 grains—there ought not to have been one; and, moreover there were 3 grains of wheat and 2 of oats: that won't do for the English market I can assure you. The buyers there are willing to pay good prices, but they want their goods sent to them in perfect condition. For example: my finest white turnips would not sell at all on the Borough (Southwark) market, because the bunches were tied with string instead of withy-twigs; they had to go to the cow-keepers at 15s a load, instead of to the green-grocers at 2s 6d a dozen bunches of 9 = £16 10s a load. It was a lesson I never forgot.

Howard's Royal prize Straw-trusser.

This Machine attached to an ordinary Thrashing Machine will truss and bind as fast as the Straw passes through the drum.



The average cost of Trussing Straw by hand is 2s. a load, and by this Machine 8d. a load. Price of Trussing Machine for 4 ft. 6 in. and 5 ft. drums, £40.

Price of Trussing Machine with transport carriage, for 5 ft. and 5 ft. 6 in. drums, £50—Catalogues Post Free.

J. & F. HOWARD, Bedford.

Lastly, don't forget that soil has more to do with the quality of the barley grown in it than climate.

Mutton.—I have received of late several letters from the States asking for information as to the whereabouts of good short-wooled breeding ewes. I have done what I could to satisfy my correspondents, but with the exception of Mr. Cochrane's Shropshires and Mr. Mark Dawes' Southdowns, I know of no flocks of the kind required.