

Agricultural Clubs—Important Notice.

The agricultural clubs already in existence and those shortly to be instituted, are requested to apply to the secretary of the Department of agriculture, who will forward to them, gratuitously, for the use of their members, certain pamphlets on agriculture, and all the information on that subject that the department is able to afford them.

H. G. JOLY DE LOTBINIÈRE,
Pres. Council of Agriculture.

IMPORTANT NOTICE

The tour of inspection of Canadian cattle, for the purpose of making entries in the stud-book, will take place in July. Those who have animals for entry are requested to send their names and addresses to the undersigned before the first day of July *prox.*, if they wish their stock to be inspected this year.

(Signed) J. A. COUTURE, D. M. V.
19 rue des Jardins Quebec.

Nitrate of soda.—As mentioned in a note in the May number of the Journal, Mr. Evans finds he cannot afford to sell this manure at less than \$3.00 the 100 lbs., in bags containing 300 lbs., each. I am sorry for it, because I fear the great rise in price, from, \$2.25, will prevent its use from becoming as general as I was in hopes it would be. By the bye, I may as well mention that I have nothing to do with the sale of this or any other manure. I received an order from a farmer in the Quebec district the other day to buy him a certain quantity of fertilisers, I "executed the order", for once, but I really have no time to spare for such business. If any one wants artificial manures, he should write direct to the Capelton factory for superphosphate, &c, to Mr. Evans for nitrate of soda, Mr. Wm. Ewing for Indian bone-meal, and to Mr. Vasey, Hochelaga for sulphate of ammonia. A. R. J. F.

Barley for the English market.

Great complaints have been made in England about the quality of the barley sent thither from Canada for malting purposes. I really do not see how anything else could be expected. There are two principal points that strike the eye of an English maltster in looking at a cargo of any foreign barley: 1. Is the grain equal in quality? 2. are there many broken grains in it? As regards the first point, if the quality is not equal, that is, equally ripened all through, the pickles will not grow equally on the floors, and, consequently, when some of it is ready for the kiln, the *plumule*, or *acrospire*, as the maltsters used to call it, being nearly up to the end of the grain, the rest will be found some half-way up the grain and others only just started on their journey. "Ah," then says the buyer, "this is only fit for 'brown malt,' for porter-brewing," and of course the price suffers in consequence.

As for broken grains, of which Mr. Saunders' report says: "unless the Canadian barley can be threshed so as to avoid the large proportion of half and broken grains, which cause excessive mould on the floors, the trade won't materialise. All English maltsters agree on this point." Yes, I should think they did, for mouldy malt would invariably be rejected by any brewer that made *fine ales*, as it causes a secondary, or rather continuous, fermentation that never stops, and ales brewed from it never become really bright.

Now the first of these two vital faults in our barleys seem to me to arise from the following causes. 1. the want of due preparation of the land. If the land intended for barley is

not rendered homogeneous, that is, of equal fineness all over, the grain will not come up synchronously, and some will ripen before the others; 2. The selection of the seed. If mixed seed is used, some from heavy land, some from light land, some fully ripe before cutting, some only half-ripe, the same effect as before will be produced. Equal depth of depositing the seed, and wide ridges, or lands, are also points to be attended to. As I have remarked before, narrow ridges, with some plants growing down in the open furrows and others on the crest of the ridge, cannot produce an equally ripened crop. Lastly; *barley for malting must be dead-ripe before it is cut.*

Again; they complain in England that "Shippers have not kept faith with the purchasers as to quality, the bulk was not equal to the sample." How could it be, when the bulk was probably made up of lots from hundreds of farms, all slumped together, no two lots of which were perhaps grown or harvested alike. In my day, Essex, Hertfordshire, and Cambridgeshire maltsters never mixed the grain of even two farms, though contiguous, without the most careful inspection. In Canada, this would be impossible, but some plan *must* be contrived to grade the purchases, so that light and heavy, bright and discoloured, lots be no longer mixed together." Well may the reporter say: "The returns received for some of the shipments have been very unsatisfactory, having resulted in loss to the shippers. This disappointment, however, is clearly traceable to want of care in threshing, cleaning, and grading the grain."

If a farmer is careful enough to thoroughly clean out the threshing machine before he entrusts it with the duty of threshing his barley, one great cause of mixed samples of seed barley will be obviated.

In Essex, and the malting counties of East-Anglia, no maltster in 1850 would buy barley threshed by horse-power. They complained of broken grains that turned mouldy on the floor. I had a great job, in 1852, getting them to see that my steam threshing-machine, with its 5½ feet drum and its unvarying pace, never broke or bruised a grain. The flail was then always used for barley, though for all other grain it had long been abandoned. In the modern machine, the straw goes in sideways, and comes out as unbroken as it went in. There is nothing in it but a drum and a cylinder, there is no beating-action, but only a rubbing. Not a grain is broken, and I may almost say, not a grain is left in the ear unthreshed. Owing to the uneven pace of horses in a mill, sudden rushes cannot be avoided, and it is here that the much complained of breakage of the grain takes place, and I do not believe that any great improvement can take place until steam is substituted for horse-power, and the wide-mouthed English machine with its *rubbing* action for the narrow-mouthed *beater* at present in use.

The buyers in the barley districts in Ontario paid up to the close of navigation from 8 to 12 cents more per bushel for the two-rowed than was offered for the six-rowed; but in many instances no care seems to have been taken to grade the purchases, but light and heavy, bright and discoloured lots, were all mixed together, making a very uneven sample. Much broken grain was also found in some lots. The returns received for some of the shipments are said to have been very unsatisfactory, having resulted in loss to the shippers. This disappointment, however, is clearly traceable to want of care in threshing, cleaning, and grading the grain. The fault lies partly with the farmer, who must exercise more care in handling this crop if it is to bring him its full value. In a letter written by a practical Canadian maltster who recently visited England in connection with the barley business of his firm, he says, when referring to the disappointing sales. "Shippers have not kept faith with the brokers or purchasers as to qua