

special business to keep it cleaned off, the final destruction of the bridge by decay seems imminent.

One old mare stuck to the bridge until she was nearly starved, rather than expose herself to the flies on the lower ground, and her owner had not only to drive her to her feed, but to keep her there.

The same observation has been made in regard to other high bridges, the centre of which has, during the fly season, been crowded with cattle, who persistently returned to their station even after they were driven away.

VECTIS.

Beet Sugar Making.

A correspondent from Brighton writes:—"As I intend to establish a sugar beet refinery, I would like to enquire if there is any sugar beet refinery in the Dominion, or in the United States, where I could learn the business of refining."

The only sugar beet factory to which we can direct our correspondent is that at Chatsworth, Illinois, U.S. This, we believe, is the only one that has been in operation, for some years, but we warn our correspondent that there has been more progress made in the knowledge of the various ways of making sugar from beet root, during the last four years, than in any previous ten. Science and chemistry are at work, and have been actively called into operation by the remunerative profits of the business in England, and it is more than probable that any old-fashioned factory may be far behind the age and time. We do not know that there may not be many modern improvements here also, but we have heard that the enterprise as conducted at Chatsworth does not pay; but this may depend, and probably does in part, on the difference between beets grown on prairie land and elsewhere.

TEETH A TEST OF AGE.—"Subscriber" asks, "Is it uncommon for Merino shearing ewes to have four broad teeth? or, in other words, do cases occur in which Merino (or other sheep) have four broad teeth when only one shear?" The number and development of the teeth are among the surest and most constant marks of the age of any animal, but like all other signs, are liable to variation. Some animals grow faster and mature much earlier than the average of the same species, and all writers on the subject refer to exceptional instances in regard to the appearance of the teeth. Randall says, "There is sometimes a variation of a number of months or even a year in the development of the teeth. High kept and rapidly grown sheep acquire their second teeth much earlier."

MUSHROOMS.—J. M. asks "How is a mushroom distinguished from a toadstool? and is there any way of propagating the for-

mer?" The edible mushroom, when it is from eight to twelve hours old, has beautiful pink or flesh-coloured gills—that is, the under side of the crown is of that colour, and has a fresh sweet smell. As it gets older, these gills turn chocolate colour, and finally almost black. The appearance then more nearly approximates to that of some poisonous fungi. But the place of growth may assist in distinguishing them. Mushrooms grow in pastures or meadows, the fungi resembling them in woods, and these have besides an unpleasant sickly odour. The following test is also, we believe, correct. If you sprinkle a little salt on the gills, and they turn yellow soon after, these should not be eaten; if they turn black, they may safely be eaten. Our correspondent will find directions for artificially growing mushrooms in the September and December numbers of the CANADA FARMER for 1869.

WESTERN WHEAT.—A correspondent asks, "Can you or any of your readers inform me whether the Milwaukee or Kansas wheat, now being largely imported by our millers, would be a safe seed for Canadian soil?" We have not seen any of this wheat, but should suppose it was of a very mixed kind, not adapted for seed. Perhaps some of our readers can give information on the matter.

The Canada Farmer.

TORONTO, CANADA, DEC. 15, 1870.

The Volume for 1870

The present number of the CANADA FARMER will complete the second volume of the new series, and the seventh since its commencement in 1864. It has been the aim of all connected with its publication to promote the important objects for which it was established, by taking note of the general progress of agriculture and kindred departments of industry, and by affording to Canadian agriculturists a medium of intercourse with one another, for discussing subjects of common interest, and comparing the results of their experience. Above all, we have endeavoured to impress the farmer with a higher sense of the dignity of his calling, and so to elevate it from a mere mechanical toil to a science, in which there is ample scope for the energies of the mind, as well as the exercise of manual labour and skill. How far these objects have been attained it is for our readers to pronounce. We have reason to be gratified and encouraged by the continued interest manifested, the increasing circulation of the journal, and the evidences of appreciation and approval in the contemporary agricultural press both of this continent and of Great Britain.

In the volume now completed, among other features of interest, special prominence has been given to the cultivation of the Beet

and the manufacture of Beet Sugar, because this industry has not only for many years exerted an ameliorating influence on Continental agriculture, but has been introduced with marked success into Great Britain, where, within the last year or two, immense improvements have been effected in the processes of manufacture, and we are desirous of seeing a fair experiment made in Canada, believing that there is nothing in the character of our soil, or climate, or market, to prevent the success of such an enterprise.

Attention has also been directed to the great progress manifested during the past year in the improvement of live stock, particularly in the breed of Short-horn cattle. Numerous and valuable importations have been made, a large proportion of intelligent farmers are practically recognizing the value of pure blood, and the number of choice herds and flocks now owned by Canadian breeders, cannot fail to raise the general character of live stock throughout the country.

In the coming year we shall keep these and other subjects of like importance steadily in view; and no pains will be spared to render the CANADA FARMER acceptable to our subscribers. We cordially invite their co-operation, and hope to number among them many new friends.

The terms for Agricultural Societies and Clubs, as published elsewhere in the prospectus for 1871, will continue on the same liberal scale as heretofore.

Farmers' Clubs.

Now that the long winter evenings are coming, and the farmer, having shorter working hours, can give time and attention to the endeavors to gain or impart information in regard to matters connected with his calling, every effort should be made to organize and keep up a Farmers' Club in each ward of a township, or each considerable village having a good farming country adjoining it. The school-room of the ward would be a good place at which to meet. If that cannot be had, let the members take turns in gathering at each others' houses once or twice a week. We have already given in times past an outline of the mode of proceedings to be adopted in organizing and carrying out a farmers' club, and in fact, they may as well be made as free from rules and regulations as possible, so that each one will feel under no restraint, but be at liberty to come forward and speak on whatever topic is brought under discussion by the one who is in the chair for the evening. Don't talk all at once, or keep up a general conversation in quiet corners with one another, but let everything that is said be directed towards the general enlightenment of the club, and be listened to with respect; and when one speaker has sat down, a short interval may occur for general discussion before the next is called on to address the meet-