

Admission and Entry Fees vs. Agricultural Society Membership.

SIR.—The question of the local fall fairs is one that needs to be handled very lightly. It has been talked over with other questions that arise at the meetings of the Canadian Association of Fairs and Exhibitions, and no conclusion has been as yet come to. I fancy if some effort were put forth to improve the present organizations, better results would follow. I am satisfied that in this section the feeling is to continue the organizations, both county and township, as each has its particular work to do.

We have had no experience in limiting judges to townships, but have heard that a township not far away has, and find it works well. In South Norwich we have always been fortunate, and do not meet with the difficulties that have been experienced by others. In conversation with a gentleman of long experience in agricultural fair work, he said he would not advise a limitation unless all township societies would agree to the same, when they would be all placed on a level. In a good many townships that have been represented at our meetings, they claim to be doing as good and even better work than the county or district fairs.

In regard to attractions, this is a subject that has taken a good deal of thought and attention. I think the majority of the people believe, in order to make the show a success, it is necessary to have some outside attraction other than just the events in the regular prize list. I agree with Mr. H. J. Hill, in his discussion of this matter, that attractions must be given to suit the locality, and that as outside attractions of any particular magnitude are too costly for the majority of fairs and exhibitions, something of a local character must be submitted, and we have found the speeding in the ring to answer the purpose. I do not mean the usual horse race, when jockeying is done and the best horse not getting the prize, as is too often the case, but the directors having no favorites, making the horses show the people that they are doing what they are entered and bred for. We carry on our speeding in this way, and people who patronize our shows seem to be satisfied and go away with the impression that no particular harm has been done morally or in any other way.

In regard to the financial success, I think I have discovered a great leak hole in the finances by having the memberships as at present. It was at one time the rule for people to help, in every way possible, the show along, but times have changed, and it seems to be the question now, what can I get out of it? I have been thinking for some time that if we could do away with memberships and have everybody pay going through the gate, collect a fee for entries, that would, in my opinion, increase the finances that are found at the close of the show in so many instances to be short to meet the obligations of the society. But we are met with this objection, that we must have members to be constituted a society. If memberships were done away with, directors elected from a meeting of the residents of the municipality, and the Government grant based upon the amount of prizes actually paid, it would seem to me to be just to all, and would meet with satisfaction. My objection to memberships is that we have to allow admissions through the gate on said memberships, some societies more and some less, and we who have watched the thing agree that there are people who will do things not in accordance with their moral standing and training, that they would not stoop to do in any other ordinary transaction, hence the shortage of gate receipts. Hoping that this may be of some little use to you,

ALEX. MCFARLANE,
Sec. S. Norwich (Ont.) Agl. Socy.

A New Machine Wanted.

SIR.—I have noticed in the FARMER'S ADVOCATE that a machine is wanted to cut and thresh at the same time. I consider a special machine is not needed, but a straw cutter and separator combined. I have never seen such a combined machine at work, but I give my plan at a venture. Have a large cylinder ensilage cutter with a belt pulley on each side, one larger than the other, to increase the speed of the separator if necessary, placed before the separator, with a carrier between placed so as to throw the cut stuff against the spikes of the cylinder. Have a belt, one side to connect with the engine, and another belt on the other side to run the separator. The cutter can be set to cut long and increase its working capacity. Good straw cut and evenly mixed with chaff is an ideal feed, and will be relished by live stock, and grain that is used for feed is not injured by being cut, and grain that is damp and tough is easily threshed when cut.

Waterloo Co., Ont. D. W. GINGRICH.

The Silver Medal Farm.

"Justice" writes us: "Kindly allow me a little space to correct a statement which appears in an article published in the ADVOCATE of the 2nd and headed 'Successful Farming.' In this article Mr. Wm. Rennie is represented as the winner of the 1st prize silver medal offered by the Ontario Agriculture and Arts Association for the cleanest and best-managed farm. Now, the facts are these: The prize Mr. Wm. Rennie won for his farm was in 1883, in group 4, which included about seven counties. In this competition Simpson Rennie, of Scarborough, was awarded 1st prize; Wm. Rennie, Toronto, 2nd; and David Smellie, Vaughan, 3rd."

Three Sugar Beet Diseases.

Important investigations are being conducted by the Cornell College of Agriculture in the fungous diseases of the sugar beet. Mr. B. M. Duggar is studying three of the diseases which are more or less prevalent throughout the United States and Canada.

1. The root-rot of beets (*Rhizoctonia Betae*, Kühn) is the same fungus as that which causes a stem-rot in carnations. It has been very destructive to the sugar-beet industry of Germany. The first evidence of the attack of this fungus is seen in the blackening of the leaf bases, and then, the stalks becoming weakened, the leaves lie prostrate on the ground. The disease next works into the crown and root proper and infected parts turn brown. Cracks appear in the root region; in time the whole top rots away, and the beet gradually disappears.

Mr. F. C. Stewart, of the Geneva Experimental Station, having determined that a small amount of alkalinity is fatal to the growth of the *Rhizoctonia* of carnations in cultures, it has been very reasonably suggested that lime might be used as a possible preventive for certain rhizoctonial diseases. The majority of soils are usually in need of liming, and where this beet disease appears an application of lime would very likely prove beneficial. The desired alkalinity could be secured with from sixty to seventy bushels of air-slacked lime per acre.

2. The leaf spot of the beet (*Cesospora beticola*, Sacc.) is a disease of very wide distribution. It begins as small brown spots with a reddish-purple



BALSAM, 30 FEET HIGH, 16 YEARS OLD.
Grown from seedling; on property of A. P. Stevenson, Nelson, Manitoba.

margin. The spots are scattered irregularly over the leaf. In time the blade shows parched appearance and finally the whole leaf becomes black and crisp. The leaves that are parched and dry stand more nearly upright on the crown, the blades that are badly infected become curled and rolled and the whole field assumes a curiously characteristic appearance.

Numerous fungicides have been tried, but the Bordeaux mixture has proved the most efficient remedy for the leaf spot. The standard formula for the Bordeaux mixture should be used, consisting of: Copper sulphate (blue vitriol), 6 pounds; fresh stone lime (unslacked), 4 pounds; water, 50 gallons.

3. The beet scale (*Oospora scabies*, Thaxter) is a fungus that causes the smooth surface of the beet to be disfigured by warty or scabby excrescences. These scabby protuberances are abnormal developments of corky tissue stimulated to excessive growth by the fungus. Sunken scabby spots are also found on the surface of the beet. They are early injuries which, failing to develop, are left as pits owing to the further growth of the beet. The potato scab and the beet scab have been found to be the work of the same fungus, and it has been shown that scabby beets are often due to the fact that the previous season the land produced scabby potatoes. Neither liming nor sulphuring have given satisfactory results, and the only course open is to avoid for the growth of beets any soil which during several years previous has produced scabby beets.

Tompkins Co., N. Y.

W. MACDONALD.

Mangel Growing.

To be successful in growing a crop of mangels, it is necessary, first, to have the soil in good condition; secondly, to give the growing crop thorough cultivation. Excellent results can be obtained by following clover sod turned down in the autumn, top-dressed liberally in the winter season, with not too long stable manure worked into the soil in the spring. But as we have a

TWO-FOLD OBJECT IN VIEW,

viz., of cleaning our ground of noxious weeds, as well as producing a crop of roots, we generally select a field that is needing such a cleaning. This is usually an oat stubble. As soon as the oat crop has been harvested, we plow the ground as lightly as possible, not deeper than four inches, working it down with harrow and roller, so that any seeds that may be near the surface would be in a condition to germinate as a shower of rain comes. This we let lie until after wheat seeding is completed, when we again turn it over with the plow, this time an inch or an inch and a half deeper than the previous time, and work it down as before. It is after this working that we see the good results of our work. The soil being in a high state of cultivation, the weed seeds that may have been turned down too deep for germination at the first plowing are brought near the surface, and are soon showing above the ground in plant life. The field is then left until just before the plowing season closes, when it is covered with stable manure, considerable of which will have accumulated in the yards by this time if the stock have had proper fall care. We apply fifteen to twenty loads per acre, plowing in as lightly as possible, thus destroying all plant life, and placing in good condition to unite with the soil for the coming crop. So much work may seem expensive and unnecessary, but I consider this method better than a summer-fallow for cleaning the land, and much cheaper than so much hand hoeing in the root crop the following season. When our ground has been worked thus in the autumn, we do not plow it in the spring.

SPRING CULTIVATION.

As soon as the ground is sufficiently dry in the spring, we go over the root ground with cultivator, roller, and harrow, which will pulverize the surface, thus holding the moisture until the oat and barley seeding is completed. We then work the ground thoroughly, roll it to make it firm, set it up in drills about twenty-seven inches apart, and sow with a two-row drill, one and a half inches deep, immediately after setting up, thus giving the seed the benefit of all available moisture. The land roller is then run over the drills to broaden the surface and compress the ground.

VARIETIES.

We have been sowing the Mammoth Long Red for four or five seasons, and find them a heavy cropper and good keeper. One year we grew a few of the Yellow Half-Long, and found them not so heavy a cropper, but an excellent keeper. If the ground is in good condition, four pounds of seed will be sufficient per acre.

CULTIVATING THE CROP.

As soon as the young plants can be plainly seen along the row, the cultivator is started, having the shovels reversed so as to draw the soil from the row, which prevents covering the young plants, but, at the same time, drawing away from the row, and to the bottom of the drill, and destroying any weeds, which are so easily killed at this stage.

The thinning which is done by the hoe and hand is quite an important part; this should be finished before the plants get too large, as it requires less labor when they are small, and we almost invariably notice that if the crop had not all been thinned at about the same time, the first thinned yielded the heaviest crop. After thinning, the cultivator is kept going at intervals as long as is practical to keep the soil loose on the surface and to keep down weeds. We generally go through the crop once with the hoes, say two weeks after thinning, and cut out any weeds that may have been missed before. Even after this some weeds may show themselves, which from press of work are often left till after harvest, when, if time will permit, we pull and carry off the field, for by this time the seeds may have set on many of the plants, which, if let go, will undo what we worked for the previous fall.

HARVESTING THE CROP.

The harvesting of the crop we leave as late as is practical and avoid heavy frosts. About the second week in October is a very good time in our section. In pulling, each man takes two rows, throwing four rows into one; these are hauled at once to the root cellar on truck wagons, avoiding frosts that are so frequent at this season of the year, causing decay on the side of the root that was exposed.

By following this method, and with a reasonable rainfall, we are able to secure a large and profitable yield of succulent food that is so helpful in dairying and hog-raising, and which no farmer can profitably do without.

A. W. VAN SICKLE,
Brant Co., Ont.