

Board of Agriculture and Arts.

At the last meeting of this Board, Mr. William Saunders, the editor of the *Canadian Entomologist*, introduced a most important suggestion—that all insect life should be destroyed in all seeds procured at the Centennial Exhibition, before the seeds are sown. Perhaps it might be well to embody a clause in the new Agricultural Act to have all seed wheat imported from Europe or Australia inspected, and insect life destroyed before it is sown in our country. On one occasion we imported several varieties of wheat; in one lot we found an insect unknown to us, eating the heart out of the wheat. We destroyed all but a small quantity; this we put in a glass bottle, expecting the insect would change into another form, cease work and leave some grain, but every kernel was destroyed in the bottle. Prevention is often better than cure.

There was an attempt made to reduce the number of members now on the Board. This is a step in the right direction. It is our impression that the number might be reduced one-half, and the work devolving on them be just as well done. In fact, five directors would do the work just as well and in less time.

The New Agricultural Act.

We have been favored with a copy of the new Act introduced into the Ontario Legislature by the Hon. Mr. Wood. There are but very few alterations from the old Act; the principal alterations are to establish a Veterinary College at the Government Farm in Guelph, to increase the grant to the Dairymen's Association to \$2,000, and to fix Belleville and Ingersoll as the two places where the annual meetings must be held.

Perhaps it might be well to insert a clause to allow district and township societies to award a portion of their funds for the best cultivated farm; also for the encouragement of planting trees. It might be well to have proper regulations to prevent the spread of diseases among our stock, and insects among our grain, from injudicious importation. Perhaps it might be as well to allow the dairymen to hold their Convention and fairs at other places, as the interest is extending.

The Garden.

As many farmers are now in a position to have hot-beds and frames in their gardens, a few hints regarding the preparation and arrangement of hot-beds, and the growing of early vegetables, may not be out of place.

LOCATION AND PREPARATION OF HOT-BEDS.

A south-western exposure should be selected, protected from the north wind by the side of a building, board fence or hedge. Then excavate the ground about two feet deep and eight feet wide, and long as required, allowing three feet for each sash. Gardeners in this latitude start their hot-beds from the 15th of February to 15th March. When started early, more manure is used, so that enough bottom heat may be supplied to keep the young plants growing until mild weather sets in. Commence by putting a layer of cold horse manure about eight inches in thickness on the excavated surface. Begin at one end of the intended bed, and be careful that this first layer, as well as all succeeding ones, is spread evenly. Then add a second layer of hot manure, of about the thickness of the first. The mass may now be trodden down by walking on top of it, keeping the feet close together. Another layer of hot manure may then be put on, the frames placed in position, and pressed down firmly. Add another layer of fine manure, ten or twelve inches in thickness, inside of the frames as a finish, and put on the sashes. The beds being eight feet wide, and the frames

only six, there will be a margin of twelve to sixteen inches outside, which should be banked up with manure as high as the top of the frame. Frames may be made of common boards nailed together, with a post in each corner for a support. They should be five feet ten inches wide from front to rear, and as long as desired—the front board twelve inches high, and the rear eighteen to twenty-four. The frames, when made, should stand level on the bottom, forming an inclined plane on top; so that, when the sashes are on, there will be enough fall from rear to front to cast the water readily. Cross ties six feet long, made of narrow strips of boards, one by three inches, should be mortised into the front and rear boards of the frames every three feet. These will support the sashes and strengthen the frames. Sashes can be bought from any sash manufacturer. They should be well constructed of seasoned wood; if not, the heat of the beds will warp the wood, and displace and break the glass. The narrow lights of glass 4 x 6 are preferable. These should be cut curved on the lower edge, so that the water will run off in the middle of the light in single drops, and not form lenses, which would likely scorch the plants. When the beds are finished, as stated before, the sashes are put on at once and covered with straw mats. In case the weather is pleasant, the mats may be taken off for three or four hours the next day. Two days from the time of making, under ordinary circumstances, the earth may be put on. This should not be done, however, until the manure is well heated inside the frames. Six or eight inches of leaf mold, or good garden soil free from stones, will answer. Two or three days from the time of putting in the earth the seed may be sown. Select a pleasant day, and remove all the sashes and mats. Unless the soil is very rich, a handful of bone-flour or superphosphate should be sprinkled over each light. Then turn the earth over with a digging-fork, and rake the surface level. For, if left slanting, the frequent watering will wash the seed from the upper or rear part of the bed.

Make shallow drills from front to rear, two inches apart and about three-quarters of an inch deep. Sow the seed in these drills, and cover lightly by sifting earth over the bed until the surface is again level. Each kind of seed should be sown separately, and labelled at the time of sowing. Replace the sashes, and toward night put on the mats. Except in very old weather, the mats should be taken off daily, about nine or ten o'clock in the morning. The secret in growing strong, stocky plants is, when they are well up, to give an abundance of air at the right time. For instance, if the sashes are opened soon after removing the mats, the chances are that the young plants will be injured by what gardeners call "damping off." While the plants are young, no air should be admitted into the beds for at least one hour after the mats have been removed. Each succeeding mild day more air may be given to the plants, to keep them from growing spindling.

Early varieties of cabbages can be started in hot-beds this month, and the young plants transplanted into other beds in March. They will be large enough to set out in the garden in April. Jersey Wakefield, Oxheart, Early York, and Winningstadt are popular varieties.

Cauliflower may also be sown this month in a hot-bed, and transplanted once or twice before planting in the field. Early Paris and Early Erfurt are reliable early varieties.

Cress or Peppergrass can be sown in hot-beds in succession, two weeks apart, until the weather is mild enough to set in the open border.

Lettuce sown in a hot-bed about the middle of the month will give plants large enough to set out

in the open ground in the latter part of April. Paris White and Green Cos, Malta and Drum-head cabbage, are the best kinds.

Radishes sown now in the hot-bed will be ready for use early in March. For successive crops sow a fortnight apart. Early Scarlet Turnip, Short Top Long Scarlet, and Scarlet Olive Shape, are the best varieties.

Tomatoes sown now would require to be twice transplanted into other frames before setting out in the open field. Each time they are moved from one bed to another more room is given in order to produce stocky plants. General Grant, Trophy, Hathaway's Excelsior, and Canada Victor, are good varieties.

Seed Wheat.

The demand for a new and reliable variety of spring wheat is so great that many farmers are ready and willing to pay any price for anything that has a slight chance of proving successful, and even for some that the chances are against them. One farmer we hear of has purchased twenty-six bushels of the old Egyptian, at \$12 per bushel; and many others we hear of have purchased lots of five and ten bushels at that price. These sales are effected by traveling agents. The wheat is called by them the Eldorado. The accounts about it are conflicting; some give it great praise, others condemn it. The Fife Glasgow or Scotch wheat is still preferred in some localities, in others it is abandoned for more profitable varieties. The Chilian wheat is only fit to sow in wet land; the quality is very inferior. The Rio Grande is not a favorite, but few continue to sow it. The Farrow, or Red Chaff, has been yielding well; farmers have been pleased with the number of bushels they have had of it, but the millers say it is the worst wheat we have ever had in Canada. It must reduce the value of spring wheat and flour, as one hundred pounds of flour made from the Farrow, or Red Chaff wheat, will make ten pounds of bread less than flour made from the Fife, or other spring wheats. This is an important statement, and one that should cause farmers to prefer another varieties. The Odessa wheat in some localities has surpassed any other variety, and a great point in its favor is, that every person that we have heard of having any of it has disposed of all they had for seed, both in Canada and in Michigan, that being the State from which we have heard the first report about it, whose crops have suffered from the great drouth, so we doubt if and really good, plump seed of that variety will be procured this year.

The Minnesota wheat has been sown to some extent during the past two years. The success of those who have sown it has been such that a much greater breadth of it will be sown this year. The change of seed from that cold climate has been beneficial to the crop, and to the quality of grain raised here. The Minnesota is no new variety, and is often mixed. Notwithstanding, this the farmers that have sown it appear well satisfied with it; many have sold their entire crop for seed. The Minnesota and Manitoba wheats are the same variety.

The Red Fern is of excellent quality, well liked by millers, and in nearly every instance it is commended. Some claim it to be midge-proof; we will hardly endorse that statement, but believe its power of resisting the attacks of the midge to be greater than that of any other variety of spring wheat.

Scores of letters have been sent to this office enquiring which is the best kind of spring wheat to sow for a main crop. To enable us to answer this question more correctly, we wish each person who