

On the Wing.

The week previous to the Provincial Exhibition we took a trip to Jackson, in Michigan, to see the State Fair which was being held there. The farms along the line of railroad were very similar to good farms in Canada, except that corn was grown much more extensively. We passed through a good deal of good land; this had formerly been timbered land. The farmers appeared to be in a thriving condition, superior to Canadians in poor sections, not equal to Canadians in good sections. Good farms could be had at \$40 to \$50 per acre, and any Canadian could live and thrive there just as well as in any part of Canada where the land is of a similar quality.

THE MICHIGAN STATE FAIR

was a good exhibition; in some respects it surpassed our Provincial Exhibition, but as a whole the display was not near equal to ours. We will mention in what respects they surpassed our exhibit. They had a very fine row of willows and a fine clump of various kinds of trees, that afforded shade to visitors. The eating and drinking booths were unobtrusively placed in the background, leaving the main space for useful exhibits.

There were several large and very fine exhibits of chilled-iron plows; these are all much shorter than the plows used in Canada, and have a much higher finish. The Percheron horses were out in large numbers, and race horses were largely represented. Merino sheep and Poland China or Magie hogs were better represented than with us. There were six combined reaping and binding machines, one of which used string; all the others used wire. There were eight different kinds of wind pumps. An agricultural steam engine was shown that would propel itself; this engine is used for threshing; horses have to be attached to guide it when traveling. The application of steam is used on bad roads or on hills; the appliance adds only 200 lbs. to the weight of the engine.

In the quantity or quality of the display made in all other departments we consider our Provincial Exhibition far superior to it. We were much astonished at the prejudice of many Americans in lauding their exhibition as superior to Canadian exhibitions, and the manner in which they tried to disparage Canada, its products and capacities.

The accommodation for visitors was increased by some of the religious denominations opening their churches. They fitted up their school and lecture rooms with beds, and used an adjoining department for cooking. They charged only a moderate sum, 25 cts., for meals or beds. Many were comfortably accommodated, but the rush was so great that the pews were all let, and many hundreds were turned away bedless. The galleries were reserved for ladies; we heard that \$3 per bed was asked. The churches opened were good, large, handsome, well-finished edifices, carpeted and cushioned. Substantial meals were served. One church made \$1,300 above expenses last year; this year it was expected that even better returns would be made. Some who have used churches for a worse purpose than for dormitories will draw a long face when they read this.

The Cultivation of Out-door Grapes.

The first name given to Canada by Europeans, or that part which was first discovered, was Vineland. The name was given from the number of grapevines seen growing wild in the woods, and bearing clusters of grapes as they do at present. Where a plant or fruit is indigenous to a country it may be reasonably expected that it is well suited to the climate, and that its cultivation will be successful. So it is with the grape in Canada. They require, it is true, protection in winter, but with it, and due care, out-door grapes can be grown in a great part of the country, and pay a fair profit.

We see no reason why we should not raise our own grapes, as we do most other fruits.

Grapevines require a rich, dry, mellow soil; if it be naturally retentive of waters it should be drained. It needs no deep trenching as was at one time usual; twelve inches of good, well-prepared soil is sufficient, but a cold damp soil is unfit for their growth; they will perish if their roots penetrate it. With due care there is no more uncertainty of growing good crops of grapes than crops of gooseberries or currants, and the required care is not greater.

We are pleased to see the culture of grapes increasing in the country. The more the value of a grape crop is known, and the little difficulty of growing, the more its culture is sure to extend. Grapes always command a good price in market, and we do not see why farmers should not be able to treat their families to a cluster of grapes in the season. There is no handsomer fruit; none more pleasing to the palate. And there is no other fruit so healthy; for some it is better than any medicine. The grape cure is very highly spoken of.

Grapevines are, as a general rule planted in May. Last May we transplanted a vine, not less than six years old, and it is now heavily laden with fruit. From the *Germantown Telegraph* we take the following extract on the cultivation of out-door grapes:

"First obtain a vine of both the Concord and Telegraph, or any other that may be preferred. We merely mention these two because they are very hardy, productive and good. Plant them in dry, rich soil, which is somewhat elevated; plant shallow, spreading the vines out, and firmly pressing the soil down. If there should be no trellis or high open fence, set the vine at the gable end of a barn or any building, in a southwest exposure, observing the conditions named as to dryness and richness of soil. Train the main branches, fan-fashion, as low as it can be well done, securing the branches with twine to nails driven in the walls or weather-boarding. Care must be taken to prevent the vines from running too high, by sharp pruning, both when growing or in any of the winter months. This will cause the vines to bear fruit low down, otherwise the vines left to run at large will bear only at the tops and the fruit will get smaller year after year until it becomes worthless. Running vines up trees, as it is sometimes done, is not to be recommended for the following reason: They will bear fruit enough at the top, where it would be difficult to gather, and not good for much when gathered.

We have seen excellent crops of grapes grown along a five-foot open fence, with the vines trained just as we recommend. There was not a vine over six feet about ground, but they were carried low, fastened to the fence for some ten or twelve feet, and were loaded with fine bunches. And this mode had been pursued for years with uniform success."

South American Trade.

The first steamer of a new line to be engaged in the South American trade leaves from an American port on October 1st, 1877. Such is the announcement in a Western journal. This steamer is large, staunch and first-class in all its outfit for passengers and freight. This line of vessels will open up to the Ohio and Mississippi valleys a large and growing trade. From that section of country the exports of flour, lard, hams, butter, onions, potatoes, corn, starch, beer, machinery, furniture, clothing, &c., will be met by imports of coffee, indigo, cocoa, hides, dye stuffs, and in fact all the products of South America.

Why is it that there are no similar departures from Canadian ports? Such a reciprocal trade as that now inaugurated between the Western States and South America is what Canada so much needs. Almost every article of Western produce mentioned can be supplied of as good, and in most instances of better quality, and on as good terms from the Dominion. South American markets are as free to the merchants, manufacturers and seamen of Halifax and Montreal as to those of Western ports.

Entomology—Birds and Insects.

The acquaintance with insect life and habits, and the ability to distinguish those that are detrimental to our interests, from such are really serviceable, becomes every day more apparent. It is well for men that are left to contend, unaided, with the innumerable destroyers of the fruits of the fields and garden, and it is well to know which of the insect tribes and of birds aid us in the diminution of those which are destructive at all times, and in some years destroy the products of large tracts of country, and change a fertile country to a desert.

Many families of birds are our most efficient allies in our increasing contests with our insect enemies, and of small birds none are more so than the Thrush family; and foremost among them is the Robin, though there are some people who would fain dispute its just claims as our friend and ally.

Specimens of these species, which have been examined in April, had been feeding upon earth-worms, wire-worms, beetles and their larvæ, with other insects, and dried barberries. This latter article was only found in the stomachs of individuals which were taken during a severe snow-storm that occurred on the 8th of the month, 1868; when it was almost impossible for them to procure anything else. May finds them taking almost the same food, excepting the barberries. In June, July and August, they add grasshoppers, cherries and berries to their bill of fare. It cannot be doubted that the Robins eat large quantities of the small fruits of the season, but an observer says in their favor that in only two instances, out of many, has he found that they had eaten them to the entire exclusion of insectivorous food. During September, October and November they subsist almost wholly upon insects. What few remain through the winter, feed principally on the worthless berries of the cedar, savin, mountain ash, etc. Thus, although there is much in this record in disfavor of the Robin, with such an array of facts before us, proving their general usefulness, we cannot condemn them. It is of much importance whether this species is protected by law, or not; for being an unsuspecting bird, it would rapidly become scarce if everyone who, perhaps without reason, chances to take a dislike to it, should shoot it; and as it usually builds its nest in prominent situations, without concealment, the work of extermination would be hastened if every little urchin were allowed to take its eggs whenever they choose.

Deep Subsoil Culture.

One of the questions most intimately connected with improvement in agriculture is the deep cultivation of the soil; and like many other subjects of the greatest moment in agriculture, the difference of opinion on the depth to which the soil should be rendered really available for affording plant food is a matter of dispute. Let eight inches be the minimum depth of your plowing, and in some cases two to four inches additional depth is still better. This is the advice given by many, and persistently carried out by some; while, on the other hand, the advocates of shallow plowing plow merely the shallow surface, and tell us that in it lies all the germinating and nourishing property of the soil. Turning up anything more they say injures the growth of the plant and diminishes its productiveness.

The sub-surface may, we admit, be sterile, and consequently, burying beneath it in its unimproved state the richer surface soil would be a very unwise act, and one that no practical farmer, if gifted with common sense, would do. He would so till the land as to obtain a present paying crop from