

applied, and it will entirely destroy this troublesome enemy." In England, the best results have followed the practice.

On Calf Milk Cows.—As these useful animals will now be bringing forth their young, it will be necessary to increase their provender. In addition to their hay, fodder or straw, as the time draws nigh for calving, they should receive slops made of some kind of meal, bran, or roots. By such attention, the cows will be enabled to sustain their approaching new relations, in strength and vigor, and come to the pail in freshness.

Breeding Pigs.—As this is a trying month with these, they should be allowed, each, a gill of meal a day in addition to their long feed, and should be regularly salted.

Root Crops.—As potatoes have become a precarious crop, it would be well for farmers to turn their attention to the growth of Beets, Mangel Wurtzel, Carrots, and Parsnips, as a substitute for the root. The cultivation of these latter roots, cost but very little more than potatoes, and if properly managed will yield much more to the acre. Carrots especially may be raised in Canada with great advantage. They are considered to be worth twice as much as turnips for fodder. In England and in the Eastern and Western States, they are extensively cultivated. They are very fattening, and should either be boiled or steamed. A good crop is 600 bushels, though Col. Meacham succeeded in raising 1000 bushels per acre for several years. He estimated the cost at \$35 per acre. The best field kinds are the white, the long red and the orange, of these the white is most prolific and valuable. The carrot will grow best upon a deep dry sandy loam, and require the land to be ploughed very deep, and manured, and kept clear of weeds. The amount of seed is about 4 or 5 pounds the acre, and should be steeped some time, and sown early, in drills one inch deep and one foot apart. It is said they leave the land in an admirable state for wheat.

Orchards.—These should be pruned of all dead or superfluous limbs. Cut into the sound wood and make a smooth surface; cover the wound with a composition made of one part lime, and one part fresh cow dung, made into the consistency of mortar, or made thus—one part resin, one part beeswax, and two parts pitch, to be well melted together. Spread this warm on a piece of maulin, or coarse paper, and then apply it to the wound.

Young fruit trees should be transplanted early—the sooner the better. In planting out a young orchard, every care should be taken. The hole should be dug wide enough to allow the roots to be spread out and much deeper than needed; the hole must be filled up to the proper depth with a mixture of equal parts of forest mould, and the soil taken out, then put in your tree, have it held straight, fill up with a mixture of forest mould and surface soil, which must be trodden around the tree as the filling up is going on. The young tree being planted, a stake must be driven down, and the tree tied to it with a whip of straw. Then pour water on the newly filled in earth to make it settle, and fill up even with the surface. To maintain moisture in the earth, it will be well to place some long manure around the tree; but should the weather be very dry, the newly planted trees must be watered at least twice a week until they take root and begin to grow. It would also be well to sow a mixture of equal portions of lime and ashes for several feet around each tree. In planting out a young orchard, be sure to get the best kinds of fruit and to buy from a responsible, conscientious nursery man.

Ornamental Trees.—If you have not shade trees around and in front of your homestead, delay no longer, but plant them next month. A country house without such sources of comfort, however stately in its exterior, and convenient in its interior arrangements, bears the aspect of desolation.

Fences.—Examine your fences, and give them thorough repairing—and have the entrance to each of your fields supplied with a good set of bars or gate.

STRAW-CUTTER.

In our second number we gave a cut of a new straw-cutter, made by Beckett and Phillips, of this City, and advised those wishing to purchase to examine it. As we are anxious to avoid every thing like deception, and shall to the best of our ability exhibit the defects as well as the merits of whatever comes under our notice, we must state, in reference to this machine, that it requires some improvement before the public can safely purchase it. We pointed out to the maker what we believed to be its imperfections; and a more complete trial proves that we were correct. Two have already

broken to pieces, in consequence of one of the defects we mentioned, and until it is remedied, others will be apt to meet the same fate.

TO AGRICULTURAL SOCIETIES.

We have been induced to make an offer to the members of these useful societies, which we trust they will generally accept. By representations from some of our Agents, we are made to believe that by holding out to the Agricultural Societies of the country advantages greater than to the public generally, we shall get more subscribers, and enlarge the field of our operations. We therefore, put our paper down to the very lowest price at which it can be printed, without regard to our own labour and loss of time. And as we have already stated, we shall not continue the publication more than a year, unless adequately sustained by the public, we wish to make every reasonable effort to test their willingness to support us. We offer to Agricultural Societies 12 copies for \$10. If more than 16 copies are ordered, they shall have them at 3s. 9d. per copy! We challenge British North America to produce a paper, containing an equal amount of original and other matter, of equal merit and of such general usefulness as this, at so cheap a price!

None of course but members of Agricultural Societies can be supplied at these rates.

DRILLING WHEAT.

The practice of drilling grain of various kinds, and especially wheat, which has been carried on in England for the last few years, and every year to a greater extent, has advantages the knowledge of which may probably lead to its more general adoption in Canada. Some of the principal advantages of drilling are the facility which it affords for getting rid of noxious weeds, giving an opportunity to cultivate the land between the drills with a horse-hoe, and allowing the air to circulate freely through the whole crop.

With us the rate of labour is too high to warrant the employment of the hand-hoe, and when any is used it must be the horse-hoe; which would go over a crop of wheat, passing between each drill, with about half the labour of ploughing. A friend of ours, on whose authority we feel it perfectly safe to rely, has stated to us the result of an experiment of drilling, which was made in England. Drilling, he observes, is too common there to be looked upon in the light of an experiment, unless the mode of it differs from that ordinarily pursued. So it was in this case. The drills were about twice the usual distance apart. 12 or 20 inches, our informant states. The drilling was performed at the time of ploughing, with a small barrow drill, the seed being deposited in every alternate furrow. When the wheat was a few inches above the ground, a horse-hoe was used between the rows: before the crop got too high this process was repeated. The crop looked unusually thin, but on being harvested and thrashed, the yield was found to be 60 bushels per acre.

The abundance of the crop was attributed to the complete mastery gained over the weeds; the good effects of cultivating the land between the rows with a horse-hoe, and a combination of other advantages which could not have been secured without drilling.

A CEMENT OR GLUE.—Dissolve five or six bits of mastic in as much spirits of wine as will make them liquid. In another vessel dissolve as much isinglass (previously soaked in water till softened) in rum or brandy as will make two ounces by measure of strong glue; add two bits of galbanum or ammoniacum, which must be rubbed or ground till dissolved. Mix the whole with a sufficient heat, and keep the composition in a bottle well corked. When to be used, set the bottle in hot water. An excellent cement.—[Gardiners' Chronicle.]

PROCURE GOOD SEED.—Spare no pains in obtaining the best seed. It is better to pay twice the usual price for an extra article, than to plant or sow that which is bad. If your corn or wheat is obviously degenerating, or

from any atmospherical contingency, operating upon the crop, is but imperfectly developed, or infected with disease, do not think of using it as seed. Such a course would be to ensure inevitable perplexity and ultimate loss. Whenever your wheat or grain of any kind becomes unfecund on soils which should ensure a good yield, the only course is to exchange it or substitute a better. This is to be accomplished by purchase, generally, and, when facilities afford, of seed raised at a distance.—[Agriculturist.]

KEEPING EGGS.

A friend who has had no inconsiderable experience in the business informs us that he has tried many methods for preserving eggs, but that the following has proved the most effectual. Take a cask or box, or any vessel that is proportioned in size to the number of eggs required to be kept, and cover the bottom with finely pulverized salt. The eggs are to be set on the small end, and so near as to touch each other, and the interstices to be filled with salt, the whole to be covered with a stratum of the same article, and another laying of eggs deposited in the manner of the first. In this way the cask may be filled. If the eggs are deposited on their large ends, the yolk will adhere to the shell, and become putrid. We have tried the above on a small scale, and find it to work admirably. A correspondent, to whom we some time since communicated the above method, and in whose statements we place the most implicit faith, in a letter to us, recently received, remarks as follows:—"I have adopted the plan recommended by you, in keeping eggs, and find it to answer admirably. I have now several dozen eggs which were packed one year since, and which are now as sweet as when taken from the nest."—[Maine Farmer]

MANAGEMENT OF YEARLINGS.

To those who have the time to attend to it, we say, stable and tie up your yearlings, both steers and heifers; curry or card them at least once a day, and if you can afford them a few roots so much the better. Such treatment makes young cattle tame and docile, and you will have no trouble in milking them when they have calves, and if intended for family cows, they may be made to eat all kinds of slops and other rubbish from the kitchen. The steers also should be broken the winter after they are a year old, and for this purpose the farmer wants his small yokes, sleds, chains, and whips—the latter to be used very sparingly. Break steers well at this age, and there will be no trouble in doing it when they become oxen.

TOOLS FOR BOYS.

Has your father a carpenter or a blacksmith's shop upon his farm? If not, get him to build one of each immediately; and whenever he hires a carpenter or a blacksmith to come and do his odd jobs, be sure you go in and look on and help until you get the use of every tool in each shop. You will be several years in doing this, so don't be discouraged if you can't do all your little work to please yourself at first; your hand-sleds, your steers' sleds, and steers' yokes, Martin-boxes and hen-coops you ought to make yourselves, together with many other things; and then there are the farming tools—all ought to be of a size suited to your age, and of the best quality. Some fathers turn off their boys with old worn out tools; this is wrong, you ought to have a little scythe and a little axe, both very sharp, and then you ought to be taught how to keep them so; and also how to use all your tools skilfully. Never slight any kind of work, but do it well, and if you can not keep up with older persons laboring in the same thing, they ought to help you rather than let you lag behind. Never indulge in lazy spirit; your father or guardian will see that you are not over-worked, and will always give you sufficient time to rest and go ahead with your studies every day; yet you will do more work than those dull-heads who neither read or study at all. Farming work, above all others, is the best to make boys grow, and gives them strong and vigorous constitutions.—lb.

From the Maine Farmer.

THE SUNFLOWER.

Those who are the most experienced in the cultivation of this plant are sanguine that, with a proper soil and proper cultivation, it is more profitable than wheat or corn. The seeds are more oleaginous than those of the flax plant, and combine the qualities for table use of the best olive oil; for burning, of the best sperm, without its smoke; and for painting it is said, by painters who have used it, to be superior to linseed as it is more rapid in drying, equally easy in spreading, and without forming a much denser coat. Prepared and eaten as artichokes, the young crops of this plant are very esculent and pleasing to the palate; the stalks are an ex-

cellent substitute for hemp or flax, and for bee pasturage it is equal to any plant, yielding, in its luscious and numerous nectaries, and abundance of the best and most palatable honey. A writer in one of our agricultural exchanges, says that, on suitable soil, with proper cultivation, it will yield, on an average, from eighty to one hundred bushels of seed to the acre. From five to seven quarts of oil are calculated on, per bushel. If this is not over-estimating its productiveness, and it can be raised as cheaply as wheat or Indian corn, ordinarily considered the most expensive crops cultivated, the sun flower must be a very profitable production. We have, heretofore, cultivated it on a small scale,—usually in vacant spots, by the fences and in places where the cultivation of other vegetables was ineligible, and so far as our experience goes, it corroborates the above assertions. We find that the green leaves are very excellent fodder for cows, especially when the feed in our pastures gets low, in seasons of scarcity and drought. We generally commence plucking them in July, taking the lower leaves first, and feeding them out at night, or, if the scarcity of food is great, in the morning before turning them from their yards. We have sometimes given them corn-toppings and the leaves of the sun flower at the same time, and have found that the latter is invariably preferred. The seed of the sun flower is a most desirable food for poultry, its highly oleaginous nature wholly superseding the necessity of animal food.

NAVIGATION LAWS—EFFECT OF THEIR SUSPENSION ON THE NAVIGATION OF THE ST. LAWRENCE.

We observe considerable anxiety expressed both by the people of Montreal and by our neighbours in the Western States, as to whether the late suspension of the Navigation Laws will operate so as to allow foreign vessels to pass up and down the St. Lawrence, upon the same footing as our own. A correspondent of the *Cleveland Herald* asks the following questions:—

Will you or some of your Canada friends inform us what will be the effect of this [the suspension] upon the navigation of the river St. Lawrence? Will it be thrown open to the free ingress and egress of our vessels? Will you tell us whether, in case the river should be open, it will be practicable for our vessels to pass through from Lake Erie to the Atlantic?

As this is a subject of considerable importance to many of us, we wish to get all the information we can.

Nemo.

Upon which the Editor remarks:—

We are not able to answer the important queries of "Nemo," and should be glad to see the opinions of our Montreal cotemporaries. Should the suspension of the Navigation Laws open the St. Lawrence to American vessels, we understand that some of the new vessels building here this winter will clear for Liverpool in the Spring, laden with provisions.

Those persons who talk so much about the debt we have contracted by our Canals and Public Works, and are wondering how we are ever to get rid of it, may derive some assistance from a consideration of the above. It appears from the extract below, that the Attorney-General East is as much in the dark on this subject as the people of Ohio. The Montreal Board of Trade addressed the Inspector-General for information on the subject.—"Whether foreign vessels will be permitted to ascend the St. Lawrence to the Port of Montreal for the purpose of taking on board cargoes of the Bread-stuffs specified in the Statute." The Inspector-General asked the opinion of Mr. Attorney-General, who replied—

"That the Provincial Authorities have no power to extend in any manner the operation of the law. If the Imperial Statute does not give the power to foreign vessels to trade to the Port of Montreal, the Provincial Government has no authority to grant permission to do that which it would require express authority by the Statute itself to do."

This is certainly a lawyers answer. It leaves the Board of Trade just as wise as they were before. "If the Imperial Statute" permits foreign vessels to come up the St. Lawrence, they can do so! As to the power of our Government in the matter, we all knew it had none. It would seem that the terms of the Statute are not known here yet, or the difficulty could be easily removed. It is a question in which we are all interested, the farmers of the country especially, and we hope it may soon be settled.