

getting such information that will be of benefit to your business.

In figure 1 we have a representation of a handy fruit ladder of which there should be several in every orchard, of simple construction which will be readily perceived in the cut, made out of a scantling or larch pole with oak or ash rungs, let through with an inch augur. The pole should be morticed into a piece of any convenient size about 3 feet long to act as a foot or support to keep the ladder steady.

For immediate shipment the fruit should be carefully assorted, rejecting all small, uneven or injured fruit. Place a layer evenly in the barrel setting the fruit on its base, then fill in carefully



Figure 1.

till barrel is full, occasionally giving it a shaking so as to settle the fruit solid, put the fruit an inch over the edge of the barrel, set the lid on it and use the screw as illustrated in figure 2, occasionally tapping the lid or outer edge of the barrel as it may require till you press the lid to its proper place; nail on your hoop, remove your screw, mark the quality of fruit enclosed whether XX or XXX and the name of the kind. Thus by becoming familiar with packing of fruit, if the market does not suit you, and you have a knowledge of the kinds you grow. You may store away the fruit already packed ready for shipping when it becomes profitable to do so.

Plants that have been layered will require some



Figure 2.

water if the weather is unusually dry, and at present it is extremely so; water and mulch will be their only salvation, giving greater root and leaf growth.

Ornamental climbers—We presume every cottager and the one flower lover in the family has their usual stock of morning glories, scarlet runners and other annual climbers, but they require renewing every season, and a little variety is more pleasing. The Clematis Gravoleus is perfectly hardy, of a very luxuriant habit with yellow flowers succeeded with silky clusters of seeds which look very pretty. The Virginia creeper, another old favorite, will grow any where and is unrivalled for covering brick walls, fences and unsightly nooks; its rich purple and crimson leaves in the fall is one of the glories of the season.

Ferns—These lovely inhabitants of the woods can easily be transplanted to grow around our doors; they will thrive in any shady corner where anything else would not grow at all. Collect some rocks, old roots, make a compost of leaf mould and loam, stick in the rocks and roots with a careless regularity, allowing for the effect when the foliage of the ferns is at its height. The present month or the next will do, but secure them ere the foliage is gone so as to have a good contrast of foliage and variety. Nothing will furnish so much pleasure as a nice collection of ferns, their leaves working nicely into bouquets, or dried serve for ornaments for winter decoration.

Planting—As the season arrives it is well to remark that the relative advantages of fall and spring planting are about evenly balanced. Failures follow all seasons. How to plant is of far more importance than when to plant, and the selection of stock to plant, of more importance than the time it is done. To those who have ordered trees for planting this fall or who intend ordering try and plant them as early as possible; from the 15th October till 10th of November will be found to be a safe time.

Dutch Bulbs, such as Tulips, Hyacinths, &c., should be planted during this month, selecting a favorable location neither too dry or wet. Dig in some well rotted cow dung and sand, set the bulbs about 4 inches underneath the soil, cover over with a mulching to prevent upheaval by frost, removing early in spring. Your labors will be rewarded by a showy bed of flowers to your satisfaction and the envy of your neighbors.

Every farmer and gardener should keep a diary of their operations on their place, taking notes of the time of seeding and planting, treatment and cultivation and other items of interest. It will be found useful in the season's round as a book of reference regarding their failures and success.

Canadian Cattle for English Markets.

The export of Canadian beeves to England, instead of falling away as was feared by some, is steadily increasing. For the prosperity of our farmers and the improvement of agriculture such measures were a matter of necessity. Fattening large herds of good stock implies good farming, but if our sales be confined to Canadian or American markets the price they bring is so low that the results of shipments now being made will encourage many capitalists to engage in the trade. One day we find a report of a shipment of 100 head of cattle, weighing on an average 1,300 lbs. each, bred and fed in Ontario, and designed for the Liverpool market; to be followed with 100 head shipped per steamer Waldensian; and shortly after a shipment of 200 head. The shippers consider it an established fact that the trade of Canada with the United States is now at an end, but that a trade with the Mother Country will confer a benefit on the farmer. Prime beef has been sold off the Government Farm at Guelph at 4½ cents per pound—one-third the price now paid in the country markets of Ireland. With a demand from England, prices here must improve, for generations. They say: It is an imperative duty that the improvement of our stock farms should go on rapidly, so that we may successfully compete with our neighbors, and have the weights necessary to fulfil the wants of the English markets. If this is not done we shall be overrun with an inferior grade, for which it will be impossible to find a market.

The Liverpool Daily Post of Aug. 2nd says:—The cattle trade with Canada is now considered established. Mr. Franklin and other importers left Liverpool highly satisfied, and will return with large shipments. The steamer Lake Megan-

tic, from Quebec, is expected immediately at Liverpool with ninety-nine head on board. The steamer Thames is expected to arrive in London on Saturday, with another large batch, all consigned to a Liverpool dealer. One of the Allan Company's steamers is also expected to appear in Glasgow in a few days with cattle on board. Engagements have been made with the Allan and Beaver lines to convey cattle to England until the close of navigation.

With such tidings reaching us regularly, we have every ground to anticipate greater prosperity in agriculture. This season furnishes additional proofs of the precariousness of farming, as a mere growing of grain, being remunerative in Canada for a succession of years; and the market of the states we may look upon as closed against our products by a prohibitory traffic. But the market of England is open to us, and the success attending the shipping of our fat cattle solves the twofold problem, where the Mother Country can obtain a supply of meat and where the Dominion can dispose of her well fed beaves.

Chemistry of the Fattening Process.

In an article on this subject, in the *Journal of Chemistry*, the writer arrives at the conclusion that the cost to a farmer of fattening an ox is much greater at the close of the process than at the commencement, and adds that if a farmer consults his money interests he will not carry the increase in fat beyond a certain point, provided he can turn his partially fattened animals to fair advantage. It is true that the pounds of flesh added to the animal in finishing the fattening process, are gained at a greater outlay for food than the same weight added to the carcass at an earlier period of its fattening; nevertheless, this increased expenditure pays the greatest profit by the increased price per pound that the better fattened beef brings. It is the few additional pounds weight that the feeder looks to to pay for the increased outlay; it is the number of shillings per hundred weight that are obtained—not merely for the few pounds—but for the whole carcass. The following is the article referred to:

A lean cow or ox is in a very different condition, chemically considered, from fat animals of the same kind. In the first place, the poor animal consists of about two-thirds water, the fat one of only half, that is, in total weight. A fat animal is in a dry condition; a poor animal is like some of our bog meadows, very wet. When the fattening process begins water commences to disappear, and fat or suet takes its place; and the increase in bulk during the process is largely of adipose matter. It is a curious circumstance that during fattening the proteids, or nitrogenous compounds, increase only about seven per cent., and the bone material or inorganic substance only one and a half per cent.

The cost to a farmer of fattening an ox is much greater at the close of the process than at the commencement, that is, increase in bulk or dry weight at that period is much more costly. If it costs three cents a pound for bulk for the first month after a poor animal is put in the fattening stall, it will cost five cents the last month. If, then, a farmer consult his money interests, he will not carry the increase in fat beyond a certain point, provided he can turn his partially fattened animals to fair advantage. Farmers have perhaps learned this fact from experience and observation, and hence comparatively lean beef abounds in our markets. Whilst this is of advantage to the farmer, it is very disadvantageous to consumers of the beef; for the flesh of a fat animal in every case is much richer in fixed, nourishing material than that of the lean, and it is never good economy to

purchase lean poorest parts lean one. contains from more fixed m in a lean on piece in the in nourishing, proves very considered, its value is i

We know there is such Every farmer them would cost. They Stable land by it as by the expens of Guelph, Gang Ploug showed us a tion. A g were satisfi that had contained o ordered by already att and must s he offers to If they are may return the Center cultural ex

The ploughing two thous first paten

From 1s of 109,870 John for feet of dea goods. I with a m 49,000,000 were by 5 increase is

The res not be farmers Patrons and hold of intere whatever whether ings mus items of Colonial Leagues,

James asked, V plied, si cussion o economy A societ break do meet for

R. M condition his fath the gra could r wheat v proving He four