

mon caterpillar; whose depredations are worse than their forerunners,—they deposit their eggs on any part of the trunk in straight rows, and as they feed on the leaves singly are difficult to destroy. The only method is to spread cloths under the trees, shake them off, gather them up into the cloths, and destroy them. It would be beneficial to the country, if a law were enacted to compel every owner or occupier of an orchard, to clear it of caterpillars, as they are of such migratory habits that one careless gardener allowing them to accumulate will infest a whole district and eat up every green leaf like a plague of locusts.

The best mode of obtaining fruit trees is to select them from a good nursery where the sorts of fruit can be depended on; as they can be had many years in advance of raising them, the difference of three to five years of fruit, (when in a bearing state) will compensate for the expense of the first cost. The extensive orchards still in a natural state in many parts of the province which only bear worthless fruit, might be productive of a vast quantity of fruit of excellent quality if judiciously headed down and properly grafted with a good selection of fruit.

Fruit should be gathered in dry weather and carefully hand-picked, even the pressure of the fingers on some sorts in the act of falling from the tree occasions them to decay or rot, and the eye of some sorts is so far sunk that the bud for the following crop is often broken off with the stalk. A pointed pair of scissors may be used with advantage sometimes to sever the stem of the apple, above the fruit bud.

The most successful plan of working the soil of an orchard, is to raise green crops, such as potatoes, corn, turnips, &c., with one year old manure, and every third or fourth year to sow it in grain. If grass or hay be the constant crop in a young orchard it is certain to stop the growth of the trees. Great care is necessary in ploughing not to injure the bark of the trees, as damage sustained in the spring has generally the effect of inducing canker, which is a fatal malady to fruit trees. If by accident any of the bark is damaged a plaster of grafting composition ought to be immediately applied to exclude the air. Above all precautions, have a good fence around the orchard, to prevent the depredations of sheep or cattle, all labour is worse than lost, if cattle are allowed to browse or rub on the trees. Encourage the upward growth of high standard trees, not by pruning of the side limbs all at once, but rather by stopping or pinching off the points of the side branches, as it is necessary to the growth of the tree to have as large a quantity of foliage as possible, only pruning a few branches at a time close to the stem.

When peaches are about ripe it is a good plan to suspend a mat in a horizontal state like a flat bag, to receive any of the fruit that may drop, as if bruised in the least degree, it will immediately spoil. The best peaches for this province are Coledge's early, Coledge's favourite, Crawford's early, George the Fourth Lemon rare-ripe, with some other early sorts.

There is a diversity of excellent apples cultivated in many parts of the province, the following will comprise most of the valuable kinds:—The Ribston Pippin, Baldwin, Swan, Esopus Spitzenberg, Porter, Gravenstein Golden Ball, Court of Wick, Belle-fleur, Alexander, Rhode Island Greening, Glori-Mundi, Beauty of Kent, Paragon, Fall Pippin, Early Harvest, Huberton's Nonsuch, Nonpareil, Roxbury Russet, Pomme-gris, Herefordshire Pearmain, Peck's Pleasant, Orange Blenheim, Dutch Mignonne, Hawthornden, William's Favourite, King of the Pippins, Green Newton Pippin, Yellow Newton Pippin, Golden Pippin, and Siberian Crab-apples, for ornament or preserving.

Some of the best sorts are the Bartlett, Broompark, White Doyennu, Gris Doyennu, Duchess D. Angoleme, La Belle of Flanders, Glout Moreieu, Sickle, Nelis Marie Louise, Citron des Carmes, Beriev D. Arsenburgh.

Plums of esteemed varieties, are Bolmar's Washington, Reine, Claud, or green gage, Prince's Imperial Gages, Orleans, Cruger's Scarlet, Laurence's favourite, Royal O. Tours, Late Sweet Water, Damson, Orange plum, Sweet Prune, White Magnum Bonum, Blue Magnum Bonum, Red Diamond, Large Green Drying, Notarine plum, Peach plum, &c. &c. The best cherries are the Black Tartarian, White Biggerew, Black Eagle, Elton, Amber, Black Biggerew, and May Duke.

The markets of England, New Brunswick, Newfoundland, and the West Indies, are not sufficiently supplied with fruit, and Nova Scotia might under proper culture, produce

large quantities of fruit, especially apples of such quantities as would command a ready sale at remunerative prices, besides supplying our own markets with a better article than can be imported, to almost any desirable extent, by introducing grafting, planting, and cultivating superior sorts of fruit.

The season for the transplanting of trees is a matter of great importance, and there is a difference of opinion, and of practice. The fall of the leaf of deciduous trees takes place when there use is not necessary for the growth of the tree—but it is certain that the sap still circulates and evaporation with other functions of the plant still go on. As the cold of Winter increases, the sap is concentrated and contracted into smaller dimensions until about the freezing point, by which a sort of vacuum is formed in the vessels, to be supplied again from the roots, which are much warmer. The circulation is thus continued until the whole plant with its roots and soil are in a frozen state. A tree therefore has a greater quantity of sap, sugars, or juices contained in its vessels in mid-winter or Spring, than it has in the fall of the year; and it only requires light and heat by swelling the sap to expand the buds and develop the leaves and blossoms. The coldness of the night-air also condenses the sap, and contracts it. The light and heat expand it, thereby perfecting every part of the plant. In proof of this simple theory, the sap of the sugar-maple and birch, runs best on a hot sunny day, where the nights are the coldest, and a maple tree will discharge sap if cut, after being severed altogether from the stump, and will expand the buds, and foliage will be formed thereon, as long as a supply of sap is in the piece of lumber, but when the cold nights cease and the leaves are developed, no more sap will flow from the incision. Beach rods if cut in cold weather and placed in the ground as stakes, will bud out leaves, as long as the sap originally in the rod is not exhausted; then the leaves wither.

If these remarks are correct; then a tree has less vital fluid in the fall than in the spring, and transplanting of trees in the fall is not attended with any advantage; also the roots of trees are expanding, soft and growing, during the late fall months and early winter. The soil is also compact and hard, and a destruction of many of the finer roots takes place in their removal, at this period. But in the spring the soil is loose, soft and free. The winter frosts cause the roots to part easily with the soil, and the tree (if removed as soon as the roots are free from frost) will only suffer in proportion as the roots are dislodged, and it is customary to reduce the top in proportion to the loss that the roots may have sustained. Although trees are not injured by the frost in the soil, yet if the bare roots are exposed to a very slight degree of frost after being taken up in spring, it will generally destroy them. Almost all gardeners recommend trees to be removed in early spring, and only advise fall planting when removed to a warmer climate. This is because the trees cannot be removed early enough, (as the soil is frozen) to suit the earlier climate. In this case it would be best to have the trees laid on the earth, technically termed putting them in by the heels, until planting time, thus keeping them moist during the winter, retarding or stopping evaporation and the frost from throwing them out on the surface of the soil, as would be the case in their proper position. Fall planted trees, in general turn sickly, bearing fruit prematurely, the effect of want of nourishment, and soon die.

With regard to grafting of trees, the methods are so plainly laid down in various works, that any person may attain the art by a little practice, little else being necessary than a sharp knife, clean cutting the joints and bringing the inner bark of the stock, and scion, in perfect coincidence (after binding it with some ligature) covering the wound with grafting clay, or a composition of 4 parts of bees-wax 2 parts of resin, and 1 of tallow, melted together and worked like shoemakers' wax.

The process of budding is more difficult, depending on dexterity, and a knowledge of the state of both the stock and bud that is intended to be inserted. The bark of both must rise easily, and also the bud must be in a mature or firm state. If the stock is growing very luxuriantly, it will do to bud it late in the season, but a good degree of growing energy is absolutely necessary to ensure success.

The method practised, with success, is to leave part of the leaf on the foot-stalk, to cause a degree of circulation in the buds, and if the leaf remains green it is a sure indication that the bud is alive. First, cut the stalk in a smooth place of the bark across, and from that

down the centre of the skin, about an inch in length, clean through the bark, in the form of the capital letter T, then open the bark on both sides, raising it with the handle or point of the budding-knife, taking care not to lacerate or bruise the bark—then selecting a bud cut slanting into part of the wood and bark a piece about an inch long, and one-eighth of an inch in thickness at the eye or bud, having the bud and root of the leaf in the centre of the piece which tapers off like a wedge at each end, lay hold of the wood of the bud by the upper end, between the point of the knife and nail of the right hand, parting away the wood, leaving the bark of the bud in its natural position, until nearly opposite the eye or bud, breaking the wood half through over the point of the nail of the left hand, and take the remainder away, leaving part of the wood of the bud opposite, the leaf and bud in its natural state undisturbed, then insert this prepared bud into the stock, from the top downward, inside of the bark that was raised up, cutting across any superfluous length of the bud after the horizontal incision in the stock, thereby allowing the bud to fall into, and under the back of the stock, tie neatly with matting, only letting the leaf, stalk and bud protrude from a small opening between the folds of the ligature or matting. In about ten days it will be necessary to untie, (if the growth of the stalk is rapid) and bind it up again slightly. But if all the wood is taken out of the bud which is inserted, the bark may unite, but having no eye, or point of wood connected with the bud, the process will not succeed, nor the bud grow. In the spring when the buds begin to swell and expand into leaf, the stock is to be neatly and smoothly cut in a slanting manner, close above, and at the back of the bud that was inserted, and the whole of the growth of the tree will consequently be directed into the bud, thereby forming the future trunk of the tree. About the last of July or beginning of August is the period for budding, as at that time the wood is forming, and buds swelling for the ensuing season.

Some have recommended oils, soaps, lye of ashes, lime wash, and other external applications to be applied to fruit trees. But I have uniformly experienced them all to be pernicious and condemn them as injurious to the growth of plants, as the same substances would be if applied to the human system, good cultivation, drainage from stagnant water, a liberal allowance of well prepared manure, keeping the soil free from weeds, judicious pruning, and scraping off any moss or parasitical plants from the bark with a dull or blunt instrument, avoiding the too common practice of climbing on trees with hard shoes or boots, thereby bruizing the bark around the roots of the branches, and causing canker and the unsightly loss of part of the bark, and often of large branches; if these things are attended to they will generally ensure a clean, thrifty, and healthy state of the tree,—but all washes have a tendency to harden, crack, and injure the bark, often killing the tree in a single season. In conclusion, if the farmers of Nova Scotia would arouse themselves to action, graft all their wild trees with good sorts of fruits, plant young orchards in good situations, giving them a moderate share of proper attention, a vast improvement in our fruits, a large and valuable export would be raised, more comforts and better fruits for our own tables would be ensured, and our country be redeemed from unjust calamities, and take her proper position among the fruit-producing nations of the earth.

WINDSOR NURSERIES.

Correspondence.

For the Christian Messenger.

Affairs at Upper Aylesford.

BUILDING AND REPAIRING MEETING HOUSES, &c.

Last autumn a new place of worship built and now occupied by the Baptists and Methodists at Morristown, on the south mountain was opened for Divine service. The ministers present at the opening were the Rev. Messrs. Beals and Harris, (Wesleyan,) C. Tupper, W. G. Parker, and A. Stronach, (Baptist.) Rev. C. Tupper, preached what is called the Dedicatory Sermon, the subject was "Union," from the words of the Psalmist, "Behold how good and how pleasant it is for brethren to dwell together in unity." The discourse was listened to with marked attention. All the ministers present took part in the service. Bro. Harris preached in the evening. The sale of the pews took place previous to the opening and realized the sum of about £50 more than the contract for building it. The name of the house is "Union."

Yesterday a tea meeting was held at the Baptist Meeting-house in the valley. It went off well. The afternoon was fine, and the attendance large. The arrangements for serving up the tea good, the tea was very superior, and the sum of about £25 was realized to aid in improving this house next year; when it is intended to put it in thorough repair, which is now quite necessary.

Upper Aylesford is at present my field of labour. Last year I was engaged with the church for half the time, this year for three quarters, and if the cause continues to progress gradually, as it has done of late, it will not be long before they will be able to have a resident Pastor settled among them. We have had two baptisms during the past summer. Our meetings are generally well attended. May the Lord grant more prosperity here and everywhere.

Yours in Christian affection,
ABRAHAM STRONACH.

Lower Aylesford, Oct. 9th, 1856.

For the Christian Messenger.

Mission to Dartmouth and Bedford.

THE Christian Messenger for Sept. 24th, contains the report by Bro. R. D. Porter, of 11 weeks' missionary labor between Dartmouth and Bedford, for the Halifax Local Missionary Board. The following are the monies collected to pay his salary:

Collections at Bedford,	£2 11 11
Do Sackville,	2 10 0
Do N. Church, Halifax,	2 0 0
Do Hammond's Plains,	0 19 04
Do Lawrencetown,	0 13 9
Do Tuft's Cove,	0 10 44
Subscriptions, R. McLearn, Esq.,	2 18 9
" Hon. J. McCully,	1 5 0
" Hon. J. W. Johnston,	1 5 0
" Dr. Parker,	1 5 0
" Geo. Creed, Esq.,	1 5 0
" John Whitman, Esq.,	1 5 0
" J. W. Nutting, Esq.,	1 5 0
" Robert Ward, Esq.,	1 0 0
" Dr. Hume,	1 0 0
" C. Twining, Esq.,	0 10 0
" S. N. Binney, Esq.,	0 10 0
" J. Naylor, Esq.,	0 10 0
" Rev. T. H. Porter,	0 10 0
" S. Selden,	0 5 0
" Harriet Ward,	0 5 0
" Wm. Ackhurst, Esq.,	0 3 9
" Mr. W. H. Beals,	0 2 6
" Mrs. McGregor,	0 2 6
	£24 12 6

Salary, 11 weeks @ 40s.	£22 0 0
Expenses,	2 12 6
	£24 12 6

E. E. D. FREEMAN, Sec.

Halifax, Oct. 14th, 1856.

For the Christian Messenger.

Donation Visit to Rev. A. Stronach.

On the first of May last, several of our friends from Upper Aylesford, together with a goodly number from this vicinity and some from Bill Town, in all about sixty persons, met at our little Cottage for a donation visit. After all had partaken of an excellent tea prepared by the Ladies, Deacon George West, in behalf of the company presented their donations amounting to between £16 and £17, which sum has since been increased to upwards of £20, about half in cash the other in useful articles, Bro. West in presenting the purse made a short but very touching and appropriate address to which the writer replied as best he could, feeling much more than he could express. The Rev. C. Tupper, who kindly attended, then addressed the meeting in a most interesting manner, and was followed by several other brethren in short addresses on the subject. Bro. Tupper offered prayer, and with the benediction closed the exercises of the afternoon. The above named sum formed no part of the stipulated salary, that being settled for in a christian-like manner. It may therefore justly be called a Donation. May that scripture be fulfilled on the donors which says, "it is more blessed to give than to receive."

Yours in Christian love,
ABRAHAM STRONACH.

Lower Aylesford, Sept. 18th, 1856.

Extract of Letter from Rev. G. L. Wiggins.

BRIGHTON, (ENGLAND,) Sept. 29th, 1856.
The following extract will be read with pleasure by many of our friends:—
"I have much pleasure in availing myself of this opportunity to say that I have received the Messenger with uniform punctuality, and that it has contained much in which I could not fail to be interested. My earliest recollections and Christian friendships being so associated with New Brunswick and Nova Scotia, I must always feel a peculiar interest in the prosperity of God's Church in that country. May His blessing rest on your labours in conducting the Christian Messenger."
I am dear sir, yours faithfully,
GILBERT L. WIGGINS.