

Agriculture, &c.

DIRECTIONS FOR SETTING AND CULTIVATING STRAWBERRIES, BLACKBERRIES, AND RASPBERRIES.—Prepare the ground thoroughly—digging to the depth of 12 to 18 inches giving a liberal supply of well rotted table manure or compost.

For Fruiting.—If cultivated in large quantities make the rows two and a half feet apart in the row. If in beds make them 4 feet wide, set three rows in each bed, 18 inches apart, and the plants 18 inches apart in the row.

Cut off one-third of the length of the roots with a sharp knife or scissors—set the plants immediately—spread the roots evenly—and press the earth around them firmly.

Cut off all runners as fast as they appear through the season.

For propagation set the plants two feet apart each way, letting the plants run; keep free from grass and weeds. If very dry, and the plants wilt, water freely at evening.

Every person cultivating the strawberry should have a copy of "Fuller's Strawberry Culturist," which will be forwarded by the subscriber to any address by mail on receipt of 25 cents in postage stamps.

Raspberries should be set in rows 4 feet apart each way.

Blackberries should be set in rows 6 feet apart, plants 4 feet apart in the row.

GEO. V. RAND.

Wolfville, N. S., April 1867.

THE COST OF WEEDS.—The most expensive crop grown by farmers is weeds. It is not easy to estimate their cost, but we know that it amounts to many millions of dollars annually. If their value is anything, the farmer has seldom been able to appreciate it. The question of weeds becomes every year more serious, and their spread more appalling. Some of the best farms in the country have become so infested with weeds as to yield but poor returns. If our present system of culture is to continue, no one need expect to rapidly grasp a fortune at farming.

The eradication of weeds, when they once get possession of the soil, is somewhat discouraging to the farmer, especially when neighboring farms are growing weed crops that furnish innumerable seeds, to be wafted by the wind and deposited upon the land. There is scarcely a farmer but fully understands that a large crop of useful plants cannot be expected from grounds overrun with weeds, and yet many pay but slight attention to subduing these pests. They increase from year to year, until the land becomes so foul that even this very condition of things is deemed a sort of excuse to let them take possession of the soil. They become formidable, and men dread to make the attack, knowing that no weak opponent is to be encountered.—*Country Gentleman.*

TRANSPLANTING IN THE NIGHT.—A friend in whose powers of observation we have confidence, informs us that last spring and summer he made the following experiments: He transplanted ten cherry trees while in blossom, commencing at four o'clock in the afternoon, and transplanted one each hour, until one in the morning. Those transplanted during daylight shed their blossoms, producing little or no fruit, while those planted during the darker portions maintained their condition fully. He did the same with ten dwarf pear trees, after the fruit was one-third grown. Those transplanted during the day, shed their fruit; those transplanted during the night, perfected their crop, and showed no injury from having been removed. With each of these trees he removed some earth with the roots.—*Working Farmer.*

A writer in the *New England Farmer* says that when tomatoes are growing near an apple tree the borers will not trouble the tree. He plants tomatoes by the trees to prevent them.

CUTTING SCIONS.—As the time approaches when it may be convenient to cut scions, we would endorse the practice of an experienced grafter, who informs us that the best way to keep them till wanted, is to stick the ends into a potato. This will prevent their drying up. Care should be taken to label them, and they should be kept in a dry place in the cellar.

HOW TO PLANT WATERMELONS.—Dig a hole two and a half feet deep and three feet across. Fill to within six inches of the surface with green stable manure, and then add good soil so as to make a hill six inches high and plant from ten to twelve feet apart. Good melons and a fine yield may be looked for by pursuing this plan of planting.

DRAUGHT IN PLOUGHING.—Many suppose that the draught of a plough is, to some extent, dependent on the speed of the team employed. It appears to some that friction, or resistance of the plough, is less when the cattle move rapidly; others, perhaps, think it increased; but the fact is the draught is wholly independent of the rate of movement through the soil. It is important, therefore, that we employ animals that naturally walk quickly.

The actual labour of draught being no greater, the oxen or horses that move naturally at a rapid pace, accomplish nearly double the work with the same effort, that others, whose pace is sluggish and lazy, will do; and so the actual expense to the farmer is no greater; or in other words he saves half or nearly half the cost of ploughing by the use of a quickly moving team, that is if this rapid pace is the natural movement, and not one induced by over urging.

This is a point which we think is too often overlooked. One yoke of oxen may plough an acre in six hours. Another will do little more than half the amount. If the former is done without distressing the cattle and thus causing a greater wear and tear, it is obvious that it has cost no more.

It is to be borne in mind that a certain amount of physical effort is spent and lost to the farmer by the labour required to move the animal's own weight. This expenditure varies, of course, with the size and weight of the animal frame. It is plain as day, therefore, that for ordinary farm work, light built and active horses and oxen are the most profitable. They do a greater amount of work with the same effort, and therefore at less expense to the farmer, than very large animals.

Take an animal to plough a hill-side, for instance, up and down, and see the difference of effort to carry his own weight between a heavy and a light one. The exertion required to plough the up-hill furrow is immensely greater than that down, and yet, strange as it may appear, the draught of the plough does not vary, if at all, but in the slightest degree, in the two furrows.

This difference in effort in ploughing up and down a hill is owing to the labour of carrying the animal's own weight almost entirely, and so the great advantage of light or medium animals over heavy ones becomes very obvious.

When a plough is rightly constructed, the use of a wheel does not add to its draught, or, if in any degree, but very slightly. The difference in draught with or without a wheel is imperceptible.

The chief resistance is due to the cutting surfaces of the plough, and hence the importance of keeping them in good order. Only about ten per cent. of the draught is due to turning the furrow slice by the mould-board in a properly constructed plough. Probably about fifty or fifty-five per cent., on an average, of the draught of ploughing, is due to the cutting the furrow slice, leaving from thirty to thirty-five per cent. due to the mere weight of the implement. We ought to aim for the greatest strength in the smallest compass. Keep the sock and coulter, the cutting surfaces, in order.—*Mass. Ploughman.*

The discontinuance of a German newspaper is announced. It enjoyed the small title of *Rouselaerschmenwassadigingsblad*!

THE INFANT'S FRIEND.—Mrs. Winslow's Soothing Syrup is the best and surest remedy in the world for all diseases of children, such as teething, wind colic, &c. It corrects acidity of the stomach, regulates the bowels, and gives rest, health and comfort to mother and child. Perfectly safe in all cases, as millions of mothers can testify. Offices, 48 Dey street, New York, and 205 High Holborn, London, England.

COLDS AND COUGHS.—Sudden changes of climate are sources of *Pulmonary and Bronchial affections*. Experience having proved that simple remedies act speedily when taken in the early stage of disease, take at once "*Brown's Bronchial Troches*," let the Cold, Cough, or Irritation of the Throat be ever so slight, as by this precaution a more serious attack may be ward off.

Persons travelling with horses, and stopping in strange stables, should remember that Sheridan's Cavalry Condition Powders are a sure protective from contagious diseases; such as horse-ail, glanders, &c.

Most of the diseases incident to human life, result from a pain producing cause, and may be cured by a pain relieving agent, such as *Blood's Rheumatic Compound*.

GOLDEN WORDS FOR DAILY USE.

Selected from C. H. Spurgeon's "Morning by Morning."

MAY 26. Sunday. Whosoever drinketh of the water that I shall give him, shall never thirst, John iv. 14.

The true saint is so completely satisfied with the all-sufficiency of Jesus, that he thirsts no more except it be for deeper draughts of the living fountain.

27. Monday. Partakers of the divine nature, 2 Pet. i. 4.

Oh marvellous mystery, who shall understand it? One with Jesus—so one with Him that the branch is not more one with the vine, than we are a part of our Saviour and our Redeemer.

28. Tuesday. What wilt thou that I should do unto thee? Mark x. 51.

Whatever our morning's need may be, let it, like a strong current, bear us to the ocean of divine love. Jesus can soon remove our sorrow; let us hasten to Him while He waits to meet us.

29. Wednesday. Though he slay me, yet will I trust in Him, Job xiii. 15.

It is a poor faith which can only trust God when friends are true and all goes well. True faith holds by the Lord's faithfulness when friends are gone, and the light of our Father's countenance is hidden.

30. Thursday. In the world ye shall have tribulation, John xvi. 33.

Expect trouble then, O child of God. Dost thou not know that thou art one day to be like thy Lord. Wilt thou not then require much of the refining process to purify thee?

31. Friday. I will be their God, and they shall be my people, 2 Cor. vi. 16.

Here is speciality and proprietorship. How sweet the title, "My people;" how cheering the revelation, "Their God."

APRIL 1. Saturday. If we suffer we shall also reign with Him, 2 Tim. ii. 12.

The jewels of a Christian are his afflictions. The regalia of the kings whom God hath anointed are their sorrows and their griefs.

Correspondence.

For the Christian Messenger.

AUTOBIOGRAPHICAL SKETCH.

By REV CHARLES TUPPER, D. D.

CHAPTER XII.

CHARGE OF FREDERICTON BAPTIST SEMINARY.

(No. 2.)

On the 5th day of February, having been kindly invited by his Excellency Sir John Harvey, to dine at Government House with him and Lady Harvey, I deemed it proper to accept the invitation. It was probably given me in consequence of my position in connection with the Baptist denomination in that Province, as Principal of their literary Institution. His Excellency was very affable. When he called upon me to give thanks at the table, one of the guests near me, an M. P. P., whispered to me to be brief. It is not my custom to be prolix; and my usual course was followed. This duty was discharged with alacrity; but when the wine came on, my situation was not so agreeable. The custom was for each guest in rotation, to take a glass of wine, and then pass the decanter to the one sitting next to him. But my strict abstinence principles forbade me to do either. Those near me, not willing to let the decanter stop, passed it by me.

With leave of absence from the Seminary, from the 8th to the 12th I attended a Quarterly Meeting in Canning. A good influence evidently prevailed, and the prospect of beneficial results appeared cheering, till one of the ministers unhappily began to preach in a *scolding strain*. The deleterious effect on the people in general soon became manifest in the countenances of the large assemblage. How unwise and pernicious is such a course! It is morally certain to do no good, but much harm. After a time, however, the adoption of an affectionate manner by others, tended to restore a favorable state of feeling; and the exercises assumed a much more encouraging aspect.

On the 3rd day of May Evan Thomas, a young Welchman resident in Cardigan, a Welch settlement at a considerable distance from Fredericton, came thither and requested baptism. His conversion was remarkable. While chopping in the woods alone, his mind became deeply impressed with a sense of his sinfulness and exposure to the wrath of God: he was led to implore mercy, obtained a joyful hope in Christ, and was desirous to confess and follow Him. Being unacquainted with English, he related his experience in his native language, and a brother in the church who understood both, interpreted. It was quite satisfactory. He was baptized by me, and partook of the Lord's supper with us. The text chosen on the occasion was Zach. iii. 2. "Is not this a brand plucked out of the fire?"

On the 19th day of the same month my beloved and excellent mother was called home, at the age of 85 years. It would have been pleasing to me to have visited her in her last days, and to have attended her funeral; but, as this was out of my power, it afforded me much consolation to learn, that her pious and useful life was closed by a tranquil and joyful dismissal from the flesh. What an infinite blessing is true piety.

At the termination of the spring term, June 7th, the public Examination of the Male Department took place. The pupils acquitted themselves well; and numbers of the spectators expressed much gratification at their proficiency. That of the Female Department, the next day, under the able conduct of sister P. B. Brown—now the wife of Bro. J. W. Hart—was equally satisfactory.

In the course of the Vacation, which commenced June 8th, I visited Amherst and adjacent places, as also Prince Edward Island, and preached to those among whom I had formerly labored. These visits appeared to be mutually pleasing and consolatory. The journeys, though sometimes fatiguing, were evidently beneficial to my health, which had become enfeebled.

Having returned to Fredericton, and resumed my labors, about 2 o'clock on the morning of August 2nd, I was aroused by the cry of "Fire!" It appeared to have commenced in the blacksmith shop of Bro. William S. Estey, a valued deacon of the Baptist Church; whose property was destroyed by it. I repaired immediately to the scene of devastation. While on my way I fell in company with two men, and asked them how they thought we could do the most good? They replied, "We are not house-holders," and so passed heedlessly along. As the flames were

spreading in various directions, I noticed a place where none were posted for protection, obtained a bucket, and repeatedly extinguished a fire kindling in a large pile of dry wood, which adjoined buildings on another street. It afforded me sincere pleasure to aid in checking the devouring element, and protecting the property of my fellow men.

It was a source of severe trial to me that several of the young men who were studying in the Seminary professedly with a view to the gospel ministry, did not appear to me at all adapted to the work. In my opinion they ought not to have been sent for that purpose. The circumstance of their unfitness, and inability to improve, was exceedingly untoward. It tended greatly to increase prejudice against the imparting of education to pious and zealous young men in order to qualify them better for the discharge of ministerial duties. Brother John Magee, however, possessed a good share of native talent, was decidedly pious, truly earnest in his desires to do good, and undoubtedly called of God to preach the gospel. This valued Brother cheered me in my educational work, and materially aided me in my ministerial labors.

In the month of September there was, through Divine goodness, a considerable movement among the pupils. We had frequent prayer meetings in the Seminary; and they were evidently attended with a gracious influence. To my great joy my eldest daughter, after much deep distress, obtained hope and consolation in Christ. So also did several of the youths in the Seminary.

About this time Bro. Miles returned from England, with his health considerably improved; and, in accordance with our previous arrangement, resumed his former charge.

In the evening of September 29th, my farewell discourse to the Church and congregation was delivered; and, October 1st, at the close of a delightful prayer meeting in the Seminary, my parting address. It was highly gratifying to me, after serving the Church nearly a year and a quarter, receiving kind attentions from the members, and living in harmony with them all, to leave them, as likewise the Seminary, in which I had taught during the same time, in a very favorable state.

All the world and Nova Scotia, at Paris.

The newspapers have long accounts of the Paris Exhibition. We have given our readers an extract for two from Dr. Honeyman's letters. We give below a few interesting items from the *Toronto Globe*:—

PARIS, April 10th, 1867.

Monday was the first one-franc day of the Exhibition, and thus it may be said in reality the opening day; for your Frenchman is one who cares just about as little to pay high prices in hard cash for sight-seeing as any variety of the *genus homo* on record. The child of *La Belle France* does not mind so very much about the loss of freedom if he can have plenty of fun. But he must have it cheap—measured by the dollar standard—or he can see no fun in it. So it was no use charging high prices for admission to the great show—the people simply wouldn't go.

The Exhibition is so vast in its general character, and so diversified in all its varieties, down to the simplest, that the correspondent who should attempt to describe everything would succeed only in confusing and wearying the minds of his readers. It will be well, then, to endeavour to seize the salient features, the novelties which stand out prominently, and which give character to the whole. And this, in contrasting it with other Exhibitions, appears broadly; that it is the creation of a single will, knowing scarce any limit save that which Providence has placed to the most stupendous human power. The Emperor Napoleon cannot afford to do a thing of the kind in little. It is the penalty of his position that he must occupy and lead the minds of the great people who acknowledge and who are proud of his sway. In the far off days it was not sufficient that the Roman Emperors should enter the capital of the empire in triumph. At the peril of ruin each one found himself compelled to outshine the other, to show more captives, to kill more gladiators, to bestow greater largesses; aye, even to dwarf the grandeur of his own preceding triumphs. Having at his beck and call vaster means than any other man the world has ever known, he has pledged his word for France and he has brought all nations besides to bring here to Paris, all the most precious, the most beautiful, the most glorious things they possess. And in this nineteenth century when a few weeks only are required to convey the treasures from the remotest corners of the earth to their place of destination, all the nations, kingdoms and peoples have hastened to fulfil his will. Had the scheme to rest upon the commercial principle of pay and profit, the whole thing would have dwindled to comparatively puny proportions. But no such paltry British ideas have been allowed to intervene. Napoleon determined to excel everything ever before attempted to enable the Frenchman to say with a proud