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JOURNAL OF AGRICULTURE.

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CONTENTS:

Board of Agriculture.

Abstract of Annual Reports and Proceedings of Agricultural Societies.

(CONTINUED FROM PAGE 35.)

HALIFAX COUNTY.

DARTMOUTH AGRICULTURAL SOCIETY.

I have the honor to inclose for the information of the Central Board, a copy of the proceedings of the Dartmouth Agricultural Society at their last meeting held on the 14th April. Much discussion took place as to the possibility of improving the breed of cattle and sheep, but the limited means of the society prevented any effort being made to secure so desireable an object. A hope was expressed that the Central Board might take the matter in hand and by the importation of a few animals, materially benefit the farming interest throughout the Province.

It was determined to set aside a portion of the funds of the society in prizes for grain, vegetables, drainage, &c., a schedule of which accompanies this.

MICH. TOBIN, *President.*

PRIZES OFFERED BY THE DARTMOUTH AGRICULTURAL SOCIETY.

At a meeting of the Dartmouth Agricultural Society, held at Dartmouth on the 14th April, it was resolved to offer the following premiums, for competition by members of the above Society; and all articles exhibited must be the production of the Exhibitor:—

ROOTS, GRAIN AND CLOTH.

For the best 1-4 acre Turnips, 1st prize, 12s. 6d—2nd do., 7s. 6d.; do. do. 20 rods Potatoes, 12s.6d—2nd do., 7s. 6d.; do. do., 5 rods Mangel Wurtzel, 10s.—2nd do. 6s.

☞ The above to be examined on the ground.

For the best dozen Parsnips, 5s.—2nd do. 3s. 9d.; do. Carrots, 1st prize, 5s.—2nd do. 3s. 9d.; do. Beets, 1st prize, 5s.—2nd do. 3s. 9d., do. Cabbages 1st prize, 5s.—2nd do. 3s. 9d.; do. bushel Wheat, 1st prize, 12s. 6d.—2nd do. 7s. 6d.; do. Barley, 1st prize, 12s. 6d.—2nd do. 7s. 6d.; do. White Oats, 1st prize, 7s. 6d.—2nd do. 5s; do Black Oats, 1st prize, 7s. 6d.—2nd do. 5s. For the best specimen of Sweedish Turnip Seed, 1st prize, 7s. 6d.—2nd do. 5s., not to be less than 3 lbs.; do. Mangel Wurtzel Seed. 1st prize, 7s. 6d.—2nd do. 5s., not to be less than 3 lbs.; do. 10 yards of Cloth, Cotton and Wool, 1st prize, 15s.—2nd do. 12s. 6d.; do. 10 yds. Cotton and Wool, plain, 1st prize, 15s.—2nd do 12s. 6d. For the best Tub of Butter, not less than 10lbs. 1st prize, 12s. 6d.—2nd do. 7s. 6d.

The above articles to be brought forward on the day of the Grain Show, at Mr. Lamont's Mills, on or about the 1st December next.

Prizes will be granted for Drainage, not to exceed 60s. in the whole.

Judges of Potatoes:—John Gaston, Gordon Khun, *Peter Farquharson—To be examined* on or about 1st August.
" Turnips, &c.,—Robert Settle, Alexander Tulloch, Alex. Giles—To be examined on or about 1st November.
" Cloth—Charles Bisset, William Lawlor —To be examined about 1st December.
" Grain—Charles LaMont, Peter McNab, jr.—To be examined about 1st December.
" Drainage—A Farquharson, jr. R Humphrey.

Notice of at least a week be given to the Committee appointed to examine the articles exhibited.

THOMAS SHORT, *Secretary*

The Field and Farm Yard.

HINTS ABOUT HAY-MAKING.

Hay-making is an important operation with the Nova Scotia Farmer. We select the following hints from an old number of the *Canada Farmer*, as likely to be useful to our readers at the present season:—

TIME OF CUTTING.

Many good reasons may be urged in favour of cutting grass early. By so doing, hay of more nutritious quality is obtained. Ripe hay, as it is called, is far less feeding in its nature than that cut sooner. Why is it that hay will not fatten stock as grass will? Because of the loss of the nutritious elements of the plant. But if the grass is cut and cured at the stage which it contains fattening properties in the highest degree, these may, to a very large extent, be retained.

"Early in its growth, grass is watery; as it approaches blossoming, the amount of sweet nourishing juice increases; after blossoming, and as the seed ripens, the sugar diminishes, and the hard woody fibre increases. The best time, therefore, generally, is to cut within a few days after the principal portion of the crop has appeared in flower. For milch cows it should be cut a little earlier than for working oxen and horses. Hard stemmed

grasses, as orchard grass and timothy, should be cut earlier than softer sorts."

All who have had experience with well-cured, early-cut hay, testify to its superior value. The cows give more milk when fed on it, the young stock grow more rapidly, and the fat cattle require fewer turnips, and a smaller allowance of oil-cake. We are persuaded that many farmers commit a grand mistake in deferring their hay-making too long. Not only better hay, but more of it, may be obtained by early cutting. By not allowing the grass plants to mature their seed, the sward retains a larger share of its vitality. Maturing seed is an exhausting process, and when this is avoided, the sward, if the weather be favorable, and the land in good condition, will soon send up a fresh growth, from which a second cutting may be had late in the season. Especially is it needful for those to begin mowing early who have to depend on the now old-fashioned scythe. Failing to commence until the grass is mature, they are unable to get through until some of the crop is dead ripe, and then the hay is little better than straw.

EXPENSE OF MAKING HAY.

On this subject we find the following remarks in the *Country Gentleman*:—

"When meadows were cut by scythes, and raked by hand-rakes, the cost of securing a crop was computed to be one-half its value. Now, by the use of mowing machines, horse-rakes, horse-forks, &c., it need not be one-fourth, as the following estimate for cutting fifty acres will show:

Interest on $100, cost of Mowing Machine	$7.00
Wear and tear, annually, say	3.00
Team and man, 8 days, 6 acres a day (a low estimate)	20.00
Cost of cutting 50 acres	$30 00
Raking, horse and man, 20 acres a day	5.00
Drawing, if 2 tons per acre, 2 men and 1 team; with horse-fork, 3 tons daily, $3 per day, 12 days	36.00
Contingencies, rain, &c., say	7.00
Cost of securing 100 tons	$78 00

Or, 78 cents per ton. It will be observed however, that the team of the farmer stands idle much of the time in harvest, and that the actual cost, as compared with the old way, would therefore be really less."

THE HAY SWEEP.

This is a labor-saving implement which any farmer may construct for himself, and although but little known, it is capable, under favourable circumstances, of greatly lightening the toil of hay-making. Where the hay is stacked in the fields, or put in a barn close to the meadow, the hay-sweep may be used to great advantage. It is estimated that used in connection with the horse-fork, two or three men and a couple of boys, with the help of three horses, can draw and stow away *thirty tons* per day with ease.

We extract the following description of this implement from *Tucker's Annual Register*:—

"It is essentially a large, stout, coarse rake, with teeth projecting both ways, like those of a common revolver; a horse is attached to each end, and a boy rides each horse. A horse passes along each side of the winrow, and they thus drag this rake after them, scooping up the hay as they go. When 500 pounds or so are collected, they draw it at once to the stack or barn, and the horses turning about at each end, causing the gates to make half a circle, draw the teeth backwards from the heap of hay, and go empty for another load—the teeth on the opposite sides being thus used alternately. To pitch easily, the back of each load must be left so as to be pitched first.

"In using this machine, not a moment is lost in loading or unloading. No person is needed in attendance, except the two small boys that ride the horses. If the horses walk three miles an hour, and travel a quarter of a mile for each load, they will draw 12 loads, or three tons an hour, or 30 tons in 10 hours, leaving the men wholly occupied in raising the hay from the ground when deposited, by means of another horse with the pitchfork.

"It will be obvious that this rapid mode of securing hay will enable the farmer to elude showers and storms, which might otherwise prove a great damage."

HAY CAPS.

These are laughed at by many as part and parcel of an effeminate parlour style of farming, but subjected to the test of experience, they commend themselves as well worthy of adoption by all judicious enterprising tillers of the soil. Some are incredulous about them and think they will get wet through like the cotton shirt on a labourer's back. On the contrary, they will shed rain like a cotton umbrella, or like the covering of a tent. It is said by those who have tried this expedient, that coarse clover will remain safe through a week's rain with such protection. And while preventing rain from coming in, cotton caps will permit the steam from the hay to go out. Mr. Emerson, an experienced New Hampshire farmer, says he has used hay-caps for upwards of fifteen years, and recommends them to all his friends and neighbours. In reference to the time consumed by putting them on—an objection urged by many, he says they save time, inasmuch as they render less particularity needful in trimming and shaping the cocks. And while he has often had uncapped cocks tipped over, or the tops blown off by gusts of wind, he never had such accidents occur when they were properly capped. Another reliable American agriculturist, writing to the *New England Farmer*, says, "Hay caps do pay, and no mistake, and on the whole, a farmer of moderate means who cuts much coarse hay cannot afford to be without some thirty or forty of them." For the guidance of such as are disposed to give hay-caps a trial, we copy the following directions from the *Country Gentleman*:—"Take four yards of yard-wide cotton sheeting; sew it together so as to make two yards square; hem the rough edges; turn up each corner two or three inches and sew it strongly; tie in a short strong twine to form a loop, and you have a hay-cap ready for use. Four sharp wooden pins of hard wood, half an inch in diameter, eighteen inches long, to be thrust upwards into the hay, at the bottom of the cock, complete the preparation."

HOW TO SHARPEN A SCYTHE.

"Mower" writes to the *American Agriculturist*:—"To properly grind and whet a scythe, requires a little practical skill, in the attainment of which the beginner may be assisted by a few hints. The cutting edge of a scythe or a similar instrument, when examined by a microscope, shows numerous fine projecting points or a series of minute wedges which are to be driven into the substance operated on, to separate the adjoining parts. In order that they may enter the more readily, these points should incline in the direction of the stroke given with the blade of the instrument. In cutting with the scythe, the edge strikes the grass at an angle of about forty-five degrees, and hence the grinding should be done so as to have the points set in that direction to the blade. This is done by keeping the blade firmly upon the stone, with the point drawn toward the body of the holder, at the above mentioned angle with the edge of the stone. Commence to grind at the heel and move it steadily along as the work progresses, until the point is reached, then grind the other side in the same manner. Never rub the scythe back and forth upon the stone as though endeavoring to whet it. The revolution of the stone will wear away the steel much better than rubbing it in this manner, by which the edge is likely to be made rounded, and to be set irregularly. It is preferable to hold the scythe so that the stone will revolve towards the edge. In this way the holder can see when the edge is reached, and the particles ground off are carried away clean. In the opposite method of grinding there is danger of making a "feather" edge which will readily crumble off, and leave the scythe almost or quite as dull as before. The blade should be ground equally on both sides. In whetting the scythe, lay the rifle or whet-stone flat against the side of the blade, and give a light quick stroke downward and forward in the direction of the edge, so that the scratches it makes shall keep the points set in the same direction as was given them by grinding. By fol-

lowing these simple suggestions, a scythe may be made to hold its edge twice as long as when the rifle or whet-stone is drawn along the edge almost at random. A few strokes carefully taken will enable the workman to keep the proper direction and whet rapidly."

CUTTING AND CURING CLOVER.

Clover should be cut immediately after blossoming and before the seed is formed. It should be cured in such a manner as to lose as little of its foliage as possible, and therefore cannot be treated exactly as the natural grasses are. It should not be long exposed to the scorching sun, but after being wilted and partially dried, it should be forked up into cocks and left to cure in this position. The fourth or fifth day, when the weather is fair and warm, open and air it an hour or two, and it will then be fit to cart to the barn. Clover cured in this way without the loss of its foliage, is better for milch cows and for sheep than any other hay. It may also be fed to horses that are not hard worked, or to young stock, but it is most valuable to cows in milk. For other farm stock it is worth from two-thirds to three-fourths as much as the best hay.—*Manual of Agriculture.*

ON MANURE.

NO III.

In this letter I wish to point out, that after doing everything to save the solid portion of the excrement of cattle from waste, and when that desideratum is actually supplied, another step is still before us—that of saving the liquid.

I delineate these steps in sequence, not because of there being any inherent necessity of their being carried out by degrees, but because I think, or rather, fear, that (except in a few scattered instances) it would be almost impossible to get our farmers to go the whole hog, or turn over a new leaf all at once; I believe, however, that if any one will take a single step in the right direction, or will go the length of really saving all the solid manure with whatever proportion of moisture it generally contains, he will then be doubly anxious to take another step in the same line, and save the liquid also.

I do not think it is necessary for me, just now, to point out in what way this should be done. I am chiefly intent on urging the necessity of its being done, knowing that when the "will to save" is once created, the "way to save" will soon follow.

The urine of a cow in comparison with the dung, is said by some of our best professors of Agriculture, to contain not only the largest amount of manure, but also the best qualities as a fertilizer; and wherever the practice of using it in its fluid state has been adopted, it has been found to be much more easily and cheaply applied than its solid compeer.

Once have the proper arrangement made for saving it, a watering cart and a pump to load it with, and I wonder if there is any crop which Nova Scotia attempts to grow, that would not rejoice to have a drink of it, at the right time.—Now, let me ask, what becomes of this almost invaluable element in Nova Scotia.

Once discoursing on this subject with a man of means, and a farmer, he exultingly drew me away to his tye-up, where he proceeded to show me how well he saved his manure; here everything was as nice and handy as money could make it. A large side hill cellar, received all his manure, liquid, and solid, convenient trap doors being laid in the floor for that purpose. See there! says he, there's the way to save manure. Where Doctor, where is it? I immediately asked.—Why, there it is, don't you see it—there it is before your eyes. Oh yes, I said, I see a big pile of pretty well saved solid manure; but Doctor, where is all that amazing quantity of liquid manure, such a number of horses and cattle must have made? The fact is that what between the floor of his cellar being of the most porous sort of sand imaginable, and the yard sloping from it, down to a boggy pond, not fifty feet off, the pile of manure was drained just about as dry as it well could be.

And yet this very man was eager for manure, and told me, he would like to have four tons of artificial manure every year.

The above anecdote will serve as an answer to our question, for it is pretty much the same with almost all the liquid that is voided by the thousands of cattle in Nova Scotia. What a prodigious waste! BEDFORD.

CHICCORY—ITS CULTIVATION AND ITS USES.

Chiccory, Succory, or wild Endive, (Cichorium intybus,) is a perennial plant, with a large, very long, simple tap-root. The first year it produces only numerous radical leaves, six to eighteen inches long, two to four inches broad, narrower at the base, and serrated more or less. In the spring of the second year, a stalk shoots from the centre of the leaves, three to six feet high, with smaller leaves than the radical ones, branching, and bearing in the axilla of the small leaves pale blue, as well as azure-blue flowers, about three quarters of an inch large. These flowers bloom successively for a long time every morning, and shut before noon. To these succeed oblong seeds, surmounted with a little scarious crown, and contained to the number of fifteen to eighteen in a common calice. It grows well on almost all soils, but particularly in those of a light sandy loam, the deeper the better, for in such the roots will attain the largest size.

The roots and leaves of chiccory have been used in medicine, as tonics and depuratives, to reestablish the appetite, promote diuretic action, &c. In Europe it is much cultivated in gardens for its leaves, which are in great request to eat as a salad, when young, and for which purpose the roots are taken up and planted in barrels or boxes in a cellar, where the leaves that shoot out of the crown become white, etiolated, and very crisp and tender.

This plant makes a most valuable fodder, which cows, horses, mules, oxen or sheep eat readily, and it is largely cultivated for that purpose, to be eaten as a green fodder, particularly by cows. For this purpose it is sown in the spring, after a good plowing, broadcast with oats, at the rate of four or five pounds to the acre, so that the leaves speedily cover the ground and smother the weeds, and by which the leaves are mutually held upright, so as to be easily mown. The seed can be sown in the fall as well, but then the plants are apt to shoot to seed the next spring before the roots have got a large size, and the crop of leaves is smaller. That sown in the spring will give two or three cuttings the first year from July until winter, and four to six cuttings the next year, and produce at each cutting about a ton of excellent fodder; or it can be pastured. It will shoot up after each mowing, no matter how dry the season may be; and no plant will bring so large an amount of fodder per acre, except perhaps Lucerne, which is more difficult as to quality of soil and culture.

But chiccory is much cultivated in Europe chiefly for the roots, which constitute its most valuable use, and for this purpose they should be taken up at the end of the second year; as the object is to obtain the largest roots, a good deep soil should be chosen, and the seed sown thinner than for fodder; or in drills six to eight or twelve inches apart, so as to hoe and weed them the better, in order that the roots may acquire their greatest dimensions.

A few years ago I took up some roots that had been growing for three years in a light, sandy, deep soil, not manured, that were about three feet long, and at the collar as thick as my wrist; one acre of such roots would produce at the rate of nearly fifty tons.

Thus when it is intended to raise chicoory for its roots, for making the chiccory or succory of commerce, they should be taken up at the end of the second year, cutting or mowing off the leaves first at the collar; and as chiccory is not affected

by the frost, they can be left in the ground as long as the open state of the weather will permit; or when it is feared that the severity of the winter would prevent the free taking up of the roots, they can be taken up at the end of the fall and stored in sand, from which they can be obtained at all times during the winter. When taken up they must be washed, dried, then sliced in pieces, and roasted in an oven, till they acquire the color of roasted coffee or chocolate, and become brittle; they are then ground fine, packed in rolls or squares of paper, containing from one half to one pound each, or packed loose in barrels or casks. In the drying and roasting the fresh roots will lose twenty-five to thirty per cent.

Let us now suppose one acre to produce at the end of two years twenty tons of roots, or 40,000 lbs.; the loss by drying and roasting thirty per cent.; this will leave a net produce of 28,000 lbs., which at 2½ cents per pound, wholesale price, will bring $700. By deducting for all expenses of seed, labour of plowing, harrowing, sowing, taking up roots, interest on land, washing, drying, roasting, grinding, packing, labels, casks, carting, etc., the sum of $150, which is rather a large estimate, it still would leave a profit of $550 per acre, independent of the fodder obtained for two years, worth between sixty to seventy dollars at least.

Chiccory has been for many years, and is now, extensively imported into the United States from Belgium, France, Germany, &c., and is much used here to mix with coffee, in different proportions; some mixing one fourth, while some mix one half, and some use it exclusively as coffee; the use of it is now become universal, and the importations of it increasing.

It abounds in a bitter juice, possessing a tonic property, and has a distinct smell of liquorice; its empyreumatic volatile oil, evolved during the roasting, exerts upon the system a diuretic and gently exciting influence, and reestablishes the appetite; taken in moderation, it is perfectly wholesome.—*Horticulturist* (*New York.*)

To make Ewes own Strange Lambs.—Take a ewe which has lately lost her lamb, and start the blood a very little in the lower part of the nostril. Put the strange lamb to sucking her, and *let her smell it.* She smells her own blood, of course, and, in most cases, will own the lamb.

The above is by a correspondent of the Prairie Farmer. One method which is found to answer perfectly is to take as much of the skin of the dead lamb as will suffice to make a jacket for the orphan lamb. The ewe smells the piece of skin, and takes to the lamb quite kindly. This method succeeded where several others failed.

Orchard and Fruit Garden.

NOTES ON FRUIT TREES, &c.

That some fruit-bearing trees may be rendered very ornamental as well as useful objects, is not to be questioned, and I might mention varieties which are really more beautiful in form and foliage than many of the so-called 'ornamental trees;' still I do not quite like the idea of planting them for ornament, except in grounds of very limited extent, preferring that each class be assigned to its appropriate place, either on the lawn or in the orchard.

In small premises it is an object, of course, to have a tree fulfil both purposes; and not only that, but a fruit-tree planted near a building may be sometimes advanced or retarded (according to the exposure) in its time of ripening its fruit. For example, a cherry-tree near my own window is so situated, that a part of its top directly faces, and, indeed, some branches lie against a high and steep roof, with a south-western exposure. In consequence, the fruit upon those branches is not unfrequently ripe by the 21st to 25th of June, while on other trees (and, indeed, the lower branches of the same tree) the same variety—White Bigarreau—is not often ripe much before the 1st of July.

I think Mr. Saunders in error in proposing to plant apple-trees nearer together than is the usual practice. He thinks that forty feet is an unnecessarily long interval—I do not; pears I admit, may be planted at twenty or twenty-five feet, and do well for many years; but I have had some experience with a small apple orchard, closely planted, and find that the lower branches, which will soon interlace at much less than forty feet, are constantly dying out, and on those which remain the fruit is small and inferior.

Sometimes we find the lawn and the orchard reversed, as in the case with those of a neighbor of mine, a gentleman of more wealth than taste, but who has a fine grapery and a beautiful lawn. In that part of the latte. directly contiguous to the front entrance, he has several cherry-trees, intermixed with ornamental trees of various kinds, while in a lot at the *rear* of his house, he some years since made a plantation of *maples*, disposed in parallel lines, at accurate intervals, in the same way that he would have planted an apple-orchard.

"*The curculio the cause of the plum warts.*"—This theory, which I have tho't fallacious, appears to be so distinctly proved by the observations of Miss Morris, that I feel almost compelled to give in my adhesion to her views. Perfectly aware of the fact that the curculio and other insects were to be found in the swellings, I imagined that they were the effect, not the cause, and they had taken up their abode there, merely because they found a convenient lodging. The late Mr. Downing, I believe, entertained this view of the case, while Profs. Peck and Harris held the opinion which is adhered to by Miss Morris.

It is rather satisfactory than otherwise to find, (if it is so,) that the same villainous little insect is the cause of both the chief ills that the plum seems heir to, for it is certainly better to fight one enemy than two or more; and I believe for one, that if all plum-growers would, for three or four seasons, persistently and thoroughly employ the sheet and mallet, we should have little cause either to fear or dread the depredations of the curculio, or rhynchœnus, hereafter.

Messrs. Ellwanger and Barry are perfectly successful in preserving their plums in this manner. I had the pleasure of being at their place, and I certainly never saw such a magnificent crop of plums as was just then at maturity upon their trees. I have tried, and seen tried, various other preventitives, such as lime, netting, pigs, poultry, etc., but have faith in nothing but *shaking and killing.* A war of extermination is only to be relied upon, and at any other game the rhynchœnus will be pretty certain.—*Horticulturist.*

Receipt for Making Grafting Wax.—Take one pound of resin, half a pound of burgundy pitch, a quarter of a pound of beeswax, and two ounces of tallow. Melt the resin, beeswax, and tallow in an iron pot. When they are melted, set the pot off the fire, have the burgundy pitch well pulverized then pour it in when melted. Pour th whole into cold water, and work it with your hands for half an hour. I think those who will try my plan, will find grafting wax made after this receipt to be very superior, as it wont crack in cold weather nor melt in hot weather.

English Apples received by the Fruit Growers' Association.—Among the scions of apples recently received by the Fruit Growers' Association from the London Horticultural Society were the following:—Baron Ward, Walthan Abbey, Norfolk, Coleman, Nonsuch, Old English Codlin, and Hoary Morning, also Pear Comte de Lamay, &c.

Vegetable & Flower Garden.

PRACTICAL DIRECTIONS FOR THE TREATMENT OF FLOWER SEEDS AND THE CULTIVATION OF FLOWERS.

It is pleasing to observe that the taste for the cultivation of flowers is steadily increasing. Almost every one can find leisure to put a few seeds into the ground and afterwards to watch the young plant pushing through the earth, to observe the bright green stem waxing into strength and throwing out its tender foliage; to see the delicate and wonderful bud forming and swelling, which is to be the reward of all your assiduity. Any one who has done this for a season, will find the pursuit to possess a species of fascination, which will yield the purest enjoyment. When farther initiated, and become familiar with the beautiful mysteries, it is delightful to steal into the garden, day after day, and trace the gradual expanding bud developing the unknown glory of a new variety. But the whole process of flower cultivation is so innocent, so congenial to health, and leads the mind so naturally to devout contemplation, that we conceive it is unnecessary to urge anything further in its favor.

Previous to forming a flower garden, the ground should be properly prepared, by being well broken and slightly manured. In the country it should be protected from cold winds by close fences or plantations of shrubs.—Generally speaking, a flower garden should not be upon a large scale. In small gardens, where there is not space for picturesque delineations, neatness should be the prevailing characteristic. A variety of forms may be indulged in, provided the figures are graceful and neat, and not complicated. An oval is a form that generally pleases, on account of the continuity of its outlines; next, if extensive, a circle; but hearts, diamonds, or triangles, seldom please. A simple parallelogram, divided into beds running lengthwise, or the large segment of an oval, with beds running parallel to its outer margin, will always please.

It is necessary to have suitable implements ready, so that the work may be performed well, and at the proper season; such as a spade, rake, hoe, trowel, line, and pruning knife. Labels may be made readily of shingles by splitting them in strips of about an inch wide and five or six inches long, and sharpening them at one end. Paint them with white lead made thin, and mark them with black lead pencil before the paint gets dry. Inscriptions written in this way, will be distinguishable as long as the lable lasts.

All kinds of *Hardy Annual* Flower Seeds may be sown in the months of May and June; the beds should be levelled and the seeds sown either in small patches, each kind by itself, or in drills from an eighth to a half an inch deep. In about a month, more or less, many of them will be fit to transplant. Take advantage of cloudy and rainy weather; move the plants carefully with a trowel the smaller kinds set in front, the larger in the rear; but if the weather be dry and the sky cloudless, give a little water and cover them for a few days.

Hardy Annuals will succeed well in a border of natural earth, if sown in May, but they will flower a month earlier if assisted by glass. If some of the hardy annuals be sown in September, they will become strong enough to survive the Winter, if protected with a slight covering of straw or litter, and when transplanted in Spring will flower earlier and stronger.

The best method to obtain an early bloom of the *Tender Annuals* and to insure strength to the plants, is to sow the seeds in pots early in March, placing them in a warm greenhouse window, or plunging them into a moderate hot-bed, carefully protecting them from the cold, shading them from the midday sun, and watering them with a finely pierced watering can. The seed should be sown in very light, sandy compost, and the pots well drained by placing broken earthenware and rough sods in the bottom; the finer seeds must not be planted more than an eighth of an inch deep, and the soil must be pressed down closely over them. Water frequently, particularly if the house or frame is very warm. As soon as the seed leaf is fully developed, transplant into small pots, three or four in each, and when they have acquired sufficient strength, transplant into the flower beds; not, however, before the middle of May.

The *Half Hardy Annuals* may be sown and transplanted as above, but must be kept rather cooler. The finer varieties of *German Aster* should be sown in pots towards the end of April, pricked off into smaller pots in June, and afterwards transplanted into the flower borders.

Biennials and *Perennials* may be sown at the same time with the Annuals of the same degree of hardiness, and treated similarly, except such of the hardy kinds as do not blossom the first year; these last may be thinned out or removed from the seed beds as soon as they are well rooted, and planted, either in different parts of the garden or into a nursery bed, in rows, a foot or more apart, keep them clear of weeds by hoeing and stirring the earth occasionally, which will greatly promote their growth, and prepare them for transplanting into the permanent beds, either in the Autumn or following Spring. *Biennials* are raised principally from seed sown every year. Some *Perennials* and *Biennials* may be sown in September, or as soon as ripe; and if the plants get strong before the setting in of Winter, most of them will flower the next summer. In transplanting, take care to preserve some earth to their roots, and tie the tall-growing kinds to neat poles or rods. Remove decayed plants, and replace them with vigorous ones from the nursery bed. Keep all the beds free from weeds, and the walks clean and neat.

Green House varieties should be sown as directed for Tender Annuals in pots, pits, or boxes, be kept in the house, carefully watched, slightly watered occasionally, and sheltered from the hot sun, till strong enough to transplant; most of these varieties may be sown at any season of the year.—*Thorburn's Catalogue.*

Arts and Manufactures.

STRAW PLAITING.

The art of making plaits from Wheat straw was first introduced into England about two and a half centuries ago. In Agnes Strickland's "Lives of the Queens of Scotland," we read that Mary Queen of Scots, when travelling in Lorraine, in France, noticed that women and children were employed in the plaiting and making of straw hats, and in the district where this light and pleasant handicraft was practised, the peasantry were much better off than in other parts where it was not. It is said that the thought struck her that the introduction of this useful art into Scotland would be attended with much benefit to her own subjects. She therefore prevailed upon some plaiters to return with her to Scotland; this was about the year 1562. The troubles in which she was afterwards involved prevented her fully accomplishing her object; but her son, James I., took a lively interest in his mother's plaiters, and transplanted them to Luton, in Bedfordshire. While, however, they remained in Scotland, they taught their art, and plaiting still survives to the present day in the Orkney Islands, though the quantity now made there is very limited.

These plaiters are supposed to have arrived in England about the year 1603, and must have taught the peasantry the art of making whole-straw plait. About a century after this, it is stated that plaiting had, in 1724, greatly extended, and that several thousand plaiters found profitable employment both in Bedfordshire and Hertfordshire. A taste having sprung up in the reign of Queen Anne, and in the succeeding reigns of the Georges for the milkmaid and gipsy hats, a considerable stimulus was received by the trade, and brought Dunstable into notriety.

The invention of the straw-splitter, supposed to have been made by the French prisoners at Yoxley Barracks, near Stilton, between the years 1803 and 1806, cheapened the prices and created a surprisingly enlarged demand for the plait. It was about 2 inches long, brought to a point, behind which a set of cutters was arranged in a circle; the point entered the straw pipe, the cutter separating it into so many equal-sized splints. Some were arranged to cut a straw into four parts, others five, and so on up to nine.

These machines, improved from time to time, so economised both labour and material that bonnets made of split straw succeeded rapidly in displacing the whole straw Dunstable hat, and continued a favourite article of fashionable wear until Leghorn hats interfered with them. Chips also had a considerable sale.

The great demand for hats from Leg-

horn about the year 1820, led to many attempts being made to produce an article resembling them in England. Every encouragement was offered by the Society of Arts to parties trying to grow straws like those in Italy, and then making a similar article to the Leghorn hat. A Mr. Parry received the Society's large silver medal in 1822, for his method of manufacturing Leghorn plait from straw imported from Italy. No person succeeded so well, however, as the late Mr. Thos. Waller, of Luton. This gentleman first imported seeds of the Italian Wheat, and endeavoured to raise straws from it in the neighbourhood of Luton, but being beaten by the uncertainty of climate, he hit upon the expedient of using straws imported from Italy. He obtained a patent for a bonnet made by plaiting eleven Tuscan straws, called by him the "Tuscan Grass Bonnet," which was afterwards patronized by Queen Adelaide, and great numbers were sold all over the kingdom at prices from 30s. to 50s. each.

From the time of making the first single plait, called split, at the commencement of the present century, many fancy kinds of plait were invented in the split straw. Similar fancy plaits and trimmings followed, termed "Patent Dunstable."

Between the years 1844 and 1850, other and more important plaits were invented known as China Pearl, Coburg, Vienna, and Brussels, each being distinguished by some particular form. The demand for the cheap plait composed of coloured and white straws was very great. But the most important of double plaits is that termed twist edge, also named whipcord edge, from the fact of the straw being whipped over as it were. It is also made in the whole-pipe seven and 11 straws, and is a staple article of English wear, forming the true straw bonnet, by exhibiting English straw to the best advantage. The discovery of this valuable plait has been attended with happy results, as it is a description capable of being used in almost every kind of hat or bonnet.

These various descriptions of straw plaits have enabled the trade to produce so many novelties that Tuscan plaits have declined as articles of wear; and although the lowering and afterwards abolition of the duties on foreign Tuscan brought that article into competition with the English straw manufacture, no injury has been sustained by the straw trade.

From the date of the Great Exhibition in 1851, plaiting has continued to progress, not so much in the invention of a number of new plaits, as in the superior quality and extent of the manufacture, and such has been the determination of our manufacturers to meet the public taste and the necessities of the million, that although foreign straw plaits from Belgium, Germany and Switzerland, have been brought to compete with them, they have nearly all failed in this respect.

Straw plait is a domestic manufacture, carried on in the cottages of the agricultural labourers of the three counties of Bedfordshire, Hertfordshire, and Buckinghamshire, and portions of Essex and Suffolk. The plaiters are generally the wives and children of the labourers; a few are men. No plait is made in factories.

Children are taught usually in schools, and are sent at the early age of four years; besides plaiting, they are taught spelling and reading. In most villages there is a plaiting school, which is generally conducted by an elderly dame, who receives from each scholar 2d. or 3d. per week. The children are some time before they can plait so as to earn anything, but after a year or two they can contrive to obtain 6d. to 1s. 6d. per week, after their plait is disposed of by their parents. They remain at school the usual school hours; afterwards, during the time they do not play, they plait a little till sent to rest. They continue working at school till they can plait sufficiently well, and when they are above eight or nine years they earn 2s. to 3s. per week. On leaving school they earn 4s. to 5s. if expert plaiters, and after they become skilful they may obtain as much as 7s. Many learn to sew, if near Luton or Dunstable, and then leave their cottage home for the greater attraction of hat and bonnet sewing, a sewer being considered a step above a plaiter; and one who may exhibit an amount of personal adornment to which a simple plaiter would not dare to aspire in her village home.

Plait is made all the year round, except harvest time. In winter plait is made indoors, and as the splints have to be worked in a partially wet condition, it is cold work for the fingers. When plaiting near the fire the straws are liable to injury; winter-made plait is never so good as when it is done in spring and summer, away from the fire or in the open air, at the cottage door, or along the green lane.

The earnings of a good plaiter, after the straws are deducted, will be from 5s. to 7s. 6d. per week, in a good state of trade.

It is computed that the number of females engaged in plaiting, and boys up to eight years of age, would now be near to 50,000, and the number of yards annually made 200,000,000 or 10,000,000 scores of plait of every description.—*Gardener's Chronicle and Agricultural Gazette.*

Dogs vs. Sheep.—During the past month several sheep have been killed by dogs in the parish of Sackville. At Hammond's Plains there are so many dogs that sheep cannot be kept at all.

Miscellaneous.

REPORT ON THE STATE OF THE CROPS, &c.

Halifax, 21st June, 1865.

The present season is, in several respects, a peculiar one. The spring opened very early, with an unusually long course of dry weather in April, which was succeeded by a period of wet in May of equally unusual duration, followed by a few hot days, and then, in June, up to the present date, alternations of warm and coldish weather, with but little rain.

Judging from the time of flowering of wild plants in the woods, and other natural phenomena usually regarded as accurate indices of the advancement of the season, the present season is, in Halifax county, about seven, and certainly not more than ten, days in advance of last year. But farm crops show, even on an average, a greater advance than this, and the present appearance of some crops indicates a difference of two or three weeks. This anomaly arises partly from the season favoring the advancement of certain crops more than others, and partly from the readiness with which wide-awake farmers took advantage of the peculiarities of the season, to forward their spring cropping. The present season has forcibly taught the farmer that Time, like a loose horse in the pasture, must be taken by the forelock.

The Hay Crop had a very early start, and the plentiful supply of rain in May caused a rapid and abundant growth, especially where top-dressings had been given during the previous autumn. In the salt marshes the hay is very thick and strong, and will soon require the application of the scythe, and on uplands, there are likewise unusually heavy crops. Red Clover, Kentucky Blue Grass and Fox tail are now in full flower in the hay-fields, and in light sandy soils, the white clover is blooming before its time. Timothy is stooling out in a luxuriant manner, giving promise of a heavy crop. The Clover is so rank that on some farms it has been cut and fed to cattle, in hope of a second cutting. Upon the whole there is every prospect of a heavy hay crop generally throughout the Province. There are complaints, however, that the hay is more weedy than usual. "Ill weeds grow apace." This is attributed to the wet spring, but is more likely to have been caused by the favourableness of last summer for ripening the seeds of field weeds.

There is one weed to which the attention of every farmer ought to be directed for to its prevalence in our hay-fields is to be attributed the bad flavor of some of the butter sold in Halifax, viz: the caraway. When caraway is eaten by

cows, the volatile oil in which the flavor resides combines with the fatty matter of the milk, viz—the cream or butter. At present the hay-fields are in many places white with caraway, even in the immediate vicinity of Halifax city, where clean farming is naturally looked for. One farmer often asks another,—how can I get rid of caraway? And the usual answer is: Why, I ploughed up my field for a year or two, and the nasty thing would'nt go away, and I have it as bad as ever; there's no use trying. Now the remedy is extremely simple; during *the present week* set to work and pull up all the plants when in flower; and should you have a young crop, repeat the operation next summer when it comes into flower, and you will have no further trouble. A boy can pull an acre in a day, and it is a cheap riddance. If you let the caraway go to seed it yearly extends and will soon cover your farm.

The PASTURES started very early this spring, (giving timely relief to farmers who had a short supply of hay), and they are still fresh and green everywhere, affording abundance of food to grazing stock. Many of our pastures are filled with poor useless grasses. The green Meadow or Kentucky Blue Grass is well worthy of encouragement in pasture lands, as it will grow in almost any soil, gives early herbage, and is never winter-killed. There are two injurious pasture weeds that ought to be well looked to, viz: the lamb-kill or lamb-poison, a small shrub which is extremely abundant in Halifax county, and no where more so than about Dartmouth; and the rattle grass which abounds in the eastern parts of the Province, and in Cape Breton, robbing not only the soil, but the pasture grasses of their juices, for it is a true parasite.

The present will probably prove to be at once the best and the worst season that we have had for potatoes for some years. In dry upland where potatoes were planted during the first dry weather of spring, the crops have come on very rapidly indeed, and look remarkably well; but in low and wet situations, the subsequent wet weather completely destroyed them. In Annapolis the frost did mischief both to potatoes and Indian Corn. Many farmers have had to plow up their early plantings, and to sow oats instead. Here we have another practical lesson of the season. Wet lands should be drained. On many farms in low lying and sheltered situations potato ploughing is still going on; these crops will scarcely have time to ripen should we not have a fine summer and autumn. It is believed that considerable quantities of potatoes have been planted throughout the Province this season, and we may look forward to a fair and well-ripened crop should the remainder of the season give average weather. Everywhere on the Peninsula potatoes are looking well, and about Bedford and Windsor road the same remark applies; we hear from Windsor and more distant localities equally favorable accounts. It is feared that in Prince Edward Island, the spring rains (which according to some exaggerated accounts nearly submerged the island) seriously impeded the preparation of the soil for potato crops.

We hear from all parts of the Province the most gratifying accounts of the progress of the *Goodrich* Seedling Potatoes, recently distributed by the Board of Agriculture. One point we would earnestly press upon those into whose hands these seedlings have fallen, viz: to take great care to preserve each variety distinct and in a state of purity free from admixture with other sorts. There will no doubt be great demands for the seed next season, and if not preserved in a state of purity the intentions of the Board will be frustrated.

OATS, wherever they were sown prior to the June showers, show a healthy braird. The partial failure of early sown potatoes, and the low price of seed oats have encouraged the more extensive sowing of the grain this season. The practice of sowing oats and cutting in a green state for curing as hay seems to be on the increase. Poor soils it does not exhaust so much as ripening the grain, and in cheap grain seasons, the oat hay is not much less valuable than the grain crop, while the labour of raising is less.

WHEAT we hear good accounts of wherever it has been sown. The season was extremely favorable for getting in this crop, but it is so much at the mercy of insects that we must wait patiently till a more advanced period before any indication can be given of the probable yield.

WINTER RYE has made a very luxuriant growth, beginning already in some places to reach the tops of the fences.

SWEDISH TURNIPS are now being sown and in absence of rain are likely to suffer a good deal in their early stage from the so-called "turnip fly," a minute beetle which attacks the plant so soon as it rises above ground. We have given in the first No. of the *Journal* the various remedies that may be applied with effect (page 9.) Thin sowing is too much practiced in Nova Scotia, and this augments the evil.

CABBAGES suffer from drought and the fly in the same way as turnips, and similar remedies may be applied.

Large numbers of excellent fat cattle have been coming into Halifax market for sometime past, and they are at this season becoming scarce in the country. New milch cows bring high prices. Calves have been arriving in great numbers. Lambs are likewise becoming numerous, but most of them would be better kept on their pastures for some time longer. Sir Walter Scott, walking *with his wife one day* pointed to a flock of lambs on the hill and remarked: How beautiful the creatures are! 'Yes,' she said 'with mint sauce,' Some of the lambs we see arriving at Richmond station would hardly suggest that remark, they are so young and thin.

From the fruit districts we have favorable accounts of the APPLE ORCHARDS. Within the last week there have been several frosts, rather severe for the season, and in some localities no doubt damage has been done, not however we believe to any serious extent. About Windsor, apples and other fruit trees seem to be suffering from various insect pests which are exercising the ingenuity of the Windsor fruitists to keep them within bounds. We have not as yet, however, heard much of gooseberry mildew this season, and everywhere small fruit seems to be doing well.

PLUMS are fruiting abundantly.

CHERRIES are already ripe at Wolfville.

STRAWBERRIES have been ripe in the *pastures for more than a week, and the* larger garden sorts are now swelling their fruits. Watering in dry weather not only promotes the growth of the plant, but increases the size and improves the flavour of the fruit. Wilson's Albany is one of the best strawberries for general culture, and although not by any means a new sort, appears to be very little known in this Province. It is a free grower, hardy, and an abundant bearer, fruit large and a little acid.

We are happy to learn from D. Henry Starr, Esq., that the apple scions received this season by the Fruit Growers' Association from the London Horticultural Society are succeeding well in the hands of various fruit growers. Any one wishing to see them may do so conveniently at Mr. Harris' nursery. A set of these scions, for which we are indebted to the Association, have taken well, and are pushing out vigorous shoots. In the old orchards and gardens of England there are many fine apples that are little known on this side of the Atlantic, and it is to be hoped that the present will not be the last contribution to our Nova Scotian orchards through the Fruit Growers' Association. We may mention, what is perhaps not sufficiently known here, that the London Society has for many years taken great pains and expended large sums of money in collecting, identifying, and classifying hardy fruits, and has, in this respect, been a pattern to all other societies,—so that any varieties from that source may be received with implicit reliance.

We hope to receive frequent communications on the progress of the crops during the present season, from our readers throughout the Province, and especially

from the Presidents, Secretaries, and other officers of Agricultural Societies.

In England there is everywhere promise of an abundant, although not an early harvest.

Horticulture has lost one of its most distinguished men in Sir Joseph Paxton, M. P. for Coventry, who died at Coventry on 8th June in the 62nd year of his age. He rose by energy from a humble sphere of life, was gardener to the Duke of Devonshire, published several useful and elegantly illustrated works on botany, and horticulture, and designed the original crystal Palace Building of 1851, which brought honors upon him. It was not so much in science and literature that he excelled as in thorough business ability, which enabled him to take a high place among his fellows.

The deaths of Charles Waterton, the genial naturalist, and of Sir John Richardson, the distinguished zoologist, are likewise announced in the English papers.

DOMESTIC RECEIPTS.

Soup Maigre.—Flour and fry a quart of green peas, four onions sliced, one carrot, one turnip and one parsnip. Pour on them three quarts of water; let it simmer till it will pulp through a coarse sieve, give it one boil and serve it.

New England Chowder.—Have a good haddock, cod, or any other solid fish; cut it in pieces three inches square; put a pound of fat salt pork into the pot, set in on the hot coals and fry out the oil; take out the pork and put in a layer of fish, over that a layer of onions. and so on alternately until your fish is consumed; mix some flour with as much water as will fill the pot; season with black pepper, and salt to your taste, and boil it for half an hour. Have ready some crackers soaked in water till they are a little softened, throw them into your chowder five minutes before you take it up; serve in a tureen.

Bean Soup.—"A bachelor of 30 years" wishes a receipt for bean soup. Get a wife that knows how to make it.—Eureka, *in Country Gent.*

Sweet Cider.—A M. Ward, Hartford Co., Conn., writes: "After years of 'fussing' with cider to 'make it good' I have this season fou.. d the short road to perfection. Took cider direct from the press, heated nearly to a scald over the fire, returned it to a barrel, and have since made daily use of it with great satisfaction."—*American Agriculturist.*

Turnips.—Peel them, and boil in plenty of water, in which has been put some salt; boil till tender, and serve either whole or mashed.

Carrots.—This root varies quite as much as the potato. Some are quickly done, even in twenty minutes, and some require two hours. They should be scraped, and boiled in water and salt; serve out in quarters, lengthways.

Muffins.—Take 1 qt. new milk, 2 eggs, 2 tablespoonfuls yeast, butter the size of an egg. Warm the milk, and mix with other ingredients at night; in the morning turn into muffin rings, or drop on tins, and bake a light brown. To be eaten with butter for breakfast.

Doughnuts.—To one quart of milk add 1-2 lb. of butter, 1 1-4 lbs. of sugar, 1 teaspoonful of soda, and two of cream of tartar dissolved separately in as little water as possible. Mix with sufficient flour, and boil immediately.

How to Make Good Butter from Frozen Cream.—Before churning, put the cream into a tin vessel and put it over a kettle of boiling water. Bring the cream to a scalding heat. Let it gradually cool to a temperature of 60°; then churn. If you want a rich yellow color, finely grate two common sized carrots to a gallon of cream. Put a little water to the pulp, thoroughly extract the juice, and put this into the cream and churn. *The above is communicated to the Cultivator by a lady.*

Salting and Packing Pork.—I will tell you my mode after an experience of forty years. I allow the hogs to cool after killing; take out the bones cut off the hams and shoulders; then cut the side pork into strips of convenient width; put in a quantity of salt in the bottom of the cask; then put in a course of meat, laying the pieces on the edges; then a covering of salt; then another course of meat, and so on until the cask is full. The whole is carefully kept covered with brine as strong as salt and boiling water will make, skimming the boiling brine so long as anything rises. The brine is put on cold, and I am careful to know that there is always undissolved salt in the barrel. It is not found necessary to scald the brine in spring. I sometimes use saltpetre and sometimes not. Hams and shoulders are salted in separate casks.—*American Agriculturist.*

TO CORRESPONDENTS.

Communications are to be addressed (pre-paid) to the Secretary of the Board of Agriculture, Prof. Lawson, Dalhousie College, Halifax, N. S. Communications must be in the Editor's hands not later than the 15th of the month, if intended for the ensuing number.

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