

The Agriculturist.

A WEEKLY JOURNAL DEVOTED TO AGRICULTURE, LITERATURE, AND NEWS.

ANDREW LIPSETT, Publisher.

"AGRICULTURE THE TRUE BASIS OF A NATION'S WEALTH."

ANDREW ARCHER, Editor

VOL. 1.

FREDERICTON, N. B., JANUARY 4, 1879.

NO. 39.

Varieties.

Good-by, Old Year, Good-by.

The bells ring loud, in muffled tones,
The chilling wind makes sadder moan;
The flowers are dead, and all must die,
Good-by, old year, good-by.

The laughing streams run coldly now,
Stern winter reigns, with ice-crowded brow,
Fair winter is dead—all youth must die,
Good-by, old year, good-by.

Once you were young, but now you're old,
Our youth can ne'er be bought with gold;
Your youth is dead—all youth must die,
Good-by, old year, good-by.

Your glory came, your glory's gone,
All glory fades, time breathes upon,
All grandeur and pride shall surely die,
Good-by, old year, good-by.

You brought us much of galling grief,
But like our joys, it smart was brief,
If joy must die, then grief must die,
Good-by, old year, good-by.

Thou wast a year of hundred years,
O! glorious triumph that endears,
But, ah! as the others, thou must die,
Good-by, old year, good-by.

Thou hast been true, and true to the end,
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Agriculture.

Value of Agricultural Journals.

There is a great deal of sound sense in the address lately delivered before a "Farmer's Club" in the influence and value of agricultural journals. It does not signify where the address was delivered or who delivered it, whether in this Province or the adjoining State of Maine, whether by a practical farmer or by an agriculturist editor, more or less theoretical, the gist of the observations made in it are sound, and apply everywhere. The scope of the address is that the farmers who subscribe for and read an agricultural journal are far ahead of those who do not, for they continually receive hints from them which are invaluable in practice.

So clearly and palpable have journals of this class demonstrated their value, that it is often possible in passing through a rural district to discover by unmistakable signs the farms at which such papers are taken, and where they have found a welcome home; and it is easy to see that in the presence of these sheets of useful knowledge, the whole aspect of the farm is changed, and the result improved. Manures and fertilizers are more efficient, as well as more abundant; the latest and best methods are adopted; a new impulse is given to vegetation; and the very roots of the crop strike deeper, and spread wider than before, and even the meadows assume a brighter shade of green, and cereal grain a deeper tinge of gold. And, finally, as a crowning evidence of what is here claimed for the influence of the press along with this new vigor of vegetation and more abundant yield, we find also a reduction of cost that is even more important than the rest.

It would be easy to refer by name, if it were not invidious, to a score of such papers, in either of which a single number could be pointed out, which for intrinsic value is worth, to a shrewd farmer, the subscription of a life time. Even single passages could be here referred to in various journals, in which the facts compressed in a few lines are worth more to an intelligent practical man than a ton of guano or an acre of land, for the acre of land is confined to one unchanged spot, and the ton of guano admits of only one application. But the great facts of experience in farming are not bounded by an acre, and do not expire in one application. On the contrary, they are developed by use, and grow by repetition. They spread and multiply from farm to farm, and from year to year, until a continent is made richer by them, and posterity hails them as a treasure.

No agricultural journal is perfect, (what paper was ever issued that exactly met the tastes of all its readers,) but instead of abusing it those who find fault should try and amend it. The only way to give such a paper a distinctive local character is for intelligent farmers to write the result of their practical experience, to give their readers the benefit of their observations on the farming operations in their district and county; to make it the medium of stating the difficulties that arise in the course of their labors with the view of drawing out answers from those who have met and overcome similar difficulties. If farmers of New Brunswick more generally subscribed for an agricultural paper, and took an interest in it by aiding to make it locally and provincially interesting, they would do a great deal to raise from its apathy and create a current of thought in the agricultural mind of the Province which would not but benefit their time honored calling. The following remarks from the address mentioned are to the purpose:—

The mere fact that a paper of this class is not perfect is the last reason in the world for neglecting it. If you have discovered the defects of your local paper, you are the very man to help improve it, by taking hold of it with a will. If you order it at once, paying for a year in advance, you will be sure to read it, and after reading a few numbers you will find time occasionally to write for it. But don't be afraid to criticize and make suggestions. And, above all, send in new facts, giving your own experience and that of your neighbors. In this way your example will kindle a contagion throughout our town and country, and you will have the satisfaction of improving your local paper, and extending its circulation, while largely increasing the sources of pleasure in your family, and the sources of profit on your farm.

The fencing of North Carolina is valued at \$10,000,000, and the stock at \$2,000,000. In other words, it takes \$5 worth of fencing to protect the crops against \$1 worth of stock.

Care of Stock in Winter.

The following is the plan adopted by an experienced farmer in wintering his stock, as stated by himself:—
To the farmers who have to feed their stock half of the year, any method of economizing fodder is a question of much interest. There are two points to be considered; how we can feed at the least expense, and have our stock to do the best. The plan of starving stock during winter is among the things that were, but are not. Spring-feeding is a term we seldom, and ought never to hear. Our farmers are determined to feed well, cost what it may. Hence the above question comes up, how to feed well and economically. The farmer who makes these two points meet is, or ought to be, a successful farmer.

One of the various expedients for cheap feeding is to make the best use of our coarser fodder, such as straw of various kinds, corn husks, stalks, etc. Very much depends on the mode of harvesting corn, whether the corn fodder is of much account. In harvesting corn, two points will be considered by all good farmers—to harvest at such time, and in such manner as to give the largest amount of sound corn, and have the fodder most palatable and nutritious for stock.

Cut it while the stalks are quite green, and the corn partially ripened or glazed, as some term it; put it up in small stacks of from three to five bundles each. Let it remain until cured, when it may be either husked in the field, or carted to the barn and husked there. The main point, after harvesting the largest amount of good corn, is to get the fodder in the best possible condition. The way I have used my coarse fodder for several years is as follows, and the oxen and cows eat it with fine relish:

After I have done my thrashing, I take a layer of corn fodder and spread it evenly over a space the size I would have the mow, and over this spread and even thickness of good, early cut straw, and continue this process alternately until the mow is completed. It would not be strange if the mow should mould a little, but this will not prevent the cattle from eating it readily. I have been feeding from just such a mow this last month. I have given my oxen and cows about half their feed from this mow, and the remainder good English hay, and so far they have not left a bushel basket full of waste from either kind of feed. In addition to this, I give my cows a small quantity of shorts, scalded and mixed with skimmed milk. My cattle are doing well, and the cows give a good quantity of milk for the season, and so far, we have not used any coloring for the butter, which we do as soon as we see any want of it.

A farmer writing to the *Cultivator* says, on this subject that "farmers might spend more time with our stock than we do, and profitably too if rightly employed. Very many farmers make it a practice to turn their animals out of the stables in the morning, and let them be out during the day, whether it is stormy or pleasant. Would it not be much better in all stormy days to have them watered morning and night, and put back again into the stable, and so not be exposed to the winter storms? It is true it takes more time to do so, but I think our animals are much better off for the care. Sheep also should not be allowed to lie out in the cold rain storms so common in this latitude. Many farmers hardly have a shelter for them at all during the winter, thinking that their covering of wool will keep them warm. This is true if we keep the sheep dry and under cover in stormy weather; but a sheep with a heavy fleece, wet to the skin by fall or winter rains, is in no condition to withstand the cold wave that frequently follows such rain storms. If these sheep had been housed in the storm and kept dry, a cold snap would not injure them. Care should also be taken to give each sheep a little grain daily from the commencement of winter, and if the feed is short and the ground not covered with snow, it would be well to begin feeding grain while the sheep were running to pasture. I have usually fed corn, sometimes corn and oats mixed, but have had as good success with corn alone as with any grain, and I begin feeding lightly as soon as the sheep come into winter quarters. This winter I began with a single handful of corn to a breeding ewe daily—not because the flock was thin in flesh, but because I wish to keep them fat for the better profit in their produce of both lambs and wool the coming spring. My experience teaches me that to do so, I must begin feeding grain at the beginning of winter, and continue it till the flock is turned to pasture in the spring.

A model Texan gave his son-in-law a wedding present of 80,000 head of cattle.

Grape-Growing in Canada.

Is Canada adapted for the culture of the grape vine? Is a subject which agriculturists and horticulturists are now agitating. When Great Britain with her milder climate finds it impossible to grow vines except under glass, we should conclude that Canada, with a temperature during the summer months as high as some parts of the Southern States, and exceptionally low in winter, would prove a still less promising field; but there are properties in the soil and climate of this country which favor the cultivation of the grape vine. A pure atmosphere and a limestone bottom are essential, both of which Canada possesses to a greater or less extent. The atmosphere is rendered clear by its immense water source; as for instance the mighty St. Lawrence and the beautiful Ottawa, and we may add the noble St. John, sweeping by our shores regulate the atmosphere and purify the air.

In view of the statement recently made that Europe will yet depend on America for vines, the question of vine culture is destined to be an important one. In France there exists a disease (*Phylloxera*) among the vines, which in time will prove disastrous to the culture of the grape. The soil on the Island of Montreal and vicinity has properties that are not equalled on the continent. As an illustration, the famous apple grown on the Island of Montreal and below Quebec has a higher color, firmer flesh, and a tartness that is unsurpassed by any other species of the fruit. The fruit grown in Western New York, although fine, cannot command as high prices in the European markets as Canadian fruit. In Scotland the buyers have learned that the fruit imported from Canada has the preference on the market.

Grape-culture has been very uncertain, although satisfactory at times, in Canada, owing to the early frosts, which often destroys the crop before it is matured. Another great enemy to the grape is "mildew," but this difficulty is almost invariably overcome by a pure atmosphere. The production of grapes is not governed by changeable seasons, as apples and other fruits. The vines, as a rule, bear abundantly every year. Another advantage in growing grapes is that they will bear the second year, and do not require as much labor as any other farming product. For instance, one man if properly trained can prune and lay down an acre of vines in a day. Two men can cultivate and secure for the winter eight or ten acres of vines. The next point to consider is the profit to be derived from grape culture. Under the most unfavorable circumstances an acre of vines will produce from five tons upwards. Calculating a sale at ten cents per pound, an acre would realize a profit of \$1,000. In order to be successful in grape culture, however, it is necessary to become acquainted with the pruning of the vine, which is very simple, easily learned, and does not require the science in cultivating that other products. The success of Mr. James Morgan, jun., is worth mentioning in support of the suitability of the climate of Canada for grape culture. Mr. Morgan sent a specimen of the grapes grown in his garden at Hochelaga to the Philadelphia Exhibition. Notwithstanding that specimens were exhibited from the vineyards of every part of the United States, including the great fruit center of Western New York, he was awarded a diploma and bronze medal. The success of Mr. Menzies at Point Claire with what is now termed the "Beaconsfield" vine has also been gratifying. His vines being an early ripener bear on the 25th of August and are not subject to injury by early frosts. Mr. Menzies being of the opinion that grape culture will prove an important source of wealth to the inhabitants of the island, has enlarged his vineyard at Point Claire, and has gone into the business on a large scale. There is a large amount of waste land in the vicinity of Montreal, too expensive for farming, which is well adapted as regards soil for vine culture, and which if utilized would yield a handsome revenue to the owners.—*Montreal Witness.*

HANDLING COLTS.—The colt should be handled almost daily while with the dam, and made familiar with men. Great care should be taken to avoid frightening it. It should be taught to regard man as its greatest friend, from whom it may always expect a pleasant caress, or something agreeable to eat. This is not only important in reference to its future temper and usefulness, but vastly important to its rapid growth. Animals do not thrive under excitement and irritation.

A horse was recently stung to death by bees in Rockwall county, Texas.

Broom Corn—How to Raise It.

Broom corn requires nearly the same quantity of soil and mode of culture as Indian corn. It thrives best on flat, loamy, or river bottom land, but will grow satisfactorily on any fertile soil. Corn stubble or clover sod precede it with advantage.

After thoroughly pulverizing the ground in the spring with the harrow mark out the rows 3 1/2 or 4 feet apart, and if possible sow the seed with a common garden drill, or wanting that, drop the seed as evenly as possible by hand. When the plants are two inches high, run backwards and forwards between the rows with a two-horse harrow, to kill the weeds, loosen the soil, and give the soil a start. Most people plant too thick and hence no damage will follow if some of the spears are torn up. After this treat as ordinary corn.

The next thing is to prevent the brush falling down and growing crooked. This is done by bending down the corn as soon as the heads shoot out. Be careful not to bend the stalks so low that the tops will touch the ground, or so much that the joints fracture, else the corn will be ruined. Go over the ground and re-plant the process until the heads are all out.

When the seed has matured, cutting must begin. The brush should be cut just above the upper joint, and the leaf removed. Take two rows, and after cutting the brush, cut the stalks near the roots, and lay them crosswise between the rows to serve as a bed for the brush so as to keep it from mildewing on the ground. This bed will serve for all the brush taken from eight to ten rows, and protect it from the moisture of the earth. It will become dry after laying exposed to the sun for two or three days. Then bundle and stack. Put about a dozen bundles in a stack. Cover with stalks in the manner of a conical tent, tight at the top and allowing a free circulation of air through the base to prevent heating. Let the stack remain for two or three weeks, until the corn is perfectly dry. Then haul to the barn, and take off the seed by means of a common threshing machine. Reverse the cylinder, and hold over it while revolving, as much brush as can be grasped in the two hands. A man with a boy to hand him the brush can thus clean several hundred pounds of it in a day.

The evergreen variety of broom corn is generally preferred to the other kinds. Its yield in brush and seed exceeds other varieties, and is in better demand. From two to four quarts of seed per acre should produce on small soil, 700 or 800 pounds of brush and 40 bushels of seed. For feeding purposes, the seed is nearly equal to corn. The brush, when of good quality and in prime order, meets with a ready sale to the broom makers. The crop is easily managed and highly remunerative.

A correspondent of the *Country Gentleman* makes the following remarks on buckwheat as a crop:—
"I have often wondered why this crop is not often grown by farmers who have lands adapted to its production. There is no crop more easily grown and harvested, and none more sure on land adapted to its peculiar nature. Buckwheat delights in a cool, moist soil, abounding in vegetable matter, and will produce from 25 to 40 bushels per acre, under favorable circumstances. Good soil requires only half a bushel of seed per acre. If the land is poor and dry, three pecks to a bushel should be sown. On very rich, new land, twelve quarts is sufficient for an acre, if the seed is hand threshed. All grain is liable to be injured when threshed by a machine, and buckwheat is especially so. It threshes so exceedingly easy, that what is needed for seed should be threshed by hand. If a machine is used, raise the concaves as much as possible, and then more or less will be hulled and broken. It should be sown in this section when the chestnut trees are in full bloom, or the first week in July, on a mellow seed-bed. It is a crop which will bear neglect more than almost any other. We sometimes take off a crop of hay and sow to buckwheat, thus getting two crops in one year, take off the buckwheat, and sow rye and seed down. It is an easy crop to harvest and thresh, and is usually as profitable as any grain crop. The straw is useless, except as a mulch, or to plow under on hard clay knolls.

Sheep Husbandry.

This may seem a worn-out topic. It is, indeed, a long time since Abel kept sheep and the other boy raised Cain; but the world moves in the matter of sheep as well as of men. Civilization and barbarism occur in alternate succession, along with improved and degenerate plants and animals of every species, unless we except a few sorts of wild game and fowls that can maintain the greatest perfection in the instincts and provisions of nature. But if there is such a thing as agricultural science, it is even more certain that the science of breeding domestic animals need study—the practical knowledge of natural history. Plants and animals in their wild state are either constituted to select their homes in the great domain of life, or were placed in such homes in the first creation of the species and can not be removed by the hand of man from the prescribed boundaries of nature thus fixed. But plants and animals designed for domestic use, while capable of wide removal, are also incapable of self-protection, care and culture; and of all domestic animals, perhaps not one needs such constant care as sheep; and scarcely any that seem more allied to the company of their owners, to seek the protecting care of the shepherd. Even their kindred species, the reindeer of the north, and the red deer of the middle latitudes, in the wildest state will seek protection of man, from the chasing wolf and the hunter's hound; and it is undeniable that the kindly offices of the shepherd's life softens the asperities of his passions in kind, bearing towards his own kindred species.

But let others moralize and we will turn to the practical advantages of sheep raising in our own location, compared with other kindred enterprises of stock raising. A few years ago, the price of dairy products seemed to invite all our northern neighbors to the business of butter and cheese; but this business has grown out of proportion, so that the question of the best paying industry is again, as it will be hereafter, under review to be decided by facts and figures, modified by each one's location and circumstances. With but few exceptions, mixed husbandry is the rule for all northern farming. In most cases grain-growing and stock-raising need to go together in suitable proportion; though in most cases one or the other will be most important to supply the market, and bring back money, and the other for home use. The great grain-growing regions of the north-west and stock-raising regions of the southwest must govern themselves by the markets within their reach, and so we will do in Maine, both in grain-growing and stock-raising. The report of many farmers is that they can not make the production of beef their leading business. Good dairy cows in many cases seemed preferable, but here again, work gets such small pay when we see the quotations of Boston markets—common butter 5 to 8 cents. Some farmers note with figures their expenses and sales of products, and accept the balance as the price of the hay. In this way the price of hay used on dairy cows in cheese factories, one or two years ago, was said to be from ten to fifteen dollars a ton. It would now most likely be much less. In keeping sheep where suitable care has been bestowed, the returns pay for the hay, and in all the ups and downs of twenty years or more has been, I think, from five to twenty dollars a ton in this calculation. I suppose no account is made of summer pasturing, on the ground that they benefit the land equal to the expense of keeping the pastures. No account is made, either, of the straw and other coarse, unpalatable fodder and the long periods of bare ground in early winter, when they get their own living. All these items in the habits and wants of the sheep need to come into the account when compared with other stock. Then again there comes the more important item—the saving of labor in keeping, cleaning out, manure and watering (though they need but to have water accessible) and still more, the of labor in the dairy rooms two or three times a year. The products of the flock are sure money and if we review the history of the last twenty years, the fluctuations are less than in any other agricultural interest. As to the varieties or kinds of sheep, we had better have, each can decide best for himself by careful observation. Peculiar types of wool and mutton seem to belong to each location. With us it is good mutton and long wool—the best for northern use. And now comes the question, what to do with our wool. The buyer is at our door ready to take it all, with a keen eye to the coming wool there is in it. The coming wool trade is gleaming all northern Maine and all Canada to work into worsted goods. The most

of our wool is thus sorted and we get the fleece back for our common wear, which chafes a little too much to be comfortable. Now I have nothing to say who shall get back the spinning wheel and loom, but I have this to say, that I want to wear myself as good wool as I raise. Some that I got lately scratches a little more than I feel the need of. No matter to what extent the business is carried, of supplying the market with combing wool, but what we have ourselves, let us have as good as we raise. Let the spinning wheel and loom or woolen mill, make our cloth from the whole of our wool as we furnish it, and we will support the manufacturer and will all feel better.—*Cor. Rural.*

Two Crops a Year.

It is the design of the market gardener to obtain two crops in one year from a large part of his land. The ordinary farmer cannot do this to any great extent, because the crops which he cultivates nearly all require a whole season in which to mature. As a general rule, the Northern farmer finds the season short enough when he only tries for one crop. But most farmers might utilize parts of their gardens for the growth of a second crop, and be gainers by the process.

The space which was devoted to early potatoes, peas, radishes and lettuce, can be cleaned up and sown to flat turnips, or set with rutabaga plants. Although the double crop will take more from the land than a single one, the thorough hoeing and pulverizing which will be necessary to fit the land for the reception of the seed or the plants, will be very useful. By this means, a great many weeds which have appeared may be killed, while multitudes of seeds which are waiting a favorable opportunity for growth may lose their vitality by means of the untimely exposure to the heat of the summer sun. Part of them will probably live and grow into vigorous plants. Though weeds are always a nuisance, it is better that they should start now than it is to have the seeds remain as they are until spring and then grow. If they start now the season will be so short that they will not get developed before frost comes, but if they lie in the ground until next year they must be constantly hoed up, or pulled up, or else they will ripen their seed and provide for a succession of their evil kind. Even if the garden has been kept quite clean for a long time past, there are probably many weed seeds in the ground, and, as these retain their vitality a long time, it will be safe to expect that whenever the land is stirred there will, very soon, appear a crop of weeds.

To destroy these and thus save labor next year, would almost pay for the work of fitting the soil for turnips and caring for the crops. The turnips are also worth something. Many families esteem both the flat varieties and the rutabagas for table use. The English farmer makes great use of turnips for his stock. Many farmers in this country consider them valuable. Sheep are especially fond of them, and cows and oxen which are being fattened are said to gain rapidly when fed with them. The seed costs but little, and the cost of raising a few bushels is very small. The land should be either hoed over, or, what is better, worked up fine with a cultivator or pulverizer. All weeds, potato tops, and other foreign materials should either be buried or removed. The application of a few hundred pounds of bone dust per acre will prove highly beneficial. Ashes will also be useful though not as good as the bone. Either of these fertilizers should be harrowed in. Green stable manure should not be used. Well rotted manure from the barn or hog pen, if made very fine and well mixed with the soil, will increase the quantity without seriously injuring the quality of the crop.

For early use, either for table or stock, the flat turnips are the best, while for spring the rutabaga is very far superior. The former can be sown broadcast or in rows. If a seed sower is owned, or can be hired for a reasonable price, the latter method is very much the best. This will allow the weeds to be removed; and the land can be occasionally stirred around the plants, thus promoting their rapid growth. If rutabagas are grown, they ought to be sown in rows or else transplanted. The best way, if a seed sower can be used, is to sow in rows, wide enough apart to admit of cultivation by horse power if the piece is larger to be between comfortably; if the piece is small and hand labor only is employed, and when the plants are large enough, thin to eight or ten inches apart; or the seed can be sown in a bed and the plants set out when large enough. They need occasional hoeing, but will well repay all the expense involved in their cultivation.—*Director Rural.*

Working Steers and Balty Horses.

The following rules for training working steers are worth knowing by all who use the labour of these patient animals:—

1st. Cultivate feelings of sympathy and attachment toward the animals.
2d. You cannot keep them too tame and fond of you by frequently rubbing them with the hand especially about the head and neck. The pressure of the hand on a tame animal assures him that all is right and puts him more completely under your control.
3d. When out of the yoke teach them to walk by your side under the goad (I never move a steer without one) and never drive him in front of you as is the usual custom because it teaches him to retreat from your presence.

4th. Give each steer a name, only one name for one steer.

5th. Always speak his right name and bid him do the exact thing you desire him to, and then kindly show and teach him how to do it approving his obedience by gently rubbing him.

6th. Study to use the goad as gently as possible can be and enforce obedience and never use it in a manner to excite fear in the animal.

7th. Never inflict punishment when in anger and always exercise perfect self control, otherwise your team will lose confidence in you, and you will fail of success.

8th. Show your confidence in them by trusting them as far—but no farther—as can be done with safety.

9th. Teach them not only the simple tactics of oxen, but all the improvements you can learn or invent that can be of practical benefit.

There are few farmer's who have not possessed, or will not possess a balty horse some time or other. The following rules for the treatment of such a case have the sanction of