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LUCYFIELD, 22nd May, 1872.

The season is unusually backward, and although we are now past the middle of May, it is only in dry situations and light soils that much progress has been made in spring planting. In some places the frost is not yet completely out of the ground. Mature heaps put out in the fields in exposed situations last Fall are only now thawing out, so as to be spread. It will give a correct indication of the lateness of the season if we mention that our snowdrops were in full bloom on the 11th of April last year, and that this year the same clumps were scarcely as far advanced on the 15th of May. In fact, the season in Halifax County is more than four weeks later than its predecessor. Notwithstanding what we have stated, no time should be lost in proceeding with spring work, preparing the ground, seeding, and planting.

What were the peculiarities of the past winter? A long period of severe weather without any covering of snow, and then, as spring approached, very heavy drifting

snow storms, such as have not been seen for thirty or forty years before. In several respects, then, the winter was a very severe one; we have never seen so much injury done before to trees and plants. Strawberries planted in the fall, have, in nearly every instance, been killed out completely, so as to render replanting necessary. In some situations raspberry canes have died and will give no fruit this season, although the roots are uninjured. Hollyhocks, Pansies, Daisies, and other plants that resist ordinary winters without protection, have succumbed to the winter of 1871-72. Such shrubs and trees as Forsythia, Purple Laburnum, Single Almond, which did not ripen their wood well in the Fall, have been killed down almost to the ground. Every plant in an exposed situation has suffered. Even the young native pines, hemlock and spruces, in clearings in the woods, have their tops browned; and we observe from the Gardener's Monthly that these hardy natives have suffered as much in the gardens and pleasure grounds of

Philadelphia as on the hills of Nova Scotia. One fact has been clearly brought out by the experience of this severe winter, viz.—that *young* plants suffer most. After a tree or shrub attains a certain size, and robustness of growth, it is much less subject to the influence of severe weather, whether summer's heat or winter's cold. The planting of ornamented trees and shrubs has become more prevalent of late years, and after so trying a winter, we should be glad to receive, for the information of our readers, hints respecting the hardiness of new kinds that have been tried in various parts of the Province.

The grass is now beginning to grow, and in favorable situations the fields are not only green, but the grass has acquired some length. If there is any truth in the adage, that a wet May brings plenty of hay, we may look forward with fair hopes; not that the rain fall has been very heavy, but there has been much dull, cold, grassy weather. In anticipation of labour difficulties in some districts

there is an increased demand for Mowing Machines. In western Canada, the wheat suffered much from want of a covering of snow during the severe frosts of winter.

We are requested by Mr. Harrington to notice a plough which was imported sometime ago by a gentleman from England, and may now be purchased on favorable terms. It is a sub-soil plough, to follow the first furrow of an ordinary plough, and only loosen the soil 8 or 10 inches deeper. By that method, our informant states, crops have been more than doubled in England, where they now plough by steam to 3 feet deep. The plough requires four good, strong horses, or, what is better, 2 yoke of oxen, to work it.

### HINTS FOR THE SEASON.

(From the Gardener's Monthly.)

#### FLOWER GARDEN AND PLEASURE GROUND.

Taste has been variously defined. Perhaps it may be expressed as putting the proper thing in the proper place. In this view how tasteless are often the garden ornaments we see. Rustic baskets, vases, fountains, rock work, statues, all or any of which show to so much advantage in the hands of tasteful persons, are too often employed to great disadvantage. It requires much judgment to select the appropriate places for trees, shrubs, or flowers in the garden; but much more to place properly these more artificial adjuncts. It is not uncommon to see rock-work in the midst of the most artificially formed part of the garden, and vases in the wildest places. Good taste would reverse this rule. It is still more frequent to find a piece of rock-work of the most rugged character acting as a base for a large urn or vase. Last summer we noted in one garden, which on the whole, exhibited pretty good taste, an arbor of rustic branches leading out from the parlor-door to the grounds; while down in one of the most retired portions, with everything natural about it, another arbor built by rule and plumb-line and neatly painted, and otherwise adorned, surprised us. Rules for these things can scarcely be laid down. Fitness must be born in one. It is hard to teach it. But hints of this kind often put one on guard, and thus serve a useful purpose.

The bedding geraniums have become so popular of late year- that every one now has some of the varied kinds. Few persons in the far away regions have any idea of the vast number of kinds used near

the large cities. Every one has a "seedling" to show the visitor. It is very rare to find a variety much different from others grown. Bust's General Lee, noticed a year ago in this Magazine, is perhaps the best raised in this section. It has much of the tint of the old Lord Palmers on, but is a regular petaled flower and an excellent grower. How it will behave as a bedder, we suppose the present season will decide. The double varieties have not produced very good bedders, nor have the tricolored-leaved varieties. These, however, are excellent for vases, or choice spots where the full sun will not get at them, and make pleasing contrasts with the deep shade of trees in a summer afternoon. For open sunny spots the Coleus is still one of the best to employ, and here the golden forms do not do as well as the green or purple kinds. The oldest, *C. Verschafeldtii*, is yet one of the best for sunny spots; but the color of it is much mellowed by being grown a little in the shade. Pretty combinations in partial shade can be made with this and the greenhouse begonias. The spotted caladiums may also enter into the picture, if moisture enough can be supplied. As a bordering for this colored-leaf gardening there are few things more effective than the variegated variety of *Vinca major*, the great Periwinkle. Some people complain that they have too much shade for a flower garden; but it is some satisfaction to know that these shady nooks are just the things for many leaf plants, provided the place is not too dry.

Very hot out-door places have been favored of late years by numerous succulent plants which do best in exposed situations. The *Echeverias* come in admirably for this. Two kinds, *E. metallica* and *E. secunda* are now well known, and are becoming cheap enough to be used in quantities with good effect. Some variegated plants stand the sun pretty well, and the variegated *Astilbes* particularly have been found of this class; and the blotched and striped *Alternantheras* and *Irisenes* do well also exposed.

In the way of silver-leaved plants much has been done within the few last years. As a dwarf, the *C. ragusina* or *C. candida*, as some catalogues persist in calling it, is yet one of the best; but it does not propagate as rapidly as some other things, and is still rare. There are some new ones very distinct from this, of which *C. Clementii* and *C. plumosa* are now getting known. Of pretty things not grown for either flowers or gay leaves, the *Morsiphyllum asparagoides* is becoming very popular. It is singular that this pretty little plant should have remained many years in old greenhouse collections, until a few years ago the Boston florists found out its merits in basket and bouquet making. The little leaves are like box-green and shining, but are on twining stems

which give the twigs great delicacy. It is a very nice thing to mix with vase plants. Most of our readers are, however, acquainted with this pretty plant by this time.

All our readers also know pretty well now that our very hot suns are not favorable to the Fuchsia. But besides this the red spider is very troublesome to them, and the heat often gets blamed for the insect's work. Wherever there is any yellowing apparent in a Fuchsia's leaf, see if the spiders are not at work, and if so, apply some of the remedies we have frequently recommended. The insects are small as dust, and require a pocket-lens to see them with. A few years ago a golden-leaved variety called Meteor, attracted some attention. It has now a companion in Golden Treasure.

Tree Carnations of late years have added much interest to the flower garden. They are somewhat straggling growers, but all can forgive that for the sake of their sweet flowers, which are produced one after another during the year. They do not like a very hot and exposed place, but yet are very impatient of shade.

As a rule, people do not think enough in spring of their summer and fall gardening, though all must be provided for at this season. The Gladiolus, Tuberoses and Tigridia come in well for this purpose, and the bulb can be set in between the spring blooming plants without interfering with them. Then there is the Pampas Grass, the Erianthus, Scarlet Sage and Tritoma, which will make the garden gay enough. The Dahlia and Chrysanthemum are well-known for this purpose; but generally the Dahlia is put in too warm a place and it blooms too soon to be very effective. On the other hand the Chry-anthemum is placed in a bleak, cold place, where the plants get injured by the early white frosts. A warm and sheltered place is the one for them. The new style of Japanese Chry-anthemum is gaining popular ground.

In preparing flower beds, we often notice a mistake made in copying from European gardening. There is too much earth in them.

In planting out flowers don't take them at once from the hot house to the open ground. Set the pots out for a few days in a cold frame with plenty of air, or under a tree in a sheltered place. Before turning them out of pots, water; and when set in the earth, press the soil very hard about the flower root. If the ground be dry, the earth cannot be pressed too hard.

In this climate, Hothouse plants often make noble bedders. The Chinese Rose Hibiscus, is a first class thing, making a gorgeous show all summer. The Geranium also is getting immensely popular. The tree Carnation is also in much request. Deciduous trees can be safely tr

planted after the leaves have pushed, and up to June; but the new leaves must be taken off, and the young shoots shortened. In a few weeks they will push out a new crop of leaves. According to "natural laws" as laid down in the books, it would injure the trees very much; but after a ten years' observation of the facts, we do not find it hurts the vitality of the trees very much, while few ever die so treated. Evergreens seem to do better in May than in any other spring month. Of the new evergreens, *Thuja borealis*, *Cupressus Lawsoniana*, *Libocedrus decurrens*, *Thuja ericoides*, are really good additions to our list.

Trellises and stakes for climbing plants and vines should be put in at or before setting out the plants. These plants always seem to grow with more freedom and vigor when they can find something at once to cling to. Climbing vines add greatly to the interest of a garden. They can be trained into all sorts of forms and shapes; and many of them, for gracefulness of form or beauty of their flowers, cannot be excelled by any other tribe of plants.

#### FRUIT GARDEN.

If large fruit is wanted thinning assists. Strawberries are increased in size by watering in a dry time. Fruit trees should be allowed to bear only according to their strength. If a transplanted tree grows freely it may bear a few fruits,—but bear in mind growth and great fruitfulness are antagonistic processes.

Handsome forms are as desirable in fruit as in ornamental trees. No winter pruning will do this exclusively. It may furnish the skeleton,—but it is summer pinching which clothes the bones with beauty. A strong shoot soon draws all its nutriment to itself. Never allow one shoot to grow that wants to be bigger than others. Equality must be insisted on. Pinch out always, as soon as they appear, such as would push too strongly ahead,—and keep doing so till the new bud seems no stronger than the others. Thus the food gets equally distributed.

When the strawberry crop is about to ripen, mulch with clean straw, to prevent rain from soiling the fruit. Short grass from the lawn is often used; but it mildews as it decays, and detracts from the flavor of the fruit. Hot suns increase flavor, and strawberry tiles were once in fashion to put round the hills, which, by absorbing heat, added greatly to the fruit's rich quality. All that we have said of Strawberries supposes them to be fruited on the hill system, with the runners kept off. Those who desire the best results, will grow them no other way; but many grow them very successfully in beds, believing that though they may not have as many large fruits, they have a greater weight in proportion to the labor bestowed.

When water can be commanded, there is nothing so profitable as to well soak the soil about small fruits; first about the time that they have set their fruit. Much of the value of this operation, however, will depend on the nature of the soil. The advantages are least in a tenacious, and greatest in porous soil. It is said that an animal derives most benefit from food when it is hungry before it begins to eat; it is certainly so with plants. Water applied to soil already wet is an injury; and water never has so telling an advantage on vegetation as when every leaf is about to wither up for the want of it. A plant that never seems to want water is in a very doubtful condition in regard to its health.

Blackberries and raspberries, set out in spring, may kill themselves by overbearing. It is pardonable to wish for some fruit the first year. If a tree seems to be growing freely, some fruit may be left. Cut out black-not, or any symptoms of disease that may appear, and as they appear.

#### VEGETABLE GARDEN.

In the cultivation of garden crops, the hoe and rake should be continually at work. Weeds should be taken in hand before they are barely out of the seed-leaf, and one-half the usual labor of vegetable gardening will be avoided. Hoeing or earthing up of most garden crops is of immense advantage in nearly every case. One would suppose that in our hot climate flat culture would be much more beneficial; but a fair trial, say on every other row of a bed of cabbage, will show a great difference in favor of the earthed-up plants. It would be easy to explain the reason of this, but in this column we try to confine ourselves to "hints," and leave reasons to our other departments.

Cabbage, Cauliflower, and Brocoli, are now set out for fall crops, and Endive sown for winter Salad. Lettuce also for summer and fall use. This, however, must be sown in very rich soil, and in a partially shaded situation, or it will go to seed. Peas, Beans, and other crops, should be sown every two weeks. They do much better than when a large crop is sown at one time, and then have too many on at one time to waste.

Melons, cucumbers, corn, okra, squash, beans, sweet potatoes, lima beans, pepper, egg-plants, tomatoes, and other tender vegetables that do not do well till the sun gets high, and the ground warms, should go into the soil without delay. Mr. Perriman, of Michigan, uses no poles, but cuts off the runners as they appear, and the plant bears abundantly as a bush. Tomatoes do well tied to poles.

Bean poles should be set before the beans are planted; and near cities where they are comparatively high priced, their

ends should be charred. This will make them last some years.

In sowing seeds it is well to remember that though the soil should be deep and finely pulverized, a loose condition is unfavorable to good growth. After the seeds are sown, a heavy rolling would be a great advantage. The farmer knows this, and we have often wondered that the practice never extended to garden work.

#### THE ORCHARD GRASS.

*From Lawson's Agriculturist's Manual.*

The Rough Cocksfoot is a well known grass, growing abundantly (in Britain) in all waste places where not very barely cropped by the cattle. It is a valuable grass in cultivation on account of the great quantity of produce which it yields, and the rapidity with which its leaves grow after being cut. Its habit of growth is tufty, and rather unsightly, with broad foliage of a slightly glaucous-green color, which renders it unfit for ornamental parks and pleasure grounds. Sheep are remarkably fond of it, but they should not be put to graze early in spring, for if allowed to stand too long, it gets hard and coarse. When subjected to perpetual pasturage the Cocksfoot does not seem to last above five or six years, but gives place to the smaller and finer leaved sorts. This may be accounted for by its spreading very little in the ground, and being in general closely eaten down by cattle, particularly sheep. It is well adapted for growing in shady moist places, under trees, &c. In America it is getting into extensive cultivation under the name of Orchard Grass.

*From Smith's English Flora.*

In shady places, orchards, &c., this is a harsh, coarse grass, not very acceptable to cattle; but when cultivated on dry open land its quality becomes excellent, and the crop of tufted radical leaves abundant.

*From Flint's Grasses and Forage Plants.*

Orchard Grass grows in dense tufts. Its stem is erect about three feet high. I have found specimens in good soil, over five feet high. Leaves linear, flat, dark green, rough on both surfaces, which, with the fancied resemblance of its tufts to the foot of a barnyard fowl, have given it the common name in England of Rough Cocksfoot. Root perennial. Flowers in June and July. Not uncommon in fields and pastures.

This is one of the most valuable and widely known of all the pasture grasses. It is common to every country in Europe, to the north of Africa, and to Asia as well as to America. Its culture was introduced into England from Virginia, where it had been cultivated some years previously, in 1764. It forms one of the

most common grasses of English natural pastures, on rich, deep, moist soils. It became soon after its introduction into England, an object of special agricultural interest among cattle feeders, having been found to be exceedingly palatable to stock of all kinds. Its rapidity of growth, the luxuriance of its aftermath and its power of enduring the cropping of cattle, commend it highly to the farmer's care, especially as a pasture grass. As it blossoms earlier than Timothy, and about the time of red clover, it makes an admirable mixture with that plant, to cut in the blossom and cure for hay. As a pasture grass it should be fed close, both to prevent its forming thick tufts and to prevent its running to seed, when it loses a large proportion of its nutritive matter, and becomes hard and wiry. All kinds of stock eat it greedily when green.

Judge Buel, distinguished as a man of taste, said of this grass: "I should prefer it to almost every other grass, and cows are very fond of it." Elsewhere he says: "The American Cocksfoot or Orchard Grass is one of the most abiding grasses we have. It is probably better adapted than any other grass to sow with clover and other seeds for permanent pasture or for hay, as it is fit to cut with clover and grows remarkably quick when cropped by cattle. Five or six days growth in summer suffices to give a good bite. Its good properties consist in its early and rapid growth and its resistance of drought; but all agree that it should be closely cropped. Sheep will pass over every other grass to feed upon it. If suffered to grow long without being cropped, it becomes coarse and harsh." Colonel Powell (a late eminent farmer of Pennsylvania), after growing it ten years, declares that it produces more pasturage than any other grass; he has ever seen in America. On being fed very close, it has produced good pasture after remaining five days at rest. It is suited to all arable soils. Two bushels of seed are requisite for an acre when sown alone, or half this quantity when sown with clover. The seed is very light not weighing more than twelve or fourteen pounds to the bushel. It should be cut early for hay.

Mr. Sanders, a well known practical farmer and cattle breeder, of Kentucky, says of it: "My observation and experience have induced me to rely mainly on orchard grass and red clover; indeed, I now sow no other sort of grass seed. These grasses mixed make the best hay of all the grasses for this climate (Kentucky); it is nutritious, and well adapted as food for stock. Orchard grass is ready for grazing in the spring ten or twelve days sooner than any other that affords a full bite. When grazed down and the stock turned off, it will be ready for re-grazing in less than half the time required for Kentucky blue grass. It stands a

severe drought better than any other grass, keeping green and growing when other sorts are dried up; in summer it will grow more in a day than blue grass will in a week. Orchard grass is naturally disposed to form and grow in tussocks. The best preventive is a good preparation of the ground and a sufficiency of seed uniformly sown. The late Judge Peters, of Pennsylvania, who was at the head of agricultural improvements in that State for many years, preferred it to all other grasses.

Orchard grass is less exhausting to the soil than rye grass or timothy. It will endure considerable shade. In a porous subsoil its fibrous roots extend to a great depth. Its habit of growth unfits it for a lawn grass. Its seed weighs twelve pounds to the bushel, and to sow alone, about twenty-four pounds to the acre are required to make sure of a good crop. It should not be sown alone except for the sake of raising the seed. It is worthy of a much more extended cultivation among us.

#### ONION CULTURE.

It is sometimes thought that by bending down the tops of the onions two or three inches above the bulbs, or rolling the ground hard before sowing, or keeping it entirely away from the bulbs while growing, will prevent them from becoming scallions; but it is now generally believed by our best onion growers that any mechanical means of this kind have little or no influence in changing the form of the onion from that which nature intended to give it. It is, doubtless, better for the bulbs to grow principally out of the ground, but there is danger in removing the soil, especially when they are small, of letting in the sun upon the tender roots. The seeds are so lightly covered that no danger need be feared that the soil about the onion will interfere with the forming of the bulb. There is, however, advantage in rolling or pressing the ground slightly after the seeds have been sown, thus preventing it from drying on the surface, or being blown from the seeds, which might retard or entirely prevent their germination.

#### RAISING SEEDS.

To keep a variety from deterioration by running to scallions, or becoming imperfect in the shape of the bulb, or too late, the largest and most perfect bulbs should be selected annually for seed.

The qualities most to be desired are early maturity, thin neck, and tops that wither down to the surface of the bulbs, thus avoiding late growing onions and the scallion form as much as possible. By persistence in this course from year to year, early varieties, or late globular forms or flat, may be produced at pleasure.

The onions thus selected for seed, should be planted in drills three feet apart, in well-manured land, in early spring, the distance between the onions in the drill being eight to twelve inches. They should be covered so as to leave the neck about half an inch below the surface, and the ground be pressed gently around them. A stake should be set by the side of each, to which the stalks must be tied for support.

If different varieties are cultivated, they should be set in separate plates, at least twenty rods distant, to prevent cross-breeding, and the consequent deterioration of the varieties. No attendance is necessary, except to draw a little earth around the bulbs, to keep them clear of weeds, and to keep the stalks securely tied to the stakes. Care should be taken in hoeing and tying not to bruise the stalks.

As soon as the seed capsules begin to turn brown and show signs of opening, the heads may be cut off about six inches below the top of the stalks and tied up in small bundles, or spread on a floor or lattice work, in a dry or airy place, till dry enough to be beaten out, after which the seeds should be cleaned and put in small bags or boxes, and be kept in a dry and moderately cold place till wanted for use.

#### WHAT SEEDS SHOULD BE SOWN.

Only the newest and freshest seeds should be sown. Experienced cultivators of the onion say that the seeds will not retain the power of vigorous growth more than one year. A vigorous plant can be grown only from a healthy seed; hence the necessity of growing seeds of the previous year's growth. Their germinating power should always be tested before sowing. This may be done by planting a few in a hot-bed, or in a box kept in a moderately cool room in the house. If only a short time is allowed, they may be placed in moistened cotton or moss, in which they will begin to grow in three or four days, if of good quality.

The largest and heaviest seeds generally produce the best and largest onions, and should be carefully separated by a sieve from the small ones before sowing. Their weight may be tested by immersion in water, and drying them in the sun as soon as possible. The light seeds will rise to the surface, and the heavy ones, fit for sowing, will sink to the bottom.

These principles are of fundamental importance, and, if adopted and practiced from year to year, will prevent, in great measure, the deterioration of varieties, which is so much complained of, and frequently so little understood.

#### THE SOIL.

New land is not favorable to the growth of the onion. It should be cultivated at least two years with some other crop, as

corn, followed by potatoes or carrots. If proper amount of manure is applied yearly, the onion may be cultivated many years on the same land with decided advantage.—*From Washington Report.*

#### THE DISCOVERER OF ANNAT BARLEY.

At the present time it may not be without interest to some of our readers to ascertain the origin and history of the Annat Barley, and to hear something of the genial old man to whom it owes its existence.

Mr. Archibald Gorrie was born in the district of Logie Almond, Perthshire, in the year 1777. In boyhood he received what was then considered "a good country school education." This was afterwards supplemented by various studies in his early life, to an extent which will be indicated by the facts we have to mention respecting his discoveries and writings. Although "by birth an Agriculturist," yet Horticulture soon became his favorite pursuit, and he was placed as an apprentice in the gardens of Logie House, under Mr. Peter Barnet, father of the Mr. Barnet who afterwards became Superintendent of the Experimental Garden of the Caledonian Horticultural Society, Edinburgh. From Logie House gardens Mr. Gorrie removed to Dupplin Castle, also in Perthshire, where, under the then Superintendent Mr. Millar, and with George Don, the celebrated Forfar botanist, as a companion, he enjoyed every advantage for prosecuting his favorite study of British Botany and other departments of the Natural History of his native land.

Towards the end of the last century he had charge of the hot house department in Leith Walk nursery, where he first became acquainted with the late Mr. J. C. Loudon, who succeeded him in that charge; an acquaintance which was again renewed when Mr. Loudon continued the publication of his Gardener's Magazine, and was continued till the close of that talented writer's useful life. And we believe that after his death a living remembrance of that friendship was cherished by Mrs. Loudon, who continued to correspond with Mr. Gorrie. A knoll near Annat Cottage is called "Loudon's brae" having been planted with Coniferæ, chiefly obtained from Mr. Loudon. During the last fifty years, Mr. Gorrie, acted successively as gardener, general manager, and factor, on the property. During a considerable portion of that period he rented the neighbouring farm of Shaury, and his previous acquaintance with Horticulture was of great service in prompting to the introduction on his farm of improvements in cultivation and novelties in cropping. He reached the ripe old age

of eighty, and was cut off by an attack of bronchitis on 21st July, 1857.

The introduction and improvement of useful and ornamental plants was always a favorite pursuit with him, as will long be testified by the numerous fine specimens of Coniferæ and other rare trees, which adorn the estate where he spent the greater part of his life. Among his contributions to fruit trees may be mentioned Lawson's Golden Gage Plum, Annat Park Apricot, Annat Bourne Pear, Annat Scarlet Apple, &c., while as a florist he was the first to introduce the cultivation of that now general favorite, the Pansy, into Scotland, if not into Britain.

Several notices of Mr. Gorrie's efforts in Agricultural improvement occur throughout Messrs. P. Lawson & Son's *Agriculturist's Manual*, in which we find the following notice of the celebrated Annat Barley:—"This new and very superior barley is the produce of two ears picked in a field on the farm of Flaw Craig, Carso of Gowrie in 1830, since which period it has been grown by Mr. Gorrie, (its discoverer, at Annat Garden, hence its name.) In 1834 it was sown on a ridge in the middle of a field, with common barley on the one side, and Chevalier on the other. In bulk of straw it seems to have the advantage of both these kinds. It was five days ripe before the former, and about a fortnight before the latter. It was also about 2½ lbs. per bushel heavier than the Chevalier. (See *Quarterly Journal of Agriculture*, March 1835.) The grain is even more round and plump than that of the Chevalier, of a bright yellow transparent colour."—*Lawson's Agric. Man. P. 40.*

In 1834 *Vicia villosa* was added to the list of British forage plants by Mr. Gorrie, who discovered its seeds in a cargo of Dantzic wheat, and pointed out its applicability as a winter tree. In the same year he discovered a fertile seeded variety of the tall Fescue Grass (*Festuca elatior fertilis*), which was subsequently propagated; and in 1840 he introduced the wood Millet Grass (*Milum effusum*) to cultivation. (*Lawson's Treatise on Cultivated Grasses, &c., P. 17.*) In short the cultivation of the natural grasses, and herbage and forage plants, afforded him a constant source of profitable recreation.

Few rural writers who originate in his sphere of life, ever acquire a simple, chaste style of writing such as characterised Mr. Gorrie's literary productions. His mind was well stored with knowledge, but that expression is scarcely applicable where the knowledge was not laid up as in a storehouse, but was so completely assimilated that his mental character grew, as it were upon it. In communicating his thoughts to others, he did not merely deal out facts and items in the crude form in which they had been received; they be-

come so elaborated by the (perhaps insensible) operation of his powerfully original mind, that it was impossible to draw the line of distinction between what was acquired knowledge, and what was spontaneous thought. And in this lay the secret of his success in rendering interesting the most barren details of rural operations. We have long regarded Mr. Gorrie as one of the most intelligent writers on rural affairs and natural history which Scotland has produced; and Scotchmen will do well to cherish his memory as that of one who in his quiet and unobtrusive life did great and lasting good to their country, by his personal influence, by his modest writings, and by his improvements in the art of rural industry.

In private life, Mr. Gorrie was a man of genial and generous disposition,—of exemplary piety, strict in the observance of religious ordinances, and ever ready to give friendly advice to the young—as a genuine christian would, without one particle of hypocrisy or self-sufficiency; but he was also ever ready to check even the appearance of evil. He had withal a quiet humour, and no one can forget the joyous smile that played upon his countenance as he told some droll story of a crack-brained naturalist, or enthusiastic gardener, or blundering farmer. It did one's heart good to see an old man so happy.

#### CHEVALIER BARLEY.

(*From Lawson's Agriculturist's Manual.*)

Ears resembling those of the Common Two-rowed or English Barley, but containing on an average two or four grains more in each; grain rounder or more plump; sample every way superior to that of the Common Barley, but not so well adapted for sowing on late soil, being eight or ten days longer in ripening. This sort was introduced from England into Scotland, and in a few years came into general cultivation in the agricultural districts.

Crop 1834.—Sample in grain and straw by Sir Anthony Maitland Lander; weight 56½ lbs. per bushel. By Mr. A. Gorrie; weight 54½ lbs. And in straw by Mr. Morris, farm manager, Invermay.

Crop 1835.—Sample in grain by Richard Garret, Esq., Great Harroudon, Northamptonshire, obtained the prize at Earl Spencer's Show in September; weight per bushel (33 quarts) 58 lbs.; produce per acre about 58 bushels. Communicated by Mr. Garret to the Highland and Agricultural Society of Scotland. Also, samples in grain by Messrs. Jacob Wrench and Sons, seedsmen, London, weight 56½ lbs. per bushel; an average sample of the Edinburgh Market, weight 56½ lbs. per bushel; and by Mr. J. McLaren, Castle Hill, Inchtute,

Perthshire, a sample of excellent quality, and equal in colour to any of the above English samples. The English samples present a marked superiority in colour to the generality of Scotch samples of the growth of this season (1835) owing to the continued wet weather which the latter received in harvesting.

### Communications.

#### ORCHARD GRASS AND PASTURAGE.

Dear Sir,—Having moved the resolution under which the Board of Agriculture is about to introduce Orchard Grass to the notice of Nova Scotia farmers, it may be expected that I should give my reasons for so doing, and state what I know about this grass. The resolution in question appeared in the April number of the *Journal*; and from its perusal everyone will discover that I considered a necessity existed for the Province to import the seed of a good hay and pasture grass, and that my object was to get the Board to establish a grass in our husbandry, the cultivation of which would, in my opinion at least, prove advantageous to the farmers of Nova Scotia in both respects, but more particularly in the latter. Regarding the clovers and timothy in general use, it is a well known fact that the former are often winter-killed, and the latter produces little or no aftermath, yet modern agriculture demands with an exactness that is only commensurate with the results obtained from the practice, that stock be well fed all the year round. And how can the cattle of this Province be kept in good growing condition during the pasture season, unless their owners can avail themselves of the seed of the best grasses, with which to improve their pasture? Hitherto our farmers have had to resort to clover and timothy seed for this purpose, seedsmen not caring to incur the expense of importing grass-seed not generally called for, or sown, in consequence of which, I believe, so far as pasturage is concerned, the farming interest has suffered materially. Many persons wonder why the improved breeds of cattle do not do as well here as in England or Ontario, and why our common breeds are not better than they are, and why our cows fall away so much in their milk in the warm months of summer; but their wonder would cease, should they contrast some of the miserable over-stocked pastures of this country with the well cultivated pastures of England and Canada.

In consequence of the introduction of improved breeds of cattle, and cheese factories getting established in different parts, the subject of pasturage has become one of the greatest importance, and should be thoroughly understood by every

farmer in Nova Scotia. In this connection it might be stated that some of the leading farmers are up to the time on this question, and have had imported for their own use such grass seed as they considered best for pasturage; but their having done so, has failed to popularize any particular kind of pasture grass, and, unfortunately, the Province at large is not filled by such enterprising men. When it is, the further need of a Board of Agriculture will cease to exist; but until the wilderness and solitary parts of the Province are made glad, and the deserts shall rejoice and blossom like the rose, there will be many important duties for a Board of Agriculture to perform, and none more so than that of agitating the question of improved pasturage.

Now, that Orchard Grass is the grass best calculated to supply a great want in Nova Scotian husbandry, I am not prepared from my own experience to state positively, but there is abundant evidence to prove that it sustains, among leading farmers in England and America, a good reputation as a desirable grass, both for hay and pasture. In *Dickerman's Farmers' Book*, edition of 1869, page 184, it is thus noticed:—

“Orchard Grass, or Cocksfoot, is one of the most valuable grasses. It is as early as red clover, and it is therefore the grass best adapted to sow with it. It is productive, yielding from three to five tons per acre. It is very nutritious, and very palatable to all kinds of stock. It gives a bite earlier than almost any other grass, is permanent, will bear close and constant cropping, stands severe drought, and, when cut, will in a week give a good bite to stock. It is therefore admirable as a permanent pasture grass. It blossoms with clover, gives a very large proportion of hay, grows a speedy and luxuriant aftermath, and is well adapted for permanent meadow with clover. It is inclined to grow in tufts, to prevent which it should be harrowed and rolled in the spring, and some other grasses should always be sown with it.” And the following account is from *Fessenden's Complete Farmer and Gardener*, edition 1855, page 14:—

“*Rough Cock's Foot*—Dr Muhlenburg and T. Cooper concur in opinion that this is the orchard grass of the United States. In England, cock's foot is taking the place of rye grass with clovers. Arthur Young speaks in high commendation of it; though all writers concur in the opinion, that it should be frequently and closely cropped, either with the scythe or cattle, to reap the full benefit of its great merits. I should prefer it to almost every other grass; and cows are very fond of it. Cooper rates it above timothy, and says it is gradually taking the place of the latter among the best farmers about Philadelphia. This is

probably owing to the fact that it is earlier than timothy, and of course more suitable to cut with clover for hay. Its growth is early and rapid, after it has been cropped. It does well on loams and sands, and grows well in shade.”

Colonel Powell, a gentleman who combines as much science with judicious practice, especially in cattle and grass husbandry, as any person in the Union, says: “I have tried orchard grass for ten years. It produces more pasturage than any other grass I have seen in America. Sow two bushels of seed to an acre.”

And an article in the March number of *The Canada Farmer* headed *Swamp Lands*, speaks very favorably of the adaptation of Orchard Grass to such lands. When these lands have been cleared up and made fit for cultivation, the writer, who has had considerable experience with such lands, goes on to state:—

“Now begin and sow a heavy seeding of Dutch Clover, Timothy, Alsike, Blue Grass, and especially Cocksfoot or Orchard Grass. This last is most important and excellent in its effects. It forms bunches and mats together, and affords excellent food for stock, and support for their feet, thereby preventing poaching the land when feeding on it. No harrowing need be done, but a bunch of bushes dragged each way by one horse or ox, will serve to cover the seed sufficiently. For one year no pasturage should be taken from land so seeded down. It will yield a heavy crop of hay, and thereby a tough sod will form. If possible, not a hoof ought to be allowed on the after-grass for the first year or two, but a heavy crop of hay may be taken to great advantage. Meadows so treated will be most valuable on the farm, and, acre for acre, will pay better than the best high land.”

In view of these favorable testimonies from some of the chief farmers of the age, relative to Orchard Grass, I hope our farmers will give it a fair trial, and cultivate it after the mode recommended “to reap the full benefit of its great merits;” and whether or not, its cultivation here proves as successful as it has done elsewhere, that its introduction may be the means of creating a growing interest among farmers in the subject of improved pasturage, which will make it necessary for seedsmen, wishing to keep abreast of the times, to have on sale the seed of the best pasture grasses, and thus lend a helping hand to the husbandman in hastening the arrival of the good time coming, when the Province shall be covered by a beautiful carpet, like unto which the late Judge Wiswell in his day compared the verdure of the picturesque valley of Truro.

Yours, &c.,

I. L.

## A SERIOUS LOSS.

To the Editor of the Journal of Agriculture:

Sir.—To say all that I think should be said upon the above subject, would require more space than you can well spare; but if you will try and cram this in, I will try another word or two at a future time, that is if you think it will be of any use. It is not farmers only who require stirring up with reference to this "serious national loss," but as all are more or less sufferers from it, so "all breeds" should be educated up to the mark concerning the necessity of preventing it in future.

That our young folks are leaving the country is for the time a very serious loss; but I want to show the old folks that they are in a great measure accountable for it. Profitable employment is what the young men go abroad to seek, while the old men at home are wasting as much manure every year, as would (if saved, and applied to the land as it should be), supply profitable employment for hundreds of those who now go to the States.

Our farming operations are mainly dependent on the muck heap, and as a consequence of a limited or reduced quantity of manure we have a limited or reduced crop to harvest. We are apt to thank God for an abundant harvest, and if we believe it right to be thankful for the harvests we now reap while we are every year wasting the greater portion of our manure, how should our thanks arise for a harvest the result of God's blessing upon a *faithful and judicious application of all the manure made in the country?* The man who wastes manure is no friend to himself or the country; and yet with very few exceptions, there is hardly a farmer that saves *one-half* of what his cattle make, and even what he does save does not go on his land as good and strong as it comes from his cattle.

I have been lately in a part of the country where they raise more wheat than they require for themselves, and where they will take a great deal of trouble to haul mussel mud, &c., on to the land; but a more careless set about their muck heaps I don't want to see. While there, I met with some very intelligent farmers, one of whom, after manuring pretty extensively for other crops, manured *three acres* very highly for turnips. This evidences a pretty heavy stock of cattle, and as he allowed to me that he only saved the dry droppings, and had no means of saving or applying the liquid portion, his loss of manure must have been immense, and equal (I have no doubt) to the raising of a crop full as large as that he did raise that season. And then look at it in its compound interest light. Had he saved *all* and applied it to his land as judiciously as he knew how, the result would have been an

increased power of feeding more and more stock every successive season.

Now what may be said of this one (so to say) prosperous farmer, may be said of almost every farmer in the country, *all losing at the least one-half of the "main stay" and support of the land.* None of them saving the liquid portion of the manure and very few saving the solid portion as well as it should be saved. This is not only a serious loss but a most fearful one, when we take into consideration that there are over 300,000 head of cattle in the country, the urine of which would fill a small lake in a very few years. To save this and apply it judiciously would give employment to many, and would under God's blessing, also give more abundant crops, and so much money would not go out of the country to buy the food we now cannot raise for ourselves.

No doubt *improved* stock is a very good thing, and *improved* seed and farming implements are very much to be desired; but in order to make these as fully beneficial as they should be, we want an *improved* method of saving and making manure, we want improved muck heaps, that will (like our squah and pumpkins) grow to an enormous size in one season, not at the expense of feeding us with our cattle, but by simple saving and making. I believe that more real good will accrue to this country from adopting a system of giving premiums for saving and making manure, than from any of the present modes of spending the Government grant. Only get the *old folks* into the habit of making big muck heaps and liquid manure tanks, and I predict that some of the *young folks* who have left the country will have to come back and help apply it to the land. And as a means of helping on the "improved muck heap" movement, I would suggest to the Board that as soon as six members of any local society shall have constructed ample liquid manure tanks to their stables, stalls, &c., that the society shall be presented with a water cart and portable pump.

Yours truly,

J. H. HODSON.

BEES! BEES! BEES!

Having undertaken to give such information as shall enable you to add considerably to your income, by means of a small investment, I might now fulfil my promise by simply telling you to invest a few dollars in Bees. My object, however, is not only to tell you that Bees will do all that I have promised;—(for this is patent to every one) but also to try and make you see this, in such a light as will induce you to follow the advice given. And in order to do this, I will first point out the fact, that there is a Bee-pasture surrounding every house in the country,

actually producing a certain amount of honey every year, and which amount of honey is altogether lost to those who have free right to obtain and use it,—simply because they have not the busy Bees to gather it for them. Whereas, if any one were but wise enough to keep as many colonies of Bees as would suffice to collect the amount of honey which God has placed within his reach—he would be surprised at the immense quantity the little labourers would procure for him. No positive estimate can well be made of the quantity of honey any given pasture will yield; but when we learn that one Bee-keeper, last season sent as much as 20,000 lbs of honey from his own Apiary, to a salesman in New York—(for every pound of which he realized 30 cents) we may safely infer that if any pasture can produce as much as *ten tons* of honey in one season—it would not be unreasonable to expect half that quantity as an average of what might be collected in any well settled neighbourhood.

Just imagine then that there has been even only *one ton* of honey actually within your reach every year, which through neglect has been allowed to pass away uncollected, and which, had you kept Bees enough to collect, would have added a nice little sum to your income. Take notice also, that every acre of Beech or Buckwheat will produce from *ten to fifteen* pounds of honey every day while it is in blossom.

Now from these few remarks you may glean something of what may result from the outlay of a few dollars in procuring a few Colonies of Bees to collect at least some portion of the sweets of nature.

I would now try and show you what I deem the best mode of procedure in this matter. A small beginning could be made by purchasing *one* hive—and with care *one* hive would soon multiply, and increase so as to be able to collect all the honey within reach;—but I would not advise such a tardy and really wasteful mode of going to work—for I believe it may be laid down as an axiom, that whatever quantity of honey *less than two tons* you fall short of obtaining, that quantity will be just so much lost to you—since by keeping Bees enough to gather it, it might be yours.

Every strong colony of Bees wintered will produce (upon an average) in a moderately good season, about ten dollars worth of honey and Bees, so that you may almost regulate your salary by the number of Hives you choose to keep over during winter. Every ten strong colonies, adding a hundred dollars, more or less, according to season.

Let me ask you to draw a comparison between the Cows you keep on your farm, and the Bees you might employ to collect honey for you. The number of Cows is generally regulated by the num-



ber of acres you have in grass, for Cows must be fed by you. But the number of Bees you might keep over winter, only, or mainly depends upon your willingness to keep many or few—for Bees will find their own food, and yet afford a large portion of it to be taken away, by way of paying a rent for the houses you provide them with, and note that the better the houses, or hives are, the greater will be the rent.

I do not pretend to instruct you how to manage with your Bees when you get them—there are plenty of Bee-books—but I would advise you to get *Quincy's Bee-keeping explained*, and let all your hives be made with moveable comb-frames, and if possible get the Italian or yellow Bees, they are the most profitable and least likely to sting.

In conclusion, I recommend you to go to work and make as large a beginning as may be in your power.

Get the Bees as soon as you can and buy a Bee-book, and you will soon learn how to manage them, and be well paid for learning besides.

Yours, &c., &c.,  
J. H. HOBSON.

(For the N. S. Journal of Agriculture.)

MR. EDITOR,—This is a backward spring, and gardens, in consequence, have not been as yet much troubled with destructive insects. But whenever there has been a bright sun and disposition to warmth in the atmosphere, we have also had fine indications of what is in store to prevent the crop of gooseberries and currants. Upon these, as yet unfrequent occasions, hundreds of the fly which produces the caterpillar that infests these bushes may be seen, male and female, busily engaged in the work of procreation. The female loaded with eggs, and depositing them on the leaves as soon as they are developed. There appears to be no remedy under present circumstances for this pest, and as far as the red and white currents are concerned, it would be much better to up-root them, than to witness the devastation which this miserable insect occasions, and that without the least hope of abatement. But can nothing be done to arrest this destructiveness? We have heard and read of external applications to the bushes, and whale oil, soap-suds, hellebore, &c., have been quoted as efficacious. All nonsense—even hand picking, although a plan in abatement, will not prove efficacious. There is one thing, however, that has not been tried—the importation of birds that prey upon caterpillars more particularly. This remedy has been applied in the neighbouring United States, it is said, with excellent effect. I happened to be in Boston last year, and my heart was gladdened by perceiving some thousands of saucy English sparrows cleaning the Common of

every species of noxious depredator that infested the trees and shrubs of that ornament to the city. They had lost none of their familiarity by emigration, and must have increased in a wonderful manner since their first importation, a few years since. They all appeared jolly, well-fed fellows. The climate and surroundings just suited their habits, and I doubt very much if they would care to go back to the land of their forefathers. Now this is a remedy that might be tried here. Two or three dozen pairs might easily be procured from Boston. The Horticultural Gardens would be just the habitat in which to try the sparrow remedy, and from thence they would spread over the city and to the country, and do all the good of which they were capable, lessening if not eradicating the numerous insects that make ineffectual all the skill of the gardener; and they would do no harm. Mayor Dunbar might do something to be remembered by, if he would introduce the sparrow. At all events, if individuals are not disposed to take the honour, it would not be beneath the dignity of the City Council to discuss the matter, as one of much usefulness and worthy a full quorum.

UTILIS.

### Reports of Agri. Societies.

#### MALAGASH AGRICULTURAL SOCIETY.

MALAGASH, March 4th, 1872.

Our Annual Meeting was held in December, in accordance with instructions, when the business transacted during the year then terminating, was submitted and approved.

We transacted little other business of importance, except selecting officers for the present year, as follows:—

*Pres.*, Mr. Thos. Simpson; *Vice-Pres.*, R. W. Porteous; *Treas.*, H. McDonald; *Sec'y.*, John R. McKenzie; *Directors.*, Murdoch Studivant, Azor H. Treen, Isaac Purdy, Alex. McKenzie 1st, Duncan McKinnon.

Mr. Donald McKenzie 2nd, was nominated as Representative.

#### WALLACE AGRICULTURAL SOCIETY.

The Society, in accordance with the desire of its members expressed at a previous meeting, purchased two bulls and two White Chester pigs, and also the boar purchased by the Hon. A. Macfarlane at the sale of the stock imported by the Central Board.

The Crops in this district were over an average. The hay crop was heavy and secured in good condition. The wheat crop also good, both in yield and quality. Oats and barley an average crop. Since the commencement of the Inter-

colonial Railroad our farmers have a ready market for their produce, which is a stimulus for increased exertion on their part, so that upon the whole this section is in a progressive state.

The following gentlemen were elected officers for the ensuing year:—John P. McIntosh, Esq., *President*; Geo. M. Iver and Nathaniel Stevens, *Vice-Presidents*; D. Mackay, *Treasurer*; John Robertson, *Secretary*. Messrs. John Cook, John Moody, John Robertson, George Amos, James A. Robertson, *Directors*. D. Mackay was appointed a delegate for the purpose of electing a representative to the Central Board.

JOHN ROBERTSON, *Sec.*  
Wallace, Dec. 30th, 1871.

#### SHUBENACADIE AGRICULTURAL SOCIETY.

##### Auditing Committee's Report of the Shubenacadie Agricultural Society.

We find the Treasurer has received from 40 members the sum of \$40, which he has paid to the Managing Committee.

Cr.	
To amount from Treasurer.....	\$40 00
Provincial Grant, 1870.....	31 00
Price of Grade Durham Bull.....	20 00
Receipts for Bull service 1871.....	33 00
	\$124 00

Dr.	
By amount due Committee at commencement of year.....	\$96 26
Keep of Bull for year.....	38 00
Paid W. L. Ycomans for bull.....	26 00
Duggan's Auction bill.....	1 53
	\$161 81

Balance due Committee ..... \$37 81  
Stock on hand, 1 Durham bull, of pure breed.

Respectfully submitted,  
A. KIRKPATRICK,  
WM. BLAKE.

You will see by the above report that the funds of our Society are low, and the stock few, but I am happy to state that through the whole bounds of our Society we have in possession an excellent grade stock from the pure breed we have had heretofore. Further, a majority of the members of our Society have subscribed extra sums to give to the Committee for the purpose of buying two more bulls as pure as they can get for the use of our Society.

Our crops as a whole were rather good, hay above an average, wheat fair, except the Fife or Bald which was hurt with weevil. DAVID MOORE, *Sec'y.*

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