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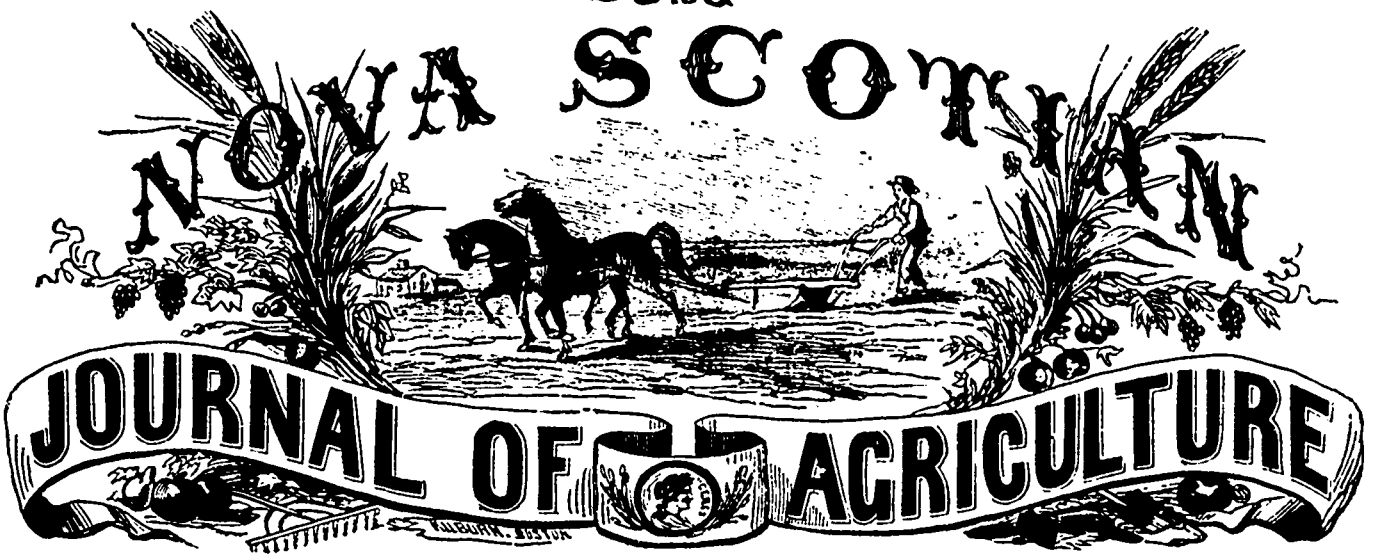

JOURNAL OF AGRICULTURE

Published under direction of the Board of Agriculture of Nova Scotia.

VOL. I. *HALIFAX, N. S., SEPTEMBER, 1870.* *No. 61.*

CONTENTS:

A HUNDRED THOUSAND DOLLARS WORTH ADDED TO THE COCHRANE HERD.

Our readers are aware that the last importation of Stock made by the Board of Agriculture was purchased principally from Mr. Cochrane of Compton. The prices paid were comparatively low, and the prices realized at the sale in Halifax were lower still. That some idea may be formed of the character of Mr. Cochrane's Herd and the money value of his animals, we give the particulars of some purchases of Short Horns which he has made in England, within the last month.

From Captain Gunter he purchased two yearling Heifers, viz:—*Duchess No.* 101, for 1000 guineas, and *Duchess No.* 103, for 1500 guineas. Both these yearlings are by 4th Duke of Thorndale. Duchess 101 is just the original Duchess colour, and the other a Bates roan. From Mr. J. C. Booth's famous Herd he purchased *Lady Grateful* for 1500 guineas. Mr. Cochrane wished also to purchase the sister of this cow, *Lady Fragrant*, and offered 2000 guineas for her, which was refused. From the Killerby Herd he purchased *Lady of the Lake*, 8 years old, for 500 guineas; *Queen of Beauty*, two years old, 500 guineas; *Fairy Gem*, one year old, for 500 guineas. Mr. Cochrane secured *Milliner* from the same herd. At Braithwaite, Mr. C. obtained *Booth's Marksman*, (a bull calf), and *Rosa Louisa*.

The above particulars are taken from the London "*Gardeners' Chronicle and Agricultural Gazette*," and may be relied upon as strictly accurate. The same journal of 13th August, adds the following information:—

An interesting catalogue has been published by Mr. Thornton of the cattle and other domestic animals purchased by Mr. Cochrane, of Hillhurst, Compton, Montreal, and shipped at Liverpool on the 2d inst., in the *North American*. We have already noticed the Wetherby, Warlaby, Killerby, and Braithwaite purchases, but besides these, heifers were selected from the herds of Mr. G. S. Foljambe, of Osberton Hall; Mr. Barnes, Westland, Moynalty, Ireland; Rev. J. Storer, Hellidon, Davantry; Messrs. Dudding, Panton, and Messrs. G. Garne, of Chipping Norton; J. Christy, of Boynton Hall; R. Plummer, Carlton Husthwaite; W. R. Bromet, Tadcaster, Atherton Chapel House; J. Logan, Newport; D. R. Davies, T. T. Drake, Beattie of Annan, Barclay of Keavil, and Aylmer of West Dereham. Mr. Thornton further informs us that besides these Shorthorns the exportations of 1870 contained a number of first-class sheep and black and white pigs. The sheep comprised the 1st prize pen of Cotswold ewes at the recent Oxford meeting, bought of Mr. J. Gillett, of Minster Lovell; and 14 Cotswold ewes and five rams from Mr. H. Cole's stock, also successful at Oxford. A number of pure-bred Berkshire pigs were purchased at Her Majesty's farm, Windsor Castle. Seven pure-bred Berkshires were obtained from Mr. Heber Humfrey; several from Mr. George Griggs, winner of the 1st prize for boars at Oxford; and four from Mr. William Smith, of Bibury.—The white pigs were purchased from Mr. J. T. Robinson, Mr. Aylmer, of West Dereham, and Mr. Atherton. There were also exported two pure-bred Alderney heifers and their calves, purchased immediately after their arrival in England; and a superior hunting bay mare,

four years old, bred by Mr. J. Beattie, Annan, got by Laughing Stock, out of Nanny, by Nimrod, well known in the Cumberland Hunt.

TOO GOOD TO BE TRUE.

A Member of the Board of Agriculture has handed to us a copy of the *Ontario Farmer* for June last, containing the following announcement:—

"The Board of Agriculture of Nova Scotia have decided to import $10,000 worth of pure-bred Stock by the 20th September. It will consist of Horses, Short Horns, Ayrshires, Devons, Herefords, Alderneys, Sheep and Swine."

We are sorry to say that our Board of Agriculture is not in a position to make any such importation, otherwise $10,000 would not be too large a sum to expend. No special grant has been made by the Legislature this year for importations, but the Board intend to purchase animals to the extent of about $2,000, depending upon the prices to be realized by their sale to reimburse a great portion of this sum. The *Farmer's* paragraph probably has reference to the action of the *New Brunswick* Board, who, we believe, find themselves in the position this year to import to the extent of $10,000. We hope their importation will be successful, and we hope that our own Board will be able to do likewise in course of a year or two.

IMPORTATION OF STOCK.

The New Brunswick Provincial Board of Agriculture, we are informed, have appointed the following gentlemen a committee to select and purchase superior breeds of stock in the United States and Canada: Hugh McMonagle, Esq., Sussex Vale; Jas. D. Dixon, Esq., Sackville; and James E. Fairweather, Esq., Kings. These gentlemen are well qualified for the duty assigned them, and being practical men, we doubt if a better selection could be made. We understand the committee are authorized to purchase extensively in Canada and the United States, and will start on their mission immediately.—*Chignecto Post.*

GARDEN HINTS FOR AUGUST.

FLOWER GARDEN AND PLEASURE GROUND.

Every reader of our pages ought by this time to know how to trim a hedge. Experience shows all do not. Perhaps if we put the rule in a few words; it may be remembered. To keep all parts of a plant healthy, every part must have light. A hedge trimmed with upright sides and square top, allows light to the bottom parts of the hedge only mornings and evenings, *therefore*, the faces of the hedge should be sloping. Such hedges mowed once a year, are models of perfection for twenty years.

The improvements in mowing machines have nearly driven the scythe out of use. This is to be rejoiced at. It is a blessing to hundreds of gardeners, and numberless places are enabled to be kept pretty that were in roughness before. Every one should have a mowing machine. But every new idea produces evils as well as good. So these machines allow small weeds to get light which were crowded out in the long grass of past times. These now crowd out the grass in their turn. We pointed out this consequence when mowing machines were getting general. Hundreds now find it so, and ask us for the remedy. All that can be done, is to keep up the health of the grass by top-dressing in fall. This will keep the grass up in good heart longer than it otherwise would be. But it will fail in time; then the best thing will be to break up the plot, and sow it down again with fresh grass.

It is pleasant to note the increasing attention given to hardy herbaceous plants. Now is the time to look after collecting seeds. If the places where they are sown can be covered with something to shade them, and kept thus shaded till next spring, it is best to sow now. Most of our best hardy herbaceous plants are natives of America, hence if we see very pretty flowers in the wild wood or prairies, there will be nothing unfashionable in saving their seed and sowing in the garden also. When sown at this season, they will mostly flower the next year. Some seeds must be sown now to grow at all. Sweet Briar is like this. Wash the Haws out of the red pear like fruit, and sow in sandy soil.

Hollyhocks are generally increased by dividing the roots or cuttings of the stems; but these are best renewed occasionally from seeds. The very double ones do not seed freely when unaided by art. The petals which are produced from the staminal column, overgrow the pistils and prevent the pollen from acting. Therefore it is necessary in order to get seed with certainty, to rub a camel hair pencil in the pollen and twist it around in the centre where the pistils are. An examination of the double flower will show what is meant. Single Hollyhocks usually vary much from seeds; but double ones reproduce themselves very nearly, because it is hard for them to fertilize with their own pollen, and worse from others. If new varieties are desired, use the brush in the pollen of some other color than one you wish seed from.

Some plants vary from seed very much without any cross fertilization. Carnations and Pinks are of this class. These seed very freely in this country, and many forms may be had from one plant. They are beautiful, and as sweet as they are good looking. Pity they are not more grown. Left to themselves, they will dwindle away in time. Every other year the side branches should be layered into rich soil to renew them. Roses may be raised from the haws, like Sweet Briars. They flower in two years, and may make one's fortune. Devoniensis or the Magnolia Rose was thus raised in a lady's garden. She was paid well for the whole stock.

FRUIT GARDEN.

Two successive seasons of good crops is highly encouraging to the fruit grower. He must now take care that exhaustion does not follow. The wise orchardist has thinned his fruit at an early stage of growth, and will now be looking round for material to fertilize them with. It is not too late to do it yet to advantage. We should surface dress with manure, compost, or rich materials, any time between now and frost; but the earlier the better. There is not much use in putting it on after the soil is frozen. Rains wash its best portions away. As to kind of manure, it makes little difference. If the surface is not disturbed much, the richer the surface soil the better. We have noticed but little difference between animal manure and mineral. Some of the best and healthiest trees we know, stand near the manure heaps in farm yards.

A little trimming is useful to most trees at this season. The Blackberry and Raspberry may have their tops shortened so as to leave the canes about four feet. Some do this earlier in the season; but the buds are apt to burst if done too soon. In like manner, pear and apple trees that grow well, but produce no fruit, are benefited by having, say half of some of the young growth cut back. The buds then left are very likely to form flower buds, in place of growth buds, for next season. Many take out the old shoots of raspberry and blackberry after they have done bearing, and we have in times past recommended it ourselves; but on further observation, we see very little good, if not positive injury. The partial shade the old stems make, seems rather beneficial than otherwise under our hot suns.

Strawberry planting often commences in August, providing the weather offers a chance. Get the soil in readiness for this chance. Heavy manuring is not good for the Strawberry except in very poor soils. Wet soils are not good. But the soil cannot well be too deep. In the field subsoil,—in the garden dig at least 12 to 18 inches. Strawberries do better moderately close than too wide, some kinds do very well in beds.

After a piece of ground is dug at this season for Strawberries, roll it well with the garden roller. When ready to plant, make holes with a dibble, fill the holes

with water, and when it soaks away, put in your plant which has been kept in water to prevent wilting. *But*, in putting in the plant do not plant too deep "Too deep" kills 99-hundredths of all the Strawberries that die in the year from transplanting. "Too deep" is when anything but the small fibres are buried under the surface.

As to varieties, it is strange to say that after so many new kinds, Triomphe de Gand and Wilson's Albany still find the greatest number of advocates. Downer's Prolific, Jucunda, French's Seedling, Agriculturist, Brooklyn Scarlet and Fillmore are kinds which prove good in many situations,—and about Boston, La Constante and Hovey's Seedling are still largely grown.

The Grape vine at this season will require attention, to see that the leaves are all retained healthy till thoroughly ripened. It is not a sign of healthiness for a vine to grow late; on the contrary, such late growth generally gets killed in the winter,—but the leaves should all stay on, to insure the greatest health of the vine, until the frost comes, when they should all be so mature as to fall together. Frequent heavy syringings are amongst the best ways to keep off insects from out-door grapes, and so protect the foliage from their ravages.

VEGETABLE GARDEN.

As soon as your vegetable crops are past kitchen use, clear them out. Never suffer them to seed. In the first place, a seed crop exhausts the soil more than two crops taken off in an eatable condition; in the next place, the refuse of the kitchen is likely to produce degenerate stocks. Good seed saving is a special art by itself, always claiming the earliest and best to ensure a perfect stock.

Celery will require earthing up as it grows, to get it to blanch well. It is not well, however, to commence too early, as earthing up tends, in a slight degree, to weaken the growth of the plants. Take care, also, not to let the soil get into the heart in earthing, or the crown is apt to rot.

As fast as Endive is desired for Salad it should be blanched. Matting thrown over is the best for this purpose, as the plants are not so liable to rot as when pots or boards are employed.

In cold or mountainous regions, Melons are hastened in the ripening process and improved in flavor, by a piece of tile being placed under the fruit.

Keep weeds from your compost heaps, as they exhaust the soil, and bear seeds for future brow-sweatings.

Sow Lettuce for Fall crop, thinly, and in deep and very rich ground.

Early Valentine Beans may still be sown early in the month,—the soil for a late crop should be well trenched, or if the Fall be dry, they will be stringy and tough.

Cucumbers, Squash, and other similar plants, often suffer from drought at this season. Cold water does not help them much, but a mulching of half-rotten leaves strengthens them considerably.

Cut down straggling herbs, and they will make new heads for next season.

Towards the end of the month, a sowing of Spinach may be made in rich soil, which will come in for use before Winter. That desired for Winter and early Spring use, is usually sown in September in this region. A few Turnips may also be sown for an early crop, but will be hot and stringy unless the soil is very rich.

Corn Salad is often sowed at the end of this month. It does not do so well in damp soil or low situation.—*From the Gardener's Monthly.*

ON JUDGING.

In the management of Exhibitions, there is no more important matter than that of judging the Animals and Articles brought forward in competition. It must be confessed that, as a rule, the same precision does not obtain at Agricultural Exhibitions which we see aimed at by Horticulturists. The subject is just now exciting some interests in Britain, and at this season of the year, when our Exhibitions are coming on, it may not be without use to call attention to some of the views advanced in the Mother Country.

JUDGING ANIMALS.

In judging animals, the common method is for each Judge to form his opinion upon each Animal as a whole, without going into a detailed calculation of points. In many cases the superior excellence of an animal over his fellow competitors is such as to claim for him the prize, without much examination or comparison. Yet it must be confessed that a careful calculation of points by the Judges would not only secure greater satisfaction among competitors, but would lead to more intelligent attention being paid to the perfecting of Stock by breeders, which is really the most important object gained by Exhibitions, so far as Agriculture is concerned.

The other day, Lord Kinnaird addressed a letter to the Highland and Agricultural Society of Scotland suggesting the propriety of framing a set of Rules for the guidance of Judges of Stock at the Shows, according to points, after the manner in which prizes are accorded in Rifle Matches. The Board of Directors gave answer that they were unanimously of opinion that it would not be advisable to alter the present system of judging Stock adopted by the Society; that is, we presume, the Rule of Thumb method. To this his Lordship replied that he was not surprised, although he regretted the decision, having had previous experience of the unwillingness of the Directors "to consider *any* new proposal." He adds: "I have little doubt that to the end of all things the same routine in the management of the affairs of the Society will be observed which has existed ever since I have been a member of it—that is to say, for forty years at least—causing the Society to act as a drag on, rather than a leader in, agricultural improvement, with an occasional waste of power by a somewhat questionable interference in political matters." After full discussion the combined wisdom of the Board was expressed in the following letter drawn up and ordered to be sent:—"Dear Lord Kinnaird,—At a meeting of the Board held here to-day, I was instructed to acknowledge receipt of your Lordship's letter of the 28th instant. I am, yours faithfully, F. N. Menzies, Secretary."

A different spirit was shown by the Royal Horticultural Society of England, at their recent Congress at Oxford, when two excellent and exhaustive papers on the subject of judging, were read, and elicited intelligent discussion. These papers have been published in the *Gardeners' Chronicle*. The first is by Dr. Hogg on

JUDGING FRUITS.

Dr. HOGG, after a few preliminary observations, said:—Though the judging of fruit has on various occasions occupied the attention of those interested in the subject, and has from time to time been discussed in the public prints by those most competent to deal with it, I am not aware that any common understanding as to the bases on which fruit-judging should rest has yet been arrived at. Notwithstanding this want of a written law on the subject, the practice of judging fruit is followed with results which, though not always agreeable to unsuccessful competitors, are upon the whole, generally accepted and acceptable.

It is not my intention to submit anything to this meeting which can be regarded in any light as a solution of the question—Upon what principles ought fruit to be judged? This I will leave to be dealt with by those of my audience who are sufficiently versed in the subject, and who feel themselves competent to do so. All that I shall do is to state the motives which actuate me in coming to the conclusion I do when I am acting the part of a fruit judge, leaving others to set up any other code they may think better and more in accordance with their own views.

And first, let me remark that, in judging fruit at exhibitions, I think we ought to do so upon different grounds to those upon which we should judge it at our own tables. We must bear in mind that exhibition fruit is exceptional, and is produced

by the greatest effort of the horticultural skill of the exhibitor. It generally receives an amount of attention which he cannot afford to bestow on a general crop, provided his establishment is an extensive one; and we ought, therefore, to regard the exhibition fruit of a gardening establishment very much as we should the exhibition ox—as the exceptional animal on the farm. In judging fruit, therefore, we must first look to those points which exhibit the greatest amount of horticultural skill, and the first of these are size and symmetry.

In judging size and symmetry we must deal with each variety on its own merits. It would not be fair, for instance, to judge on the same grounds a bunch of Buckland Sweetwater grape and one of White Muscat of Alexandria. A bunch of Buckland Sweetwater may be much larger than, and equally as handsome as one of Muscat of Alexandria, and both may be in every point what gardeners call "well finished;" but the skill required in producing such a bunch of Muscat of Alexandria being much greater than that which is required to grow the Buckland Sweetwater, and the Muscat of Alexandria being a much superior fruit, I would give the preference to the latter, although inferior in size to the former. The same may be said of Black Hamburgh and Black Prince shown in the same class, though not on the ground that Black Hamburgh requires greater skill in the production of it, but because it is a superior fruit.

It matters not what description of fruit we may be judging; be it Grapes, Pines, Peaches, or any other fruit, size and symmetry are the features which first attract our attention, and therefore to size and symmetry, but not to size apart from symmetry, I attach, perhaps, the greatest importance when other points are not greatly deficient.

The next important feature is colour, requiring much skill in the development of it. This is by some regarded as of even greater importance than size and symmetry. I am rather inclined to give colour second place, except when it is unusually fine, and the difference of size and symmetry between the competing fruit is not great. In such a case I would certainly give preference to colour, for I conceive that in such circumstances there is greater exhibition of horticultural skill in producing the highly-coloured fruit than in producing the larger, because it betokens attention to the maintenance of the just equilibrium between the action of the roots and that of the leaves, and a knowledge as to the crop the plant is capable of producing, without which I conceive no fruit can be well and perfectly coloured. One may feed and force a plant so as to induce it to produce a large and showy fruit; but unless the treatment is so regulated as to preserve the just equilibrium between the root, which serves as the mouth, and the leaves, which perform the functions of digestive organs, there is no guarantee either for high colour or perfect flavour, which generally go together. Still, I say, when fruit has not an objectionably bad colour, and is not deficient in flavour, but has size and symmetry, I would certainly give the award in favour of the larger fruit.

The next point on which I have to touch is flavour; and here I know there is great diversity of opinion. Some hold that the beginning and the end of all fruit culture is flavour; no matter how large or how small, or however badly coloured, the fruit may be, if flavour is obtained the grower has got all he has ever striven for. Now that is very well when fruit is grown merely for private use; and so long as the palate is satisfied there is no other desire to be gratified; but we are now discussing the merits of exhibition fruit, into which the whole energy of the cultivator is thrown to develope, not one, but every feature of his production, and the greatest display of cultural skill is to succeed in gratifying the mind as much through the eye as through the palate. It is not to be supposed that I depreciate flavour, on the contrary, I consider it an important point in making awards to exhibition fruit; but it ought only to come in when the competition is otherwise so close that another point is required to turn the scale.

There is only one exception I would make on the question of flavour, and that is in judging Melons, which, if they have not flavour, have nothing whatever to recommend them. They may be Vegetable Marrows, or Pumpkins, or any other vegetable production, if flavour is absent; and I think experience will testify that if the flavour of a Melon is even but indifferent, then the fruit is not worth eating, and hence I think all Melons ought to be cut and judged by flavour only.

In the discussion which ensued on the reading of Dr. Hogg's paper, Mr. Marshall said that flowers were grown to please the eye, and therefore were judged by the eye; but fruit being grown to please the palate, he thought that flavour should stand first as being more requisite, say to the Grape, than either size or colour.

Mr. Ayres remarked that it should be the duty of the Society to say that fruit should be grown for use, and not merely for exhibition; he would certainly consider flavour as the first requirement.

Major Clarke thought that fruit was produced commonly on two distinct principles, one to obtain fruit for exhibition, and the other to obtain it for dessert. The man who could combine these two principles he should certainly choose for his gardener.

JUDGING PLANTS AND FLOWERS.

The second paper was by Thomas Moore, Esq., F.L.S., a distinguished botanist, on the judging of Plants and Flowers. He treated the subject so fully as regards general principles, as well as details, that his paper is in reality an exhaustive treatise, and we can only refer to some of those points likely to interest the Exhibitors and Judges of our limited Nova Scotian Exhibitions.

FLORISTS' FLOWERS.—Though various in character, these admit of more ready and exact comparison than some other subjects; for the number of organs to be adjudicated on are fewer, and hence the requisite features admit of more exact comparison and definition, which definition has been already well worked out by florists. The features to be specially sought, and their relative value are these:—

1. *Form*.—In most single flowers this should be circular, or, where the circle will not apply, symmetrical. In double flowers there should be a semi-geobular outline. Compound flowers follow the same law as double flowers. Tubular flowers, and some others of peculiar forms, offer exceptions, which can only be dealt with individually.

2. *Substance*.—The texture of the petals must be stout and dense if the flower is to be durable, for if flimsy it soon gives way, and loses both form and colour.

3. *Smoothness and Flatness of Edge and Surface*.—These qualities are eminently necessary to give refinement to the flower. A course rough-surfaced flower bears no comparison with one of velvet-like smoothness and softness, and evenness of margin is equally necessary. A regular series of wart-like spots, as in the case of some Lilies, is, however, admissible. In some cases, but not often, a well-developed fringe or frill is also admissible.

4. *Colour*.—This must be bright or pure and decided in self-flowers (that is, flowers of one colour), and clearly-defined and well-contrasted in striped or laced flowers.

5. *Fixity of Colour* is a quality of some importance, and depends partly, but not wholly, on the texture or substance of the corolla.

6. *Proportion of Parts to the Whole* is an essential element of beauty, but as this depends on the actual form, it must be defined individually in the different kinds of flowers.

7. *Size* is an advantage, so that it is not disproportionate nor conducive to coarseness.

8. *Distinctness* is absolutely necessary for the sake of variety.

9. *Novelty* is a quality always welcome, as it enlarges the field of floriculture; but, to count as a point in judging the change,

must not be a mere variation, but a decided difference of form or feature. The merit of any novelty of feature, moreover, must always be estimated subject to the higher qualities of form, substance, smoothness, proportion, &c.

Cut flowers for competition are always shown in collections, *e. g.*. Roses, Carnations, Pansies, Gladioli, Hollyhocks, Asters, &c. Hence, many of the points advanced under the head of Plants staged in Collections, apply to these also; but there are additional points, such as those advanced under New Florists' Flowers, and over and beyond all these come in the special properties of each particular kind of flower. I will merely mention those which are of general application, or nearly so:—

1. *Conformity with the terms of the Schedule.*

2. *Freshness, and unimpaired Condition.*

3. *Special Properties* of the particular flower under judgment, and more particularly as regards:—Form, substance, smoothness of texture and margin, purity and definition in colour.

4. *Variety.*

The only strictly accurate mode of judging is by alloting marks to each collection or plant in respect of each point of merit, and finally summing up the total. This may seem a tedious method of arriving at a result, but it need not be so in reality; and it is practically the method under which, by means of a mental process, our best judges arrive at their decisions. When this plan is adopted there is no guesswork, but the sum of the merits of a plant or a collection must come out accurately. I can only here briefly indicate how the method may be applied:—

In Plants staged in Collection, the first point settles whether the collection is admissible or not—nonconformity with the schedule means disqualification. The other points must be gone over *seriatim*, and a decision arrived at whether each plant can be marked as good, bad, or indifferent, in respect to each point. As the points are not all equal I would allow double marks for the points of primary importance, and single marks for the secondary ones. Under the former, good would be represented say by 6 marks, indifferent by 3 ma , bad by 1 mark. Under the latter good would stand at 3, indifferent at 2, bad at one. With a little practice these numbers would be soon run out, even in a collection of a dozen or a score of plants, especially if prepared slips with columns for the different points were handed to the judges previous to their commencing their duties. I should put the points numbered 2. 3, 4, and 5 (health, freshness, beauty, compatibility) in the first category, and 6, 7, 8, and 9 (size, variety, facility of culture, rarity, and value) in the second, as regards collections of flowering plants; and 2, 3, and 4 (health, freshness, beauty), in the first, and 5, 6, and 7 (facility of culture, size, rarity,) in the second category, as regards specimen plants. In this way the decisions may be very accurately made out, the groups being all competitive.

In the case of new plants, the subjects require a different treatment, the object being to determine their intrinsic, not their comparative merit. Here, consequently, a fixed number, say 100, should indicate the highest degree of excellence, and any lesser number awarded will show the degree in which they approach this highest degree of merit. Practically those plants which gain 75 marks or upwards would be 1st class in merit; those which gain over 50 up to 75 would be 2nd class; and those which gain only from 30 to 50 would be 3rd class. In these cases the full number assigned to each meritorious feature is only to be awarded to the perfect condition of that feature, and any lesser proportionate number according to the actual degree of merit.

In reducing this to practice, the following would be the marks indicating the highest degrees of excellence in the case of New Flowering Plants:—

1. Freeness of habit	15	=100 marks.
2. Profuseness and display of flowers	15	
3. Healthiness of leaf-development	15	
4. Purity, brightness, or contrast of colour	10	
5. Endurance, substance, and form of flowers	10	
6. Succession of bloom	10	
7. Size of flower	10	
8. Distinctness of character	5	
9. Gratefulness of odour in leaves or flowers	5	
10. Novelty of a decided kind	5	

Glaring defects amongst new flowering plants would be presented by the undermentioned peculiarities, each of which should reduce the award by 10:—Straggling habit, flimsy flowers, muddled or dingy or fleeting colours, fœtid odour.

The following is the scale proposed for New Foliage Plants:—

1. Freeness of habit	15	=100 marks.
2. Healthiness of leaf-development	16	
3. Gracefulness or nobility of aspect	15	
4. Endurance of foliage	15	
5. Distinctness of character	15	
6. Agreeableness of colouring	10	
7. Definition in markings	10	
8. Novelty	5	

As glaring defects which may occur in this class of plants, may be mentioned the following peculiarities, each of which should reduce the award by 10:—Straggling habit; flimsy, tender, rapidly perishing leaves; indistinct or fleeting colours or markings.

In the case of New Florists' Flowers, the points of excellence would bear the numerical ratio indicated below:—

1. Form	15	=100 marks.
2. Substance	15	
3. Smoothness	15	
4. Colour	10	
5. Fixity of colour	10	
6. Proportion	10	
7. Size	10	
8. Distinctness	10	
9. Novelty	5	

The most glaring faults in this class of subjects are to be found in the following features, which are in most cases altogether incompatible with a high position: Open eyes, as they are called, when double flowers show any part of the disc or centre; split petals or florets; run or confused or fading colours; roughness of outline or surface.

MRS. MILLINGTON'S PRIZE FARM.

In America, the Ladies talk politics and make speeches, but in England they work farms. At the recent Competition of the Royal Agricultural Society, the farm which gained the first prize, "in fair fight," was found to be managed by a Lady,—not a small parlour farm or potato patch such as may be seen on this continent under female management, but a regular working business farm, with 800 acres under the plough. The following account of Mrs. Millington's farm is given in the *Agricultural Gazette*:—

Few competitions have created more interest than that which has occupied attention during the last week, between the various candidates for Mr. Mason's prizes. We hardly need remind our readers that a cup valued at £100 was offered by Mr. Mason, late High Sheriff of the County of Oxford, for the best managed farm held by a tenant, in a certain large but circumscribed district. The fact has for the last few months been well known in agricultural circles, and considerable interest has been expressed as to the result. Mr. Torr, Mr. Keary, and Mr. Gibbons formed a very well qualified committee of inspection, and these gentlemen, after visiting the candidate farms, first in April, and again within the last fortnight, have arrived at a decision already before the public. It is well known now that what was a matter of report a few weeks ago is true, namely, that the judges, after mature consideration, have decided to award the first prize to a lady. We regard this as a significant fact. Much has lately been said and written upon the capabilities of the fairer and gentler sex to engage in more masculine duties than have hitherto engaged their attention. The subject is a difficult one, and it is far from our intention now to discuss it. One thing is however clear, namely, that three experienced and accredited agriculturists have, after the closest scrutiny and the greatest care, concluded that, in an area of some hundreds of square miles, the best managed farm is in the hands of a woman. When the decision was known on Tuesday, we were naturally anxious to visit so notable a farm, and accordingingly we left Oxford, its crowded showyard and throng of visitors, and sought the privilege of a quiet walk around this distinguished piece of nineteenth century cultivation. Claiming to be country bred, and not altogether unacquainted with

rural operations, we did not expect to meet with that startling complication of modern improvements so well described in "Talpa Loquitur," by Mr. Wren Hoskyns. Any one who will look into the inimitable illustrations which enliven that refreshing work, will find a picture of what the cockney expected on a real go-a-head farm. He was disappointed. His imagination pictured the steam cultivator at work breaking up the soil, the drill sowing the seed, the liquid manure hose distributing fertility broadcast, the reaping machine cutting down a perfect jungle of crops, the steam threshing-machine preparing the same for market, the mill grinding corn, cattle feeding on cooked viands of the most approved scientific composition, and all going on at once, giving a picture of high farming consistent with express travelling and Transatlantic telegraphy. He was disappointed. What actually met his gaze was the unobtrusive quiet of a well-managed farm, not the rattle of a factory, the natural developement of a vegetable and animal growth assisted but not substituted by modern applications.

We were courteously received at Ashgrove Farm, and although our time was short, we saw something of the management which will now be unmercifully criticised. The prize farm is situated upon the Duke of Marlborough's estates. It is 14 miles from Oxford, and lies about 5 or 6 miles to the south-east of Bicester. The soil rests upon the stone brash of the oolite, and is of uniformly poor quality, free working, and pleasant to farm, capable of growing sheep well, and producing a nice malting sample of Barley. The soil is thin, and rests on a rubbly, rocky subsoil, which precludes the possibility of deep cultivation. The poorness of the soil is doubtless one of the points which attracted the attention of the judges, and it should be steadily kept in view in inspecting the farm. Almost the whole of the occupation is arable. It embraces 880 acres more or less, 70 of which are very poor pasture. The farm was taken on lease by the late Mr. Millington, in 1854, for 21 years, and was under his management until his lamented death, about a year ago. Mrs. Millington now holds the farm, and much of her success in the recent competition is due to the able management of her brother, Mr. Ormand, who has carried out the ideas and system of management pursued by the late Mr. Millington. In a report so brief as the present perforce must be, we cannot do better than attempt to give some idea of the general impression conveyed to a visitor. First, then, he will be struck by the buildings. He will see yards without sheds, generally poor accomodation for cattle; he will not see cattle boxes or elaborate barn arrangements. The stables are devoid of stalls, the design of the buildings is altogether inconsistent with those rules which should guide the architect in planning them. He may perhaps be staggered by the sight of wooden ploughs, antiquated drags, clumsy wagons, and old fashioned utensils of various kinds: a very different assortment of implements will meet his eye from what perhaps he has recently witnessed at the Oxford meeting; and, in a word, he may be a little discouraged with what he sees. Again, when he glances at the live stock he will see a mixed and moderate class of cattle, a shabby lot of pigs, no grand sheep, and a poor lot of poultry. If he looks at the fences he will find nothing to admire particularly, and as he walks over the grass land he will be offended by the presence of rushes, unstubbed Thorns, ragged ditches, and not very neatly filled drains.

Again, as he extends his observations from the buildings over the farm itself, he will fail to see the prescribed sheep-fold, with its hurdles and its fresh Vetches or Cabbages, its troughs for artificial food, its water carts, and its shelter from the noonday heat. Lambs will be seen, still unweaned, on large bare pieces of seeds, with their mothers, looking anything but blooming, under the blaze of this tropical July sun.

Such were some of the features of the best-managed farm in Oxfordshire which struck us, and after observing them, we were tempted to ask why, under such circumstances, the judges awarded a prize that we might have expected to see associated with something more in harmony with modern ideas? We do not desire to carp at the decision of three experienced and reliable men, and we have not compared the Ashgrove farm with any of its competitors. We had rather proceed to point out those features that are worthy of attention. We have before noticed that the land is poor, and we now add that it bears a magnificent crop of Wheat and Barley. The portion under corn is indeed a pleasant sight, both from its joyful luxuriance and, so far as we could judge, its cleanness. Then again when the roots are looked at, they are surprisingly good for the season and for the district. There is nothing like them for miles around. It is, then, in these main features of corn and roots that the great charm of this occupation lies, and far be it from us to underrate their importance. There are 18 horses kept, and the work is partially performed by steam cultivation in the spring. The horses are now receiving one bushel per week of Indian Corn, crushed, and straw chaff. The steam cultivation is hired and the grubber or cultivator is preferred to the plough. The rotation followed is that pursued in Lincolnshire, and the general management partakes of that of the same county.

The rotation is as follows:—1st, roots, principally Swedes and Turnips; 2nd, Barley; 3rd, seeds; 4th, two-thirds Wheat and one-third Barley, including a portion of Vetches. Catch crops are seldom sown, and the Vetches occupy any portion of the seed land not thought to be in good enough condition to bear a corn crop. Vetches therefore on the farm follow seeds, and are again followed by roots, and this brings any land out of condition into a good state. The rotation is also deviated from by ploughing up some of the seed land early for Mustard, afterwards to be followed, like the remaining seed land, with Wheat; and the result is said to be two quarters more Wheat than after seeds at once ploughed for the Wheat crop. Glancing at each crop in rotation, we find that the cultivation for roots embraces one deep (as possible) three-horse furrow in the autumn, followed by steam cultivation in the spring. Up to last year, when Fowler's tackle was employed, Smith's cultivator had been in use. The land is afterwards worked with Coleman's cultivator, and the roots are sown with 4 cwt. of Hale's superphosphate put in with water on the flat. Two-thirds of the Turnip crop is eaten on the land with cake and corn, and one-third is drawn off for the cattle. No farmyard manure is ever applied to the root crop, but all is devoted to the seed land, and is now being spread over the land as a preparation for Wheat, according to Lincolnshire usage. No top-dressings are used, and, to quote from Mr. Ormond, the opinion as Ashgrove is, that top-dressing is like "putting on a false coat." All is put under the soil. Still, oilcake in the form of sheep-dung is top dressed on the land, and the condition of the farm must be well supported by the £1000 to £1200 worth of cake annually spent on the farm. There is also an expenditure of about £300 per annum in the form of superphosphate, no other purchased manure being imported.

There is a flock of 400 Lincoln ewes maintained, and all tegs are either fatted or find their way into the flock. Ewes, culls, theaves, and lambs constitute a standing flock of 950 sheep, and the clip is estimated at from two to three fleeces per tod. The lambs remain till late with their mothers, as above stated, and the first summer the management appears to be anything but forcing.

Twenty-five calves are usually weaned every spring upon linseed gruel, and with the assistance of two cows. These cattle are kept until they are three years old, and are then disposed of at from £16 to £18 each. The stores receive from 2 to 5 lb. of linseed cake per day according to their age, with a restricted amount of roots.

Labourers are well cared for in the

matter of wages. We were informed that the average wages of the men amounts to close upon 18s. per week, while that of the neighbourhood is very much less. The increased wages is principally the result of a judicious use of task work. We could not learn that any special method was used in the arrangement of labour upon the farm, excepting that the people do not work in gangs, and as much of the work is let by piece as possible. The labour bill is £1200 per annum, or close upon 30s. per acre over the arable land. This is an amount which agrees well with former carefully-made estimates as to what labour ought to cost. Lastly, we may say that the impression conveyed by a visit to Mrs. Millington's farm is, that the scene of a paying business has been inspected. There is little trace of what is known as the model or amateur farm, and we should certainly liked to have seen the live stock and buildings more in accordance with the year we live in.

We believe, however, that we anticipate the probable answer of the judges to such a criticism when we say that, after all, the application of tenants' capital was to be considered, and not the expenditure of landlord's money in expensive buildings.

We sum up our remarks by adding, that the land on the prize farm is well done, but the live stock is unmistakably below par.

SPRING PHLOXES.

The Editor of the *Horticulturist* does a good service, in the August number, by calling attention to the spring Phloxes as choice ornamental plants, which flower at a time when there are few things of beauty in our gardens. It must not be supposed, however, that these plants are novelties in our gardens, either in Europe or America. They are American plants, and the first one described as a new variety worthy of introduction, viz., Phlox stolonifera, has in reality been in cultivation for 70 years. P. subulata was introduced to England from North America even earlier than the other, and several varieties of it are well known and extensively grown in our Dominion. In New York State, P. subulata is a native These plants are perfectly hardy and should be grown in every flower garden,

APTITUDE OF CATTLE.

For the benefit of those exacting farmers who expect that one and the same animal should have every diverse quality in perfection, we extract from the *Agricultural Gazette* the following translation from Mole and Gazot's work on Cattle:

"The term aptitude is used with reference to an organic and functional disposition, in virtue of which the animal endowed with it is especially fitted for particular employments, destinations, or products, rather than to any other. Between conformation and aptitude there is at once a connection and a close correlation, for the correspondence is reciprocal between principle and consequence. Both are acquired and become fixed by descent, aided by food and what may be called education. It is here that the influence of man shows itself paramount over the animal organism, for such aptitudes change more or less according to the wish of the master mind, The ox tribe offers the most remarkable proofs of the above remarks. From his origin, towards the domestic condition, it contained in a latent condition, if one may so speak, the three faculties which make it valuable—work, secretion of milk, and production of meat—in a degree more or less advanced, or more or less latent. Each individual considered separately presents to the observer certain signs of its special natural disposition; one can sustain fatigue for a long period, another gives abundance of milk, a third shows an aptitude to lay on flesh and to become fat. Thus there are special aptitudes adapted to the temperaments of each. In cultivating these special aptitudes they have been developed to a high degree, and in the course of time, and through great care, have almost reached perfection, and become hereditary. This speciality is the result arrived at. The original inclination existed as a simple organic tendency; it is now a large and transmissable aptitude. a valuable attribute of a race. According as the faculty is developed the conformation is modified * * * * The working ox should be rough and powerful, but he will not distinguish himself in the shambles. The milk cow only lives for the secretion of milk; she labours without ceasing towards that end, and if she is not allowed sufficient materials to elaborate she feeds upon herself, and gives her own substance. The stall-fed beast, of lazy nature, unadapted for work or for yielding milk, consumes exclusively for the increase of her own body, and strives to surpass all others in fatness. She will be valuable at the slaughterhouse, but there alone will she excel."

These various aptitudes are not found developed in a high degree in one and the same animal. It is upon this general principle that these authors argue against the wisdom of attempting to develope more than one of these aptitudes in a race of cattle. Whatever is gained by increasing the secretion of milk, for instance, is lost in the inclination to develope flesh; and, again, the encouragement of a disposition to withstand the hardships of toil is followed with a diminution of both the other valuable qualities.

Communications.

DOINGS AT YARMOUTH.

The Reports of the Yarmouth Society's doings, kindly sent by C. E. Brown, Esq., the indefatigable Secretary, did not reach us until our last number had been issued. The history of their importation of Pigs is as follows:—

On May 5th, the Chester White Stock was landed, ex Steamer *Linda*, from Boston.

1 Boar,	10 months old,	May 6,	
1 Sow, large,	14 "	" Apl. 10, to Pig July 1,	
1 " medium size,	7 "	" May 20,	" 20.

The breeder and shipper, George B. Hickman, of West Chester, Chester Co., Penn., owner of the farm where the breed originated, wrote that they were all of the very best stock. The two Sows engaged for the Society were to have been both of one age and size, but the mate to the largest one sent, lamed herself a few days before shipment, and the smaller one was necessarily substituted. For this animal, Mr. Hickman had been offered $63.50 by two breeders who knew her pedigree and value.

The three cost at shipping depot $150; expenses to Boston, $33.75; keep there, $8; freight to Yarmouth, $6. By the time they are offered for sale with their litters probably about $250, or an average of $80 odd each.

No one about town was conveniently fitted up for taking care of them, and Mr. Charles W. Smith, an experienced breeder, agreeing to take charge of all three animals, they were sent to his place within a few hours after the arrival of the boat.

The large sow had a litter of 11, but unfortunately, possibly from too high condition, became ill, lost her milk, and four of the pigs died. Some were brought up by hand, until the 23rd July, when having been duly advertised in the *Herald*, to be sold to any member of any Agricultural Society in the County, under bonds to be kept for breeding purposes for two years, they were offered at public auction by Messrs. Wm. Law & Co., and sold as follows:—

	1 Boar, Henry Burrill,	$30.00,	giving bond	$60.00
	1 Sow, S. M. Ryerson,	25.00,	" "	50.00
No.	1 Boar Pig, C. W. Smith,	12.00,	" "	21.00
"	2 " E. E. Archibald,	5.00,	" "	10.00
"	3 " Alex. Crosby,	4 50,	" "	9.00
"	4 " Jacob Silver,	3.00,	" "	6.00
"	1 Sow Pig, W. Churchill,	6.50,	" "	13.00
"	2 " James Crosby,	5.50,	" "	11.00
	Injured, J. L. Hatfield,	4.00,	no bond required.	
		$95.50		$183.00

The remaining Sow had a small litter of four only, 2 Boars and 2 Sows, but being in good condition they are all doing finely; will be sold August 13th.

	1 Sow, C. W. Smith,	$26.00,	bond for	$52.00
No.	1 Boar Pig, Carlton Club,	8.50,	"	17.00
"	2 " H. Burrill,	5.00,	"	10.00
"	1 Sow Pig, Geo. Trisk,	6.50,	"	13.00
"	2 " H. Burrill,	6.50,	"	13.00
		$52.50		$105.00

July 23, 1870.

The Society's quarterly meeting was held on 2nd of August. Number of Members to date 124.

Minutes of last meeting, of correspondence with the Board of Agriculture, and of sale of Chester White Stock, read and approved; conclusion of sale, viz., 1 Sow, 2 Boar Pigs, 2 Sow Pigs, arranged to be held August 13th, on same conditions and at same place.

Mr. Jeremiah Sims, of Plymouth, exhibited some very fine potatoes, Early Rose of excellent quality, now fully matured, Goodrich, Early Blue. The general report affirms the good quality of the Early Rose when fully grown and ripened, while for earliness and productiveness it is unapproachable.

There were also exhibited some fine samples of Norway Oats, apparently quite as *productive as last year*, *Sicily Barley* and Golden Wheat, all of which were said to promise a fine crop.

Some English Gooseberries of large size, and some immense and delicious red Raspberries grown by James Murray, jr, elicited unqualified admiration, while a handsome brace of White Spine Cucumbers grown in the open air were not without admirers.

Mr. Archibald alluded to a gift of a single eye of Bresee's Peerless (cut from one of two potatoes of this variety, presented to the Secretary by Mr. Bresee); in May he looked at it with at least a little contempt, but it has grown so vigorously and looks so promising now, that he is looking forward to the maturity of the tubers with much interest, and has no doubt it will prove a most valuable variety.

A discussion arose as to the admission or exclusion of articles not included in the premium list; while the premium list is necessarily limited, from the small amount of the fund, to leading articles of growth and produce it would be unwise not to invite and encourage voluntary contributions of whatever may add to the interest of the Exhibition, with the proviso that premiums will be awarded should there be any part of the fund unappropriated.

A premium list, with the number for exhibition, has been addressed to each member, mostly delivered; intending exhibitors, not members, must address, with entrance fee of $1.00,

BENJAMIN KILLAM, JR.,
Chairman Man. Com. Exhibition,
Yarmouth,

by whom a number will be supplied and premium list forwarded, conditions of which must be complied with by all exhibitors, whether members or not.

Committees for the October Exhibition have been named, and a special Committee for articles not included in the published Prize List.

KING'S COUNTY AGRICULTURAL SOCIETY, LOWER HORTON.

In the Report for 1869, forwarded by George Hamilton, Esq., Secretary and Treasurer, the number of members is stated at 55. The Society owns several farm implements. Two superior Bulls were hired for the season, the Society not having funds available to purchase. The Society's Ram, after having been kept for some years, was sold. Twenty copies of *N. S. Agricultural Journal* taken and highly prized by the members. At annual meeting it was agreed to import two Chester Boars and two Rams. Details are given of the state of crops of 1869, and effects of the Saxby storm, which broke the dykes and flooded the dyke lands in the township, destroying much hay, some cattle, horses and sheep, and sweeping away nearly all the fences. Officers of the Society:—Joseph B. Bowser, *Pres*; John Simpson, *Vice Pres.*; W. Falkner, *2nd Vice Pres.*; George Hamilton, *Sec'y. and Treas.*; Thomas Tuzo, *Assistant. Directors:* Chas. Reid, Nathan L. Fuller, William Falkner, Samuel Palmeter, Leander Palmeter.

The Journal of Agriculture

—is published monthly by—

A. & W. MACKINLAY,

No. 10, GRANVILLE STREET,

HALIFAX, NOVA SCOTIA.

TERMS OF SUBSCRIPTION:

Fifty Cents per annum—payable in advance.

Printed at the Office of the *Nova Scotia Printing Company*, Corner of Sackville and Granville Streets, Halifax, N. S.