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THE

Canadian Agriculturist,

OR

JOURNAL AND TRANSACTIONS OF THE BOARD OF AGRICULTURE

OF UPPER CANADA.

VOL. XIII. TORONTO, DECEMBER 1, 1861. No. 23.

The Great International Exhibition, at London, 1862.

We trust that a sufficient number of our griculturists and Mechanics are making pre-rations to represent the industry of this rovince at the approaching great Exhibition England, next year. From a circular of e commissioner, which appeared in our last ue, it would be seen that applications from rties desirous of exhibiting, would be re-ved till 4th December at Montreal, and that tain points would thereafter be designated ach section of the Province at which arti- prepared for exhibition would be receiv- up to certain dates. In a subsequent ertisement of the commissioners, which ears in onother part of this number of our nal, and to which we beg leave to direct attention of our readers, these points are cated. They are, for Upper Canada, as ws: London, 18th February; Hamilton, Feb.; Toronto, 22nd Feb.; Kingston, Feb.; and Ottawa, 28th February. Arti- may be sent in for examination and ap-al at any time between the 10th of Feb-y next and the above mentioned dates, her application to exhibit the same has previously made or not. Parties desirous rther information in regard to agricultu-oducts may apply to Col. Thomson, Presi- of the Board of Agriculture, Toronto.

For fuller particulars in regard to the conveyance to places of examination, &c., we beg to refer to the advertisement of the Commissioners. We trust that Canada, which gained so high a place for herself at the Exhibitions of 1851 any 1855, at London and Paris, will not exhibit any falling off in 1862, but rather a proportionate advance upon her former position. Industrial products of every description, except live stock and vegetable products of a rapidly decaying nature, will be received. We understand that already a considerable number of applications have been sent in, but as yet only a small proportion of what may be expected. The Agricultural and Natural products selected will, we understand be purchased by the Commissioners, and the freight on all the articles forwarded to London will be paid by them. The very best specimens of agricultural products which it is possible to procure ought to be obtained for the Exhibition, and those who are able to supply such specimens ought to be forward in placing them at the disposal of the Commissioners for the purpose.

The Wentworth and City of Hamilton agricultural societies, it will be seen by an advertisement which appears in another column, propose holding a special exhibition in January, for the purpose of selecting articles to send to London. We commend their example to the consideration of agricultural societies elsewhere.

Substitutes for Guano.

It is well known that the British farmer for the last quarter of a century has been largely dependent on Guano in sustaining or increasing the fertility of the soil, and consequently the augmented crops which characterise modern husbandry. This article, as yet, has been but partially employed by Canadian farmers;—where however, it has been tried,—more particularly in the raising of root crops, the results, we believe, have been generally satisfactory. The present high prices of good varieties of guano will operate as a check to its employment in this country as a manure for general purposes, and barn-yard dung and gypsum must continue to constitute the principal materials for dressing the land. The following facts condensed from a prize report of Mr. John Dove, in a recent number of the Highland Society's Transactions, will be found instructing and suggestive to our readers.

Mr. Dove comes to the conclusion from extended and carefully conducted experiments, instituted for a special purpose, that the supply of guano is not absolutely necessary in Britain for keeping up the fertility of the soil, as there are other substances at command by which it can be equally well done, and that it becomes a mere question of relative cost.—*On turnips,*—a crop to which by far the largest quantity of artificial manure is appled, superphosphate and sulphate of ammonia are quite aqual to most kinds of guano;—on *wheat,* sulphate of ammonia has been found superior to it; on *oats,* there is not much difference between guano and nitrate of soda; and on *grass,* nitrate of soda is better. Mr Dove is of opinion that if it were possible to get a larger importation of the nitrate of soda, at a cheaper rate, it would be one of the greatest boons that could be rendered to British agriculture. The supply of it is said to be unlimited, and the cost to consist chiefly in the labor of preparing and transporting it to the sea coast in those countries where nature produces it. If the means of cheapening its preparation and transit could be effected, its expense would be greatly lessened, a reduction in the price of guano must soon follow, or the demand for it would quickly fall off. A few years since we employed the nitrate of soda on a small scale for experimental purposes, and in most instances with marked benefit to the crop. Grain that looked yellow and sickly in the beginning of June was in a marvellously short time changed to a swarthy green, and its growth pushed forward vigorously; which was also the case with grass. On flowers and garden vegetables its effects were in many cases in a very short time, most striking, and the crop materially augmented. As a farm fertilizes, however, the nitrates of potash and soda, from their high price, cannot, we think, be profitably employed in Canada. Mr. Dove is of opinion that these and other materials, such as rape, woollen rags, superphosphates, &c., will for the future keep down the demand for guano in Britain, where its price has of late years considerably increased.

Agricultural and Veterinary Instruction.

It is probably known to most of our readers that a gentleman from the Edinburgh Veterinary School, has recently come to Canada at the instigation, and under the patronage of the Board of Agriculture. One of the principal objects contemplated is the ultimate formation of a Veterinary School for this Province. An object of such importance can only be realised by the careful adoption of preparatory and progressive measures, and as an initiative, it is proposed to devote four or five weeks this winter to the giving of popular instruction to all such young men in the country who may be disposed to avail themselves of it, in scientific and practical Agriculture, including the breeding and management of farm animals;—their anatomy, physiology, diseases, &c. This course will probably commence the beginning of February. Professor Buckland, assisted by the Professors of Chemistry, Geology and Natural History, in University College, will conduct the Agricultural, and Mr. Andrew Smith, the Veterinary department of the course. The main object aimed at will be impart as much useful information to young men of ordinary powers of comprehension, engaged in farming pursuits, as the limited time will allow, and to put them into a way of subsequently prosecuting these studies by themselves. As the only expense incidental to the proposed course of instruction will be a few text-books

and board and lodging, it is expected that a number of our young farmers desirous of improvement will readily avail themselves of it. We shall give full particulars in our next issue.

For the Agriculturist.

Death of Mr. Dods, of Petite Cote.

This sad and unexpected event has spread a gloom of sorrow over the whole of Lower Canada. Remarkable for his unassuming and retiring habits and manner of life, Mr. Dods, nevertheless, was known, and his character respected, over the whole of the Lower Province, while his many amiable qualities had endeared him to a large circle of friends. A liberal patron of every benevolent scheme, he was in an especial manner the friend of the poor and needy in his own immediate neighbourhood. As a spirited and successful agriculturist, his death is to be regarded as little short of a national calamity.

For nearly thirty years he had resided on his farm at Petite Cote, near Montreal, and his career as a farmer was one of untiring diligence and steady improvement in his profession.—Bringing with him from Scotland, his native country, a large amount of experience, he engrafted into his system of farming all the improvements of the old country that were suitable to the altered circumstances of the new world; wisely adopting such of the prevailing customs of his adopted country, as he saw to be beneficial. As a result, his farm, at the time of his death, was in every respect a model one, while his perseverance amid the many difficulties incident to a new country, and the prejudices which oftimes obstructed his efforts to influence others, call for our admiration, as they are worthy of the imitation of the farmers of the whole Province.

Mr. Dods was an enthusiast in his profession, and excelled in every department of it. Of the various breeds of sheep, horses, and cattle, he had imported from Great Britain perhaps more than any other single individual in Canada; this his ample means enabled him to do to the best advantage. That he was singularly fortunate in his selections is best attested by the numerous prizes which he received whenever he exhibited his stock in competition with others.

Nearly the whole of his large farm had been thoroughly tile drained, and it is satisfactory, as well as highly important that the farmers of Canada should know, that in his experience, this operation was found to be remunerative. His system of cultivation was neat, husband-like and thorough, based upon enlarged and scientific principles—at the same time eminently practical, widely different from the lavish—often useless and inconsiderate expenditure which too frequently marks the practice of those whose money constitutes their only title to the rank of "the Gentleman Farmer."

Mr. Dods has thus done much to elevate the standard of Agriculture in Canada. His life has been a bright example of a man, "not slothful in business—fervent in spirit, serving the Lord;" one who, looked up to by his brother-farmers, commanded also the respect of others whose educationand intellectual endowments, had placed them at the head of refined society. His business talents were of no mean order. For many years he held the office of director of the City Bank. He was also for many years President of the County of Montreal Agricultural Society; by his prudence and liberal views he was the instrument of elevating that society to its present state of usefulness and efficiency—a matter of no small difficulty when the contending influences brought to bear by the antagonistic pressure of French and English interests, are taken into account. His sauvity of manner, coupled with decision of character, did much to reconcile discordant feelings, and when he retired from the presidency of the Society he did so with the satisfaction of witnessing both races united in a generons rivalry.

A painful and melancholy interest attaches to the circumstances of his death. While walking in his own field, superintending the operations of his farm, he was attacked by a vicious bull of his own herd—a very fine specimen of the Ayrshire breed. Ere assistance reached him, he was fearfully gored and bruised in various parts of his body. Medical aid was promptly obtained, and it had been hoped that his injuries might not prove fatal; but it was otherwise ordained,—at the end of ten days, unfavourable symptoms made their appearance, resulting in what is known by the medical profession as

"Piaemia." Under this disease he sank rapidly, and expired on the 18th November in the 54th year of his age. His last moments were free from suffering. Living, he was a humble, devout Christian. His death was that of the righteous. "His last end like his."

Archerfield, 25th November, 1861.

The Wheat Crop.

(*Continued from page* 684.)

After the *soil*, the *seed* is the next point which claims attention. Here the conditions of success are simpler, and far better understood. In all cases care should be taken that the seed be perfect (unmjured), and fully matured; and that it be of the best quality. If the seed be much bruised or injured, its germinative powers may be entirely destroyed, and it decays in the soil without producing a plant at all. If it be slightly injured or not fully matured, it *generally* produces a weak and sickly plant, which fails for want of nourishment, before it is able to throw out roots and obtain its own supply; or, if it has strength sufficient to struggle through this period of its existence, its generally debilitated condition renders it liable to the attacks of those fungoid and insect enemies which accompany every stage of its future growth.

Lastly, the mode of *sowing* requires consideration—whether by "broadcast," "drilling," or "dibbling" the best results are to be obtained. By the first, time and labour are economised, at the expense of an increased quantity of seed; by the second, the quantity of seed is economised, but the cost of labour is increased; and by the last, the proportion of seed is still farther lessened, while the cost of labour is still augmented. The first mode renders any subsequent operation, as hoeing, weeding, &c., impracticable; while the two latter modes give every facility to them, and, at the same time, more equally and regularly distribute the plants over the surface.

The regularity of distribution over the surface is of some importance to the future yield. An equal, regular plant is usually more productive, both in quantity and quality, than where the plant is patchy—luxuriant in some places and defective in others. The ordinary practice of seeding is far too close; a greater distance between the plants would—provide, of course, that the seed were good and the soil in proper condition—give much better results, not only as regards the crop—the primary crop—whatever it may be, but also as regards the secondary crop—seeds, for instance, that might be sown with it. The usual width of drills may be taken at 6 to 9 inches; if this be increased to 12 inches the effect on the grain crop, but more particularly on the seeds, is very marked.

The Lois-Weedon system resembles much that advocated by Jethro Tell about a century ago—deep cultivation and wide drilling—by which, without any manures whatever, a large crop of wheat could be obtained, it was said, year after year, off the same ground. Here however, a difference of material importance exists between the two systems. Tull operated on the same ground, while by the Lois-Weedon system it is not precisely the same ground that is cropped in each succeeding year; indeed it is merely a system of alternate *fallowing and cropping*, the repeated fallowing being equivalent (during a certain time (to the manuring of the Essex and other heavy land fallowing practices.

In this, the wheat is drilled in 12-inch rows; and between every set of three drills there is an interval of three feet, which is *dug or forked*, and kept well stirred and pulverized during the whole time the crop is growing and coming to maturity. In fact, it is simply a naked fallow, extending over a portion of the field equal in extent to that occupied by the crop. When the crop is harvested, the empty spaces are quite ready, in thoroughly clean and mellowed state, for the reception of the seed; this space is then sown in the same manner, and the next year's crop is produced solely upon that portion of the field which was under a naked fallow the past year. It appears to be, therefore, clearly a system of alternate crop and fallow; and by this arrangement of wide drilling and open intervals of space, with *deep tillage* and perfect *freedom from weeds*, the crop oneach half acre so cultivated is found to exceed in quantity the average of that grown under the ordinary mode of cultivation upon the whole acre surface, while the sample is always more regular and of better quality.

The returns of wheat produce from one particular piece of land upon which the practice has been continuously tried since its commencement in 1847 are thus given by the Rev. S. Smith:

1847	not measured.	1853	returns good, but not noted
1848	34 bushels.	1854	
1849	44 "	1855	40 bushels.
1850	34 "	1856	37 "
1851	28 "	1857	36 "
1852	34 "	1858	40 "

These returns must be understood to be from each *half acre* under crop—the other half acre, thanks to the working it has during its fallow, being in an admirable condition for the next year's crop. The tillage processes during the fallow, Mr Smith tells us, amount to 12s. to 18s. per acre. The cost would be diminished to one-half or one third, now that we have sucessfully harnessed steam to our plows and cultivators. The increased vigour of plants, owing to the deep tillage and open growth, shows itself in the stoutness of the straw, which frequently exceeds 2 tons to the half-acre, and is very rarely laid. A practice of earthing up the plants with a light mouldboard, which Mr. S.'s system of

wide cultivation has enabled him to apply to his wheat, no doubt assists in maintaining the stoutness and strength of the plant, as we know it does in Indian corn and other plants of the same family.

Let us now follow the growth of the plant, whose existence we have traced from the parent seed up to the period when, having passed through the earliest stages of its life, and consumed all the food stored up for its use, it enters upon an independent career, and relies upon its own powers for its future support. During the growth of the plant many circumstances have influence over it: the principal of these are in connection with the soil in which it is placed, or the atmosphere which surrounds it. Favorable conditions are readily recognized in the more or less vigorous appearance of the plant; in some cases, however—for instance, where the soil contains a large proportion of available organic matter—the plant starts off with an appearance of growth which it is not able to sustain in its later stages. In others, again, owing probably to a deficiency of soluble silicates in the soil, the straw, though stout and tall, is of too herbaceous a nature, and lacks the rigidity necessary to carry a full head to maturity; and again the produce is unsatisfactory. In both these cases the application of common salt as a top-dressing at the rate of 3 to 5 cwt. per acre, is generally found to be followed by good results.

Again, appearances just opposite to these are to be frequently seen in crops growing even on strong and good wheat soils, especially if the season be a dry one, where a deficiency of organic food for the plant occasions a stunted, though at the same time not an unhealthy growth. This may entirely disappear should the weather change, and furnish a supply of moisture to the soil, which would enable the roots to obtain more readily the needed supplies; but it may be materially improved by the judicious application of some manurial substances, rich in the elements which the plant is supposed to require. Here the good effects of nitrogenized manures are generally seen, guano (Peruvian) and nitrate of soda being those usually applied, at the rate of 2 to 3 cwt. per acre. In all cases, these top-dressings should be applied immediately before or during wet weather, so that they may be acted upon by the rain, and carried at once into the soil.

Frequently, after a mild winter especially, the autumn-sown wheats on good soils present an appearance of luxuriant growth, which is considered to augur badly for the future crop, as rendering the plant more liable to disease, and to suffer from the weather. In this case a practice exists of feeding it off by sheep, and then allowing it to resume its growth. This practice does not appear to make its way as it ought to do; chiefly, I am inclined to think, because where it has been tried unsatisfactorily, the necessary conditions and precautions were not properly observed. It should not be attemped too late in the season, certainly not later than the end of March; the land should be sufficiently dry to carry the sheep, of which a large number should be folded on it at once, so as to get over the surface rapidly. The wheat should be eaten down close to the crown of the root, and not merely its leaves only; and then when the sheep are taken off and vegetation is again unchecked, stems are sent up from each knot of roots formed by the "tillering" process of the plant, and being now of equal growth, present at the time of harvest an equal plant all over the field, with none or few of those short straws with small heads, (tillers), which not only ripen irregularly, but lessen the produce returns of wheat grown under the ordinary conditions.

There can be no doubt that, *cæteris paribus*, autumn-sown wheat is more productive than spring-sown, it being the growth of say ten months (October to August), against six months (February to August). The roots have an opportunity of developing themselves, and penetrating deeper into the soil, by which they are placed in far more favorable conditions as regards mineral food, moisture, and temperature than when they are forced to remain nearer the surface. To compensate for these advantageous natural conditions, spring-sown wheat requires a soil richer in available food, so that it may feed quicker; that it may, indeed, be able, in six months, from a limited depth of soil, to abstract as much food as the autumn-sown obtained from an increased depth of soil in ten months. If this is not provided by the farmer in the superior condition of his land, his returns will not be so productive from his spring as from his autumn wheats, while he must always bear in mind that the former are more liable to be influenced by climatal effects—rain or drought—than the latter.

The vast increase of turnip cultivation during the last twenty years has greatly affected the period of wheat sowing throughout the country. The practice of spring sowing has followed the introduction of turnips, into districts where formerly it was never thought of. In instances where wheat follows turnips fed off on the land a plentiful supply of available food is prepared for the wheat by the preceding crop, while the extra tillage of the turnip crop acts as a good preparation for the wheat

During the period of growth the wheat requires but little attention. Early in the spring some mechanical assistance should be given to the soil, in the shape of rolling or harrowing, in order to compensate for the effects of winter and restore the surface to its proper condition. On certain soils—those containing much clay or lime for instance—the alternate frosts and thaws of winter frequently leave the surface in a very loose and open condition, in many cases, indeed, exposing the roots prejudicially, and in some lifting the plants completely from their bed.

Here the roller does good service to the land in consolidating the surface soil, which it leaves at at the same time in a finely divided condition. On soils of a loamy character the heavy rains of winter frequently, if succeeded by drying winds, leave the surface battered down and coated with hard dry crust impervious to the atmosphere, and obstructive to the increasing vitality of the plant at that period of the year. This may be readily broken up, and a healthy surface restored, by a double turn with the light seed harrows. Later in the spring the operation of hoeing should not be neglected, as even on the cleanest farms a certain number of weeds will always be found, and they must abstract from the soil matters that would otherwise be available as food for the growing crop. The introduction of the expanding horse-hoe has been a great benefit to the farmer, as it enables him to hoe his wheat land more efficiently, more quickly, and at a saving of three-fourths to four fifths, as compared with hand labor. Hand-hoeing is generally piece work. Here the interest of the employer and the employed are opposed to each other, and one generally suffers. The object of the farmer is *quality*, the object of the labourer is *quantity* of work, and if the latter is not well looked after, or above the average honest, the one is sacrificed to the other, and the soil removed by a 6-inch cut with the hoe serves to cover up the next 6 inches of untouched surface; while the agreed price of say 3s. per acre actually becomes 4s., 5s., or 6s. per acre, according to the proportion left unhoed.

Time, too, is an important element in this operation. Hoeing must not be attempted, unless the ground be in a suitable condition, or it would occasion more harm than good; and this particular condition rarely exists for more than a few days at a time, at the season when hoeing should be done, a shower, if only of an hour's duration, frequently putting stop to a chance of hoeing for the remainder of the season. Where there is a large breadth of wheat grown, the labor question of hoeing becomes a serious one, as a man cannot fairly and properly get over more than half an acre per day, especially where the drills are of the ordinary width. The horse-hoe relieves the farmer from much of his anxiety. He has only to regulate the depth and the withth of the cut, and be assured that the whole of his surface will be equally acted upon by it. He finds that, with one man to direct and a horse to draw, the implement will do on the average from eight to twelve acres per day (according to the description of soil and width of drills) in a superior manner, at a cost of say—horse, 2s. 6d.; man 2s. 6d.; wear and tear, 1s. = 6s.; which would have required the employment of sixteen to twenty-four labourers to effect, and at an expenditure of from 24s. to 36s. This, like many other machines possessing equal advantages, can only *follow* good farming. Before it can be rendered available, the land must be drained and laid flat, the surface must be well tilled, and the seed must be deposited in parallel lines; then there is no difficulty whatever in successfully working it.

After the hoeing has been successfully accomplished, the wheat must be left to take its chance against the various injuries and enemies which attend upon every period of its growth. These we will discuss after we have harvested our crop, as, although the injuries they inflict are principally during its growth, our knowledge in reference to them is unfortunately far too imperfect to enable us to assign, except to a very few, the exact period of their attack, the part of the plant in which it is commenced, or the mode in which it is effected.—*Our Farm Crops, by* Professor WILSON.

Advantages of Agriculture to be expected from the Great Exhibition, 1862.

Extract from the remarks of Mr. Brandett Gibbs, before the Bedfordshire Association:—

"Continuing then, this glance at the future, may remind you that next year our society is about to hold its great Metropolitan meeting under the presidency of His Royal Highness the Prince Consort, and this too during the period of the Great International Exhibition of 1862. A metropolitan meeting is an event not likely to take place above once in a quarter of a century, and we may therefore, fairly expect that thousands will throng our show-yard, not only from all parts of the United Kingdom, but also from foreign countries. It may be asked, 'of what advantage will the attendance of foreigners be to us? Will they not gain more from us than we from them? Cannot our agriculture vie with that of any other country in the world? Are not our implements far superior to all others, and cannot our live stock defy competition, come whence it may?' In reply to this I would ask what then is the benefit of an agricultural show, and what has been the result of the Great Exhibition of 1851? Of the benefit of any agricultural show, I would say that I believe that no man of ordinary observation can attend your interesting show this day without gaining some information. Those who are engaged in the same pursuits meet together, ideas and experiences are interchanged, failures or successes in experiments are explained, useful inventions are stamped with approval, and prejudices are removed, and information communicated from one to another. If, then, this holds good of a local meeting, if concentrating the agricultural experience and knowledge of any county or district is of mutual advantage to those residing in it, how much more forcibly does this apply to the meetings of our National Society, which bring together those who would scarcely otherwise, have the opportunity of meeting. I need then go but one step further. I have

from a county to the whole of England, and I will now apply the same reasoning from England to the world. Gentlemen, the foreigner is placed in different circumstances to ourselves; he has different ideas, different requirements and necessities. 'Necessity is the mother of invention;' and foreigners are, perhaps, more of an inventive turn than ourselves. The result may prove that what owes its existence to these causes may eventually be so modified and adapted as to meet some want of our own. Indeed, I may point to the reaping machine as illustrating this. It is true that long before the year 1851, reaping machines had been invented, but their existence was little known. *It was not until America exhibited those of M'Cormick and Hussey in the Great Exhibition of* 1851, *that the attention of our English manufacturers was seriously turned to this description of implement*, and thus a machine called into existence to meet a foreign want has been adapted and improved so as to meet what I believe to be a want of our own. But I need not weary you with further illustrations; I believe I have said enough to show that the Great National Exhibition of 1862 may be frought with important results to agriculture, and I believe that I have at the same time shown that our society has entered upon an important era in its existence."

Mines of Wealth hidden under the Chalk Stratum.

Sir Roderick Murchison has started a subject the Wayland Agricultural Meeting, which we ...ey will occupy the attention of the agricul... ist.

Lord Walsingham, who occupied the chair, in ...oposing Sir Roderick's health, said: perhaps ...would be too much to expect from a gentle...n who had anticipated the finding of gold in ...tralia, that he should teach them how to ...d gold in the sands of Norfolk: but he would ...ature to say that the due and prudent applica...n of science to the practice of agriculture was ...t a less sure way of finding gold than digging ...it where it ha...d long lain hidden in the bow... of the earth. If Sir Roderick were kind ...ugh to make them an address on this occa..., as he had no doubt he would, he might, ...haps, be willing to tell them how important ...as to farmers that they should consult some...g of the geology and mineralogy of the ...tum on which they lived, and ascertain how ...ch the surface was altered by the character ...he geological stratum beneath it. Sir Rod...k might perhaps be willing to tell him why ...as that among the sands of Norfolk they ...d those deposits of clay and marl which ...used so largely in fertilizing the soil. But ...out anticipating what Sir Roderick might ...posed to say, he would only further add ...if he spoke of that which he knew he must speak to them of things of which they knew little or nothing, and it was quite impossible that Sir Roderick could address them without giving them much important and valuable information.

Sir Roderick at once took up the gauntlet, and thus replied:—With regard to the discovery of what might exist under the soil, to which his noble friend the President had adverted, the time was when Dr. Buckland, his (Sir Roderick's) distinguished and illustrious predecessor, had said the day would come, and so he told the late Sir Robert Peel, when there would be found under the soil phosphatic substances that would greatly enrich the farmer. Dr. Buckland was actually laughed at and actually scorned for having expressed such an opinion, but they had lived to see the day when, in the adjoining county of Cambridge, the substratum was laid open to the day, and the lands of that and the adjacent counties were enriched to a large extent by the exhumation of those very phosphatic substances that formerly were deemed as nothing to the farmer, and only regarded by geologists as curiosities. They now knew the value of this discovery, and he only wished he could further point at what depth underneath the Norfolk chalk this substratum might be found. Let them hope that when the geological survey came here, they would find some corner in Norfolk where the chalk thinned away, and where this stratum that lay immediately under it, cropped out in great abundance. They would then see some spirited nobleman, like Lord Walsingham, sinking a shaft to bring it out and enrich the land with a material that was equal to any guano the farmers now paid so high a price for. These were the chief advantages which the geologists, the underground men, could communicate to the farmer. The whole system of drainage depended on a knowledge of the subsoil. How should geologists know anything of their trade if they could not say where a well should or should not be sunk? How should they know anything of the strata, or be considered as anything in their profession, if they were not able to tell the farmer how to drain his lands? These were the points on which geologists were connected with agriculture, and he must say that they would never have arrived at half the knowledge they possessed, by going over the surface of the soil and into the ravines that here and there existed, were it not for the kindness and hospitality by which they had been received by the British farmers. To them the geologists owed a deep debt of gratitude wherever they went, and all the surveyors under his direction—for he was at the present moment director of the geological survey of the British Isles—were under the deepest obligations to British proprietors and farmers, not only for the kind manner in which they were received, but also for the way in which they were instructed, in the nature of the soil they examined. He could not exactly answer the question that had been propounded by

his noble friend, for he assured them it was a most difficult one. Lord Walsingham had asked him how he could account for the intermixture of clay, sand, and flints, that was found here and there in the different pits that were sunk. Geologists merged all these materials in the common name of drift. They were drifted materials that had been carried from different rocks over the surface of the land. The sub-soil was chalk, but some of the soil which covered it was, he was happy to say, sufficiently thick to bear the magnificent oaks he had seen on the estate of his noble friend; while, from what he had seen during the little partridge shooting he had enjoyed with his friend the Duke of Wellington he found it thin enough for the chalk to be seen at the surface. How to account for every heap of sand or gravel would defy the best geologist that ever lived; and his lordship had, therefore, propounded to him a question which no geologist at this moment was in a position to answer.

American Cavalry Horses—their Inferiority of Quality and its Causes.

Some of the remarks in the subjoined article, which we copy from *Wilke's Spirit of the Times*, are deserving of the special attention of breeders of horses.

A long continuance of profound peace and tranquility has invariably been found to lead naturally to a feeling of national security, and a relaxation of that vigilance which is asserted to be the price of liberty. This cause, combined with that eager and engrossing pursuit of the "almighty dollar," which is generally regarded as characteristic of the American people, has caused us to neglect the judicious maxim, "In time of peace, prepare for war." This is especially true of one of the most important arms of our military organization—our cavalry—and the seemingly studied neglect with which we have treated it, would lead to the conclusion that we ignored its value. The breed of horses best adapted for cavalry may be said to hardly exist in this country, or, at all events, only in a very limited degree. This is especially evident in viewing a regiment of cavalry at the present time, and observing the heterogeneous lot of horses on which they are mounted. Horses of every breed, except the one best suited for the cavalry charger, are there in abundance. The trotter, with his unnatural gait and unsuitable action, is alongside the badly-broken and hard-mouthed hack, and the lumbering Conestoga; all equally unfitted for active service in the field. But the true charger, nearly thoroughbred, full of fire and courage, that can clear a hedge or a ditch like a deer, carry his heavily armed rider with ease, and possess both speed and endurance in the highest degree, is hardly ever to be seen.

And to what is this deterioration of our breeding stock to be attributed? It is to the fact that in the Northern States, racing, as a national pastime, has been allowed to die out, and, as the natural consequence, we are fast losing in the breed of our horses, the speed, courage and endurance which are characteristics of the thoroughbred racer. Trotting has usurped the place of racing in the affections of the people, and the country has become flooded with a breed of horses that are utterly valueless for cavalry purposes in time of war, however useful they may be for the pursuits of peace. Such a class of horses can never be got to face the cannon's roar, or to charge the serried ranks of glistening bayonets. "Blood will tell," and they would recoil and run away in such circumstances, where the stock of the "high mettled racer" would stand firm, and, like its rider, defy the whistling storm of death.

In the Southern States, where racing, as an institution, flourishes and prospers, they possess a breed of cavalry horses which can hardly be excelled in the world. In the commencement of the present war, they far surpassed us in the number and excellence of their cavalry, and even now they are far better mounted. In the Mexican war it is well known that the cavalry furnished by the Southern States was much superior to the Northern, owing to the better breed of their horses, which could withstand any amount of fatigue and travel. In actual warfare, the great advantage of cavalry is by charging, to prevent the reforming of the enemy's ranks, after they have been broken by the fire of artillery, or by the bayonet charge of infantry; and by completing the temporary disorder, produce a disastrous effect throughout the ranks. To effect this, the horse and the rider must be so trained that every evolution can be executed with precision and rapidity; and it is essential that the former must possess courage, endurance and speed. The latter quality is as important a requisite as the other two, so that no time may be lost in making the decisive charge upon the already broken ranks. It is easy to conceive the effect upon raw recruits of a charge of well organized and well mounted cavalry, when their lines are once broken: the trampling down of the horses and the fearful execution of the riders' sabres; the temporary disorder may often precede a total rout.

In England, where racing is a national institution, patronized and supported by annual grants of money, by government itself, are to be found the best cavalry horses in the world. For this purpose the English hunter stands unequalled, he is nearly thoroughbred, and possesses all the virtues of the latter, with an increase of stoutness. Russia, whose Emperor, Nicholas I, devoted such care and attention to raising a breed of cavalry horses, imports all her thoroughbred stallions from England. No price is too great for a first-class thoroughbred sire, as the best

sums that the late Emperor paid in England for such, testify. He gave $10,000 for Van Tromp, after he had broken down in training; Andover became his property for the same figure. For Peep-o'-day-Boy, Col. Shrider, the Emperor's agent, was asked $3,000, but as he would not give an answer at the time, the price, on his next visit, was raised to $6000; another demur shot the price up to $8,000, and the Emperor bought him for that sum. Dr. Cains, Cardinal Wolsey, Soothsayer, Juggler, Bourbon, Middleton, Memnon, Allegro, Coronation, Jereed, Ithuriel, Uriel, General Chassee, Wanota and Andover, are a few only of the "terribly highbred" English stallions that Russia has imported to produce her cavalry horses. In the south parts of that vast empire, the studs for cavalry horses alone comprise 1,000 to 1,500 mares each.—Strict military discipline is kept up, and the great object is to get horses as thoroughbred as possible, as the half breeds cannot stand six or seven hours of manœuvring on parade. In the royal stables alone, in Nicholas' day, there were 600 chargers and 600 in breaking, 1,200 harness horses and 1,200 in breaking, and these did not include those at Warsaw and Moscow.

In France, the breed of cavalry horses is equally as great an object of importance and care as in Russia, and the thoroughbred racers of England are the source from whence stock is derived. Some of the best horses that ever ran on the English turf have been purchased for the Government Haras. Gladiator, Lanercost, Ionian, Sting, The Baron, Ion, the Emperor, Nunnykirk, Dlthiron, Womersley, Hernandez, Caravan, Assault, Flying Dutchman and West Australian, have sown their high-bred progeny largely over France. For cavalry horses, the government has several *depots de remount*, but it will only buy from breeders, and not from dealers. In spite of this virtual monopoly, their great cavalry contract in 1842–3 was executed in England. Their standard for the cavalry *legere* is from fourteen-three to fifteen hands; for the dragoons, from fifteen-one to fifteen-two; and for the cuirassiers, from fifteen-two to sixteen hands. The Emperor's own private establishment contains nearly five hundred horses.

Prussia, Sardinia and Austria, also pay great attention to the raising of cavalry horses, and, like Russia and France, endeavour to have them as near thoroughbred as possible. Prussia imports a vast number of thoroughbred mares for the Government Haras, in which are now standing the famous sires, Stilton, Ephesus and Chatham. The studious care devoted by the governments of Europe to the securing and cultivating of the best breed of horses for cavalry purposes, stands in striking contrast to the neglect hitherto evinced by our own government in this important matter. Nor has individual enterprise effected what government has left undone. Throughout the Northern States, breeders devote all their efforts to the extension of a race of trotters, which can never be made good cavalry horses, and think more of a Morgan, Bashaw, or Messenger than of the best thoroughbred racer on the turf. Except Lapidist, Come Hommes, Mango, Slasher and Consternation, we have no thoroughbreds at the stud; while in the South they are spread broadcast through the States, and include such world-renowned horses as Albion, Childe Harold, Yorkshire, Lexington, Nicholas, Revenue, Sovereign, Fly-by-night, Wagner, Balrownie, Knight of St. George and Bonnie Scotland.—We repeat, therefore, that it is to the dying out among us in the North, of racing as a national pastime, that the degeneration and deterioration of our breed of horses for cavalry is to be attributed, and to its revival only can we look for a remedy for the evil.—*Wilke's Spirit.*

The Harvest Moon.—The remarkable phenomenon of the harvest moon is familiar to every one. During the time that our satellite is full, and for a few days before and after—in all about a week—there is less difference between the time of her rising on any two successive nights than when she is full in any other month of the year. By this means, an immediate supply of light is obtained after sunset, so beneficial for gathering in the fruits of the season. To conceive of this phenomenon, it must be recollected that the moon is always opposite to the sun when she is full—that she is full in the signs of Pisces and Aries, these being the signs opposite to Virgo and Libra, which the sun passes through in September and October, our harvest months. Thus, although, whenever the moon enters the signs Pisces and Aries (and she does so twelve times a year), the same circumstance takes place with regard to her rising, yet it is not observed on these occasions, just because she is not full at the time. The reason of there being little difference in the time at which she rises on several consecutive nights is that at these periods her orbit is nearly parallel with the horizon. The harvest moons are as regular in south latitude as with us in north latitude, only they happen at different periods of the year. —*Chamber's "Information for the people"*

An Easy Way to Dissolve Bones.—James S. Grennell, Esq., Dreenfield, practices dissolving bones by a method which seems worthy of notice from its simplicity and convenience. Casks having each but one head are provided; a layer of bones six or seven inches thick placed on the bottom; then strong, unleached wood ashes are spread over the bones to the thickness of two inches or more. The casks are filled in this way, taking care to have a pretty good thickness of ashes at the top to prevent the exhalation of ammonia. The process of thus packing the bones goes on through the season,

as ashes accumulate in the house, and they remain in the casks till spring, when the casks are emptied, and the bones are found to be generally well pulverized, or so soft that they can easily be broken as fine as desired. The mixed bones and ashes are excellent manure for most crops, and especially for fruit crops.—[*Boston Cultivator.*

Relative Value of Substances for Producing Milk.—Several French and German chemists estimate the relative value of several kinds of food for milch cows according to the following table:

That 100 pounds of good hay are worth
200 pounds potatoes.
460 " beetroot with the leaves.
350 " Siberian Cabbage.
250 " Beetroot without the the leaves.
250 " Cartots.
80 " Hay, clover, Spanish trefoil or vetches
60 " Oil Cake, or colza.
250 " Pea straw and vetches.
300 " Barley or oat straw.
400 " Rye or wheat straw.
25 " Peas, beans, or vetch seed.
50 " Oats.

Burning Clay Soil.—Stiff olay soils are sometimes greatly improved by burning a portion of the surface. The burned clay loses its tenacity, and being mixed with that which is unburned, a more friable soil is produced — The burning of clay, however, deprives it of the power to retain fertilizing salts, which it naturally possesses in a high degree. This subject was alluded to in a late lecture by Mr. Holland before the Evesham Farmer's Club. He said :—'Professor Way had two large boxes made, one of which was filled with burnt, and the other with unburnt clay. In these a strong solution of salt and water was poured, holes being left in the lower part of the boxes for the solution, after percolating through the clay, to escape by. It was found that that which ran through the unburnt clay came out almost tasteless, whilst the burnt clay allowed the solution to come away almost as strongly impregnated with salt as when it was first poured into it. The advantage of burning clay was, that in doing so a very large portion of the ground was laid open to the action of the atmosphere, which was of great service, for a large amount of nitric acid and ammonia came down from the sky and strengthened the soil, if the earth was only open to receive it. That was one of the advantages of deep tillage and of burning the soil upon very heavy land."—*Ex.*

Late Pasturing.

Some farmers keep their cattle out as late as possible in the fall, and even into winter. The pastures are gnawed very close, and even the after-math of mowing fields, as if they never expected to get another crop of grass from them. This is very bad husbandry upon any land, and especially upon that recently seeded with herds-grass. This grass, as is well known to all careful observers, has a bulbous root, and the fine roots that shoot out from the bottom are not as strong as the roots of most other grasses. It is, therefore exceedingly liable to be torn out by the roots by grazing cattle, especially if the grass is short. In a close cropped meadow where this grass has been sown, nothing is more common than to see thousands of these dried bulb lying upon the surface. We doubt the economy of grazing a herds-grass meadow at any time But if done at all, it should not be cropped after the first of November in this latitude.

The roots of all the grasses are designed to be covered with their own leaves and stalks during the winter. These and the snow protect them from the alternate freezings and thawings, and bring them out in good condition in the spring. The farmer who undertakes to thwart the designs of Nature in this respect, will find it a very expensive business. The little that he saves in feed now, he loses next season in the diminished yield of the pasture or the meadow. We ought always to manage so as to have nature working with us, instead of against us. This is one of the evils of overstocking farms. The farmer is afraid that he has not quite fodder enough for winter, so he pastures till the ground is frozen. He cuts less hay for the next season, and he is still more sorely tempted to pasture.

It is quite as bad for the cattle as it is for the land If they have no fodder in the month of November, they lose rather than gain upon pasture, unless it is much better than the average. Every animal ought to go into the stable in a thriving condition—if not fat, at least in full flesh. They are then easily kept thriving upon good hay, or upon hay and roots, straw and meal. After several years' close observation directed to this particular point, we do not think any thing is gained by pasturing in this latitude, and north of it, after the first of this month. All the grasses must have time to cover their roots in order to make lush feed next season. Cattle foddered through a part of October, and brought to the stable about the first of November, in good flesh, are easily wintered. It is better management to buy hay or to sell stock, than to pinch the pastures by close feeding.—*Am. Agriculturist.*

Advantages of Deep Draining.

The following remarks were made at a late meeting of the Surrey (England) Agricultural Association, by an English agriculturist, Mr. Butcher, on receiving a prize for the best practical results of draining.

Entering upon an explanation of his plan of drainage, he avowed himself to be a deep drainer,

and to have been so for the last thirty years. He remembered to have been laughed at for placing a main drain thirteen feet deep. In the place where he had carried on his operations the surface drainage had been attempted by one after another most unsuccessfully, but the needs still remained just the same, and could not be cured. He, however, having plenty of energy, and the owner placing at his disposal plenty of money, he had succeeded in reclaiming an estate which had been represented as irreclaimable. He felt pleased that he had succeeded, because the old men of the day gone were unable to find out the secret. He found it thus: that while others were content with mere surface-drains he dug deeper and deeper until he came down to the springs. He made a deep drain, while his general drainage was about four feet, though on coming into the farm he found his neighbor's drainage about two feet. He felt that the land he had drained was drained efficiently. He advised that land should not be drained in small portions, and with furrows; but even in a clay soil, to allow the moisture to pass quickly through, as if through a colander, without leaving any of it to adhere to the surface. If the water was required to be carried off the surface, must be done by plowing on a flat surface; and whatever draining was done on a stiff land was required to be done deep. On meadow land it was found necessary to be careful, and to drain on a proper system, with the drains not too closely connected; always keeping one consideration in mind—not to study an artifical position, but to take nature's surface; and as nature makes the fall of the land, let the worxmen take the cut.

Agricultural Intelligence.

Herefords in Canada and Australia.

In our impression of last week we gave a brief abstract of a very interesting Agricultural Meeting, held under the auspices of the Provincial Agricultural Society of Canada, in which the name of F. W. Stone, Esq., the newly-elected president of that important national society, was prominently placed as one of those who have for the past few years taken a lively interest in the agricultural progression of that colony, and whose importation of Herefords last year from the herd of Lord Bateman were so generally admired at their recent show. The readiness with which those animals become acclimatised induced their spirited owner to send further commissions to the mother country, and the following lots were purchased for him at the sale of the late Lord Berwick's herd, viz., Graceful (168) Wildrose (180), Sweetheart (182); to these heifers were added the bull calf Sailor (219) and the lot shipped in the steamer "North American" from Liverpool to Canada a short time since. Whilst it gives us great pleasure to record such endeavours in the northern portion of the western hemisphere, it also gives us equal pleasure to be enabled to speak of the well-doing of this valuable race of animals in the southern part of the eastern hemisphere, as the fame attached to the numerous exportations which it has been our pleasure to notice would soon cease, were there any disappointment experienced with the animals after arrival in those foreign lands, where they are destined to form the foundation of future herds. And here, we think, we cannot do better than give an extract from a letter before us, verbatim: "The Herefords have done much better than the Durhams: the bulls do well, and keep in excellent condition; the cows are all fat, they have never been shut up for any length of time, having done very well out at grass; but I have had great difficulty in keeping the Durham bulls in condition, they appear to do nothing but run about when out, until they become as poor as crows." The Herefords here alluded to were selected by Mr. W. Bostock, and sent to his Australian possessions, from the herds of Mr. Monkhouse, The Stow; Mr. Rea, of Westonbury; and that of the late Lord Berwick.—*Mark Lane Express, Nov.* 11.

Horticultural.

Hamilton Horticultural Club, &c.

The following is the Annual Report of this club, submitted at a recent meeting.

Hamilton, 1st October, 1861.

Mr. President and Gentlemen,—

Your Directors in presenting this their fourth Annual Report, beg to congratulate the members on the continued success and prosperity of the club. At no time since its formation has the attendance of members been more regular than during the past year, and the interest manifested in the meetings, and everything connected with the usefulness of the association has been very encouraging. During the year which commenced on 18th October 1860, and ended 3rd September 1861, there have been twelve regular meetings. The subjects brought forward at the meetings have been varied, and excited lively interest during their discussion.

The principle subject at each meeting is as follows:

October,—Annual Meeting, election of office-bearers, &c.

November,—Discussion on Potato Disease.

PDecember,—Paper on cultivation of the Dwarf ear, by C. Meston.

January,—Report on draft of rules for Library, Discussion on circulation of Periodicals, &c.

February,—On cultivation of the Cherry, by J. Freed.

March,—Discussion on the Brassica tribe, introduced by H. Shaw.

April,—Paper on Bedding plants, by Mr. G. Laing.

May,—Discussion on hardiness of certain bulbs, D. Murray.

June,—Discussion on the effects of severe winter on hardy fruits, J. Freed.

July,—Paper on Fruit trees in Pots or the Orchard House, D. Murray.

August,—Paper on the cultivation of the Strawberry, by, J. Freed.

September,—Report from Floal Committee, G. Laing.

The attendence of members at the meetings, although not large were regular, average attendance at each meeting has been eleven.

Your Directors beg to bring under the notice of the Club some of the new features introduced during the year, one of which is the publication in the *Canadian Agriculturist* of subjects brought before the meetings, and desire to tender the sincere thanks of the club to the conductors of the *Agriculturist* for the courteous manner in which they responded to our call for space in that valuable periodical for contributions emanatig from the club.

The *Gardener's Chronicle* and *Cottage Gardener* have been circulating among the majority of the members during the year, and we have no doubt many have been edified by these ably conducted papers.

Committees have been appointed for the examination of Seedling florists' flowers, that may be submitted to them for that purpose. Should the flowers so examined come up to a certain standard, they are entitled to a certificate representing to which class, first or second they belong; anything not worthy a second-class certificate is discarded.

Committees have also been appointed on fruits and vegetables—neither of those committees have been burthened with their labors hitherto; but as more attention is paid to the raising of new and superior varieties of plants, flowers and vegetables, their labors will increase, and in time will be appreciated.

At the commencement of the year the names of members on the roll were twenty, two members left the city during the year, four were taken off the roll for non-attendance, and eleven new members have been admitted during the same period. There are now twenty-five members, most of whom take a deep interest in our meetings.

In conclusion, we beg to call on every member of the club to do his duty, his simple duty, and we dare to say that the footing we have now gained will not only be maintained by us, but but by our successors, until the good effects of the Hamilton Horticultural Club will be felt in Canada wherever the art is known. All of which is respectfully submitted,

CHAS. MESTON, *Sec.*

[We hope to see several societies of a similar character to the Hamilton Horticultural Club established in different parts of the Province, and subjoin its Rule and Regulations for the benefit of such as may be disposed to aid in the formation of such societies. EDS.]

HAMILTON HORTICULTURAL CLUB, AND LIBRARY ASSOCIATION. INSTITUTED SEPTEMBER, 1856.

REGULATIONS.

I. Persons desirous of admission to the Club shall be recommended by two members at one meeting, and balloted for at the next meeting. The votes of two-thirds of the members present being necessary for the admission of a member.

II. Members of the Club shall pay an annual subscription of one dollar, in advance, for defraying necessary expenses. Any surplus and donations to be applied for the purchase of Horticultural Publictions, and the formation of a Library. A payment of ten dollars by a member shall entitle him to the benefits of the Club for life.

III. The office-bearers to consis of a President, Vice-President, Secretary, Treasurer and three Directors, to be elected annually at the annual general meeting of the Club, on the first Tuesday in October. Three of the office-bearers, one of whom, however, must be President or the Secretary, to be a quorum for the transaction of business.

IV. The duty of the president will be to preside and preserve order at the meetings, and regulate the order of procedure by enforcing the rules for the regulation of debates or discussions.

V. The duty of the Secretary to record the proceedings, giving a short account of the discussions and results in the minute book.

VI. The duty of the Treasurer to collect and pay moneys and keep the accounts, submitting a correct statement at the annual meeting.

VII. The meetings will be held on the first Tuesday of every month, at 7 o'clock, P M., in winter, and 8 o'clock, P. M, in summer.

VIII. The business of the meetings will be: 1st. The exhibition of any objects of interest, not to exceed half an hour. 2nd. Reading, correcting if necessary, and approving the minutes of previous meeting. 3. Balloting for new members. 4th. Reports from Standing Committee. 5th. Reading an Essay on some subject announced and approved at a previous meeting, and remarks on the same by the members, in rotation. 6th. Answering queries by members according to a notice on the roll or table of subjects.

IX. To any meeting a member may introduce a friend.

X. No discussion or conversation allowed on any subject not connected with the objects of the Club.

XI. Any member interrupting the proceedings by improper conduct, or disturbing the harmony of a meeting may be expelled by a majority of the members present.

XII. Any addition may be made to the rules by a majority, but no alteration shall be made of a rule once established. except by a vote of at lest two-thirds—in either case a month's notice of the addition or alteration must be given.

REGULATIONS OF THE LIBRARY. 1861.

The Librarian shall receive, and take charge of all Books and Periodicals belonging to the Hamilton Horticultural Club, and shall make and keep account of the Books and Periodicals in the Library, in such form as the Directors may determine.

Rule 1st. The Library shall be opened for receiving and giving out books every Saturday, between the hours of 8, A. M. and 6, P. M.

2nd. The Librarian on application by any member, will issue one volume which may be retained for the time specified therein, if kept longer without being renewed, five cents shall be exacted for every week, or part of a week, it may be so kept.

3rd. In order that the Librarian may be enabled to report on the state of the Library, all Books and Periodicals must be returned at least one week previous to the annual meeting of the Club, in each year, under a penalty of twenty-five cents, for every week or part of a week, they may be retained beyond that period. The Library at this time shall be closed, until after the election of officers shall have taken place, when it shall again be opened for issuing and receiving Books. Members shall not be entitled to receive Books until they have paid such fines as they may have incurred.

4th. When a Book is damaged or lost, the injury must be repaired, or the book replaced as the Directors shall determine

5. The non-compliance with any of the above rules, shall be sufficient for the expulsion of any member

OFFICE BEARERS FOR THE ENSUING YEAR:

J. A. Bruce, Esq..... ... *President.*
D. A. McNab, Esq..... *Vice President.*
F. C. Bruce, Esq..... *Treasurer.*
C. Meston, Esq..... *Secretary.*

DIRECTORS.

George Laing. Hugh Shaw.
D. Murray.

Hamilton Oct. 1st, 1861.

Culture of Flowers.

Mr. Editor,—The short descriptive article on the Crystal Palace grounds and flower beds in England, that appeared in your last journal, highly deserves attention, as being not only interesting, but very instructive, and calculated, I think, to lead to enquiry. Particularly so at the present time, when Floriculture is commanding so much notice in the mother country. During the last few years, the flower-bedding system has undergone a very great change for the better; there the objects in view are well considered and effectually carried out. It is to be regretted that so little attention is paid to these things in this country, the old random way of planting seems still to be adhered to and practiced, without thought or consideration; this is wrong, and ought to be discontinued, and arrangements made and adopted to make the most of things that are.

In the old country, from the Royal Gardens down to the humble cottages the flower-bedding system is particularly attended to; high and low, rich and poor, all unite in forwarding this object. This is as it ought to be, every one trying to excel his neighbour in his best planned bed, linked chain, or ribbon-border. Now the way of accomplishing this lies in the arranging of the plants and colours, and to do so effectually the operator must have a thorough knowledge of the plants, their nature, habits, colour of flower, time and duration of flowering. When the whole is properly carried out a very pleasing effect will be produced and very much taste displayed. It must be borne in mind that the foliage of plants, as well as their flowers, has a good deal to do in the matter, and must not be forgotten. A full consideration of those things will not be without its good effects on the cultivator; without it he may rest assured nothing really good can be arrived at; it will afford very pleasing exercise for the mind during the dull winter months, when looking through the bedding plants for the next spring. You may hear from me again on this subject. In conclusion I must say that I feel convinced that we have in this Province just as keen ribandists as there are in all England, if they could be induced to come out. Out I trust they will come next year, and get all the ladies and artizans to join them.

Yours, &c.,
Hortus.

Hamilton, 28th Nov., 1861.

Transactions.

List of Prizes Awarded,

AT PROVINCIAL EXHIBITION, LONDON, SEPTEMBER 24TH TO 27TH, 1861.

HORSES.

CLASS I.—BLOOD HORSES—(15 Entries.)

Judges.—Messrs. Geo. D. Morton, Bradford; James Armstrong, Union, Elgin; Henry Battell, Cobourg.

Best thorough bred stallion, Wm. Saul, West Nissouri, $40; 2nd do, Hiram Brotherhood, Iona, $25; 3rd do, Thos. C. Hillyer, Simcoe, $12.

Best 2 years old filly, James White, Trafalgar, $14.

Best yearling filly, James White, Trafalgar, $10.

Best mare and foal, or evidence that the foal has been lost, James White, Trafalgar, $22; 2nd do, John Thompson, Mount Vernon, $14.

REMARKS BY JUDGES.—The judges, in making their return in this class, would beg to remark that they are sorry it is not in their power to congratulate the Society on the animals exhibited in it, either as to number or quality, and would recommend the Board to investigate the pedigrees more closely. Giving prizes at the Provincial Show to animals of impure blood as thorough-bred stock, when they are not such, is only deceiving the public. They would also suggest that more encouragement be given to importers of really good blood stock, knowing, as they do, that the prices asked for such in the old country is four or five times as much as for any other kind of animals. All of which is respectfully submitted.

CLASS II.—AGRICULTULAL HORSES—(123 Entries.)

Judges—Jacob Young, York, Grand River; James Davidson, Paris; G. S. Burrill, Cramahe; James Lawrie, Scarborough; John P. Bull, York Township.

Best stallion for agricultural purposes, Thos. Gowland, York, County Haldimand, $40; 2nd do, Robert Edington, Indiana Township, $25; 3rd do, Joseph Johnston, Cathcart, Brant, $12.

Best 3 years old stallion, Adam Smith, St. George, $22; 2nd do, Chas. A. Woodhull, Komoka, $14; 3rd do, Archibald Frank, Cheltenham, $7.

Best 2 years old stallion, Robert Robson, London, $14; 2nd do, John Long, Waterdown, $10.

Best yearling colt, Theobald Brunnen, Sebringville, $8; 2nd do, Henry Bowman, McGillivray, $6; 3rd do, Rich'd Fanson, Exeter, $4.

Best agricultural stallion of any age, Thos. Gowland, York, Grand River, Diploma.

Best 3 years old filly, Donald Clark, Embro, $18; 2nd do, Robert Robson, London, $11.

Best 2 years old filly, George Shipley, East Williams, $14; 2nd do, Chris. Walker, London, $9; 3rd do, Henry Lock, Nilestown, $4.

Best yearling filly, Wm. Amos, McGillivray, $8; 2nd do, Robert Drany, Dorchester, $6.

Best brood mare and foal, or evidence that the foal has been lost, Thos. Gowland, York, River, $22; 2nd do, Peter Crerar, Stratford, $14; 3rd do, Christopher Walker, London, $6.

Best span matched farm or team horses, John Chote, Dorchesthr, $20; 2nd do, Dugald Brown, Iona, $15; 3rd do, Hendie & Co. London, $10.

REMARKS.—The judges, in returning their list of prizes awarded in this class have pleasure in stating that their duties were fully engaged by the numerous entries in almost every section, proving that the breeding of horses for useful purposes has not been neglected. But they have to express their regret that, from want of arrangement on the part of the exhibitors, or those whose duty it was to notify them, the judges have experienced much inconvenience and delay, and would suggest the advisability of having two rings for the exhibition of horses. They would further recommend those persons who may be exhibitors in future to classify their horses more carefully; as much inconvenience, and they fear loss to individuals, must have arisen by a want of due consideration of, and attention to these important matters.

CLASS III.—ROAD OR CARRIAGE HORSES—(253 Entries.)

Judges—E. Wilmot, Kingston; G. Taylor Belleville; B. Rice, Chatham.

Best roadster or carriage stallion, 4 year, old and upwards, James Armstrong, Union Elgin, $40; 2nd do, George Roach, Hamilton, $25; 3rd do, John Dickson, Etobicoke, $12.

Best do 3 years old, Charles Ross, Grovesend, $22; 2nd do, James Powell, York Township, $14.

Best do 2 years old, R. Dochstader, Mount Healy $14; 2nd do. John Gibson, Newcastle, $10; 3rd do, Alex. Burgess, Ingersoll, $5.

Best yearling colt, T. Stripp, Belmont, $8; 2nd do, John Gill, Toronto Township, $6; 3rd do, Thomas Welsh, London, $4.

Best stallion of any age, John Dickson, Etobicoke, Diploma.

Best French Canadian Stallion, J. Brown

Streetsville, $30; 2nd do, Jas. Fitzsimmons, St. Thomas, $20; 3rd do, Hendie & Co., London, $10.

Best 3 years old roadster filly, Robert L. Wright, London. $18; 2nd do, James McArthur, East Williams, $11; 3rd do, do do, $7.

Best 2 years old filly, Robt. Smith, London, $14; John Paton, Amherstburgh, $9; 3rd do, Thomas Smith, Toronto Township, $4.

Best yearling filly, Joseph Lamb, London, $8; 2nd do, S. Peters, London, $6.

Best brood mare and foal, or evidence of foal having been lost, S. Peters & Son, London, $22; 2nd do, Richard Williams, Culloden, $14; 3rd do, Thomas Armstrong, Maple, $6.

Best pair matched carriage horses, John Coot, London, $20; 2nd do, John Gage, Bartonville, $15; 3rd do, M. T. Moore & Son, St. Thomas, $10.

Best single carriage horse in harness, Wm. R. McKenney, Crowland, $10; 2nd do, John Dodrick, Port Rowan, $8; 3rd do, Joseph Lamb, London, $6.

Best Saddle horse, John Nickerson, Delhi, $10; 2nd do, William Ferris, London, $8; 3rd do, T. Sharon, Southwold, $6.

EXTRA ENTRIES.—Chas. Perley, Burford, pair of hacks, commended; Peter E. McKerral, Chatham, pair of ponies, commended; Albert G. Hatch, Brantford, pair of hacks, commended; G. L. Ridout London, pony, $3.

CLASS IV.—HEAVY DRAUGHT HORSES—(43 Entries.)

Judges—Richard Saul, Strathroy; John Hunter, Goderich; Matthew Jones, Darlington.

Best heavy draught stallion, Robert Ferris, Richmond Hill, $40; 2nd do, Joseph Thompson, Markham, $25; 3rd do, John Miller, Brougham, $12.

Best 3 years old stallion, Joseph Walker, Falkirk, $22; 2nd do, R. A Hartley, Chinguacousy, $14.

Best 2 years old stallion, John Shedden, Toronto, $14; 2nd do, Edward Little, London, $10.

Best draught stallion of any age,—only one shown, did not get a prize in his own class—James Dalziel, Ayr, commended.

Best 3 years old filly, only one shown, 3rd prize, Christopher Waugh, London, $6.

Best 2 years old filly, George Miller, Markham, $14; 2nd do, John Henderson, Lobo, $9.

Best yearling filly, George Miller, Markham, $8.

Best broad mare and foal, or evidence that the foal has been lost, John Crawford, Scarboro', $22; 2nd do, George Miller, Markham, $14.

Best span of draught horses, Hendrie & Co., London, $20; 2nd do, do, $15; 3rd do, do, $10.

CLASS V.—HORSES FOR GENERAL PURPOSES, THE PRINCE OF WALES PRIZE.—(38 Entries.)

Judges—The judges of all the other classes united.

Best stallion for general purposes, Prize presented by His Royal Higness the Prince Wales, James Armstrong, Union, Elgin, $60. $60.

REMARKS.—The Judges after a full and careful consideration of the horses entered in this class, of which they felt pleasure in seeing so good a display, decided their award in favor of No. 5 (as above).

EXTRA CLASS.—ASSES AND MULES.—(3 Entries.)

William Henry, Stamford, 1 jack, imported from Spain, commended, $10; do, do, 1 jenny, imported from Spain, commended, $10.

CATTLE.

CLASS VI.—DURHAMS.—(178 Entries.)

Judges—Richard Jackson, Guelph; A. Alcorn, Cobourg; Thomas Peirson, Oshawa; Daniel Perley, Brantford; Robert Kirkwood, Hamilton; H. J. Laury, Hamilton.

Best bull 4 years old, F. W. Stone, Guelph, "Thrid Grand Duke," $36; 2nd do, George Black, St. Mary's, "Sir Charles Napier," $24; 3rd do, Donald Robertson, Queenston, "Fremont," $16; 4th do, James Anderson, Guelph, "Wolviston 1st," $8.

Best 3 years old bull, James White, Trafalgar, "Milton," $32; 2nd do, George Miller, Markham, "Prince of Wales," $20; 3rd do, John Zavitz, London, "Billy O'Gaunt," $12; 4th do, John P. Wheeler, Scarborough, "President," $6.

NOTE.—The four prize bulls in this section are of very superior quality.

Best 2 years old bull, J. R. Pettitt, Grimsby, "Alfred," $24; 2nd do, John Snell Chinguacousy, "Cobden," $16; 3rd do, Robt Routledge, London, "General Williams,".

$9; 4th do, Henry Welford, Woodstock, "Duke of York," $5.

Best 1 year old bull, John Miller, Pickering, "Canadian Punch," $20; 2nd do, G. H. Phillips, Prescott, "Master Maradan," $12; 3rd do, F. W. Stone, "Prince of Wales," $8; 4th do, G. H. Phillips, Prescott, "Master McHale," $4.

Best bull calf (under 1 year), John Snell, Chinguacousy, "Baron Solway," imported from Britain, 1861, $48; 2nd do, John Miller, Pickering, "Heather Jock," $10; 3rd do, George Robson, London, "Commodore," $6; 4th do, John Snell, Chinguacousy, $3.

Best Durham bull of any age, F. W. Stone, Guelph, "Third Grand Duke," diploma.

Best cow, F. W. Stone, Guelph, "Martha," $20; 2nd do, Wm. Shore, St. Thomas, "Florence," $12; 3rd do, Geo. H. Phillips, Prescott, "Fragrance," $8; 4th do, George Miller, Markham, "Snowdrop," $4.

Best 3 years old cow, Thos. Stock, Waterdown, "Betsy," $16; 2nd do, George Miller, Markham, "Queen of the May," $10; 3rd do, Arthur Hogge, Guelph, ——, $6; H. P. Welford, Woodstock, "Wild Eyes," $4.

Best 2 years old heifer, Thomas Stock, Waterdown, "Lizzie," $12; 2d do, G. Miller, Markham, "Diadem," $8; 3rd do, Geo. H. Phillips, Prescott, "Maradan 8th," $5; 4th do, Arthur Hogge, Guelph, "Mary," $4.

Best 1 year old heifer, F. W. Stone, Guelph, "Isabella 4th," $10; 2nd do, do, "Matchless," $6; 3rd do, Wm. Shore, St. Thomas, "Daphne," $4; 4th do, Geo. Robson, London, "Satin," $2.

Best heifer calf (under one year), F. W. Stone, Guelph, "Sanspareil 7th," $6; 2nd do, do, "Cambridge 3rd," $4; 3rd do, John Iles, Puslinch, "Martha," $2; 4th do, Geo. Miller, Markham, —— $1.

Best herd of Durhams, consisting of one bull, and not less than four cows *or* heifers, or cows *and* heifers of any age, F. W. Stone, Guelph, $40.

CLASS VII.—DEVONS.—(116 Entries.)

Judges—D. W. Freeman, Simcoe; John A. Nellis, Grimsby; Philip Gregory, Port Dalhousie; John Bobier, Tyrconnel.

Best bull 4 years old and upwards, Charles A. Woodhull, Komoka, $36; 2nd do, W. H. Loch, St. Thomas, $24; 3rd do, H. D. Smith, Aldborough, $12; 4th do, Benjamin Rice, Chatham, $8.

Best 3 years old bull, Christopher Beer, Katesville, $32; 2nd do, Chas. Sifton, Lambeth, $20; 3rd do, Richard S. Cleave, Duart, $12; 4th do, John Mason, St. Mary's, $6.

Best 2 years old bull, John Tuckey, Lobo, $24; 2nd do, Daniel Tye, Wilmot, $16; 3rd do, Christopher Courtice, Darlington, $9; 4th do, do, $5.

Best 1 year old bull, William Scott, New Hamburgh, $20; 2nd do, Daniel Tye, Wilmot, $12; 3rd do, Christopher Courtice, Darlington, $8; 4th do, John Pincombe, London, $4.

Best bull calf (under 1 year), William H. Lock, St. Thomas, $16; 2nd do, S. Peters & Son, London, $10; 3rd do, John Pincombe, London, $6; 4th do, Christopher Courtice, St. Thomas, $3.

Best Devon bull of an age, W. H. Lock, St. Thomas, diploma.

Best cow, W. H. Lock, St. Thomas, $20; 2nd do, Christopher Courtice, Darlington, $12; 3rd do, John Mason, St. Mary's, $8; 4th do, John Pincombe, London, $4.

Best 3 years old cow, John Pincombe, London, $16; 2nd do, do, $10; 3rd do, Wm. H. Lock, St. Thomas, $6; 4th do, John Pincombe, London, $4.

Best 2 years old heifer, John Pincombe, London, $12; 2nd do, W. H. Lock, St. Thomas, $8; 3rd do, Daniel Tye, Wilmot, $5; 4th do, W. J. Lock, St. Thomas, $3.

Best 1 year old heifer, Henry Lock, Nilestown, $10; 2nd do, do, $6; 3rd do, John Pincombe, London, $4; 4th do, W. H Lock, St. Thomas, $2.

Best heifer calf (under 1 year), John Pincombe, London, $6; 2nd do, W. H. Lock, St. Thomas, $4; 3rd do, do, $2; 4th do, do, $1.

Best herd of Devons, consisting of one bull, and not less than four cows and heifers, W. H. Lock, St. Thomas, $40.

NOTE BY JUDGES.—The first prize aged bull was not entered for the diploma.

CLASS VIII.—HEREFORDS.—(21 Entries.)

Judges—John Paton, Amherstburgh; John Salkeld, Goderich; Edward Jones, Thorold; James Archibald, Huntingdon.

Best bull 4 years old and upwards, James R. McMicking, Stamford, imported from the United States since last Exhibition, $72.

Best 1 year old bull, F. W. Stone, Guelph, imported from England, since last show, $60.

Best bull calf (under 1 year) Henry J. Lamy, Hamilton, $16.

Best Hereford bull of any age, F. W. Stone, Guelph, diploma.

Best cow, F. W. Stone, Guelph, imported from England since last Exhibition, $40; 2nd do, J. R McMicking, Stamford, $12; 3rd do, H. J. Laury, Hamilton, $8.

Best 3 years old cow, F. W. Stone, Guelph, imported from England since last exhibition, $32; 2nd do. J. R. McMicking, Stamford, $10; 3rd do, F. W. Stone, Guelph. $6.

Best 2 years old heifer, F. W. Stone, Guelph, imported from England since last show, $24; 2nd do, F. W. Stone, Guelph, $8; 3rd do, do. $5; 4th do, J. R. McMicking, Stamford, $3.

Best 1 year old heifer, J. R. McMicking, Stamford. $10.

Best heifer calf (under one year) F. W. Stone, Guelph, $6.

Best herd of Herefords, F. W. Stone, Guelph, $40.

Extra Entries.—Herefords, F. W. Stone, Guelph, 3 years old heifer, in calf, imported, highly commended, $16.

Remarks by Judges.—We think it proper to notice the splendid herd of Herefords lately imported from the best stock in England into this province. We consider this the finest importation that we have seen, and that Mr. Stone is justly entitled to the highest praise for his efforts to improve the stock of this province. In our opinion it is desirable that such stock should not be overfed, as, for breeding purposes, fat cattle are more likely to deteriorate the progeny, as well as to endanger the lives of the cattle themselves.

Class.—Ayrshires—(70 Entries.)

Judges—The same as for Herefords.

Best bull 4 years old and upwards, James Nimmo, Camden East, $36; 2nd do, Joseph Boyle, West Flamboro', $24; 3rd do, John Waddell, Sarnia, $16; 4th do, W. H. Essery, Arva, $8.

Best 3 years old bull, R. L. Denison, Toronto, $32; 2nd do, Wm. Carey, Flamboro' West, $20; 3rd do, Hiram G. Frank, Strathroy, $12; 4th do, Joseph Jardine, Saltfleet, $6.

Best 2 years old bull, W. H. Essery, Arva, $24; 2nd do, Geo. Morton, Morton, Leeds, $16; 3rd do. George Stanton, Paris, $9.

Best 1 year old bull, P. R. Wright, Cobourg, $20; 3nd do, James Nimmo, Camden East, $12; 3rd do, George Morton, Morton, $8; 4th do. R. L. Denison, Toronto, $4.

Best bull calf (under 1 year,) Geo. Morton, Morton, $16; 2nd do, do do, $10; 3rd do, R. L. Denison, Toronto, $6.

Best Ayrshire bull, of any age, P. R. Wright, Cobourg, Diploma.

Best cow, P. R. Wright, Cobourg, $20; 2nd do, James Nimmo, Camden East, $12; 3rd do, Joseph Jardine, Saltfleet, $8; 4th do, Simon Beattie, Scarboro', $4.

Best 3 years old cow, P. R. Wright, Cobourg, $16; 2nd do, do do, $10, 3rd do, R. L. Denison, Toronto, $6; 4th do, Chris. Waugh, London, $4

Best 2 years old heifer, P. R. Wright, Cobourg, $12; 2nd do, Geo. Morton, Morton, $8; 3rd do, R. L Denison, Toronto, $5; 4th do, Geo. Morton. Morton. $3.

Best 1 year old heifer, P. R. Wright, Cobourg, $10; 2nd do, do do, $6; 3rd do, Geo. Morton, Morton, $4; 4th do, do do, $2.

Best heifer calf (under one year,) George Morton, Morton, $6; 2nd do, P. R. Wright, Cobourg, $4; 3rd do, Christopher Waugh London, $2.

Best herd of Ayrshires, one bull and four cows or heifers, P. R. Wright, Cobourg, $40.

Remarks of Judges.—In noticing the above class we are glad to see so many good specimens exhibited, but amongst them were a number that, either from breeding in and in, starvation, or some other cause, were poor representatives of this important dairy class. We think it would be well for the Province if the same effort were made to improve this class, as is shown in the other classes, as, for dairy purposes, there is no stock to equal them.

Class X.—Galloway Cattle—(77 Entries.)

Judges—William Roddick. Port Hope; John Dunlop, Woodstock; Wm. Peers, Woodstock.

Best bull, 4 years old and upwards, John Stuart, Mount Albion, $36; 2nd do, James Grahame, Vaughan. $24; 3rd do, John McClain, Clover Hill, $16; 4th do, John Roddick, Brantford, $8.

Best 3 years old bull, John Nickerson, Delhi, $32; 2nd do. John Fleming, Vaughan, $20; 3rd do, James Cobane, Mono, $12; 4th do, Joseph Jardine, Saltfleet, $6.

Best 2 years old bull, Jeremiah Lyons, West Flamboro', $24; 2nd do, E.W. Thomson, York Township, $16.

Best 1 year old bull, John Snell, Chinguacousy, $20; 2nd do Alex. Kerr, Westminster, $12.

Best bull calf, (under 1 year), George Miller, Markham, $16; 2nd do, W. H. Peter-

son, Woolwich, $10; 3rd do, Alex. Kerr, Westminster, $6; 4th do, John Snell, Chinguacousy, $3.

Best cow, John Snell, Chinguacousy, $20; 2nd do, do, do, $12; 3rd do, John Fleming, Vaughan, $8; 4th do, Jeremiah Lyons, West Flamboro', $4,

Best 3 years old cow, John Fleming, Vaughan, $16; 2nd do, W. H. Peterson, Woolwich, $10; 3rd do, John Snell, Chinguacousy, $6.

Best 2 years old heifer, John Snell, Chinguacousy, imported from Scotland, 1861, $24; 2nd do, John Snell, Chinguacousy, $8; 3rd do, George Miller, Markham, $5; 4th do, Jeremiah Lyons, West Flamborough.

Best 1 year old heifer, John Snell, Chinguacousy, $10; 2nd do, Geo. Miller, Markham, $6; 3rd do, do, do, $4.

Best heifer calf, (under one year) John Snell, Chinguacousy, $6; 2nd do, Jeremiah Lyons, West Flamboro', $4; 3rd do, John Fleming, Vaughan, $2; 4th do, Andrew Kyle, Dumfries, subject to proof of breeding, $1.

Best herd of Galloways, John Snell, Chinguacousy, $10.

EXTRAS.—Lachlan Curry, Belmont, West Highland Cattle—Aged bull, $12; two year old bull, $8; aged cow, $8; three year old cow, $5; two year old heifer, $4; bull calf, $5.

SPECIAL AWARD—POLLED ANGUS CATTLE.

Mr. James Nimmo, of Camden East, having exhibited certain cattle in the Galloway class, they were adjudged prizes in that class, but a protest being preferred against the awards, on the ground that the cattle were not true Galloways, but of the polled Angus or Aberdeen breed, the class was rejudged, and Mr. Nimmo's cattle, in consideration that they had previously been allowed to compete as Galloways, and that he could not therefore properly be blamed for entering them in that class, were set apart in a class by themselves, and awarded the following prizes:—polled Angus or Aberdeen bull, first prize, $32; do. cow, first prize, $20; do. do. second prize, $12; do. 2 year old heifer, first prize, $12; do. heifer calf, first prize, $6; do. herd, $40.

REMARKS BY JUDGES.—The judges recommend that the pure bred Galloway and polled Angus breeds be allowed to register in the herd book, in order to prevent future difficulties.

CLASS XI.—BULLS OF ANY BREED.—(18 Entries.)

Judges.—A committee selected from the judges of all the other classes of cattle.

Best bull of any age or breed, F. W. Stone, Guelph, "Third Grand Duke," diploma and silver medal.

REMARK.—The judges recommend this prize to be omitted another year, being unsatisfactory to the breeder, as well as a puzzle to the judges.

CLASS XII.—GRADE CATTLE.—(136 Entries.)

Judges.—Dr. Richmond, Gananoque, R. B. Ireland, Nelson; John S. Burley, Lennox.

Best cow, William P. Frank, London, $20; 2nd do, William Buttery, Strathroy, $12; 3rd do, John Stiles, London, $8; 4th do, Richard Adams, Woodstock, $5.

Best four year old grade cow, Samuel Peters & Son, London, $20; 2nd do, J. R. Pettit, Grimsby, $12; 3rd do, Richard Adams, Woodstock, $8; 4th do, G. W. Boggs, St. Thomas, $5.

Best 3 years old cow, Samson Baker, Simcoe, $16; 2nd do, John Pearce, Tyrconnell, $6; 4th do, Francis Nichol, London, $4.

Best 2 years old heifer, Thomas Stock, Waterdown, $12; 2nd do, Arthur Hogge, Guelph, $8; 3rd do, H. P. Welford, Woodstock, $5; 4th do, Allan Routledge, London, $3.

Best 1 year old heifer, Arthur Hogge, Guelph, $10; 2nd do, Allan Routledge, London, $6; 3rd do, John Pearce, Tyrconnell, $4; 4th do, George McFarland, McGillivray, $2.

Best heifer calf, under 1 year, Sampson Baker, Simcoe, $6; 2nd do, do, do, $4; 3rd do, Samuel Stevenson, London, $2; 4th do John Stiles, London, $1.

THE FERGUS CUP.

Best grade heifer, not more than two years old on March 1, 1861, the produce of a pure bred Durham bull, having a recorded pedigree, and of a cow of any breed, not more than one remove from thorough bred. Prize presented by Hon. A. Fergusson, Thomas Stock, Waterdown, SILVER CUP.

REMARKS OF JUDGES.—There was a fine lot of Ayrshire grades shown in this class, but there ought to be a separate class for them as milkers, as they are the best adapted for that purpose, and do not show favourably with the short horn grades.

CLASS XIII.—FAT AND WORKING CATTLE, ANY BREED.—(78 Entries.)

Judges.—Phillip Armstrong, Toronto; Henry Andrews, Kingston; James Vine, Niagara.

Best fat ox or steer, James White, Trafalgar, $30; 2nd do, John O'Rourke, Shakespeare, $20; 3rd do, do, do, $12.

Best fat cow or heifer, William Elliott, Kingston, $30; 2nd do, John Pearce, Tyrconnell, $20; 3rd do, George Alway, Komoka, $12.

Best yoke of working oxen, John Kennedy, London, $20; 2nd do, William Trowbridge, London, $12; 3rd do, John Sinclair, St. Thomas, $8.

Best yoke of 3 years old steers, John Pincombe, London, $16; 2nd do, Thomas Routledge, London, $10.

Best team of oxen, not less than 10 yoke from one township, the property of any number of persons, John Nixon, for the Township of Westminster, $40.

NOTE BY JUDGES.—As a whole, the cattle in this class are a better lot than ever exhibited heretofore.

SHEEP.

CLASS XIV.—LEICESTERS—(208 Entries.)

Judges—J. B. Ireland, Waterdown; John Johnston, Ayr; Robert Wickett, York, Grand River.

Best ram, two shears and over, Jno. Snell, Chinguacousy, $16; 2nd do, Simon Beattie, Scarboro'. $10; 3rd do, Christopher Walker, London, $4.

Best shearling ram, John Miller, Pickering, imported from England 1861, $48: 2nd do, John Snell, Chinguacousy, $10; 3rd do, do, do, $4.

Best ram lamb, C. Walker, London, $8; 2nd do, do, do, $4; 3rd do, W. Douglas, Onondaga, $2.

Best two ewes, two shears and over, C. Walker, London, $16; 2nd do, J. S. Smith, McGillivray, $12; 3rd do, J. Miller, Pickering, $6.

Best two shearling ewes, C. Walker, London, $12; 2nd do, J. Long, London, $8; 3rd do, Thomas Friendship, London, $4.

Best two ewe lambs, C. Walker, London, $6; 2nd do, J. Miller, Pickering, $4; 3rd do, J. Snell, Chinguacousy, $2.

CLASS XV.—COTSWOLDS—(57 Entries.)

Judges—Wm. Dickson, Beverly; Jno. Campbell, Waterloo; Mark Gray, Halton; Thos. Arkell, Puslinch.

Best ram, two shears and over, F. W. Stone, Guelph, $16; 2nd do, do, do, $10; 3rd do, J. Snell, Chinguacousy, $4.

Best shearling ram, F. W. Stone, Guelph, $16; 2nd do, J. Snell, Chinguacousy, $10; 3rd do, G. Miller, Markham, $4.

Best ram lamb, J. Snell, Chinguacousy, $8; 2nd do, Thomas Smith, Toronto Township, $4; 3rd do, F. W. Stone, Guelph, $4.

Best two ewes, two shears and over, F. W. Stone, Guelph, $16; 2nd do, J. Snell, Chinguacousy, $12; 3rd do, F. W. Stone, Guelph, $6.

Best two shearling ewes, F. W. Stone, Guelph, $12; 2nd do, do, do, $8; 3rd do, do, do, $4.

Best two ewe lambs, F. W. Stone, Guelph, $6; 2nd do, J. Snell, Chinguacousy, $4; 3rd do, F. W. Stone, Guelph, $2.

CLASS XVI.—CHEVIOTS—(34 Entries.)

Judges—Henry Wade, Port Hope; John Gibb, Lindsay; Thomas Allin, Whitby.

Best ram, two shears and over, James Dickson, Clarke, $16; 2nd do, do, do. $10; 3rd do, David Elliott, West Flamboro', $4.

Best shearling ram, George Miller, Markham, imported from Scotland, 1861, $48; 2nd do, David Elliott, West Flamboro', $10; 3rd do, Thomas Guy, Whitby, $4.

Best ram lamb, David Elliott, West Flamboro', $8; 2nd do, do, do, $4; 3rd do, Jas. Dickson, Clarke, $2.

Best 2 ewes, two shears and over, George Miller, Markham, imported from Scotland, 1861, $32; 2nd do, James Dickson, Clarke, $12; 3rd do, David Elliott, West Flamboro, $6.

Best two shearling ewes, Thomas Guy, Whitby, $12; 2nd do, David Elliott, West Flamboro', $8; 3rd do, Geo. Miller, Markham, $4.

Best 2 two ewe lambs, David Elliott, West Flamboro', $6; 2nd do, do, do, $4; 3rd do, Thomas Guy, Whitby, $2.

CLASS XVII—OTHER BREEDS OF LONG WOOLED SHEEP, NOT LEICESTERS, COTSWOLDS, OR CHEVIOTS—(81 Entries.)

Judges—Henry D. Smith, Aldborough; Jno. P. Wheler, Scarboro'; Jas. Petty, Kippen.

Best ram, two shears and over, John Robson, London, $16; 2nd do, Thomas Guy, Oshawa, $10; 3rd do, Thos. Smith, Toronto Township, $4.

Best shearling ram, John Miller, Pickering, imported from Britain, 1861, $48; 2nd do, George Miller, Markham, $10; 3rd do, John Snell, Chinguacousy, $4.

Best ram lamb, George Jackson, Toronto Gore, $8; 2nd do, Jno. Robson, London, $4; 3rd do, Alfred Jeffrey, Vaughan, $2.

Best 2 ewes, two shears and over, John Miller, Pickering, $16; 2nd do, John Snell, Chinguacousy, $12; 3rd do, John Routledge, London, $6.

Best 2 shearling ewes, John Miller, Pickering, $12; 2nd do, John Snell, Chinguacousy, $8; 3rd do, Jas. S Smith, McGillivray, $4.

Best 2 ewe lambs, John Miller, Pickering, $6; 2nd do, John Snell, Chinguacousy, $4; 3rd do, John Routledge, London, $2.

CLASS XVIII.—SOUTHDOWNS—(78 Entries.)

Judges—W. Balkwill, London; J. J. Farley, Belleville; H. Puddicombe, Wilmot.

Best ram, two shears and over, F. W. Stone, Guelph, $16; 2nd do, John Spencer, Whiting, $10; 3rd do, F. W. Stone, Guelph, $4.

Best shearling ram, F. W. Stone, Guelph, imported from England, 1861, $48; 2nd do, F. W. Stone, Guelph, $10; 3rd do, G. J. Miller, Niagara, $4.

Best ram lamb, Daniel Tye, Wilmot, $8; 2nd do, James Dickie, North Dumfries, $4; 3rd do, Joseph Peers, Woodstock, $2.

Best 2 ewes, two shears and over, James Maxwell, Paris, $16; 2nd do, Joseph Peers, Woodstock, $12; 3rd do, John Benton, Glanford, $6.

Best 2 shearling ewes, John Spencer, Whitby, $12; 2nd do, N. & T. Bethel, St. Catherines, $8; 3rd do, Joseph Peers, Woodstock, $4.

Best 2 ewe lambs, James Dickie, North Dumfries, $6; 2nd do, John Spencer, Whitby, $4; 3rd do, John Renton, Carluke, $2.

CLASS XIX.—MERINOS AND SAXONS—(32 Entries)

Judges—H. J. Brown, Niagara; Stephen P. Niles, Hillier; Wm. Kern, Dundas.

Best ram, two shears and over, G. W. Miller, Grantham, $16; 2nd do, Edward Arkland, Whitby, $10; 3rd do, Jacob Rymal, Glanford, $4.

Best shearling ram, Edward Arkland, Whitby, imported from United States, 1861, $32; 2nd do, do, do, $10; 3rd do, Alex. Young, Glanford, $4.

Best ram lamb, E. Arkland, Whitby, imported from the United States, 1861, $16; 2nd do, Jacob Rymal, Glanford, $4; 3rd do, Alex. Young, Glanford, $2.

Best 2 ewes, two shears and over, Edward Arkland, Whitby, imported from the United States, 1861, $24; 2nd do, do, do, $12; 3rd do, Jacob Rymal, Glanford, $6.

Best 2 shearling ewes, E. Arkland, Whitby, imported from United States, 1861, $18; 2nd do, do, do, $8; 3rd do, Jacob Rymal, Glanford, $4.

Best 2 ewe lambs, Jacob Rymal, Glanford, $6; 2nd do, Alex. Young, Glanford, $4.

CLASS XX.—OTHER PURE BRED SHORT WOOLED SHEEP, NOT SOUTHDOWNS, MERINOS OR SAXONS—(49 Entries.)

Judges—The same as for class XIX.

Best ram, two shears and over, J. Spencer, Whitby, $16; 2nd do, G. Miller, Markham, $10; 3rd do, S. Baker, Simcoe, $4.

Best shearling ram, S. Baker, Simcoe, $16; 2nd do, J. Spencer, Whitby, $10; 3rd do, D. Tye, Witmot, $4.

Best ram lamb, D. Tye, Wilmot, $8; 2nd do, S. Baker, Simcoe, $4; 3rd do, D. Tye, Wilmot, $2.

Best two ewes, two shears and over, J. Spencer, Whitby, $16; 2nd do, S. Baker, Simcoe, $12; 3rd do, E. G. O'Brien, Barrie, $6.

Best two two shearling ewes, G. Miller, Markham, imported from Britain, 1861, $24; 2nd do, G. Miller, Markham, $8; 3rd do, J. Spencer, Whitby, $4.

Best two ewe lambs, J. Spencer, Whitby, $6; 2nd do, G. Miller Markham, $4; 3rd do, W. Brearley, Woodstock, $2.

NOTE.—Mr. Geo. Miller, of Markham, having exhibited some imported Shropshire Down sheep, in the above class, as the only one open to them, and it being considered that the classification was not exactly suited to them, a special committee of the Board submitted the following report in reference to them:—

"The undersigned having examined the Shropshire Down sheep exhibited by Mr. George Miller, of Markham, and recently imported by him from England, have great pleasure in bearing testimony to their excellent

qualities for wool and mutton. They are fine animals of the breed, and seem to be well adapted to the country. As there is no class in the premium list for Shropshire Downs, the undersigned recommend that a special premium be given to Mr. Miller.

Signed E. W. THOMSON,
D. CHRISTIE.

London, 27th Sept., 1861.

CLASS XXI.—FAT SHEEP—(30 Entries)

Judges—Phillip Armstrong, Toronto; Henry Andrews, Kingston; James Vine, Niagara.

Best 2 fat wethers, John Snell, Chinguacousy, $12; 2nd do, Christopher Waugh, London, $8; 3rd do, Samuel Sparling, St. Mary's, $4.

Best 2 fat ewes, F.W. Stone, Guelph, $12; 2nd do, Thomas Smith, Toronto Township, $8; 3rd do, P. Skelly, Paris, $4.

PIGS—LARGE BREEDS.

CLASS XXII.—YORKSHIRES.—(46 Entries.)

Judges—J. N. Dimond, Belleville; Robert Tinling, Waterloo; Wm. Woods, Belleville.

Best, boar, 1 year and over, S. H. Reeve, Toronto Township, $15; 2nd do, P. Kelly, Paris, $10; 3rd do, C. A. Jordison, Belleville, $7.

Best boar under 1 year, C. A. Jordison, Belleville, imported from England, 1861, $30; 2nd do, J. Long, London, $6; 3rd do, T. Kent, London, $4.

Best breeding sow, 1 year and over, T. Kent, London, $10; 2nd do, S. H. Reeve, Toronto Township, $7; 3rd do, C. A. Jordison, $4.

Best sow, under 1 year old, C. A. Jordison, Belleville, $5; 2nd do, J. Main, Peel, $4; 3rd do, D. Cummings, Hyde Park, London, $3.

CLASS XXIII.—LARGE BERKSHIRES.—(11 Entries.)

Judges—The same as for Class XXII.

Best boar 1 year and over, J. Collins, Mt. Elgin, $15; 2nd do, S. Baker, Simcoe, $10.

Best boar under 1 year, C. A. Jordison, Belleville, imported from United States, 1861, $20; 2nd do, S. Baker, $6; 3rd do, A. Gerrie, Dundas, $4.

Best breeding sow 1 year and over, S. Baker, Simcoe, $10.

Best sow under 1 year old, C. A. Jordison, Belleville, imported from United States, 1861, $7 50; 2nd do, S. Baker, Simcoe, $4; 3rd do, do, do, $3.

CLASS XXIV.—ALL OTHER LARGE BREEDS.—(43 Entries.)

Judges—The same as for Classas XXII and XXIII.

Best Boar, 1 year and over, John Black, St. Thomas, $15; 2nd do, W. C. Smith, Strathroy, $10; 3rd do, James Crocker, London, $6.

Best boar, under 1 year old, J. Barnes, St. Thomas, imported from United States, 1861, $20; 2nd do, J. Brady, St. Thomas, $6; 3rd do, Henry Mann, St. Thomas, $4.

Best breeding sow, 1 year and over, G. Miller, Markham, imported from England, 1861, $20; 2nd do, L. G. Shipley, Williams, $7; 3rd do, J. Barnes, St. Thomas, $4.

Best sow, under 1 year old, G Millar, Markham, imported from England, 1861, $10; 2nd do, J. Brady, St. Thomas, $4; 3rd do, H. Mann, St. Thomas, $3.

SMALL BREED PIGS.

CLASS XXV.—SUFFOLKS.—(62 Entries.)

Judges—Captain Tyrwhitt, Bradford; John Cullis, Cobourg.

Best boar, 1 year and over, George Savage, Summersville, $15; 2nd do, Jas. Main, Chinguacousy, $10; 3rd do, John McGlashan, Pelham, $6.

Best boar, under 1 year, Jas. Main, Chinguacousy, $10; 2nd do, E. Arkland, Whitby, $6; 3rd do, John McGlashan, Pelham, $4.

Best breeding sow, 1 year and over, Peter Mettler, jun., Pelham, $10; 2nd do, John E. Couse, St. Thomas, $7; 3rd do, W. H. Whitehead, London, $4.

Best sow, under 1 year old, James Main, Chinguacousy, $5; 2nd do, Robert Routledge, London, $4; 3rd do, David Cummings, London, $3.

CLASS XXVI.—BERKSHIRES.—(43 Entries.)

Judges—The same as for class XXV.

Best boar, 1 year and over, Thos. Penton, Paris, $15; 2nd do, James Spears, London, $10; 3rd do, David Buchan, Paris, $6. EXTRA.—Equal to first, having been overlooked on first inspection, John Corrie, Culloden, $10.

Best boar, under 1 year, David Buchan, Paris, $10; 2nd do, Thomas Penton, Paris, $6; 3rd do, John A. Penton, Paris, $4.

Best breeding sow 1 year and over, Thos. Penton, Paris, $10; 2nd do, E. W. Thom-

son, York Township, $7; 3rd do, F. Fauquier, Zorra, $4.

Best sow, under 1 year old, Thomas Penton, Paris, $5; 2nd do, David Buchan, Paris, $4; 3rd do, John A. Penton, Paris, $3.

CLASS XXVII.—ALL OTHER SMALL BREEDS.—(52 Entries.)

Judges—The same as for Classes XXV and XXVI.

Best boar, 1 year and over, Alex. Beaton, Aldborough, $15; 2nd do. Jas Cowan, Galt, $10; 3rd do, W. O. M. King, London, $6.

Best breeding sow, 1 year and over, Wm. Weldon, St. Thomas, $10; 2nd do, Daniel Tye, Wilmot, $7; 3rd do, W. T. Moore & Son, St. Thomas, $4.

Best boar, under 1 year, Jas. Cowan, Galt. $10; 2nd do, Daniel Tye, Wilmot, $6; 3rd do, do, do, $4.

Best sow, under 1 year old, D. Cummings, London, $5; 2nd do, Wm. Weldon, St. Thomas, $4; 3rd do, James Cowan, Galt, $3.

NOTE BY JUDGES.—These pigs have been placed in pens at different points, so that we have much greater difficulty in deciding as we could wish, than if they were put in pens near together, and we have the same remark to make in regard to the other classes.

CLASS.—POULTRY, &C.—(294 Entries.)

Judges—J. G. Horne, Toronto; Joseph C. Small, London; Wm. Grey, Woodstock.

Best pair of white dorkings, John Bogue, London, $4; 2nd do, Joseph Lamb, London, $2.

Best pair of spangled dorkings, S. Peters, London, $4; 2nd do, George Durand, Toronto, $2.

Best pair of black Polands, Joseph Lamb, London, $4; 2nd do, F. Fauquier, Zorra, $2.

Best pair of white Polands, Joseph Lamb, London, $4.

Best pair of golden Polands, Joseph Lamb, London, $4; 2nd do, C. C. Coombs, London, $2.

Best pair of game fowls, S. Peters, sen., London, $4; 2nd do, William Calder, London, $2.

Best pair of Jersey blues, S. Peters, London, $4; 2nd do, W. H. Essery, Arva, $2.

Best pair of Cochin China, Shanghai, Canton, or Bramah Pootra fowls, Mark Dyer, London, $4; 2nd do, do, do, $2.

Best pair of black Spanish fowls, S. Peters, sen., London, $4; 2nd do, do, do, $2.

Best pair of black Java fowls, John Bogue, London, $4.

Best pair Bolton grays, Joseph Lamb, London, $4; 2nd do, Sam. Peters, sen., London, $2.

Best pair of Hamburg fowls, W. O. M. King, London, $4; 2nd do, do, do, $2.

Best pair of smooth-legged bantams, Jos. Lamb, London, $2; 2nd do, Jas. McCarthy, St. Thomas, $1.

Best pair of turkeys (white or colored), James McCarthy, St. Thomas, $4; 2nd do, Alex. Gerrie, Dundas, $2.

Best pair of wild turkeys, John Bogue, London, $4; 2nd do, M. Wilson, London, $2.

Best pair of large geese, John Bogue, London, $4; 2nd do, N. T. Bethell, St. Catherines, $2.

Best pair Bremen geese, Jos. Lamb, London, $4; 2nd do, do, do, $2.

Best pair of Chinese geese, Joseph Lamb, London, $4; 2nd do, Jas. Cowan, Galt, $2.

Best pair of Muscovy ducks, Alex. Cameron, London, $4; 2nd do, Jos. Lamb, London, $2.

Best pair common ducks, Jos. Lamb, London, $4; 2nd do, John Bogue, London, $2.

Best pair of Aylesbury ducks, Sam. Peters, sen., London, $4; 2nd do, do, do, $2.

Best pair of Poland ducks, Joseph Lamb, London, $4; 2nd do, do, do, $2.

Best pair of Rouen ducks, Samuel Peters, sen., London, $4; 2nd do, do, do, $2.

Best pair of Guinea fowls, John N. Hunt, Talbotville, $4; 2nd do, Samuel Tye, Stanley, $2.

Best pair of pea fowls, S. M. Frazer, London, $4; 2nd do, W. H. Essery, Arva, $2.

Best collection of pigeons, Henry Imlach, London, $4; 2nd do, Wm. Calder, London, $2.

Best lot of poultry, in one pen, and owned by exhibitor, John Bogue, London, $6.

Best collection of poultry entered in the various classes by one exhibitor, Jos. Lamb, London, $8.

THE FERGUS MEDALS.

Best pair (Cock and Hen) of Domestic Fowls, any breed, prize by Hon. Adam Fergusson, silver medal; 2nd do, Henry Imlack, London, silver medal.

REMARKS OF JUDGES.—The exhibition is better in the class of poultry than on previous occasions, and the judges had great difficulty in awarding the premiums, in consequence not

only of many of the birds being of nearly equal merit, but also that the different specimens of a class were not placed together, and the judges being obliged to run from one end of the building to the other in order to compare the scattered birds, could scarcely perform their duties satisfactorily.

XXIX.—FOREIGN STOCK.—(7 Entries.)

Judges—E. W. Thomson, Toronto; George Buckland, Toronto.

Best stallion for agricultural purposes, Stephen Powell, Lewiston, N. Y., diploma and $12.

Best Merino or Saxon ram, L. W. Worster, Cornwall, Vermont, Diploma and $6; 2nd do, do, do, $6.

AGRICULTURAL PRODUCTIONS.

CLASS XXX.—GRAINS, SEED, &C.—445 Entries.

Judges—Joseph Harris, Rochester, N Y.; E. A. McNaughton, Newcastle; R. Moderwell, Stratford; John Cullis, Lindsay; Edward Musson, Etobicoke.

For the best 25 bushels of fall wheat, the produce of Canada West, being the growth of 1861, Canada Company's prize, H. J. Brown, Niagara, $100; 2nd do, by the Association, Thomas Vicars, Orono. $40; 3rd do, T. T. Turnbull, Glenmorris, $20.

Best 2 bushels of winter wheat, John Cullis Cambourne, $10; 2nd do, Thomas Vicars, Orono, $8; 3rd do, Chas. Pope, Woodstock, $6; 5th do, Henry Wright, Amherstburgh, $4.

Best 2 bushels of spring wheat, T. McEvers, Cambourne, $10; 2nd do, I. H. Anderson, Flamboro', $8; 3rd do, Wm. Beatty, Westminster, $6; 4th do, Hugh McIntyre, Lobo, $4.

Best 2 bushels of barley, (two-rowed) I. H. Anderson, Flamboro', $6; 2nd do, A. Gerrie, Dundas, $4; 3rd do, J. Gouinlock, Caradoc, $2.

Best 2 bushels of barley, (6 rowed,) Chas. Kennedy, London, $6; 2nd do, Hugh Kennedy, Birr, $4; 3rd do, S. M. Frazer, London, $2; 4th do, Thos. Allen, Whitby, volume Transactions.

Second prize 2 bushels of rye, Richard Frank, London, $4, 3rd do, R. L. Denison, Toronto, $2; 4th do, John Waddell, Sarnia, volume Transactions.

Best 2 bushels of oats, (white,) A. Gerrie, Dundas, $6; 2nd do, I. H. Anderson, Flamboro, $4; 3rd do, Edward Baker, Delaware, $2; 4th do, Donald Clarke, Embro, volume Transactions.

Best 2 bushels of oats, (black), A. Hetherington, Arva, $6; 2nd do, Alex. Gerrie, Dundas, $4; 3rd do, W. Tolton, Eramosa, $2; 4th do, J. Wilson, London, volume Transactions.

Best two bushels of field peas, J. Storey, Whitby, $6; 2nd do, T. Davis, Etobicoke, $4; 3rd do, Wm. Shepherd, St. Thomas, $2; 4th do, Richard Frank, London, vol. Transactions.

Best 2 bushels of marrow-fat peas, George Lothian, Delaware, $6; 2nd do, J. Long, London, $4; 3rd do, W. Martin, London, $2; 4th do, Mark Dyer, London, volume Transactions.

Best 2 bushels of tares, W. Lea, Toronto, $6; 2nd do, George Savage, Toronto Township, $4.

Best 2 bushels of white field beans, Wm. Bissell, Westminster, $6; 2nd do, Thomas Fleming, London, $4; 3rd do, G. J. Miller, Niagara, $2; 4th do, Wm. Shepherd, St. Thomas, volume Transactions.

Best 2 bushels Indian corn, in the ear, (white,) G. L. Miller, Niagara, $6; 2nd do, J. R. Petit, Grimsby, $4; 3rd do, M. C. Nickerson, Port Dover, $2; 4th do, Levi Foster, Amherstburgh, vol. Transactions.

Best 2 bushels of Indian corn, (yellow,) J. R Pettit, Grimsby, $6; 2nd do, Robert Warren, Niagara, $4; 3rd do, G. J. Miller, Niagara, $2; 4th do, G. W. Boggs, St. Thomas, vol. Transactions.

Best bushel of Timothy seed, Joseph Nixon, London, $6; 2nd do, Wm. Tolton, Eramosa, $4; 3rd do, Edward Baker, Delaware, $2; 4th do, David Wilson, Chatham, vol. Transactions.

Best bushel of clover seed, Samson Baker, Simcoe, $6.

Best half bushel Alsike clover seed, R. Stephens, London, $6.

Best bushel hemp seed, H. Girouard, Hamilton, $6.

Best bushel flax seed, R. Frazer, London, $6; 2nd do, W. Benham, Guelph, $4; 3rd do, G. Patrick, London, $2.

Best bushel mustard seed, J. Dickson, Orono, $6.

Best Swedish turnip seed, from transplanted bulbs, not less than 20 lbs., J. Wilson, London, $6; 2nd do, W. Murray, London, $4; 3rd do, N. T. Bethel, St. Catherines, $2.

Best 14 lbs field carrot seed, W. Bissell, London, $6; 2nd do, D. Falconer, Fullerton, $4; 3rd do, H. Girouard, Hamilton, $2.

Best 12 lbs. mangel wurzel seed, L. Simpson, Talbotville, $6; 2nd do, D. Falconer, Fullerton, $4; 3rd do, G. G. Ward, Cashmere $3.

Best bale of hops, not less than 112 lbs. J. Stevenson, London Township, $20; 2nd do, J. Russell, London Township, 12; 3rd do, R. Reid, London Township, $8.

Best bushel buckwheat, J. N. Hunt, Talbotville, $4; 2nd do, W. F. Smith, Lambeth, $2; 3rd do, J. E. Couse, St. Thomas, vol. Transactions.

Best bushel Millet, A. G. Deadman, Delaware, $4; 2nd do. J. Haldane, London, $2; 3rd do, Joseph Wheaton, Thorndale, volume Transactions.

Second best bushel Hungarian grass seed, James Haldane, London, $2; 3rd do, J. N. Hunt, London, volume Transactions.

Special Prizes for Fall Wheat from Counties.—Best bushel of Fall wheat contributed by a county agricultural society, the growth of the county in the year 1861, the wheat to be the property of the Board: North Oxford Society, $5; 2nd do, West Durham Society, $4; 3rd do. County of Peel Society, $3; 4th do, County of Kent Society, $2; additional sample, East Elgin Society, $1 50.

Report of Judges.—The Judges in making their Report, would say they were much pleased with the arrangement of the articles in their department, which reflects much credit upon the superintendent, Mr. Fleming.

When we began operations we did experience some little difficulty, by the interference of parties, some of whom were exhibiters, but upon making known this fact to the President of the Board, such arrangements were made that upon the following day we got along with our work without difficulty.

We only refer to this matter in order that it may come under the eyes of exhibiters, and that upon future occasions such arrangements may be made in the different departments, that judges can proceed with their arduous duties without being hampered with the interference of interested parties.

In our department, the actual exhibiters came far short of the number of entries made, in many cases they were not a fourth. The general quality of the articles, with a few exceptions, was very fair; in some of the sections, however, the articles were not what they should have been for such an Exhibition as this. In some cases, therefore, we did not award a first prize, believing the articles were not worthy of holding that place. We also found many articles competing in classes which properly did not belong to them; also some entered in the Extra class, when there was a proper class for them. We do not know whether these were entered this way through ignorance, or otherwise; but in all cases where such entries were found, we took it upon ourselves to classify them aright, so as to come in direct competition with others of the same class.

There is, perhaps, no class in the Exhibition, in which a higher interest is felt, than the one your judges have the honor of being placed upon; the most prominent part of it, however, is that of wheat. There may be several reasons for this; we think, however, that the very liberal gift of the Canada Company, ably seconded by the Association, is the principal feature of its attraction.

Your judges, from past experience, were fully aware of the jealousies existing in the mind of each competitor, as to the merit of his own particular sample; we therefore bestowed a greater share of our time than is usual upon this article, in order that no hasty conclusions might be arrived at. Upon our first inspection, we had but one opinion in our award of the Canada Company's prize, the successful individual being Mr. Anderson, of Flamborough. The subsequent actions of Mr. Anderson excited a suspicion that all was not right; we therefore made a second examination, and upon this occasion we emptied each lot, when we found in the case of Anderson' sample, that for about a third of each bag, at the top, was placed wheat of a very superior description, the remainder of each bag being very inferior. We also found this to be the case in two lots of the two bushels samples, one of which was also Anderson's. In these cases the judges set the samples aside, and changed their awards.

There was but one other case of deception practised, which came under our notice, that being in a sample of oats. The exhibiter, apparently anxious to give them a fine appearance, resorted to the expedient of rubbing them with oil, so as to make them have a glossy appearance; had they been left in their natural condition they might have been awarded a premium.

The judges think it most laudable in an exhibiter to bestow all possible care in having his samples pure and clean, the public thereby being benefited; but, on the other hand, we think no language can be uttered too strongly condemnatory of the baseness of an individual who would descend to practise deception, as in these cases, for the purpose of receiving a paltry sum of money.

Your judges think it a duty owing to the public for their future safety, to prohibit these parties from exhibiting upon any future occasion. We would further suggest to your Board that better facilities for the examination of wheat should be placed at the disposal of the judges. This could be done, by having a hopper with a slide, so that each bag could be emptied therein; by this means every part of the bag could be examined.

All of which we beg to submit.

Signed, E. A. McNAUGHTON, EDW. MUSSON, JOHN CULLIS, R. MODERWELL, } *Judges.*

CLASS XXXI.—ROOTS AND OTHER FIELD CROPS—(391 Entries.)

Judges.—John Tilt, Toronto Township; David D. Rogers, Kingston; Trueman McEvers, Huldimand Township; John Beattie, Nichol; John A. Donaldson, Weston.

Best bushel pink-eyed potatoes, John Wheaton London, $3; 2nd do, R. Stephens, London, $2; 3rd do, W.B. Harding, London, $1.

Best bushel cup potatoes, R. Stephens, London, $3; 2nd do, Alex. Gerrie, Dundas, $2; 3rd do, Joseph Wheaton, Thorndale, $1.

Best bushel goldfinders, H. J. Brown, Niagara, $3.

Best bushel white potatoes, A. G. Deadman, Delaware, $3; 2nd do, Horatio Jell, Delaware, $2; 3rd do, D. B. Burch, Lambeth, vol. Transactions.

Best bushel blue potatoes, Patrick Cleary, London, $3; 2nd do, E. McConnell, Gravesend, $2; 3rd do, G. W. Boggs, St. Thomas, volume Transactions.

Best bushel of any other sort, E. W. Thomson, York Township, $3; 2nd do, John Long, London, $2; 3rd do, J. Stephens, London, volume Transactions.

Best bushel Swede turnips, George Murray, London, $3; 2nd do, James Beatty, Lambeth, $2; 3rd do, Henry Johnson, Delaware, $1.

Best bushel of white globe turnips, Alex. Kerr, Westminster, $3; 2nd do, R. Rispin, London, $2; 3rd, Alex. Gerrie, Dundas, vol. Transactions.

Best bushel of Aberdeen yellow townships, R. Stephens, London, $3; 2nd do, Alex. Kerr, Westminster, $2; 3rd do, Alex. Gerrie, Dundas, volume Transactions.

Best 20 roots red carrots, A. W. Taylor, Hamilton, $3; 2nd do. Jno. B. Oullett, Amherstburgh, $2; 3rd do, John Paton, Amherstburgh, $1.

Best 20 roots white or Belgian carrots, Charles Hunt, London, $3; 2nd do, W. Cairncross, London, $2; 3rd do, W. Armstrong, Lambeth, $1.

Best 12 roots mangold wurzel, (long red) John B. Oullett, Amherstburgh, $3; 2nd do, Wm. Walker, London, $2; 3rd do, Wm. Benham, Guelph, $1.

Best 12 roots red globe mangel wurzel Wm. Benham, Guelph, $3; 2nd do, William Walker, London, $2; 3rd do, E. W. Thomson, York Township, vol. Transactions.

Best 12 roots yellow globe mangold wurzel, George Harris, Delaware, $3; 2nd do, Alex. Kerr, Westminster, $2; 3rd do, Wm. Shephard, St. Thomas, $1.

Best 12 roots long yellow mangold wurzel, R. Stephens, London, $3; 2nd do, Wm. Benham, Guelph, $2.

Best 12 roots of khol rabi, George Harris, Delaware, $3; 2nd do, G. J. Miller, Niagara, $2; 3rd do, W. B. Harding, London, $1.

Best 12 roots, of sugar beet, G. W. Boggs, St. Thomas, $3; 2nd do, R. Stephens, London, $2; 3rd do, E. T. Ledyard, London, $1.

Best 20 roots of parsnips, Wm. Benham, Guelph, $3; 2nd do, R. Rispin, London, $2; 3rd do, A. W. Taylor, Hamilton, vol. Transactions.

Best 20 roots of chicory, George Pears, Yorkville, $3.

Best two large squashes for cattle, D. B. Burch, Lambeth, $3; 2nd do, Thomas Fleming, London, $2; 3rd do, G. W. Boggs, St. Thomas, $1.

Best two mammoth field pumpins, M. Kelly, London, $3; 2nd do, D. B. Burch, Lambeth, $2.

Best four common yellow field pumpkins, Joseph Nixon, London, $3; 2nd do, Alex. Kerr, London, $2; 3rd do, Alex. Kerr, Westminster, volume Transactions.

Best 20 lbs. of tobacco leaf, growth of Canada West, Henry Girouard, Hamilton, $3,

Best broom corn brush, 28 lbs. John Gage Bartonville, $3.

Best 112 lbs. of flax, the Canada Company's prize, Alexander & Co., Norval, $24; 2nd do, by the Association, Perine Brothers, Conestoga, $16.

EXTRA.—John Stephens, London, bushel tancred turnips, $2.

HORTICULTURAL PRODUCTS.

CLASS XXXII.—FRUIT—(406 Entries.)

Judges.—Thomas Briggs, jun., Kingston; S. J. J. Brown, Niagara; John Gray, Toronto.

Best 20 varieties of apples, named [six of each], Chauncey Beadle, St. Catherines, $5; 2nd do, John Gage, Bartonville, $4; 3rd do, Alex. Leslie, London, $3.

Best 12 table apples named, [Fall sort], A. W. Deadman, Delaware, $3; 2nd do, Alex. Dolson, Chatham, $2; 3rd do, Hugh King, London, $1. EXTRA.—Geo. Leslie, Toronto, $1.

Best 12 table apples, named, [Winter sort,] A. Bailey, Amherstburgh, $3; 2nd do, H. J. Brown, Niagara, $2; 3rd do, John Dolson, Chatham, $1. EXTA.—A. Baty, London, $1; do. Chas. Arnold, Paris, $1.

Best 12 baking apples, named, [Fall], John Freed, Hamilton, $3; 2nd do, George Leslie, Toronto, $2; 3rd do, James Smith, Chatham, $1.

Best 12 baking apples, named, [Winter sort,] John Freed, Hamilton, $3; 2nd do, H. Girouard, Hamilton, $2; 3rd do, A. W. Deadman, Delaware, $1.

Best 20 varieties of pears, named, [three of each.] Chauncey Beadle, St. Catherines, $5; 2nd do, Alex. Leslie, London, $4; 3rd do, Bruce & Murray, Hamilton, $3.

Best 12 table pears, named, [Fall sort] John Freed, Hamilton, $3; 2nd do, Chauncey Beadle, St. Catherines, $2; 3rd do, J. D. Humphreys, Toronto, $1. EXTRA.—Robt. Warren, Niagara, $1.

Best 12 table pears, named, [Winter sort,] A. G. Deadman, Delaware, $3; 2nd do, J. D. Humphries, Toronto, $2; 3rd do, Alex. Leslie, London, $1.

Best 12 plums, named, [Dessert,] J. D. Humphreys, Toronto, $3; 2nd do, Charles Arnold, Paris, $2; 3rd do, William Benham, Guelph, $1.

Best 12 baking plums, named, W. E. Baldwin, Toronto, $2; 2nd do, Charles Arnold, Paris, $2; 3rd do, do, do, $1.

Best quart of Damsons, [English], M. C. Nickerson, Port Dover, $3; 2nd do, J. W. Miller, Grantham, $2.

Best 12 peaches, grown in open air, named, H. J. Brown, Niagara, $3.

Best 12 quinces, H. J. Brown, Niagara, $2; 2nd do, do, do, $1 50.

Best 3 clusters of golden or white grapes, grown under glass, Charles Arnold, Paris, $4; 2nd do, Thomas C. Kerr, Hamilton, $3; 3rd do, Charles Arnold, Paris, $2.

Best three clusters black grapes, grown under glass, Thos. C. Kerr, Hamilton, $4; 2nd do, Charles Arnold, Paris, $3; 3rd do, do, do, $2.

Best four clusters black grapes, grown in open air, S. Pope, Westminster, $2; 2nd do, W. H. Read, Port Dalhousie, $1 50; $2; 3rd do, T. McMullen, London, $1; do, EXTRA.—Charles Arnold, Paris, $1.

Best four clusters white grapes, grown in open air, W. H. Read, Port Dalhousie, $2; 2nd do, S. Pope, Westminster, $1 50; 3rd do, Charles Arnold, Paris, $1.

Best and heaviest two clusters grapes, grown under glass, Charles Arnold, Paris, $3; 2nd do, do, do, $2.

Best and heaviest two bunches of grapes, (open air), W. H. Read, Port Dalhousie, $3; 2nd do, S. Pope, Westminster, $2; 3rd do, Charles Arnold, Paris, $1.

Best collection of grapes, grown in open air, two clusters of each sort, W. H. Read, Port Dalhousie, $4; 2nd do, Charles Arnold, Paris, $3; 3rd do, Bruce & Murray, Hamilton, $2.

Best green flesh melon, James Steel, London, $2; 2nd do, J. M. Hirschfelder, Toronto, $1 50; 3rd do, J. D. Humphreys, Toronto, $1.

Best red or scarlet flesh mellon, W. L. Lawrason, London, $2; 2nd do, John Nichol, London, $1 50; 3rd do, R. Rispin, London, $1.

Best water melon, S. Pope, Westminster, $2; 2nd do, do, do, $1 50; 3rd do, W. H. Essery, London, $1.

Best 6 citrons for preserving, R. Rispin, London, $2; 2nd do, A. W. Taylor, Hamilton, $1 50; 3rd do, Alex. Kerr, London, vol. Transactions.

Best display of fruit, the growth of exhibiter, (distinct from other entries) three specimens of each sort, George Leslie, Toronto,

$9; 2nd do, Chauncey Beadle, St. Catherines' $6; 3rd, Charles Arnold, Paris, $3.

EXTRAS IN FRUIT.—F. Fauquier, Zorra, English filberts, $1; W. H. Essery, Arva, transcendent crab apples, 50c; Sebastian Tryfogel, Shakespeare, prunes, 50c; John Freed, Hamilton, Prince Albert currants, 50c; A. W. Deadman, Delaware, English filberts, $1; M. T. Partridge, London, red currants, 50c; R. Sugden, Nissouri, Siberian crabs, 50c; M. Essery, London, crab apples, 50c; Alex. Leslie, London, collection of crab apples, $1; Ellwanger & Barry, Rochester, N.Y., collection of apples 62 varieties, $8; do, collection of pears, 80 varieties, $8; do Native grapes, 8 varieties, $3, and diploma for very fine display of fruit; do 6 bottles white grape currant wine, Diploma. Bruce & Murray, Hamilton, 12 figs of pot growth, $1; do, 4 clusters of hot house grapes, new variety, $1.

CLASS XXXIII — GARDEN VEGETABLES— 353 ENTRIES.

Judges.—Asa A. Burnham, Cobourg; J. C. Small, Toronto; John Wade, Cobourg.

Best 12 roots of salsify, G. J. Miller, Niagara, $2; 2nd do, M. Kelly, London, $1 50; 3rd do, A. W. Taylor, Hamilton, $1.

Best 3 heads brocoli, R. Bugler, London, $2.

Best 3 heads cauliflower, John Freed, Hamilton, $2; 2nd do, do, do, $1 50; 3rd do, A. W. Taylor, Hamilton. $1.

Best 3 heads of cabbage (summer) M. Kelly, London, $2; 2nd do, J. Steel, London, $1 50; 3rd do, D. Campbell, London, $1.

Best 3 heads of cabbage (winter) David Anderson, London, $2; 2nd do, G. W. Boggs St. Thomas, $1 50; 3rd do, Rispin, London, $1.

Best 4 sorts winter cabbage, including savoys, 1 of each sort, R. Rispin, London, $3; 2nd do, David Anderson, London, $2; 3rd do, D. Campbell, London, $1.

Best 3 heads red cabbage, R. Rispin, London, $2; 2nd do, R. Bugler, London, $1 50; 3rd do, John Pegler, London, $1.

Best 12 carrots for table, long red, W. Benham, Guelph, $2; 2nd do, A. W. Taylor, Hamilton, $1 50; 3rd do, J. Pegler, London, $1.

Best 12 early horn carrots, J. Clanahan, London, $2; 2nd do, A. W. Taylor, Hamilton, $1 50; 3rd do, D. Kempster, London, $1.

Best 12 table parsnips, W. Benham, Guelph, $2; 2nd do, J. Clanahan, London, $1 50; 3rd do, R. Bugler, London, $1.

Best 6 roots of white celery, J. Pegler, London, $2; 2nd do, J. Freed, Hamilton, $1 50; 3rd do, J. Pegler, London, $1.

Best 6 roots of red celery, J. Freed, Hamilton, $2; 2nd do, do, $1 50; 3rd do, D. Falconer, Mitchell, $1.

Best dozen of capsicums (ripe) M. Kelly, London, $2; 2nd do, S. Pope, Westminster, $1 50; 3rd do, A. W. Taylor, Hamilton, $1.

Best collection of capsicums (ripe) six of each sort, A. W. Taylor, Hamilton, $3.

Best 3 egg plants, purple, A. W. Taylor, Hamilton, $2; 2nd do, do, $1 50.

Best 12 tomatoes (red) A. W. Taylor, Hamilton, $2; 2nd do J. D. Humpreys, Toronto, $1 50; 3rd do J. Freed, Hamilton, $1.

Best 12 tomatoes (yellow), R. Rispin, London, $2; 2nd do J. D. Humphreys, Toronto, $1½; 3rd do W. O. M. King, London, $1.

Best assorted collection of tomatoes, 6 each of large sorts, and 12 each of small sorts, J. D. Humphreys, Toronto, $3; 2nd do R. Bugler, London, $2; 3rd do M. Essery, London, $1.

Best 12 blood beets, G. J. Miller, Niagara, $2; 2nd do J. Clanahan, London, $1 50; 3rd do F. Strip, Belmont, $1.

Best peck of white onions, A. W. Taylor, Hamilton, $2; 2nd do T. Brown, London, $1 50.

Best peck of yellow onions, A. W. Taylor, Hamilton, $2; 2nd do R. Rispin, London, $1 50; 3rd do G. Headly, London, $1.

Best peck of Red onions, A. W. Taylor, Hamilton, $2; 2nd do J. Clanahan, London, $1 50; 3rd do R. Bugler, London, $1.

Best 12 white turnips (table) A. W. Taylor, Hamilton, $2; 2nd do R. Rispin, London, $1 50.

Best 12 yellow turnips (table) R. Stephens, London, $2; 2nd do R. Rispin, London, $1 50; 3rd do M. Kelly, London, $1.

Best 12 ears sweet corn, A. W. Taylor, Hamilton, $2; 2nd do M. C. Nickerson, Port Dover, $1 50; 3rd do R. Rispin, London, $1.

Best and greatest variety of potatos, half peck of each sort named, A. W. Taylor, Hamilton, $3; 2nd do J. Pegler, London, $2; 3rd do John Stephens, London, $1

Best 3 squashes (table) R. Bugler, London, $2; 2nd do J. Steel, London, $1 50; 3rd do J. R. Flock, London, $1.

Best and greatest variety of vegetables (distinct from other entries) each kind named, A. W. Taylor, Hamilton, $4; 2nd do R. Bug-

ler, London, $3; 3rd do J. Pegler, London, $2.

Extras in Vegetables.—William Hawes, Lumbeth, English potato onions, 50c; R. Bugler London, white egg plants, 50c; Daniel Falconer, Fullarton, collection of garden seeds, $1; J. D. Humphreys, Toronto, green peas, 50c.; do Beans, 50c. D. Kempster, London, Strawberry Tomatoes, 50c. J. M. Hirschfelder, Toronto, Asparagus Beans, 50c; do Prussian peas, 50c.; do poor man's potatos, 50c. A. McDougal, London, pop corn, 50c. R. Bugler, London, miniature garden, $2. David Anderson, London, red currants, 50c; do Okra pods, 50c. James Gridlin, London, intermediate carrot, 50c.; do Roan parsnips, 50c. E. Paine, Talbotville, potato onions, 50c. M. Essery, London, winter cucumbers, 50c; Thomas McBroom, London, top onions, 50c., do pickling onions, 50c. W. L. Lawrason, London, cucumbers, 50c. H. Girouard, Hamilton, cucumbers, 50c. J. C. Small, Toronto, capsicums, 50c. Bruce and Murray, Hamilton, Dioscorea Batatas, 50c.

Note by Judges.—The judges in closing their report upon the class of vegetables, consider it a very creditable show in the several sections. They would particularly notice a very large collection of potatos of 42 varieties.

Miscellaneous.

Improvement in Horticulture.—It cannot be denied by any one that there has been an immense progress in all departments of Horticulture within the past few years. In fruits we have for the dry, choking summer pears, and the large but tasteless autumn varieties, an endless list of delicious tender, and juicy sorts, any of which would grace the dessert of a king. For grapes instead of the two varieties of a few years since, the Isabella and Catawba, we have a great number of luscious varieties, all superior to those sorts. And so of all kinds of fruits. The Strawberry, Raspberry, Blackberry, rarely known except as wild plants twenty years since, are now cultivated in every garden, and are found quadrupled in size and fruitfulness by the attention of the gardener.

But it is not in fruits alone that we see the evidences of the great advance which has been made. The flower garden bears evidence to a still greater improvement. Any one who can recall the appearance of most gardens of twenty years since, will remember the limited number of varieties of shrubs and flowering plants of those days. The Lilac, the Syringa, the Snowberry, the Althea, with a very few others, composed the shrubberies; herbaceous plants were represented by one or two varieties of Phlox, the Columbine, the Larkspur, the Iris, the Meadow Sweet; of annuals single Balsams and Asters, Cockscombs, Cereopsis, Marigolds, and a few varieties of Pinks, held the places of honor. Now behold the change; the seedsmen's catalogues register the names of hundreds if not of thousands of annuals, and the quality as well as quantity has been greatly improved. No one would recognize in the splendid double German Asters and the Camelia flowered Balsams of the present day, the same plants as the single varieties of a few years ago.

In shrubs we can now show dozens, remarkable for beauty of foliage and flowers, for one of that time. Bedding plants, almost unknown then, are now sold by every florist in thousands and tens of thousands. Every year witnesses the introduction of novelties in every department of floriculture and the improvement of old sorts. Every corner of the earth, no matter how remote, is visited by the enthusiastic amateur or the salaried servants of enterprising nurserymen. No expense is thought too great, no labour too severe to deter men from the pursuit of new plants. Nor are these labours unrewarded. Rich men lavish money on the adornment and enrichment of their green and hot houses and their grounds; the man of moderate means must have his well ordered and well furnished garden, and even the poor man spares a few of his hardly earned pence for the purchase of a few packets of seeds of annuals to beautify the few square feet he calls his own.—*Country Gentleman.*

Flying Fish.—The usual length of this fish is from ten to twelve inches, but at the island of St. Helena I have seen it offered for sale from fifteen to twenty inches long, where it is used, as in the West Indies, for food, and is of very delicate flavor. This species is named the Solitary Flying fish (*Exocetus Solitarius,*) from not being seen in large flocks like the others; and it appears to have other specific differences. When watching these fishes close, as they passed under the stern of the ship, I remarked that the extension of both the pectoral and ventral fins as effected with an audible rustling noise, and only a vibratory motion was perceptible afterwards; nor was there any expansion and contraction of those organs during flight, after the first effort. Had there been any percussion of the pectoral fins, it would have been distinctly visible, owing to the proximity of the fish; indeed, to procure percussion of the fins it would be requisite to have an elaborate muscular apparatus; and as on dissection such is not found, the theory of that action of the fins may be conceidered unsupported by fact.

It was also remarked that the fish, when keeping in a direct line of flight, proceeded for a great distance; but when this was deviated from,

and it turned round, (which action was apparently performed by the tail, not by the pectoral fins) it only proceeded about the length of a yard and dropped into the water. The greatest length of time I have seen them fly has been thirty-two seconds and their longest flight from 200 to 250 yards. The Flying-fish has a steady flight, resembling that of some birds, but when pursued by enemies or frightened by the passage of the ship through the water, it loses this graceful style of volitation, its flight becomes hurried, irregular and awkward; a kind of scrambling pace, —and it frequently drops into the water and again renews its flight in the same unsteady manner. When a large shoal of them emerged at the same time from the sea, it was perceived that some of them dropped immediately, others passed over a distance of twenty yards and fell, while the rest continued a steady flight of 170 to 200 yards, and passed out of sight. Their long pectoral fins or wings have the rays united by a fine, delicate membrane, flexible and transparent; the color of this membrane varies, and some have the ventral fins so large as to appear to have four wings.—*Gatherings of a Naturalist in Australasia.*

Dutch Cattle.

Mr. W. W. Chenery, of Belmont, has made another importation of Dutch cattle. We saw them on the 7th as they were removed from the ship Fairfield, at Battery wharf. They consisted of a yearling bull, and four 2-year-old heifers, all in good condition. The passage was short, having occupied only thirty one days from Rotterdam. They are what are called the "best nord Dutch blood." The correspondent adds, "'a solid peasant' was employed to purchase them, and they were carefully selected, of excellent skin and hair, 'and are breake out of hands by offer of money,'" *i. e.*, only obtained by exorbitant prices In bringing them to the port for importation, "they were not allowed to come in contact with any cattle on the way to the port where they were shipped."—They are large, thrifty-looking animals, the heifers weighing over 900 lbs. apiece after arriving at Mr. C.'s farm, and are, evidently, of the best bred stock of the Dutch cattle. Mr. Chenery remarked, that he regards them as combining all the good qualities of the Ayrshires and the Short-horns. It may now be said of the enterprising proprietor of the "Highland Stock Farm," that "Richard's himself again."

Mr. Chenery took every precaution in this importation, necessary to guard against disease, besides instructing his agent to purchase none but the best blood of the Dutch cattle. He has shown us certificates and declarations from Burgomasters, Magistrates, Secretary of the Dutch Agricultural Society and J. F. W. Korndorffer, first-class Veterinarian of the Kingdom of Holland, all duly signed and sealed, setting forth the fine and sanitary condition of the animals. Not only were the specific animals after minute examination pronounced healthful, but reference is had also in the certificates and declarations, to the present and past condition of the herd where they were selected and whence they came.

"Speaking of the "Dutch Short horned race" as Mr. Flint in his "Milch cows and Dairy-Farming," calls the Dutch cattle, imported by Mr. Chenery, he says, "It has been bred with special reference to dairy qualities, and is especially adapted to supply the wants of the dairy farmer." Again he says, "Dutch cattle, are, in general, renowned for their dairy qualities; but especially so are the cows of North Holland, which give a large quantity but also a very good quality," [of milk.] It is for these qualities so strongly certified to by Mr. Flint, together with others which Mr. C. enumerates, that commend this breed of cattle to him as being superior to all others in his estimation.—W.—*Boston Cultivator.*

Salt to Save Manure.—A recent issue of the *Gardiners' Chronicle* gives the following as a preservative of the fertilizing elements of manure:—"Dissolve common salt in water, sprinkle the same over your manure heap and the volatile parts of the ammonia will become fixed salts, from their having united with the muiatic acid of the common salt; and the soda thus liberated from the salt will quickly absorb carbonic acid, forming carbonate of soda; thus you will retain with your manure the ammonia that would otherwise fly away, and you have also a new and most important agent then introduced, viz., the carbonate of soda, which is a powerful solvent of all vegetable fiber."

Editorial Notices, &c.

Lower Canada Agriculturist:

A new and much improved series of this useful publication has just been commenced, under the joint editorship of Mr. Perrault and Dr. Smallwood. It will continue to be the official organ of the Board of Agriculture and Agricultural Societies of Lower Canada; and will, of course, contain matter equally interesting to farmers in either section of the Province. In the "getting up," as well as the subject-matter treated of, the new series is a most decided improvement, and we heartily wish the energetic and talented conductors abundant success. It is published monthly for the Proprietor, J. Perrault, Esq., Montreal, at $1 per annum, to whom all contributions are to be addressed.

The Four Great British Reviews and Blackwood's Magazine:

We continue to receive, as published, through

Mr. Rowsell, of this city, these invaluable periodicals, which have now become an essential to every reading man, whether professional, commercial, or agricultural. They are republished almost simultaneously with their appearance in England, in an extremely cheap and well executed form, by Leonard Scott & Co., 54, Gold Street, New York, from whom Canadian subscribers may obtain them direct, *free of American postage;* or they can be procured periodically through the principal booksellers in the Province. We strongly recommend the circulation of these British periodicals throughout these British Dependencies, not only as works of unequalled excellence in all the varied departments of human knowledge, but especially for the true British spirit which they are so eminently calculated to create and strengthen. No reading man can afford to do without them, and we would call our readers' attention in particular to the advantages which the American publishers offer by a most convenient system of clubbing. We sincerely trust that their enterprise is as remunerative to themselves as it is unquestionably beneficial to the public. A number of each of the Reviews is published quarterly, four numbers, each containing letter-press sufficient to fill an ordinary octavo, constitute two volumes a year. Blackwood's Magazine appears monthly, forming two handsome volumes a year. The whole of these leading journals can now be had for the small sum of $10 per annum, being less than a third of the price in Great Britain!

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The present critical state of European affairs will render these publications unusually interesting during the forthcoming year. They will occupy a middle ground between the hastily written news items, crude speculations, and flying rumours of the daily journal, and the ponderous tome of the future historian, written after the living interest and excitement of the great political events of the time shall have passed away. It is to these Periodicals that readers must look for the only really intelligible and reliable history of current events, and as such, in addition to their well established literary, scientific, and theological character, we urge them upon the consideration of the reading public.

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The Prize List.

We publish in this number a portion of the Prize List of the late Provincial Exhibition. As exhibitors are aware, some mistakes unavoidably occur at each exhibition, through error in transcribing the judges' awards, or in placing the tickets. Extra prizes also are

awarded, for which amounts have to be placed, awards are contested, &c., all of which things require a considerable amount of time after the close of the exhibition, and some correspondence, to adjust properly. The Prize List now given may be relied upon as entirely correct.

International Exhibition, London, 1862.

THE Commissioners for Canada at the INTERNATIONAL EXHIBITION of 1862, give notice to all parties desirous of exhibiting Canadian products, whether application has been already made for the exhibition of the same or not, that such articles may be sent in for examination and approval to the following places, at any time between the TENTH DAY of FEBRUARY next, and the undermentioned dates, viz:—

IN CANADA WEST.—London, 18th February; Hamilton, 20th February; Toronto, 22nd February; Kingston, 25th February, and Ottawa, 28th February.

IN CANADA EAST.—Quebec, 14th February; Three Rivers, 18th February; St. Hyacinthe, 22nd February; Sherbrooke, 25th February next; and Montreal, 3rd and 4th March next.

Articles will be received and stored at the Depots of the Grand Trunk Railway Company at London, Toronto, Kingston, Quebec, Point Levi, Sherbrooke and St. Hyacinthe.

The Commisssoners will begin their examinations at 10 o'clock, A. M., of each day named.

Intending exhibitors must deliver the articles for exhibition at the above named places, free of charge. Should they not be approved, the Grand Trunk Railway will return them free of charge, to any depot on their line from which they have been sent.

Parties sending in Grain or Woods are requested to transmit a certificate, stating the species and varieties, and where grown. Woods should be sent of the usual dimensions for commerce, and Her Majesty's Commissioners have expressed a desire that they be shown in planks 4 inches thick, showing the sap on both sides, or in 4 inch scantling, and accompanied, wherever practicable, by twigs with leaves or flowers.

Parties desirous of further information, may apply, concerning Minerals and Specimens of Economic Geology, to Sir W. E. Logan, Montreal; concerning products of the Forests and Waters, to Dr. Tache, Quebec, or Dr. Hurlburt, Hamilton; concerning Agricultural produce, to Hon. L. V. Sicotte, St. Hyacinthe, and Col. Thomson, Toronto; concerning articles of Canadian Manufacture, to Dr. Beatty, Cobourg, or to the Secretary, Montreal, to whom also, communications on all other business of the Commisssion are to be addressed.

R. CHAMBERLIN, Com'r, Secretary.

Montreal, December 12, 1861.

THE INTERNATIONAL EXHIBITION OF 1862.

THE UNITED AGRICULTURAL SOCIETIES OF WENTWORTH and HAMILTON will hold an Exhibition of Wheat at Cramm's Hotel in the City of Hamilton, on Saturday the 18th day of January, 1862, with a view of obtaining the best samples to forward to the International Exhibition, London,

Best two bushels Soule's Winter Wheat					$6
"	"	"	Red Chaff	"	6
"	"	"	Blue Stem	"	6
"	"	"	Golden Drop, Spring		6
"	"	"	Fife	"	6

The Wheat obtaining the prizes to become the property of the Society. Members of either of the Societies may compete.

The wheat to be the property of the exhibiter, and grown in the County in 1861.

Entries will be received by the Secretary until 10 o'clock, a. m., of the day of Show.

WM. A. COOLEY,
Sec., U. S. W. & H.

Ancaster, Nov. 25th, 1861.

BOARD OF AGRICULTURE.

THE Office of the Board of Agriculture is at the corner of Simcoe and King streets, Toronto, adjoining the GovernmentHouse. Agriculturists and any others who may be so disposed are invited to call and examine the Library, &c., when convenient.

HUGH C. THOMSON,
Toronto, 1861. *Secretary.*

Contents of this Number.

The Agriculturist,

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