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THE

Canadian Agriculturist,

OR

JOURNAL AND TRANSACTIONS OF THE BOARD OF AGRICULTURE
OF UPPER CANADA.

VOL. XIII.

TORONTO, DECEMBER 16, 1861.

No. 24.

Popular Instruction in Agriculture and the Veterinary Art.

We mentioned in our last that arrangements were being made in this city for a short and popular course of instruction in the various branches of Agricultural and Veterinary Science, *specially adapted to the wants of young men engaged in farming pursuits.* From the subjoined circular addressed to the various Agricultural Societies, it will be seen that the final arrangements have been made. We trust that many young men from different parts of the country will avail themselves of this opportunity of making themselves acquainted with the *principles* on which alone the practice of agriculture can be successfully carried out, and its advancement accelerated. Mr. Smith comes among us with the highest testimonials of character and ability from the Principal of the Edinburgh College, in which he graduated. In fact our Board of Agriculture left in the hands of Professor Dick, to choose a suitable person for Canada, with a view not only to the establishment of a private practice, but also to the initiation of what it is hoped will ultimately become a Canadian Veterinary School. The present attempt, therefore, is simply introductory, and the important objects contemplated by the Board—will, it is hoped, be obtained by degrees. It is so manifestly the interest of every young farmer to become acquainted with the princi-

ples of his art; including a general knowledge of the form of diseases, and modes of treatment of the domesticated animals, that in this age of mental activity and industrial progress, a scheme of this nature, faithfully and efficiently carried out, cannot—one would think—fail in securing a large measure of success.

BOARD OF AGRICULTURE FOR UPPER CANADA,
Toronto, December 20th, 1861.

SIR,

I am instructed by the President of the Board, to inform you that arrangements have been made for giving in this city a course of instruction in the Principles and Practice of Agriculture, and of the Veterinary art.

Mr. Andrew Smith, Licentiate of the Edinburgh Veterinary College, and, by appointment, Veterinary Surgeon to this Board, will give instruction in the Anatomy and Physiology of the Horse, and other farm-animals, including a popular description of the symptoms and treatment of the ordinary diseases to which they are subject.

Professor Buckland, assisted by the Professors of Chemistry, Geology, and Natural History in University College, will give a course of Lectures on the science and practice of Agriculture, specially adapted to the wants of young Canadian farmers.

The course will extend over four weeks; commencing on Wednesday, February 12th, and ending on Thursday, March 13th, and will

comprise 26 lectures on Veterinary subjects, and 72 on those of the greatest interest in relation to Scientific and Practical Agriculture.

The great object of this course is to afford an opportunity to young and inquiring farmers of becoming acquainted with the *principles* of their important art, and to prepare them for carrying on their studies and observations by themselves. As the course will be entirely free, the only expense which young men will have to incur in attending it will be for board and lodging, which may be readily obtained in the city for about \$3 a week.

Any further information relative to the Lectures may be obtained by addressing PROFESSOR BUCKLAND, University College, Toronto.

H. C. THOMPSON,
Secretary.

The Agriculturist for 1862.

Having now brought to a close the volume for 1861, it becomes our pleasing duty to gratefully acknowledge our many obligations both to subscribers and contributors, with the expression of our earnest hope that a similar support will be extended to this journal during 1862. It will continue to be published twice a month, 32 pages each number, for the very small sum of half-a-dollar a year, with a bonus of ten per cent to societies or clubs taking not less than ten copies. The *Agriculturist* thus makes an annual volume, with title page, index, &c, of 768 pages. The main object of this journal is not profit, but *usefulness*. Its conductors regret that circumstances beyond their control have, in two or three instances, during the year, delayed its publication a few days, but they hope to surmount these difficulties entirely in the coming year. Contributions are earnestly requested from all parts of the Province, and it is in contemplation to introduce illustrations in the next volume, and to make it more extensive and complete as a vehicle of agricultural intelligence. Each number will contain a distinct VETERINARY DEPARTMENT, which will be under the superintendance of MR. ANDREW SMITH, Veterinary Surgeon by appointment to the Board of Agriculture.

Board of Agriculture.

The following named members of the Board of Agriculture retire in January 1862, viz.:— Messrs. E. W. Thomson, Toronto; R. L. Denison, Toronto; Hon. H. Ruttan, Cobourg; Hon. Geo. Alexander, Woodstock. It therefore falls upon the County Agricultural societies at their approaching Annual meetings to elect suitable persons to fill the vacancies thus created. The retiring members are eligible for re-election.

Rearing of Calves.

(Continued from page 683.)

It is very difficult to lay down an exact rule for feeding calves, as far as quantity is concerned, nor can a time be fixed for weaning; the appearance of forwardness in the animals being the best rule to go by. However, as a general mode, supposing the calf to have been dropped in March, I would suggest that "pure mother's milk" should be given for a fortnight, then by degrees an admixture of the oil-cake gruel introduced, and a sufficient drink allowed at each meal, so as to remove all hollowness from the flank. In a few weeks six gallons will be taken by the calf, and when the weather is favourable it should be allowed to run in some well sheltered place where the pasture is sweet. In three months calves have an appetite for grass, and it is then that the process of weaning should be begun. I never use skimmed milk; and I gather from the experience I have had in rearing calves that pure milk and the oil-cake gruel is the most profitable mixture for calves. Water gruel, hay tea, and linseed jelly, may be all used, and calves weaned on them; but the condition of those fed on the cake gruel and pure milk will bear comparison with the others.

I would have the calves fed with milk and gruel at 6 o'clock in the morning, or as soon after the cows are milked as possible. Then supposing them to have arrived at an age to be allowed to run at pasture, I would defer their being driven out until an hour or so after their first feed, so as to allow the process of digestion to be somewhat advanced, as when healthy calves are turned out they usually run and play about at first, which is by no means desirable immediately after being fed. Again between 5 and 6 o'clock in the evening, I would allow each the same quantity as they had in the morning.

The calf-houses should be well supplied with rock-salt; there can be no second opinion as to its being a natural stimulus to the digestive organs, increasing the appetite and promoting the general health. We are informed by hunters of the attractions produced by salt springs for wild animals; nature, doubtless, prompting them to resort where salt is to be procured to correct the

influences of unwholesome matter. Chalk is frequently used as a preventive to purging, and may, with advantage, be placed where the calves have access to it. It is, besides, an excellent ingredient in all drinks given in diarrhoea or scouring. The tendency to purging is caused by acid, which the alkali mixing with it neutralizes, and so checks disease. The animal suffering from inconvenience is led to seek some corrective or palliative, and, though seeming at times to pick up food unsuited to it, it is in fact having recourse to simples placed within its reach. We observe dogs eating grass, pigs rejoicing in cinders, and cattle regaling themselves on grass with clay adhering to the roots, may, more, the cow has often been seen to pick up earth and eat it, particularly when any indigestion is present; and in the account of the Wonderful Kintore Ox, given in Mr. Youatt's excellent work on the breeds, management, and diseases of cattle, we find 'he had a lump of rock salt in his manger, of which he was particularly fond. A basket of earth also stood by him, of which he occasionally ate a considerable quantity, and which operated as a gentle purgative. The uneasiness caused by commencing decomposition caused him to have recourse to the mould, and the acid being met by the alkali was rendered harmless.' I may observe that, for the sake of allowing the corrective of the earth, I object to washing turnips; the small quantity of mould adhering to them being more advantageous than the contrary.

The practice of placing stones in the dewlap I consider an excellent one, and the more the animal is forced or pampered the more necessary it is. I have never had a case of quarter-ill or black-leg, and am disposed to think the exemption from that disease may be chiefly owing to the use of setons. In January or February I usually have them inserted, passing them through the loose skin of the chest, taking care not to place them too low down, which would cause the animal much inconvenience when lying, as great soreness is felt for some days. The hair of a cow's tail twisted to the thickness of the finger, with a wooden button at one end, and a knot at the other, answers the purpose. The seton should be smeared with Venice turpentine, to cause it to act quickly, and drawn from knot to button, or the reverse, daily. Black hellebore is sometimes used as a seton, and it may not be out of place to quote Mr. Youatt's valuable opinions when writing on this subject:—"The use of setons in practice on the diseases of cattle is in a manner limited to the passing of a piece of hair, rope, or of black hellebore root through the dewlap; and as exciting inflammation in the neighbourhood of the diseased part, and thus lessening the original one, and causing a determination of blood to a greater or less extent to this new seat of irritation, they are useful both in acute and chronic inflammation of the respiratory organs. In young cattle rapidly

thriving, and placed in pasture perhaps a little too luxuriant, permanent setons are highly beneficial; they act as a salutary drain, and prevent that accumulation of the circulating fluid which is the usual cause of inflammatory fever and other fatal complaints."

In conclusion, a few hints may be given for the treatment of novel-ill, diarrhoea, loose or catarrh, and black-quarter, in their incipient changes, although all serious cases involving the necessity of operations or real scientific treatment call for the presence of the veterinary surgeon.

The examination of the navel-string of the newly dropped calf demands the first attention of the herdsman, who should not be satisfied if it present too raw an appearance, or blood be dropping from it. Mr. Youatt advises "a ligature should be passed close round it, but, if it can be avoided, not close to the belly. Possibly the spot at which the division of the cord took place may be more than usually sore. A pledget of tow, well wetted with friar's balsam, should be placed over it, confined with a bandage, and changed morning and night; but *caustic applications that are so frequently resorted to should be avoided*. Fomentation in the part, in order to disperse the tumour, the opening of it with a lancet if it evidently points, and the administration of two or three ounce doses of castor oil, made into an emulsion by means of an egg, will constitute the first treatment; but if, when the inflammation abates, extreme weakness should come on, as is too often the case, gentian and laudanum, with, perhaps, a small quantity of port wine, should be administered."

Next, *Scouring*.—So long as we observe the calf to be lively and playful, taking its milk freely, we need not be alarmed by thin evacuations. Most practitioners recommend a mild purgative in the first instance to remove the acidity and irritation of the bowels, after which the simple doses of from $\frac{1}{2}$ oz. to $\frac{3}{4}$ oz. of tincture of rhubarb with an equal quantity of water.

Calves well housed until at least two months old, and not put to grass at too early an age, are seldom liable to scour which can cause any uneasiness. My custom, on an appearance of laxness, is to reduce the allowance of milk and keep the calf warm and quiet. An astringent drink of starch 2 ozs, 1 drachm of laudanum, $1\frac{1}{2}$ drachm of ginger, is also recommended.—Should it assume a threatening appearance, or the evacuations be white and tinged with blood, 5 grains of sulphate of copper and two of opium, given four times a day, will be found an excellent remedy.

Mr. Francis Clater treats this disease very simply, and his valuable book, "Every Man his own Cattle Doctor," is much prized, and should be in the hands of all stock-masters, as it is written in a style quite free from pedantry and professional technicalities.

I have found the acrid nature of the fæces to

cause great irritation and uneasiness about the anus; this is greatly relieved by sponging with warm water and keeping the parts clean; too much care cannot be taken, after a cure has been made, so to regulate the diet as to guard against a new attack.

Hoose or Catarrh.—This disease, to which calves are very liable, is most dangerous when neglected, and runs its course with them even quicker than with grown cattle; it also suggests a special reason for vigilance, because it occasionally becomes an epidemic. It is very prevalent in early spring and in the "fall," owing, doubtless, to the extremes of temperature experienced at those seasons of the year. Even temperature in the houses, proper ventilation, nourishing food, and a fair share of it, are the best preventives; whereas, where there is cold, wet, and insufficiency of provender, the disease is almost sure to be present. The first time the herdsman hears a beast cough he should stop and examine it closely; the neglect may prove fatal to the animal affected. Mr. Youatt's advice cannot be too often repeated: "There is no disease of a chronic nature by which cattle are so seriously injured, or which is eventually so fatal to them, as hoose; yet not one herdsman in twenty, and very few of those whose interest is more at stake, pay the slightest attention to it. The cow may cough on from week to week, and no one takes notice of it, until the quantity of milk is seriously decreasing, she is rapidly losing flesh, and then medical treatment is generally unavailing. The disease has now reached the chest, the lungs are seriously affected, and the foundation is laid for confirmed consumption." And, again, how plainly and simply does he point out the means of ascertaining the exact condition of the animal, so that proper measures may be adopted for its relief. "Let her be taken up and examined. Does she feed as well as ever? Does the dew stand upon her muzzle? Are her flanks perfectly quiet? Then one or two nights' housing and a mash or two, or a dose of physic, may set all right. But if, on examination, the muzzle is a little dry, and the root of the horn hot, and she heaves (although not much) at the flanks, and the coat is not to sleek as usual, and she is a little off her feed, let her be bled. Experience will teach the farmer that these chest affections in cattle often and speedily assume a highly inflammable character, and that they must be conquered at first or not at all."

I have often found in the first stage of common catarrh or cold a little nitre given at night in bran mash have an excellent effect. This nitre, or nitrate of potash, is very useful and effective in allaying inflammatory symptoms; it acts mildly on the kidneys. Two drachms in a little bran would be sufficient for an ordinary calf. It will be found to act on the skin, opening the pores, and inducing perspiration. So, while an animal is under its influence, great care

must be taken to guard against sudden chills, and, by careful housing to assist the medicine in its operation. If the cough should not yield to a few doses of this simple kind, we must add tartar emetic and digitalis, both most valuable medicines where fever is present. A most severe case of inflammation in a heifer of mine, was a short time since most successfully combated by the administration of frequent but small doses of these medicines, without having recourse to bleeding.

There are few things so annoying to cattle as lice. By their attacks the skin is kept in such a state of irritation that the animal can neither feed nor rest in peace, and it is impossible to expect improvement and thrift, while these pests remain in the hair. A thoroughly healthy beast will seldom be infested with lice unless near cattle that are so affected. A good state of health seems to repel, as much as the poverty stricken beast would attract them. Unless checked they increase very rapidly, and whoever it was who said "they are grandfathers in twenty-four hours after their birth" seemed to have formed a tolerably correct opinion of their powers of increase. Powders may be recommended for their destruction, but an oleaginous application will be found the surest. Mercurial ointment would destroy them at once, but I hesitate to advise its use, fearing salivation. Strong tobacco water, or sheep-dressing, will doubtless cause much relief, but I question whether they will be as effectual as train or linseed oil. After its application, and when the lice are found dead in the hair, a washing of soap and water will serve much to cleanse the skin from scurf and irritation, and prove very agreeable to the animal.

Quarter-ill, Black quarter, Joint murrain, &c.—No disease has so many names. This may be accounted for from the variety of the symptoms which present themselves. Inflammatory fever would better describe the malady.

It is not the calf alone that is liable to its dread attacks; cattle of all ages may be smitten with it, and it is more frequently present where there is high condition and much thrift. So sudden are its visitations, that we may to-day see a beast drooping and quite amiss that was thought in perfect health yesterday. The heated breath, heavy flank, dry muzzle, quick pulse, and anxious looks indicates the fever that rages within. The animal objects to move about, and when the posture is changed the gait is unsteady, principally in the hind quarters; there is also peculiar moaning; and laborious breathing. The uneasiness increases, he is constantly up and down, at last seems unconscious of surrounding objects. His efforts to rise prove abortive, the symptoms get worse, and the beast dies.—The worst signs are a tenderness in the back and loins, with swelling in these parts, and yielding to the least touch; then we must fear that decomposition has begun; one of the limbs becomes swollen, feels inflamed and tender, and

shows no elasticity on being pressed by the finger: it is in fact, in a state of mortification. Ulcers may appear in different parts of the body, particularly in the mouth, and the urine is discoloured, being darker and perhaps bloody. To treat this disease, in the first place the animal must be housed, and (much as I object to it in the general treatment of cattle) bleeding must be resorted to; purging with Epsom salts should follow: if one dose does not operate it must be repeated. The beast should be most closely watched during this treatment, the least change being carefully noted by the attendant. If there is improvement, doses of digitalis, tartar emetic, and nitre should be administered three times a day. Any swellings of the joints should be well fomented with hot water, and rubbed with equal parts of camphorated spirits of wine, spirits of hartshorn and turpentine. Chloride of lime is a most valuable disinfectant, and it would be wise to wash all ulcers that may appear with a solution of it several times in the day; it will serve in a great measure to prevent the bad smell which always arises from the ulcers. A solution of chloride of lime of a quarter of an ounce in weight may be mixed with a pint of water, and will form a most valuable disinfectant lotion.

"Prevention is better than cure," and I am disposed to attribute my immunity from loss by quarter-ill to proper attention to feeding and housing, and also to the use of the seton, which is my practice to insert in the calf's dewlap towards the end of January. The oil-cake, which I strongly commend, causes the bowels to be kept in a regular state.

Before I conclude I must impress on young farmers the great advantage of having their stock-houses properly constructed, so that there should be no lack of light or fresh air: both are essential to the well-being of calves. I am rather an advocate for the light being admitted from the roof, or at all events sufficiently high to prevent the animals standing "at gaze," and, by much watching, becoming unsettled and unthrifty. The houses should be kept scrupulously clean, no accumulation of dung or wet litter allowed to remain, and the floors thoroughly swept before fresh straw is supplied. I find wood answers admirably as a floor; it is more easily kept clean than ordinary pavement. If good paving stones are scarce, the thinnings from young plantations, cut into blocks about ten inches long, and placed vertically on a bed of sand, will make a good substitute. I prefer the wood to the stone, and both to flagging, which is at times dangerous, owing to the smoothness its surface presents from wear and wet.

While animals are feeding, their houses should be cleaned rather than at any other time, and then also their coats should be brushed, as they will like to lie down and rest when their food is disposed of. The gases arising from decom-

posed vegetable matter are injurious to cattle; and if so to adults, must they not be much more so to animals of tender age? In severe weather warmth, and at the same time proper ventilation, should be provided: the importance of these requisites cannot be overrated.

In conclusion, I may remark that I have treated of the rearing of calves with the aim of turning them into money with all convenient speed, whether in the shape of well-bred cows for breeding and the dairy, or of fine steers ready for the slaughter-house. Of veal calves I have said nothing, not considering that they come within the limits of an "Essay on rearing calves." They are not in fact, *reared*, as it takes but a very short period of time to prepare them for their purpose. It behoves the rearer of calves to "look sharp;" for mortality amongst them tells fearfully against their pockets. The death of one or two or in the year, and even delicacy and the absence of thrift, would swallow up a considerable amount of any profit a breeder (on an average scale) might reasonably expect from his young stock, because he must always allow a margin for casualties in the byre previous to birth ("there is many a slip between the cup and the lip,") and the would-be rearer is often disappointed by cows aborting, or unfortunately producing dead calves, events over which he cannot have much control; to which, however, I am disposed to think high feeding largely conduces. When he has his calves safe and sound, I do not feel that I presume too much when I say that by strictly following the advice which experience has enabled me to give with confidence in the foregoing pages, he may look for a fair share of success in his certainly somewhat arduous undertaking. "It is not in mortals to command success." Let us, however, endeavour to deserve it.—MAJOR S. M'CLINTOCK, in *Journal of Royal Agricultural Society of England*.

Agricultural Intelligence.

Progress of Agriculture in France.

In a notice of the Rural Economy of France, by M. Leonce de Lavergne, the "Edinburgh Review" gives an interesting review of French agriculture. On a level with England a century ago, although its progress has been slow, it has latterly become remarkable, and that which in our own case is history, we see now in actual accomplishment among our neighbors. The following picture of French circumstances is interesting:

"Since 1815 her foreign trade has quintupled, her manufactures have quadrupled, her agriculture has doubled its produce, under the influence of those three great principles of peace, justice and freedom, which are the eternal counterpoise of the hateful effects of war, violence and des-

pot.sm. Eighty thousand miles of roads have been opened in the country; 10,000 miles of railway have been completed, or are now in progress; canals have been made, rivers rendered navigable, ports and docks constructed. The progress of rural economy, especially from 1815 to 1847, kept pace with this great movement, and has not been sensibly thrown back by the unfavourable and extraordinary courses of the last few years, in spite of bad seasons, the potato disease, the vine disease, the mortality of the silk worm, and the disturbed state of the political world. The tenure of land has of course been modified to a considerable extent by the laws of succession established in France, but this change is less rapid and complete than is commonly imagined in England. Taking the area of France at 45,000,000 of hectares, M. de Lavergne computes that one-third of the soil is still held by 50,000 large proprietors, possessing an average of 750 acres, another third by 500,000 middling proprietors, possessing an average of 75 acres; the last third by 5,000,000 of small proprietors possessing an average of 7 acres. This calculation is obviously merely approximative; but it is certain that there are in France 16,000 land owners paying £40 a year and upwards in land tax to the State, and about 37,000 land owners paying £20 to £10.

"In the allotment of the soil it seems that since 1789 about 5,000,000 of acres have been added to the productive area of the country; vineyards and orchards and meadows have considerably increased; woods have diminished. In tillage cultivation the fallows have decreased by one half; the growth of wheat, barley and oats has increased a third: that of rye and the inferior kinds of grain has diminished. Water meadows have tripled in extent, and the cultivation of roots, which was hardly known in 1789, now covers 5,000,000 of acres. But the quality of the crops has risen even more than their extent. The quantity of wheat actually grown has nearly doubled; live stock has also doubled in number and value; the silk crop and the rape oil crop have quintupled. The production of home grown sugar has come into existence, and the growth of wine has also doubled. From these facts M. de Lavergne concludes that the total value of the agricultural produce of the empire must now exceed £200,000,000 sterling, or at the rate of about £6 per head of the population. He also infers that rents have risen since 1789 in the proportion of 12 to 30; farmer's profits in the proportion of 5 to 10; outlay in that of 1 to 5; taxes on land and dues have diminished in the proportion of 7 to 5; and labourer's wages have doubled."

The £200,000,000, at which the annual value of French agricultural products is now estimated, is £75,000,000, or 90 per cent. over the estimated annual value of the same interest 50 years ago; and even our own agriculture, we presume, can hardly exceed so rapid a movement as that. We

quote the following local pictures and particulars.

"Large fortunes have at all times been made by agriculture in the neighborhood of Paris, but more especially in the last half century. Some of the farmers have their million of francs, many more their £20,000 or £30,000. Farming is here an art, employing large capitals and returning large profits, especially in that district called France *par excellence*, because it formed part of the original domain of Hugh Capet. Large estates are here also less divided. More than 3,000 of the rural assessments exceed 1,000*fr.*, and there are many land owners having from £2,000 to £1,000 a year.—*London Ag. Gazette.*

SHORT-HORN INTELLIGENCE.—We stated a week or two ago that Mr. S. E. Golden had sold a bull calf for 500 guineas. The animal, we may now add, was about 14 days old when thus disposed of; the adventurous buyer was Mr. Thomas Atherton, of Speke, near Liverpool; and the young patrician (as appears from a comparison of his weight with his cost) fetched something about five shillings an ounce, or eighty shillings a pound. This is an unprecedented event in the annals of short horn breeding, and is equally significant of courage, speculation and success. Whether a calf not three weeks old is worth 500 guineas, is of course, a question we cannot decide; but it may be said, with truth, in reference to the seller, that an animal is worth what it will bring; and, with equal truth, in reference to the buyer, that the practical value of a prime-bred bull cannot well be estimated. *Bell's Messenger.*

An Italian Cattle Show.

Since the successful career of Garibaldi, and the organization of a Government of their own, the Italians seem to be coming up in all the arts and social institutions which give strength and character to a nation. Among the best evidences of this is the establishment of a National Cattle Show.

The Boston *Cultivator* quotes from the London *Times* an account of this Exhibition, which appears to have been a successful one. It was held in Florence, which gave it rather a Tuscan character, as the cattle were principally from Tuscany, the other sections of the Kingdom not being in direct railway communication with Florence. A writer present, speaking of the cattle in that part of the world says:

"The color of the genuine Italian breed of cattle is almost uniformly straw-yellow or pearl-white, and nothing can equal their sleekness and cleanliness. Whether this is the effect of their shortness of hair and the peculiar healthiness of their skin, or whether the Italian boor takes that pride in the look of his cattle for which he does not show the same care about his own person, is more than I am able to say; but it is a fact that I have often remarked in the *Æmilia*, and

which I again witnessed here to-day, that oxen and cows in Italy look as thoroughly groomed, as smooth and shining, as English race-horses. All of these huge field-laborers, the cows and the very bulls, have a placid, half-dreamy look, indicative of the very best nature, and of a temper which no provocation would ruffle. I noticed the Archbishop of Pisa's steers, in particular, with the classical profile of their heads, the slightly-arched frontal bone; the meditative, almost clerical gravity of expression, for which, taking their prodigious bulk into account, it was impossible not to feel a certain degree of reverence and kindly affection."

Horticultural.

The Dwarf Pear.

SUMMER PRUNING OR PINCHING.

[Read before the Hamilton Horticultural Club, and concluded from page 331 of the *Agriculturist*.]

MR. PRESIDENT AND GENTLEMEN,—According to your request at your last meeting, I now bring forward the concluding portion of paper on the Dwarf Pear, that is summer pinching—thinning the fruits, gathering and keeping the fruit &c. Summer pruning or pinching is to go over the trees at stated periods during the growing season, and remove the points of the growing shoots, (this operation is performed by the thumb-nail and fore-finger—hence, *pinching*) with a view to bring a young tree into a proper shape and a bearing state in the earliest possible time, and at the least expense of vegetative powers. When a tree or plant of any description grows with great vigor it has a tendency to grow gross, or watery as we usually term it; and instead of flowers and fruit, the produce (if a fruit tree) is but wood and leaves. This process continues from year to year; in some trees for an almost indefinite period—until the roots have exhausted all the nourishment within their reach, the tree arrives at maturity,—or some accidental occurrence take place that will bring it into a bearing state. The scientific fruit cultivator will not require to wait any lengthened period for his tree to produce abundantly: any more than a florist would think of occupying three or four years to grow specimen plants of Geraniums or Fuchsias. In growing either of the above species of plants they are highly fed at the roots and encouraged to grow luxuriantly; but its luxuriance is not allowed to run to water or expand itself in making strong watery shoots, for as soon as the shoot is the required length, its point is pinched off, and instead of one strong shoot, there will spring from the base of each leaf-stalk a shoot—not so strong as the one from

which it sprung, but strong enough for the purpose it is designed to serve. A similar process is employed in respect to the Dwarf Pear to bring about similar results. It is encouraged to made vigorous growth, and that growth kept in check by pinching. For some varieties of pears on *Quince stock*, pinching alone will bring a tree early into a bearing state, although it will take a longer time, and the tree will attain a larger size than if root-pruning and summer pruning are combined. About the middle or end of June, (according to the season) the branches will put forth young shoots,—from one, to three or more; select the one most suitable for a leader, pinch off all the others to three leaves from the base of the shoot, *i. e.*, when the young shoots have made four leaves, pinch off the fourth leaf and the point of the shoot, thus leaving three leaves on the shortened shoot. When the leading shoot has made 6 or 7 inches growth that also may be pinched at that distance if the variety be a strong growth, but if weak grown it is better to shorten the leaves to 4 or 5 inches. If the wood mature the pruning knife will be little required at the winter or spring pruning; but if the wood is not perfectly ripened it must be cut into the mature wood, keeping in view the desired shape of the tree. The same operation is repeated annually as long as the tree requires it. A few years will suffice to bring the trees into a bearing state, and then they will make wood put sparingly.

Thinning the Fruit.—Young pear trees not only require the fruit thinned, but would be greatly benefitted were the half of the blossom buds thinned out also. Early in May or just before the buds open, if the tree is thickly covered with fruit-buds one-half may be cut off, and there will still be enough—and to spare for fruit. This will materially assist the shy setting varieties. I confess that I have not practised the thinning of pears to any great extent, seldom having cause to remove a perfectly formed fruit. But when Curculio or any other insect has made an attack so as to deform the fruit, I do not hesitate to thin sparingly. For small varieties, such as the *Seckel*, *Dearborn's Seedling*, *Madeleine*, &c., little thinning is necessary; but for large sorts such as *Napoleon*, *Beurre Diel*, and some seasons the *Duchesse d'Angouleme*, thinning is absolutely necessary, if size and quality of fruit be the object. Varieties that grow in clusters should be reduced to two, and, except those growing on the same spur, no two fruit ought to touch each other, from 6 to 8 inches apart all over the tree would be a very good distance, and the nearer approach to that we can come, the nearer to perfection we shall reach, in the cultivation of the Pear.

There are various opinions respecting the gathering of late pears. Some cultivators, and writers on the subject, say that late varieties should hang on the trees as long as there is no danger from severe frosts. But even the

latest varieties of pear may be allowed to hang too long on the tree, and in some cases will not ripen at all. Mr. Rivers in one of his works, says that he allowed some pears to hang on the trees until late in October, and although they were treated similarly to others of their class usually are, they did not ripen, but turned black, and decayed at the core. A variety of late pear (for which I have no name) went the same way last season, got black (although quite firm), and was unfit for use. This season *Steven's Genesee* were allowed to hang on the trees until they appeared ripe (were yellow as a lemon), but they never got fit for use, neither did they soften until decay took place. Pears should always be gathered before the usual time of ripening, and that process completed in doors. It is difficult to state with any degree of certainty at what time any variety of late or early pear should be gathered, so much depending on the season and locality, that nothing short of practical experience will enable the young cultivator to judge. I have gathered the latest varieties that fruit in this place about the first week in October.

Although writers and cultivators are divided as to the time at which the fruit of the pear ought to be gathered, they all agree as to the mode of gathering it. Choose a day, say, gently raise the fruit, and detach it at the proper place, (so as not to injure the fruit buds on the tree, nor the fruit by pulling the stalk out,) and to handle them as carefully as if they were eggs, for on that principally depends the keeping of the fruit; when there is plenty of time to do it. Pears ought to be gathered from the tree, put into the vessel in which they are to remain until ripe, and carefully carried to the fruit house. It is well not to put a large quantity into any one vessel—not more than one bushel and a half—that quantity is preferable. I have kept some of the larger sorts very well in half flour barrels, i. e., a flour barrel cut in two, with rope handles put in them; by that means they are handy to move about. These with a little hay or straw at bottom, placed in a cool, dry cellar, seem to answer very well. By keeping the fruit in a lower temperature than usual, most varieties have been later in maturing than former years. There are now (Dec. 1st) *Beurre Basc*, *Beurre Diel*, *Duchesse D'Angouleme*, *Napoleon*,—all of which have matured three or four weeks earlier in former years. In concluding this paper, I may state that I have tried several experiments in keeping late pears; but hitherto they have not been found superior to half barrels or small boxes, and treated as above. So far as my experience goes, pears should be gathered carefully—not too late—put away in a cool room or cellar—have plenty of air, and removed to a higher temperature (60° or 65°) for a few days before using.

CHAS. MESTON.

Veterinary.

DOCKING AND NICKING.—These barbarous methods of depriving the horse of his natural form and appearance, in order to make him conform to the fashion of the time, is, fortunately very fast going into disuse. If the tail of the horse were given him for no good purpose, and if it were not a design of nature that he should have the power of moving it forcibly to his sides, there might be some excuse for cutting it off, within a few inches of his body, or for separating the muscles at its sides to lessen this power; but, that this is not the case, must be acknowledged by all who have seen how a horse, whose tail has been abridged by "Docking," or weakened by nicking, is annoyed by flies.

If a horse has a trick of throwing dirt on his rider's clothing, this may be prevented by cutting off the hair of the tail, below the end of the bones, as is the custom with hunters in England, where the hair is cut squarely off about eight or ten inches above the hocks.

No apology is offered for not giving here a description of these two operations; they are so barbarous and so senseless, that they are going very rapidly out of fashion, and it is to be hoped that they will ere long have become obsolete, as has the cropping of the ears, formerly so common in England.

A more humane way of setting up the horse's tail, to give him a more stylish appearance, is by simply weighting it for a few hours each day, in the stall, until it attains the desired elevation. This is done by having two pulleys at the top of the stall, one at each side, through which are passed two ropes which come together and are fastened to the tail, the ropes having at their other end weights, (bags of sand or shot are very good for the purpose) which must be light at first, and may be increased from day to day. The weight should be continued until the tail has taken a permanent position as desired. It is true that this method requires a somewhat longer time than that of cutting the muscles, but while it is being done the horse is never off his work, and he suffers infinitely less pain.

The method of nicking or pricking, as usually performed in this country, is not quite so cruel, nor so hazardous as the cutting of the muscles.—*Herbert's Hint's to Horse-Keepers.*

HORSE SHOES FOR SNOW.—A correspondent of the *American Agriculturist* suggests that the balling of snow on horses' feet may be materially lessened, by making the upper side of the shoes wider than the lower side, so that the inner edge will be beveling outward. If constructed in this way, the balls of snow would more readily fall out than if held by square-sided shoes. The suggestion is not a new one—at least we have heard of it before, we believe—but it would seem to be valuable, and worthy

the attention of blacksmiths, or those who have horses to be shod. At best, damp snow will pack into the shoe, but if the lower side of the opening be the widest it will be the more likely to drop out.

Transactions.

Prize List, Provincial Exhibition, 1861.

(Continued.)

CLASS XXXIV.—PLANTS AND FLOWERS.— (136 Entries.)

Judges—Messrs. John Wade, Port Hope; Asa A. Burnham, Cobourg; and J. C. Small, Toronto.

Best dozen dahlias, named, George Leslie, Toronto, \$2.

Best and largest collection of dahlias, Geo. Leslie, Toronto, \$5.

Best bouquet of cut flowers, (for table) J. M. Hirschfelder, Toronto, \$2; 2nd do, A. Bugler, London, \$1 50.

Best hand bouquet, J. M. Hirschfelder, Toronto, \$2; 2nd do, do, \$1 50; 3rd do, G. Haigh, London, \$1.

Best collection of green-house plants, not less than 12 specimens, in flower, J. Pegler, London, \$10; 2nd do, do, \$6; 3rd do, J. M. Hirschfelder, Toronto, \$4.

Best 12 pansies, J. Westland, Westminster, \$2; 2nd do, J. Pegler, London, \$1 50; 3rd do, Mrs. Beecher, London, \$1.

Best 6 fuchsias, in flower, J. Pegler, London, \$3; 2nd do, do, \$2; 3rd do, do, \$1.

Best collection of annuals in bloom, D. Kempster, London, \$2; 2nd do, J. Westland, Westminster, \$1 50; 3rd do, J. M. Hirschfelder, Toronto, \$1.

Best 6 cockscombs, J. Steel, London, \$2; 2nd do, A. Denham, do, \$1 50; 3rd do, R. Bugler, do, \$1.

Best 6 balsams in bloom, D. Kempster, London, \$2; 2nd do, F. Girouard, Hamilton, \$1 50; 3rd do, R. Bugler, London, \$1.

Best collection of asters, J. Fleming, Toronto, \$2; 2nd do, Mrs. Lawrasen, London, \$1 50; 3rd do, J. Pegler, London, \$1.

Best collection of 10 weeks' stock, George Haigh, London, \$2; 2nd do, John Pegler, London, \$1 50; 3rd do, R. Bugler, do, \$1.

Best collection of hybrid perpetual roses, not less than 12 blooms, John Pegler, London, \$2; 2nd do, H. Girouard, Hamilton, \$1 50.

Best floral ornament or design, T. Partridge, London, \$5; 2nd do, J. Steel, London, \$4; 3rd do, J. M. Hirschfelder, Toronto, \$3.

Best collection of verbenas, not less than 12 varieties, Bruce & Murray, Hamilton, \$3; 2nd do, J. M. Hirschfelder, Toronto, \$2; 3rd do, J. Pegler, London, \$1.

Best 6 petunias, J. Pegler, London, \$2; 2nd do, J. M. Hirschfelder, Toronto, \$1 50; 3rd do, do, \$1.

Best collection perennial phloxes, George Leslie, Toronto, \$2; 2nd do, Bruce & Murray, Hamilton, \$1 50; 3rd do, J. Pegler, London, \$1.

Best 6 hardy shrubs, (spikes in flower) G. Leslie, Toronto, \$2; 2nd do, C. Arnold, Paris, \$1 50.

Best collection of hollyhocks, Geo. Leslie, Toronto, \$2; 2nd do, J. Clanahan, London, \$1 50; 3rd do, G. Leslie, Toronto, \$1.

Best display of plants in flower, distinct from other entries, J. Pegler, London, \$10; 2nd do, J. Fleming, Toronto, \$6; 3rd do, J. M. Hirschfelder, Toronto, \$4.

Best collection of native plants, dried and named, Miss Kate Crooks, Hamilton, \$5; 2nd do, Mrs. C. P. Trail, Otonabee, \$3; 3rd do, Thos. Waterhouse, London, \$2.

Best specimen of useful and ornamental rustic work for the garden, H. Girouard, Hamilton, \$4.

EXTRA PRIZES.—John R. Flock, London, ivy plant, \$1. J. M. Hirschfelder, Toronto, 3 foliage plants, \$2. James Westland, Westminster, China Pinks, \$1. Mrs. T. Partridge, London, zinnias, \$1. John Pegler, London, collection cactus and aloes, \$5. Geo. Haigh, London, French marigolds, \$1; do, do, gladiolus, \$1. Mrs. Beecher, London, zinnias, \$1. Bruce & Murray, Hamilton, collection of gladiolus, \$2; 6 spikes tritonias, \$1. Ellwanger & Barry, Rochester, N. Y., collection of natural flowers, \$3.

REMARKS BY JUDGES.—The judges in closing their report upon plants and flowers, are much pleased with the exhibition in this department, and have much pleasure in strongly recommending a collection of flowers and fruit sent in by Ellwanger & Barry, of Rochester, N. Y., for a premium and diploma.

CLASS XXXV.—DAIRY PRODUCTS, &c.— (162 Entries.)

Judges—Messrs. Oliver Blake, Simcoe; Sam. Lake, Newburgh; Benjamin Jackson, Haldimand township; and Joseph Ross, York township.

Best fi kin of butter, in shipping order, not

less than 56 lbs., T. Shore, London, \$12; 2nd do, M. McArthur, Lobo, \$10; 3rd do, A. Dolsen, Chatham, \$8; 4th do, G. Patrick, London, \$6.

Best butter, not less than 28 lbs, in firkins, crocks, or tubs, P. Scott, North Easthope, \$8; 2nd do, Mrs. J. Allen, Ingersoll, \$6; 3rd do, William Tolton, Eramosa, \$4; 4th do, M. McArthur, Lobo, \$2.

Best cheese, not less than 30 lbs, H. Ranney, Salford, \$10; 2nd do, J. Paton, Amherstburg, \$8; 3rd do, J. Harris, Ingersoll, \$6; 4th do, H. Ranney, Salford, \$4.

Best two stilton cheese, not less than 14lbs. each, H. Ranney, Salford, \$10; 2nd do, H. K. Parsons, Guelph, \$8; 3rd do, do, \$6; 4th do, J. Harris, Ingersoll, \$4.

Best honey in the comb, not less than 10 lbs, John McKee, Norwich, \$3; 2nd do, H. McKee, Norwich, \$2; 3rd do, J. E. Couse, Yarmouth, \$1 50; 4th do, C. Robinson, Burford, Transactions.

Best jar of clear honey, G. Miller, Markham, \$4; 2nd do, G. G. Ward, Cashmere, \$2; 3rd do, H. McKee, Norwich, \$1 50; 4th do, Jno. McKee, Norwich, Transactions.

EXTRA PRIZES.—Hiram Ranney, Salford, De ham, 6 pine-apple cheeses, \$3. James Harris, Ingersoll, 4 pine apple cheeses, \$2. John P. Fuller, London, hive of bees, \$3; do, do, beeswax, \$1.

CLASS XXXVI.—AGRICULTURAL IMPLEMENTS,
WORKED BY HORSE OR OTHER POWER.—
(164 Entries.)

Judges—Alex. Shaw, Toronto; Jacob Bingham, Burford; John Tilt, Toronto township; Nathan Choate, Port Hope.

Best iron plow, Wm. Mahaffy, Brampton, diploma and \$12; 2nd do, John Gray, Egmondville, \$8; 3rd do, Geo. Morley, Thorold, \$4.

Best wooden plow, Wm. Mahaffy, Brampton, diploma and \$12; 2nd do, Jas. Walker, Westminster, \$8; 3rd do, George Morley, Thorold, \$4.

Best subsoil plow, George Morley, Thorold, diploma and \$12.

Best double mould plow, George Morley, Thorold, \$10; 2nd do, James Walker, Westminster, \$6.

Best pair of harrows, H. Johnston, McGillivray \$6; 2nd do, Thos. Stacey, St. Thomas, \$4; 3rd do, Andrew Boyle, Eden Mills, \$2.

Best horse-power thrasher and separator, Ganson Waterous & Co., Brantford, diploma

and \$20; 2nd do, J. Watson, Ayr, \$12; 3rd do, Joseph Hall, Oshawa, \$8.

Best grain drill, J. Watson, Ayr, diploma and \$12; 2nd do, Maxwell & Connell, Paris, \$8; 3rd do, Pavey & White, London, \$4.

Best straw cutter, Maxwell & Connell, Paris, \$5; 2nd do, Pavey & White, London, \$4; 3rd do, Hugh McLaren, Lowville, \$3.

Best smut machine, J. Garithore, Dundas, \$6.

Best grain cracker, A. Harris, Beamsville, \$8.

Best clover cleaning machine, A. Harris, Beamsville, \$12; 2nd do, do, \$8.

Best cider mill and press, Sampson & Son, St. Catharines, \$12; 2nd do, do, \$8.

Best two-horse wagon, John Sheriff, Chatham, \$12.

Best horse-rake, A. Harris, Beamsville, \$4; 2nd do, Murray Anderson, London, \$3; 3rd do, John Pacey, London, \$2.

Best wooden roller, A. C. Bruce, Glenora, \$10.

Best stump extractor, J. Thomas, Hamilton, \$8; 2nd do, do, do, \$4.

Best reaping machine, Bell & Lawrason, St. George. Brant, diploma and \$20; 2nd do, Collins, & Co., Guelph, \$12; 3rd do, Isaac Modeland, Brampton, \$8.

Best mowing machine, J. W. & R. Green, Waterford, \$12.

Best combined mower and reaper, Bell & Lawrason, St. George, diploma and \$20; 2nd do, Billington & Forsyth, Dundas, \$12; 3rd do, McArthur & Co., Plattsville, \$8.

Best potato digger, Murray Anderson, London, \$3; 2nd do, James Beattie, Lambeth, \$2.

Best field or two horse cultivator, Henry Collard, Gananoque, \$12; 2nd do, A. C. Bruce, Glenora, \$8; 3rd do, W. Alexander, Falkirk, \$4.

Best horse-hoe, or single horse cultivator, Pavey & White, London, \$4; 2nd do, Orin Avery, Tilsonburgh, \$4.

Best improved liquid manure drill, for drilling two or more rows of liquid, with turnips, mangels, &c., either on the ridge or flat, Emanuel Rockey, Union, \$25.

EXTRA PRIZES.—Wm. T. Goff, Lambeth, clod-crusher, \$2. S. W. Ryckman, Bridge-town, corn sheller, \$2. John Elliott, London, gang plow, \$2. Robert Robson, London, double shear trench plow, \$2. Hugh McLaren, Lowville, combined cultivator and grain drill, \$6. J. D. S. Nixon, Ingersoll, drag saw, \$2. George Jackson, London, corn sheller, \$1. John Thomas, Hamilton,

drill for drilling rock, diploma and \$5; do, do, universal joint for running angles without bevel gearing, \$2. G. Huntingdon, Norwichville, gang plow and sower combined, \$6, James Hamilton, Peterboro, model of combined grain drill and cultivator, \$1. Emanuel Rockey, Union, broad cast sower, \$4. Robert Robson London, field leveller, \$1. E. Leonard, London, boring machine, \$2; do, drag saw, \$4. James Norman, St. Thomas, model pea-thrasher and separator \$2.

CLASS XXXVII.—AGRICULTURAL TOOLS AND IMPLEMENTS, CHIEFLY FOR HAND USE.—
(109 Entries.)

Judges.—Messrs. Stephen Wade, East Elgin; Donald McFarlane, Etobicoke; and John Ker, Drummondville.

Best fanning mill, O. W. Everett, Dundas, diploma and \$6; 2nd do, John Adam, Chatham, \$4; 3rd do, Stewart & Tapp, London, \$2.

Best seed drill or barrow, Wm Walker, London, \$4; 2nd do, do, do, \$3; 3rd do, E. Rocky, Union, \$2; extra do, E. Rockey, Union, \$2.

Best straw cutter, H. McLaren, Lowville, \$5; 2nd do, M. Anderson, London, \$4; 3rd do, G. White, London, \$3.

Best machine for cutting roots for stock, Maxwell & Connel, Paris, \$6; 2nd do, J. S. Nixon, Ingersoll, \$4; 3rd do, Peter Forsyth, St. Marys, \$2.

Best cheese press, G. Huntingdon, Norwichville, \$8; 2nd do, Andrew Bowd, Eden Mills, \$6.

Best churn, Chas. R. Parkes, Toronto, \$3; 2nd do, Silas Walter, Princeton, \$2; 2nd do, James Armstrong, Bathurst, \$1.

Best thistle extractor, Arch. Frank, Cheltenham, 3rd prize, vol. Transactions.

Best farm gate, M. S. Depew, Paris, \$3.

Best specimen of farm fence, of wood, James Gardiner, Cashmere, \$3.

Best half-dozen hay rakes, Thos. Bryan, London, \$3; 2nd do, do, do, \$2; 3rd do, W. Tait & Co., Duart, \$1.

Best half-dozen manure forks, A. S. Whiting & Co., Oshawa, \$3; 2nd do, do, do, \$2; 3rd do, do, do, \$1.

Best half dozen hay forks, A. S. Whiting & Co., Oshawa, \$3; 2nd do, do, do, \$2; 3rd do, do, do, \$1.

Best half dozed sythe snaiths, W. Tait & Co., Duart, \$3; 2nd do, A. S. Whiting & Co., Oshawa, \$2; 3rd do, do, do, \$1.

Best ox-yoke and bows, J. Nixon, London, \$2; 2nd do, George Nixon, London, \$1; 3rd do, John Nixon, London, Trans.

Best grain cradle, Thos. Brian, London, \$2; 2nd do, John Lighthart, Acton, \$1.

Best half-dozen steel hoes, A. S. Whiting & Co., Oshawa, \$3; 2nd do, do, \$2; 3rd do, do, \$1.

Best half-dozen grass scythes, A. S. Whiting & Co., Oshawa, \$3; 2nd do, do, \$2; 3rd do, do, \$1.

Best half-dozen cradle scythes, A. S. Whiting & Co., Oshawa, \$3; 2nd do, do, \$2; 3rd do, do, \$1.

Best implement for harvesting peas, Murray Anderson, London, 2nd prize, \$5.

EXTRA PRIZES.—A. S. Whiting & Co., Oshawa, collection of agricultural and gardening tools, \$5. E. Cutler Coldstream, hand weaving loom, \$2. David Culer, Amiens, feeding trough for cattle, 1\$; do, do, sheep rack, \$1. Thomas Bryan, London, subble rake, \$1. Alanson Harris, Beamsville, wagon rack, \$2; A. Murdock, Newcastle, large hand rake, \$1. Robert Kerr, Bridgeport, broadcast grain and seed sower, \$2. H. Wyatt, Aurora, model of rotary tooth harrows, \$1.

CLASS XXXVIII.—CATTLE FOOD—MANURES, AND MISCELLANEOUS.—(13 Entries.)

Judges.—Messrs. Alexander Bartlett, Windsor; and Henry Wright, Amherstburg.

Best specimen ground bones for manure, P. R. Lamb, Toronto, \$4; 2nd do, J. Gaitshore, Dundas, \$2.

Best specimen other artificial manure, Alex. Taylor, York, Grand River, gypsum, \$4.

EXTRA.—Alex. Taylor, York, Grand River, specimens of gypsum, unground, \$2.

CLASS XXXIX.—FOREIGN AGRICULTURAL IMPLEMENTS.—(17 Entries.)

Judges.—Messrs. Alexander Bartlett and Henry Wright.

Horse pitch fork, Stephen Bullock, Bradford Co., Pennsylvania, diploma.

Plough, of English manufacture, H. Chisholm, London, certificate.

Combined reaper and mower of United States manufacture, M. Delong & Co., Belleville, certificate.

Iron plough, of English manufacture, Rich. Gibson, London, certificate.

Comb ned thrashing and cleaning clover machine, Birdsell & Co., Monroe Co., N. Y., diploma.

A Kirby mowing machine, and combined mower and reaper, Edw. Braman, Buffalo, N. Y., diploma.

Six clocks (calendars), A. Heggie, Ithaca, N. Y., diploma.

Knitting machine, U. S. patent, S. S. Martin, Toronto, diploma.

Artificial leg, Douglas Bly, Rochester, N. Y., diploma.

Scientific churn, D. W. Seely, Auburn, N. Y., diploma.

REMARKS OF JUDGES.—The judges in the above class would beg to bring under the notice of the executive committee the following articles as particularly deserving of their attention, viz: No. 1, a horse pitch fork, (Stephen Bullock, Pennsylvania). Nos. 6 and 7, English iron ploughs, (exhibited by R. Gibson, London). No. 8, a clover thrashing and hulling machine, (Birdsell & Co., N. Y.) being the best on the ground, and of great advantage to the farmer; the judges saw it perform its work with great efficiency. The Kirby-mower, (Ed. Braman, Buffalo, N. Y.) they regard as worthy of a diploma. No. 15, an artificial leg, (Douglas Bly, Rochester, N. Y.) and No. 4, a knitting machine, (exhibited by S. S. Martin, Toronto,) are both very ingenious, and recommended for diplomas. No. 17, a scientific churn, (D. W. Seely, Auburn, N. Y.) will make butter in two minutes and a half, which the judges had verified by the churning of a quantity of skim milk in that short space of time. All which is respectfully submitted.

DEPARTMENT SECOND.

Arts, Manufactures, Ladies' Work, &c.

CLASS XL.—ARCHITECTURE AND MISCELLANEOUS USEFUL AND DECORATIVE ARTS.—
(91 Entries.)

Judges—Messrs. J. Shier, Whitby; G. Bickle, Dundas; and Henry Langley, Toronto.

Best architectural drawing, Matt. Sheard, Toronto, \$6.

Best architectural drawing in perspective, Matthew Sheard, Toronto, \$6.

Best composition drawing of natural foliage (Canadian), applicable to architectural details, John Moser, Toronto, \$7; 2nd do, do, \$5.

Best collection of mathematical, philosophi-

cal and surveyor's instruments, A. F. Potter, Toronto, \$10.

Best specimens stained glass, McCausland & Horwood, Toronto, \$6.

Best carving in wood, Phenix Philips, Toronto, \$6; 2nd do, James Peterkin, Toronto, \$4.

Best carving in stone, N. L. Steiner, Toronto, \$6; 2nd do, J. W. Smith, London, \$4.

Best decorative house painting, Jno. Moser, Toronto, \$5; 2nd do, John Moser, Toronto, \$3.

Best engraving on wood, with proof, John E. Ellis, Toronto, \$5; 2nd do, Thomas Whalen, Toronto, \$3.

Best geometrical drawing of engine or millwright work, colored, F. G. Beckett & Co., Hamilton, 2nd prize, \$3.

Best heraldic painting, David Hamel, London, \$5; 2nd do, Mrs. Caroline Walker, St. Thomas, \$3.

Best lithographic drawing, on Canadian stone, W. Anderson, London, \$5.

Best modelling in plaster, W. Ward, London, \$6.

Best monumental tomb or headstone, J. W. Smyth, London, \$6; 2nd do, J. W. Smyth, London, \$4.

Best painting, in imitation of wood and marble, T. P. Knaggs, London, \$5; 2nd do, McCausland & Horwood, Toronto, \$3; highly commended, Colerick & Stephens, Goderich.

Best picture frame, ornamented gilt, R. J. Sedden, London, \$5; 2nd do, do, \$3.

Best picture frame, plain gilt, R. J. Sedden, London, \$4; 2nd do, do, \$2.

Best seal engraving, with wax impressions, T. Wheeler, Toronto, \$6.

Best silvermith's work, C. H. VanNorman, Hamilton, \$5; 2nd do, do, \$3.

EXTRA PRIZES.—John R. Peel, London, sculptured head in marble, diploma and \$5. F. Tisdale, Adelaide, two picture frames, \$3. R. J. Sedden, London, imitation porcelain vase, \$3. John Phillips, London, specimens of lithographic engraving, \$3. Alex. Taylor, York, Grand River, gypsum for stucco work, \$4. G. W. Woodsworth & Co., Brantford, double water drawer, and single do, \$4. Jas. Deadman, London, painted work table, \$4; do, do, coat of arms on glass, \$4. G. R. & G. M. Truaine, Toronto specimens of maps engraved on stone, \$5. S. Damerall, London, inkstand, mosaic work, \$3. W. R. Orr, Toronto, engraved copy slips of an improved system of ladies' writing, diploma.

CLASS XII.—CABINET WARE AND OTHER WOODEN MANUFACTURES.—(86 Entries.)

Judges—Messrs. William Watt, Brantford; and David A. Robertson, St. Mary's.

Best set bed room furniture, S. P. Leake, London, \$3.

Best centre table, G. Fischer, Morriston, \$6; 2nd do, H. Coombs, London, \$4.

Best drawing room sofa, H. Coombs, London, \$7.

Best set drawing room chairs, H. Coombs, London, \$7.

Best set drawing room furniture, H. Coombs, London, \$8; 2nd do, Mills & Anundsen, London, \$6.

Best six corn brooms, John Darling, London, \$2.

Best cooper's work, C. Lewis, Salford, \$3; 2nd do, J. Elliott, Guelph, \$2.

Best curled hair, 10 lbs., H. Coombs, London, \$3; 2nd do, S. Carr, Yorkville, \$2.

Best door, four or six panelled, Grant & Thompson, Ingersoll, \$3.

Best three flour barrels, C. Lewis, Salford, \$3; 2nd do, Robert Abbs, London, \$2.

Best collection handles for tools, for carpenters, blacksmiths, gunsmiths, watchmakers, &c., J. J. Beatty, Credit Mills, Streetsville, \$8.

Best specimen joiner's work, Grant and Thompson, Ingersoll, \$4.

Best machine wrought moulding, 100 feet, C. Heise, Preston, \$3.

Best machine-wrought flooring, 100 feet, McLean & Clark, Morriston, \$3; 2nd do, do, \$2.

Best shingles, two bundles, split, George Nixon, London, \$3.

Best specimens turning in wood, J. J. Beatty, Credit Mills, Streetsville, \$5.

Best veneers from Canadian woods, Clement & Purdy, Newbury, \$5; 2nd do, H. Coombs, London, \$3.

Best wash-tubs and wooden pails, three of each, C. Lewis, Salford, \$3; 2nd do, do, \$2.

Best six wash-boards zinc covered, W. Tait & Co., Duart, \$2; 2nd do, do, \$1.

EXTRA PRIZES.—Franz Kistenmacher, Morriston, ladies' writing table, \$5. Coridon Lewis, Salford, six axe handles, \$1. J. J. Beatty, Streetsville, eccentric turning in wood and ivory, \$2. Wm. Tait, & Co., Duart, half-dozen broom handles, \$1; do, half-dozen mop handles, \$1. Joseph Brickley, Orwell, self-revolving hand loom, \$2. Charles Bennett,

London, Lady's work table, \$2. Henry Coombs, London, half-dozen Windsor chairs, \$1. George Bentley, Clinton, ladies' work-box \$2. Mills & Anundsen, London, gentlemen's toilet-stand, \$2; do, drawing room fire screen, \$1. Thos. McIlroy, Brampton, invalid bedstead, \$5. Phillip Rapp, Whitby, specimen varnishing and poli-hing piano tops, \$1; do, flowing set of carved piano legs, \$2. John Powers, Stratford, washing machine, \$1. S. E. Lawrence, Granby, washing and wringing machine, \$2. Peter Welsh, Montreal, turning in ivory, \$1. Wm. Thomas, Port Hope, self-protecting escritoir, diploma. Thomas Thorpe, Guelph, model of patented removable window sash, \$3.

CLASS XIII.—CARRIAGES AND SLEIGHS, AND PARTS THEREOF.—(53 Entries.)

Judges.—Messrs James Kay, Galt; A. E. Munson, Cobourg; and James E. McDonald, Aylmer.

Best axle, wrought iron, W. Chambers, London, \$3.

Best six bent shafts, R. McKinley & Co., St. Catharines, \$3; 2nd do, A. Esson, London, \$2.

Best buggy, single seated, H. Dart, London, \$5; 2nd do, W. & J. McBride, London, \$3.

Best pleasure carriage, two horse, J. Campbell, London, \$10; 2nd do, W. & F. Platt, London, \$6.

Best pleasure carriage, one horse, W. & J. McBride, London, \$7; 2nd do, J. Campbell, London, \$5.

Best two pair carriage hubs, E. Rockey, Union, Elgin County, \$3; 2nd do A. Esson, London, \$2.

Best two pairs of carriage rims or felloes, W. R. McKinley & Co., St. Catharines, \$3; 2nd do, do, \$2.

Best one dozen machine-made carriage spokes, W. R. McKinley & Co., St. Catharines, \$3.

Best pleasure sleigh, two horse, J. Campbell, London, \$7.

Best pleasure sleigh, one horse, W. & J. McBride, London, \$6.

Best set steel carriage springs, Isaac Briggs, Gananoque, \$3.

Best pair of carriage wheels, unpainted, W. & J. McBride, London, \$4; 2nd do, J. Campbell, London, \$3.

EXTRAS—Isaac Briggs, Gananoque, railway car spring, \$3. John Campbell, London, dog cart, \$4. A. Esson, London, buggy spin-

dles \$1; buggy seat arms, \$1; bent stuff for pleasure sleigh, \$1; variety of bent stuff for carriages, &c., \$1 50. R. McKinley & Co. St. Catharines, two sets bent buggy top bows, \$1, W. & J. McBride, London, road wagon, \$4.

CLASS XLIII.—CHEMICAL MANUFACTURES AND PREPARATIONS.—(23 Entries.)

Judges—H. Y. Hind, Toronto; N. Higginbotham, Guelph, and Duncan McMillan, Dundas.

Best blacking for shoes, P. R. Lamb, Toronto, \$2.

Best glue, 14 lbs, S. Carr, Yorkville, \$3; 2nd do, P. R. Lamb, Toronto, \$2, 3rd S. Carr, Yorkville, \$1.

Best medicinal herbs, roots and plants, native growth, W. Saunders, London, \$7.

EXTRAS.—W. Saunders, London, pharmaceutical preparations, \$4. James John Giles, London, friction matches, \$2.

REMARKS.—In reference to medical herbs and roots, the Judges are of opinion that a specimen of the entire plant should accompany each specimen of leaf, root or stalk, as the case might be. The collection of medicinal plants is excellent, and the subject is one which claims greater attention than it has hitherto received.

CLASS XLIV.—FINE ARTS.

Professional list—Oil.

JUDGES—Messrs. H. W. Peterson, Guelph; William Hay, Toronto; G. S. Daintry, Cobourg; and W. M. Wilson, Simcoe.

Best animals grouped or single, W. N. Cresswell, Goderich, \$10; 2nd do, R. Whale, Burford, \$6.

Best historical painting, Canadian subject, W. N. Cresswell, Goderich, \$10.

Best landscape, Canadian subject, R. Whale, Burford, \$10; 2nd do, Miss Gibbon, St. Mary's, \$6.

Best marine painting, Canadian subject, W. N. Cresswell, Goderich, \$10; 2nd do, do.

Best original composition, any other subject, Miss Gibbon, St. Mary's, \$10; 2nd do, John Griffith, London, \$6.

Best portrait, R. Whale, Burford, \$8; 2nd do, do, \$5.

In Water Colors.

Best flowers, grouped or single, Miss Gibbon, St. Mary's, \$7; 2nd do, Capt. Caddy, Hamilton, \$3.

Best landscape, Canadian subject, Capt. Caddy, Hamilton, \$7; 2nd do, do, \$5.

Best marine view, Canadian subject, Capt. Caddy, Hamilton, \$7; 2nd do, C. S. Millard, Toronto, \$5.

Best other original composition, Capt. Caddy, Hamilton, \$7; 2nd do, A. J. Cox, Hamilton, \$5.

Pencil, Crayon, &c.

Best crayon, colored, Mrs. V. Cronyn, London, \$5; 2nd do, E. H. Longman, do, \$3.

Best crayon, plain, Miss Gibbon, St. Mary's, \$5; 2nd do, Miss A. Bushell, London, \$3.

Best pencil drawing, Miss Gibbon, St. Mary's, \$5; 2nd do, C. S. Millard, Toronto, \$3; Extra, Mrs. S. A. Secord, Acton west, \$3.

Best pen and ink sketch, J. G. Horne, Toronto, \$5; 2nd do, Mrs. C. Walker, St. Thomas, \$3.

Best portrait in pencil, J. Wanless, Newbury, \$5.

Best portrait in crayon, J. W. Bridgeman, Smithville, \$5.

Amateur List—Oil.

Best animals, grouped or single, J. H. Whale, Burford, \$7; 2nd do, E. C. Gourlay, Hamilton, \$5.

Best historical painting, Canadian subject, J. H. Whale, Burford, \$7.

Best landscape, Canadian subject, J. H. Whale, Burford, \$7; 2nd do, do, \$5.

Best marine painting, Canadian subject, J. H. Whale, Burford, \$7; 2nd do, do, do, \$5.

Best other original composition, J. H. Whale, Burford, \$7; 2nd do, J. Cooper, London, \$5.

Best portrait, J. Ashton, London, \$6; 2nd do, Miss Beddome, London, \$4.

In Water Colors.

Best animals, grouped or single, W. Ambrose, Hamilton, \$6; 2nd do, Mrs. J. McFarlane, Thorold, \$4.

Best flowers grouped or single, J. Griffith, London, \$4; 2nd do, Miss Gemmell, London, \$3.

Best landscape, Canadian subject, W. Ambrose, Hamilton, \$6; 2nd do, Mrs. C. Walker, St. Thomas, \$4.

Best marine view, Canadian subject, W. Ambrose, Hamilton, \$6.

Best miniature portrait, J. Griffith, London, \$4.

Best other original composition, C. D. Bettridge, Woodstock, \$6; 2nd do, W. Ambrose, Hamilton, \$4.

Pencil, Crayon, &c.

Best crayon, colored, Miss Maughan, Toronto, \$4; 2nd do, Miss Hope, London, \$3.

Best crayon, plain, V. Briscoe, Toronto, \$4; 2nd do, Miss McCann, London, \$3.

Best pencil drawing, Miss Maughan, Toronto, \$4; 2nd do, V. Briscoe, Toronto, \$3.

Best pen and ink sketch, E. C. Goulay, Hamilton, \$4; 2nd do, W. Brookland, Thamesford, \$3.

Best portrait in pencil, J. Cameron, St. Mary's, \$4; 2nd do, A. McKintrick, London, \$3.

Best portrait in crayon, J. Cameron, St. Mary's, \$4; 2nd do, Miss McCann, London, \$3.

Photography.

Best collection of ambrotypes, James Egan, London, \$5; 2nd do, S. Smith, London, \$3.

Best Photograph portraits, colored, J. Egan, London, \$7; 2nd do, Carson, Bros., Toronto, \$5.

Best photograph portraits, plain, James Hay, Toronto, \$6; 2nd do, Carson Bros., do., \$4.

EXTRAS.—James Hay, Toronto, Case cartes des visites, \$3. S. M. Logan, London, penmanship, commended, A. B. Scott, Brampton, penmanship commended, Isaac Bates' jr., Hamilton, penmanship, commended, Miss Maughan, Toronto, two water color drawings, copies, \$4. Carson Bros., Toronto, collection photographs retouched in India Ink, commended; do. do, ivory types, \$3. Chas. Hunt, London, steel engravings, commended, W. McLeod, Ingersoll, ornamental penmanship, commended, James Egan, London, photographs retouched in India ink, \$3.

REMARKS.—In presenting our Report, we have much pleasure in congratulating the Association upon the improvement in Art evinced at the present exhibition, many of the pictures being most creditable to the artists. We would, however, suggest that if a little more care were taken in arranging the subjects according to their respective sections, much time would be saved, and perhaps more correct decisions might be arrived at.

CLASS XLV.—FURS AND WEARING APPAREL.—
(24 Entries.)

Judges.—Messrs. J. McQuaig, St. Mary's; and Samuel Brasher, Vienna.

Best business coat, John W. Eccleston, London \$4.

Best fur cap, Philip McCann, London, \$3; 2nd do, Henry Ferdinand, Waterloo, \$2.

Best fur gloves, mits, or gauntlets, Philip McCann, London, \$3.

Best fur sleigh robe, Philip McCann, London, \$4; 2nd do, Henry Ferdinand, Waterloo, \$3.

Best gloves and mits, buckskin, E. Panton, \$2; 2nd do, Henry Ferdinand, Waterloo, \$2.

Best gloves and mits of any other leather, E. Panton, London, \$2.

Best silk hat, E. Beltz, London, \$3; 2nd do, E. Beltz, London, \$2.

Best suit of clothes of Canadian cloth, T. G. Furnival, Hamilton, \$5.

EXTRAS.—Phillip McCann, London, set of ladies' mink furs, \$5; E. Beltz, London, set of ladies mink furs, \$2; do, lot of black cloth caps, \$1.

CLASS XLVI.—GROCERIES AND PROVISIONS.—
(124 Entries.)

Judges.—Messrs. D. McLaren, Mitchell; John Arkell, Aylmer; and James McMonies, jun., Waterdown.

Best barley, pot and pearl, Alexander Mitchell, York, \$3; 2nd do, Alexander Mitchell, do, \$2.

Best assortment biscuits, W. Christie, Yorkville, \$4; 5nd do, John Nasmith, Toronto, \$3.

Best lot bottled fruits, Mrs. Jesse Thomson, Yorkville, \$3.

Best lot bottled pickles, W. T. Erith, London, \$3; 2nd do, S. D. Hopkins, Stoney Creek, \$2.

Best buckwheat flour, R. Somers, Byron, \$3.

Best Cayenne pepper, from capsicums, grown in the Province, H. Girouard, Hamilton, \$2.

Best chickory, 20 lbs, George Pears, Yorkville, \$3.

Best assortment confectionery, Henry Starr, Brockville, \$4; 2nd do, H. Fysh, London, \$2.

Best jar Mustard, H. Girouard, Hamilton, \$3.

Best oatmeal, James Wilson, Eden Mills, \$3; 2nd do, James Wilson, do, \$2.

Best six kinds preserves, Mrs. Caroline Dorman, London, \$3; 2nd do, Mrs. Jessie Thomson, Yorkville, \$2.

Best can preserved meats, Mrs. Jesse Thomson, Yorkville, \$3.

Best sauces for table use, Mrs. Wm. Lawrason, London, \$3; 2nd do, Mrs. Jessie Thomson, Yorkville, \$2.

Best starch, 12lbs of corn, E. A. McNaughton, Newcastle, \$2; 2nd do, do, do, \$1.

Best starch, 12 lbs of potato, E. A. McNaughton, Newcastle, \$2; 2nd do, George Colcleugh, Ayr, \$1.

Best sugar, 20 lbs maple, Henry Sharon, Frome, \$3; 2nd do, Wm. Peers, Woodstock, \$2.

Best sugar, one loaf of refined, D. Tiffany, Delaware, \$3.

Best 14 lbs, Canadian manufactured tobacco, Geo. E. Tuckett, London, \$3; 2nd do, do, \$2.

Best wheat flour, Charles Hunt, London, \$4; 2nd do, W. Lundie, Carradoc, \$3.

EXTRAS.—E. A. McNaughton, Newcastle, arrow root, \$2. H. Fish, London, bride's cake, \$2. David Wilson, Chatham, two sides bacon and two hams, \$2. John Bobier, Tyroconnell, one gallon maple syrup, \$1. Geo. E. Tuckett, London, fifteen boxes Canadian manufactured cigars, \$2. Mrs. Caroline Dorman, London, maple molasses, \$1. D Gardner, St. Thomas, fancy breads, \$1. W. Saunders, London, fruit essences and syrups, \$3. W. T. Erith, London, assortment of currant wine, raspberry wine and ginger wine, \$2. R. A. Pilgrim & Co., Hamilton, assortment of ginger wine, champagne cider, elderberry wine, soda water and sarsaparilla, \$3. John Symmonds, London, bacon, sugar cured hams, and Bologna sausages, \$4. Mrs. Charles, Yorkville, cherry wine, black currant wine, raspberry brandy, raspberry vinegar, and black currant vinegar, \$2. Mrs. Jesse Thomson, Yorkville, currant cordial, \$1. Charles Arnold Paris, rhubarb and grape wines, \$2. C. Maine, London, English filberts, \$1.

CLASS XLVII.—INDIAN WORK.—(30 Entries.)

JUDGES.—Messrs. S. McCuaig, St. Mary's; and Samuel Brasher, Vienna.

Best bark canoe, C. W. Hodgetts, London, \$2; 2nd do, J. F. Jones, Brantford, \$1.

Best clothes basket, J. F. Jones, Brantford, 50c.

Best fruit basket, J. F. Jones, Brantford, \$1; 2nd do, do, do, 50c.

Best hand basket, J. F. Jones, Brantford, 50c.

Best Indian cradle, J. F. Jones, Brantford, 50c.

Best two paddles, J. F. Jones, Brantford, \$1.

Best pipe of peace, J. F. Jones, Brantford, \$2.

Best pair snow shoes, common size, J. F. Jones, Brantford, 50c.

Best pair snow shoes, small size, C. W. Hodgetts, London, 50c.

Best tobacco pouch, J. F. Jones, Brantford, 50c.

EXTRAS.—John R. Flock, London, case of Indian and other curiosities, \$1 50. J. F. Jones, Brantford, collection of articles of Indian workmanship, \$5 50.

NOTE. Several of the prizes in the above class are reduced from the amount offered in the list, the Judges considering the articles of trifling value, and not deserving of the amounts offered.

XLVIII.—LADIES' WORK.—(487 Entries.)

JUDGES—Mrs. R. L. Denison, Toronto; Miss Helen Thomson, Carleton West; Mrs. J. M. Bennett, London; Mrs. Steiling, and Mrs. J. Beatty, London.

Best bonnet of Canadian straw, Mrs. W. H. Buttery, London, \$4.

Best braiding, Miss Eliz. Meyer, London, \$4; 2nd do, Mrs. Bates, Hamilton, \$3.

Best crochet work, Miss Bidwell, Colborne, \$4; 2nd do, A. Hardinge, London, \$3.

Best embroidery in Muslin, Miss Christie, Toronto, \$4; 2nd do, Miss Mitchell, London, \$3; do, Miss E. Green, London, commended.

Best embroidery in silk, Miss A. Gemnell, Brockton, \$4; 2nd do, Mrs. Pollard, Toronto, \$3.

Best embroidery in worsted, Mrs. Bernard, London, \$4; 2nd do, Mrs. John Wilson, London, \$3.

Best guipure work, Miss Bidwell, Colborne, \$4; 2nd do, do, do, \$3.

Best hat of Canadian Straw, Mrs. Moorehouse, Nilestown, \$4; 2nd do, Miss C. Dorman, London, \$3.

Best knitting, Mrs. Unwin, Toronto, \$4; 2nd do, Mrs. Wanless, London, \$3; do, Miss Ellen Hamilton, London, commended.

Best lace work, Miss Potter, London, \$4; 2nd do, Miss Bidwell, Colborne, \$3; do, Miss Bemar, Hamilton, commended.

Best three pairs woollen mittens, Mrs. Wm. Pearce, Wallacetown, \$3; 2nd do, Miss J. Allen, Ingersolt, \$2.

Best needle work, ornamental, Mrs. V.

Fisher, Glanworth, \$4; 2nd do, Mrs. Carey, Brantford, \$3.

Best fancy netting, Mrs. W. H. Buttery, London, \$4; 2nd do, Miss M. R. Hill, Kingston, \$3.

Best quilts in crochet, Miss Stedman, London, \$4; 2nd do, Miss Porte, do, \$3

Best quilts in knitting, Mrs. B. Foster, London, \$4; 2nd do, Miss Spettigue, London, \$3.

Best quilts in silk, Mrs. Egar, London, \$4; 2nd do, Mrs. Burt, Port Stanley, \$3.

Best quilts in piecework, Mrs. J. Barclay, London, \$4; 2nd do, Mrs. Jacob Morse, Fingal, \$3.

Best gentleman's shirt, Miss E. Robb, London, \$3; 2nd do, Mrs. Jas. White, Bronte, \$2.

Best three pairs woollen socks, Mrs. Wm. Pearce, Wallacetown, \$3; 2nd do, Mrs. Wm. Niles, Nilestown, \$2.

Best three pairs woollen stockings, Mrs. Hyman, London, \$3; 2nd do, Mrs. John Allen, Ingersoll, \$2.

Best tatting, Miss L. A. Fuller, Thorold, \$4; 2nd do, Miss Boys, Barrie, \$3.

Best wax fruit, Miss G. Stripp, Belmont, \$5.

Best wax flowers, Mrs. R. McKay, London, \$5; 2nd do, Miss Isabella S. Niven, Niagara, \$3.

Best worsted work, Miss R. Evans, London, \$4; 2nd do, Mrs. H. Chisholm, do, \$3; do, Mrs. Beddome, London, commended.

Best worsted work, (raised) Miss Ferguson, Pittsburgh, \$4; 2nd do, Mrs. Bates, Hamilton, \$3.

EXTRAS.—Mrs. E. D. Moore, Eglington, 2 pairs woollen stockings, \$1. Mrs. Urquhart, Komoka, pair ladies' elastic stays, \$4. Mrs. Nickerson, Port Dover, hair flowers, \$2. hearth rug, raised work, \$2. Mrs. W. Radcliffe, Adelaide, fancy cabinet, \$2. Miss Annie Bushell, London, paper flowers, \$1; Miss Beddome, London, crape embroidery, \$2. Mrs. Jacob Morse, Fingal, white cambric quilt, \$3. Mrs. James McQueen, Fingal, quilt, \$3. Mrs. E. Fairbank, Clifton, pair screens, \$2. Mrs. R. McKay, London, wax vase, \$3. Mrs. Hiram Lee, London, feather flowers, and frame, \$2. Mrs. W. Lawrason, London, worked table cloth, \$2. Mrs. Thomas, London, banner screen, \$2. Mrs. S. A. Secord, Acton West, ornamental sea moss work, \$2. Miss M. Carmichael, Fingal, hair wreath, \$2; fancy basket, \$1.

CLASS XLIX.—MACHINERY & MODELS, THERE-OF, CASTINGS AND TOOLS.—(73 Entries.)

Judges—Messrs. Robert Melvin, Guelph; James Davidson, Cobourg; and Richard Eaton, Hamilton.

Best cast wheel, spur or bevel, not less than 50 lbs., Blaikie & Clark, Sarnia, \$4; 2nd do, do, \$3.

Best castings for railways, railroad cars and locomotives, John Gartshore, Dundas, \$10; 2nd do, Thos. Fogg, Brantford, \$6.

Best steam engine, of one to four horse power, in operation on the ground, F. G. Beckett & Co., Hamilton, \$15.

Best metal pump, Edwin Rodgers, London, \$4; do. extra, Cameron & Harris, Kingsville, \$4.

Best six chopping axes, Jeremiah Hourigan, Dundas, \$3; 2nd do, Aitkin Wilkie, London, \$2.

Best assortment of edge tools, Jeremiah Hourigan, Dundas, \$12.

Best moulding planes and plows, Robt. McKechnie, Dundas, \$2.

EXTRAS.—Samuel Brown, London, Nos. 1 and 2 Singer's sewing machines, diploma. S. S. Martin, Toronto, sewing machines for manufacturers' use, diploma; family sewing machines, \$3. L. N. Soper, Woodstock, sewing machines for manufacturers' use, \$3. Ganson Waterous & Co., Brantford, eight horse power portable steam engine, diploma and \$15. W. H. Gibson, cracker and biscuit machine, office printing press and copying presses, coffee mill, sugar mill, and eyelet stamp, \$10 and diploma. David Bruce, Glenmorris, improved wood sawing machine, diploma and \$6. John Gartshore, Dundas, bran duster for mills, \$3. James Forrest, Ontario, self-acting railway cattle guard, diploma. P. T. Ware & Co., Toronto, model of sewing machine brake, diploma. Thomas Fogg, Brantford, model of patent ballasting car, diploma.

CLASS L.—METALWORK, PLAIN AND ORNAMENTAL, INCLUDING STOVES.—(82 Entries.)

Judges—Messrs. H. Sills, Vienna; and James Buchanan, Aylmer.

Best assortment of fire arms, Philo Soper, London, \$5; 2nd do, Edward Parkhurst, Stratford, \$3.

Best collection of cast steel files, Hays & Hart, Hamilton, \$3; 2nd do, W. L. Kinmond, Dundas, \$2.

Best fire proof office safe, J. & J. Taylor, Toronto, \$6, 2nd do, do, \$4.

Best set of horse shoes, William Mahaffy, Brampton, \$2; 2nd do, Wm. Weeks, Woodstock, \$1.

Best iron work from the hammer, James Berry, Wellington Square, \$5; 2nd do, Wm. Weeks, Woodstock, \$3.

Best iron work, ornamental cast, Robert Bland, London, \$5; 2nd do, Wm. Symons, London, \$3.

Best assortment of locks with work, E. Wilmot, Kingston, \$5; 2nd do, J. & J. Taylor, Toronto, \$3.

Best nails, 20 lbs. of pressed, Isaac Briggs, Gananoque, \$5.

Best nails, 20 lbs. of cut, Isaac Briggs, Gananoque, \$5; 2nd do, do, \$3.

Best assortment plumber's work, Edward Rogers, London, \$5.

Best assortment sheet brass work, John Kidd, Harpurhey, \$5.

Best assortment wire work, F. L. Field, Brantford, \$6.

Best cooking stove for wood, with furniture, Murray Anderson, London, \$5; 2nd do, George Jackson, London, \$3.

Best hall stove for wood, George Jackson, London, \$4.

Best parlor stove for wood, Murray Anderson, London, \$4; 2nd do, do, \$2.

EXTRAS.—Edward Rogers, London, baking apparatus, \$3; shampooing apparatus, \$2. Willet Ferris, Kingston, two pairs shaft snaps, \$1 50. A. E. Taylor, Brockville, improved door bell, \$4. Murray Anderson, London, cast iron stove teakettle, \$1. H. Berniers, Lotbiniere, C.E., fancy double stoves, diploma. John Gurd, London, rifle safety lock, \$8; pistol safety lock, \$5; threebarrelled rifle, \$4.

CLASS LI.—MISCELLANEOUS.—(15 Entries.)

Judges—Messrs. Andrew Patton, Vienna; Jno. Anderson, Dundas; and H. R. O'Reilly, Waterdown.

Best assortment of brushes, C. Boeck, jr., Toronto, \$5; 2nd do, do, \$3.

Best model of a sailing vessel, John Bulmer, Brantford, \$4; 2nd do, C. Leonard, Clifton, \$3.

EXTRAS.—Norris Black, Toronto, collection artificial limbs, \$4. Henry Paimer, London, improved voltaic battery, \$3. William Saunders, London, perfumery, \$4. John Condeall, Brockville, collection artificial limbs, \$4. R. E. Jackson, London, model eight oared gigs, \$4.

CLASS LII.—MUSICAL INSTRUMENTS— (31 Entries.)

Judges—Messrs. J. D. Humphreys, Toron'o; W. W. Carey, Bandmaster Canadian Rifles; and Prof. H. F. Chalaupka, Cobourg.

Best melodeon, S. R. Warren, Montreal, \$6 and diploma; 2nd do, Andrus Brothers, \$4 and diploma; do, R. S. Williams, Toronto, highly commended.

Best piano, square, Joseph T. Rainer, Whitby, \$10 and diploma; 2nd do, C. L. Thomas, Hamilton, \$6 and diploma.

Best violin, Coridon Lewis, Salford, \$3.

EXTRAS.—D. P. Merrill, Dawn, improved dulcimer, \$2. R. S. Williams, Toronto, home tanned calf drum heads, \$2; lot of musical instruments, \$5. Mills & Anundsen, London, wind harp, \$1.

REMARKS.—The judges have much pleasure in noticing the increased improvement made in pianos since last exhibition, in not only elaborate and finished workmanship, but superiority of tone. Those of Thomas & Co., of Hamilton, and Rainer, of Whitby, deserve especial attention, and reflect the very highest credit on both parties. But the judges respectfully give it as their opinion that the prizes are totally inadequate. It should be borne in mind that the instruments are difficult and costly in transportation, and moreover are always liable to more or less damage. They trust, therefore, they are not overstepping their duty in recommending that the amount in this department should be increased.

CLASS LIII.—NATURAL HISTORY.—(28 Entries.)

Judges—Messrs. W. N. Alger, Brantford; A. McCallum, Hamilton; and T. G. Cottell, Woodstock.

Best collection of stuffed birds of Canada, classified, with common and technical names attached, William Porte Ingersoll, \$7; 2nd do, Abel Hine, London, \$5.

Best collection of native fishes, stuffed or preserved in spirits, with common and technical names attached, S. W. Passmore, Toronto, \$7.

Best collection of native insects, classified, with common and technical names attached, W. Saunders, London, \$6; 2nd do, T. Reynolds, Hamilton, \$4.

Best collection of stuffed mammalia of Canada, classified, with common and technical names attached, S. W. Passmore, Toronto, \$7.

Best collection of native plants arranged in their natural families, and named, Miss Kate Woods, Hamilton, \$7; 2nd do, Mrs. W. Saunders, London, \$5.

Best collection of reptiles of Canada, stuffed, or preserved in spirits, and common and clinical names attached, S. W. Passmore, Toronto, \$7.

Best collection of stuffed birds and animals of any country, Abel Hine, London, \$7; 2nd do, V. Clonyn, London, \$5.

Best collection of the woods of Canada, boards two feet long, one side polished; also a portion of the tree cut in sections, showing the bark, James Gardner, Cashmere, \$7. EXTRAS.—V. A. Brown, London, fresh water aquarium, \$5. William Saunders, London, specimens living native fishes, named and classified, \$5.

CLASS LIV.—PAPER, PRINTING, BOOKBINDING, SPECIMENS AND THEIR MATERIALS AND TOOLS. (20 Entries.)

Printers—Messrs. E. R. Dewhurst, Brantford; E. C. Cleuch, Cobourg; and Dr. Barker, Kingston.

Best bookbinding, (blank-book), Charles Chapman, London, \$5.

Best bookbinding, (letterpress), Charles Chapman, London, \$5; 2nd do, do, \$3.

Best letterpress printing, plain, George Brown, Toronto, 2nd Prize, \$3.

Best letterpress printing, ornamental, George Brown, Toronto, \$5; 2nd do, Thomas Evans, London, \$3.

EXTRAS.—George Brown, Toronto, letterpress printing, cards, \$2; do, do, do, posters, \$2; do, do, do, various kinds, \$3. James A. Campbell, Georgetown, mailing machine, \$4; do, do, \$3.

CLASS LV.—POTTERY, BUILDING AND PAVING MATERIALS. (32 Entries.)

Builders—Messrs. David Barnett, Cobourg; James Whimster, St. Mary's; and Adam Oliver, Ingersoll.

Best 1 dozen hollow bricks for building purposes, Joseph Close, Woodstock, \$5; 2nd do, do, \$3.

Best filterer for water, Marlatt & Akrons, \$3; 2nd do, W. Lea, Toronto, \$2.

Best assortment pottery, Marlatt & Akrons, \$8, and diploma; 2nd do, John Richardson, Katesville, \$4.

Best sewerage pipes, stoneware, assortment sizes, W. & R. Campbell, Hamilton, \$6. 2nd do, F. P. Gould & Co., Brantford, \$4.

Best assortment stoneware, F. P. Gould & Co., Brantford, \$6; 2nd do, do, \$4.

Best slates for roofing, Benjamin Walton, Toronto, \$5.

EXTRAS.—Joseph Close, Woodstock, 1 dozen pressed bricks, \$2; 1 dozen stock bricks, \$2. Mrs. Townsley, Yorkville, assortment train tiles, \$2. Thus Nghtingale, Yorkville, assortment drain tiles, \$3; fancy bricks, \$2. John McGregor, London, common bricks, \$1.

CLASS LVI.—SADDLE, ENGINE HOSE AND TRUNK MAKERS' WORK, LEATHER, &c.—(61 Entries.)

Judges—Messrs. Duncan McKay, Brantford; Thos. Morrow, Cobourg; and William Davidson, Hamilton.

Best set of double harness, Robert Hay, Woodstock, \$6.

Best set of single carriage harness, A. Lochrey, London, \$5. 2nd do, do, \$3.

Best set of team harness, M. F. Moore & Son, St. Thomas, \$5.

Best six assorted carriage and team horse collars, Wm. Stewart, Toronto, \$3.

Best ladies' quilted saddle, Alex. Chalmers, Dundas, \$6; 2nd do, W. Stewart, Toronto, \$4.

Best gentlemen's plain shaftoe saddle, A. Lechrey, London, \$4; 2nd do, do, \$3.

Best assortment of whip thongs, Isaac McMichael, Hamilton, \$3.

Best harness, six pairs of wooden team, W. Tate & Co., Duart, \$3; 2nd do, Wm. Stewart, Toronto, \$2.

Best ladies' saddle tree, Wm. Stewart, Toronto, \$3.

Best gentlemen's saddle tree, Wm. Stewart, Toronto, \$3.

Leather—Best belt leather 30 lbs. Robt. Johnston, Fergus, \$3.

Best brown strap and bridle, one side of each, S. Morill, London, \$3 and diploma; 2nd do, Robert Johnston, Fergus, \$2.

Best carriage covers, two skins, Robt. Johnston, Fergus, \$3.

Best deer skin, dressed, Henry Ferdinand, Waterloo, \$2.

Best harness leather, two sides, McKay & Horner, London, \$3; 2nd do, W. Maklem & Chippawa, \$2.

Best lacing leather, one hide, Robert Johnston, Fergus, \$2.

Best patent leather for carriage or harness work, 20 feet, Robert Johnston, Fergus, \$5.

Best skirting for saddles, two sides, W. M.

Macklem, Chippawa, \$3; 2nd do, S. Morrill, London, \$2.

EXTRAS.—McKay & Horner, London, specimens leather, \$2. Robert Johnston, Fergus, patent wiuker leather, \$2; patent dash leather, \$2.

CLASS LVII—SHOE AND BOOT MAKERS' WORK, LEATHER, &c.—(89 Entries.)

Judges.—Messrs. William Wilson, Woodstock; David Abel, Simeoe; and William Begg, London.

Best B. moral boots, one pair of ladies', John McPherson, London, \$3; 2nd do, John Crabb, London, \$2.

Best assortment shoemaker's work, Thomas Webb, London, \$6; 2nd do, John Sims, Toronto, \$4.

Best kid slippers, one pair of ladies' John Sims, Toronto, \$2; 2nd do, Thomas Webb, London, \$1.

Best lace boots, one pair of gentlemen's sewed, John Crabb, London, \$3; 2nd do, Thomas Webb, London, \$2.

Best lace boots, one pair of gentlemen's pegged, John McPherson, London, \$3; 2nd do, Thomas Webb, London, \$1.

Best Wellington boots, one pair of gentlemen's sewed, Thos. Webb, London, \$4; 2nd do, John McPherson, London, \$3.

Best assortment of boots and shoemaker's lasts and trees, W. A. Young, Dundas, \$6; 2nd do, Selway & Ireland, Toronto, \$4.

Best assortment of shoe pegs, W. A. Young, Dundas, \$3; 2nd do, George Colcleugh, Ayr, \$2.

Leather.

Best two calf skins, E. W. Hyman, London, \$3; 2d do, Robert Johnston, Fergus, \$2.

Best two Morocco calf skins, Robert Johnston, Fergus, \$3; 2nd do, W. M. Macklem, Chippawa, \$2.

Best two skins cordovan, Robert Johnston, Fergus, \$3.

Best two sides kip skins, W. M. Macklem, Chippawa, \$3; 2nd do, McKay & Horner, London, \$2.

Best 20 feet patent leather for boots, J. Milburne & Co., Oakville, \$5; 2d do. do, \$3.

Best two sides sole leather, M. T. Moore & Son, St. Thomas, \$3; 2nd do, McKay & Horner, London, \$2.

Best two sides upper leather, E. W. Hyman, London, \$3; 2nd do, W. M. Macklem, Chippawa, \$2.

EXTRAS.—W. M. Macklem, Chippawa grain upper leather, \$2. Tye & Collins Whitby, grain upper leather, \$2; grain calf skin, \$3. W. A. Young, Dundas, crimping machine, \$3; boot polishing machine, \$2.

CLASS LVIII.—WOOLLEN, FLAX, AND COTTON GOODS.—(172 Entries.)

Judges.—Messrs. John Kirkland, Aylmer and Bernard Saunders, Toronto.

Best pair woollen blankets, Alexander Donsen, Chatham, \$6; 2nd do, John Woodhull Komoka, \$4.

Best 12 yards woollen carpet, John Campbell, Kilworth, \$6; 2nd do, James J. Farley, Cannifton, \$4.

Best 12 yards cloth, fulled, Wm. Pearce Wallacetown, \$6; 2nd do, John Deconvort Port Dover, \$4, 3rd do, Joseph J. Clutterbuck, Aylmer, \$2; do Wm. T. Smith, Lambeth commended.

Best two counterpanes, John Woodhull Komoka, \$5; 2nd do, Daniel Shaw, Belmont, \$3.

Best 28 lbs flax or hemp cordage, Alex. Main & Co., Hamilton, \$5, and Diploma.

Best assortment of cordage and twines from Canadian flax or hemp, Alex. McMain & Co. Hamilton, \$6, and Diploma.

Best pair woollen drawers, factory made, Stewart & Thomson, Guelph, \$4; 2nd do, J. G. Crane, Ancaster, \$2.

Best 12 yards flannel, not factory made, James J. Farley, Cannifton, \$5; 5nd do, Thomas Jackson, Arva, \$3.

Best 12 yards Kersey, for horse clothing, James J. Farley, Cannifton, 2nd prize, \$3.

Best 12 yards linen goods, John Pearce Tyronnell, \$5.

Best three woollen shawls, W. Pearce, Wallacetown, \$5.

Best 3 woollen shirts, factory made, Jasper G. Crane, Ancaster, \$5, and Diploma; 2nd do, Stewart & Thomson, Guelph, \$3.

Best 3 pairs woollen stockings, factory made, Jasper G. Crane, Ancaster, \$4; 2nd do, Stewart & Thomson, Guelph, \$2.

Best 3 pairs woollen socks, factory made, Jasper G. Crane, Ancaster, \$2; 2nd do, Stewart & Thompson, Guelph, \$1.

Best 3 pairs, mixed woollen and cotton stockings, factory made, Jasper G. Crane, Ancaster, \$4.

Best 12 yards winter tweed, W. Young Lees & Griffith, Byron, \$6; 2nd do, John Sugden, Thamesford, \$4.

Best 12 yards summer tweed, J. Clutten, Aylmer, \$6; 2nd do, do, do, \$4.

Best assortment woollen shawls, stockings, drawers, shirts and mitts, Jasper G. Crane, Ancaster, \$7, and Diploma.

Best 1 pound woollen yarn, white, Jasper G. Crane, Ancaster, \$2, and Diploma; 2nd do, do do, \$1.

Best 1 pound woollen yarn, dyed, Jasper G. Crane, Ancaster, \$3; 2nd do, Mrs. Hannah Morden, London, \$2.

EXTRAS.—Crossland & Brown, Dundas, cotton batting, Diploma; William Pearce, Wallacetown, 3 woollen plaids, \$2; 12 yards bird's eye linen, \$2; 12 yards bird's eye cotton, \$2. John Pearce, Tyrconnill, 3 woollen plaids, \$4.

CLASS LIV.—FOREIGN MANUFACTURES,—
(29 Entries.)

Judges.—Dr. Beatty, Cobourg; J. E. Pell, Toronto; Wm. Edwards, Toronto.

Articles admitted for exhibition only; but Certificates awarded to any articles of worth, or peculiar merit.

Germain & Co., Buffalo, N. Y., Pennsylvania Rock Oil, Diploma.

Hurlburt, U. S., stave sawing and dressing machine, Diploma.

AMATEUR MUSICAL BANDS.

(Four Bands in Competition.)

Judges.—G. W. Strathey, Mus. Doc., Toronto; Messrs. J. D. Humphreys, Toronto; and W. W. Carey, band-master R. C. R., London.

For the best Canadian Amateur band, consisting of not less than eight performers, of whom there shall not be more than two professional artists, Cobourg Brass Band, \$100; 2nd do, Guelph Union Brass band, \$75; 3rd do, London Artillery band, \$50.

Miscellaneous.

HOUSE SPARROWS—These, by far the ugliest and most impudent of all British birds, swarm in London and the suburbs at all seasons, and are said to number double the amount of human population within the sound of Bowbells. In the fall of the year, and throughout winter, they congregate about two hours before sunset, in the nearest trees, and there make such a din as drowns at times even the roar of London streets. It is from this cause that so many trees in the front grounds of suburban villas, which would otherwise be allowed to grow to their fair proportions, are mutilated and cut down to shapeless trunks. The sparrows in such myriads in a large tree are an intolerable nuisance, while their drippings poison the air. They are kept down in the pop-

lars at the end of the Terrace Gardens, by the Terrace cats, which promenade the top of the walls, and seal the throats after them, bagging them easily during their conclaves. When pairing time comes in the spring, the sparrows, in their eagerness to build, will fight like tigers for a site for a nest. Year after year, they build in the open mouth of the waste-pipe from the roof, and as regularly lose a portion of their brood by the sudden showers which wash them away. Their nests are most slovenly affairs, and generally fall to pieces by the time they are done with.—*Chambers' Journal.*

Editorial Notices, &c.

THE JOURNAL OF THE BOARD OF ARTS AND MANUFACTURES FOR UPPER CANADA, Toronto, December 1861.

The first volume of this valuable periodical, devoted to the cause of native industry, is completed, and comprises much to interest and instruct in the various branches of Arts and Manufactures. It is under the able editorship of Professor Hind, assisted by Mr. Edwards, the indefatigable Secretary of the Board of Arts and Manufactures. It may not be generally known that this journal can be obtained by members of all *Agricultural Societies*, as well as *Mechanics' Institutes* organized according to Statute, for the very low sum of half-a-dollar per annum; and we should be happy to hear that a large number of the former have availed themselves of the opportunity.

"In all respects, with the exception of correspondence, has the Journal met with the anticipations of its promoters. As it is impossible with the means at our disposal to obtain information respecting local progress or local wants, we again call attention to that paragraph in the prospectus which refers to the co-operation of others. "All who are engaged in industrial pursuits, capable of improvement or extension, can recognize the advantages which a journal of the character proposed is capable of conferring; and it is earnestly hoped that many will be willing to contribute information as to what is *now doing* in Canada, and suggestions as to *what may be done* with profit to individual enterprise and advantage to the Province." Such, however, has been the share of encouragement awarded to this Journal, that the Board has determined to enlarge it by four additional pages in each number, or 48 pages in the volume. The monthly issue will also be printed on a larger sheet, and supplied with a cover, stitched and cut. These improvements will, we trust, be met in a liberal and encouraging manner by *Mechanics' Institutes*, *Reading Associations*,

and private individuals. The Journal is supplied at the following rates:—At \$1 per annum for single copies, or to Clubs of ten or more at 75 cents per copy; to members of Mechanics' Institutes, and of Literary, Scientific and Agricultural Societies, through their Secretary or other Officer, 50 cents per annum per copy."

V. L., neatly half bound in coloured sheep, will be supplied for \$1; and to Members of Mechanics' Institutes, &c., &c., at 75 cents per copy.

MANUAL OF AGRICULTURE, FOR THE SCHOOL, THE FARM AND THE FIRESIDE, BY G. B. EMERSON, AND C. L. FLINT. Boston: Swan, Brewer, and Tileston, 1861.

We have looked through this work with much pleasure and satisfaction. Although on some few matters, perhaps, comparatively unimportant, our views do not exactly coincide with those of the authors, we do not hesitate to pronounce the book to be admirably adapted to the purpose for which it has been mainly prepared—viz., for the use of schools, and young persons generally who may be in any way connected with rural affairs. Indeed it may be perused with interest and advantage by the most experienced farmers, and cannot fail to impart a most salutary influence to the minds of all who are engaged in agricultural pursuits. Mr. Emerson is favourably known as the author of a valuable "Report on the Trees and Shrubs of Massachusetts," and Mr. Flint has long enjoyed a high reputation, as the author of some of our best modern agricultural publications, on "Milk cows and Dairy Farming," "Grasses and Forage Plants," &c., and who has been for several years the able Secretary of the Massachusetts Board of Agriculture. We hope soon to see this Manual in general use not only in our public schools, but also among the numerous class of young farmers throughout the land. The retail price, we understand, is only 75 cts.

THE SCIENTIFIC AMERICAN: Munn & Co., New York.

This able weekly journal of practical information in Art, Science, Mechanics, Agriculture, Chemistry and Manufactures, has long enjoyed the very highest reputation on this continent, and indeed throughout the civilized world, having now completed its seventeenth year. It abounds in good practical and scientific articles embracing the wide field of human

industry, profusely illustrated by appropriate and beautifully executed wood engravings. No mechanic can afford to do without it, and the farmer, gardener, and general reader, will find much to interest and instruct. Its articles generally are written in an attractive style, well adapted to the present times, and fully up to the current state of knowledge. It makes two large and handsome volumes a year of 416 pages each;—the printing and paper of the best quality.

TERMS.

To mail subscribers:—Two Dollars a year, or One Dollar for six months. The volumes commence on the first of January and July.

CLUB RATES.

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For all clubs of Twenty and over, the yearly subscription is only \$1 40. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

Western and Canadian money or Post-office stamps taken at par for subscriptions. Canadian subscribers will please to remit 25 cents extra on each year's subscription to pre-pay postage.

MUNN & CO., PUBLISHERS,

No. 37 Park-row, New York.

THE ILLUSTRATED ANNUAL REGISTER OF RURAL AFFAIRS AND CULTIVATOR ALMANAC FOR 1862, by J. G. Thomas: Albany, N. Y., Luther Tucker & Son.

This little Annual is now two well known and appreciated to need any special recommendation. Like the *Country Gentleman* and *Cultivator* it is got up in the Messrs. Tucker's best style, while the Editor, Mr. Thomas, has shown much industry and sound judgment in getting together and arranging the materials. The present volume is embellished with over one hundred and sixty nicely executed engravings, illustrating farm buildings, Implements, Fruits, Grasses and other subjects of interest to farmers, gardeners, and country residents in general. The wonder is that a work in every way so excellent can be sold for a quarter of a dollar!

Complete sets of the *Annual Register*, 8 numbers, can be had in paper covers for \$1.60. *The Country Gentleman* is published weekly

at \$2 per annum, and the *Cultivator* monthly, at 50 cents.—We can most conscientiously recommend these excellent publications, and shall be happy to learn of their increasing circulation throughout our North American Provinces.

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 Commissioners 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. Huelbert, 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 Commission are to be addressed.

R. CHAMBERLIN, Com'r, Secretary.
Montreal, December 12, 1861.

THE INTERNATIONAL EXHIBITION OF 1862.

THE UNITED AGRICULTURAL SOCIETIES of WESTWORTH and HAMILTON will hold an Exhibition of Wheat at Crann'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
" "	Rife " "	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 exhibitor, 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.

FOR SALE.

AT

WOODHILL, WATERDOWN P. O.

MR. FERGUSSON expects to have several pure *Durham* bull calves to dispose of next Spring, 1862, not intending to raise any this season. These calves will be all of the well known *DUCHESS* tribe, and will be put on the G. W. R. R. at six weeks old for eighty dollars each.

N. B.—First come, first served.

Waterdown, Nov. 14, 1861.

4-t.

VETERINARY SURGEON.

ANDREW SMITH, LICENTIATE of the Edinburgh Veterinary College, and, by appointment, Veterinary Surgeon to the Board of Agriculture of Upper Canada, respectfully announces, that he has commenced his profession in Toronto, and for the present, may be consulted either personally or by letter, on diseases of Horses, Cattle, &c., at the office of the Board of Agriculture, corner of King and Simcoe Streets; or at Mr. Bond's Livery Stables, Shepherd Street.

Toronto, October 3, 1861.

BOARD OF AGRICULTURE.

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

HUGH C. THOMSON,
Secretary.

Toronto, 1861.

FOR SALE.

A FEW PURE-BRED SOUTH-DOWN RAMS
and Ewe Lambs, from

IMPORTED STOCK,

Selected from the Best Flock-dealers in Dorset,
Wilts, and Hants.

The Subscriber will Warrant these Lambs to
produce as much Wool and Mutton, and of
equal Quality, as those of Jonas Webb, or any
other Flock of the same kind and number in
England.

JOHN SPENCER,
Brooklin, Post Office,
Ontario County C. W.

Oct. 12th, 1861.

AYRSHIRE BULL FOR SALE.

MR. Denison, of Dover Court, offers for Sale
a thorough bred Ayrshire Bull, bred by
the celebrated Ayrshire breeder, John Dodd,
Esq., of Montreal. The bull is 3 years old, and
can be delivered at or after the Show at Lon-
don, in September.

Toronto, Aug., 1861.

THE
JOURNAL OF THE BOARD OF ARTS
AND MANUFACTURES,

FOR UPPER CANADA,

Is Published on the first of every Month,

AT \$1 per annum for single copies, or to clubs
of ten or more at 75 cents. per copy; to
members of Mechanics' Institutes, and of Liter-
ary, Scientific, and Agricultural Societies,
through their Secretary or other officer, 50 cents
per annum per copy.

Subscriptions payable in advance.

Printed for the Board of Arts and Manufactures
for Upper Canada, by W. C. CHEWETT & Co.,
King Street East, Toronto.

FOR SALE.

A LOT of thorough bred **ESSEX PIGS**,—bred
from recently imported 1st prize animals,
and who have this season taken premiums at
both Township, County, and Provincial Exhi-
bition.

JAMES COWAN.

Cochmhor, Galt P. O., Oct. 12, 1861.

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FOR SALE.

A LOT of thorough bred improved Berkshire
Pigs of various ages.

R. L. DENISON,
Dover Court.

Toronto, Aug, 1861.

The Agriculturist,

OR JOURNAL AND TRANSACTIONS OF THE BOARD
OF AGRICULTURE OF UPPER CANADA,

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