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The Farmer's Advocate

—AND—
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The Provincial Exhibition of Agriculture and Art, 1877.

This Exhibition, which has just closed in the city of London, has been one of unprecedented success in this Dominion in regard to numbers of agricultural visitors and agricultural exhibits. The weather was most favorable. The railroad companies accommodated the public by running sufficient trains at suitable times for the public; they have been well patronized. There was no disturbance or excitement to diminish or increase the number of spectators beyond the proper exhibits of the Association. The mass of visitors have been the farmers and their families. The attractions to this Exhibition were not increased by any horse-racing, or elk-racing, no balloon ascension or fireworks; no prince, potentate nor orator added to the attraction, not even a band of music was to be heard; still this Exhibition has been better attended than any previous one held in London.

THE EXHIBIT.

The agricultural implements and machinery displayed were astonishing; 21 steam engines were exhibited, most of which were in operation, many driving long tiers of machinery; such a display has never before been seen in Canada. This part of the Exhibition was most highly appreciated by all, despite the repeated deafening shrieks of the whistles of the steam engines, the drivers of which appeared to take the greatest delight in trying which could make the most noise. Manufacturers prefer to exhibiting at London rather than at any other place, because they effect more sales. Many manufacturers sold all they exhibited; some took orders for hundreds to be shipped. To particularize about the merits of each would not be of general interest; we must leave that for future numbers.

STOCK—HORSES.

The blooded and trotting stock were better represented than they have been at our previous Exhibitions. Messrs. Crabb, Brown & Hornsby of Eminence, Kentucky, exhibited many fine animals; we are pleased to have the Americans exhibit amongst us. The display of Clydesdale, Agricultural, General Purpose and Carriage Horses was much admired by all who examined it.

Durhams, Devons, Ayrshires and Herefords were well represented. The Alderney were a new feature; they were not largely represented, but some of the ladies were much pleased with them, while some of the old settlers said they would not do to turn into the woods, they would be sure to be shot for deer; some stigmatized them as mere rats and worthless, but they have their merits and many people know their worth. The Galloways were not represented; we hope some of the Galloway men will state why they have not exhibited this year.

SHEEP.

Each class was well represented. On the whole, we do not consider the exhibit in sheep superior to former years.

SWINE.

This department drew unusual attention, as the Prince of Wales' Prize was awarded to Berkshires. The competition was great and most of the stock unusually good, although there were some exhibited which were no credit to the exhibitors or the country, and ought to have been turned out with disgrace marked on them. J. Snell's Sons gained the prize; it was well deserved, although there were many who were strong rivals and gained prizes in different grades. The other classes were fairly represented. There were more Poland China and less Cheshire Whites and Yorkshire hogs exhibited than usual; this shows that the medium sized and quick maturing animals are more in favor than the larger-sized hogs.

Fruit and flowers were not as largely displayed as we have seen them. Vegetables and roots were not equal to the display made in Ottawa. The competition for the prizes in seeds and grain was not as good as it should have been, in fact this part of the Exhibition has never received the attention that its importance deserves. The highest award has for many years been carried off by the Deihl wheat, which is the whitest and most precarious wheat to grow. A special list of prizes have been given for the Egyptian wheat; the Egyptian or Eldorado wheat is the whitest spring wheat, but it will not pay for general cultivation one-quarter as well as many varieties to which no prize is awarded. We have previously called attention to the necessity of a proper revival of the seed-grain list.

The Crystal Palace was well filled with a general assortment of horticultural goods, wearing apparel and arts products; to particularize would occupy too much space at the present. In the poultry department we noticed nothing new

worthy of particular mention; the general exhibit was creditable. Messrs. Pontey & Taylor of St. James' Park Nurseries introduced a new feature, copied no doubt from the Centennial Exhibition, they planted a grove of trees and surrounded it with a border or rather plots of flowers; the varieties were all named. This plan we hope to see followed in our future Exhibitions, as trees, shrubs and flowers add greatly to the attraction of our Agricultural Exhibitions; if our florists, seedsmen and nurserymen were allowed a space in every exhibition ground in Canada, and the associations would properly protect such plantations from harm, we believe that the exhibition grounds of our country would soon be handsomely decorated and comfortably shaded. If each Provincial Association in the Dominion would take this question up at their next meeting, we feel satisfied that good results would follow; our exhibition grounds would become institutions, pleasure grounds, and add shade and beauty without interfering with the space required.

The weather has been most tempting, fine, dry and warm; the number of visitors was far greater than it had ever been in London; the dust was very disagreeable to visitors and exhibitors; the Board neglected their duty in not having the grounds well watered every night—the cost would have been but trifling, as there were numerous engines at work on the ground and a running stream passing through it; seats were very sparsely supplied, and the litter of papers and melon rind that were strewn in every direction should have been removed. The annual meeting of the delegates was well attended. The usual routine of reading the minutes of the last meeting, delivering of the President's address, and voting on the place to hold the next Exhibition, is all that is done annually. There was quite an excited feeling in regard to a feeler put out in reference to locating the Provincial Exhibition permanently at some place. The repudiation of the attempt by the President and others quieted the discussion; a strong feeling existed against such a course being taken. Guelph was prepared to furnish the necessary accommodation, and received about one-quarter of the votes. Toronto was also prepared to furnish proper accommodation, and as according to former custom it was Toronto's turn to have it, the majority voted for Toronto. Where it may be held in 1879 no one can yet say. Kingston has received a heavy reprimand by having been deprived of it for one year; perhaps it may never go there again.

Many spoke highly of the attention and management of the President and the Secretary, but many successful exhibitors complain that the Treasurer left the city and prize-takers awaiting their pay at his office. If the Treasurer has a duty to perform he should attend to it, or leave the office to some one who would.

Hamilton or Central Exhibition.

This exhibition took place the week following the Provincial. The Guelph or Grand Central took place at the same time. The managers of these two exhibitions contend that each has taken the week belonging to the other. They both might have been better had they not fallen at the same time; however, they both made good displays.

Some of the breeders divided their herds and exhibited at both. Mr. Stone exhibited Herefords and Mr. Rudd exhibited Devons. This we look on as commendable in them, as they both belong to Guelph, and Guelph is exerting every nerve to gain a march on Hamilton.

Hamilton had a creditable display in each department that we had time to examine. In the fruit, root and vegetable departments the display was far superior to the display made at the Provincial; the quantity appeared about as large; the size and quality of a great deal of fruit, particularly the grapes, peaches and pears, were far ahead of any to be seen at the Provincial. The roots and vegetables were also superior. The arrangements in this department ought to be copied by the managers of the Provincial; the order of laying out the display was such that the judges could at once see what was before them, and the public could at a glance see if the judging had been fairly done. The different varieties to be judged are placed in rows on sloping shelves. The arrangement was the best we have seen. The Provincial directors should have a better arrangement than they have had, as good exhibitors in this department complain very sorely of the muddle of the arrangements and partiality and injustice that has been perpetrated in this department for years past. Notwithstanding previous irregularities, favored parties this year were allowed to enter the building at four o'clock in the morning and pack their fruit; when other exhibitors arrived they were chagrined to find some of their best specimens minus. We heard no complaints at Hamilton, but many at London.

The floor of the building in which the fruit, vegetables and flowers were exhibited in Hamilton was strewn with tan-bark; this was dampened every morning. This kept the dust down and the atmosphere humid; vegetation kept fresh, and a person could see the color of the fruits. This we could not do in London; the dust coated every thing, and the dry, hot air wilted the leaves and caused fruit and vegetables to shrink up.

We visited the Hamilton Exhibition on Wednesday evening. There had been no rain up to that time since the Provincial Exhibition. On Thursday morning it rained, preventing many from attending the exhibition.

Hamilton has been long celebrated for its fruit displays. The apparent unsettled questions in regard to the future of the Provincial Exhibition and the management of its fruit, root and vegetable department, leaves an opening for Hamilton to establish a Fruit Exhibition.

Guelph or Grand Central Exhibition.

Guelph is rapidly raising its head and saying "We have a right and a claim, and will have the Provincial Exhibition." Some, we have heard, say they have just as good an exhibition as the Provincial this year. To give them credit, they have as good exhibition grounds as any we have seen in Canada, in some respects superior. They have a very fine raising hall, overlooking the horse ring, on which thousands can stand and view the horses; they are always a great attraction. They have a good lot of stalls for cattle, and they were well filled. There are many good stock men about Guelph, and they turned out well.

The Guelph Exhibition surpassed the Provincial in the display of Galloway cattle; the Galloway breeders would not exhibit in London because the Association had taken off some of the prizes in this class of animals, and had reduced the prizes given to the animals of that breed. Guelph excelled both Hamilton and the Provincial in the display of roots, more particularly of turnips. In this class the display was very large and fine; the arrangement was far superior to that to be seen at the Provincial; the name of each variety is given, and the several varieties are placed in rows so that all can see them. The Provincial managers should have a Guelph man to show them how to arrange the roots, and a Hamilton man for fruits.

While admiring the size of the field carrots, a prize-taker informed us how he had succeeded in getting them so large. He sowed the seed in October. This may be a hint to some of you who wish to take prizes next year.

A strong advocate for taking the Provincial Exhibition to Guelph sneeringly said to us that he heard there were a hundred people walking the streets of London, who could not get a bed. Should Guelph succeed in getting the Provincial, it should be stipulated that some thousands of sleeping berths should be provided for beyond the possible capacity of the house accommodation of Guelph. Guelph makes a good exhibition, and has reason to be proud of it.

The Government held its first annual sale of live stock on the Government Farm at Guelph, on Thursday. The sale was well attended, and the stock looked well. Only moderate, or even low prices were obtained. The sheep dogs pleased us better than any other animals sold; they were very good and brought from \$8 to \$16 each.

The exhibition grounds of both Hamilton and Guelph are already planted with trees. Londoners should not be alone in this matter; they have no trees planted. We do not draw comparisons to injure the Provincial Exhibition, but to cause improvement.

A Canadian Home.

"On the Wing," Continued from September No. of Farmer's Advocate.

The account we are about to unfold should, in our opinion, take precedence of some of the other wonders. Neither Niagara Falls nor the Centennial Exhibition has astonished us so much as the contemplation of the following scene, which to many may appear incredible; but our own eyes have not yet entirely failed, neither have our observing faculties become totally impaired, or we should look on this, if related by others, as imaginary.

We passed along a rather circuitous and inferior by-road. We entered the gates, and were at once on a good, smooth, well-kept road, hard and firm enough for any load, yet smooth and fine on the surface, without loose stones or dust or harshness to tread on. This road is on the gorge of a deep ravine, through which a stream is flowing. Stone dams have been made to form miniature cataracts or falls. The stream wends its way frequently from one hill to the other, necessitating many bridges. The bridges are all built of cedar, with the bark on, and constructed on the neatest rustic designs, each after a different pattern. As we pass we see natural trees of the forest interspersed with plantations; here is a weeping willow, there a bed of roses, then a canopied bridge; next a rustic bower and fountain of water; then a large, green, well-kept lawn. The carriage road now ascends

the hill. A neat, rustic bath-house is in view a short distance further up the ravine; another arched bower, with seats to rest on, is arrived at part of the way up the hill; from this a foot-path with log steps is met, by which visitors may ascend the hill. At the top there is another bower. Here we take a seat. In front is a large lawn interspersed with flowers, beyond which may be seen a large expanse of water, many miles in length and breadth, in which steamboats, pleasure boats and sailing vessels may be seen in the distance. Uncle Sam's territory is visible. To the right of our seat another very large and handsome rustic bower is in view. To the right is a mansion having on three sides a very large, wide and handsomely constructed verandah; attached to the verandah is a large canopy or arch, under which carriages may drive. Visitors may here alight and ascend to the verandah, the steps near to the door being covered with matting. We enter the first hall; this is for preparatory arrangement. We proceed to the main hall, which is larger and is lighted from the roof. Two large, square balconies are seen from the centre on the two stories above. The construction is different from that of houses generally. There is a passage round the open square on the second and third stories, so that all the bed-rooms open into this passage. The floor of the hall is laid with dark and white wood alternately, made like cabinet work. On the floor are spread the skins of a tiger and a bear; the heads of these animals are stuffed and show the teeth and eyes; the head parts of the skins are laid under the table in the centre of the hall, so as to appear like foot-stools. The claws of the animals are also left on. Various other skins, such as a leopard's, panther's, polar bear's, &c., were spread in another room, and in the passages in one room neat skins were on the sofa and chairs, used as antimacassars. The floor is not entirely covered with skins. Sometimes one will tread on a skin, then on the variegated floor. The skins are so well kept that they look about as sleek as if they were on the backs of the wild animals.

We entered the reception room. Our attention was immediately drawn to see what injury we might be doing, as our foot apparently sank in something it had been unaccustomed to. We immediately looked to the cause; it was only a Turkish carpet. This is very thick and soft, and was either made to suit the elaborate work of the ceiling and walls, or the room was made for the carpet; we did not enquire which. There had been great taste and judgment displayed in the adaptation. The furniture of this room is such as would have attracted more than a passing notice at the Centennial. The ball room, drawing room, dining room, &c., are furnished in such a manner that it would puzzle us to describe them, and perhaps many of you to read the descriptions. The library is neatly fitted up, having a large mirror in the centre of the book-case. To our surprise, the mirror frame being touched, opened, and we passed through; it was a door. Adjoining the library is a smoking room fitted with lounges and hung above with tapestry. The bed-rooms are fitted with every modern improvement, and all the rich furniture that fancy could imagine.

The stable of this establishment is grained, and the iron and steel kept shining like mirrors; even the straw is matted and laid straight, as if with a coarse comb, for the horses. This whole establishment is so gorgeously furnished, so neatly kept, with such lovers' walks and seats, that one would almost think he was in a fairy land.

We descended the hill by another road, and left this beautiful scene, the grandeur of which you may guess.

(To be Continued.)

On the Wing.

The week previous to the Provincial Exhibition we took a trip to Jackson, in Michigan, to see the State Fair which was being held there. The farms along the line of railroad were very similar to good farms in Canada, except that corn was grown much more extensively. We passed through a good deal of good land; this had formerly been timbered land. The farmers appeared to be in a thriving condition, superior to Canadians in poor sections, not equal to Canadians in good sections. Good farms could be had at \$40 to \$50 per acre, and any Canadian could live and thrive there just as well as in any part of Canada where the land is of a similar quality.

THE MICHIGAN STATE FAIR

was a good exhibition; in some respects it surpassed our Provincial Exhibition, but as a whole the display was not near equal to ours. We will mention in what respects they surpassed our exhibit. They had a very fine row of willows and a fine clump of various kinds of trees, that afforded shade to visitors. The eating and drinking booths were unobtrusively placed in the background, leaving the main space for useful exhibits.

There were several large and very fine exhibits of chilled-iron plows; these are all much shorter than the plows used in Canada, and have a much higher finish. The Percheron horses were out in large numbers, and race horses were largely represented. Merino sheep and Poland China or Magie hogs were better represented than with us. There were six combined reaping and binding machines, one of which used string; all the others used wire. There were eight different kinds of wind pumps. An agricultural steam engine was shown that would propel itself; this engine is used for threshing; horses have to be attached to guide it when traveling. The application of steam is used on bad roads or on hills; the appliance adds only 200 lbs. to the weight of the engine.

In the quantity or quality of the display made in all other departments we consider our Provincial Exhibition far superior to it. We were much astonished at the prejudice of many Americans in lauding their exhibition as superior to Canadian exhibitions, and the manner in which they tried to disparage Canada, its products and capacities.

The accommodation for visitors was increased by some of the religious denominations opening their churches. They fitted up their school and lecture rooms with beds, and used an adjoining department for cooking. They charged only a moderate sum, 25 cts., for meals or beds. Many were comfortably accommodated, but the rush was so great that the pews were all let, and many hundreds were turned away bedless. The galleries were reserved for ladies; we heard that \$3 per bed was asked. The churches opened were good, large, handsome, well-finished edifices, carpeted and cushioned. Substantial meals were served. One church made \$1,300 above expenses last year; this year it was expected that even better returns would be made. Some who have used churches for a worse purpose than for dormitories will draw a long face when they read this.

The Cultivation of Out-door Grapes.

The first name given to Canada by Europeans, or that part which was first discovered, was Vineland. The name was given from the number of grapevines seen growing wild in the woods, and bearing clusters of grapes as they do at present. Where a plant or fruit is indigenous to a country it may be reasonably expected that it is well suited to the climate, and that its cultivation will be successful. So it is with the grape in Canada. They require, it is true, protection in winter, but with it, and due care, out-door grapes can be grown in a great part of the country, and pay a fair profit.

We see no reason why we should not raise our own grapes, as we do most other fruits.

Grapevines require a rich, dry, mellow soil; if it be naturally retentive of waters it should be drained. It needs no deep trenching as was at one time usual; twelve inches of good, well-prepared soil is sufficient, but a cold damp soil is unfit for their growth; they will perish if their roots penetrate it. With due care there is no more uncertainty of growing good crops of grapes than crops of gooseberries or currants, and the required care is not greater.

We are pleased to see the culture of grapes increasing in the country. The more the value of a grape crop is known, and the little difficulty of growing, the more its culture is sure to extend. Grapes always command a good price in market, and we do not see why farmers should not be able to treat their families to a cluster of grapes in the season. There is no handsomer fruit; none more pleasing to the palate. And there is no other fruit so healthy; for some it is better than any medicine. The grape cure is very highly spoken of.

Grapevines are, as a general rule planted in May. Last May we transplanted a vine, not less than six years old, and it is now heavily laden with fruit. From the *Germantown Telegraph* we take the following extract on the cultivation of out-door grapes:

"First obtain a vine of both the Concord and Telegraph, or any other that may be preferred. We merely mention these two because they are very hardy, productive and good. Plant them in dry, rich soil, which is somewhat elevated; plant shallow, spreading the vines out, and firmly pressing the soil down. If there should be no trellis or high open fence, set the vine at the gable end of a barn or any building, in a southwest exposure, observing the conditions named as to dryness and richness of soil. Train the main branches, fan-fashion, as low as it can be well done, securing the branches with twine to nails driven in the walls or weather-boarding. Care must be taken to prevent the vines from running too high, by sharp pruning, both when growing or in any of the winter months. This will cause the vines to bear fruit low down, otherwise the vines left to run at large will bear only at the tops and the fruit will get smaller year after year until it becomes worthless. Running vines up trees, as it is sometimes done, is not to be recommended for the following reason: They will bear fruit enough at the top, where it would be difficult to gather, and not good for much when gathered.

We have seen excellent crops of grapes grown along a five-foot open fence, with the vines trained just as we recommend. There was not a vine over six feet about ground, but they were carried low, fastened to the fence for some ten or twelve feet, and were loaded with fine bunches. And this mode had been pursued for years with uniform success."

South American Trade.

The first steamer of a new line to be engaged in the South American trade leaves from an American port on October 1st, 1877. Such is the announcement in a Western journal. This steamer is large, staunch and first-class in all its outfit for passengers and freight. This line of vessels will open up to the Ohio and Mississippi valleys a large and growing trade. From that section of country the exports of flour, lard, hams, butter, onions, potatoes, corn, starch, beer, machinery, furniture, clothing, &c., will be met by imports of coffee, indigo, cocoa, hides, dye stuffs, and in fact all the products of South America.

Why is it that there are no similar departures from Canadian ports? Such a reciprocal trade as that now inaugurated between the Western States and South America is what Canada so much needs. Almost every article of Western produce mentioned can be supplied of as good, and in most instances of better quality, and on as good terms from the Dominion. South American markets are as free to the merchants, manufacturers and seamen of Halifax and Montreal as to those of Western ports.

Entomology—Birds and Insects.

The acquaintance with insect life and habits, and the ability to distinguish those that are detrimental to our interests, from such are really serviceable, becomes every day more apparent. It is well for men that are left to contend, unaided, with the innumerable destroyers of the fruits of the fields and garden, and it is well to know which of the insect tribes and of birds aid us in the diminution of those which are destructive at all times, and in some years destroy the products of large tracts of country, and change a fertile country to a desert.

Many families of birds are our most efficient allies in our increasing contests with our insect enemies, and of small birds none are more so than the Thrush family; and foremost among them is the Robin, though there are some people who would fain dispute its just claims as our friend and ally.

Specimens of these species, which have been examined in April, had been feeding upon earth-worms, wire-worms, beetles and their larvæ, with other insects, and dried barberries. This latter article was only found in the stomachs of individuals which were taken during a severe snow-storm that occurred on the 8th of the month, 1868; when it was almost impossible for them to procure anything else. May finds them taking almost the same food, excepting the barberries. In June, July and August, they add grasshoppers, cherries and berries to their bill of fare. It cannot be doubted that the Robins eat large quantities of the small fruits of the season, but an observer says in their favor that in only two instances, out of many, has he found that they had eaten them to the entire exclusion of insectivorous food. During September, October and November they subsist almost wholly upon insects. What few remain through the winter, feed principally on the worthless berries of the cedar, savin, mountain ash, etc. Thus, although there is much in this record in disfavor of the Robin, with such an array of facts before us, proving their general usefulness, we cannot condemn them. It is of much importance whether this species is protected by law, or not; for being an unsuspecting bird, it would rapidly become scarce if everyone who, perhaps without reason, chances to take a dislike to it, should shoot it; and as it usually builds its nest in prominent situations, without concealment, the work of extermination would be hastened if every little urchin were allowed to take its eggs whenever they choose.

Deep Subsoil Culture.

One of the questions most intimately connected with improvement in agriculture is the deep cultivation of the soil; and like many other subjects of the greatest moment in agriculture, the difference of opinion on the depth to which the soil should be rendered really available for affording plant food is a matter of dispute. Let eight inches be the minimum depth of your plowing, and in some cases two to four inches additional depth is still better. This is the advice given by many, and persistently carried out by some; while, on the other hand, the advocates of shallow plowing plow merely the shallow surface, and tell us that in it lies all the germinating and nourishing property of the soil. Turning up anything more they say injures the growth of the plant and diminishes its productiveness.

The sub-surface may, we admit, be sterile, and consequently, burying beneath it in its unimproved state the richer surface soil would be a very unwise act, and one that no practical farmer, if gifted with common sense, would do. He would so till the land as to obtain a present paying crop from

the very shallow surface soil, and at the same time so improve the sub-surface that from being sterile it would become productive. Good farming demands a provident preparation of the soil for other years as well as for the present.

Deep subsoil culture implies a culture not merely of eight or ten inches, as a general plowing of soil suitable for that depth. If beneath that depth there be a subsoil so tenacious that the water reaching that depth cannot penetrate it, as is often the case, it is necessary to break up that stubborn subsoil if we would force our fields to give the abundant increase that is within our reach. Let us, however, bear in mind that deep subsoil plowing by itself will not effect the desired improvement. Rain water must have a means of escape from the land, whether that means be natural or artificial. Deep subsoiling and thorough draining, where needed, mutually aid each other in the improvement of the soil. In stiff, wet land, subsoil culture without drainage would but enable the water that would lie stagnant on the subsoil to stagnate within it, and stagnant there it would greatly diminish the productiveness and retard the maturing of the crops. Whereas, if the rain water be enabled, in consequence of the subsoiling and drainage, to filter through deep soil and escape by the drains, it brings, in its descent from the atmosphere and through the soil, the air so necessary for the preparation of plant food within the soil, accompanied with the needed moist warmth. It also dissolves those ingredients of the soil that are needed for plant growth.

The drainage system, however, will be a subject for future consideration.

There have been instances in which there has been no perceptible improvement of the soil from deep subsoil culture, but the failure to obtain benefit can be readily traced to other causes than the system itself. In an agricultural journal we have read an account of an experiment in deep subsoil culture in which there was no amendment perceptible over the land tilled in the ordinary mode. There was no difference in the crops in the fall; as soon as the snow passed away and the thaw would admit, the wintering and growth were examined, and no amendment could be perceived. The harvest showed no increase, nor could any benefit be traced to the subsoil, nor was there apparent benefit for the three years that intervened between the time of that plowing and the date of the report.

Why was there no improvement? Is deep subsoil tillage unprofitable—a mere waste of labor? We see at once in this report the cause of no improvement. "The land was deep clay loam, so much that the second plow, following in the furrow of the first, failed to bring up any hard pan, or hard, intractable soil; nor did it raise the subsoil to the surface, but only moved it to the depth of 12 or 13 inches, and for the most part allowed the crumbled earth to fall back from whence it was raised." We must infer from the report that the land was of such a quality, soil and subsoil, that no subsoil culture was needed; there was no "hard, intractable soil" to be broken up; the rain water did not stagnate on it, but percolated through it; the tap roots of growing plants penetrated it, and from it drew any additional nourishment needed. For this reason there was, after the subsoiling, no amendment perceptible.

Investigations by Prof. Marklyn and Mr. Cooper would seem to place rye before wheat in the scale of nutrition. They pronounce it one-third richer than wheat. Rye is especially rich in gluten. This corresponds with the generally received idea of farmers. In Pennsylvania rye has long been considered one of the most valuable cereals as food for horses, and in Europe it is held in high estimation for bread. It winters easily and thrives on a comparatively poor soil.

Home Industry.

Never was the importance of home industry more conclusively proved than it has been during the past year. In the United States and Canada, as well as in England, has the fact been more fully established that the wealth of nations is to be reckoned, not so much by the number of millionaires and the hoarded gold, as by the numbers employed and in receipt of fair, remunerative wages. The hive that has in it an undue proportion of drones must be weak, no matter how fair appearances may be. Drones must be fed on the product of the labors of the industrious and frugal. It is not enough for Canadians that our country raises and exports large quantities of raw produce. 'Tis true this is employment to some, but to only a few of those to whom agriculture and shipping afford the means of acquiring a competence. We should, for instance, manufacture more linen and woolen clothes.

Our neighbors south of the line are pretty well aware of the importance of home industry; and a great party there spare no exertion to stimulate the producing capacity of the country to its utmost. From the *American Miller* we take the following extract indicating their policy: "The wheat crop of the United States was estimated last year at 246 millions of bushels, of which the eight States of Ohio, Michigan, Illinois, Wisconsin, Minnesota, Iowa, Missouri and Kansas produced 176 millions. Our exports for the year 1876 were upwards of 55 millions of bushels, of which upwards of 42 millions of bushels went to Great Britain, while our corn exports for the same year only were nearly 50 millions of bushels, Great Britain taking the same amount of that as of wheat. Leaving 20 millions of bushels for seed, the millers of the United States must have manufactured the past year about 38 million barrels of flour, of which were exported 4 million barrels. *If we had manufactured the 55 millions of bushels of wheat we exported into barrel flour, it would have made over 12 millions of barrels, given employment to at least 10,000 men, and supported 40,000 or 50,000 people.* Three-quarters of these men would be employed in getting out cooper stock and in making barrels."

In order to promote the prosperity of the Dominion the great aim of our Legislature should be to provide, as far as possible, remunerative employment for every man who is able and willing to work. To this, first, due support and encouragement should be given to our manufactures, that Canada may be self-supporting, and second, in any commercial treaty the great object to be attained should be to extend the market not merely for the raw produce of our fields, mines and forests, but for such commodities as would give most employment to our industrious fellow-countrymen. Let our exports not be merely wheat and barley, wool, flax and ores—let them rather be meat, butter, cheese, linens, woolen cloths, agricultural implements and cabinet work. Let our great aim be to promote home industry and prove ourselves worthy in every respect of the great empire of which we are proud to call ourselves a part, who, in like manner, fostered every branch of home industry till convinced (whether rightly or not) that fostering was no longer needed.

The *Colonial Farmer* says: "Lately, when at Van Buren, we were shown the buildings which were erected for a starch factory there, and were told that \$40,000 would be paid out for potatoes for the use of this factory this fall. This money will be distributed among the farmers living within ten miles of the village, and is an entirely new source of income to them—not a substitute for one which they have heretofore enjoyed.

"If," he says, "the Government was to collect

and disseminate information which would show the farmers what are the productions of farms for which there is the most certain demand, much would be gained. To do this experiment may be necessary. Take the article of starch. Perhaps correspondence would not conclusively settle the matter; but it would be an easy matter to buy a quantity of Aroostook starch and ship it to England or other places where there may be a demand for it, and after it has been tried by the consumers of such starch the question of profit in the manufacture could be settled to a certainty. The introduction of starch factories into New Brunswick would work a revolution in agriculture. Increase the potato crop, and if the experience of other places is any criterion, you decrease the buckwheat and increase the wheat crop. Almost as a matter of course comes an increase of live stock, which means better farming and richer farms. An active cash demand for produce will lead to the proper appreciation of agriculture as a department of industry, that is, to the establishment of the wealth of the country upon its true basis."

Ground Bones as a Fertilizer.

Mr. C. an old English farmer, now farming in London Township, tells us what he knows of the use of bones as a fertilizer, having used them on the farm he now occupies, and having previously used them extensively in England. Five years ago he applied to a large field coarse broken bone at the rate of two hundred weight to the acre. For three years the effect produced by them was not great; it did not pay him for his labor in breaking and applying. Two more years have elapsed, and he finds the effect of the application. These two years his crops have been, from the effect of that application, very heavy. Coarse broken bones, he says, are an excellent fertilizer in England, as there the climate is so moist, they soon become dissolved and their fertilizing properties available as plant food; where as here in Canada it takes a long time to dissolve them, owing to the drought of the climate. Not so, he says, with bone dust. It is speedily dissolved and served to feed the first crop after its application, as well as succeeding crops. It is for that reason more valuable. A farmer, as well as other business men, needs to receive some remuneration for his outlay, without having to wait years for it. A farmer must wait for months for a return for his outlay at the best; an enterprising, improving farmer often much longer; and when a few months may bring in as good a return as years, as is the case with bones ground fine instead of broken, it is well to avail one's self of the means of securing a speedy repayment of money and time expended.

The benefits from the use of bone-dust as a fertilizer are told by a correspondent of the *Ohio Farmer* as follows:—

I have personally seen much of the good effects of this fine ground bone, and notwithstanding Mr. Manchester's statement that the bone is slow in action, I have known of many results from the use of the bone on the wheat crop more astonishing than the one he refers to. I have known of almost total failure of wheat, when alongside the bone has brought a good crop. I knew of an instance last year where there were 21½ bushels wheat to the acre on the boned part, and only 3½ bushels without the bone. Out of a seeding of twelve acres, a neighbor of mine has no grass except where he sowed the bone. When the bone was applied the grass is dark-colored and vigorous.

All the various makes of phosphates and superphosphates, as well as bone manures, have been experimented with in section with good results, generally; sometimes there have been failures, but I have never known of an instance of failure when this bone has been properly applied to wheat by being drilled it with grain, or when ap-

plied to grass either as a top-dressing or when cultivated into the surface soil.

In Maryland we used to apply large quantities of course ground bone which gave good and long-continued results, but it was somewhat slow in action. The bone referred to is fine and it acts promptly, and we can make a very economical application of it.

I saw three fields of wheat to-day, two of them had been boned, and the other heavily manured. All three pieces are excellent, but if any difference, the boned wheat has it; I have never seen better stands of wheat than these. I have often seen the bone in competition with manure, and the bone has always been equal on the wheat, and generally has been ahead on the grass after the wheat. The bone secures the grass crop and consequently a good sod, and gives us a chance to make manure. In view of our own experience and what we have seen, we know that the claims made for this fine, inoffensive bone are not too strong.

Canadian Butter.

BY L. B. ARNOLD, SEC. OF AMERICAN DAIRYMEN'S ASSOCIATION.
(Continued from Sept. No.)

If there is anything like an approximation to this state of things in the Dominion, of which there is no doubt, then the butter interest is of much greater magnitude than that of cheese, and this is doubtless true even in Ontario, in which cheese has its greatest pre-eminence.

Why, then, I ask again, has this branch of the dairy stood comparatively still, while the cheese interest has been advancing with unparalleled strides? The answer, I think, will be anticipated. It is because the cheese dairymen have studied their art. They have formed associations; held conventions for discussion and investigation; printed and circulated matter relating to their calling, in pamphlet reports, in circulars and newspapers; held large and expensive fairs for the exhibition of products, that all might see with their own eyes just what the market requires and learn how to produce it; and they have traveled from factory to factory to pick up items of experience which their fellows had acquired, and in every way posted themselves in their specialty.

They have really been in school for the last decade. Their tuition has been somewhat expensive. It has cost them a great deal of time and labor and money, but it has proved a good investment. They have made money by so doing, and gained a reputation for themselves and their country. An equal success lies within the reach of the butter producers if they will "go and do likewise." Let town, county and provincial Butter Associations be everywhere formed, and discussions and investigations in regard to every future of the butter-making art be carried on thoroughly and often, and progress will at once follow. Private labors are good as far as they go, but they do not tell like associated effort. When each works wholly by himself, others must remain ignorant of any good he may develop, and cannot therefore profit by it. But where public consultations are held, all are the wiser for what each has learned, and hence spring the most rapid advances. One bee can neither fill a hive with honey nor warm it. It is the combined effort of his 100,000 co-laborers that makes the hive a rich and comfortable home for him. So does the associated effort of those engaged in any calling tell on their store of knowledge concerning it. This is no chimera or idle fancy. It is actual fact which is being every day demonstrated in practical results, not only by cheese men, but by fruit growers, wool growers, hop growers, poultry fanciers and apiarians, and many other interests whose devotees form organizations to post each other and mutually further each other's interests. The Western N. Y. Dairymen's Associations, whose discussions have related chiefly to butter, have pushed the butter interest further ahead in three years than it had got in half a century before.

The butter-making branch of agriculture has not kept pace with the cognate branch of cheese-making, and many other branches of rural industry are outstripping it. Something needs to be done to arouse butter makers and bring their products also into the front rank, and that something is association. Will not some of the enterprising men in this department move in the matter, and start an Ontario Butter Makers' Association to begin with? There is a field open in this direction for great and lasting usefulness to individuals and to the country, and the most that seems to be wanting in such an enterprise is somebody to lead off in the work.

Thick or Thin Seeding.

The great benefit of sufficient space for the plant to feed from, and of free access of light and air, are well known to every cultivator of the soil. Especially have they been noticed by the gardener, to whom every plant under his care is as well known as each sheep and lamb to the shepherd. Innumerable instances have been met with demonstrating the remarkable fecundity of a place dropped by chance in some waste spot. A single seed or potato, for instance, yields a produce sometimes many fold greater than the average yield of a crop of the same kind would if planted in the same ground as thick as the ordinary seeding. How many pods of peas from one parent in such cases! How many kernels of corn from one! The power is given by nature to multiply greatly wherever the plant food is sufficient for the support, and the various benefits from atmospheric influence. In the cereals this extraordinary increase is from the greater number and size of the grains; by branching from the main stem; and by tillering or stooling. By both names is the production of additional stalks from the seed or root known. The season of '77 furnishes an instance of such increase in the West. An old farmer referring to the corn crop of this year, says that the time for corn-planting was cold and unseasonable; and that as the season advanced the weather became wetter and warmer, and with it an immense swarm of ground squirrels, ants, cut-worms, wire-worms, and birds of every kind, that take up the young and tender stalks, and there were few fields where the growing crop of corn had as thick a stand as usual. Many went to replanting the corn; others let it go just as it came up: the stand of the crop was consequently thin; but in many of these fields the stalks are of an immense growth, many of them having two ears and, in some instances, more, so that farmers have in their fields a prospect of a fine crop of corn. The dozen of hills that had the space and plant food generally occupied by a score bear so much more yield.

We should not, however, suffer ourselves to be influenced by such instances to seed too thin. Thicker sowing than is necessary is a waste of seed, but too thin seeding induces late ripening and a diminution of crops. Whether, taking all circumstances into consideration, a greater or less quantity of seed is better, each farmer must decide for himself. No cast-iron rule will suit alike every variety of soil and every degree of fertility. A good English authority gives the quantity of wheat usually sown as 100 pounds per acre. The number of seeds in one pound averages 10,000. Were all circumstances favorable to germination, it is very plain, this would cause twice too many wheat plants on any soil; but many grains of seed have been dead, some have been covered too deep, some have remained uncovered, and there is an uncertain amount of loss from water, frost, birds, and wire-worms, in some soils a greater loss than in others, so that stinting the seed we look upon as the whole bad policy. A better rule and one more generally applicable is—AVOID EXTREMES.

Poultry Yard.

Young Stock.

The birds you have hatched this season, are generally half to two-thirds grown. They should be coming on nicely, now. The broods are putting on their winter plumage, also—the down and early feathers disappearing. In September and October, you may cull the flocks to best advantage; since you are now able to determine what are the most promising selections to be made among them, either for future sales, breeding or exhibition. Don't be too grasping, in this process. Select only the best to reserve for your own use, or for sale as breeding stock. Fatten and market the rest, and in November, you can get more for them as dead poultry than the imperfect, indifferent or scrubby individuals of either sex are worth, to carry through the coming winter. It has been very well said of poultry-raisers that "the good breeder is the good killer." If we were to give one secret of success to the novice who aspires to win prizes or sell for high prices, and but one, we would say, breed a great many fowls and kill a great many.

The Whitewash Process.

Is in order this month and next, for fowl-houses and fences—inside and out. The common method of half cleansing the poultry premises, has been in vogue so many years, and farmers are so prone to adhere to the old furrow in doing these things, that they need to be reminded every spring and fall that complete cleanliness of fowl-houses and runs is essential to success. In whitewashing the interior of a poultry house do not leave a spot even as large as the head of a pin untouched anywhere. Plash the whitewash liberally into every nook and corner, crack and crevice. If the henry is a floor of cement, stone brick or boards whitewash that also. The plan of "whitewashing" is a very good and serviceable way to renovate the houses, and to purify the premises. But the use of lime alone, in this work is not so good a method as the following: Into the whitewash pail, when the liquid is prepared for application to inside work, while the lime-water is still hot, drop a tea-cup full of soft-boiled rice, and mix this thoroughly through the mass. Then pour into a quart pot of cold water, say ten or twelve drops of crude carbolic acid. Mix this into the rest, and swab the interior of your hen-houses with it. For outside work, use rock salt dissolved, instead of boiled rice and dispense with carbolic acid. No other preparation of "whitewash" even equalled this, within our knowledge—and no one who tries this once, will ever be content with any other combination, for poultry buildings.

Hindrances to Poultry Keeping.

One of the most insidious hindrances is overstocking. There is considerable misapprehension in the public mind on this point. The enthusiasts have always recommended heavy stocking, and many persons who did not know any better followed recommendations to their cost. This matter of overstocking is one of degrees, and is modified by circumstances; the amount of room at command is the first subject for consideration. Since poultry keeping has grown to be so popular, thousands of people with very limited areas of ground are trying to "raise their own eggs and chickens." To this circumstance, in itself, there can be no objection; but the trouble arises in overstocking these small yards. I have seen a great many instances where, in room that would save comfortably accommodated a half dozen hens and a cock, twice or thrice this number were attempted, and the investment was always a failure. Possible success might have been attained for a little while but soon feather-eating, egg-eating, and general "cussedness" would follow. The fowls would look bad, and feel bad, they would mope, refuse to eat, and die, while their owner was wondering what was the matter with them. This short and appropriate epitaph over their buried carcasses would have told the whole story: Died of overcrowding.—Poultry Journal.

POULTRY ASSOCIATION.—The fanciers of poultry in Hamilton Ont. held a meeting at the Dominion Hotel for the purpose of arranging a poultry and dog show to be held in that city, and also to form an Association. There were some twenty-five present, all of whom became members of the Association. It was determined to call the Society the Canadian Poultry Association, and to hold annual shows in the city. Another meeting will be held shortly for the purpose of electing officers.

Garden, Orchard and Forest.

Horticulture at the Centennial Exhibition.

BY A GARDENER.

After a rather lengthy interval I proceed to make good my promise of last March of saying something about what I saw at the Centennial Exhibition last September.

In my former communication I said nothing of the Exhibition proper, confining myself merely to what I noticed of interest in the way of horticulture in the gardens of Philadelphia. Now I will resume my letter by going into the Centennial grounds, but must perforce confine myself to the department which presented the greatest amount of interest to myself, viz., that of Horticulture.

The park (of which the Exhibition grounds are a part) did not strike me as possessing any very striking features, apart from its extent, some 1,500 acres, its well made and capably preserved drive and beautiful green grass, which at that hot season of the year certainly looked the perfection of verdure.

The trees were large, apparently as planted by nature, and the effect had been made more by cutting away than by planting additions. But once inside the grounds, this was changed entirely; on every hand were indications of cultivated gardening skill carried out to the most minute particular, and seemingly every available clime had been drawn upon to do its share toward adding to the beauty of this charming place.

The Horticultural Building, standing in the midst of a world of richly colored flower beds, was a very tastefully conceived building, looking quite in keeping with the object for which it had been erected. The visitor, on entering the building, finds himself in a warmer climate than that prevailing outside, for it has been fitted up as a palm house, and is heated artificially to accommodate the habits of the rare tropical plants with which it is filled. Immense Australian ferns, bearing a tuft of fern-like fronds, on a bare trunk eight and ten feet high, are scattered here and there through the whole area. Lofty palms, their heads nearly touching the glass, together with the great heat and humid atmosphere, indelibly stamp the place as tropical in the extreme.

A particularly interesting plant among them was the *Eucalyptus globulus*—foliage blue, rather than green, and of a most peculiar odor, which arrested the attention of nearly all. This is the tree which is being planted now to such a large extent in the malarious districts of the Southern States and South America, as a fever destroyer. It has also been used successfully in some French hospitals as a cure for ulcerous sores, extracting the poisonous matter and healing the sore by merely laying the leaves on the part affected. Hundreds of rare plants and trees, all with their botanical and English names attached, and also the countries of which they were natives, filled up the main portion of the house, all planted out and growing as luxuriantly as though in their native homes. Now mount up stairs—take one look inside down on to the mass of strange foliage, enlivened by the forms of the busy sight-seers moving here and there through the plants, and then outside to the roof of the building, where one of the finest sights to be seen at the Exhibition meets your eye—I do not know how many acres of the most perfectly kept flower gardens it is easy to conceive; row after row along the walk sides of ribbon beds, that is, colors of either foliage or flowers so arranged as to give the appearance of long strips of ribbon with four or five colors running unbroken from end to end. Large clumps of standard roses—beds of new and

rare plants, furnished by different nurserymen and kept in thorough order, having the name of the firm by whom they were supplied, was a novel feature and one that we might take a hint from in the furnishing of our London park, if ever we are to have one. One large plot, entirely filled with cotton plants, which were just bursting the pods and showing the snowy material within, attracted considerable attention. Masses of all the different kinds of Coleus planted on raised beds, sloping from the centre to the edges and trimmed perfectly even with sheep shears, presented a very unique and striking appearance. Rhododendrons, Azaleas, Kalmias, and new and rare varieties of Evergreens studded the grounds in every direction, with here and there an object of more than ordinary interest standing conspicuously out, such as several fine specimens of *Sequoia gigantea* (the Mammoth Tree of California), the bark of which was exhibited elsewhere as cut from the tree in its native home, eighteen inches thick. Several varieties of Beech, including the Cut-leaved, Crested and Weeping, together with different kinds of the purple-leaved sorts, showed to what an extent these things were prized by some nurserymen.

Auracuria imbricata (the Chili Pine), *Cedrus deodara* (Indian Cedar), *Cedrus Libani* (Cedar of Lebanon), and *Cryptomeria Japonica* (the Japan Cedar), all were represented by beautiful specimens, and reminded us of some we had seen under most favorable circumstances in the west of England.

Enough could be said, Mr. Editor, about the things to be seen in those horticultural grounds alone to occupy a large portion of your space, and in case I am already trespassing upon it, I will for the present close my remarks, trusting they may be found of interest to some of your numerous readers.

S. J. P. N.

Root Pruning.

From the Gardeners' Chronicle.

“Young trees for kitchen garden borders and quarters are generally trained as pyramids, and as such I will notice them. When planted, see that they are not planted over deeply, and their roots nicely spread out. Do not use any gross manures, only maiden loam to give them a good start. Pears on the quince should be planted out enough to cover the union of the stock and scion. I prune rather closely the first two or three years, according to their respective growths, not to encourage grossness, but to secure sufficient branches to lay the foundation for handsome, symmetrical trees. In summer pruning I only remove superfluous laterals. In winter pruning I cut back the leading branches, according to their respective growths, shortening the leader well back to get plenty of lateral branches; I don't summer pinch the laterals of young trees—as for winter pruning they are generally cut further back than they have broken. In bearing trees it is all the pruning required except the regulating of laterals, of which there is no great quantity in well root-pruning trees.

“By the end of three or four years they will be getting nice trees, and well furnished with branches to form handsome pyramids. Early in the autumn I have them carefully lifted, open a trench round three or four feet from the stem, carefully follow the roots to within a short distance of the stem, then return the soil back to within eight or ten inches of the surface level, treading it firmly down, then cut any bruised part of the roots, spread them equally over the surface, and cover them with some fresh loam. If the weather is dry I give them a nice watering, and level the surrounding soil. As soon as the leaves drop, I have them nicely drained by driving a few stiff pegs into the soil three or four feet from the stem, then run a wire around the top of them, which is fastened by a few hooks. To this I tie the bottom branches as nearly in a horizontal position as possible. If the trees looked full of wood it is wonderful how this operation seems to lessen their number. If well done they look as if done by an expert in Azalea training.

“From this time forward give up using the knife, unless you cannot find time to use your

finger and thumb. In the course of a few years I again lift the roots back again to where I left them at the last lifting, raising them nearer the surface. This periodical root pruning, if performed early in the season, does not lessen the chances of a crop the following season.

“I will now notice the old neglected trees. I would at once carefully remove all superfluous shoots, retaining a few where there were space for them. They generally form nice bearing wood. As soon as sap had risen into the eyes of the cut shoots I would begin root-pruning—the earlier in the season the better—according to the age and strength of the trees. I cut a deep trench around them, deep enough to meet with all their roots; I then have the soil carefully forked away from the roots, following them nearly up to the stem. I find a few pegs useful to peg the roots out of the way of the workman, so as not to bruise the roots more than possible; they are easier retained to the surface when retained a good length. The soil is now levelled back and well trodden in to within 15 inches of the surface. I placed three or four inches of good, fresh soil on top of this, then carefully prune all the bruised parts of the roots, spread them nicely on the fresh soil, a person with a spade placing some on the top of them, to keep them in their proper places, and when all is nicely levelled off the work is finished.

“The next time they are root-pruned I dig a trench round them a little further than where I left them at the last, and fork the soil away till I come to the former cuts. I then prune as before, and carefully cover up. It is not well to leave them until they show signs of grossness.

“I think the labor bestowed upon them is amply compensated by the return and superior quality of the fruit. It takes very little more to root-prune than it does to remove the faggot-wood out of them; besides, in their neglected state they are only worthless cumberers of the ground. I question very much if there is any more useful fruits than good apples and pears; many prefer them when in good condition to grapes and pines, but when smothered up in dense masses of unnatural foliage they cannot attain either their proper size, color, or flavor.”

Experiment in Grape Culture.

A correspondent of the *Prairie Farmer* writes as follows: Seven years ago, in grubbing up a Catawba vineyard, the writer left one row of the vines. The stakes had been taken away, and as a lot of apple tree trimmings were convenient, a quantity were placed on each side for the vines to run on, just keeping them off the ground, but scarcely more than a foot from it in any place.

The experiment has been completely successful. The last three years have been excessively wet, and both rot and grape curculio have run riot among the Concord, while these vines are altogether exempt. This year, hot, steamy weather would occur immediately after severe showers; the result has been wide-spread blight among pear, apple and other trees, and grapes could be seen to mildew while observing them; but these vines, close to the ground, have been kept shaded all the time, and were also much cooler. In no case do they show any evidence of atmospheric or insect injury of any sort.

Experiments like these are recommended in localities where mildew is common, and where choice sorts, like the Catawba do not usually prosper. The mode of culture has many merits. It costs little or nothing to care for them, only placing brush or rough forks under them to keep the vines from contact with the earth. In winter, the snow, leaves and other sheltering cover, sift in among the branches and remain there, preventing injury from severity of the climate. Last and most important of all, the fruit is of a superior quality, without any imperfections in any part, even while requiring no care.

Forest Culture.

The time for making entries for the liberal prizes offered by the Massachusetts Society for Promoting Agriculture, has now passed, and we regret to learn that the number of entries has been small. We have at different times during the present year called attention to the subject, and from the many inquiries upon the subject and the wide distribution of the little pamphlet containing the essay of Prof. Sargent, reprinted from the last Report of the Secretary of the State Board of Agriculture, we very naturally inferred that there was a wide-spread interest in the planting of trees and that there would be some active competition for the prizes. But such does not appear to be the case.

We believe it is good economy to plant trees, and we agree with George B. Emerson when he says that it is very important to cover all the hills with trees. By doing it you will improve the climate. The loss of trees in Massachusetts has injured the climate very much. It has been growing worse and worse for over a hundred years. An old gentleman in Worcester said forty years ago: "There are a great many plants we cannot cultivate in our gardens now—nice, delicate things—which, when I was a boy (he was fifty or sixty years old then), grew perfectly well; but, since then, all these hills have been denuded, the forests on them have been cut down, and the winds from every quarter come in without being impeded at all, and that makes our climate so bad here in the centre of Worcester that many of the delicate plants which flourished perfectly well thirty or forty years ago cannot be raised now."

We can all do something towards remedying this evil. Take care that the tops and sides of all the hills shall be covered with forests. By so doing we are not only protecting our own gardens, so that we may cultivate delicate plants in them, but are rendering our homes more comfortable and more healthy.

The Window Garden.

IVY.—Ivy will succeed better, says the Ohio Farmer, in warm, dry rooms than any other plant, and all that is needed to make it attractive is the exercise of a little ingenuity in the appliances for its home. A vase, not necessarily costly by any means, will answer a good purpose, and this reminds us of an excellent idea that we lately noticed in a foreign periodical for growing this very plant. Long shoots of the ivy were procured, with the young and tender aerial roots very abundant. The lower ends were wrapped in moss, and then some five or six of these were lightly tied together at the bottom and placed in the vase. Fill the vase within a few inches of the top, and suspend the ball of moss within. The roots will soon commence to grow, and afterwards the moss should not quite reach the water, as the roots will extend down into it, and prove all-sufficient.

So many different varieties of ivy are now in cultivation, that by selecting kinds that will form a decided contrast in shape and color, the effect will be sensibly heightened. The center of the vase may be filled with cut flowers or grasses, or nothing will look better than ferns. The ivy may be allowed to hang down over the side of the vase in graceful festoons, or else trained and placed over and around the window, thus making a room appear cheerful and pleasant all winter long. It will not grow quite as well in strong light as when partially shaded, as the ivy loves shade and an even, cool atmosphere. It can be planted in tubs and trained up a stairway, thus forming a mass of green foliage from the hall below to the floor above.

Used in any way as fancy directs, it is excellent as a house plant. A convenient way of growing a small ivy is to fill a small fish globe with clean rain water, putting in the bottom some tiny shells and gay colored stones for ornament; place in this a slip of parlor ivy, and suspend the globe by three small brass chains, which may be bought at any hardware store. This may hang from the window cornice or from the center of the chandelier, or in any other place where the light is not too strong. By filling up with fresh water as fast as it evaporates, you may sustain the life of an ivy through the whole winter. In replenishing the water add three drops of ammonia to it.

Heating Small Greenhouses by a Coal Stove.

BY G. A. H.

We will suppose the greenhouse in question to be about 12x24, and built against the west side of the kitchen. A bench runs along the whole front except at the end where the stove stands, the rest of the house being given up mainly to large plants standing on the floor or ground.

Not wishing to be at the expense of a boiler, and having a stove and plenty of pipe, I set the stove (a small base-burner), in the northwest corner, at the end of the bench, digging down about eighteen inches to bring the flue at a proper height. The stove has four doors, with mica panels just above the fire pot. I took off the rear door and had one of sheet iron put in its place, with a hole and collar for smoke pipe. The stove then had two flue holes, with a piece of pipe about ten inches long projecting from each, the upper one having a damper. I then carried the smoke pipe from the lower flue hole along under the bench, and returned it to the

stove, connecting it with the upper flue hole, and thence carrying it straight outside to the galvanized iron chimney pipe. The damper in the upper flue is left open till the fire is well kindled, when it is closed, so that the draught is then through the whole length of pipe. I have had no smoke or gas but once, when the outside pipe became choked by soot. This could have been prevented had I supposed it ever likely to occur. Last year (1875-6) the greenhouse was about half its present size, and I used the same stove, with a single line of pipe running the length of the bench, and out at the other end. In either case it is satisfactory, though of course the heat is not so steady as with a boiler.

This greenhouse faces west, and has no protection on the north (about as bad a position as can be, except due north), and a part of the main house projects on the south, keeping off the sun in the shortest days till after 1 o'clock. With no care between 10 P. M. and 6 A. M., the temperature at night has ranged from 42° to 48° at the coldest end. On two or three occasions it fell to 38°. The greenhouse was built mainly for ferns and palms used out of doors in Summer, and requiring cool treatment. Of these one can make an admirable selection, and I have been very successful in growing them. Of course the selection of blooming plants is quite restricted, but the lack of bloom may in some measure be made up by Dracenas and other ornamental-leaved plants. I have as fine Primroses and Cinerarias as any one, while Carnations, Chorozema, Begonia incarnata and Yellow Oxalis are unfailing; and among the less common plants are Cypripedium insigne and the Fall blooming Epiphyllums. The list might be extended, but these, with Winter blooming bulbs, are the chief dependence till April brings the Cactus and Azaleas.—Gardener's Monthly.

The Elder Tree or Shrub.

The common Elder is too little regarded among our ornamental, second-class trees, or first class in growth of shrubs. The botanical name, Sambucus, is said to be derived from a musical instrument once made from it, called Sambuca. In Scotland it is called the Bower tree, pronounced "Boortree." From its flowers as well as its fruit a wine is made, and from the fruit pies and puddings are made. I can not say much for the flavor of the wines or the cooked dishes, but as an ornamental plant it should be more grown.

Few trees grow so rapidly, keep as clear of insects or show as fully of flowers and berries. It is a coarse feeder, and grows best where there is more or less moisture. In its early stages it has unpleasant odors from its foliage, and would be taken as a coarse weed, but, belonging as it does to the natural order, Caprifoliaceae, like the upright honeysuckle, it soon becomes beautiful in foliage and flowers. The variety commonly found is known as nigra, which has varieties, one with cut-leaved delicate foliage, and another with a foliage mottled with yellow; one of the handsomest of all our shrub trees. It has a hollow stem and many a pop-gun and whistle have been made from it, and where it grows a native wildling the bark has been used around the bodies of young fruit trees to prevent rabbits and mice from eating the bark of the tree. Fine ornament hedges are made from it cheaply, for it grows readily from cuttings of its own year-old wood; and while forming a pen upon a farm in which to keep calves, its fruit when ripe is readily eaten by poultry. It is used as a sort of nurse or shelter for young plants that need protection from wind and sun, a little time, and then it can be removed.

Raspberries and Their Management.

At planting, the tops of raspberries should be cut away, so that the entire energies of the root may be expended in producing new canes. Early in July the leading canes should be shortened in, and this may be repeated once or twice during the growing season, and once in autumn after the leaves have fallen.

The result will be short, stout, bushy plants, which will occupy but little space. These will bear about one-fourth of a crop the next year, when they should be cut away as previously directed. The new canes of each succeeding year should be shortened in as before stated, which will give the rows a beautiful hedge-like appearance. Black cap raspberries make a spreading growth the first year. Their training branches often extend to a distance of several feet. These may be shortened-in during the growing season or not, as may be convenient. In autumn, however, the plant should be reduced to a compact "hill," with branches averaging eight or ten inches in length.

This will give room for all the good berries that the plant is capable of producing to advantage. The young canes of the second and succeeding years are much stronger and grow more upright.

Early in July their upward growth should be checked by cutting off their tops, and their laterals should be cut back several times, as recommended in the case of red raspberries.

If new plants are required, the laterals, if cut at all, should only be cut early in the growing season. Eventually, they should be shortened-in, but commonly this is not done until the new plants are dug. Whenever practicable, it is better to have all surplus wood removed in autumn. The ice and snow of winter cannot then so easily crush or mutilate the plant. If previously neglected the final pruning may be done in winter or spring. For this purpose, pruning or grape shears are excellent implements.

In summer, while the wood is soft, a light, sharp corn cutter answers very well, and can be operated with great speed. A pair of leather mittens or gloves is often needed in handling berry bushes. Cats with gloves may have some trouble in catching mice, but most men similarly engaged would prefer to have gloves. In this particular case no mice are wanted, hence the fallacy of applying any proverb in connection with them.

If raspberries are pruned as above directed, stakes may usually be dispensed with. The short, compact bushes will, as a rule, sustain the load of fruit without allowing it to come in contact with the soil.

A NEW FRUIT IN ENGLAND—PYRUS MALEI.—This desirable new fruit has been introduced into England from Japan. It is allied to the Japan Quince. The fruit is the size of a moderate quince, of a bright apricot color, and makes a rich conserve. The flowers, which are produced in great profusion, are of a most brilliant orange-scarlet color. It is one of the most beautiful flowering trees of recent introduction, as well as a valuable fruit.

THE CANKER WORM.—C. W. Palmer, in a communication to the Germantown Telegraph, says: We have utterly destroyed the Canker Worm, that were so destructive to our apple trees, by the application of tar. One barrel we find will cure two hundred trees. We now soften the tar with rain-water by warming it, and applying it to the naked tree. At first we feared damage to the trees, but we find it does not harm the most young and tender. Some tried kerosene oil to soften the tar, but it damaged the trees when applied to the bark. Water is better, and keeps the tar soft longer, and is much more effectual. Nothing but diligence will overcome them; it takes about thirty days to effect a cure. One man will tar about two hundred trees in about two hours, and it must be done every day.

William Penn foresaw, nearly two hundred years ago, the possibility of early destruction to our timber trees, and insisted on five acres out of every hundred being allowed to stand, and he especially desired that the oak and mulberry should be preserved. Prof. Rothrock says that France requires that thirty-two per cent. of her area should be in timber, but that in the United States our proportion of timber land to area has been already reduced to twenty-five per cent. More than ten thousand square miles of timber are destroyed each year. The law of Sweden requires that for every tree cut down two shall be planted by the tree destroyer.

"Gardener's Year-Book" says that the most simple, least expensive, and most certain method of exterminating the gooseberry (and currant) caterpillar, is to cover the surface of the ground, early in Spring, all round the bushes, and two or three inches deep, with fresh tan from the tanyard. This course can be recommended the more, because of its being so easy and excellent a means of suppressing the weeds, which are so apt to grow up among the low Spring branches, and are protected by them from the fingers that keep weeds away from other plants. The season for its application, too, is the time in May when young shoots spring up from the collar of the plants, and help to rob and smother them. All of these that have not ample room are easily rubbed out while the tan is being applied. The tan mulching preserves moisture to the roots, and gives off some to the leaves, and this is especially necessary for the gooseberry, which loves humidity, and mildews badly in very dry air.

Orchard in Clover.

Colman in the *Rural World* replies as follows to an enquiring correspondent:

A great mistake is made by putting young orchards in clover. For trees to thrive, they need a loose, well-cultivated soil in their younger years. The roots of trees cannot run out far in reach of food in dry, hard soil. The trees in consequence become stunted and injured by disease in some form. Many years ago we planted two young orchards, at the same time and from the same block of trees. One of the orchards was cultivated in corn several years, and the trees grew thriftily and came early into bearing. The other was seeded to clover the second year, and remained in clover for four years. At the end of that time the trees in corn were so far ahead of those in clover, that no one would have thought they had been planted the same season and from the same lot of trees. The soil of both orchards was similar. No one, who has not had actual observation, could have any just idea of the benefits of cultivation. By all means plow your ground as soon as the clover is cut, and if you put any crop in it, let it be beans, corn, potatoes, tobacco, or something of the kind, requiring the soil to be frequently stirred. Of course, turnips or peas could be sown, and would not be very bad crops to raise in the orchard, but corn is preferable. You must have a short single-tree, and be sure not to tear off the bark of trees with it.

But really, unless on very rich soil, no crop ought to be raised in an orchard. A crop of trees and fruit is enough. The land should not be too much exhausted by taking off other crops. Fruit raising will tax the land all it can bear in a very few years. Most farmers think all they have to do is to plant trees, and that then they can take care of themselves. Do they plant potatoes or corn, and let them take care of themselves? Do they not plow and hoe, and give them good culture? So should they do the same to fruit trees.

Watering Window Plants.

There is nothing that the cultivator of window plants asks more about than how and when to water plants. There is nothing he or she asks that is more unsatisfactorily answered. The florist tells him to water when the plant needs it. But how is it known when the plant needs water? That is just the point of ignorance. Yet it is very difficult to give the knowledge to any one. It must come of experience, and yet there are a few hints that one may profit by in trying to find out when a plant needs water.

With experience one can soon tell by the weight of the pot. One knows about how an empty pot ought to feel, and how the same pot seems to weigh when filled with dry earth. When very wet the weight is nearly double. A plant never wants water when the pot with the earth is heavier than a pot of dry soil. Then the color of the earth will tell, with very little experience, when it needs water, and one soon learns to distinguish by this. It is almost always much lighter in color when dry than when wet; and if the earth is as dark as it is when fresh watered it wants no more till it gets lighter.

And then experience will soon teach one to know when a plant needs water by the feeling of the earth. When dry the earth will crumble a little when it is touched; on the other hand, it seems to press together and to be smeary when wet. With a very little experience it is so easy to tell when a plant needs water by the feeling alone that a blind man might make a florist in this respect.

Those who wish to know how many times a week to water their window plants can never get an answer. Plants will need more water in a warm room than in a cool one, in a dry atmosphere than in one that is moist, when a plant is growing vigorously than when it is at rest, when it is in good health than when it is somewhat sick, and in light, shady earth, rather than in stiff and heavy ground. Nothing at all but a little experience will help one, but if there is a true love for the helpless little thing, it is astonishing how soon the knowledge comes to one. There is no such one but soon becomes a good "plantsman."—*Worcester Gazette*.

Apples recently sold at five shillings a barrel in Liverpool market.

Small Fruit Growing.

A Western small fruit grower says: "I commenced the business on an income of \$100 a year; now it is \$3,000. My market has been mostly in our small towns near home. And it is astonishing what an amount of fruit can be sold in our small towns of from 500 to 5,000 inhabitants, and at paying prices, too. But as some one who reads this may think he will try the business, too, I will just say 'go slowly' at first. That is good, and remember it requires years to become successfully established in small fruit growing, and then the profits may be light. Your land is to be first put in good condition. Apply the manure liberally, even if you have enough for one acre only. Go slowly. Obtain the best varieties of fruits, as far as in your power, and be satisfied to make a mere living. Beware of setting varieties that are not adapted to your climate. For instance, raspberries that may be very successful in one place may not be worth anything in another locality, and the same is true, in some degree, with strawberries, grapes, etc."

A bed of double Portulaca is one of the floral treasures of which we never tire and which we never dream of doing without even for a single

most. Nothing is more presumptuous than to return from a ramble in a friend's garden with a bouquet of your own selection, unless requested in an unequivocal manner to help yourself, and even then it requires rare discretion to make a choice satisfactory to all parties. Handle or pinch nothing whatever; even a touch injures some vegetation, and feeling of rose and other buds is almost sure to blast them. The beauty of scented-leaved plants is often ruined from having their foliage pinched by odor-loving friends; better pick the leaf off entirely for a visitor, than for half a dozen to be mutilated by the pressure of fingers, which are seldom satisfied with trying only one. A tender-hearted young friend received a rebuke from a lady that almost brought the tears to her eyes; as she moved her hand toward an unusually fine rose geranium, the pride and pet of its possessor, in sharp alarm its owner exclaimed, "don't pinch it." The young lady's mortified feelings were only soothed by explaining to her that her friend was constantly tormented by the ruinous admiration of acquaintances, and her nerves were too irritated for a gentle remonstrance. Every cultivator of flowers can understand the annoyance of seeing a favorite flower in danger.

Among my acquaintances is one who is welcome

everywhere but among flowers. When she approaches them, it is no exaggeration to say that I am in agony. The rarest and most delicate plants are pinched and stripped through her fingers, particularly if the foliage is ornamental. When she discovered my lovely ferns and handled them unmercifully, I should have burst into tears if I had not caught the pitying eye of my husband bent upon me, who with ready tact diverted her attention to something else. When one exhibits a beautiful baby, she does not expect to have its fat limbs pinched till they turn black and blue, its hair pulled because it is soft and silken, or its lustrous eyes examined by curious fingers. Neither will the tender children of the soil endure useless handling. If accompanied by a child, be sure it does not touch the flowers. A little rosy elf with its apron full of choice flowers and broken branches will look very much more bewitching to its mother or some uninterested artist, than to the owner of the depleted flower-beds. Believe one who speaks from experience, and do not rob yourself of a welcome to some friend's garden by trying the experiment.

When an enthusiast in floriculture triumphantly shows some elegant foliage plant, so gorgeously dyed and painted that it is always in blossom, do not ask whether it has a flower. A conspicuous bloom on a plant so lavishly dowered with beauty would be a superfluity which nature is too wise to bestow.

Cyclamen Persicum Giganteum.

The accompanying cut represents a new and greatly improved variety of Cyclamen, with very broad, beautifully mottled leaves, broad petals of great substance, pure white, with a fine bold violet purple eye. This pretty flower is worthy of a place in every household. It is of the easiest culture, and for a window plant not to be surpassed, giving a greater show of flowers than almost any other plant. Pot in October or November in rich loam, mixing with the soil about a spoonful of soot, which will give brilliancy and size to the flowers. Charcoal broken fine will answer the same purpose. Use a small pot, and place the crown of the bulb just above the surface of the soil. Keep the plants cool till the leaves are well grown. When the flower buds begin to rise on the foot-stalks remove to a sunny shelf, where they will soon show bloom. After the flowering season (which lasts about three months) gradually cease watering, and let the leaves dry down. Seedlings will bloom in about two years.



CYCLAMEN PERSICUM GIGANTEUM.

season. To establish one of really double flowers, is a work of several years, and when established, it is necessary to pull up any plant that bears a single or semi-double flower as soon as it opens—else in the place of a few seeds of double flowers, hundreds of those of single flowers will be half-sown and a bed of, for the most part, single Portulaca, will be the disappointing result for the ensuing year. The double flowers last several hours longer than the single, and in dull weather for the whole day. They are matchless little roses, and the brilliancy of their several colors quite bedim those of most other flowers growing near enough for comparison.

Etiquette of the Flower Garden.

There are comparatively few who, either from instinct or education, regard that delicate courtesy which should be observed by all who enter the charmed precincts of a garden. A few suggestions to those who thoughtlessly violate the etiquette of the garden will prevent much mortification and unpleasantness.

If the walks are narrow, a little care will avoid sweeping one's skirts over the beds, to the injury of the flowers and the nerves of the owner as well. Do not pick unbidden a blossom, or even a leaf—it may be the very one its possessor values the

Cheese.

The article of cheese has been well handled this season, so far, by the factory men. We urged them three months ago to sell promptly to the highest bidder two or three times in the month, in preference to holding for future high prices which might or might not be realized. Whether they took our advice in June or not, they have sold pretty freely up to the middle of July; when, the whether being cool, there seemed to be a unanimous decision arrived at among the makers that they would shape the course of events and markets to suit themselves for the remainder of the season. Consequently there was very little done in the way of selling in the early part of August; and about the middle of that month, buyers concluded that if they wanted the cheese they had better be stirring, whereupon a considerable movement was made in the upward direction and a very large amount of cheese sold, including July make, from 8½ to 10½c. and for the balance of the season at from 11 to 11½c., according to the locality and reputation of the cheese. This latter mode we consider a very prudent one on the part of the factory men.

It is true that this week has witnessed a remarkable bound upward in prices, a bound which we consider unwarrantably great, and under the

present excitement and sell their stock to good men are to be congratulated. But any who may feel dissatisfied that they did not hold on longer, and so become rich by the present spasmodic advance, may comfort themselves by the reflection that the present cannot be safely considered a normal rise, or anything more than a chance price based upon speculation.—*Toronto Monetary Times.*

The Government Sale of Cattle.

PRICES REALIZED.

The sale of cattle at the Model Farm took place on Thursday afternoon, and was a decided failure, so far as prices obtained were concerned. The following sales were made:—

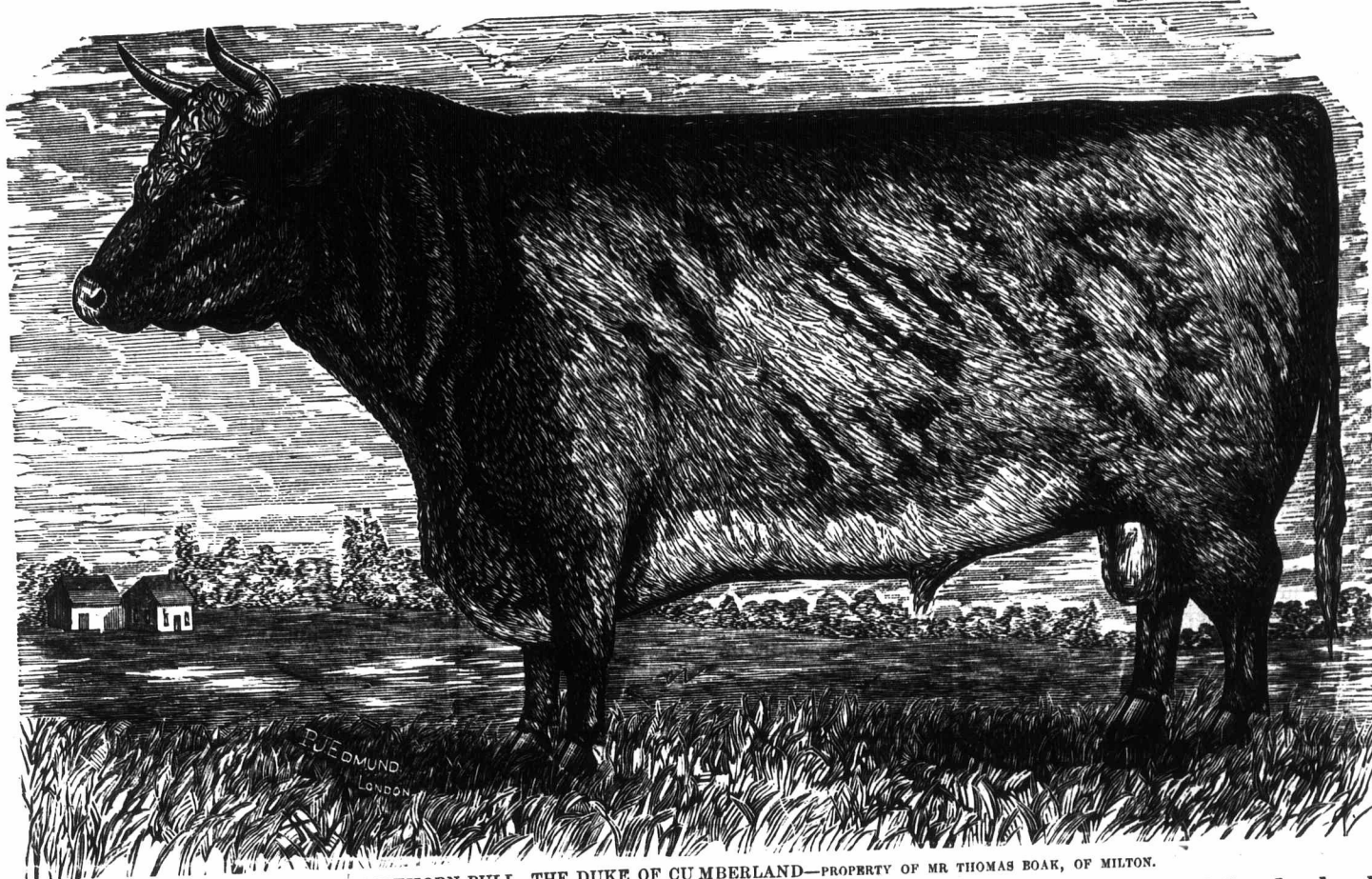
CATTLE.—Shorthorns—Cambridge Chief—red and white, calved August, 1865, got by Cranberry Chief, bred by John S. Armstrong, dam, Cambridge 10th, \$61, J. B. Ridd, Maryboro.
 Senator—white, calved April, 1875, got by Baron Pawlett, by Hon. Geo. Brown, dam, Louan of Brant 5th, \$60, P. Mahon, Puslinch.
 Cambridge Duke—red and white, calved September, 1876, got by 3rd Duke of Springwood, bred by Colonel Taylor, London, dam, Cambridge 10th, \$100, D. Betzner, Pilkington.

BERKSHIRE PIGS.—Boar pig, farrowed June, 1877, J. and B. Hunter, Pilkington, \$13; do., Geo. Cherry, Maryboro, \$12; do., Wright & Butterfield, Sandwich, \$12; do., J. S. Armstrong, \$12; do., J. L. Squiers, Owen Sound, \$11; do John Carter, Puslinch, \$7.

Sow pig, Robert Brown, Puslinch, \$19; do., J. B. Ridd, \$9; do., Wm. Lackner, Hawksville, \$8; do., J. L. Squiers, \$9; do., Geo. Harvey, Guelph Township, \$6; do., J. B. Ridd, \$8; do., R. Cromar, \$5; do., J. S. Armstrong, \$6; do., J. Armstrong, \$6; do., Wright & Butterfield, \$17; do., W. Lackner, \$5.

PRINCE ALBERT WINDSOR PIGS.—Boar pig, farrowed May, 1877, R. Rennelson, \$6; do., John Hudson, Guelph Tp., \$6; sow pig, same farrow, Wright & Butterfield, \$8; do., J. Hudson, Guelph, \$8; do., A. Elliott, Galt, \$7; Wright & Butterfield, \$9; do., J. H. Glennie, Puslinch, \$4; do., Thos. Waters, \$6; do., John Jackson, Chingacousay, \$6; do., J. & R. Millar, \$8.

COLLIE DOGS.—Bitch, littered July, 1877, John Snell, \$16; do., J. K. Weir, Grenville, \$10; do., W. B. Telfer, Pilkington, \$8; do., — Nichols, Lockport, \$8; dog, same litter, P. Arkell, Teeswater, \$6; do., John Hope, Bow Park Farm, \$9; do., John Hope, \$10.



SHORTHORN BULL, THE DUKE OF CUMBERLAND—PROPERTY OF MR THOMAS BOAK, OF MILTON.

The Duke of Cumberland.

For the benefit of those of our readers who did not attend the Provincial Exhibition, we instructed our artist to draw a few prime animals. We now give you the representation of the one that took the Diploma as the best Shorthorn Bull. This bull also gained the silver medal given by the Canadian Commissioners at Philadelphia.

SCHOOL OF AGRICULTURE.—Owing to the extension of the school not being completed, the fall term will not open until November first. The full complement of 80 students have been enrolled, but, owing to the number of applicants, the officers intend to crowd in some 8 or 10 more.

Here is an instance of the great profits which follow good tillage:—Mr. D. J. Lowrie a few years since purchased the "Clement lot" near the celebrated lot 90, St. Davids, paying therefor about \$3,000. This year his crops will yield as follows: Fruit, \$700; corn, \$200; hay, \$150; berries, \$130; other products, such as cattle, sheep, pigs, poultry, eggs, butter, &c., \$729; making a total of \$3,000. Mr. Lowrie's farm is 97 acres.

circumstances altogether speculative and unsafe. The prices paid in Ingersoll on Tuesday, Sept. 25th, 12½ to 13c., were a half cent beyond the highest figures paid by American buyers at the Little Falls market on a like date. The advance paid here was evidently based upon the stride in the English market from 51s to 60s, but those amongst us who pay the prices of to-day are buying with the chance of profit against them. Sixty shillings per hundred of 112 lbs., means something less than thirteen cents per pound in Liverpool, and, remembering that it costs two cents per pound to get it thither, under eleven cents to Toronto, yet buyers are paying in Canada this very week 12 and 13c.

The very highest known to have been paid for our cheese in the English market of late years was in 1874 or the succeeding year, which was 76s or about 16½c., which meant under 15c. here. And even this price lasted only a few weeks. There is no market in the world which will stand such prices as are being paid for cheese in Ontario; the figure in Britain may advance, but to our view cannot advance to such a degree as to make present prices safe. Those who bought earlier are of course all right, but holders at the prices we have named are running a very great and needless risk.

Factory men who can take advantage of the

Manrico 2nd, got by Manrico, bred by Her Majesty the Queen, from the Booth blood, dam, Rosalie, \$84, Joseph Thomson, Nichol.

HEREFORDS.—Duke of Argyle, got by Duke of Connaught, bred by Her Majesty the Queen, dam, Princess Mary 2nd, \$100, R. J. Mackie, Oshawa.

Duke of Manchester, got by Duke of Connaught, bred by the Queen, dam, Heather Bell, \$75, F. W. Stone.

SHEEP—COTSWOLDS.—Two shear ram, Thomas McCrae, \$51; one shear ram, J. L. Squiers, Owen Sound, \$25; do., R. Rennelson, Galt, \$12; do., R. Rennelson, \$13; do., Geo. Atkinson, Guelph Township, \$16; do., Jas. Laird, Puslinch, \$11; do., W. P. Mills, Frontenac Co., \$23; ram lamb, A. Nelson, Nassagaweya, \$44.

LEICESTERS.—Two shear ram, Thomas Waters, Eramosa, \$18; shearing do., R. Gowanlock, Bruce Co., \$18; do., Robert Aikens, Nassagaweya, \$24; do., Jas. Craig, Port Elgin, \$38; do., George Cherry, Maryboro, \$25; do. R. B. Fleming, Saugueen, \$24; do., J. B. Ridd, Maryboro, \$24.

SOUTH-DOWNS.—Aged ram, A. Nicol, Catarqui, \$26; shearing ram, Robt. Cromar, Pilkington, \$20; do., F. Beck, Doon, \$10; do., J. S. Armstrong, Eramosa, \$10; ram lamb, R. Rennelson, Galt, \$8; do., W. B. Mills, Frontenac, \$12; do., W. L. Gordon, Pilkington, \$8; do., R. Rennelson, \$13.

Agriculture.

No More Land to Sell.

The emigration of those desirous to acquire good, cheap farms, having the virgin soil unbroken, must henceforth be directed more exclusively to Canada, and this is certainly one bright feature in our prospects for the future. In the vast territories of the Dominion, more especially in the Northwest, there are fertile lands awaiting the enterprising colonists. In the United States there are no more lands of the public domain to sell. The *N. Y. Times* admits that there exists no longer a fertile and inviting field for colonists.

For a century at least, we have been in the habit of referring to "the national domain" as an unbounded tract of arable land, laced with beautiful streams, verdurous with groves of timber, rich in pasturage, and waiting only for the plow of the farmer that it may laugh with a harvest. But all this is founded on a popular delusion. There are no grand areas of arable land lying open to the adventurous plow of the settler. Whether wisely or not, railroad companies have been endowed with millions of acres; land scrip for educational and other purposes has been used to cover other millions of acres; hundreds of thousands of homesteads have been granted from the national domain, and considerable tracts have been sold for cash or bought under the acts for the encouragement of mining. The only considerable body of unoccupied land lying in one tract is that which is drained by the headquarters of the Missouri. In Dakota, Montana and Wyoming are found so few settlements that the country, away from a few points on the rivers, may be said to be wholly unoccupied. But the land for the most part is high and unproductive. The region is intersected by deep gorges, broken by steep bluffs, and absolutely incapable of producing regular crops. Here and there in Wyoming, Colorado, New Mexico, Nevada and Arizona are isolated spots of good land which may eventually be available for agricultural purposes. Some of these spots are now in fine arable condition. But they are remote from channels of communication, and are surrounded by wild wastes which may never be available for purposes of settlement. Even the grasping railroad corporations which have run their lines through these States and Territories are incumbered with hundreds of thousands of acres of worthless lands, which cut a very big figure in their "princely endowment," and nothing more. In Nevada, New Mexico and Arizona, these fertile spots, though numerous, derive their only value from the contrast of the appalling waste of desert around them. A few thousand acres of land on which bunchgrass and brambles grow, and water flows, is a delightful oasis to the traveler who has just crossed an arid wilderness peopled with horned toads and rattlesnakes and sustaining no vegetable growth but the thorny cactus. In Colorado, Texas, Nebraska, Wyoming, and in some parts of New Mexico and Arizona, there are vast ranges of grazing lands. And this phrase, "grazing land," has deceived many into the belief that eventually the ranges will be covered with smiling farms. This is impossible. The ranges where once fed the prodigious herds of buffalo, and where now feed the flocks and herds of the American stock-raiser, can never be farming lands. The herds of cattle subsist on the grass, which is green and succulent in early summer, and dry, sun-cured and nourishing through all the rest of the year. The cattle frequent the rivers, seldom straying far from the watercourses, and taking refuge in the bluffs when the storms of winter rage. But the surface is treeless, watercourses are infrequent, and the high rolling ground is as dry and brown from July to January as the swales of an African desert. There is no use in attempting to disguise the fact that the "national domain" is gone. It does not exist as a fertile and inviting field. Much of it is occupied by substantial and prosperous towns and settlements. Much more is available for the useful purposes which we have indicated. But it is folly to suppose that the nation has much more agricultural land to sell or give away.

Subsoiling, like surface ploughing, should be done for every crop. Clover roots are a good subsoiling agent; they mellow and enrich the ground, and give it porosity.

Western Wheat Crop.

The crop of wheat in Minnesota, Iowa, Kansas and Wisconsin is estimated at 117,000,000 bushels, rather more than twice that of last year, and 24,000,000 bushels in excess of the yield of 1875. The aggregate in Michigan, Indiana, Ohio, Tennessee and Kentucky will exceed the crop of 1876 by from 35,000,000 to 40,000,000 bushels. There will be a falling off in California, but allowing for this, the excess of the yield in the United States, the yield will be enormous. The average export has hitherto been 61,500,000 bushels; this year there will be at least 100,000,000 bushels available for shipment. With the diminishing production in the grain-growing districts of the continent in consequence of the war, there will be ready remunerative markets for their surplus. The yield in Austria, France and Italy has been excellent this year, but allowing for this, Europe will require, it is estimated, about 160,000,000 bushels the bulk of which must come from this side of the Atlantic.

A Prize English Farmer.

For several years past the Royal Agricultural Society of England has offered substantial prizes for the best managed farms in the counties which form the district in which the show is held. This season the competitors were divided into eight classes, viz., 1st, arable farms above 150 acres in extent; 2nd, arable farms above 80 and under 150 acres; 3rd, farms above 40 and under 80 acres; 4th, dairy or meat-producing farms above 200 acres; 5th, ditto, not less than 100 but under 200 acres; 6th, farms of not less than 50 but under 100 acres; classes 7 and 8, for farms in the Isle of Man.

It happens again this year, as has been the case on one or two previous occasions, that a woman's management wins—the prize in class first going to Mrs. Ellen Birch, for a farm of 242 acres, all arable land, at Aintree, near Liverpool. The farm like the surrounding region is nearly level; is divided into fields of about 30 acres each, by neatly-kept hedges, and is a light and easily worked soil, naturally dry. No stock of consequence is kept, as town manure is cheaply brought on to the land by a canal from Liverpool, for which market the products of the land are intended. The rent paid is £5, say about \$25, per acre. The course of cropping is as follows:—1st, potatoes, after lea; 2nd, wheat; 3rd, barley or oats, sown with grass seeds; 4th, hay; 5th, hay; after which the lea is again broken out and planted with potatoes. The potato crop now on the ground is spoken of as "simply splendid." And it is on the potatoes that all the town and home-made manure is applied, sometimes with the addition of a little nitrate of soda. The grain crop, especially the oats, were very heavy. Fifteen men and lads are employed, at 16 and 17 shillings a week, and cottage rent. Heavy crops of hay are grown, and after this is over for the season, sheep are taken in to grass for local salesmen, at sixpence per week. The farm has been in the continuous occupation of the same family for thirty-five years, being conducted now by the widow of the tenant, assisted by her two sons.

Inoculating Arable Land.

The Duke of Manchester has tried experiments on his estate at Kimbolton, which are well worth consideration by all concerned in the breeding of live stock. Desiring to convert arable land into pasture, he did not sow grass seeds, but with a machine, made by Messrs. Howard, of Bedford, he cut ropes of sod two inches wide out of an old pasture. These ropes were carted to the field that was to be converted, were broken into pieces about two inches square, and were then placed in regular rows on the surface of the ground by women and children, who gave each piece a slight squeeze with the foot after laying it. The rows are marked by the counters of an empty corn-drill drawn over the land; and, after the inoculation is finished, the field may be rolled whenever necessary. It was in November, 1873, that the first field was thus treated. By the following autumn it was completely covered with grass, and was nearly as level and good as old grass land; and in the second year was fit for grazing. And as regards the pasture from which the ropes had been cut, we are told that "after the first year the gaps in the turf are scarcely perceptible."

Thus the tendency of grass to spread and fill up bare places has been turned to profitable account. The subject is not new, nor is this the first time it has been mentioned, but the making use of such

small pieces of sod to inoculate the land is new. The cost is about three pounds an acre, which, as we are informed, is less than the cost of sowing with grass seeds; and "there is no falling off experienced in the third, fourth or fifth year, at least to the same extent as when land is laid down to pasture with artificial grasses."—*Chambers' Journal*.

Liquid Manure.

It is generally believed that no system of enriching land for small gardens, with a view to perfection of crops, is so truly economical and so easily available as that of liquid manure. We occasionally hear of a gardener or an amateur fruit-grower who has practiced enriching the crop by liquid manure; but it is not a common practice so to enrich our gardens and lawns, however oftentimes the advocacy of the practice has been written. The writer practiced the sprinkling of a lawn in a dry season with weak liquid manure-water, and in the greatest of heat and drought has kept it fresh and green. In the management of pot plants, no course of supplying food equals that of a judicious use of liquid manure. There are in almost every family waste liquids, which usually go into a sewer or drains, or possibly upon the road where they are of no avail; but if saved, being conducted to a tank, along with wash-waters belonging to the house, would enrich an entire garden for vegetables and fruits, flower-borders, &c., and the whole, if the wash be applied regularly, and at night, after sunset, in moderate quantities, would prevent the driest weather of midsummer from checking vegetation. If an unpleasant odor comes from the tank, a little plaster (gypsum) sprinkled in and around the tank would keep it sweet and clean. Again the cause of liquid manure need never delay planting, because of manure not being on hand; but planting could proceed and the application of manure be made at leisure.

The Results of Hoing Wheat.

There is a great deal of doubt about the utility of hoing wheat, but there is no question at all but that it adds to the productiveness of winter wheat. Of course where the hoe is used the wheat must be drilled; hence the importance of knowing the effects of the wheat hoe at this season, before the wheat is sown. In connection with this subject comes up also the advantage of hoing wheat in the spring. All who have tried the harrow on wheat have invariably reported that it was a success. Mr. Beckwith, when we met him at the Farmers' Club of Volinia last week, was desirous that we should caution farmers who would be likely to use the harrow on wheat next spring, that it should not be drawn lengthwise of the rows, but across them. Sometimes in dragging wheat lengthwise a single tooth will get into a row and drag up all the plants in it, while when the harrow is dragged across the rows the wheat is not dragged out, as the teeth are all evenly supported, and do not touch at a time more than a single plant. Harrowing wheat in the spring is only a light hoeing that breaks the crust of the ground and exposes the soil to the air, and hence promotes the growth of the young plant by encouraging it to push out its roots. The wheat hoe following as a second operation ought to have a very salutary effect on the growth of the wheat plant at that season, aiding to make more roots and to stool out for a longer season. At the same time the very stirring of the soil makes it more able to sustain a greater growth, and to retain the rains and dews while resisting with iron power the heat of the sun. On clay soils that are apt to crust over and become baked in the spring it is a most effective operation, leaving the soil in good condition for the whole season of the growth of the wheat plant and up to its ripening. The advantage of hoing wheat ought to be more thoroughly tested than it has yet been.

A Western paper has been shown a specimen of good raw sugar manufactured from corn. A bushel of corn yields thirty pounds of raw sugar, which is white and very saccharine. It is marketable at four cents a pound. To complete its conversion into pure granulated sugar, alcohol is required, to remove the foreign matter, leaving about twenty-seven pounds of good sugar from a bushel of corn. This is certainly better than burning corn for fuel, as has often been done in the West, and may result in establishing a new industry for that section, and be an important contribution to the national wealth.

Roving Farmers.

From the Colonial Farmer.

There is a class of farmers who are constantly on the lookout for a better place to go to. Their farms are always "for sale," and they dream of luxuriant lands in some other part of the country which can be bought "for a song," where they imagine they would be more prosperous, and enjoy life better than where they now reside. Many of these men own mortgaged farms; and for such men to desire to remove where they can own a free farm, though it be far, far away, is but a natural manifestation to better one's condition, which the human mind cannot resist. But where can these men go, after selling their farms, and be contented? This is a serious question, which no man can answer of his own knowledge. Suppose they can sell out, and command a thousand or fifteen hundred dollars after paying all their debts, and they start for "the West," Kansas, Missouri, Iowa, or some other State. Eighty acres of land, with a comfortable house or log cabin on it, can be bought for from \$5 to \$10 per acre. The land is all right, as good as "lies out of doors;" but, alas, for the surroundings. Neighbors are scarce, society is a myth, and the poor, frail housewife who follows her husband without a murmur pines for friends. The children have to go two miles or further to school, and in the winter time they cannot attend much of the time on account of the storms. Churches are "few and far between," and the people are generally a mixture of various nations; and the result of all is that many an Eastern farmer who goes West is unhappy and wishes himself back on his old homestead. So if one goes South, or anywhere, he will not find things just to his mind. If one thing is better than on the old place another is worse; and taking all things into consideration, but few farmers change their residences, who are able to make a living on the old place, that better themselves by removing to a distant State. One may obtain rich lands at a low price where there is no market for what he grows; and he may get into an unhealthy locality, and soon he may bury his wife and children, and what then?—a gloomy world for him.

Cheap and Easy Drainage.

There is in use in some parts of the country a very cheap and practical method of underdrainage, which farmers properly circumstanced can employ to advantage, but which is seldom mentioned in the agricultural papers. The plan is most effectually adopted wherever, at a depth of a few, or perhaps several feet, a strata of clay or hard-pan, through which water will not penetrate, overlies gravel or other porous substance, when, if a shaft is dug through the clay formation and into the gravel or sand below it, a vast amount of water will find a natural subterranean and perfect outlet at a very light expense. Several members have stated at the Batavia Farmers' Club that in instances where they found a low place on their land, where water was inclined to stand, they, in a dry time, dug a hole as for a well down through this clay, then filled the hole with any refuse stone and removed the excavated earth so as to let the drainage into this pit, and after that no water was ever seen standing there any more. The same plan was practised in Batavia village, where, on Main St., water in wet times had flooded the surface for rods, and it was thought to be a difficult and expensive job to properly drain it away; but as the corporation extended it chose for Street Commissioner a farmer who had practised the method described, and he had a hole sunk at the lowest point on each side of the street, which, after filling with stone and leveling, secured the perfect drainage desired. Thus, at an expense of a few dollars only, was obtained a result which it might easily have cost a few hundred dollars to have effected in any other way.—H. L., Genesee Co., N. Y.

New Rules for the Barley Trade.

The Committee on Grain of the Produce Exchange held a meeting lately, at which new rules for the grading of barley were established as follows: Extra Canada barley shall be of a bright natural color, plump, sound and well cleaned, weighing not less than 49 pounds to the measured bushel. No. 1 Canada barley shall be of a bright natural color, plump, sound and well cleaned, weighing not less than 48 pounds to the measured bushel. No. 2 Canada barley may be slightly stained, otherwise sound, reasonably clean, weighing not less than 48 pounds to the measured

bushel. No. 3 Canada barley may be stained, but shall be sound, reasonably clean, fit for malting, and weighing not less than 46 pounds to the measured bushel.

No. 1 State barley, four-rowed, shall be of a bright natural color, plump, sound and well cleaned, weighing not less than 48 pounds to the measured bushel. No. 2 State barley, four-rowed, shall be plump, sound, reasonably clean, but may be slightly stained. No. 3 State barley, four-rowed, shall be sound, reasonably clean, fit for malting, otherwise unfit for No. 2.

No. 1 State barley, two-rowed, shall be bright, natural color, plump, sound and well cleaned. No. 2 State barley, two-rowed, shall be sound, reasonably clean, but in color not good enough for No. 1. No. 3 State barley, two-rowed, shall be sound and fit for malting, but in color and in cleanliness unfit for No. 2.

Rejected barley shall be such as is for any reason unfit for No. 3.

No. 1 Western barley shall be plump, bright, sound, clean and free from other grain, weighing not less than 48 pounds to the measured bushel. No. 2 Western shall be sound, bright, not plump enough for No. 1, reasonably clean and free from other grain, weighing not less than 46 pounds to the measured bushel. No. 3 Western barley shall include shrunken or otherwise slightly damaged barley, weighing not less than 41 pounds to the measured bushel.

Rejected Western.—All Western barley which is damp, musty, or from any cause is badly damaged or largely mixed with other grain, shall be graded Rejected Western.

The above rules go into effect immediately.—N. Y. Herald.

Lime as a Constituent of Soils and Plants.

Dr. A. S. Heath read a paper before the American Institute Farmers' Club, from which we abstract as follows:

Different plants vary in the quantity of lime required. To give a comparative idea of the quantity usually contained in grain, grasses, etc., the following table was given, which represents the amount of lime in ash of

	Grain.	Straw.	Total.
	lb.	lb.	lb.
Wheat, 25 bushels to acre, contains lime.....	1	12	13
Barley, 40 bushels to acre, contains lime.....	1½	15½	17
Oats, 50 bushels to acre, contains lime.....	3	19	22
Rye, 26 bushels to acre, contains lime.....	1½	15½	17
Beans, 25 bushels to acre, contains lime.....	2½	34	36½
Turnips, 20 tons to acre, contains lime.....	46	71	118
Potatoes, 8 tons to acre, contains lime.....	8	31	39
Red clover, 2 tons to acre, contains lime.....	—	77	77
Rye grass, 2 tons to acre, contains lime.....	—	30	30

Indian corn ash contains about the same as oats; timothy hay contains about two-thirds as much as red clover. Peas and beans, when the soil is well limed, will always boil soft. In fact, peas and beans will not yield well without a generous supply of lime. Meadow hay contains 22 per cent. of lime in its ash, and Sprengel estimates 22 per cent. of lime in the ash of white clover; Nesbit gives 15 per cent. of lime in the ash of hops; of apple trees 63 per cent., and of the cherry tree 35 per cent. Of the following woods lime forms of their ash the remarkable percentage, viz.: oak, 75; elm, 47; linden, 29; beech, 63. The pine tribe of woods contain in their ash from 30 to 46 per cent. of lime.

Lime is the most beneficial the second or third year after its application, and its good effects are said to continue for many years. It should be frequently applied, as it does most good near the surface of the soil before it is washed by the rains out of reach of the roots of plants. But for lime the grasses and grains would not have sufficient strength and substance of stem to stand erect while growing, as is proven in soils deficient in lime by the prostrate condition of these grasses and grains, and by the fact that on these same

soils, after liming, they stand stoutly up. In reply to the objection against liming soils, that lands lose their strength faster than when no lime is used, Dr. Heath said the charge is sustained by fact; however, that is only one side of the case. The larger the crop the sooner not only is the lime exhausted, but also all other fertilizing substances contained in the soil; but the value of the excess of the large crop more than compensates and will amply pay four fold for the new supply of fertilizers which the heavy drain upon the soil demands. There is both rhyme and reason in the couplet:

Lime and lime, without manure,
Will make both land and farmer poor,

Transpose the rhyme and still maintain the truth:

But lime and lime with good manure,
Makes wealth of land and farmer sure.

Marl, bone phosphate, gypsum, and other substances containing lime are included in liming soils. Composts are the most convenient and economical form of applying lime. The analysis of plants gives not only one inorganic substance—lime—but potash, soda, salt, &c. Composts comprising most of these substances, together with nitrogenous matters, vegetable moulds, barn-yard manures, &c., are therefore urged to be annually applied in quantities suiting the needs of the soil. By this method excesses will be avoided and over-liming need not be feared. These mixed manures will prove valuable for the past as for future crops. Let something be supplied every year. This bank never fails to pay its depositors both principal and interest. For the convenience of farmers not versed in chemistry Dr. Heath gave a number of receipts, among which was the following for top-dressing to sow broadcast on spring wheat or on meadow, early: Bone-dust, 250 pounds; lime (air slacked), 125 pounds; wood ashes (leached), 300 pounds; powder leaf mould, 500 pounds.

Underdraining with Gravel.

Under all circumstances where underdrains are required, and the gravel can be obtained as economically, or at a cost not much exceeding that of other draining material, I prefer it as a draining material in all soils, and for main drains as well as laterals, and I have found it decidedly preferable to other material when quicksands are encountered.

Containing or "mingled with" sand, it will act as well as draining material, if the quantity used is increased proportionately, on account of the presence of the sand. But it is almost a reflection on the intelligence of the enquirer, to state that it is more economical to screen out the sand at the pit or quarry, as its removal reduces the weight of the same bulk just the amount which the sand weighs, and a less bulk of gravel will form a more efficient drain. This will not reduce the bulk of the gravel to be handled and hauled, but will materially reduce the weight, and proportionately lessen the excavation required in opening the ditch.

For ordinary laterals or side-drains, I rarely find that the quantity of water to be conducted requires more than one-fourth of a square foot, as a section of the gravel in the bottom of the drain, or six inches wide and sixth in depth. I have, in my experiments, found that a gravel drain, formed of pebbles from the size of a kernel of wheat to that of a partridge's egg, six inches by six inches, will convey in a level ditch four feet in length, as much water as will flow through a section of two-inch drain-tile, four feet in length, said pipe also to lie on a level bed. This rule may serve as a guide to the inexperienced. I have, however, used a similar gravel in main underdrains, a cross-section of one foot six inches each way. When shavings are convenient I use them on the gravel, but unless the soil returned on the gravel is a very friable alluvial or muck soil, no covering is required before the earth is returned. In case the veins break out of the bank higher than six inches above the ditch bottom, the depth of gravel should be increased so that it will receive the lateral water directly in the gravel, instead of in the soil over-laying it. The reasons are obvious.

Until latterly, I have found more difficulty in maintaining intact the discharge ends of main gravel underdrains than I have where stones or tile are used, but I am now able to make them equally as durable as with other material.—J. W. in Ohio Farmer.

Preservation of Potatoes.

M. Carriere, a French writer, publishes some interesting particulars regarding the preservation of potatoes during winter and spring. The methods usually employed he characterizes as both good and bad; good, because the atmosphere of cellars or pits is usually damp enough to prevent the too speedy evaporation of water from the tubers, and because the cellars are almost invariably kept closed, so that occasionally the temperature rises considerably and induces the very evil most to be avoided, namely, the sprouting out of buds. In storing potatoes for seed or culinary purposes, the main object in view is to prevent their germination, so that it may not be necessary to pick out the budding eyes, a process which invariably induces a rapid deterioration in quality and strength. To prevent this, the store-places should be wholesome, dry, and *freely ventilated*. In extremely cold weather the temperature must be raised by artificial means, but an excess of warmth is to be carefully guarded against; it is sufficient to keep the temperature just above freezing point, the arrival of which may be proved, in the absence of a thermometer, by the appearance of ice on a shallow pan of water purposely kept in the store-place. These measures suffice in the case of potatoes intended for planting out, but where they are required for domestic consumption the further precaution must be taken of shielding them from the action of light. If this be not done, the tubers are apt to turn green, a change which is nothing to their detriment for seeding purposes, but which is attended by chemical alterations that give them a bitter taste, and quite spoils them for domestic use. By attention to these points, M. Carriere has succeeded in keeping old potatoes in good plantable condition up to the middle of June, or sometimes, as in the present year, to the middle of July, by which date the new potatoes are no longer scarce, dear, and tasteful, as is the case at the time the old stock usually goes out.

The British Crop Reports.

The London *Agricultural Gazette* of Sept. 3 says: "We have taken out the returns from Yorkshire and Lincolnshire; from Norfolk, Suffolk, Cambridge, Bedfordshire and Essex; from Kent, Sussex, Hants, Wilts and Dorset; and from Shropshire, Staffordshire and Lancashire separately, and the returns thus received in separate lots do nothing whatever to diminish the gloomy character of the prospect. In the first of these groups, of thirty-one wheat reports twenty-one are below an average and only one is above; of thirty barley reports; fifteen are average and fourteen under an average, of twenty-nine oat reports, seventeen are average and only two are over an average. In the eastern county group of forty-four wheat reports, thirty-four are under an average; of forty-one barley reports, twenty-six are under an average; of thirty-nine oat reports, twenty-four are an average, six over an average, and nine under an average. In the southern county group, of thirty-six wheat reports nine are an average—all the rest are under an average; of thirty-five barley reports, twenty-four are an average, and nine under an average; of thirty-six oat reports, nineteen are an average, six over an average, and eleven under an average. In the western county group, of sixteen wheat reports twelve are under an average; of seventeen barley reports, eight are under an average, ten are an average, and two over an average."

The Iowa press is vigorously attacking the Iowa State Agricultural College and Farm for its extravagance and uselessness. It costs the State \$70,000 a year. It is stated that the first class graduated twenty-four students in 1872, only one of whom is a farmer; the class of 1873 graduated three farmers; the class of 1874 graduated no farmers; the class of 1875 none; the class of 1876 none, and the present senior class, numbering twenty-five students, has but three taking a course in the Agricultural department.

To plant and harvest crops is attended with much care and expense; and most farmers exhibit commendable industry up to this point, but when these crops are to be fed out many of them do it with the greatest recklessness. Corn is thrown to the hogs in muddy, slushy yards; hay is scattered upon the ground, to be trampled in the manure by the cattle; and the cleanly sheep receive their hay and grain in the same manner. Were it otherwise we verily believe that one-fourth more stock could be kept on the same provender, and be in better health and condition.

Notes on the Garden and Farm.

The Massachusetts Society for Promoting Agriculture has offered a series of prizes for the encouragement of tree-planting in that State—the awards to be made ten years from the 1st of March next for the best results produced in the interval. The white ash, the European larch, and the white and Scotch pine are the varieties especially favored. Mr. Sargent, of the new Arboretum of Harvard College, estimates that over 1,000,000 trees will be planted in Massachusetts this year. In Connecticut the General Assembly of this year gives public sanction and encouragement to the same enterprise by exempting from taxation all plantations of timber trees to be thereafter planted, for a period of ten years after such trees have grown to an average of six feet in height. These inducements will doubtless push on the good work, which cannot be commenced too soon, not only in New-England, but in nearly every State in the Union.

AMERICAN MANUFACTURES IN FOREIGN MARKETS.—A Canadian journal not favorable to legislative protection for home productions, when speaking of the American protective tariff, says:—"American manufacturers produce, and have produced ever since the enactment of the tariff, these goods at too great cost to sell them in foreign markets. Their policy has been to manufacture exclusively for the domestic market, and not for exportation, seeking by larger prices on a limited production to make greater profits. There have been some exceptional cases, but this has been general." Compare this assertion with the reports from other sources. The *London World* says:—"Nothing more important has ever happened in the history of the English trade than the threatened displacement of our cotton manufacturers by those of America. Pieces of goods from the Lonsdale Mills of New York State are sold in every town in England at a lower price and of better quality than English goods of a nominally corresponding grade." In England there is unrestricted free trade, and yet they are undersold by manufacturers who produce under a protective tariff.

FLAX MILLS.—The Maryboro flax mills have received between 500 and 600 tons of flax, and expect about 100 tons more. There are about sixty hands employed threshing the seed and spreading the straw out to rot. The crop is a little below the average this year, on account of the dry weather in June. A large amount has been damaged since pulling by the rains. They have shipped 1700 bushels of seed and expect as much more.

HORSES FOR HURON.—Mr. T. J. Bell, who lost a fine stallion last spring, recently arrived home with two stallions he had purchased in Scotland. A Liverpool correspondent, under date of the 23rd ult., writes as follows respecting him:—"Mr. T. J. Bell, of Lonsdale, takes the two-year-old dark brown Clydesdale stallion 'Conqueror,' also bay Clydesdale two-year-old 'What's Wanted,' by the celebrated horse 'Remarkable,' both these horses are fine specimens, and were purchased from Mr. Drummond, Clydesdale breeder, Fifeshire."

When phosphates fail at the root of the plant, grain fails at the mill; and when, from waste at the mill, phosphates fail in the bread, the bones and the teeth fail in growing bodies. The improvidence that leaves excretory phosphates to be washed away to the salt sea, farther from the reach of life than they were in the primitive rocks, is an improvidence that prepares an inheritance of poverty for after generations; and the ruthlessness that permits the purveyors of food to sift phosphates from the food of men, does its part to enfeeble the present generation.

WHAT MAKES A CAR LOAD.—Nominally, an American car load is 20,000 pounds. It is also 70 barrels of salt, 70 of lime, 90 of flour, 60 of whiskey, 200 sacks of flour, 6 cords of soft wood, 15 or 20 head of cattle, 20 or 60 head of hogs, 80 or 100 head of sheep, 6,000 feet of solid boards, 340 bushels of wheat, 400 of corn, 680 of oats, 400 of barley, 360 of flax seed, 360 of apples, 430 of potatoes, 300 of sweet potatoes, 1,000 bushels of bran, 130 to 190 barrels of eggs, and 15,000 to 26,000 pounds of butter.

I think I have a better remedy for the currant worm than white hellebore. Take eight quarts of washing or soap suds to one quart of chamber-lye, and with a brush of any kind give the bushes a general and thorough sprinkling. It will help the currant bushes to grow and kill the worms.

Those who bought stock in the Philadelphia Centennial Show will get back only \$1.75 on each share costing \$10.

The wholesale destruction by grasshoppers is undoubtedly caused by the thinning out of such birds as grouse, prairie hens, etc., which feed upon them. The great and inestimable service done to the farmer, gardener and florist by the birds is only becoming known by sad experience. Spare the birds and save your fruit. The little corn and fruit taken by them is more than compensated for by the quantities of noxious insects they destroy. The long persecuted crow has been found by actual experience to do far more good by the vast quantities of grubs and insects he devours, than the little harm he does in the few grains of corn he pulls up. He is one of the farmer's best friends.

Dr. Kingsbury talked of Sanitary Reform on the Farm. Decaying vegetable matter about the house, around the wells, and in the cellar, are prolific causes of disease in the farmhouse. Ill-treatment of cows, getting them excited and then feeding the milk to children is a practice liable to be attended with fatal consequences. Bad ventilation attended with impure air, causes catarrhal and skin diseases of our animals, especially when obliged to breathe the impure of decaying manure. Better ventilation of sleeping rooms was urged and more out-door exercise for the farmer's wife.

PATENT STEEL BARB FENCING.—For several weeks past the Washburn & Moen Manufacturing Company, of Worcester, Massachusetts, have been advertising that they make a patent steel wire barb fencing which is "the farmers' comfort" and "the gardeners' security." It is composed of two wires twisted about each other, with barbs fastened along the entire length, five inches apart. The wires are annealed steel, galvanized to resist the weather, and are guaranteed to be 45 per cent. better and more durable than common iron wires. Its size is No. 12 wire gauge, and when twisted, will sustain a pressure of 1,400 pounds to the square inch. It is maintained and has been proved to be the lightest fencing known and yet perfectly safe, as no animal will attempt to cross it. It is so tempered that it will resist the action of the changes of temperature, the twisting allowing it to shrink or expand without straining the fastenings or posts.

ARRIVAL OF CANADIAN EGGS IN LIVERPOOL.—The *Liverpool Journal* of Sept. 8th says: "The Allan steamer Sarmatian, which arrived on Tuesday morning, brought 280 barrels of eggs from Canada. This promises to become a great trade. From the market report of the Hamilton (Ontario) *Spectator* of the 9th August, we learn that eggs were very quiet, there being really no wholesale trade in them at present. In Ottawa fresh eggs were selling at 12 cents (6d) per dozen. Eggs to the value of £2,610,231 sterling were imported into England last year, and still the market is not well supplied, as the present high price will prove. The future extension of this trade between Canada and England cannot fail to be of interest to every householder."

One of the important manufactured products of the country towns of New England and New York State is potato starch. It is believed that nearly 3,000,000 bushels of potatoes are frequently consumed per year in the States of Maine, New Hampshire, Vermont and New York in the production of potato starch. This amount is three-eighths as large as the total potato crop of Maine, three-fourths as large as that of New Hampshire, three-fifths as large as that of Vermont, one-tenth as large as that of New York State, about the magnitude of that of Massachusetts, and much larger than the crops of Connecticut or Rhode Island. There are about 225 factories engaged in the manufacture of potato starch, and probably all of them, with one or two exceptions, are located in the States of New York, Maine, New Hampshire and Vermont. The average price paid for potatoes by starch manufacturers during the past season has been 30 cents per bushel. The aggregate annual production of all the factories is usually from 6,000 to 11,000 tons. A bushel of potatoes generally makes eight pounds of starch, 250 bushels therefore being required for a ton. As the average market quotation of potato starch is about 5 cents per pound, if follows that a bushel of potatoes brings only 40 cents after being converted into starch, and the value of the total production of potato starch in the country is \$800,000 to \$2,200,000 per annum.

Correspondence.

NOTICE TO CORRESPONDENTS.—1. Please write on one side of the paper only. 2. Give full name, Post-Office and Province, not necessarily for publication, but as guarantee of good faith and to enable us to answer by mail when, for any reason, that course seems desirable. 3. Do not expect anonymous communications to be noticed. 4. Mark letters "Printer's Manuscript," leave open, and postage will be only 1c. per 1/2 ounce.

To Correspondents.

Owing to the great pressure on our space this issue, we are obliged to keep over to the next month several communications, those from Batavia and many others.

Land Plaster.

SIR,—I have an extensive plaster quarry on my farm. We are just commencing to use it as a fertilizer. Would it be likely to benefit land near the quarry? Is it suitable on clay soil? Whether the white or gray the best quality. S. F.

Wallace, Nova Scotia, Sept. 18, 1877.

[Plaster, whether white or gray, is valuable as a fertilizer, though the way in which it benefits the soil remains a matter of doubt; whether as a means of attracting ammonia from the atmosphere and retaining it for plant-food, or by chemical action on the soil, is uncertain. But of its beneficial effects, however conveyed, there can be no doubt.

It will benefit the land near the quarry. In its present state it is not available as plant-food, even to "land near the quarry," as it would be when applied to the soil. This has been proved by the use of it in other localities, as for instance, the vicinity of Paris, Ontario.—ED.]

Peach Beetles.

Mr. J. A. Couse, of Wyoming, has sent to our office bugs that he found eating his peaches. We have shown them to Mr. Wm. Saunders, President of the Entomological Society of Ontario. The following is his description of them:—

Euryomia inda.—An oval, dark grey beetle, about half an inch long. Is not destructive other than being fond of sweets; will sometimes attack ripe fruits and feed upon them until the beetle becomes almost buried in their substance. In this manner they inflict injury on ripe pears, peaches and plums.

Potomac Fruit Growers' August Meeting.

(From our Washington Correspondent.)

Dr. Snodgrass read a paper on

FRUIT CULTURE AND ITS RELATION TO HEALTH.

The "Grape" cures of France and Spain are well established institutions. I know that individuals have been restored to health by the use of grapes, as well as by other fruits. Some years since, as presiding officer of the N. Y. Farmers' Club, I volunteered a prescription for those seeking health—Substitute lemonade, strawberries and the fruits in their season for salts, sulphur, sassafras tea, and the like popular remedies, and which too many people think indispensable to take every spring, to regulate the bowels and purify the blood. Throw the physic to the dogs, and take without stint of the various fruits—not as a dessert merely on an already overloaded stomach, but as a part of your regular food.

At one of the autumn meetings a tall and stately farmer from N. Y. rose and said: "Doctor, I want to report on your prescription. I did throw the physic to the dogs, and used instead strawberries, blackberries, currants, peaches, &c., in their term, as you recommended, omitting medicine for the first time in many years. Your prescription worked like a charm, and at least one man is grateful for it, and will be while life lasts."

Raise, then, friends, an abundance of fruits, and you will not only add a hundredfold to your own happiness, but also to the well-being and happiness of others.

DISCUSSION.

Dr. Braevold—If people would use less flesh and more fruit they would less need the doctor.

Dr. McKim—Children suffering from summer

complaints will find great relief if fresh and well-ripened fruit is furnished to them. I use no other medicine in dysentery. Last year I had seven cases of typhoid, which I treated with fruit (including melons, tomatoes, &c.). Six of them recovered; the seventh, through a complication of diseases, did not.

Gen. Muzzey came forward with a plump and healthy infant in his arms, and said when this child was born she weighed nine pounds; when 11 months old only 11 pounds, and we expected to lose her. Hearing of the fruit cure, we fed her peaches, all she could eat (she eating nine at the first sitting), and you see the result.

I may be allowed to suggest a prescription—If those men who have recently shown themselves "strikers" would go to raising fruits and using them instead of the salty, stimulating meats, exciting condiments and beverages, they would be cured of their troubles.

G. F. N., Washington, D. C.

Unleached Ashes.

SIR,—I have a small quantity of unleached ashes which I intend to use for top-dressing on grass land. Please advise me through the columns of the next ADVOCATE as to the best time for putting them on—this fall or next spring? L. A. Bristol, Westmoreland Co., Sept. 15, 1877.

[Ashes are more beneficial to the soil of grass land. When applied in the land, they serve to protect the crowns and roots of the more tender grasses from winter-killing. Another advantage from the fall application is that they are dissolved by the fall rains, and the plant food they contain is at once conveyed to the roots of the grasses, and rendered available for the earliest return of spring growth.—ED.]

Horse Beans.

SIR,—During my residence this side of the Atlantic I have often wondered why farmers don't feed their horses on crushed beans and oats mixed. These two, with hay and chaff, form the common fodder in England; why not here, when horses are known to do much better on such food? I have not seen a field since I left the shores of Old England.

Again, I am surprised that some genius does not invent a bean and oat crusher which could be turned by hand. It could be constructed either after the style of a coffee-mill or oil-cake crusher. To me, and I dare say to many others, such an invention would be a great boon in this country, where mills are few and far between.

P. E. I., Sept. 11, 1877.

[Beans have not succeeded well in Ontario, but they might in your part of the Dominion. A few are grown near Montreal. No hand-power crushing machine would find a sale in Ontario—horse-power and steam engines are cheaper than manual labor. See "Beans for Horses," page 232.—ED.]

The ADVOCATE has generally given what I always feel most interested in—the Garden and Fruit Department, for that concerns me most. I have the numbers of the ADVOCATE of the last three years as carefully preserved as my Bible. My boys used to read them with pleasure when they were home.

But what I wish to talk most about is the flies, bugs and grubs that annoy us so much every season. It seems that in spite of all the information you give about these pests, and all the experiments we try, they are determined to destroy our fruit and vegetables. Small as is our crop of apples this year, the codling grub seems to have the largest share, although in my main orchard I fenced in my fowl and kept two pigs all summer, until they began to bark the trees. So what next to do I know not, unless I try the bandage or strip of cloth around the trees—or something better from you.

Then our cabbages—as soon as planted the green bugs in thousands feasted on them until they stripped off all the leaves—and eat the very heart. I tried unleached ashes, lime, soot and water—everything, to keep them little jumping bugs disturbed; but I had to re-plant several times. After the bugs comes the green caterpillar, to eat up what the bugs had left; and they have devoured about all the cabbage in this neighborhood. I think, however, that I have mastered them, having paid a great deal of attention to their destruction. I first picked them out

with my knife every day, and as I had a thousand plants it took up a considerable portion of my time. Then I got some hen dung and cow droppings, and made a liquid which I poured on the hearts of the cabbages. Next I got some roach lime and slacked it, and shook it unsparingly over them. My next dose for them was black pepper and mustard. So I saved my cabbages by a great deal of labor and watchfulness. On the edges of the leaves I would find thousands of young ones, striped, different from those that first attacked the inside of the leaves. I think these striped ones are engendered by the butterfly, that the ADVOCATE described.

If you have any better remedies than the above, please let me know, so as to be prepared for next season.

Queries.—1, Which way is best to keep cabbage through the winter—pit in the ground, or put in the cellar?

2, Which way is best to keep plums, crabs and harvest apples for shows, as they are all ripe before the shows commence in this part of the country?

3, I have some Philadelphia raspberry canes; they are some five or six feet high; would it be best to cut some of the tops off before winter sets in?

We have another pest, a little white fly, on the grape-vines (Clinton variety); had a prospect of an abundance of fruit, but these flies have eaten the leaves so that they crisp up and wither. The difficulty is to get at them, for they are on the under side of the leaves. I hope you will give me some advice how to manage them. N. B. C.

Walkerton, Sept. 3, 1877.

[1, Pit them. 2, Keep them as cool as possible. 3, Cut out all the old canes; cut off the tops of the canes of this year's growth; mulch the stools.—The white grape shall receive special notice.—ED.]

SIR,—Having a piece of low ground covered with water at certain seasons which I wish to reclaim by draining, I desire to get some information from you or some of the readers of your valuable journal. The ground is a pure marl deposit, eight feet thick, and has in places no admixture of soil on the surface; in spots there are two or three inches of very rich mould on the surface. Now, I desire to learn if timothy will grow in pure marl? If not, will any suitable grass for making good hay grow on it? If so what kinds? Any information on this subject will be thankfully received. R. J. D., Owen Sound.

[We have not known an instance of a bed of marl with no surface soil covering it. The depths at which the marl lies beneath the surface, as far as our experience goes, is from two to eight or ten feet. It is very valuable as a fertilizer, but judging from its constituent parts we doubt if a grass crop would succeed sown on a pure marl bed. Were the water drained off and the marl ploughed to the depth of a few inches, and that covered or mixed with any kind of earth, it would most probably form a good seed-bed for grass or other crops. Were the marl deposit on a farm of ours we would use it as a fertilizer on the other land.—ED.]

The "Galloway Club," composed of a number of jolly fruit growers from the Niagara Peninsula, amongst others Messrs. R. Currie, Gage Miller and J. Brown, spent a pleasant time during Provincial Exhibition, camping out near Ald. Christie's residence.

At the Fire Brigade Demonstration at Southport, England, Mr. Barnum in response to the toast of his health referred to the visit he had made to England during the last thirty-eight years, and said that he never left this country without feeling the same regret that he did on leaving his own home. He referred to the first time he visited England, observing that he came here prejudiced against this country; but on his next visit he became more interested in its government; and on his third visit his opinions entirely changed. He attributed the present strikes in America to its low legislative franchise, and hoped that England would be careful in extending its franchise, too much. Of the two governments he loved that of England better.—*English Paper.*

Winter wheat has been very extensively sown; the plant could not look better; it is now ready for a winter coat; some we have seen is now too rank, and is beginning to lodge, it will require to be fed off to prevent rotting or smothering.

Stock and Dairy.

Milk Globules.

BY L. B. ARNOLD, SEC. OF THE AMERICAN DAIRY-MEN'S ASSOCIATION.

"A Reader" of the FARMERS' ADVOCATE enquires as follows: What is the difference, if any, between milk globules, cream globules and butter globules? and what are the characteristics of each? When, where and how are they formed? and do they increase or decrease in milk under any circumstances after it comes from the cow?

REPLY.

Milk globules, cream globules, butter globules and fat globules, when applied to the constituents of milk, are synonymous terms, and are used to indicate the minute specks of solid, fatty material which are suspended in milk at the time it is discharged from the udder. In regard to the structure of the myriads of these infinitesimal globes, which are always suspended in the liquid portion of milk, from which cream and butter are derived, there is a difference of opinion among observers. The most common belief is that they are made up of minute atoms of different kinds of fat—oleine, margarine and stearine—compounded together, and the compound covered with a pellicle of cheesy matter. Others hold that there is no envelope to the atoms of fat, and that they exist naked in the milk. Baumheuer, who is the most prominent defender of this theory, denies very positively that there is anything in the nature of an envelope covering the fat globules in the milk of any animal, and insists that they are entirely naked.

There is error in both of these theories. That the globules in milk are made up of different fats, organized into one little globe, is disputed by nobody. The error is in respect to the pellicle enveloping the globules. Whether they are covered with an envelope, and if so, what it is composed of, might very fairly be inferred from analogy. Everywhere in the bodies of animals fats are both secreted and deposited, in cells whose walls are membranes of albuminous matter, and we therefore reasonably expect that the secretion of fat in the udder would be carried on in the same way. A very careful inspection of the mammary glands shows this inference to be true. The system of minute milk tubes which branch out and ramify in each quarter of a cow's bag, starting from a single tube in the teat, dwindle down in size as they extend through the udder to very slender threads, and each branch finally terminates in a small bunch of gland cells, which has a cavity inside of it connecting with the tube of which it forms the termination. The fat in the milk is secreted inside of these little gland cells, and it never leaves them. The cells themselves, when they have accomplished their work, are one by one shed off from the cluster of cells into the cavity within the cluster, and having become free, are, with their fatty contents, washed along by the liquid part of the milk from the cavity into the slender duct connected with it, and pass along the duct, down through the body of the teat, and out through the orifice in the teat. The milk globule, by whatever name it may be designated, is simply a gland cell with its fatty contents separated from its fellows and left floating or suspended in the liquid portion of the milk. It has a pellicle indeed, but it is membranous, and not caseous or cheesy. The reaction of chemical agents upon fresh cream globules is the same as upon membranes, and unlike the reaction from casein.

The average size of these interesting fat-globes

increases or diminishes as fatty elements are abundant or scarce in the food of the cow, making their envelopes apparently thin in one case and thick in the other. This fact of the variation of the size of the milk globules with the variation of fat in the food of the cow, established beyond question by the experiments of Dr. Sturtevant of Massachusetts, affords a strong corroborative evidence of the mode of their origin.

We have another corroborating evidence in the fact that, under certain influences of food and health, the fat in many of the globules sometimes entirely disappears, and its place is filled with a thin watery secretion, which serves to distend the membranes forming the cast-off cells and gives them the usual rotund form of the sound globule. These sacks, filled only with water, and floating in the milk, having the same size and all the appearances of the butter globules except in their contents, prove the existence of membranous envelopes, and are very suggestive of cell origin for all the globules. These water-filled globules rise very sluggishly to the surface of the milk in the form of cream, and become the cause of many of the cases in which cream will not "come" to butter because there is not fat enough in it to make butter of.

The gland cells in the udders of different species and of different individuals of the same species might well be expected to vary somewhat in size and function, though all in general perform a similar duty, and consequently that milk globules derived from the cells of different glands, should vary accordingly in size and composition, and this is true in fact. The butter made from different animals is different and the milk globules have all the variations in size and general appearance of the cells of the mammary glands from which they have been derived.

The different breeds of cows show decided characteristic differences in the globules of their milk. Thus the Ayrshire cows are noted for the unequal size of their milk globules, the Channel Island cows for having them uniformly large, and the Holstein for having them uniformly small, while the common cows of the country known as natives, being derived from a mixture of all breeds, are notorious for the wide differences between the milk of individual cows, seldom being alike in any two cases. These differences are easily accounted for from constitutional peculiarities, but could hardly be reconciled with the supposition that milk globules are atoms of naked fat simply mechanically mixed through the milk.

There is no evidence that I know of to show that the number of globules ever increased either in number or size after leaving the udder of the cow, though some parties have asserted that an increase, that of fat, may take place in milk after it is drawn, if kept so it will remain fresh and sweet. But this position is not well sustained. That they diminish in number when milk stands long enough to become changed is known from finding them in a broken and decaying condition when seen under a magnifier, and from a diminution of the per cent. of fat when determined by chemical analysis. When milk becomes decidedly sour the destruction of fat globules goes on, so rapidly that the quantity of butter which can be made from a given quantity of a sample of milk becomes appreciably lessened.

A writer in the *Prairie Farmer*, on sheep raising in the North, says of peas:—The nutritive value of peas is about 74 per cent. against 78 per cent. corn, or 72 per cent. oats, while the comparative value as a wool-former is enormously in their favor as against any other cereal, showing conclusively their excessive value over any other ordinary grain.

Shropshires.

The Shropshire has a dark brown face and legs, and the wool in centre of forehead and around the ears tinged with brown, larger than Southdown, which it much resembles; and the fleece, which weighs from five to seven pounds, is much longer in staple and heavier than the Southdown, but still a carding wool; there is, however, a lack of uniformity. In samples taken from last year's lambs the fleece had precisely the appearance of Cotswold wool, while a sample taken from an imported buck of same age, which was nearly as long, was a carding wool, which was much like the Southdown. The meat resembles the Southdown, being marbled with fat but perhaps less delicate. While the Shropshire as a breed are superior to the Southdown in size and weight of fleece, still it is much to be doubted if they prove equal to the Southdowns for improving the common breed of our country. The Southdown, being a very old and distinct breed, impresses its characteristics with great certainty; the Shropshire being a cross-bred animal, and, as most cross-bred animals are superior to either of the breeds from which it is formed, it is not so likely to impress its progeny with its own type.

True Standard in Breeding.

It is apparent to the most casual observer that the American breeders of Jersey cattle are wandering after strange gods, and will soon lose the chief excellence of the breed, unless they speedily return and adhere strictly to first principles.

The Jersey cow, considered in the abstract, is an animal machine for the production of butter—a machine that gives the largest return for the food consumed, and gives it in the most compact and smallest possible form—a medium or small quantity of very rich milk. The superiority of the Jersey consists in the large quantity of butter contained in so small a quantity of milk, and of that butter being more easily obtained, because of the larger butter globules that rapidly rise after setting for cream and easily break in the process of churning for butter, and of the superior quality of that butter in color and flavor.

Therefore the best cow is one that will yield the greatest amount of butter during the year, upon the least amount of food and in the smallest quantity of milk, and, as a breeder, transmit this excellence to her offspring.

What are the watchwords of our breeders today? Read the advertisements of their cattle offered for sale. "Solid color, black points!" "Deep milkers!" What if they are solid colors? The Devons will excel them for that; and as to deep milking, they cannot equal the Ayrshire or Dutch cattle. Why lose sight of the real value of our breed in vaunting points of no merit, and, if so, which are found more fully developed in other breeds?

Color has no significance whatever, further than to give selling value to the animal while its peculiar color happens to be fashionable. If breeding for a certain color could be practiced without sacrificing the true value of the animal, it would be unprofitable, because the fashion will change. I can remember in Shorthorn history when a white animal was the rage. They had their day, and are not now salable at any price. Then roans became the fashion; and now the beautiful roan has passed into history, to give place to the dark reds.

No less dangerous is the rage for deep milkers. Yielding a large flow of milk is not a characteristic of Jersey breed, and is incompatible with the extraordinary richness of their milk; and if it be bred until it becomes a trait of the Jersey, it will depreciate her value by robbing her of her chief excellence—milk condensed in its richness. If she be bred to yield five gallons per day, it is, after all, only a dilution of the quantity belonging to the original breed, in which the fat globules are more attenuated, and we have gained quantity only, and for our pains handle two gallons extra water to secure the same amount of butter. I am aware that some will contend that it is possible to increase the flow and at the same time maintain the per cent. of richness belonging to small milking Jerseys; but those who can really do this, like those who can produce sex at will, are generally sons of the seventh son and more gifted than the average breeder, and because they can do these things we must not all expect to do them.

In application to the individual performance of my ideal cow, in order to demonstrate that she is not an accident—like a born poet—she must transmit her good traits to her offspring. If she can't

do this, she is simply an illustrious daughter of a degenerate family, with back breeding tendencies that destroy her value as a breeder.

Therefore, no cow should be judged in any other way than by her own merits, together with her ability to transmit her merits to her offspring.

Summer Butter for Winter Use.

BY PROFESSOR ARNOLD.

Persons who wish to know how to keep the butter made in hot weather for winter use are advised, first, to see that the cows are so circumstanced as to be quiet and comfortable. Cows which are by any means worried, or heated by too much exposure to hot sun, or annoyed with thirst, become feverish, and the butter made from their milk will not keep. Sound and healthy milk is a *sine qua non* in making butter to keep.

Second, the milk must not be kept so warm, while standing for the cream to rise, that the cream will become stale before it can be raised and churned. Butter made from stale cream has its death-warrant signed and sealed, and nothing will prevent it from going to destruction. To make butter that will keep, the cream must be fresh—it may be a little sour, but it must not be in any degree stale. If the milk must stand in a warm room, better churn the whole milk when it begins to sour, though it should be but twelve hours old, rather than let it stand for the cream to rise till its freshness is destroyed.

Neither should the cream, after skimming, be long kept if it must be kept warm. If there is not cream enough for a churning when it is in the right condition, do not keep it till it spoils, waiting for more, but supply the deficiency with the milk, and let the churning go on before the cream loses its fresh taste.

Third, cool the cream to sixty degrees, as near as may be, before churning. Butter churned at a high temperature, so that it comes soft and white, is spoiled for keeping. If good water is at hand wash the buttermilk out, but if not press out with laddle and level with the least possible friction. It must not on any account be made greasy. If butter, either in churning or making, is treated with so much violence as to break the grain and make it greasy, it will go to decay like bruised fruit and broken eggs, and for similar reasons. Greasy butter is so perishable that there is no use in packing it away for a future day. It will depreciate from the start and fail continually—salt will not save it. Many people have an idea that salting high will save butter. No mistake could be greater. It is the avoidance of injury in making which gives to butter its best keeping quality. Butter not injured in manufacturing is the only butter that will keep. Faulty butter will "go marching on" to destruction, though buried in the best of salt.

The Export of Fresh Meat to England

The great development of the transportation of fresh meat to England must make a description of the process of interest to all, especially to those engaged in the feeding of cattle. Now that the shipment of fresh meat from this continent may be regarded as fully established, the feeding cattle for European markets must be a source of good profit to us Canadian farmers. The process is thus described in the *London Illustrated News* :—

The States from which more than nine-tenths of the carcasses are obtained, are Illinois, Kentucky, Ohio and Indiana, and a great many stall-fed cattle from Upper Canada. The cattle intended for British use are all taken alive to New York. After being dressed, the carcasses are put into a refrigerating room, where a constant stream of air, passed over ice, is kept up by means of an engine of twenty-five horse-power. The object of this is to extract all the animal heat from the carcass before it is shipped; and the effect of the thorough chilling is that the meat, brought from New York in the summer, keeps longer after being delivered in this country than the meat killed at Glasgow. It is likewise much more suitable for curing purposes, being older and the fibres more open. After refrigeration, the quarters are sewn in canvas sacking, and shipped on the following day to be in readiness for Saturday sailing. On board ship, the walls of the chambers or safes are about nine inches thick, composed of wood, a layer of resinous paper, a vacuum for the air, then a layer of felt, and lastly a covering of wood. The walls are so constructed as to prevent rats gaining entrance to the apartment, for putting out of view

the damage they might do the beef, the injury caused by the hot air issuing through their holes would be infinitely greater. There are two modes in use of keeping the meat fresh; one is known as the fan, the other as the pipe process. The former, which is exclusively used on board the Anchor Line steamers, is believed to be the best. It is simply a continuous current of air, passed over ice, which tends to keep the temperature of the chamber at from 36° to 38°. If the temperature were to get below the freezing-point, it would injure the meat, so that has to be carefully guarded against. The other plan for maintaining a low temperature is by a system of pipes ranged around the chamber, through which is forced a compound of ice and salt. With the latter process the meat has a tendency to become frozen; and only recently, one firm in Liverpool lost 800 quarters from that cause alone.

The London Standard on the Sale of Canadian Shorthorns in England.

It was quite anticipated that Mr. Cochrane's consignment of Shorthorns from Canada would be one of the sensational sales of the year; but Mr. Thornton, who sold the cattle on Monday, could scarcely have imagined that 4,300 guineas would be reached for one animal. The stock sold on Tuesday was shipped on the 17th of August from Montreal, and after a ten days' passage they looked uncommonly well, thus proving that their constitutions were hardy. The sale brought out all the principal breeders of Shorthorns, Earl of Bective, Lord Skelmersdale, Lord Faversham, Sir W. Salt, Sir John Swinbourne, &c. The animals sent over consisted of a number of first-class specimens of the Booth blood and of the Bates, the latter of which were decidedly most in favor at present. The first animal brought into the ring was Vernal Star, a cow of eleven years of age. She is a beautiful red and white that keeps her age remarkably well. She rose very rapidly to 450 guineas, at which price she was knocked down to Mr. Darling of Shropshire. White Rose was bought by the Rev. Mr. Staniforth, after a spirited competition, for 400 guineas. This was a beautifully modelled white cow, and so was also the red and white Bright Lady, that fell to Mr. Torr, M.P., for 330 guineas. When Vesper Star came into the ring there was quite a sensation. She is a charming red and white cow, full of flesh, and betokens a good milker. From 100 guineas, which were bid, she rapidly rose to 1,000 guineas, at which sum the sand-glass ran down, amid cheers, to Mr. Crosby of Kerry, Ireland. There was less animation in the next lots, yet still several of the cattle went from over 200 guineas to 800 guineas. When the third Duchess of Hillhurst stepped majestically into the ring there was a moment's pause, until 1,000 guineas was offered, and Mr. Lodor at last claimed her as his own at 4,100 guineas, amid great applause, Mr. Thornton declaring her to be the highest priced cow in England. Lord Bective however had his revenge when the Fifth Duchess of Hillhurst came into the ring. At once a thousand guineas was offered, capped immediately by 500 more. Then 3,000, 3,300, and Lord Bective, in defiance of all other competition, bid 1,000 guineas advance upon his own previous bid, and secured her for 4,300 guineas, which is, with the exception of the Duchess of Geneva, sold in New York two or three years ago, for 7,000 guineas, the highest price ever given. After these prices it was thought that the Second Duke of Hillhurst, a magnificent specimen of the Shorthorn breed, would have made more than 800 guineas; but he did not, and at this price he fell to Mr. Longman. The sale in every respect was a highly successful one, representing in the grand total £17,150, the average of 37 cows, heifers and calves being over £420, and of eight bulls £2,400.

I was visiting a large dairy in Yorkshire, and for the first time saw the system in operation of taking the milk from the cream, and I believe that that system is very little known out of that county. To take the milk from the cream requires the dairy utensils to be specially prepared for that purpose, as follows: In the dairy I refer to the milk cans were oblong in shape (made of zinc, I think), three feet long by two and a half feet broad, and about eight inches deep (I did not measure them at the time), and the bottom of the milk-holder was about one inch smaller all round than the top, and each zinc basin was fitted into a wooden frame on four legs, which carried it about two and a half feet from the floor of the dairy. In the bottom of each zinc basin near each corner there was a large

hole made, and in that hole was soldered a piece of zinc pipe about twelve inches long, projecting under the basin, and of such a diameter that a common bottle cork would fit into it. The method of using the above apparatus was as follows: When wishing to get the cream, the dairymaid placed a jar under the pipe, and withdrawing the cork allowed the milk to flow in a rapid stream, and just before the last of the milk was ready to escape she replaced the cork, and the result was that in about one minute or less an unbroken mass of cream was left in the basin—at least it was only broken around the edge. I think the above process well worthy of being adopted in all the large dairies, as it seems to me to be a very great saving of time, and it produces more cream.—*London Land and Water.*

In-and-In Breeding.

As a good deal of discussion on this subject has occurred in the *Agricultural Gazette* of late, I beg to state a point of breeding which came under my notice the other week, *i. e.*, one of our small flock-masters was delivering some 4-shear wethers from the Moor flock; all parties who saw them admired them greatly, and of course the master was questioned as to how he got such astounding sheep, and the answer was that they were never pampered or indulged, but when they had a good ram for getting, they did not part with him as a deal of people do, changing every two years or so. The last ram, which they were using now, they had in service for six years, and the ram before was his sire, and they used him eight years. Those wethers were of the North Yorkshire Moor, and will weigh when fit for the butcher 18 to 20 lb. per qr.—*J., in Agricultural Gazette.*

The Horse.

Lung Power in Horses.

How shall a colt be treated in order to develop in him the highest degree of speed? We will take an animal at two years of age, let us say, and inquire into the best method of cultivating the faculty and power of rapid motion.

The first thing to attend to, be it observed by all, is the lungs. Lung power is the best kind of power a horse can possible have, because it alone can make other kinds of power of avail; muscular power is very desirable, but muscles can never bring a horse to the wire in time unless his lungs are good. Nervous force is excellent; but no amount of vital energy will hold a horse up through the wear and tear of a four-mile race. A perfect bone structure is admirable; but what are bones, if the breeding apparatus is inadequate? The first point, therefore, that a breeder or owner of a lively colt should consider, is this matter of lung development. The great question with him should be, "How can I expand and enlarge his lungs?"

To begin with, then, let it be remarked that colts need a great deal of exercise. By nature they were made for rapid movement. Like young birds they develop in motion. The number of miles a colt of high breeding, and in good condition, will go when at pasture, each day, is something surprising.

Now, no sensible man will turn a colt of fine promise loose in the pasture after the second year; and we do not after the first. A good colt is too valuable to risk in that foolish manner, especially if it be a horse colt. He should be kept in a large, roomy stall, where he can be attended to and trained day by day. But do not forget his need of daily exercise. Do not think that a box stall will suffice. You might as well teach an eagle to fly in a large cage as to give the needed discipline to a colt's legs, heart and lungs, in a box-stall. Many most promising youngsters are fatally checked in the development of their powers, by lack of needed exercise in their second and third years. We hold that a colt needs a great deal of exercise, not to the halter, which is good for nothing but to sweat out a lazy groom; but sharp, quick exercise, in the taking of which every muscle is brought into play, every joint tested, and every vein, however small, swelled taut with rapid blood, as is the case when allowed the liberty of hill and plain, and to follow the promptings of nature.

"The chest of a horse in all cases should be large and capacious. In shape it may vary somewhat, according to the service to which the horse is to be put. If he is kept for slow work and heavy drawing, the chest may be nearly circular in form, because

this shape is the one for strength and bulk, to receive and bear up against the pressure of the collar; while, at the same time, sufficient room is secured for that expansion of the lungs caused by slow regular work. But if the chest is circular, let it be at the same time deep, or else the lungs may be cramped. A horse with a shallow chest is worthless for any purpose. The rule then, is this: For a draft horse, a circular but deep chest; but as you pass through the different degrees of speed, up to the racer and trotter, the chest must increase in depth compared to its roundness, until, for the highest rate of speed, you must have a chest as deep as a greyhound, and at the same time not lacking in breadth."

The Horse for Profit.

Experience has demonstrated that to raise horses for profit, they must have size, weight and strength beyond the common scrub horse that comprise two-thirds of the horses heretofore raised in the west. The sales at the Union Stock Yards, Chicago, the past week, are a fair sample of the selling value of our western horses. Common horses sold at \$65; streeters, \$95; cavalry horses, \$125; express horses, \$150; draft, grade Norman horses, \$250.

For heavy freighting in the cities the heavy horses are a necessity, and perhaps the increased price demanded for them is because farmers who have a team of such horses are not anxious to part with them. They can haul a load worthy of a first-class farm team. A pair of them can draw the sulky plow without any help, and do the work of three common horses.

Then we must conclude that if these heavy horses sell for the most money, and are so desirable on the farm, then they are the most profitable horses to raise.

These heavy horses are now being extensively raised all over the west. The Percheron-Norman, Clydesdale and English draft horses, imported from France, Scotland and England, and crossed upon our common mares, produce this most desirable, heavy, strong, large horse. Trotting horsemen still sneer at these imported horses, and say they are too heavy and too big. That we may admit, but who is going to plow a \$2,000 imported horse? Yet these horses in Europe stand at the head for serviceable work, where they are next to steam plowing for their thorough tillage. Their grades make the most desirable American horses for all work. While the thoroughbreds are superior for light harness and fast time, we cannot expect to get a horse for all work from them, bred as they have been for generations for their speed, to run or trot a mile or two in the quickest time in such gaits as are never used on the farm.

These heavy grades mature early, can be put to work while young, and pay for their raising, then go into the market at four years old and command the highest price and are always in demand.

Beans for Horses.

The Secretary of the American Institute Farmers' Club, speaking of beans for horses, said that they form a striking illustration of the principle that the nourishing or strengthening effects of the different articles of food depend more on some peculiar property which they possess, or some combination which they form, than on the actual quantity of nutritive matter. Beans contain but 578 parts of 1,000 of nutritive matter, yet they add materially to the vigor of the horse. There are many horses that will not stand hard work without beans being mixed with their food. Observant travelers have discovered the difference of spirit and continuance of their animals in proportion as they allow or deny them beans on their journey. They are of great assistance to the hard-worked coach horse; washy horses could not get through this work without them, and old horses would die under the task imposed upon them. Beans afford not merely a temporary stimulus, but they may be used daily without losing their power or producing exhaustion. They should not be used whole or split, but crushed. Some persons use chaff with beans, instead of oats. With hard-worked horses this might be allowed, but in general beans without oats are too binding and stimulating. Beans should be at least twelve months old before they are given to the horse, and care should be taken to prevent them from getting damp and mouldy, which will at least disgust the animal if they do not harm him. Then, too, mouldy beans harbor an insect which destroys the inner part of the bean. When converted into meal beans are good for fattening hogs.

Quebec Provincial Exhibition.

The Provincial Exhibition was held at Quebec, the ancient capital. It was largely attended and was a great success—one of the most successful ever held in the province. The number of entries far exceeded that of former years, while the receipts taken at the gates during the Exhibition amounted to \$6,250. The Exhibition grounds are situated at one of the highest elevations in the city, and the weather was all that could be desired.

The Exhibition was opened by his Excellency, the Lieut.-Governor, accompanied by his staff, and by the principal officers of the Exhibition.

The departments were all well represented, especially that of agricultural implements, which presented a very large number of new machines. The exhibition of mowers, reapers, plows, harrows and other agricultural implements was varied and excellent. In horses, cattle, pigs, sheep and poultry, the animals were such as countries longer noted for their agricultural progress might be justly proud of.

PRIZE LIST.

HORSES.

THOROUGHBREDS.

Stallions, 3 years old and upwards, A C Stewart, 1; J Hickson, 2; L Fillian, 3.

Brood mare and foal, J Hickson, 1; A C Stewart, 2.

One year old fillies, M Swift, 1.

COACHING STALLIONS.

A Casgrain, 1; P A Lachance, 2.

PURE BRED CLYDES.

Stallions, 3 years and over, J L Gibb, 1; Thos Brown, 2; L C Brosseau, 3.

Two year old fillies, Thos Irving, 1 and 2.

PERCHERONS.

Stallions, L Dery, 1; C G Powell, 2.

Stallions weighing 1,300 lbs and over, J Gagnon, 1; L Houle, 2; H Brodie, 3.

Stallions weighing less than 1,300 lbs, B Bernard, 1; N Laverge, 2; P Gagnon, 3.

Three year old stallions of any breed, L Trudeau, 1; V Coupal, 2.

Two year old stallions of any breed, V Giroux, 1; G Broomer, 2.

One year old stallions of any breed, L Durand, 1; M Walsh, 2.

Brood mare weighing 1,300 lbs and over, with foal, L Brosseau, 1; Jas Henderson, 2.

Brood mare weighing less than 1,300 lbs, with foal, James Henderson, 1; C Dion, 2.

Three year old filly of any breed, C Jobin, 1; P Gagnon, 2.

Two year old filly of any breed, M Desmarais, 1; Thomas Irving, 2.

One year old filly of any breed, Jas Henderson, 1; P Cantin, 2.

Pair of draught horses, Lieut-Col Strange, B Battery, 1; M Hunt, 2.

Saddle horses, C E Levy, 1; R R Dobell, 2.

Hunters, Jos Hickson, 1; C V M Temple, 2.

Shetland stallions, Jos Hickson, 1 and 2.

Shetland mares, Hon J C McGreevy, 1; Jos Hickson, 2; do, hon mention.

CATTLE.

BURHAMS.

Bull, 3 years old and upwards, A Miller, 1; J L Gibb, 2.

Bull, 2 years old, Joseph Hickson, 1.

One year old bull, Joseph Hickson, 1.

Cow, 3 years old and upwards, J Hickson, 1; J L Gibb, 2 & 3.

Two year old heifer, J Hickson, 1 and 2.

One year old heifer, J Hickson, 1 and 2.

Heifer calves, under 1 year, J Hickson, 1.

AYRSHIRES.

Bull, 3 years old and upwards, G Muir, 1; T Irving, 2.

Bull, two years old, J L Gibb, 1; Wm Rodden, 2.

One year old bull, Wm Rodden, 1 and 2.

Bull calf, under 1 year, J L Gibb, 1; J B Desjardins, 2.

Cow, 3 years old and upwards, J L Gibb, 1; Thos Irving, 2; 25 entries.

Two year old heifer, Thos Irving, 1; Wm Rodden, 2; 13 entries.

One year old heifer, Wm Rodden, 1; J L Gibb, 2.

Heifer calves, under 1 year, P G Charlebois, 1; Louis Durand, 2.

GALLOWAYS.

J Hickson, four prizes.

ALDERNEYS.

Cow, 3 years old and upwards, J Hickson, 1.

CANADIAN COWS.

In the class of Canadian cows proof had to be given that the animals descended directly from the first cows imported from France into this country, and that they have not been crossed.

Cows, 3 years old, Chas Jobin, 1; Louis Durand, 2; Wm Meek, 3; 7 entries.

Two year old heifer, Wm Meek, 2; no first awarded.

GRADE CATTLE.

Cow, 3 years old and upwards, James West, 1.

Two year old heifer, Wm Coribeu, 1.

One year old heifer, Joseph Hickson, 1.

FATTED WORKING CATTLE—ANY BREED.

Fat ox or steer, Tozer & Co., 1.

Fat cow or heifer, Tozer & Co., 1.

Pair of working oxen, John L Gibb, 1.

For the best herd of Ayrshires, John L Gibb, 1.

SWINE.

YORKSHIRE AND OTHER LARGE BREEDS.

Boar, one year and over, Thos Irving, 1; A Stewart, 2.

Boar, under one year, T Irving, 1; A Stewart, 2.

Breeding sow, one year and over, A Mousseau, 1; A Stewart, 2.

Sow, under one year, T Irving, 1.

SUFFOLK AND OTHER SMALL BREEDS.

Boar, one year and over, W Tozer, 1; A Stewart, 2.

Boar, under one year, L Oulette, 1; E Kenna, 2.

Breeding sow, one year and over, D Barnard, 1; Charles Paradis, 2.

Sow, under one year, Thos Irving, 1; E Talbot, 2.

BERRSHIRES.

Boar, one year and over, A Mousseau, 1; P G Charlebois, 2.

Boar, under one year, F Perrault, 1; A Mousseau, 2.

Breeding sow, one year and over, Thos Irving, 1.

Sow, under one year, A Mousseau, 1; R S Frazer, 2.

Messrs. R S Tozer, Quebec, and Edward Kenna, of St. Vincent de Paul, received honorable mention in several of the classes.

POULTRY.

Colored Dorkins, Silver Grey Dorkins, Thos Irving, 1st prize in each. In W. Cochins, Silver Poland, Hamburgs, Black Bantams, Muscovy Ducks and Bremen Geese, J Hickson bore off first prizes. J Johnstone, E Carbray, A Frazer, J L Gibb, M H Taylor, T Gale, H D Moore, R J Tozer, John Hunt and Jas Jeffery took each a first prize.

DAIRY PRODUCTS.

Home-made butter, 28 lbs, O Marion, 1; T Paquet, 2.

Home-made butter for exportation, 50 lbs, Agricultural School, Richmond, 1; J Meloche, 2; P Houghton, 3.

Factory cheese, 30 lbs, A Sauerville, 1.

Cheese, home-made, Jas Cowan, 2.

AGRICULTURAL IMPLEMENTS.

Double furrow plow, Jas Jeffrey, 1; W Evans, 2.

Iron plow, Jas Jeffrey, 1; W Evans, 2.

Wooden plow, Jas Jeffrey, 1; Learmouth & Sons, 2.

Double mold-board plow, Jas Jeffrey, 1; Alfred Trudel, 2.

Subsoil plow, no first prize; W Evans, 2.

Heavy harrows, H B & H Jewell, 1; Jas Jeffrey, 2.

Light harrows, Jas Jeffrey, 1; W Evans, 2.

Drill harrows, Jas Jeffrey, 1; W Evans, 2.

Iron roller, Jas Jeffrey, 1; P Legare, 2.

Wooden roller, Learmouth & Sons, 1; Jas Jeffrey, 2.

Scarifiers or cultivators, Mat Moody, 1; J & S Vessot, 2.

Grain-sowing machine, J & S Vessot, 1; W Evans, 2.

Beet and carrot sowing machine, E E Spencer, 1; W Evans, 2.

Grass-seed sowing machine, J & S Vessot, 1; W Evans, 2.

Compost sowing machine, E E Spencer, 1; W Evans, 2.

Mowers, M Moody, 1; R Kerr & Co, 2.

Mowers and reapers combined, G M Cossitt and Bro, 1; D McCormick, 2.

The New York State Fair.

The New York State Agricultural Society have held their thirty-seventh annual exhibition at the Rochester Driving Park. There was a large attendance, and it was in many respects very interesting and successful. The leading points in the exhibition were the agricultural implements, the valuable horses in the various classes, the Burden Jerseys, the Jardine Ayrshires, the Wadsworth Princess Shorthorns, the Peck and Cole Devons, the many sheep-pens and pig-pens. All things combined made the success of the exhibition surpassingly great. The illiberality of the Central Railroad in refusing to make a reasonable reduction of rates to visitors had, however, the effect of keeping back many. The total number of horned stock was not far from two hundred; of these forty-five were Ayrshires. The leading interest in that department is said by the *Country Gentleman* to have been the grand display of a Canadian breeder, Mr. J. W. Jardine, of Hamilton, whose Ayrshires "without exception may almost be characterized as faultless models of their kind." One, perhaps the best cow of the herd—Bonnie Jessie, imported in 1873, and a very successful prize-taker—dropped a calf on the ground and died of milk-fever soon after. Of the Jerseys, the next in general interest to the Ayrshires, the recently imported herd of the Messrs. Burden, of Troy, gave special importance to the class. There were, however, many other fine animals in the class, which numbered thirty-two in the whole. There were on exhibition forty-three Shorthorns, and as a class they looked decidedly well. The most interesting group was Mr. Wadsworth's Princesses. Of the Devons, numbering twenty-five in all, there were just two exhibitors, but the show was a good one, all the animals being excellent in quality. Of Holsteins there were a dozen animals shown by the Unadilla Valley S. B. Association. There were three entries of Galloways, and none of Herefords.

Provincial Exhibition.

PRIZE LIST--1877.

HORSES.

CLASS 1--THOROUGH-BRED HORSES.

Best thorough-bred stallion four years-old and upwards, \$36, John Forbes, Woodstock; 2nd do, \$26, Alex McArthur, Westminster; 3rd do, \$16, Hendrie & Co, Hamilton.

Best three-years-old stallion, \$21, W & J Peters, London.

Best two-years-old stallion, \$15, John White, Milton; 2nd do, \$10, W & J Peters, London; 3rd do, \$5, P & C Horton, Southwood.

Best yearling colt, \$10, John White; 2nd do, \$7, W & J Peters.

Best thorough-bred stallion of any age, diploma, John White.

Best three-years-old filly, \$18, John J Doyle, London; 2nd do, \$11, T C Patteson, Eastwood; 3rd do, \$7, John White.

Best two-years-old filly, \$14, T C Patteson; 2nd do, \$10, do.

Best yearling filly, \$8, W Dempster, Ingersoll; 2nd do, \$6, Frank B Leys, London.

Best brood mare, with foal by her side, \$21, John White; 2nd do, \$14, John White; 3rd do, \$7, John White.

Best foal of 1877, \$8, John White; 2nd do, \$6, John White; 3rd do, \$4, W & J Peters. Pedigree to be produced in this class.

CLASS 2--ROADSTER HORSES. FOR DRIVING, OR THE SADDLE, NOT EXCEEDING 15 1/2 HANDS.

Judges--C Gannon, St Catharines; Chas. Lealey, Waterdown; Wm. Carrick, Oshawa; R. S. Patterson, Belleville; Richard Brown, Orono.

Best roadster stallion, 4 years old and upwards, \$10, J P Wiser, Prescott; 2d do, \$30, Jas Scott, Puslinch; 3d do, \$20, Jno Mason, Hullett.

Best do, 3 years old, \$24, A F Dufour, St Mary's; 2d do, 3 years old, \$18, Hugh Cooper, York Mills.

Best do two years old, \$21, Wm Fortner, London; 2nd do, \$14, W B Crubb, Eminence, Ky; 3d do, \$7, J P Wiser.

Best yearling colt, \$10, W L O'Dell, Westminster; 2d do, \$7, Wm Heppburn, Yarmouth; 3d do, \$4, Arthur Woodhouse, Saltfleet.

Best stallion of any age, Diploma, J P Wiser.

Best three years old roadster filly, \$18, J W Hornby & Son, Eminence, Ky; 2d do, \$11, W B Crubb; 3d do, \$7, T C Patteson, Eastwood.

Best two years old filly, \$14, A F Dufour; 2d do, \$9, J P Wiser; 3d do, \$5, W B Crubb.

Best yearling filly, \$8, J P Wiser; 2d do, \$6, Thos Patrick, London; 3d do, \$4, Geo Dudge, Columbus.

Best brood mare, with foal by her side, \$21, John Day, East Nissouri; 2nd do, \$14, R M Wilson, Delhi; 3d do, \$7, Jno O'Brien, London Township.

Best foal of 1877, \$8, F W Stone, Guelph; 2d do, \$6, John Day; 3d do, \$4, John O'Brien.

Best pair matched driving or roadster horses, (geldings or mares), not over 15 1/2 hands, \$20, Buchners & Bro., Port Colborne; 2d do, \$15, L Mahon, London; 3d do, \$10, Joseph Hymal, Barton.

Best single roadster horse (gelding or mare) in harness, not over 15 1/2 hands, \$15, Wesley J Series, Rommel Plains; 2d do, \$12, H N Dinm, Pt. Rowan; 3d do, \$8, W B Coley, Yarmouth.

Best saddle horse, (gelding or mare) not over 16 hands, \$15, Joseph Grand, Toronto; 2d do, \$12, T C Patteson; 3d do, \$8, Joshua Doty, Ingersoll.

CLASS 3--CARRIAGE HORSES.

Judges--Chas Elliott, St Catharines; Thomas Stony, Stratford; Chas O'Neil, Stratford; Chas Girvin, Nile; Chas N Spooner.

Animals 3 years old and upwards to be 15 1/2 hands and over.

Best carriage stallion, 4 years old and upwards, \$40, R W Patterson, Stratford; 2nd do, \$30, Joseph Vance, East Zorra; 3d do, \$20, Charles Austin, Guelph.

Best do, three-years-old, \$21, Nilson Young, Fungal; 2d do, \$18, Wm Long, Lansing; 3d do, W H Hoover, Warwick.

Best do, two years old, \$21, John Harley, Zimmerman; 2nd do, \$14, J W Hornby & Son; 3rd do, \$7, J W Hornby & Son.

Best yearling colt, \$10, John B Walker, Stoney Creek; 2nd do, \$7, E W Chambers, E Oxford; 3rd do, \$4, James Chambers, Dereham.

Best stallion of any age, diploma, R W Patterson.

Best three years old carriage filly, \$18, George Buttery, Adelaide; 2nd do, \$11, John Jackson, London Township; 3rd do, \$7, Leonard Hunter, Usborne.

Best two years old filly, \$14, J W Hornby & Son; 2nd do, \$9, D F Jelly, Harrietsville; 3rd do, \$5, T C Patteson.

Best yearling filly, \$8, Wm Laidlaw, Westminster; 3rd do, \$4, Geo Buttery.

Best brood mare with foal by her side, \$21, Dan Campbell, Bradford; 2nd do, \$14, W M Smith, Fairfield Plains; 3rd do, \$7, John Banburg, Dereham.

Best foal of 1877, \$8, Geo Fraligh, London Tp; 2nd do, \$6, Sam Smilie, Kippen; 3d do, \$4, John Banbury.

Best pair matched carriage horses (geldings or mares), over 15 1/2 hands and not over 16, \$15, John Leys, Toronto; 2d do, \$12, Wm Laidlaw; 3d do, \$8, Jas A Miller, St Catharines.

Best single carriage horse (gelding or mare), in harness, over 15 1/2 hands, \$15, J E Davis, Stoney Creek; 2d do, \$12, Thos Pitton, Exeter; 3d do, \$8, F B Leys, London.

CLASS 4--AGRICULTURAL HORSES, EXCLUSIVE OF PURE CLYDESDALES AND SUFFOLKS.

Judges--John McMillan, Belleville; J R Crawford, Thorold; John Firth, Glen Buel; Wm Binions, Iroquois; John Lee, Highgate.

Best agricultural stallion, \$40, Sam Dunseith, Downie; 2d do, \$30, Jas Horton, Usborne; 3d do, \$20, Jos Calvert, Walpole.

Best 3 years old stallion, \$24, Thos G Bell, Lonsdale; 2d do, \$18, L N Chum, Brampton; 3d do, \$12, Jos James, Bosanquet.

Best 2 years old stallion, \$21, Sam Wilson, Usborne; 2d do, \$14, Peter McEwen, McKillop; 3d do, \$7, John Mason, Hullett.

Best yearling colt, \$10, Walter Cation, Chingitacousy; 2nd do, \$7, Geo Vance, Blandford; 3rd do, \$4, Calvert Kneggs, E Oxford.

Best 3 years old filly, \$18, John Glen, Colborne; 2nd do, \$11, Geo Dickie, Hyde Park; 3rd do, \$7, B T Zavitz, Lobo.

Best 2 years old filly, \$14, John Glen; 2nd do, \$9, E & J McKay, Blanshard; 3rd do, \$5, J W Dennis, Dorchester.

Best yearling filly, \$8, Wm Trowbridge, London Tp; 2nd do, \$6, Wm Taylor, London; 3rd do, \$4, W D Stoddart, Bradford.

Best brood mare, with foal by her side, \$21, Jas McDonough, Colborne; 2nd do, \$14, Wm Taylor; 3rd do, \$7, Wm Baker, Harpley.

Best foal of 1877, \$8, Wm Baker; 2nd do, \$6, Wm Rae, Lobo; 3rd do, \$4, Wm Broek, Adelaide.

Best matched team (geldings or mares), in harness, \$20, Jas Currie, W Oxford; 2nd do, \$15, B T Zavitz; 3rd do, \$10, Allan Webb, Blanshard.

Sweepstakes--Best agricultural stallion of any age, diploma and \$50, Thos G Bell, Lonsdale.

CLASS 5--HEAVY DRAUGHT HORSES.

Imported or bred from pure imported Heavy Draught Stock on the side of both sire and dam, including Clydesdales and Suffolks.

Judges--W H Hardman, Ottawa; Arch Bishop, Ayr; John Buchanan, Brantford; Jacob Pollard, Bowmanville; Root Sommerville, St Mary's; John Crowson.

Best heavy draught stallion, four years old and upwards, \$40, Robt Chyne, Toronto; 2d do, \$30, Wm Long; 3d do, \$20, Jas McDonough, Colborne.

Best 3 years old stallion, \$24, Canada West Farm Stock Co., Brantford; 2d do, \$18, C Edmondson, Brantford.

Best 2 years old stallion, \$21, Thos G Bell, Lonsdale; 2d do, \$14, John Place, Guelph; 3d do, \$7, Wm Hawking, Hibbert.

Best yearling colt, \$10, Hugh Lovar, Hazel, Stanley.

Best heavy draught stallion, any age, diploma, Canada West Farm Stock Co.

Best 3 years old filly, \$18, Thompson & Smith, Columbus; 2d do, \$11, Alex Melville, Fullarton; 3d do, \$7, Canada West Farm Stock Co.

Best 2 years old filly, \$14, Thos Vance, East Zorra; 2d do, \$9, Thos Werry, Jr, Usborne; 3d do, \$5, C A O'Malley, Wardsville.

Best yearling filly, \$8, Jos Franks, Dorchester.

Best brood mare with foal by her side, \$21, J T Davidson, Balsam; 2d do, \$14, Patrick Curran, Biddulph; 3d do, \$7, D McConachie, Clarke.

Best foal of 1877, \$8, J T Davidson; 2d do, \$6, D McConachie; 3d do, \$4, Patrick Curran; commended, Jas Loadman, Hay.

Best span of heavy draught horses, geldings or mares, \$20, Jas Thomson, Usborne; 2d do, \$15, G C Gray, W Oxford; 3d do, \$10, Jas Chambers, Dereham; extra, William Sage & Co.

CLASS 6--DURHAMS.

Judges--Wellington Bolter, Demorestville; John Rogers, Newmarket; James Vine, St Catharines; Wm Clark, Road Eau; Jos Walton, Peterboro; Capt Wm Chamber, Woodstock.

Best bull, 4 years old and upwards, \$40, J & R Hunter, Pilkington; 2d do, \$30, J S Armstrong, Guelph; 3d do, \$20, York Stock Company of Newtonbrook.

Best 3 years old bull, \$40, Thos Cook, Milton; 2d do, \$30, Jos Moffat, Reach; 3d do, \$20, J & R McQueen, Pilkington.

Best 2 years old bull, \$40, John Stimson, Peel; 2d do, \$30, J & W Watt, Salem; 3d do, \$20, W G Pillit, Burlington.

Best bull calf, under 1 year, \$20, Jas J Davidson; 2d do, \$15, J S Armstrong; 3d do, \$10, J J Davidson.

Best bull of any age, diploma, Thomas Boak, Milton.

Best cow, 30, J & W Watt; 2nd do, \$22, J & W Watt; 3rd do, \$16, Jos Moffat.

Best 3 years old cow, \$25, Jas Dickson; 2nd do, \$20, J & R McQueen; 3rd do, \$15, John Fothergill, Nelson.

Best 2 years old heifer, \$20, J & W Watt; 2nd do, \$15, J S Armstrong; 3rd do, \$10, J & W Watt.

Best 1 year old heifer, \$16, W G Pellet; 2nd do, \$12, J & W Watt; 3rd do, \$8, Jas Dickson.

Best heifer calf, under one year, \$16, James J Davidson, Balam; 2nd do, \$12, J S Armstrong; 3rd do, \$8, York Stock Company.

Best 5 calves, under one year old, got by one bull, and the *bona-fide* property of the exhibitor, \$10, Jas J Davidson, Balam.

CLASS 7--HEREFORDS.

Judges--J R Miller, Morrisbank; John F Bearman, Bell's Corners; Robert Gibson, Iderton; Jno Carter, Unionville; John Brown, Galt.

Best bull, 4 years old and upwards, \$30, F W Stone; 2d do, \$20, do, do.

Best 3 years old bull, \$30, Geo Hood, Guelph; 2d do, \$20, F W Stone; 3d do, \$10, do, do.

Best 2 years old bull, \$20, Geo Hood; 2d do, \$15, F W Stone; 3d do, \$10, do, do.

Best one year old bull, \$10, do, do.

Best bull calf, under one year, \$15, Geo Hood; 2d do, \$10, F W Stone; 3d do, \$10, do, do.

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

Best cow of any age, \$20, F W Stone; 2d do, \$15, do, do; 3d do, \$10, do, do.

Best 3 years old cow, \$20, F W Stone; 2d do, \$15, do, do.

Best two years old heifer, \$15, F W Stone; 2d do, \$10, do, do; 3d do, \$5, do, do.

Best one year old heifer, \$12, Geo Hood; 2d do, \$8, F W Stone; 3d do, \$4, F W Stone.

Best heifer calf, under one year, \$12, F W Stone; 2d do, \$8, Geo Hood; 3d do, \$4, F W Stone.

Best herd of Herefords, consisting of one bull and five females, of any age, \$30, F W Stone.

CLASS 8--DEVONS.

Judges--J A Couse, Wyoming; H J Brown, Niagara; J B Merritt, Scotland; R A Preston.

Best bull, four years old and upwards, \$30, Geo Rudd, Puslinch.

Best three years old bull, \$30, W & J Peters, London; 2d do, \$20, John Pincomb, do; 3d do, \$10, Samuel Harper, Hamilton tp.

Best one year old bull, \$20, Geo Rudd; 2d do, \$15, Geo Rudd.

Best bull calf (under one year), \$15, Geo Rudd; 2nd do, \$10, W & J Peters; 3rd do, \$5, Samuel Harper.

Best bull of any age, diploma, W & J Peters.

Best cow, \$30, W & J Peters; 2nd do, \$15, Geo Rudd; 3rd do, \$10, W & J Peters.

Best three years old cow, \$20, George Rudd; 2nd do, \$15, John Pincombe; 3rd do, \$10, W & J Peters.

Best three years old heifer, \$15, W & J Peters; 2nd do, \$10, George Rudd; 3rd do, \$5, Samuel Harper.

Best one year old heifer, \$12, George Rudd; 2nd do, \$8, George Rudd; 3rd do, \$4, George Rudd.

Best heifer calf (under one year), \$12, W & J Peters; 2nd do, \$8, George Rudd; 3rd do, \$4, Geo Rudd.

Best herd of Devon cattle, consisting of one bull and five females, of any age or ages, \$30, Geo Rudd.

CLASS 9--AYSHIRES.

Judges--John Hagerman, Belleville; Geo Caruthers, Grafton; Jas Fisher, Hyde Park; Jas Anderson, Guelph.

Best bull, 4 years old and upwards, \$30, Jardine & Son, Saltfleet; 2d do, \$27, Thomas Guy, Oshawa; 3d do, \$16, Archibald Kains, Westminster.

Best 3 years old bull, \$30, Jardine & Son; 2d do, \$27, Thos Nichol, Blenheim; 3d do, \$16, Archibald Park, W Oxford.

Best 2 years old bull, \$33, James Laurie, Malvern; 2d do, \$22, Jardine & Son; 3d do, \$11, Hugh Beck, W Nissouri.

Best 1 year old bull, \$25, Thomas Guy; 2d do, \$18, Thomas Guy; 3d do, \$12, Archibald Kains.

Best bull calf (under 1 year), \$22, Jardine & Son; 2d do, \$16, Thomas Guy; 3d do, \$11, Geo. Thompson, Blandford.

Best bull of any age, Diploma, Jardine & Son.

Best cow, \$28, Jardine & Son; 2d do, \$23, Thos Guy; 3d do, \$16, Thos Guy.

Best 3 year old cow, \$20, Jardine & Son; 2d do, \$22, Thomas Guy; 3rd do, \$16, Thos Nichol, Benheim.

Best 2 years old heifer, \$22, Jardine & Son; 2d do, \$16, Thomas Guy; 3d do, \$11, Thomas Guy.

Best one year old heifer, \$16, Jardine & Son; 2d do, \$11, Thomas Guy; 3d do, \$9, Arch Park.

Best heifer, under one year, \$13, Jardine & Son; 2d do, \$9, Arch Park; 3d do, \$9, Thos Guy.

Best herd of Ayrshire cattle, consisting of one bull and five females, of any age or ages, \$33, Jardine & Son; 2d do, \$33, Thos Guy.

The judges report the show of Ayrshires the best that was ever seen in Canada.

CLASS 10--GALLOWAYS.

There were no Galloways on the ground.

CLASS 11--JERSEY OR ALDERNEY.

Judges--A H Carscallen, Newburgh; Richard Gibson, Alonson Baker.

Best bull, 3 years and over, \$20, Wright & Butterfield.

Best bull, 2 years and over, \$10, Wright & Butterfield.

Best bull, 1 year and over, \$5, John Snells & Sons.

FEMALES.

Best 3 years old cow, \$20, Hugh Clark, Chingitacousy.

Best 2 years old heifer, \$10, Wright & Butterfield.

Best 1 year old heifer, \$5, Wright & Butterfield.

Wright & Butterfield entered two bull calves and one heifer highly commended.

CLASS 12--GRADE CATTLE.

Judges--J H Price, Welland; Thomas Harrison, Port Hope; John Graham, Tweed; Thomas Armitage, Amherstburg; John Weir, Jr, West Flamboro.

Best grade cow, J W Watt, Wellington County, \$30; 2d do, J W Watt, \$20; 3d do, W Geo Pettitt, \$15.

Best three-year-old cow, J & W Watt, \$25.

Best two-year-old heifer, J & R McQueen, Pilkington; \$20; 2d do, Richard Whittier, Westminster, \$15.

Best one-year-old heifer, J & R McQueen, \$15; 2d do, Alf Finmore, Westminster, \$10; 3d do, Francis Lears, London Tp, \$5.

Best heifer calf (under one year) J & W Watt, \$12; 2d do, J & R McQueen, \$8; 3d do, Alf Finmore, \$5.

Best 5 female of any age, the property of the exhibitor, J & W Watt, \$25.

CLASS 13--FAT AND WORKING CATTLE, ANY BREED.

Judges--D Brown, Zana; Bethel Loverin, Addison; John Motherwell, Perth; Philip Armstrong, Yorkville; Thos Andrews, Goderich; R Whetter, London.

Best pair of fat cattle, of any age, silver cup, value \$40, J S Armstrong, Guelph.

Best fat ox or steer, 1 years old and over, \$30,

Wm Meir, Westminster; 2d do, \$20, Wm Meir; 3d do, \$10, Wm Meir.

Best fat cow or heifer, 4 years old and over, \$30, J S Armstrong; 2d do, \$20, J H Glennie, Puslinch; 3d do, \$10, Jacob Terribery, Glanford.

SHEEP—LONG WOOLED.

CLASS 14—COTSWOLDS. Best ram, two shears and over, \$22, J Snell's Sons, Edmonton; 2nd do, \$17, F W Stone, Guelph; 3rd do, \$12, John Ivez, Walpole.

CLASS 15—LEICESTERS. Best ram, two shears and over, \$22, Thomas Lightfoot, Metcalfe; 2d do, \$17, John Scott, Lobo; 3d do, \$12, John Kelly, N Easthope.

CLASS 16—LINCOLN SHEEP. Best ram, two shears and over, \$20, C S Smith, Acton; 2d do, \$17, Sam Longford, Biddulph; 3d do, \$12, Jas Anderson, Westminster.

SHEEP—MEDIUM WOOLED. CLASS 17—SOUTHDOWN. Best ram, two shears and over, \$17, Robert Marsh, Richmond Hill; 2d do, \$12, D Perly, Brantford Township; 3d do, \$7, T W Stone.

SHEEP—FINE WOOLED. 19.—SPANISH, FRENCH, AND SAXON MERINO. Best ram, 2 shears and over, \$12, A Terrill, Wooter; 2nd do, \$8, A Terrill, Wooter.

CLASS 20.—FAT SHEEP. Best 2 fat wethers, 2 shears and over, \$12, W Whitelaw, Guelph; 2d do, \$8, Jno Mitchellree, London; 3d do, \$4, do.

Best 2 fat wethers, under 2 shears, \$12, W Whitelaw; 2d do, \$8, Jno Mitchellree; 3d do, \$4, do.

FIGS—SMALL BREEDS.

CLASS 21—IMPROVED BERKSHIRES. Best pen of Berkshires, consisting of 1 boar, 3 sows, and 1 sow with her own litter of 1877.

CLASS 22—SUFFOLKS. Best boar over 2 years, \$15, A Franks & Sons, Cheltenham; 2d do, \$10, J Featherstone, Toronto Tp; 3d do, \$5, J Featherstone, do.

CLASS 23—ESSEX PIGS. Best boar, over two years, \$15, Wright & Butterfield; 2d do, \$10, J Featherstone; 3d do, \$5, do.

LARGE BREEDS. YORKSHIRE AND OTHER LARGE BREEDS. Best boar over 2 years, J Featherstone, \$15; 2d do, Wright & Butterfield, \$10; 3d do, Jno Hewer, \$5.

POULTRY. CLASS 25—DORKINGS, POLANDS, GAME, ETC. Dorkings, best pair white (not imported from Europe), \$4, John Bogue, Westminster; 2nd do, \$3, Wm Lamb, London; 3rd do, \$2, John Aldons, Berlin.

Game, best pair pile, white or blue, \$4, H M Thomas; 2d do, \$3, Dan Shea, London; 3d do, \$2, W M Smith, Fairfield Plains.

CLASS 26—ASIATIC FOWLS, TURKEYS, GEESSE, ETC. Cochins, not imported from Europe, best pair cinnamon or buff, \$4, H M Thomas, Brooklin; 2nd do, \$3, W & J B Clark, Sandwich; 3rd do, \$2, Geo Hope, Port Hope.

CLASS 27—DORKINGS, POLANDS, GAME, ETC. Dorkings, best pair colored (not imported from Europe), \$4, John Bogue; 2nd do, \$3, James Main, Trafalgar; 3rd do, \$2, Thos Pellow, Petersburg.

CLASS 28—DORKINGS, POLANDS, GAME, ETC. Dorkings, best pair colored (not imported from Europe), \$4, John Bogue; 2nd do, \$3, James Main, Trafalgar; 3rd do, \$2, Thos Pellow, Petersburg.

CLASS 29—DORKINGS, POLANDS, GAME, ETC. Dorkings, best pair colored (not imported from Europe), \$4, John Bogue; 2nd do, \$3, James Main, Trafalgar; 3rd do, \$2, Thos Pellow, Petersburg.

CLASS 30—DORKINGS, POLANDS, GAME, ETC. Dorkings, best pair colored (not imported from Europe), \$4, John Bogue; 2nd do, \$3, James Main, Trafalgar; 3rd do, \$2, Thos Pellow, Petersburg.

CLASS 31—DORKINGS, POLANDS, GAME, ETC. Dorkings, best pair colored (not imported from Europe), \$4, John Bogue; 2nd do, \$3, James Main, Trafalgar; 3rd do, \$2, Thos Pellow, Petersburg.

CLASS 32—DORKINGS, POLANDS, GAME, ETC. Dorkings, best pair colored (not imported from Europe), \$4, John Bogue; 2nd do, \$3, James Main, Trafalgar; 3rd do, \$2, Thos Pellow, Petersburg.

and J B Clark; 2nd do, \$2, W and J B Clark; 3d do, \$1, Wright and Butterfield, Sandwich.
 Brahmas, best pair, dark, not imported, \$3, Wright and Butterfield; 2d do, \$2, Wm H Doel; 3d do, \$1, Wm H Doel.
 Cochins, best pair, cinnamon or buff, not imported, \$3, W and J B Clark; 2d do, \$2, Wright and Butterfield; 3d do, \$1, W and J B Clark.
 Cochins, best pair, partridge, not imported, \$3, Wright and Butterfield; 2d do, \$2, John Aldons; 3d do, \$1, Wright and Butterfield.
 Ducks, best pair of Aylesbury, \$3, John Bogue; 2d do, \$2, John Bogue; 3d do, \$1, H Cannon & Sons, Springfield.
 Ducks, best pair Rouen, \$3, Jas Main, Trafalgar; 2d do, \$2, Jas Main, Trafalgar; 3d do, \$1, G. T. Simpson.
 Ducks, best pair, any other kind, \$3, Wm Lamb; 2d do, \$2, do, do; 3d do, \$1, John Routledge, London.
 Best pair of fowls, of 1877, of any other kind not classified, \$3, Wright and Butterfield; 2d do, \$2, Duncan Kay; 3d do, \$1, Jas Fullerton.
 Special prizes—Fowls imported from Europe—any age—Best pair of cinnamon or buff cochins, \$4, H M Thomas.
 Best pair white or black Cochins, \$4, H M Thomas.
 Best pair Dark Brahmas, \$4, H M Thomas.
 Best pair colored Dorkings, \$4, H M Thomas; 2d do, \$2, John Weld, London.
 Best pair black, blue or brown red Game, \$4, D Allan; 2d do, \$2, do.
 Extras.—Pair Toulouse Geese, W M Smith; do Goslings, do. Pair White Georgian Game, imported, Pereley & McCummins. Pair white game Bantams, Pereley & McCummins.

AGRICULTURAL IMPLEMENTS.
CLASS 27.—AGRICULTURAL IMPLEMENTS AND MACHINES FOR EXHIBITION ONLY.

In this class, by request of numerous manufacturers, entries of the undermentioned articles will be received for exhibition only, not in competition for prizes.

CLASS 28.—IMPLEMENTES FOR CULTIVATING AND SOWING THE SOIL, HORSE, STEAM OR OTHER POWER.

Best 2-furrow plough, \$30, Wm Hardy, Churchville; 2d do, \$20, R Sylvester, Enniskillen.
 Best iron plough, diploma and \$15, T Doherty, Watford; 2d do, \$10, Joseph Lowrie, Sarnia.
 Best wooden plough, diploma and \$12, G Jackson, London; 2d do, \$8, J. Walker, Westminster; 3d do, \$4, A Dobbie, Thorold.
 Best iron-beam plough, with steel mould board and wood handles, \$15, P McDougal; 2d do, \$10, Geo Jackson; 3d do, \$5, A Dobbie.
 Best subsoil plough, diploma and \$12, A Dobbie.
 Best double-shear trench plough, \$10, J Lewrie; 2d do, \$7, J Walker; 3d do, \$4, Bell & Sons, St George.
 Best double mould plough, \$10, A Dobbie; 2d do, \$7, R Dennis, London.
 Best gang plough, \$12, D M Vary, Strathroy; 2d do, \$8, Agricultural Mfg. Co, Elora; 3d do, \$4, Levi Cossitt, Guelph.
 Best horse-hoe, or single-horse cultivator, iron, \$4, Copp Bros & Co, Hamilton; 2d do, \$3, J Walker; 3d do, \$2, T Tipling, Clinton.
 Best horse-hoe, or single-horse cultivator wood, \$4, Crawford Bros, London; 2d do, \$3, T Brown & Co, Ingersoll; 3d do, \$2, Copp Bros & Co.
 Best cylinder cultivator, \$10, P L Bawlinhimer, Clifton.
 Best pair of iron harrows, \$10, John Doridge, Whitby Tp; 2d do, \$8, T Tipling; 3d do, \$6, Wm Tost, Glen Williams.
 Best pair of wood harrows, \$6, Copp Bros & Co; 2d do, \$4, Frank Ross & Piper; 3d do, \$2, James Wright, Westminster.
 Best wooden roller, \$10, Thomas Brown & Co, Ingersoll; 2d do, \$5, Noxon Bros Mfg Co.
 Best stump extractor, \$8, J W Anderson, Elora; 2d do, \$4, W & A McMichael, combined machine for sowing, &c., R H Savaris, Mitchell; combined cultivator and gang plough, J Richardson, Aeneaster; Co; silky or riding plough, Acton Plough Company; Co; silky or riding plough, John Elliott, London; Farmers' thrasher, Sharman & Foster, Stratford.

CLASS 29.—IMPLEMENTES AND MACHINES FOR HARVESTING, PREPARING PRODUCTS FOR USE, CARRIAGES, &c.—HORSE OR OTHER POWER.

Judges—D Nesbitt, Mandamin; John Lowrie, Sarnia; Wm Cowan, Ottawa; W McLeod, Sumner; John Tennant, Paris.
 Best silky horse rake, \$8, Massey Manufacturing Co, Newcastle; 2nd do, \$6, J O Wisner & Son, Brantford; 3rd do, \$4, Dickie & Kennedy, Oshawa.
 Best implement or machine for cutting, pulling, or otherwise harvesting peas, \$15, Tolton, Bros., Guelph; 2d do, \$10, George McLeod, Ridgeville.
 Best potato digger, \$10, Thos Head, Beverly; 2d do, Thos Head, Beverly.
 Best straw cutter, \$8, D Maxwell, Paris; 2d do, \$6, R Brown & Co, Ingersoll.
 Best machine for cutting roots for stock, \$8, D Maxwell; 2d do, \$6, J S Burns, King.
 Best grain cracker, \$8, R Sylvester, Enniskillen; 2d do, \$6, D Maxwell; 3d do, \$4, T. Brown, Ingersoll.
 Best corn and cob crusher, \$4, R Sylvester.
 Best cider mill and press, \$8, H Sells, Vienna; 2d do, \$4, G D Armstrong, Belleville.
 Best two-horse team wagon, \$12, Geo Minchin, Shakespear; 2d do, \$8, Peter Adams, Paris; 3d do, \$4, Ward & Line, Fullerton.
 Best two-horse spring market wagon, \$10, Willard Sage & Co, London; 2d do, \$7, R Dart, London; 3d do, \$4, R Staples, Coluden.
 Best one-horse light market wagon, \$9, Willard Sage & Co; 2d do, \$6, Moran Bros, London; 3d do, \$3, James Rice & Co, Kingsville.
 Best two-horse power for general purposes for farmers use, \$15, D Maxwell.

Best drag saw, \$20, Noxon Bros Manuff Co, Ingersoll; 2d do, \$16, John Stewart & Co, London.

CLASS 30.—AGRICULTURAL TOOLS AND IMPLEMENTS, CHIEFLY FOR HAND USE.

Judges—Wm Hudson, Roslyn; G McGugan, Strathroy; Robert Kemp; Jno Fathergrel, Appleby.
 Best machine for making drain tiles, diploma and \$20, Geo L Tiffany, London; 2d do, \$10, D. Darvill.
 Best set draining tools, \$6, Jas Wright, Westminster.
 Best half-dozen steel hoes, \$3, Whiting Manuff Co, Oshawa; 2d do, \$2, Hobbs, Osborn & Hobbs, London.
 Best half-dozen manure forks, \$3, A S Whiting Manufacturing Co; 2d do, \$2, Hobbs, Osborn & Hobbs.
 Best half-dozen spading forks, \$3, Whiting Mfg Co; 2d do, \$2, Hobbs, Osborn & Hobbs.
 Best seed drill, or barrow, for turnips, &c, \$4, Jas Walker, Westminster.
 Best garden, walk or lawn roller, \$3, Copp Bros & Co, Hamilton.
 Best half-oxen scythe the snaths, \$3, Frank & Ketchum, Strathroy; 2d do, \$2, Frank & Ketchum.
 Best grain cradle, \$2, Frank & Ketchum.
 Best half-dozen grass scythes, \$3, A S Whiting Manuff Co.
 Best half-dozen cradle scythes, \$3, A S Whiting Manufacturing Co.
 Best half-dozen hay rakes, \$3, Ashman, Nissouri; 2d do, \$2, M S Weymest, Waterloo; 3d do, \$1, Frank & Ketchum.
 Best half-dozen hay forks, \$4, A S Whiting Manufacturing Co; 2d do, \$2, Hobbs, Osborn & Hobbs.
 Best straw or barley fork, wood, \$2, Thos Head, Beverly; 2d do, \$1, M Ashman; 3d do, trans, B S Wells, Byron.
 Best fanning mill, diploma and \$10, John Bennett, Belleville; 2d do, \$8, John Stewart & Co, 3d do, \$6, Horace Merrill, Ottawa.
 Best straw cutter, \$4, D Maxwell; 2d do, \$3, F J Craig, Strathroy; 3d do, \$2, Cornell & White, Arkona.
 Best machine for cutting roots for stock, \$6, D Maxwell; 2d do, \$4, J T Burns, King; 3d do, \$2, Jas Wright, Westminster.
 Best cheese press, \$8, Ashley & Smith, Belleville.
 Best churn, \$3, McMurray & Fuller, Toronto; 2d do, \$2, Wm Stevely, London; 3d do, \$1, Corridor Lewis, Salford.
 Best cheese vat, \$8, Wm Dyson, London.
 Best assortment of factory milk cans and pails, \$5, Wm Dyson, London.
 Best bee-hive, \$3, Joseph Aches, Lobo; 2d do, \$2, A C Attwood, Vanneck; 3d do, \$1, D E Darman, Westminster.
 Best half-dozen axe-handles, \$2, John Kelly, Percy; 2d do, \$1, C Lewis, Salford; 3d do, H Fortner, Lobo.
 Best set horse shoes, \$3, Thos Tipling Clinton; 2d do, \$2, A Moorhead, London; 3d do, \$1, D McKenzie, Guelph.
 Best ox-yoke and bows, \$2, Wm Doyle, Delaware; 2d do, \$1, Geo Nixon, Westminster.
 Best farm gate, \$3, James Smith, Norwich; 2d do, \$2, R Shoff, London; 3d do, trans, J Y Williams, Warwick.
 Best specimen farm fence, wood, \$3, A F Allen, London; 2d do, \$2, H Hagle, Warwick; 3d do, trans, H Harrington, Blandford.
 Best specimen wire fencing, not less than two rods, erected on the ground, \$8, D W C Fair, Cleveland, Ohio.
 Best wooden pump, \$4, J M Cousins, London; 2nd do, \$3, Wm Nickle, London; 3rd do, \$2, E Stovell, Guelph.

AGRICULTURAL PRODUCTIONS.
CLASS 31.—FIELD GRAINS, HOPS, &c.

Judges.—Jno Dawson, Bell's Corners; Robert Gibson, Wroxeter; Thomas Robinson, Kintore; Samuel Woods, Moulinette.
 The Canada Company's prize for the best 25 bushels of all wheat, the produce of the Province of Ontario, being the growth of 1877. Each sample must be of one distinct variety, pure and uniform, of the best quality for seed, and not to be mixed, of the best quality for seed, and not to be tested merely by weight. The prizes to be awarded to the actual grower, or if the wheat, which is to be given up to and become the property of the Association, for distribution in the several Agricultural Districts for seed, \$100, Thos Stock, Waterdown; 2d do, \$40, Thos Manderson, Reach; 3d do, \$20, Robt Shearer, Niagara. The winners of the 2d and 3d prizes to retain their wheat.
 Best two bushels of white winter wheat, \$19, Wm Tuck, Nilson; 2d do, \$8, Thos Stock; 3d do, \$4, Robt Shearer; 4th do, \$1, Thos Manderson.
 Best two bushels of red winter wheat, \$8, R Hamby, Lobo; 2d do, \$6, Wm Richardson, Westminster; 3d do, \$4, John Smith, Burford; 4th do, \$2, Robt Shearer.
 Best two bushels of Egyptian wheat, \$8, Chas Grant, Thornbury; 2d do, \$6, C Watt, Thornbury; 3d do, \$4, Thos Manderson.
 Best two bushels of Fyfe spring wheat, \$8, Chas Grant; 2d do, \$6, C Watt; 3d do, \$4, R Nichol, Westminster.
 Best two bushels spring wheat of any other variety, \$8, Chas Grant; 2d do, \$6, C Watt; 3d do, \$4, T Manderson.
 Best two bushels barley (2 rowed), \$6, Charles Grant; 2d do, \$4, Walter Telfer, Hamilton Tp; 3d do, \$2, W N Smith, Fairfield Plains; 4th do, trans, Wm Thompson, Whitby.
 Best two bushels barley (6 rowed), \$6, Charles Grant; 2d do, \$4, David Carstairs, Harwood; 3d do, \$2, John Haskett, London Tp; 4th do, trans, Wm Tuck.
 Best 2 bushels winter rye, \$6, D Dorman, Westminster; 2nd do, \$4, J S Baines, Yarmouth.
 Best 2 bushels spring rye, \$8, Chas Foster, E Flamboro.
 Best 2 bushels of oats (white), \$6, T Manderson;

2nd do, \$4, D Carstairs; 3rd do, \$2, W Telfer; 4th do, trans, T C Douglas, N Dumfries.
 Best 2 bushels of oats (black), \$6, John Kennedy, London; 2nd do, \$4, H B Kennedy, Birr; 3rd do, \$2, John Smith, Burford; 4th do, trans, T Manderson.
 Best 2 bushels of small field peas, \$6, J Adair, Westminster; 2nd do, \$4, John Rowat, N Dorchester; 3rd do, \$2, T Manderson; 4th do, trans, D E Dorman.
 Best 2 bushels of marrowfat peas, \$6, Pat Carroll, Colborne; 2nd do, \$4, D Carstairs.
 Best 2 bushels of any other kind of field peas, \$6, Jas Dickson, Tuckersmith; 2nd do, \$4, T Manderson; 3rd do, \$2, Wm Brock, Adelaide.
 Best bushel of small white field bean, \$6, C Lewis, Salford; 2nd do, \$4, W Telfer; 3rd do, \$2, Wm Woodham, Yarmouth; 4th do, trans, Joseph Nixon, Petersville.
 Best bushel of large white field beans, \$6, C Lewis; 2nd do, \$4, Joseph Nixon; 3rd do, \$2, Wm Richardson; 4th do, trans, Peter Duguid, Westminster.
 Best two bushels of Indian corn in the ear (white), \$6, Chas Ross, Malahide; 2nd do, \$4, H J Brown, Niagara; 3rd do, \$2, P Hinman, Haldimand; 4th do, trans, J & N Ransome, Otterville.
 Best two bushels of white Dent corn in the ear, \$6, James McLanders, Dunwich; 2nd do, \$4, Wright & Butterfield, Sandwich.
 Best two bushels (yellow) Indian corn, \$6, Chas Ross; 2nd do, C M Honsberger, Jordan; 3rd do, \$2, John Rowat; 4th do, trans, B Cornell, Delaware.

CLASS 32.—SMALL FIELD SEEDS, FLAX, HEMP, ETC.

Best bushel timothy seed, \$6, James Dickson, Tuckersmith; 2d do, \$4, John Kennedy, London Township; 3d do, \$2, Cor-don Semis, Salford; 4th do, trans, Joseph C Hughes, London Township.
 Best bushel of clover seed, \$6, John Kennedy, London; 2d do, \$4, Charles Sifton, Lambeth; 3d do, \$2, Henry Lutz, Stoney Creek; 4th do, trans, John Doyle, Westminster.
 Best half bushel of Alfalfa seed, \$6, N Bethel, Thorold.
 Best bushel flax seed, \$6, John Moir, London; 2d do, \$4, Alex. Begg, London; 3d do, \$2, A. Park, West Oxford.
 Best Swedish turnip seed, from transplanted bulbs, not less than 12 lbs, \$6, John Crumb, Darlington; 2d do, \$4, Alfred Crumb, Darlington; 3d do, \$2, W. Murray, Westminster.
 Best grey stone turnip seed, 12 pounds, \$6, Alfred Crumb, Darlington.
 Best 12 lbs. white Belgian field carrot seed, \$6, Alfred Crumb, Darlington; 2d do, \$4, John Crumb, Darlington.
 Best 12 lbs. of long red mangel wurzel seed, \$6, Alfred Crumb, Darlington; 2d do, \$4, John Crumb, Darlington.
 Best bushel of taros, \$6, Walter Riddell, Hamilton Tp.
 Best bushel buckwheat, \$4, W. M. Smith, Fairfield Plains; 2d do, \$2, John Smith, Burford; 3d do, trans, J. G. Barnes, Yarmouth.
 Best bushel of millet, \$4, W M Smith, Fairfield Plains; 2d do, \$2, John Smith, Burford; 3d do, trans, A Kirk, Westminster.
 Best bushel of Hungarian grass seed, \$4, W M Smith, Fairfield Plains; 2d do, \$2, John Smith, Burford; 3d do, trans, Geo Y Hutton, Caradoc.
 Best 10 lbs cured tobacco leaf, growth of Ontario, \$4, Robt Shearer, Niagara.

CLASS 33.—FIELD ROOTS, ETC.

Best bushel of climax potatoes, \$3, Thos Lanctford, London; 2d do, \$2, William Taylor, London; 3d do, \$1, Chas Foster, E Flamboro.
 Best bushel cup potatoes, \$3, H A Head, Copetown; 2d do, \$2, Chas Foster; 3d do, \$1, Sam Loughton, Bidulph.
 Best bushel garnet chills, \$3, Wm Taylor; 2d do, \$2, H A Head; 3d do, \$1, Chas Foster.
 Best bushel fluke potatoes, \$3, J & N Ransome, Otterville; 2d do, \$2, John Howar, Guelph.
 Best bushel early rose potatoes, \$3, Robt Sugden, jun, W Nissouri; 2nd do, \$2, John Day, E Nissouri; 3rd do, \$1, Jos Moore, Lobo.
 Best bushel Brownell's beauty, \$3, Thos Stock, Waterdown; 2nd do, \$2, Arch Kains, Westminster; 3rd do, \$1, Wm Burgess, Mimico.
 Best bushel of peachblows, \$3, H A Head; 2nd do, \$2, Chas Foster; 3rd do, \$1, Wm Taylor.
 Best bushel peerless potatoes, \$3, A C Dayton, London; 2nd do, \$2, S Worrall, London; 3rd do, \$1, Peter Murray, Westminster.
 Best bushel of any other sort of potatoes, \$3, John Drew, Clifton; 2nd do, \$2, Cyrus Sumner, Westminster; 3rd do, \$1, G G James, London.
 Best collection of field potatoes, half week of each sort—named, \$6, A Hildelbrandt, London township; 2d do, \$4, Charles Foster; 3d do, \$2, H A Head.
 Best eight roots Marshall's improved Swede turnips, \$3, Jas H Glennie, Pa. line; 2d do, \$2, J & R McLaren, Pilkington; 3d do, \$1, W A Beattie, Westminster.
 Best eight roots Carter's Swede turnips, \$3, Jas H Glennie; 2nd do, \$2, J L R McLaren; 3rd do, \$1, Robert Murray.
 Best eight roots Skirving's Swede turnips, \$3, David Beattie, Westminster; 2d do, \$2, J & R McLaren; 3d do, \$1, W H Beattie.
 Best eight roots Sutton's champion turnips, \$3, W H Beattie; 2d do, \$2, R Murray; 3d do, \$1, H Glennie.
 Best eight roots Westbury turnips, \$3, W C Furch, Westminster; 2d do, \$2, James Beattie;

Westminster; 3d do, \$1, Richard Whetter, Westminster.
 Best eight roots white globe turnips, \$3, Wm Laidlaw, Westminster; 2nd do, \$2, James Craig, Westminster; 3rd do, \$1, John Hower.
 Best eight roots greystone turnips, \$3, John Hower; 2nd do, \$2, J & R McLaren; 3rd do, \$1, J A Gustin, London Township.
 Best eight roots Aberdeen yellows, \$3, J Hower; 2nd do, \$2, Wm Laidlaw, Westminster; 3rd do, \$1, Robert Baty, Westminster.
 Best twelve roots red carrots, \$3, Alton & Boyes, Appleby; 2nd do, \$2, T B Ronson & Son, Middleton; 3rd do, \$1, John Drew, Clifton.
 Best twelve roots white or Belgian carrots, \$3, Joseph Moore; 2nd do, \$2, Wm Murray, Westminster; 3rd do, \$1, Wm Burgess.
 Best twelve roots mangel-wurzel (long red), \$3; Wm Taylor; 2nd do, \$2, M Adman, Nissouri; 3rd do, \$1, J W Dennis, Dorchester.
 Best eight roots red globe mangel-wurzel, \$3, Wm Burgess; 2nd do, \$2, J Lackey; 3rd do, \$1, J Lackey.
 Best eight roots yellow globe mangel-wurzel, \$3, W Burgess; 2nd do, \$2, J Lackey; 3rd do, \$1, W H Beattie.
 Best eight roots long yellow mangel-wurzel, \$3, W Burgess; 2nd do, \$2, J Lackey; 3rd do, \$1, W H Beattie.
 Best eight roots kohlrabi, \$3, D E Dorman, Westminster; 2nd do, \$2, C W Jarvis, Byron; 3rd do, \$1, J R Dorman.
 Best eight roots white sugar beet, \$3, W Burgess; 2nd do, \$2, J Lackey; 3rd do, \$1, Charles Foster.
 Best twelve roots parsnips, \$3, W Burgess; 2nd do, \$2, W Benham, Guelph; 3rd do, Trans, T McBroom.
 Best 12 roots chicory \$3, J Lackey; 2nd do, \$2, T McBroom; 3rd do, Trans, W Burgess.
 Best 2 large squashes for cattle, \$3, S Worrall; 2nd do, \$2, J J Lancaster, London Township; 3rd do, \$1, Jos Nixon, Petersburg.
 Best 2 mammoth field pumpkins, \$3, Chas Ross, Malahide; 2nd do, \$2, J A Gustin, London Township; 3rd do, trans, Chas Baker, Westminster.
 Best 4 common yellow field do, \$3, Alex Kerr, Westminster; 2nd do, \$2, J M Campbell, Caradoc; 3rd do, Trans, Chas Baker.
 Extras—Jos Nixon, 8 roots Lang's Swede Turnip, highly recommended; J A Gustin, rape, highly recommended.

DAIRY PRODUCTS, &c.

CLASS 34—DAIRY PRODUCE, &c.

Judges—E Harland, Highgate; Alex Fraser, Tayside; J Hagarty, W Huntington, Robt Shearer, J C Small.
 Best 3 firkins of butter, fitted for exportation, not less than 56 pounds in each firkin, made by exhibitor, \$20, Arch Kains, Westminster.
 Best firkin of butter, in shipping order, not less than 56 pounds, \$14, John McLurg, Lobo; 2nd do, \$12, A Kains; 3rd do, \$10, Hugh Clarke, Chinguacousy; 4th do, \$8, Geo Y Hutton, Caradoc; 5th do, \$6, T Langford, London township; 6th do, \$4, Mrs M McArthur, Lobo.
 Best butter, not less than 28 lbs in firkin, crock, or tubs, \$10, A Kains; 2nd do, \$8, Jas Anderson, Westminster; 3rd do, \$6, Hugh Clarke; 4th do, \$5, M Ballantine, Blanshard; 5th do, \$4, G N Hutton; 6th do, \$3, Mrs R Fraser, Bosanquet.
 Best factory cheeses, not less than 45 lbs each, with statement of number of cows, and management of factory, \$50, Robert Facey, N Dorchester; 2nd do, \$40, J A James, Nilestown; 3rd do, \$25, Jas Elliott, Brownsville; 4th do, \$15, T R Richardson, Kerwood; 5th do, \$12, A Y Anderson, Wyoming; 6th do, \$8, E Hunter, Dorchester.
 Best cheese, dairy, not less than 30 lbs, \$12, Jno Calder, Blainford; 2nd do, \$10, John Rowat; 3rd do, \$8, Jas B Lane, Dorchester; 4th do, \$6, Wm Harris, Mt Elgin.
 Best 2 Canada Stilton cheeses, not less than 8 lbs each, \$8, Eliza Parson, Guelph; 2nd do, \$6, C B Lambert, Wallacetown; 3rd do, \$4, Wm Harris.
 Best 3 Canada Gloucester or Wiltshire loaf or truckle cheeses, not less than 8 pounds each, \$8, John Calder; 2nd do, \$6, M Ballantine; 3rd do, \$4, C B Lambert.
 Best five cheese boxes for shipping purposes, \$6, Henry Helmka, Brownsville.
 Extras—Col. of Flavored Cheeses, C B Lambert, highly commended.

CLASS 35—HONEY, SUGAR, BACON, &c.

Best honey, in the comb, not less than 10 lbs, \$4, Joseph Aches, Lobo; 2nd do, \$2, A Hibbithwait, London township; 3rd do, \$1, Alex McGregor, Yarmouth; 4th do, trans, John Yiddell, Dunwich.
 Best jar of clear honey, \$1, D E Dorman; 2nd do, \$2, Joseph Aches; 3rd do, \$1, Robert Suglen, W Nissouri; 4th do, trans, W H McGuire, McGillivray.
 Best 30 lbs maple sugar, cake, \$3, G Y Hutton; 2d do, \$2, N. Clarke, Dunwich; 3d do, \$1, Eliza Clarke, Dunwich.
 Best 30 lbs do, stirred, \$3, Eliza Clarke; 2d do, \$2, Jas McLunders; 3d do, \$1, John Tiddell.
 Best five gallons maple syrup, \$3, James McLunders; 2nd do, \$2, John Kennedy, London.
 Best side of cured bacon, \$4, Andrew O'Meara, London.
 Best ham, cured, \$3, Andrew O'Meara; 2d do, \$2, John Symonds, London.
 Extra entries—Samples of lard, Andrew O'Meara, recommended.

CLASS 36.—DOMESTIC WINES.

Professional and Commercial Lists.
 Best half-dozen dry wines, \$10, James Brown, Toronto; 2d do, \$6, V Casci, Toronto.

Best half-dozen sweet wine, \$6, James Brown, Toronto; 2d do, \$4, V Casci, Toronto.
 Best half-dozen sparkling wine, \$10, V Casci, Toronto; 2d do, \$6, J D Lutz, Saltfleet.
 Best half-dozen Canada claret, \$6, J D Lutz, Saltfleet; 2d do, V Casci, Toronto.

General List.

Best three bottles of dry wine, white, \$6, Henry Lutz, Stoney Creek.
 Best three bottles dry wine, red, \$6, H. Lutz, Stoney Creek.
 Best three bottles sweet wine, white, \$4, Chas. Arnold, Paris; 2nd do, \$2, H. Lutz, Stoney Creek.

FRUITS, VEGETABLES, PLANTS AND FLOWERS.

CLASS 37—FRUIT—PROFESSIONAL NURSERMEN'S LIST.

Best 30 varieties of apples, correctly named, six of each, \$10, Geo Leslie, Leslieville; 2d do, \$8, A M Smith, Grimsby.
 Best 20 varieties do, correctly named, six of each, \$6, A M Smith; 2nd do, \$4, Geo Leslie.
 Best six varieties of fall table apples, named, six of each, \$3, George Leslie; 2nd do, \$2, A M Smith.
 Best six varieties of fall cooking apples, named, six of each, \$3, George Leslie; 2nd do, \$2, A M Smith.
 Best six varieties winter table apples, named, six of each, \$3, George Leslie; 2nd do, \$2, A M Smith.
 Best six varieties winter cooking apples, named, six of each, \$3, George Leslie; 2nd do, \$2, A M Smith.
 Best collection 15 varieties pears, correctly named, three of each, \$10, G Leslie; 2d do, \$8, A M Smith.
 Best six varieties do, correctly named, six of each, \$5, G Leslie; 2d do, \$3, A M Smith.
 Best collection six varieties plums, correctly named, six of each, \$5, G Leslie.
 Best collection peaches, correctly named, six varieties, \$5, A M Smith; 2d do, \$3, W Moyer, Jordan.
 Best three varieties do, six of each, \$3, R Kettlewell, Westminster; 2d do, \$2, C Baker, Middlesex.

Best collection grapes, grown in open air, 12 varieties, two bunches each, named, \$8, J Holder, St Catharines; 2d do, \$6, G Leslie; 3d do, \$4, A M Smith.
 Best collection grapes, 6 varieties, grown in open air, two bunches each, correctly named, \$5, G Leslie; 2d do, \$3, J Holder.

Best three varieties black grapes, grown in open air, 2 bunches each, correctly named, \$3, A M Smith; 2d do, \$2, G Leslie.
 Best three varieties grapes, any other color, grown in open air, two bunches each, correctly named, \$3, J Holder; 2d do, \$2, A M Smith.

Best collection of grapes, 12 varieties, grown under glass, one bunch of each sort, correctly named, \$8, J Holder; 2d do, \$6, G Leslie.
 Best three varieties black grapes, grown under glass, \$4, J Holder; 2d do, \$2, G Leslie.

Best three varieties white grapes, grown under glass, \$4, J Holder.
 Best three varieties grapes, any other color, grown under glass, \$4, J Holder; 2d do, \$2, G Leslie.

Best and heaviest one bunch black Hamburg grapes, grown under glass, \$3, G Leslie; 2d do, \$2, J Holder.
 Best and heaviest one bunch black grapes, any other kind, grown under glass, \$3, G Leslie; 2d do, \$2, J Holder.

Best and heaviest one bunch white grapes, grown under glass, \$3, G Leslie; 2d do, \$2, J Holder.
 Best display of fruit, the growth of exhibitor, distinct from other entries, three specimens of each sort, named, grown under glass and in open air, \$15, G Leslie; 2d do, \$10, A M Smith.

Best collection of one dozen each of six varieties of crabs, cultivated, \$3, A M Smith; 2d do, \$2, G Leslie.
 Extras. Chas Baker, Westminster, highly commended.

CLASS 38—FRUIT—GENERAL LIST—APPLES AND PEARS.

Best twenty varieties apples, correctly named, three of each, \$10, C M Honsberger, Jordan; 2d do, \$8, J D Lutz, Saltfleet; 3rd do, \$6, G J Miller, Virgil; 4th do, \$4, J D Servos, Niagara.
 Best 12 varieties do, correctly named, three of each, \$6, C M Honsberger; 2d do, \$4, H J Brown, Niagara; 3d do, \$3, J D Servos; 4th do, \$2, G J Miller.

Best four varieties desert apples, correctly named, six of each, \$3, G J Miller; 2d do, \$2, J D Lutz; 3d do, \$1, J D Servos.
 Best four varieties, cooking do, correctly named six of each, \$3, H J Brown; 2d do, \$2, G J Miller; 3d do, \$1, J D Lutz.

Best 12 Summer Rose, \$2, Noah Smiley, Guelph.
 Best 12 Benoni, \$2, T H Parker, Woodstock.
 Best 12 Hawley, \$2, A W Taylor, Burton; 2nd do, \$1, John Smith, Burford.

Best 12 Duchess of Oldenburgh, \$2, Ed West, Westminster; 2nd do, \$1, John Jackson, London township.
 Best 12 snow apples, \$2, R Dawling, Westminster; 2nd do, \$1, P Flint, Westminster.

Best 12 fall pippins, \$2, J D Lutz; 2nd do, \$1, B Corneil, Delaware.
 Best 12 Gravenstein, \$2, C M Honsberger; 2nd do, \$1, J D Lutz.

Best 12 Mother, \$2, G J Miller; 2nd do, \$1, J D Servos.
 Best 12 St Lawrence, \$2, J D Lutz; 2nd do, \$1, Nathan Clarke, Dunwich.

Best 12 any other variety fall apple, \$2, C M Honsberger; 2nd do, \$1, W M Wile, Gosfield.
 Best 12 Ribston pippin, \$2, G J Miller; 2nd do, \$1, W Laidlaw.

Best 12 Esopus Spitzenburg, \$2, G Y Miller; 2d do, \$1, C M Honsberger.
 Best 12 Baldwin, \$2, H J Brown; 2d do, \$1, J D Lutz.

Best 12 Pomme D'Or, \$2, G J Miller.
 Best 12 Rhode Island Greening, \$2, H J Brown; 2d do, \$1, J D Lutz.

Best 12 Wagner, \$2, Wm Herbison, Goderich Township; 2d do, \$1, J D Lutz.
 Best 12 Porter, \$2, H J Brown; 2d do, \$1, G J Miller.

Best 12 Soek no Further, \$2, G J Miller; 2d do, \$1, C M Honsberger.
 Best 12 Roxbury Russett, \$2, G J Miller; 2d do, \$1, C M Honsberger.

Best 12 Swaar, \$2, H J Brown; 2nd do, John Smith.
 Best 12 Fallawater, \$2, John Fenwick, Westminster.

Best 12 American Golden Russet, \$2, H J Brown; 2d do, \$1, J D Lutz.
 Best 12 Swayze Pomme Grise, \$2, H. J. Brown; 2d do, \$1, G J Miller.

Best 12 Pomme Grise, \$1, C M Honsberger; 2nd do, \$1, H J Brown.
 Best 12 Northern Spy, \$2, C M Honsberger; 2d do, \$1, A W Taylor, Barton.

Best 12 any other variety (winter), \$2, G. J. Miller; 2d do, \$1, H J Brown.
 Best 12 seedling apples, \$2, G J Miller; 2d do, \$1, H J Brown.

Best collection of pears, 20 varieties, three of each, \$10, G J Miller; 2d do, \$8, J D Servos; 3d do, \$6, H J Brown.

Best 10 varieties pears, 3 of each, \$6, John Freed, Hamilton; 2nd do, \$4, G J Miller; 3rd do, \$3, J D Servos; 4th do, \$2, H J Brown.

Best 4 varieties do, 3 of each, \$3, John Freed; 2nd do, \$2, E C Fearnside, Hamilton.
 Best 6 Bartlets, \$2, G J Miller; 2nd do, \$1, Thos Robson, London.

Best 6 Seckle, \$2, Sam Woodley, Hamilton; 2nd do, \$1, E C Fearnside.
 Best 6 White Doyenne, \$2, E C Fearnside; 2nd do, \$1, G J Miller.

Best 6 Lawrence, \$2, J D Servos; 2nd do, \$1, G J Miller.
 Best 6 Flemish Beauty, \$2, J D Lutz; 2nd do, \$1, J D Servos.

Best 6 Beurra Diel, \$2, G J Miller; 2nd do, \$1, E C Fearnside.
 Best 6 Louise Bonne de Jersey, \$2, S Woodley; 2nd do, \$1, J D Servos.

Best 6 Bell Lucrative, \$2, Chas Morton, Westminster; 2d do, \$1, G J Miller.
 Best 6 Duchesse d'Angouleme, \$2, J D Servos; 2d do, \$1, H J Brown.

Best 6 Beurra Bosc, \$2, G J Miller; 2d do, \$1, J D Servos.
 Best 6 Beurra d'Anjou, \$2, G J Miller; 2d do, \$1, J D Servos.

Best 6 Beurra Chairgeau, \$2, G J Miller; 2d do, \$1, E C Fearnside.
 Best 6 Beurra Superfin, \$2, Wm Saunders, London; 2d do, \$1, Ed West.

Best 6 Goodie, \$2, G J Miller.
 Best 6 Winter Nolis, \$2, J D Servos; 2nd do, \$1, W Saunders.

Best 6 Glout Morecan, \$2, H J Brown; 2d do, \$1, W Saunders.
 Best 6 Vicar of Winkfield, \$2, J D Servos; 2d do, \$1, E C Fearnside.

Best 6 Easter Beurra, \$2, G J Miller; 2d do, \$1, J D Servos.
 Best 6 Beurra de l'Assomption, \$2, E C Fearnside.

Best six of any other variety of fall pear, \$2, H. J. Brown; 2d do, \$1, G J Miller.
 Best 6 any other variety winter pear, \$2, J D Servos; 2d do, \$1, G J Miller.

CLASS 39.—FRUIT—GENERAL LIST—CONTINUED.
 Professional nurserymen excluded. Competitors can make only one entry, and receive only one premium in each section.

PLUMS, PEACHES, GRAPES, ETC.
 Best collection, 6 varieties plums, green or yellow, correctly named, 6 of each, \$1, N. Sunly, Guelph; 2d do, \$3, E C Fearnside, Hamilton.

Best collection 6 varieties plums, red or blue, correctly named, 6 of each, \$1, N Sunly; 2d do, \$3, E C Fearnside.
 Best 12 Bradshaw, \$2, Geo Sturgeon, Kincairdine.

Best 12 Lombard, \$2, Geo Sturgeon; 2d do, \$1, T H Parker, Woodstock.
 Best 12 Washington, \$2, Geo Sturgeon.

Best 12 Hulings' superb, \$2, N Sunley.
 Best 12 Coe's golden drop, \$2, R J Howes, Hamilton; 2nd do, \$1, N Sunley.

Best 12 yellow egg-plum, \$2, A W Taylor, Barton; 2nd do, \$1, G Sturgeon.
 Best 12 Smith's Orleans, \$2, G Sturgeon; 2nd do, \$1, N Sunley.

Best 12 imperial gage, \$2, N Sunley; 2nd do, \$1, E C Fearnside.
 Best 12 McLaughlin, \$2, G Sturgeon.

Best 12 Pond's seedling, \$2, R J Howes; 2nd do, \$1, G Sturgeon.
 Best 12 dessert plums, one variety, correctly named, \$2, E West; 2nd do, \$1, G Sturgeon.

Best 12 cooking plums, one variety, correctly named, \$2, R J Howes; 2d do, \$1, N Sunley.
 Best 6 varieties of peaches, correctly named, 6 of each, \$4, C M Honsberger, Jordan; 2d do, \$2, G J Miller, Virgil; 3d do, \$1, W J Brown, Niagara.

Best 6 Early Crawfords, \$2, C M Honsberger; 2d do, \$1, J D Lutz, Saltfleet.
 Best 6 Late Crawfords, \$2, G J Miller; 2d do, \$1, H J Brown.

Best 6 peaches, any other variety, correctly named, \$3, G J Miller; 2d do, \$1, J D Servos, Niagara.
 Best 6 peaches, white flesh, any other variety, correctly named, \$2, C M Honsberger; 2d do, \$1, H J Brown.

Best 6 peaches, yellow flesh, any other variety, correctly named, \$2, W Armstrong, Byron; 2d do, \$1, H J Brown.

Best collection of grapes, grown in open air, 12 varieties, 2 bunches of each, \$8, S Woodley, Hamilton; 2d do, \$6, Jas Taylor, St. Catharines.

Best 6 varieties grapes, open air, two bunches of each, \$5, W Young, Hamilton; 2d do, \$3, S Woodley; 3d do, \$2, Jas Taylor.

Best 3 bunches Concord grapes, \$2, C Morton, Westminster; 2d do, \$1, S Woodley.

Best 3 bunches Delaware, \$2, S Woodley; 2d do, \$1, Chas Morton.

Best 3 bunches Adirondac, \$2, T H Parker.

Best 3 bunches Dina, \$2, W Young; 2d do, \$1, Jas Taylor.

Best 3 bunches Creveling, \$2, Jas Taylor; 2d do, \$1, S Woodley.

Best 3 bunches Rogers, 4, \$2, Wm Young; 2d do, \$1, S Woodley.

Best 3 bunches Rogers' 3, \$2, Jas Taylor; 2d do, \$1, S Woodley.

Best 4 bunches Rogers' 19, \$2, Jas Taylor; 2d do, \$1, S Woodley.

Best three bunches Rogers' 44, \$2, Jas Taylor; 2d do, \$1, S Woodley.

Best three bunches Eumelan, \$2, S Woodley.

Best three bunches Hartford Prolific, \$2, S Woodley; 2d do, \$1, W Young.

Best three bunches Iona, \$2, S Woodley; 2d do, \$1, Jas Taylor.

Best three bunches Isabella, \$2, Jas Taylor; 2d do, \$1, S Woodley.

Best three bunches Allen's Hybrid, \$2, Jas Taylor; 2d do, \$1, S Woodley.

Best three bunches of any other variety, \$2, W Young; 2d do, \$1, C Morton.

Best collection Grapes, grown under glass, 12 varieties, one bunch each, correctly named, \$8, Alex Gauld, Westminster.

Best 2 bunches Black Hamburg, \$3, T. H. Parker; 2d do, \$2, A. Gauld.

Best 2 bunches Black Grapes, any other variety, \$3, T. H. Parker; 2d do, \$2, T. H. Parker; 3d do, \$1, Misses Ussell, London.

Best 2 bunches White Grapes, grown under glass, correctly named, \$3, A. Gauld; 2d do, \$2, T. H. Parker; 3d do, \$1, T. H. Parker.

Best 6 Nectarines, named, \$3, R. J. Howes; 2d do, \$2, G. J. Milton.

Best 6 Quinces, \$2, John Freed, Hamilton; 2d do, \$1, R. Shearer, Niagara.

Best green flesh melon, \$2, Jas A. Miller, St. Catharines; 2d do, \$1, W. Cairncross.

Best red or scarlet flesh melon, \$2, C. W. Jarvis, Byron; 2d do, \$1, G. G. Jarvis, London.

Best watermelon, \$2, A. W. Taylor; 2d do, \$1, W. Burgess.

Best citron, \$2, J. & W. Ransom, Otterville; 2d do, \$1, Thos Wilkinson, London.

Best quart uncultivated native wild plums, \$2, Thos Waterhouse.

Best three clusters uncutivated wild grapes, \$5, J. D. Servos; 2d do, Thos Farnham.

Greatest variety native wild crabs, 12 each, \$2, C. M. Honsberger.

Best three varieties cultivated crab, 12 each, \$2, John Freed; 2d do, \$1, E. C. Fearnside.

Largest and best collection cultivated crabs, \$4, E. C. Fearnside; 2d do, \$2, G. J. Miller, Virgil.

COLLECTION.

OPEN TO ALL—PROFESSIONAL AND GENERAL.

The best collection of named varieties of apples, pears, peaches, grapes, plums, crabs and quinces. Open to agricultural and horticultural societies in Ontario, entries to be made by the secretary of such societies, the 12th rule not to apply, diploma and \$40, Hamilton Horticultural Society; 2d do, \$20, West Huron Horticultural Society.

CLASS 40—GARDEN VEGETABLES.

Judges—W. McK. Ross, Chatham; S. Woodly, Hamilton; J. Sharran, Oakville.

Best twelve roots of salsify, \$2, R. Evans, London; 2d do, \$1, Ascott Williams, Barton.

Best three heads cauliflower, \$2, G. Bowditch, London; 2d do, \$1.50, W. Cairncross, London; 3d do, \$1, A. Williams.

Best three heads cabbage (Early York), \$2, A. Williams.

Best three heads cabbage (Winningstadt), \$2, A. Steele, Lobo; 2d do, \$1, H. Gatehouse, Stratford.

Best three heads cabbage (Oxheart), \$2, A. Williams; 2d do, \$1, H. Gatehouse.

Best three heads cabbage (St. Denis), \$2, J. R. Donnam; 2d do, \$1, A. Williams.

Best three heads cabbage (Quintal), \$2, A. Williams; 2d do, \$1, H. Gatehouse.

Best three heads cabbage (drumhead), \$2, A. Steele; 2d do, \$1, E. Pope, London.

Best 1 sort winter cabbage, including savoys, one of each sort, \$3, John Drewe, London; 2d do, \$2, M. M. Wiebe, Gosfield.

Best 3 heads red cabbage, \$2, D. E. Dorman, Westminster; 2d do, \$1.50, G. G. James, London; 3d do, \$1, John Luckey, London.

Best 12 carrots, for table, long red, \$2, W. Benham, Guelph; 2d do, \$1.50, Chas Foster, E. Flamboro'; 3d do, \$1, W. Burgess, Mimico.

Best 12 intermediate or half long carrots, \$2, A. W. Taylor, Barton; 2d do, \$1.50, W. Cairncross; 3d do, \$1, J. O. Veale, Hamilton.

Best 12 early horn carrots, \$2, A. W. Taylor; 2d do, \$1.50, J. O. Veale; 3d do, \$1, Noah Gunley, Guelph.

Best 12 table parsnips, \$2, R. Rawlings, London; 2d do, \$1.50, S. Pope, London; 3d do, \$1, Peter Duguid, Westminster.

Best 6 roots white celery, \$2, John Dawes, London; 2d do, \$1.50, D. Anderson, London; 3d do, \$1, E. West.

Best 6 roots red celery, \$2, E. West; 2d do, \$1.50, A. Williams; 3d do, \$1, J. Dawes.

Best dozen capsicums (ripe), \$2, J. O. Veale; 2d do, \$1.50, A. W. Taylor; 3d do, \$1, S. Pope.

Best collection of capsicums (ripe), \$3, S. Pope; 2d do, \$2, A. W. Taylor; 3d do, \$1, J. O. Veale.

Best 3 egg-plant fruit, purple, \$2, S. Pope; 2d do, \$1.50, E. C. Fearnside, Hamilton; 3d do, \$1, J. O. Veale.

Best 12 tomatoes (Trophy), \$2, D. Anderson; 2d do, \$1, E. C. Fearnside.

Best 12 tomatoes (Gen Grant), \$2, J. A. Miller; 2d do, \$1, E. C. Fearnside.

Best 12 tomatoes, Cook's Favorite, \$2, J. Scott, London; 2d do, \$1, T. Waterhouse, London.

Best 12 Arlington tomatoes, \$2, H. Gatehouse; 2d do, \$1, J. D. Lutz, Hamilton.

Best 12 Conqueror tomatoes, \$2, E. West; 2d do, \$1, E. C. Fearnside.

Best 12 Dempsey's seedling, \$2, E. C. Fearnside; 2d do, \$1, C. Arnold, Paris.

Best 12 tomatoes, large yellow, \$2, J. O. Veale; 2d do, \$1, C. W. Taylor.

Best 12 any other variety tomatoes, \$2, A. Steele; 2d do, \$1, J. Scott.

Best assorted collection of tomatoes, \$3, S. Pope; 2d do, \$2, E. C. Fearnside; 3d do, \$1, E. Anderson.

Best 6 blood beets, long, \$2, W. Benham, Guelph; 2d do, \$1.50, A. Crumb, Darlington; 3d do, \$1, Isaac Darby, Woodstock.

Best 6 turnip rooted beets, \$2, W. Cairncross; 2d do, \$1.50, J. D. Lutz; 3d do, \$1, S. Pope.

Best peck white onions, \$2, James O'Brien, Westminster; 2d do, \$1.50, W. Tyhurst, Hamilton; 3d do, \$1, A. Williams.

Best peck of yellow onions, \$2, S. Symonds, London; 2d do, \$1.50, R. Rawlings; 3d do, \$1, P. Duguid.

Best peck red onions, \$2, A. Steele; 2d do, \$1.50, A. Williams; 3d do, \$1, P. Duguid.

Best 2 quarts pickling onions, \$1.50, D. Campbell; 2d do, \$1, D. Anderson.

Best 12 white turnips (table), \$2, T. Farnham, Dorchester; 2d do, \$1.50, A. Williams; 3d do, \$1, T. Waterhouse.

Best 12 yellow turnips (table), \$2, W. Benham; 2d do, \$1.50, T. Waterhouse; 3d do, \$1, Charles Foster.

Best 12 ears sweet corn, fit for the table, \$2, J. Luckey; 2d do, \$1.50, Edward West; 3d do, \$1, E. C. Fearnside.

Best quart French beans, \$2, G. E. James; 2d do, \$1, D. Anderson.

Best 6 winter radish, \$2, D. Anderson; 2d do, \$1, T. Waterhouse.

Best 3 Scotch kale, \$2, W. Cairncross; 2d do, \$1, D. Campbell.

Best collection pot and sweet herbs, \$2, S. Pope; 2d do, \$1, E. C. Fearnside.

Best six varieties of potatoes garden cultivation, half peck of each sort, named, \$4, A. Williams; 2d do, \$3, C. Foster; 3d do, \$2, C. Arnold.

Best three varieties table squashes, \$2, D. Anderson; 2d do, \$1.50, S. Worrall, London; 3d do, J. Scott.

Best two vegetable marrow, \$2, J. Luckey; 2d do, \$1, S. Worrall.

Best and greatest variety of vegetables (distinct from other entries), each kind named, \$4, T. McBroom, London.

CLASS 41—PLANTS AND FLOWERS.

Judges—E. J. Townsend, Hamilton; T. Kilvington, Hamilton; Jas Forsyth.

Best 12 varieties standard dahlias, named, one of each, \$2, G. Leslie & Son; 2d do, \$1.50, Ed West.

Best 12 bouquet dahlias, \$2, G. Leslie & Son.

Best and largest collection of dahlias, \$5, G. Leslie & Son; 2d do, \$4, E. West; 3d do, \$3, R. Kettlewell, Westminster.

Best two large vase bouquets, \$4, A. R. Murdock, London; 2d do, \$3, A. Pegler, London; 3d do, \$2, J. Holder, St. Catharines.

Best pair side table or fan bouquets, \$3, A. R. Murdock; 2d do, \$2, E. West; 3d do, \$1, A. Pegler.

Best hand bouquet, \$2, A. R. Murdock; 2d do, \$1.50, E. West; 3d do, \$1, A. Pegler.

Best bouquet, everlasting, \$2, T. Partridge, London; 2d do, \$1.50, E. West; 3d do, \$1, E. C. Fearnside, Hamilton.

Best hanging basket of flowers, \$2, D. Anderson, London; 2d do, \$1.50, A. R. Murdock; 3d do, \$1, John Stott, London Tp.

Best and largest collection of green-house plants, \$15, W. Cairncross, London; 2d do, \$10, A. R. Murdock; 3d do, \$6, A. Pegler.

Best 12 pansies, \$2, Isaac Darby, Woodstock; 2d do, \$1.50, E. West; 3d do, \$1, J. D. Sharran, London.

Best six varieties fuchsias, in flower, \$4, W. Cairncross; 2d do, \$3, A. R. Murdock.

Best six ferns, cultivated, \$4, A. R. Murdock; 2d do, \$3, W. Cairncross.

Best 6 ferns, native, \$3, Thos. Farnham, Dorchester; 2d do, \$2, John Stott; 3d do, \$1, Thos. Waterhouse, London.

Best 6 foliage plants, \$3, W. Cairncross.

Best collection annuals, in bloom, named, \$5, T. Partridge; 2d do, \$3, A. R. Murdock.

Best 6 cockscombs, \$2, John Simonds, London; 2d do, \$1.50, A. R. Murdock; 3d do, \$1, E. West.

Best 6 varieties, balsams in bloom, \$2, D. Anderson; 2d do, \$1, R. Kettlewell; 3d do, \$1, T. Waterhouse.

Best 12 German asters, \$2, Noah Sunley, Guelph.

Best collection of asters, \$3, N. Sunley; 2d do, \$2, I. Darby; 3d do, A. R. Murdock.

Best collection of 10-week stocks, \$2, John Simonds; 2d do, \$1.50, Wm Warner, London.

Best collection of margeritas, \$2, A. R. Murdock; 2d do, \$1.50, D. Anderson; 3d do, \$1, D. Campbell, London.

Best collection hybrid perpetual roses, named, \$5, John Fraser, London; 2d do, \$3, R. Kettlewell; 3d do, \$2, A. Pegler.

Best collection of Bourbon, Tea, and Noisette roses, named, \$4, A. Pegler; 2d do, \$2, E. West; 3d do, \$1, A. R. Murdock.

Best 3 roses of any one variety, \$3, E. West; 2d do, \$2, A. R. Murdock; 3d do, \$1, John Fraser.

Best floral design for supper table, \$5, A. R. Murdock; 2d do, \$4, E. West; 3d do, \$3, T. Partridge.

Best 12 verbenas, named, \$2, W. Cairncross; 2d do, \$1.50, A. Pegler; 3d do, \$1, E. West.

Best collection verbenas, named, \$3, W. Cairncross; 2d do, \$2, E. West; 3d do, \$1, A. Pegler.

Best 6 petunias, single, \$2, E. West; 2d do, \$1.50, A. Pegler; 3d do, \$1, John Freed, Hamilton.

Best 6 petunias, double, \$2, E. West; 2d do, \$1.50, J. Freed; 3d do, \$1, A. R. Murdock.

Best collection Phlox Drummondii, \$2, E. West; 2d do, \$1.50, F. O. Veale, Hamilton; 3d do, \$1, J. Darby.

Best collection dianthus, \$2, F. O. Veale; 2d do, \$1.50, E. West; 3d do, \$1, R. Kettlewell.

Best collection perennial phloxes, \$3, A. R. Murdock; 2d do, \$2, G. Leslie & Son; 3d do, \$1, C. Baker, Westminster.

Best six hardy shrubs, spikes in flower, \$2, G. Leslie & Son; 2d do, \$1.50, C. Baker.

Best collection hollyhocks, \$2, A. R. Murdock; 2d do, \$2, W. Warner.

Best collection of double zinnias, \$2, T. Partridge; 2d do, \$1.50, J. D. Sharran; 3d do, \$1, W. Cairncross.

Best twelve single geraniums in pots, named \$5, D. Anderson; 2nd do, \$3, W. Cairncross; 3rd do, \$2, E. West.

Best six double geraniums in pots, \$3, D. Anderson; 2nd do, \$2, E. West; 3rd do, \$1, W. Cairncross.

Best display of plants in flower, distinct from other entries, \$12, A. R. Murdock; 2nd do, \$8, A. Pegler.

Best specimen of useful and ornamental rustic work for the garden, \$4, A. R. Murdock.

SPECIAL PRIZES OFFERED BY JAMES VICK, ESQ., ROCHESTER, N. Y., FOR THE PURPOSE OF ENCOURAGING THE CULTURE AND LOVE OF FLOWERS.

Best collection of cut flowers, \$20, T. Partridge; 2nd do, \$10, N. Sunley; 3rd do, \$5, Chas. Smith, Dorchester; 4th do, floral chromo, A. C. Johnston, Westminster.

Best ornamental floral work (either bouquet or floral ornament), \$5, T. Partridge.

ARTS AND MANUFACTURES DEPARTMENT.

CLASS 42—FINE ARTS, IN OIL.

Any subject, best three pictures, \$20, Bridgeman & Foster, Toronto; 2nd do, \$12, James Griffiths, London; 3rd do, \$6, Charles Chapman, London.

Animals from life, \$12, W. H. Creswell, Seaforth; 2nd do, \$6, Jas Griffiths, do.

Flowers or fruit, \$10, Chas Chapman, London; 2nd do, \$6, Jas Griffiths, do.

Figure or historical subject, \$12, F. A. Verner, Toronto; 2nd do, \$8, Bridgeman & Forster, do.

Landscape, Canadian subject, \$15, W. H. Creswell, Seaforth; 2nd do, \$10, F. A. Verner, Toronto; 3rd do, \$6, Chas Chapman, London.

Landscape or marine painting, not Canadian subject, \$10, W. H. Creswell, Seaforth; 2nd do, \$6, W. L. Judson, London.

Marine painting, Canadian subject, \$12, L. K. O'Brien, Toronto; 2nd do, \$8, F. A. Verner, do.

Portrait, \$10, A. H. Heaslip, Toronto; 2nd do, \$7, Bridgeman & Forster, do; 3rd do, \$4, Farmer Bros, London.

Still Life, not flowers or fruit, \$10, F. A. Verner, Toronto; 2nd do, \$6, Miss Strickland, Oshawa. Commended—Jas. Griffiths, London.

AMATEUR LIST—OIL—(COPIES.)

Any subject, \$10, Miss E. J. Lamb, Mimico; 2d do, \$6, Miss Strickland, Oshawa; 3d do, \$4, John Hunt, London.

Animals from life, \$8, Paul Peel, London; 3d do, \$5, E. E. Thompson, Toronto.

Figure subject, \$8, Sophia J. Taylor, Westminster; 2d do, \$5, J. McP. Ross, Leslie.

Flowers or fruit, \$8, John Chapman, Ridgeway; 2d do, Paul Peel, London; 3d do, L. Lamb, Mimico.

Landscape or marine view, Canadian subject, \$8, John Hunt, London; 2d do, \$5, Miss E. J. Lamb, Mimico.

Portrait, \$8, John Hunt, London; 2d do, Paul Peel, London.

Still Life, not flower or fruit, \$7, Miss E. J. Lamb, Mimico; 2d do, Paul Peel, London.

CLASS 43—FINE ARTS IN WATER COLORS, CRAYONS, &C.

PROFESSIONAL LIST—(ORIGINALS.)

WATER COLORS.

Any subject, best three pictures, \$12, W. H. Creswell, Seaforth; 2d do, \$8, James Griffiths, London.

Animals from life, \$8, W. H. Creswell; 2d do, \$5, A. Verner, Toronto.

Flowers or fruit, \$6, James Griffiths; 2d do, \$4, C. Chapman, London.

Figure or historical subject, \$6, F. A. Verner; 2d do, F. Gilmaster, London.

Landscape, Canadian subject, \$10, W. H. Creswell; 2d do, \$6, L. R. O'Brien, Toronto; 3d do, \$3, F. A. Verner.

Landscape or marine view, not Canadian subject, \$6, W. H. Creswell; 3d do, \$4, L. R. O'Brien.

Marine view, Canadian subject, \$6, W. H. Creswell; 2d do, \$4, L. R. O'Brien; 3d do, \$2, A. Verner.

Portrait, \$6, W. L. Judson; 2d do, \$4, Isaac T. W. Brown, Toronto.

Still Life, not flowers or fruit, \$6, F. A. Verner; 2d do, \$4, W. L. Judson.

PENCIL, CRAYON, &C.

Crayon, colored, \$5, Farmer Bros, London; 2nd do, \$3, Jas Griffiths, London.

Crayon, plain, \$5, Farmer Bros; 2nd do, \$3, Miss F. Hauser, Belmont.

Crayon, or pencil portrait, \$5, J C Rollson, London; 2nd do, \$3, Farmer Bros.
Pen and ink sketch, \$5, C Chapman; 2nd do, \$3, Jas Griffiths.
Pencil drawing, \$5, F Geilmeister, Toronto; 2nd do, \$3, Chas Chapman.
Sepia drawing, \$5, W L Judson; 2nd do, \$3, Jas Griffiths.

AMATEUR LIST—(ORIGINALS).

WATER COLORS.

Any subject, \$6, R Crockett, Hamilton; 2nd do, \$4, Rev R W E Green, Toronto; 3rd do, \$2, A W Chapman, Toronto.
Animals from life, \$6, J L Rabone, Toronto; 2nd do, \$4, Jas Chapman, Ridgetown.
Flowers or fruit, \$6, Miss F O Salter, London; 2nd do, \$4, Miss Strickland, Oshawa.
Landscape marine view, Canadian subject, \$6, R Crockett; 2nd do, \$4, Rev R W E Green.

PENCIL, CRAYON, &c.

Crayon, colored, 2nd, \$2, John Chapman.
Crayon, plain, \$4, John Chapman; 2nd do, \$2, Miss Lily Jones, Toronto.
Crayon or pencil portrait, \$4, J A Mann & Son, London.
Pencil drawing, \$4, Jas Fitzgibbons, London; 2nd do, \$2, John Chapman.
Pen and ink sketch, \$4, John Chapman; 2nd do, \$2, S J Beattie & Co, Belleville.
Sepia, \$4, John Chapman.

AMATEUR LIST—(COPIES).

WATER COLORS.

Animals, grouped or single, \$4, Miss S Strickland; 2nd do, \$2, E. Brough, Goderich.
Flowers or fruit, \$4, Miss F G Lambe, Mimico; 2nd do, \$2, Miss F O Salter, London.
Figure or historical subject, \$4, Miss Lily Jones; 2nd do, \$2, Miss F S Lambe.
Landscape, \$4, R Crockett; 2nd do, Miss F O Salter.
Marine view, \$4, R Crockett; 2d do, \$2, Mrs W H McFadden, Goderich.
Still life, not flowers or fruit, \$4, Miss Strickland; 2d do, \$2, Miss F S Lambe.

PENCIL, CRAYON, ETC.

Crayon, colored, \$4, Miss Lily Jones; 2d do, \$2, Susan Woodcock, Ingersoll.
Crayon, plain, \$4, Mrs W West, London; 2d do, \$2, Miss Lily Jones, commended, do.
Crayon, or pencil portrait, \$4, E. McIntosh, Thorold; 2d do, \$2, Mrs Robert Milner, Chatham.
Pen and ink sketch, \$4, W Y Barber, Sarnia; 2d do, \$2, Miss E J Lambe.
Pencil drawing, \$4, Miss F O Salter; 2d do, \$2, E McIntosh.
Sepia, \$4, Miss F O Salter; 2d do, \$2, Miss F S Lambe.
Extra entries, 1st and 2d, Geo Bonfield, London, illuminated texts; 3d do, 2d for illuminated cards.

CLASS 44—STATUARY, PHOTOGRAPHY, MECHANICAL DRAWINGS, &c.

STATUARY—(ORIGINALS).

Carving in wood, \$10, Bennet Bros., London; 2nd do, \$6, Miss Whitehead, London.
Carving in stone, in relief, \$10, Hooper & Nisbet, London; 2nd do, \$6, F. W. Peel, London.
Statue or group, in stone, \$15, H. A. Wilkens, London; 2nd do, \$10, S. Gardner, Simcoe.
Anatomical models, for school purposes, \$6, 1st and diploma, School Apparatus Co., Toronto.
School appliances, \$6, School Apparatus Co., Toronto.
School maps, \$6, Geo. Bonfield.

PHOTOGRAPHY.

Photograph portraits, collection of, in duplicate, one set colored, \$10, Jos. S. Butler, Chatham; 2nd do, \$6, J. F. H. Brown.
Photograph portraits, collection of, plain, \$8, Hunter & Co., Toronto; 2nd do, \$5, Farmer Bros., London.
Photograph landscapes and views, collection of, \$8, Hunter & Co.; 2d do, \$5, Lindop & Cooper, St. Thomas.
Photograph portrait, finished in oil, \$8, Bridgeman & Foster, Toronto; 2nd do, \$5, J. F. H. Brown.
Photograph portrait, finished in Indian ink, \$6, Hunter & Co.; 2nd do, \$4, Jos. S. Butler, diploma, Farmer Bros.
Photograph portrait, finished in water colors, \$6, Jos. S. Butler; 2nd do, \$4, Farmer Bros.

ARCHITECTURAL AND MECHANICAL DRAWINGS, ENGRAVINGS, LITHOGRAPHY, &c.

Drawings, architectural, geometrical and perspective view, \$8, Wm. Irving, Toronto; 2nd do, \$4, A. Amundson, London.
Drawing of machinery, in perspective, \$4, R. Booth, Sherbrooke, Que.; 2nd do, \$2, Jas. Anstinson, Ingersoll.
Drawing, geometrical, of engine or mill work, colored, \$4, R. Booth.
Engraving on wood, with proof, \$4, Henry Beech, London; 2nd do, \$2, P. J. Edmund, London.
Extras. Stanton & Vickers, Toronto, combination group of family; 1, H. McLaren, London, set of teeth on gold plate and on rubber plate; 2, V. Case, Toronto, plastic casting from nature; 1, Neil McLellan, London, carved ship; 2, Chas. Wright, Toronto, model of a barge; 2, Hunter & Co., Toronto, combination photography; Lindop & Cooper, photos, in carbon; 1, V. Case, bust in relief, cast from original model; 1, H. A. Wilkens, London, plaster cast from original model.

CLASS 45—PAPER, PRINTING, PENMANSHIP, BOOKBINDING, AND TYPE.

Bookbinding, (blank book), assortment of, \$5, E A Taylor & Co., London.
Bookbinding (letterpress), assortment of, \$5, E A Taylor & Co., London.
Letterpress printing, book and pamphlet work, \$5, FREE PRESS Printing Co., London.
Letterpress printing, plain, \$5, FREE PRESS Printing Co., London; 2d do, \$3, John Cameron & Co., London.
Letterpress printing, ornamental, \$5, FREE PRESS Printing Co., London; 2d do, \$3, John Cameron & Co., London.
Letterpress printing, posters, plain and ornamental, \$5, Bell, Hawkins & Co., Toronto.
Penmanship—business hand, without flourishes, \$4, S G Beatty & Co, Belleville; 2d do, \$2, Tennant & McLaughlin, Hamilton.
Penmanship—ornamental (not pen and ink pictures), \$4, S G Beatty & Co.
Extra Entries—Assortment of specimens of marbling, 1st, Jno Fawcett, Toronto. Engraving, 1st Hector McKay, jr., Toronto. Addressed envelopes, 2nd, Tennant & McLaughlin, Hamilton.

CLASS 46—CHEMICAL MANUFACTURES AND PREPARATIONS.

Chemical preparations, in case, \$6, School Apparatus Co., Toronto.
Essential oils, assortment of, \$6, J T A Gibzeau, Strathroy.
Best collection mineral water, \$4, H. Sudgen, Evans & Co., Montreal—Diploma.
Oil—Paraffine, \$6, Waterman Bros., London; 2nd do, \$4, London Oil Refining Co.
Best collection pharmaceutical preparations, \$4, B A Mitchell, London.
Petroleum, refined, half gallon, \$6, Waterman Bros; 2nd do, \$4, London Oil Refining Co.
Perfumes, assortment of, \$6, B A Mitchell; 2nd do, \$4, Sudgen, Evans & Co.
Best collection toilet preparations, \$4, B A Mitchell; 2nd do, \$2, Sudgen, Evans & Co.
Best and finest display of petroleum products exhibited by one person or firm—Gold medal, Waterman Bros.

CLASS 47.—NATURAL HISTORY, MINERALOGY, &c.

Birds—Collection of native, stuffed, with common and technical names attached, and classified so as to show those injurious and those beneficial to agriculture and horticulture, \$10, C. Mummery, London; 2d, \$5, S. Mummery, do.
Fossils—Collection of Canadian, named and classified, \$10, D Boyles, Elora.
Insects—Collection of native; with common and technical names attached, and classified so as to show those injurious and those beneficial to agriculture and horticulture, \$15, Wm. E. Saunders, London; 2nd, \$10, Geo. Hope, Port Hope.
Insects—Collection of foreign, exclusive of species found in Canada, named and classified, \$10, Entomological Society of Ontario, London.
Mammalia and Reptiles—Collection of native, stuffed or preserved in spirits, with common and technical names attached and classified, so as to show those injurious and those beneficial to agriculture and horticulture, \$12, S. Mummery, London.
Plants—Collection of native, arranged in their natural families, and named, \$10, Miss G Choate, Ingersoll; 2d do, \$6, Miss A L Saunders, London.
Stuffed birds and animals of any country, collection of, \$10, C. Mummery, London; 2d do, \$6, S. Mummery, do.
Forest Leaves—Canadian, dried, collection of, \$5, Miss G Choate, Ingersoll.
Mineralogy, &c.—Copper ores of Dominion, best collection, commended, D. Boyle, Elora.
Iron ores of the Dominion, best collection of, \$8, D Boyle, Elora.
Lead ores of the Dominion, best collection of, commended, D Boyle.
Silver ores of the Dominion, best collection of, \$8, John Symmonds, London.
Specimens, illustrating the mineralogy of Canada, best collection of, \$15, D Boyle, Elora; 2nd do, \$10, Alex Ferguson, London; 3rd do, \$5, John Symmonds, London.
Extras—Embalmed flowers, 1st, Miss H Sammons, London.

LADIES' WORK.

CLASS 48—EMBROIDERY, KNITTING, NEEDLE WORK, &c.

Applique work, \$3, Miss McPherson, London; do, \$2, Mrs S Rawden, Brampton.
Bead work, \$3, Miss S Metcalf, Toronto; 2d do, \$2, Miss Jones, Toronto.
Carriage Afghan, \$5, Mrs C A Brush, Detroit; 2d do, \$2, Miss Jones.
Counterpanes, domestic weave, \$3, Miss M Wilkie, Westminster; 2d do, \$2, Wm Tyhurst, Harwich.
Counterpanes, crochet, \$3, Miss O M Parks, Waterdown.
Counterpanes, knitted, \$3, Mrs M J Doyle, London; 2d do, \$2, Miss O M Parks, Waterdown.
Crewel work, in wool, \$3, Miss S Rawdon; 2d do, \$2, Lizzie McVean, Woodhill, Peel.
Darning, best specimen, \$3, Miss Lily Jones; 2d do, \$2, Mrs S Rawdon.
Embroidery in cotton, \$3, Sarah Strickland, Oshawa; 2d do, \$2, Lizzie McVean.
Embroidery in muslin, \$3, Miss Agnes Mitchell, London; 2d do, \$2, Sarah Strickland.
Embroidery in silk, \$3, Mrs Tedford, Harwich; 2d do, \$2, Mrs H A Wicksteed, Ottawa.
Embroidery in worsted, \$3, Mrs Rawden, Brampton; 2d do, \$2, Sarah Strickland.
Gloves, three pairs, \$3, Mary McIntyre, Merris-

ton, Wellington; 2d do, \$2, Mrs P Heenan, Grafton.
Knitted shirts or drawers, hand made, \$3, Sarah Strickland; 2d do, \$2, Lily Jones.
Machine sewing, family, \$3, Lizzie McVean; 2d do, \$2, Lily Jones.
Mittens, woollen, three pairs, \$3, Miss M A McIntyre; 2d do, \$2, Mrs P Heenan.
Plait, for bonnets or hats of Canadian straw, \$3, Lily Jones; 2d do, \$2, Miss E and J Aikins, Woodstock.
Quilt, calico patchwork, \$3, Miss H N Wilson, Westminster; 2d do, \$2, Miss J P Ringston, Watford.
Quilt, cloth patchwork, \$3, Jane Cox, London; 2d do, \$2, Mrs G Sinclair, Tilsonburg.
Quilt, silk, patchwork, or otherwise, \$3, Mrs N G McNee, Thamesford; 2d do, \$2, Mrs W H Phillips, London.
Rag carpet, \$3, Miss H S Chute, Aylmer; 2d do, \$2, M Wilkie, Westminster.
Rag mat, \$3, Miss H S Chute; 2d do, \$2, Mrs J M Chute, London.
Shirt, men's coarse, unwashed, hand made, \$3, Mrs J Simpson, London; 2d do, \$2, Miss L McVean, Woodhill.
Shirt, men's fine, unwashed, hand-made, \$3, Lizzie Brown, Chinguacousy, Peel; 2d do, \$2, Mrs G Sinclair.
Shirt, men's fine, machine-made, \$3, Lizzie Brown; 2d do, \$2, Lizzie McVean.
Socks, fancy, for children, \$3, Mrs L C Daniel, London; 2d do, \$2, Miss M McIntyre, Morrison.
Stockings or socks, 3 pairs woollen, knit by hand, \$3, A C Johnston, Westminster; 2d do, \$2, Miss M McIntyre; highly commended, Mrs F Griffith, Westminster, and Mrs P Heenan.
Stockings or socks, 3 pairs, cotton, knit by hand, \$3, Mrs H Harper, Cobourg; 2d do, \$2, Sarah Strickland.
Stockings or socks, 3 pairs, knit by a girl under 12 years, \$3, Miss S Clark, Dunwich.
Society Regalia, \$3, Mrs M Fortuno, London.
Indian beadwork, by Indians only, \$3, Maggie Kwakere, Caghawaga, Que; 2nd do, \$2, Mrs Wool, do, do.
Extra—Embroidery in Net—1st, J S Guthrie, London.

CLASS 49—LADIES' WORK.

FLOWERS, BERLIN WOOL, LACE, WAX WORK, ETC.

Berlin wool work, for framing, \$3, Mrs Miller, London; 2d do, \$2, Mrs J A Mann.
Berlin wool work, flat, \$3, Mrs Miller; 2d do, \$2, Mrs Field, Westminster.
Berlin wool work, raised, \$3, Miss Tilly Rice, London; 2d do, \$2, Mrs J Dorman, Westminster.
Chenille work, with silver or gold, \$3, Miss Strickland.
Crochet work, in cotton, \$3, Miss Strickland; 2d do, \$2, Mrs W Telfer, Westminster.
Flowers, artificial, in feathers, \$3, Mrs J A Mann; 2d do, \$2, Mrs J A Mann.
Flowers, artificial, in hair, \$3, Mrs A L Newcomb, London; 2d do, \$2, Miss E Anslie, East Oxford.
Flowers, artificial, in paper, \$3, Mrs M E Hornberry, London.
Flowers, artificial, in wax, \$3, Mrs T O'Brien, London; 2d do, \$2, Matilda Ballory, do.
Fancy work, any kind, for children under 12 years of age, \$3, Miss Minnie Jones, Toronto.
Guipure work, \$3, Mrs S Rowdon, Brampton; 2d do, \$2, Mrs H A Mickstead, Ottawa.
Hair, ladies head-dress, \$3, Lala Beal, London.
Hair jewelry, \$3, Sarah Strickland; 2d do, \$2, Mrs Kechem, Strathroy.
Homonit, \$3, Mrs John Manley, Toronto; 2d do, \$2, Miss L M Frazer, London.
Fancy knitting, \$3, Miss O M Parks, Waterdown; 2d do, \$2, A C Johnston, Westminster.
Lace, point, \$3, Miss C Chalmers, London; 2nd do, \$2, Lizzie McVean.
Lace, any other kind, \$3, Mrs Jas Stanton, Millbrook, Durham; 2nd do, \$2, Mrs A Troutwill, Aylmer.
Lamp mat, \$3, Mrs Field; 2nd do, \$2, Lily Jones.
Leather work, ornamental, \$3, Lizzie Brown; 2nd do, \$2, Miss Claypole, London.
Moss ornaments, \$3, Annie H Heaslip, Toronto; 2nd do, \$2, Miss K Hayden, London.
Netting, fancy, \$3, Sarah Strickland; 2nd do, \$2, Lizzie McVean.
Pair slippers, in worsted, \$3, Lizzie McVean; 2nd do, \$2, Miss Anna Taylor, London.
Seed wreath, \$3, Mrs J A Mann; 2nd do, \$2, Mrs Geo Fuller, Harrietsville.
Soft cushion, \$3, Mrs Field; 2nd do, \$2, Miss A Hudson, London.
Sewing, plain, for children under 12 years, Miss Minnie Jones.
Toilet cushion, \$3, Mrs. Field; 2d do, \$2, Miss Jones, Toronto.
Tidy, crochet cotton, \$3, Sarah Strickland; 2d do, \$2, Mrs. R. Scott, Lobo.
Tidy, knitte, cotton, \$3, Mrs John Carr, London.
Tidy, woollen, \$3, Mrs Worthington, Lobo; 2d do, \$2, Annie B Mathewson, London.
Wax fruit, \$3, Mrs H E Buttery, London.
Wax work, ornamental, \$3, Mrs H E Buttery; 2d do, \$2, Lily Jones.
Work basket, \$3, Leslie Eckley, London; 2d do, \$2, Lily Jones.
Tattooing, \$3, Miss K Smith, Toronto; 2d do, \$2, Mrs A C Johnston, Westminster.
Extras. Frome lace, 1st, Lady McDonald, Kingston; Berlin wool wreath flowers, commended, Mrs M Simpson, London; Case of millinery, R Walker & Sons, London, commended; Cretanno com velvet, Miss M E Chalmers, London, commended; Lyre of summer and autumn wax mended; Mrs T O'Brien, London, commended; Macramil work, \$3, Miss A Fenwick, London.
CLASS 50—MUSICAL INSTRUMENTS.
Entered for exhibition only. No prizes offered.

CLASS 51—CABINET WARE AND OTHER WOOD AND HAIR MANUFACTURES.

CABINET WARE. Bedroom furniture, set of, \$12, George Moorhead Manufacturing Co, London. Carving in wood, decorative, not connected with any other article on exhibition, \$6, Bennett Bros, London; 2nd do, \$4, R Drury, Woodstock. Centre table, \$6, David Shedden, Woodstock; 2nd do, \$4, W Keene, London. Chair, easy, for invalids, \$4, S T Tabb & Co, Montreal. Drawing-room sofa, \$6, George Moorhead Manufacturing Co; 2nd do, \$4, J Ferguson, London. Drawing-room chairs, set of, \$6, Geo Moorhead Manufacturing Co; 2nd do, J Ferguson. Veneers from Canadian woods, undressed, 2nd, \$4, D Shedden. Veneers from Canadian woods, dressed and polished, never previously exhibited, and not connected with other articles on exhibition, \$6, D Shedden. What-not, 2nd, \$2, T Weston, London.

BRUSHES, HOLLOW-WARE, MACHINE WORK, &c. Brushes, hair, assortment of, \$4, Chas Rosstter London. Clothes-wringer, \$2, J G Fitch, Ingersoll; 2nd do, \$1, R T Wilson, Hamilton. Cooper's work, \$4, Condon Lewis, Salford; 2nd do, \$2, John Fells, Salford. Corn brooms, one dozen, \$2, C Jarvis & Co, Brantford; 2nd do, \$1, J R Gurd, London. Mangle, \$3, F Blakie, Sarnia; 2nd do, \$1, Hamilton Manufacturing Co. Turning in wood, collection of specimens, \$6, T Weston. Washing machine, \$3, J S Elliot, Guelph; 2d do, \$1, James Farmer, London. Highly commended, Stockton, Rositer & Co, Toronto. Wash tubs and pails, factory made, three of each, \$4, C Lewis; 2d do, \$2, John Fells.

Extras—John Evans, London, 1st and 2nd prizes for combination bed lounge and draft or checker table. Millar & Frazer, London, 1st and 2nd for spring bed bottoms. Thomas Weston, London, 1st for collection of twist turning. C Jarvis & Co, 1st for fancy work on brooms. James F Williams, London, 1st for froe ware. Moorhead Manufacturing Co, 1st for cylinder book case. Wm Peacock, Montreal, 1st for collection of cricket bats and collection guards and wickets. John Ryan, Woodstock, 1st for clothes dryer. R Stephens, Port Stanley, 1st for collection double twist work. W B Jackson, London, 1st assortment of scroll work. Tate & Bombsall, Oakville, 1st for sewing table, with ironing attachment. J Gilroy, Grimsby, 1st for patent stretcher. Roland Denis, London, 1st for ornamental fencing. S Long, London: 1st for patent broochlock.

Second prizes were given to the following:—Thos Burton, Courtwright, bureau chest; W B Crick & Co, Toronto, spring bed bottom; C Jarvis & Co, Brantford, assortment of whisks; John McCulloch, Port Elgin, baking sideboard; Bennett Bros, London, school seat and desk combined; Hyram W Coulter, Cayuga, patent clothes dryer; John Law, London, brass work.

Highly commended.—Moorehead Manufacturing Co, church furniture; Wm Peacock, Montreal, gymnastic articles; C H Owen, London, rustic window shade; R Stevens, single twist work; E B Eddy, Ottawa, washboard; Miss West, London, frest work; Angus McDermall, Parkhill, patent clothes dryer. Commended.—C Jarvis & Co, feather dusters; T D Stickle, Watford, picture frames; Porter & Cushman, Hamilton, glass ventilator for windows; Bennett Bros, Chatham, rustic furniture; do, jardiner, in walnut and gilt; Elijah Sicles, Delaware, walking canes; McMurray & Fuller, Toronto, wickets; do, broom holder; Jacob Turner, Ingersoll, milk can; James Turner, do, milk can.

CLASS 52—CARRIAGES AND SLEIGHS, AND PARTS THEREOF.

Buggy, double seated, covered, \$8, Willard, Sage & Co, London; 2d do, \$6, John Campbell, London. Buggy, double seated, uncovered, \$6, Wm Gray Chatham; 2d do, \$4, H G Abbott, London. Buggy, single seated, covered, \$8, Wm Gray; 2d do, \$6, W J Thompson, London. Buggy, single seated, uncovered, \$6, W J Thompson, London; 2d do, \$4, John Campbell. Carriage, hack, \$10, John Campbell; 2d do, \$6, Willard, Sage & Co. Carriage, two-horse, pleasure, \$12, John Campbell; 2d do, \$8, B J Nash, London. Carriage, child's (perambulator), \$3, A E Hord, London; 2d do, W Haney, London. Carriage and buggy, woodwork, assortment of, \$10, Plummer & Son, London; 2d do, \$6, R & J D McLean, Watford. Democrat waggon, \$7, Wm Gray; 2d do, \$4, Rodger Dart, London. Hubs, carriage, one dozen \$3, John Head & Son, Lambeth; 2d do, \$2, Plummer & Son. Phreton, pony, \$6, John Campbell; 2d do, \$4, Little, Bros, & Co, Listowel. Phreton, covered, \$6, John Campbell; 2d do, \$4, Wm Gray. Ruins, or fellos, one dozen, \$3, Plummer & Son; 2d do, \$2, T E Montague, West Lorne. Sleigh, two-horse, pleasure, \$8, John Campbell; 2d do, \$6, S Turner & Co, London. Sleigh and cutter staff, assortment, \$6, T E Montague; 2d do, \$4, Plummer & Son. Spokes, carriage, machine-made, \$3, John Dew & Co, StCatherines; 2d do, \$2, Plummer & Son.

Springs, one set steel carriage, \$5, Jas Warnock & Co, Galt. Wheels, 1 pair of carriage, unpainted, \$3, John Dew & Co; 2d do, \$2, T E Montague.

EXTRA PRIZES. 1st Prize—Chas A Rogers, London, hand-painted phaeton; Wm Grey, Chatham, pony phaeton, buggy, canopy top; Moran Bros, London, one-horse pleasure sleigh—do trotting waggon; Brown & St. Charles, Belleville, omnibus; Willard, Sage & Co, sulkey, hack, cutter (Portland) and Dexter buggy; John Drew & Co., St. Catharines, set Guard's patent wheels; A Smith, fifth wheels, do body loops and dash frames; Jas Warnock & Co, Dexter carriage springs; W J Thompson, London, trotting sulkey and skeleton waggon; A E Hord, London, child's cutter and boy's velocipede; Wm Mallock, London, velocipede; G H Stevens, Toronto, expanding and contracting carriage hubs; S. Turner & Co, London, one-horse pleasure sleigh; John McBride, Strathroy, spring reach and couplings; B J Nash, London, 1st and 2d ploma for harness; D Conboy, Uxbridge, one-horse sleigh, 1st and diploma. 2nd Prize—S Turner & Co., London, Portland cutter—do trotting buggy; T E Montague, one-horse pleasure sleigh. Highly Commended.—John McBride, spring reach and couplings.

CLASS 53—BUILDING MATERIALS, PAINTING, WORK IN MARBLE, POTTERY, &c.

Bricks, pressed, one dozen, 2nd, \$1, L Pears, Yorkville. Bricks, kiln-burnt, one dozen, \$2, Wm Roberts, Stratford; 2nd do, \$1, Richard Griffiths, Westminster. Mantlepiece in marble, \$8, G Powell & Son, London; 2nd do, \$6, Hooper & Nesbit, London. Mantlepiece in marbleized slate, \$6, G Powell, London; 2nd do, \$4, R Harger, Hamilton. Marbles, Canadian, polished specimens of, \$6, Hooper & Nesbit, London; 2nd do, \$4, George Powell & Son, London. Monumental headstone, \$6, F W Peel, London; 2nd do, \$4, John Matheson, London. Pottery, an assortment of, \$6, Bradwin Bros, Mount Forest; 2nd do, \$4, Peter Elson, London Township. Sewerage pipes, stoneware, assortment of sizes, \$8, J Williams, agent for Otis & Gonline, London. Slates for roofing, \$6, Benj Walton, Toronto. Stained glass, collection of specimens, \$8, R Lewis & Co, London. Stench traps for draining, stoneware, \$3, J Williams. Stoneware, an assortment, \$8, W E Welding, Brantford; 2d do, \$5, John Williams, agent for Otis & Gonline, London. Extras.—Decorated china and earthenware, 1, W J Reid & Co, London. Ornamental plaster of Paris work, 1, Tibbs & McIntosh, London. Assortment of artificial stone, J Heard & Co, Strathroy. Specimens of polished Canadian granite, 1, J Matheson, London. Highly commended—Mineral cement, Ellsworth, London; model of house with felt roof, F & W Cathrow, London; specimen of felt and pitch roofing, F & W Cathrow, London.

CLASS 54—MACHINERY AND PARTS THEREOF, TOOLS, CASTINGS, ETC.

Part 1—Steam Engines, Hydraulic Machinery. Best portable steam engine for agricultural purposes, not less than six-horse power, to be put in operation on the ground, \$30, J Abell, Woodbridge; 2d do, \$20, Haggart Bros, St Thomas. Best boiler, for steam engine, \$12, Waterous Co, Brantford; 2d do, \$8, Wentworth Co, Hamilton. Best engineer's brass work, assortment, \$8, Stevens, Turner & Burns, London. Best engine, steam, stationary, one to four-horse power, in operation, \$15, John Doly, Toronto. Best engine, steam, stationary, five-horse power or upwards, in operation, \$20, Inglis & Hunter, Guelph; 2d do, \$12, Goldie & McCulloch, Galt. Best engine, portable, \$15, Waterous Co; 2d do, \$10, John Abell. Best engine, steam, model of improved, diploma, Sam Long, London. Best fire engine, hand-power, \$10, Valentine Satribe, Waterloo. Best fountain, \$6, Stevens, Turner & Burns. Best pumps, metal, for wells or cisterns, assortment, \$6, J A McMarten, Montreal; 2d do, \$4, Robertson & Dayer, Oakville. Best pump, double acting, liquor force, \$4, Goldie & McCulloch; 2d do, \$2, White & Yates, London. Best pump, steam, \$4, Barber & Harris, Meaford; 2d do, \$2, Stevens, Turner & Burns. Best steam engine governor, \$4, White & Yates; 2d do, \$2, Waterous Co. Best water wheel, turbine, \$3, J C Wilson & Co, Pictou, P E I; 2d do, \$5, Goldie & McCulloch. Extras.—Robertson & Dayer, fountain and pump; J M Cousins, London, windmill; J Doty, Toronto, water feed pump; F B Scovell, London, safety valve; Goldie & McCulloch, bone extract-ing heater; Waterous Works Co., boiler pinger; J H Copping, Toronto, lawn sprinker; Scott & Phillips, Toronto, gas machine; Stevens, Turner & Burns, steam gauges, &c; also double compression cock, for hot and cold water; also assortment of hub cocks; also beer pumps; P R Miller, water regulator; Robert Whitelaw, Woodstock, wheat cleaner; John Doty, agricultural boiler; also twenty horse-power stationary engine.

Part 2—Metal Working Machinery and Machinists' Tools.

Best blacksmith's tools, assortment of, J G Burpee, Waterloo, \$4. Best chopping axe, 1 doz, \$4, J Warnock & Co. Best drills, taps, dies and rimmers, assortment, \$4, A Jardine, Hespeler. Best edge tools, largest and best assortment, \$20, J Warnock & Co; 2d do, \$12, A Riddell. Best emery wheels, assortment, \$4, Waterous Manufacturing Co. Best machinists' tools for working in metals, best and largest display of, \$10, A Jardine; 2d do, \$5, J G Bruker. Best saws, circular, assortment, \$6, Waterous, Manufacturing Co. Best saws, hand, including cross-cut, \$4, R H Smith & Co, St Catharines. Extras—1st Prizes—Waterous Engine Co, saw gummers; Thos Smart, Kingston, blacksmith's hand bit-cutter; also brace bit-screwing machine; J G Bricker, assortment of hub rimmers; John Hower, pruning knife. Part 3—Wood-Working Machinery. Band saw, \$4, Cameron & Co, Galt; 2d do, \$2, Cant, Gourlay & Co, Galt. Collection of wood-working machinery, \$10, Cant, Gourlay & Co; 2d do, \$5, Cameron & Co. Jig saw, \$4, Cant, Gourlay, & Co; 2nd do, \$2, Cameron & Co. Mitrering machine, \$4, Cant, Gourlay & Co, 2nd do, \$2, Cameron & Co. Morticing machine, foot, \$4, Cant, Gourlay & Co. Morticing machine, power, \$6, Cameron & Co; 2nd do, \$4, Cant, Gourlay & Co. Commended, Henry Caster, Aylmer. Moulding machine, \$6, Cameron & Co; 2nd do, \$4, Cant, Gourlay & Co. Res-sawing machine, \$4, Goldie & McCulloch; 2nd do, \$2, Cant, Gourlay & Co. Saw mill, steam, in operation, \$20, Waterous Engine Co. Shaping machine, \$4, Cameron & Co; 2nd do \$2, Goldie & Co. Shingle and heading machine, \$4, Goldie & McCulloch; 2nd do, \$2, Waterous Engine Co. Surface planer, for wood work, \$6, Cameron & Co; 2nd do, \$4, Cant, Gourlay & Co. Goldie & McCulloch, extra 1st, \$6. Tennoning machine, \$4, Cameron & Co; 2nd do, \$2, Cant, Gourlay & Co. Turning lathe, \$4, Cant, Gourlay & Co. Window blind machines, best set, \$6, Cant, Gourlay & Co; 2nd do, \$4, Goldie & McCulloch. Wood planing and matching machine, \$10, Cant, Gourlay & Co; 2nd do, \$6, Cameron & Co. Extras.—1st prizes—Wm Kennedy & Sons, Owen Sound, wood-facing and jointing machine; Cant, Gourlay & Co, carriage cut-off saw; Cant, Gourlay & Co, rip saw table, sand-papery machine, emery grinding machine, boring machine, matcher sett; J J Lancaster, machine for tri-raming machines; Cameron & Co, Galt, sand-papery machine; Goldie & McCulloch, Galt, machine for workmanship and finish.

Part 4—Mill and Factory Machinery, and Miscellaneous Articles.

Bolting cloth, \$4, Waterous Engine Co. Brick-making machine, \$10, G S Tiffany, London; 2d do, \$6, Jamieson & Carroll, Toronto. Card clothing, assortment of, \$4, Fleming & Sons, England. Knitting machines, for manufacturing, \$4, Lamb Knitting Machine Manufacturing Co; 2d do, \$2, Fray & Pope, Georgetown. Knitting machine, for family use, \$4, Lamb Knitting Machine Manufacturing Co; 2d do, \$2, Fray & Pope, Georgetown. Mill stones, best pair, \$4, Goldie & McCulloch. Smut machine and separator, \$6, B Baqter, Toronto; 2d do, \$4, Goldie & McCulloch. Extras.—1st prize—Garden City Middlings Purifying Co, Toronto, middlings purifier; Goldie & McCulloch, Galt, millstone pinion; Waterous Engine Co, swing wind shaft for millstone testing; half dozen picks; Bulwer & Shepherd, Montreal, model of a brick machine; E. Glendillan, Owen Sound, true vertical lift pump; J B Hyde, Milton, car break. Highly commended—Golerich Foundry Co, Middlings purifier.

CLASS 55—MECHANICAL, METAL-WORK (MISCELLANEOUS), STOVES, CASTING, &c.

Part 1—Hardware, Cutlery, Bells, Safes, Scales, &c. Artificial limbs, assortment, \$6, J Doan & Son, Drayton. Bells, hand, assortment, 2d, \$2, John Law, London. Fire arms, assortment, \$6, J L Rawbone, Toronto; 2d do, \$4, R W Sopher, London. Scales, counter, \$4, Barrow, Stewart, & Milne, Hamilton. Scales, platform, \$4, Burrow, Stewart, & Milne. Table cutlery, commended, Meridan Britannia Co, New York; A S Murray & Co, agents. Trusses and orthopedic instruments, diploma, Chas Cluthe, Hamilton. Extras—1st prizes—Stevens, Turner & Burns, brass castings; J L Rawbone, Toronto, combined hand turnover, shell extractor and wall rammer, and brace-loading implement. 2d Prize—A A Watson, Ayr, revolving flower stand. Diploma—S Y Tabb & Co, Montreal, surgical chair.

Highly Commended—J J Grant, London, maleable driven well points; J L Rawbone, patent horse clipper; Smith, Chapman & Co, agents, sausage cutter.

Commended—J Gurd & Son, safety gun lock movement; also safety pistol lock movement; Stevens, Turner & Burns, rabbit metal; J L Rawbone, sample skate grinding.

Part 2—Gold, Tin and Coppersmiths' Work
Locks, Nails, &c.

Nails, twenty lbs, pressed, \$4, Hebbs, Osborne & Hobbs, London—commended.

Nuts, hot pressed, assortment, \$4, Brown & Co, Paris.

Picture frame, ornamental gilt, \$4, F J Hood, London; 2d do, \$2, Bennet & Chester, London.

Silversmiths' work, \$4, Meridan Britannia Co, New York (A S Murray & Co, agents).

Tinsmiths' work, assortment, \$4, J M Williams & Co, Hamilton; 2d do, \$2, J Turner, Ingersoll; commended, Jas Turner, Ingersoll.

Tinsmiths' lacquered work, \$4, J M Williams & Co.

Extras—Diploma—G H Bliss, Chicago, electric pen and press.

1st Prizes—N L Piper & Son, Toronto, improved sreet lamp; Alex Smith, London, improved iron bedstead; W H Gonne, Chatham, door knobs; Wm Hobbs, breasting for house tops.

2nd Prizes—W Hobbs, iron bedsteads and iron fencing.

Cast wheel, spur or level, not less than 50 lbs weight, \$6, J C Wilson & Co, Pictou, P E I; 2d do, \$4, Goldie & McColloch, Galt.

Cooking range, portable, \$6, E & C Gurney, Toronto; 2d do, \$4, do, do.

Cooking stove, for wood, \$6, St. Catharines Stove Co; 2d do, \$4, Burrow, Stewart & Milne.

Cooking stove, for coal, \$6, Burrow, Stewart & Milne; 2d do, \$4, McClary Mann Co, London.

Furniture for cooking stove, one set, \$4, Jas Stewart & Co, Hamilton; 2d do, \$2, McClary Mann Co.

Hall stove, for wood, \$4, Jas Stewart & Co; 2d do, \$2, St Catharines Stove Co.

Hall stove, illuminated base burner, \$4, Hart & McKillop, Toronto; 2d do, \$2, McClary Mann Co.

Parlor stove, for wood, \$4, St Catharines Co; 2d do, \$2, Jas Stewart & Co.

Parlor stove, for coal, \$4, McClary Mann Co; 2d do, \$2, E & C Gurney, Toronto.

Parlor cooking stove, \$4, McClary Mann Co; 2d do, \$2, E & C Gurney.

Parlor grate, \$4, Powell & Son, London; 2d do, \$2, Jas Stewart & Sons; highly commended, McClary Mann Co.

Parlor fireplace, complete, including setting grate so as to economize fuel, and arrangement for ventilating room, \$6, McClary Mann Co.

Stoves, ranges, and hollow ware, best and large display, \$10, McClary Mann Co; 2d do, \$6, E & C Gurney.

1st prizes—Smith & Watson, Paris, stove platforms; do, stove pipe collars; do, pipe stoppers; do, stove leg rests, in zinc and brass; copper tea kettles; sewing machine oilers; lighting rod balls; zinc balls for cornice work; copper tea kettle covers and rests. Becher Bros, London, portable self-feeding coal hot air furnace; same of brick; surface-burning coal hot air furnace; portable same of brick; portable wood furnace; do, brick. L L Nash, Mono Centre, feed cooker. C Norsworthy & Co, St Thomas, Centennial hitch-post and step. A Laidlaw & Co, Hamilton, tie-posts. Henry Collard, Gananoque, iron gates.

2nd prizes—Jas Stewart & Co, parlor cooking stove. E & C Gurney, base burner.

CLASS 56—SEWING MACHINES, FOR EXHIBITION ONLY.

The prizes in this class have been discontinued by request of the manufacturers.

CLASS 57—SADDLE, ENGINE HOSE, TRUNK MAKERS WORK, LEATHER, ETC.

Saddlery, &c.

Collars an assortment, \$4, William Vahey Forest.

Harness, set of double carriage, \$6, J C Miller Clinton; 2d do, \$4, Jas Twitchel, Clinton.

Harness, set of team, \$6, Thomas McGolrick, S Murys.

Leather machine belting, an assortment, \$6 Geo Kerr, London; 2d do, \$4, Stricker & Cosford Drayton.

Saddle and Harness Stock.

Brown strap and bridle, one side of each \$4, Geo Kerr, London; 2d do, \$2, Park & Mousley Newmarket.

Harness leather, two sides, \$4, Geo Kerr, London; 2d do, \$2, Thos Brown & Son, Ingersoll.

Horse blankets, two pairs, \$4, Woollen Mann, Co, Montreal.

Kersey, for horse clothing, one piece, \$4, Woollen Mann Co, Montreal.

Lace leather, 30 lbs, \$4, W B Burnett, Galt; 2d do, \$2, John Honey, Logan.

Skirting for saddles, two sides, \$4, Geo Kerr, London; 2d do, \$2, Stricker & Cosford, Drayton.

Extra Entries.—Horse collar blocking machine 1, Wm Vahey, Forest; Seamless, cotton fire hose, rubber lined, T F Blackwood, Toronto; Two sides harness, 1 Park & Mousley, Newmarket; shirt case, portmanteau and shawl strap combined, and combined portmanteau and shawl strap, 4 sizes, D S Mathew, Windsor, (by A L Hall, Detroit).

CLASS 58.—SHOE AND BOOT MAKERS' WORK, LEATHER, &c.

BOOTS, ETC.

Boots, ladies', hand made, an assortment, \$6, Wm Gamble, Richmond Hill.

Boots, gentlemen's, hand made, an assortment, \$6, A J Webster & Co, London; 2d do, \$4, Wm Gamble.

Boots, men's, single pair, hand made, \$4, A J Webster & Co; 2d do, \$2, Wm Gamble.

Gaiters, Balmorals, Oxford ties, etc., hand made, assortment, \$6, A J Webster & Co.

Boot and shoemakers' lasts and trees, \$6, Selway & Wood, Toronto.

Calf skins, 1 dozen, \$4, Park & Mousley, Newmarket; 2d do, \$2, Thos Brown & Son, Ingersoll; highly commended, Alex Johnson, for King Bros, Whitby.

Calf skins, grained, 1 dozen, \$4, T Brown & Son; 2d do, \$2, E W Hyman, London; highly commended, Alex Johnston.

Calf skins, morocco, 1 dozen, \$4, Park and Mousley.

Cordovan, two skins, \$2, Geo Kerr, London; 2d do, Park & Mousley.

Cow, buffed, two sides, \$2, E W Hyman; 2d do, \$1, T. Brown & Son.

Cow, pebbled, two sides, \$2, Geo Kerr; 2d do, \$1, E W Hyman.

Dog skins, two dressed, \$2, T Brown & Son; 2d do, \$1, Stricker & Cosford, Drayton.

Kip, two skins, \$2, J Honey, Logan; 2d do, \$1, E W Hyman.

Kip, grained, two skins, \$2, Thos Brown & Son, 2d do, \$1, E W Hyman.

Leather, kinds not otherwise described, assortment of, \$4, Park & Mousley, Newmarket.

Linings, six skins, \$2, J Honey; 2d do, \$1, R Arscott & Co, London.

Shoes, India rubber, an assortment, \$4, Good-year Rubber Co, New York.

Sole leather, two sides, slaughter, \$2, R Arscott & Co; 2d do, \$1, E W Hyman.

Splits, two sides, \$2, E W Hyman; 2d do, \$1, Park & Mousley.

Upper leather, two sides, \$2, Stricker & Cosford 2d do, \$1, J Honey.

Upper leather, grained, two sides, \$2, Thomas Brown & Son; 2d do, \$1, Geo Kerr.

Extra Entries—1, Park & Mousley, dozen calf skins, oak tanned; 1, do, kip skins; 1, Jos Swan London, doz calf skins, chemically tanned; R F Lacey, London, 12 pair boot and shoe uppers; 1, John Honey, skins tanned with hair on; 2, G A McAully, Hamilton, boot and shoe uppers; 2, Jos Swan, calf skins, chemically tanned. Highly commended—Goodyear Rubber Co, India rubber coats do, piano covers; R Palm & Co, Collingwood, leather, oak tanned.

CLASS 59.—WEARING APPAREL, FLAX, HEMP AND COTTON GOODS.

Best fur sleigh robes, assortment, not less than three kinds, \$6, W J Robinson, London.

Best sheepskin mats, dressed and colored, assortment, \$4, W J Robinson, London.

Best gloves and mits of leather, \$4, Storey & Co, Acton.

Best gloves and mits of kid, \$4, Storey & Co.

Best gloves and mits, woollen, \$4, Francis Smith, Paris.

Best overcoat, of Canadian cloth, \$2, R Walker & Sons, London.

Best shirts, gentlemen's, assortment, \$3, R A Garlick, London; 2d do, \$2, John Wilson, do.

Suit, gentlemen's, \$3, 2d, R Walker & Sons.

Suit, boy's, \$5, R Walker & Sons.

FLAX AND HEMP.

Corlage, assortment, not less than 10 lbs each \$6, Geo Copland, Hamilton.

Twines, assortment, not less than 3 lbs. each, \$4, Geo Copland.

COTTON GOODS.

Bags, assortment, \$4, King and Dolan, Merriton.

Baro warps, assortment, \$4 King & Dolan; 2d do, \$2, E W Holebrook & Co, New York.

Calico, bleached, 3 pieces, \$6, Homesville Manufacturing Co, New York.

Hosiery, assortment, \$4, F Smith, Paris.

Yarns, assorted colors, 3 lbs. each, \$2, King & Dolan.

Extras—George Copland, Hamilton, assortment of corlage and twine from Russian hems; do, from Japanese hemp; do, from jute hemp; do, from Manila hemp. King & Dolan, 1 white batting; do, wadding; assortment of cotton twines; E Colebrook & Co, New York, 2d for wadding and batting.

Commended—Heiter & Gans, New York, assortment of umbrellas, E W Colebrook & Co, New York, specimens of hearse plumes, and plumes for horses. King & Dolan—black batting.

CLASS 60—WOOLLEN GOODS.

Blankets, white, 2 pairs, \$6, Miss McIntyre, Morriston; 2d do, \$4, D Ferguson, Plympton.

Blankets, grey, 2 pairs, \$6, Woollen Manufacturing Co, Montreal.

Flannel, all wool, white and colored, 3 pieces, \$5, S T Willett, Chambly, Que.

Wincey, assortment, 3 pieces, \$6, Miss McIntyre.

Yarn made from Canadian super wool, white and dyed, 3 lbs, each, \$3, Strathroy Knitting Co.

Yarn made from Canadian super wool, assortment of mixtures, three lbs each \$3, Strathroy Knitting Co.

Yarn made from merino or foreign wool, white, dyed, and mixtures, three lbs each, \$3, Strathroy Knitting Co.

Extras—Diploma—Thomas Parker, Toronto, specimens wedged silk, red-dyed worsted and woollen goods; do, mixed materials; red-dyed cotton. George Wright Stratford, 1st for woollen coverlet; 2d do, union coverlet.

Knitted Goods.

Cardigan jackets, one nozen, \$3, F Smith, Paris.

Drawers and shirts, plain and ribbed, half dozen of each, \$4, F Smith, Paris; 2d do, \$2, Strathroy Knitting Co.

Half hose, assortment, 1 dozen, \$3, 1st diploma, F Smith; 2d do, \$2, R A McAllister, Toronto.

Hose, ladies and misses, plain and ribbed, assortment, half-dozen of each, \$3, F Smith; 2d do, \$2, R A McAllister.

Nubias and scarfs, assortment, one dozen, \$4, Strathroy Knitting Co.

Carpets, &c.

Carpets, 3 pieces, \$6, diploma, Thos C Kerr & Co, Hamilton.

Carpet, stair, 3 pieces, \$3, included in diploma, as above.

Carriage rugs, 3 pieces, \$4, W J Robinson, London.

Domestic Woollens.

Cloth, fulled, farmers' make, 2 pieces, \$4, James McLanders, Dunwich; 2d do, \$2, A C Hughes, London Township.

Flannel, not factory made, \$4, Miss McIntyre; 2d do, \$2, W Tyhurst, Harwich.

Yarn, white and dyed, not factory made, \$2, Miss McIntyre; 2d do, \$1, Elijah Clark, Dunwich.

Woolen shawls, home made, \$4, commended, Mrs P Henman, Haldimand.

Extras—A J Stevens, Paris, for floor oil cloth, highly commended; F Smith, Paris, blue guernsey overshirts, cotton and woollen mixtures, and hose and half hose, mixtures.

CLASS 61—GROCERIES AND PRESERVATIONS.

Barley, pearl, 25 lbs, \$3, John Wright, Owen Sound.

Barley, pot, 25 lbs, \$3, John Wright, Owen Sound.

Barley flour, \$3, John Wright; 2d do, \$2, Ed Kendrew, Westminster.

Biscuits, collection of, \$4, T McCormick, London; 2d do, \$2, Massie, Weir & Bryce; Guelph.

Bottled fruit, an assortment, manufactured for sale, \$4, Chester Day, Ingersoll.

Bottled pickles, an assortment, manufactured for sale, \$4, John Symonds, London; 2d do, \$2, Mrs J Dorman, Westminster.

Buckwheat flour, 25 lbs, \$3, Edward Kendrew.

Candies and confectionery, \$5, Massie, Weir & Bryce; 2d do, \$3, T McCormick.

Canned meats, assortment, \$6, Mrs John Dorman.

Chicory, 20 lbs, prepared, \$3, Todhunter, Black & Co, Toronto.

Confectionery, \$4, T McCormick.

Indian corn meal, 25 lbs, \$3, Wm Young, North Dorchester; 2d do, \$2, John Wright, Owen Sound.

Oatmeal, 25 lbs, \$3, P Stewart, Ingersoll; 2d do, \$2, John Wright.

Salt, 1 barrel coarse Canadian, diploma and \$4, S Platt, Goderich; 2d do, \$2, C J Kingstone, Warwick.

Salt, 1 barrel fine Canadian, diploma and \$4, C J Kingstone; 2d do, \$2, S Platt.

Salt, 30 lbs, table or dairy, Canadian, \$3, S Platt.

Sauces for table use, an assortment, manufactured for sale, \$4, John Symonds; 2d do, \$2, T McBroom, London.

Soap, one box of common, \$4, D Richards, Woodstock.

Starch, 12 lbs, flour, 2d, \$1, John Jackson, London Township.

Starch, 12 lbs, potato, \$2, John Jackson, London.

2d do, \$1, Thos Head, Beverley.

Wheat flour, 50 lbs, \$4, V Ketcher, Milverton; 2d do, \$2, G Turville, London township; highly commended, E Kendrew, Westminster.

Extra entries—First prizes to the following:—T McCormick, assortment candied peels; Todhunter, Black & Co., assortment of chocolate and cocoa; do, assortment of spices; do, granulated wheat; Henry Webb, Toronto, ornamented bride's cake; Massie, Guelph & Co., highly commended, fancy confectionery; I. Christinas goods; 1, bottled peaches; 1, bottled netarine; W & J Peters, London, 1 fig home-made bread; Wm N Grieve, Ottawa, 1 scalded popcorn; D E H Hourd, Thorold, 1 fruit preserved by a new process; John Birkett Kingston, 1, bottles vinegar. Highly commended—1, John Wright, 25 lbs split peas. Commended—S Platt, table salt; W Ferguson, Flora, prepared flour; Geo E Jarvis, Byron, canned fruit.

An exchange says of the New York State fair:—

The horses formed a large and excellent division of the show, particularly as regards the general purpose and carriage stallions. The total number of all kinds and ages was 170.

Of the sheep classes, there were 77 pens of Merinos, 29 of Longwools and 27 of the Downs.

The swine occupied 120 pens, and included representatives of all the leading breeds.

Muskoka District Fall Show.

Bracebridge, Ont., Oct. 3.—The agricultural show for the electoral district of Muskoka and Parry Sound was held here yesterday and to-day, and was in every respect a marked success. The attendance to-day was very large—not less than 800 people visited the grounds. The number of entries this year was 783, as against 694 last year. The show of grain was particularly good, and the quality of wheat was equal to any to be found in the front, while the display of roots was remarkably fine.

Midland Central Fair.

The fourth Exhibition of the Midland Central Fair Society opened on the 27th September, at the Crystal Palace, Kingston, and was a great success.

The show of horses was remarkably good, some of them of very high quality. There were five entries in the class of stallions for agricultural purposes, all superior animals. There was a fine show of matched farm horses in harness, and also in the classes of fillies, and of brood mares and foals. In the class of road or carriage stallions the show was splendid. First prizes were awarded for 4 yrs. old and upwards to N. Brown; for 3 yrs. old, to John Miller; for 2 yrs. old, L. A. Clark; for 1 yr. old, W. Phair. In the class, a pair of matched carriage horses, there was a splendid show, Mr. Ross of Belleville carrying off the first prize. In the section, single carriage horses, there were sixty-one entries, many very superb animals. In saddle horses there were ten entries. For the best thoroughbred stallion first prize was awarded to L. McAdoo. Taken as a whole, the exhibition of horses was very superior.

The show of cattle was not large, the Midland District not being at all equal to the more western part of the Province for cattle-raising. The greater number of cattle exhibited were grades. The few Durhams and Ayrshires on the ground however were considered exceedingly good. In Durhams Mr. T. C. Stark exhibited some fine animals, three bulls and two cows, and took first prizes for bull 3 yrs. old and upwards, bull under 3 yrs. old, bull under 2 yrs. old, and two first prizes for Durham cows. First prizes were awarded for bull calf to D. Fraser, and for bull of any age to Jas. Nimmo.

Col. Stranbenzie exhibited nine Ayrshires, male and female, taking the lead in this class, and carrying off two first prizes for bulls and one for cow 4 yrs. old. Messrs. Mison, Jas. Nimmo, D. Fraser and D. Nichols also took first prizes for Ayrshires. R. G. Purdy exhibited a fine Devon bull, obtaining an extra prize. In class, grade cattle, T. C. Stark took four first prizes, W. H. Rankin a first and a second prize. A. Nason, J. McCammon and Col. Stranbenzie were also awarded prizes. In class, fat and working cattle, the successful exhibitors were, first prizes, T. C. Stark, C. George, W. G. Elliott; and for yoke of 3 yr. old steers, R. Spooner.

Of sheep there was a very fine exhibition, there being about 120 entries. The Leicesters and Southdowns especially being a superior class. In Cotswold sheep D. Fraser, W. Dawson, D. Lee and T. C. Stark bore off first prizes. In class, Leicester sheep, C. Gordon, D. W. Ball, James Daly, D. Fraser, L. H. Stover and W. Rankin took three first prizes, W. Dawson three. In fat sheep the first prizes were taken by R. Spooner and D. W. Ball.

In swine the show was not large, but was of a high order. M. B. Bird had a very fine lot of improved Berkshires; in large breeds also he took a first prize for a year old boar. Mr. Joseph Fisher also showed improved Berkshires, and so did Mr. Nichol. In Suffolks Messrs. J. McCammon and W. H. Ramsay were exhibitors.

In poultry there were 153 entries.

Amusements.

At the Provincial Exhibition there are generally some outside shows to amuse and to catch a little loose change. The best of these at the late Exhibition in London was a grand concert in which hundreds of children sang and acted in unison; they were kept in surprising good order, and amused and instructed all who visited this entertainment. Mrs. White, the directress, has gained a great reputation among the elite of this city.

A dog show was also another novelty. This attracted the attention of many of our leading farmers, and many a fair lady was to be seen caressing her favorite quadruped, which bewailed its temporary imprisonment, despite the silk and satin cushions that tastefully surrounded it. Dogs of nearly all sizes and breeds were to be seen. This exhibit was new and pleasing.

Base ball matches were played daily. They drew large crowds. The theatre and other amusements were well patronised.

An Honorable Employment.

Anything that tends to improve the farmers and the youth of our country is beneficial, and anything that tends to increase the products of our soil and the happiness of our homes is advantageous. The ADVOCATE gives reliable accounts about agriculture, horticulture, stock, seeds, implements, the dairy, orchard, poultry, apiary, and household recipes and amusements, &c., &c., from all parts of our Dominion.

It is an honor for any lady or gentleman to give useful information to others, and any lady or gentleman will be doing a good service to their neighbors and to the country by soliciting subscriptions from those who do not already take the ADVOCATE. Every person that tries can send us one or more new subscribers. It is by numbers that we are enabled to add improvements. We have improved the paper every year, and hope to make the ADVOCATE the best agricultural paper in the world.

Every president, secretary or director of any agricultural or horticultural society and mechanic's institute may do much good by kindly acting on the above advice. Every member of Parliament and every prospective member who has the interest of the country in view might advantageously aid the circulation of the old and tried ADVOCATE, that has fought the battle of independence against all comers, and now stands the only independent mouth-piece of the yeomanry of this Dominion. No party or sect has been able to turn it from its independent course.

Take your paper and show it to some one that does not subscribe for it; show them the utility and advantage it is to every one, and send one more dollar for the cheap, useful and illustrated ADVOCATE. The long evenings have now set in, and now is the time to add subscribers. Begin at once; "the early bird catches the worm." Do not procrastinate. As soon as you have received your paper go to work.

J. Watson of Ayr is now constructing chilled iron plows after the latest American principle. We have no doubt but that these plows will in many cases supersede the steel and iron plows now in use.

It is a luxury to have some persons visit a garden—to have the gems of one's collections singled out immediately by an appreciative eye—to watch the play of expression, intense enjoyment of your treasures gives to the mobile features; and, last, to share everything that can be divided with them and read on a beaming face that you are fully thanked before the lips move in words.—*F. Tremaine, in Country Gentleman.*

Canadian Agricultural Notes.

Manitoba—A Wheat Growing Country.

Mr. Ogilvie having returned from Manitoba, exhibited samples of wheat raised in that province. It is principally of two kinds, one known as the Manitoba wheat, the other the Russian wheat. The Manitoba is a dark, flinty grain, and is said to be the best known for the purpose of making the new process patent flour; while the Russian wheat is also a dark wheat, but it is not so large in the berry. A sample in the straw showed a large yield, the straw itself being very often over five feet in height. The average yield of wheat per acre this year will be from thirty to thirty-five bushels, and it would have been much better but for the unusually wet weather in the early part of the season, which caused the plant to run too much to straw. In favorable seasons farmers have often had fifty and even sixty bushels to the acre; but, except around Winnipeg, it cannot be disposed of to any advantage. Contracts have already been made for all the wheat the Red River boats can carry, and the difficulties of transportation are now increased as the water in the river is not three feet deep on an average.

Nova Scotia.

Thirteen years ago, says the Nova Scotia *Journal of Agriculture*, there was not a single thoroughbred animal in the Province. We have now 337 registered pedigreed animals, all either imported or raised in the Province from imported stock since 1864. Many of these animals are of great pecuniary value; but if we estimate them all at the low average price of \$150, we find that our farmers have invested in pure blood to the extent of \$50,550.

Ontario.

About 400 acres of beets, suitable for the manufacture of sugar, are under cultivation in Wellesley township.

Mr. Legget, of the township of Sarnia, from a field of four and a half acres, this year, raised two hundred and thirty bushels of excellent wheat.

New Brunswick.

Some excellent wheat of red bald, and bearded varieties, have been grown on the farm of Mr. R. Brown, town of Newcastle, and matured and ripened in due season. The grain is full, large and sound, and shows that the agricultural capabilities of the Miramichi are equal to the other parts of the Province, which are popularly supposed to be more favorable in that respect.

COLORED POULTRY PORTRAITS.—Mr. H. H. Stoddard of the Poultry World, Hartford, Ct., sends us neatly executed colored engravings of fowls of several breeds, issued for the benefit of subscribers for that journal.

We are told that the Hessian fly has made its appearance to such an extent around Battle Creek, Mich., U. S., that some farmers have sown their fields the second time.

Patrons of Husbandry.

Useful Grange Meetings.

Although rather late in the season, in some respects would be a good thing if Granges generally would adopt the practice of the first Grange organized in New Jersey, in Middlesex County. That Grange meets twice a month; once at its hall for general discussion of business, and once at the house of some one of its members. At these last meetings the members visit the fields and out-houses, and usually find sufficient material for discussions at the next meeting in the hall. By this course a more fraternal feeling between members and their families is produced, and the social as well as business talents of the participants are brought out.

New Subordinate Granges.

611, Clover Hill—Wm. Cox, M., Walkerton; Thos. McLennan, S., Walkerton.
612—Haggie Cook, M., Corinth; A. L. Cook, S., Corinth.

Division Granges.

42, Hastings—David Vandewater, M., Belleville; Chas. Huffman, S., Wallbridge.
43, South Grey—James Edge, M., Durham; P. Brown, S., Orchard.

The Family Circle.

"Home, Sweet Home."

The Ship's Doctor.

BY MRS. OLIPHANT.

(Continued.)

"Nora," cried the young man, desperate, "this is the moment that's to settle my life. It's little matter for you, but for me it's life or death. I'm not asking you to take me now—say a year, say even two years, I'll be content; but I have to know—Nora, bide a moment; if you turn me away without any hope—by—! There's the Pretty Peggy sails from Anster on Saturday. I'll go to Greenland in her, and never see you more."

"And why should I want to see you more?" said Nora. "What do I care for your Pretty Peggy? It will do you a great deal of good, Mr. Erskine. It will teach you that you can't have everything your own way."

"Is this your last word, Nora?" cried the poor fellow, with glistening eyes. If she had looked him in the face, Nora's heart would have given way. But she felt her weakness, and would not look him in the face. She stood by the table, turning over and over in her hand an Indian toy of carved ivory, with her eyes fixed upon it as if it was the intricacies of the pattern that involved life and death—and then she said slowly, while the blood seemed to ebb away from her heart, "I have nothing more to say."

In another moment the door shut violently, and Willy Erskine was gone. The sound went through the house like a thunderclap, and threw down with its violent concussion the castle of cards in which Nora had been entrenching herself. She sank down upon a chair, stupefied, and listened to the step that went echoing along the street. Was he gone? Was he really gone, and for ever? Gone to Greenland in the Pretty Peggy, into the ice where men and ships perished, into the whaling boats where they sank and were lost for ever—should she never see him more?

"You've made the bed, and you must lie on it," said Mrs. Sinclair, when she heard of, with an indignation that was soon lost in sympathy. But Nora would not give way either to the sympathy or the indignation. She declared steadily that she would do the same over again if it was in her power.

"What right had he to come making claims, and speaking of his rights to me?" she said. "If a lad follows a girl, does that give him a right to her whether or no?" This was said with burning eyes into which tears refused to come. But yet Nora shed tears enough over it. She took immense pains privately to find out when the Pretty Peggy sailed, and to know if she had shipped a doctor before she sailed from Anster pier. Not for her life would she have asked the doctor's name, but she satisfied herself so far. And when the fact could no longer be doubted, her heart grew so sick that she could not go home. The Sinclairs had friends in England—a vague sort of expression used by the untraveled Scotch then, as untraveled islanders nowadays talk of the Continent. Nora persuaded her mother that it would be pleasant to go south and pay the long-promised visit. She was glad to go away, glad to be anywhere out of the range of those people and places with which Willy Erskine's name was so closely connected. But the other day it seemed he had been so joyful, so full of good prospects and high hopes. Now he was out upon the Northern seas, surgeon in a whaling ship, like any poor student or broken man. And he Drumthwacket's son! and whose fault was it all? Nora was ashamed to confront even the familiar rocks that knew him so well—that knew how she met him (by accident), and strayed with him along the sea verge, with the salt spray now and then dashed into their fresh faces, and the surge rising to their feet. She dragged her home-loving mother about from one connection to another all the summer through, enjoying the visits but little, poor child. As for Mrs. Sinclair, a British matron of the present day would not be more disconsolate, or feel herself more alien in the heart of French society than was the Scottish gentlewoman among her southern connections. Their ways, their accents, their mode of living, were all discordant to her. "If I were to live all my life among those English," she said, "I think I would rather die." Her soul longed for the tents of Jacob and the dwellings of Jerusalem. "But if I were not to humor my own bairn," added Mrs. Sinclair, with pathos, "who should humor her?" Nora was her only child; somehow or other she had made a mistake in her young life. Clouds had come up over the sun at the moment when that sun should have been brightest. Her mother could have given her the best of good advice, but she chose to give her something better instead—she humored Nora. She was her tender partisan, right or wrong. She took up her cause and supported her silently against her own reproaches and all the world. And that is the best way of healing the wounded, if their friends but knew.

It was the end of summer before they returned to the Gushat-house. And then, whether it was that they were unexpected, or whether from her misdeeds towards Willy Erskine, as Nora thought, few people came to see them at first, and nobody so much as mentioned the Drumthwacket family. The name of Erskine was never, as Nora thought, named before her; and she felt herself more guilty still as she seemed thus to read her own condemnation in the eyes of others. But now the turn of the season had arrived; when she cast wistful looks from the corner of the garden up the long country road, "going north," as those geographical, seafaring populations described it. A leaf would now and then flicker down through the sunny air, a sign that autumn had come. A few weeks more, and the Pretty Peggy might flutter up the Firth with all her sails set, like a fine lady coming into a ball-room, as the sailors delighted to say; and if Nora, penitent, with softness in her eyes, were by, could any one doubt that the eager face of the ship's doctor would expand too, and that the evil days would come to an end? No one could have doubted it but Nora. It was as certain that it would all be made up as that the Pretty Peggy would come safe out of the icy seas. To be sure, ships were lost there sometimes, sometimes detained

among the ice. But look what a season it had been! Even the men's wives were easy in their minds, and sung by their wheels, or mended their nets at the cottage doors, and looked over the smooth Firth with contented hearts. A week or two more, and the seamen, with their wages, and their curiosities, and their rejoicings, would have come home.

There was not a man's wife in the Pretty Peggy who was so anxious as Nora. But then it was her fault. It was she who had sent him to sea—he who was no seaman, he whom a wealthier lot awaited. And perhaps he would look bitterly upon the woman whose caprice had wrought him so much harm. This was the thought that made her heart ache, and made the days so long to her. She used to walk out to the pier to watch the sunset reflections, and listen in silence to the prognostications of the fishers and seamen about. When they prophesied a gale, Nora's heart beat wild with alarm; when they gave their word the storm was past, a hush as of a consoling child would come over her. At last there came a consoling child on the horizon, upon which all those ancient mariners fixed their telescopes. They exchanged opinions about her rig, and her hull, and her manner of sailing, till Nora, standing by, was half crazed with suspense. At last the news flew through the town, waking up all the wynds and cottages. It was the Pretty Peggy at last.

It would be vain to describe the excitement into which Nora, like many another woman, rose at the news. The other women were the sailors' wives, who had a right to be moved. She had no such right. She had never spoken even to her mother of the Pretty Peggy. She had been too proud at first to betray the smallest interest in the movements of her lost love; and she did not even know whether Mrs. Sinclair was aware that Willy was coming with the returning seamen out of the icy seas. She had to invent a reason for her anxiety as the ship drew near the port. "Willy Morrison is in her, mamma," said Nora. "I'd like to go down and see them come in. His mother will be so happy." Willy Morrison's mother had been Nora's nurse, and that was her excuse.

"Well, well," said Mrs. Sinclair, with an impatience unusual to her, "I wanted you at home this afternoon; but Nancy will be proud to see you have a warm heart to your foster-brother. Be home as soon as you can. I would not be surprised if some friend was to look in to tea."

Nora gave her mother a startled look, of which Mrs. Sinclair took no notice. She looked as if she had her secret too; and most probably she knew as well as her daughter did who was coming up the tranquil Firth in the returning ship. Did her mother expect him too? Could it be possible, after all the tragic hours that were past, that things should fall so calmly into the old routine, and Willy Erskine, after his voyage, look in to tea? She did not know if she walked on air or solid ground when she made her way down again to the pier. If that were to be the end of it, of what use had been all the agonies of those silent months? Life seemed to swim before her like a dream, and confused phantasmagoria, as she thought but yet a subtle sense of happiness was gathering at her heart. He was coming so soon; he was so near; and all those ghosts would roll up their gloomy wings and disappear out of sight, when Willy Erskine once more looked in at the Gushat-house. She went quickly down along the half-deserted road to the pier, where the women were all crowding. The Pretty Peggy could not reach the harbor yet for more than an hour, but still to be so much nearer her, to be ready to meet the men and hear that all was well, five minutes earlier, was compensation enough for the wives. They made pleasant little speeches to Nora as she came down among them.

"Ah, Miss Nora, the day will come when you'll be looking out for a man of your ain," said one.

"And I hope with a my heart it'll be a good man and a pleasant day," added another.

"But Miss Nora's man will never be a seafaring man like ours, to make her heart stair," said a third.

"Unless it was a grand captain of a frigate in a' his gold lace," was the ambitious aspiration of Nancy Morrison. —"Sure I am, I didna bring up a winsome young lady for less than that."

She was a favorite, and this was the pleasant chatter that passed from lip to lip as she went among them.

"I want to see Willy come in from his first voyage, nurse," said Nora. What a lying, wicked little speech it was! and what a true one! but before Nancy had time to answer, one of the men threw down his telescope with a groan—rather the glass slid out of his hands.

"Go out of my way, women, wi' your cackling," he said, as he stumbled down.

"Oh, Lord, and their mother that canna stir a foot from her bed!" With this the old sailor turned his back on the advancing ship, and sat down on the edge of the pier, and hid his face in his hands.

This action alarmed the entire community, for Peter Rodger was well known to have two sons on the Pretty Peggy. Two or three of the women crowded around him to ask what he meant, when another of the men gave a sudden cry—"My God, the flag's at half-mast!"

A sudden horror fell upon the group. It fell upon the town instinctively in the twinkling of an eye; the news flew by that strange electricity which is quicker than the telegraph. It was a sunny afternoon, the Firth was like glass, the sky was blue—nothing but the white clouds above and the soft-gliding sails below disturbed the glistening surface of the sea. The ship, with its white sails, came softly on before a slight but favorable breeze; but the faces of the little crowd grew pale in the sunshine, and a shudder ran through them. There was a pause and every heart stood still.

"She's got the garland on the topmast; she's made a good voyage," said a younger sailor under his breath.

"Oh, lad, how dare ye speak," cried one of the women, "when she's bringing death maybe to your mother or to me?"

The strain of the suspense was terrible as they stood and watched; some of the poor wives fell on their knees and prayed aloud, as if that would bring to life the dead man, probably long ago committed to the safe-keeping of the sea; some began to rock themselves, crying silently as if their individual fate had been sealed. As for Nancy Morrison, she stood rigid as a stone, and with big dilated eyes watched the ship that was bringing her life or death. Nora was shocked and disturbed, as was natural. Her heart went forth in a certain passionate pity for the one, whoever it was, upon whom the blow was to fall, but she did not feel the same over-softly to her old nurse, and put her arm around the poor woman—"Oh, Nancy, take courage," she cried; "don't think it's him!"

"Let me be! oh, let me be!" cried Nancy.

There was no one there in a condition to take comfort or give attention to anything but one.

And the ship came on slowly, as it seemed to everybody now. The Firth lit up with all the glorious reflections of the sunset; the May rose dark upon the blazing water with the iron skeleton that held at night its fire signal; the Bass lay like an uncouth shell against the dim outline of land on the other side, and the long sun-rays slanted and fell tenderly across the water. Then the horrible excitement of the watchers was roused into a sharper crisis still. A boat darted forth from the shore with six stout oarsmen, to the slowly gliding ship. Could it be a ship of death, like that one that the Ancient Mariner saw against the sun? Could there have been pestilence on board? It came on gliding, as the other vessel must have done when "the men all light, the seraph men," brought her near the port. These wild thoughts passed through Nora's mind alone. There came into it a curious vague wonder whether it might have been Providence, and not she, that sent Willy Erskine into such a ship. She seemed to see him on the deck with all, or almost all, the authority in his hands—the saviour of most of the disabled crew; healer, ruler, hero; such was the strange vision that glided before her eyes as she too, eagerly watched the boat. The thought of his supposed devotion made Nora unselfish too. She ceased to tremble about their personal meeting. She kept eye and hand firm, to be ready to give help and succor to her who might be smitten, whosoever she might be.

When the boat came back, and got within hailing distance, the excitement grew terrible. Some of the poor wives threw themselves among the rocks to get the news a moment earlier. Peter Rodger stood on the highest ledge, with his broad hand curved like a trumpet round his eager ear. Nora placed herself behind her nurse, instinctively, for she loved the woman. But the awful strain of all their ears and senses made the first cry unintelligible to them. Twice the vague shout came over the waters before it could be comprehended. Then it was caught up and echoed by a hundred voices—"Only the doctor!" That was what they said.

Only the doctor! There was a shout, and then a cry, sharp with joy, from all these women. Joy! though it was still death that was coming. They clasped each other's hands; they wept aloud; they cried out, in the relief of their deliverance. The whole community, every living creature about began to breathe, and babble, and sob forth thanksgiving. One figure alone fell forward against the wall on which Nancy Morrison had been leaning. Nora was stupefied. It was like a great rock falling suddenly down upon her out of the peaceful sky. She shrank, and gave one wall and shudder, and then it came, crushing the heart and flesh. The doctor! He had said true—she was never to see him more.

"Miss Nora, cheer up," said Nancy, crying, and laughing, and shivering with joy. "Dinna take it so sair to heart. It's her nerves, my bonnie woman. But they're a' safe, no, baith lads and men. It's but the doctor—do ye no hear what they say?"

Then Nora rose up desperate, and turned her stony face upon them. "Do you think there's none to break their hearts for him?" she cried with a wild indignation. "Do you think there's no mother, no woman watching? Be silent, ye cruel woman! How kare you to tell me it's only him?"

Then they all looked at her with pathetic faces, gathering round her where she stood—she who did not know what she was saying. Impatiently she turned from their looks. What could sympathy, or anything, do for her? What did it matter? "Let me be!" she cried, as Nancy had cried. Let her alone! that was all she could say.

"Eh, Miss Nora, if we had kent the doctor was anything to you!" cried one of the pitiful women. Nora turned round with a certain wild fierceness almost before the words were said.

"And who said he was anything to me?" she asked, with a strange scorn of herself, and them; he was nothing to her. She could not even wear black for him, or let anybody know she mourned. She shook herself clear of the pitying people she could not tell how. Like a blind creature, seeing nothing, with an instinct only to get home anyhow, she went straight forward, not knowing where she placed her feet; and thus walked sightless, open-eyed, and miserable—into Willy Erskine's arms.

The cry she uttered rang in the ears of all the watching population for years after. They forgot the ship and the men who were so near at hand to gather round this curious group. Nora fell forward into her lover's arms like an inanimate thing. One shock she had borne, and it had taken all her strength—the other she could not bear. For the first time in her life she lost consciousness. The light had gone out of her eyes before—now the very breath died on her lips. Mrs. Sinclair, who had come down to the pier with him to find her child, could never be sufficiently thankful that Willy was a doctor and knew precisely what to do. He carried his love all the way along the pier, hampered by eager offers of help, and still more anxious comments of sympathy, to Nancy Morrison's cottage on the shore, his heart full of remorse and exultation. Though he had long forgotten that threat about the Pretty Peggy, still it was quite true that he had come, like a conspirator, to surprise from Nora's honest eyes, from her candid face, some revelation of her true feelings. She had so revealed them now, as that they never could be denied again; and though it was not Willy's fault, he was remorseful in his tenderness. He had never set foot on the Pretty Peggy. He had forgotten so entirely even the use he had made of her name, that he believed, like Mrs. Sinclair, that it was kindness to her foster-brother which had taken Nora to the pier. Instead of an unprofitable visit to Greenland seas, he had been setting himself very advantageously in an inland town, where his "connections" in the county were sure to be of use to him; and after this interval, with the mother's concurrence, to know with sober-determination not to be discouraged, to know what Nora meant, and what his fate was to be. All this Nora learnt afterwards by degrees with wrath and happiness. The doctor who had died was a dissipated old man, of a class too common in the Greenland ships. "I kent weel that doited body could never be anything to Miss Nora," cried Nancy Morrison, drying her eyes. The mystery was cleared up in a fashion to all the admiring and sympathetic population round when Willy Erskine appeared on the scene; and yet nobody knew what it meant but Nora and he. She was very angry and she was very happy, as we have said. But she had taken all power of resistance, had she wished to resist, out of her own hands. And the story came to the usual end of such stories, and there is nothing more to say.

Minnie May's Department.

MY DEAR NIECES,—Our lovely Autumn days are again with us. Oh, if we could keep them longer. The wind already whistles among the trees, blowing down their bright leaves to the ground, reminding us that winter will soon follow. Therefore, dear nieces, gather your treasures, look out for all the pretty leaves, flowers, grasses and ferns; they will brighten our homes during the winter. Let us not forget in our housekeeping that we should be homekeepers. We must endeavor to make our homes the dearest spot on earth, that the absent ones will love and rejoice to return to the cozy bright home.

There are many little things that contribute toward the beauty of a room which are not costly, more than they take time for construction. Those who sigh for costly furniture and grand houses, find that it is not in them that most comfort is found. Then let us have our plain carpets and furniture, with some flowers, vines, and hanging baskets in our rooms. Some houses are not adapted for keeping flowers during the winter, but pressed ferns and autumn leaves are something all can have, and when tastefully arranged in bouquets, wreaths, crosses, mottoes, and various devices, often produce effects as beautiful as a picture from the brush of a skillful painter. A very tasteful ornament consists of a cross made of wood, covered with a coating of mucilage and marble dust or sand sprinkled carefully over it. Fasten the base of it on a thin block of wood or thick card-board, which block cover with green moss. Form a wreath of small leaves by means of fine wire and twine up the cross. Mottoes make beautiful gifts from friend to friend, and are easily made. Gather the smallest leaves you can see, the dark maroon wild rose, bright red huckleberry, the notched miller, grape vine, clover, sorrel, in fact any that are pretty. Press carefully, draw with a pencil the outline of your letters on card-board, then carefully stick on the leaves, (with flour paste), and you will have mottoes, which, when framed under glass, are far prettier than the common chromos, now so much admired. The word "Welcome" is very pretty, made in this way, to hang in the hall or room facing it. When leaves are thoroughly dried they can be attached to a piece of coarse, flexible wire by the help of fine brown cotton covered wire, and by intermingling the varied and contrasting colors of the different maples, the oak, beech, and a few green ferns, handsome garlands can be formed to encircle picture frames, mirrors, or to hang in windows. Flower pots look very pretty with a small garland around them, or a single leaf or small clusters on the sides. Lovers of the beautiful will find much pleasure in using their lovely leaves in numerous ways, which space will not allow us to suggest this time.

MINNIE MAY.

RECIPES.

HOW TO PUT AN EGG IN A SMALL BOTTLE.

To accomplish this seemingly impossible act requires the following preparation:—You must take an egg and soak it in vinegar, and in process of time its shell will become quite soft, so that it may be extended lengthwise without breaking. Then insert it into the neck of a small bottle, and by pouring cold water upon it it will resume its former figure and hardness. This is really a complete curiosity, and baffles those who are not in the secret to find out how it is accomplished. If the vinegar used is not sufficiently strong to produce the required softness of shell, add one teaspoonful of strong acetic acid to every two tablespoonfuls of vinegar. This will render the egg perfectly flexible and easy of insertion into the bottle, which must then be filled with cold water.

A GOOD WAY TO KEEP APPLES ONE YEAR.

Years ago, when we produced large quantities of fruit, we always kept apples in excellent condition during the entire year. At a recent agricultural convention in Utica, N. Y., a quantity of fair apples were exhibited which were plump, fresh and of good flavor, quite as good as the same kind of apples are ordinarily on the approach of spring. The apples had been put up in refuse boxes the year previous, and in the following manner: A layer of dry sawdust was sprinkled at the bottom of the box, and then a layer of apples placed in so that they do not touch each other. Upon this was placed a layer of sawdust, and so on till the box was filled. The boxes, after being packed in this way, were placed on the wall in the cellar, up from the ground, where they kept perfectly, retaining their freshness and flavor until brought out.—*N. Y. Herald.*

TO MAKE GOOD COFFEE.

Get pure Java coffee—chicory ruins the flavor; if Java is too mild, use one-third choice Rio with it. Allow one heaping tablespoonful of coffee for every person, and allow two cupfuls of water for every tablespoonful of coffee. (It can be even stronger if desired.) Place the coffee in the steeper; if making coffee for four persons, use the white of one egg, throw it in the steeper on the dry grounds and shake it about until it is all covered with the coffee; pour on boiling water and set it on the back of the range, stopping up the spout with a soft cloth to prevent the steam from escaping; let it simmer five minutes, or not longer than ten. The yolk of the egg can be used the following morning. If the coffee is for eight persons, use one egg, white and yolk. Look in the steeper once before removing it from the range, and if the grounds have boiled up and are clinging to the sides of the steeper, push them down with a spoon. Serve the coffee boiling hot.

TAPIOCA CREAM.

Soak two tablespoonfuls of tapioca in a little water for two hours. Boil a quart of milk with a cupful of sugar in it, and, when scalding hot, add the tapioca, and let it boil up. Separate the whites and yolks of three eggs; beat the yolks, and add a little cold milk; then stir into the pudding, and set it off at once. Add a little salt, and a little flavoring if you prefer. Beat the whites to a stiff froth, and pour over top after it is poured into your serving-dish.

BAKING LARGE CAKES.

In making very large cakes, that require three or four hours to bake, an excellent way for lining the pan is the following: Fit three papers carefully, and butter them thoroughly; make a paste of equal parts of Graham and white flour, wet with water just stiff enough to spread easily with a spoon; place the first paper in the pan with the greased side down; spread the paste evenly over the paper about as thick as pie-crust. In covering the sides of the pan use a little paste to stick a portion of the paper to the top of the pan to keep it from slipping out of place; press the second paper carefully into its place with the greased side up, and next put in the third paper as you would into any baking pan, and pour in the cake. All except layer cakes should be covered with a paper cap when first put into the oven. Take a square of brown paper large enough to cover well the cake pan, cut off the corners, and lay a plait on four sides, fastening each with a pin, so as to fit nicely over your pan; this will throw it up in the centre, so that the cover will not touch the cake. Save the cap, as it can be used several times.

APPLE CUSTARD.

Pare and core six apples; set them in a pan with a very little water, and stew them until tender; then put them in a pudding-dish without breaking, fill the centres with sugar and pour over them a custard made of a quart of milk, five eggs, four ounces of sugar, and a very little nutmeg; set the pudding-dish in a baking pan half full of water, and bake it about half an hour. Serve it either hot or cold, at the dinner.

RICE CREAM.—This is how I make rice cream. I put together four ounces of ground rice, two of white sugar, a few drops essence of vanilla; add a quart of fresh milk, two ounces of butter, boil from fifteen to twenty minutes, till it is smooth; pour into molds, serve when cold. Be careful and have the rice well done. Sometimes I add frosting of two eggs (the whites), and four tablespoonfuls of sugar, then put it in the oven to brown. It is very nice and cheap.

MYRA.

SHORT PASTE FOR TARTS.—Rub a quarter of a pound of butter into a pound of flour, wet it with water and two eggs, work it up to a good stiffness and roll it out once. For sweet tarts, two tablespoonfuls of sugar should be added.

PUFF PASTE.—To 1 pound of flour, take $\frac{3}{4}$ of a pound of butter; rub half the butter very fine into the flour, mix it into a paste with cold water; roll out the paste, put on the remainder of the butter, roll it up, leave it for half an hour; then roll it out for use; you may beat an egg very fine, and mix it with the water.

MRS. P.

The Uses of the Lemon.

Few people know the value of lemon juice. A piece of lemon bound upon a corn will cure it in a few days; it should be renewed night and morning. A free use of lemon juice and sugar will always relieve a cough. Most people feel poorly in the spring, and take medicine for relief, but if they would eat a lemon before breakfast for a week—with or without sugar, as they like—they would find it better than any medicine. Lemon juice used according to this recipe will cure consumption even after the doctors have given them up as not to be benefited: Put a dozen lemons into cold water and slowly bring to a boil; boil slowly until the lemons are soft, but not too soft, then squeeze until all the juice is extracted, add sugar to your taste and drink. In this way use one dozen lemons a day. If they cause pain, or loosen the bowels too much, lessen the quantity, and use only five or six a day until you are better, and then begin again with a dozen a day. After using five or six dozen, the patient will begin to gain flesh and enjoy food. Hold on to the lemons and still use them very freely several weeks more. Another use for lemons is for a refreshing drink in summer, or in sickness at any time. Prepare as directed above, and add water and sugar. But in order to have this keep well, after boiling the lemons, squeeze them and strain carefully; then to every half-pint of juice add one pound of loaf or crushed sugar, boil and stir a few minutes more until the sugar is dissolved, skim carefully, and bottle. You will get more juice from the lemons by boiling them, and the preparation keeps better.—*Correspondence London Lancet.*

Care of the Nails.

Parents are too often to blame for allowing their children to bite off their nails, and thus cause their little hands to become ugly. If your children follow this practice, a little strategy and kindness will generally remedy the matter. Compel them in the first place, to keep their hands from their mouths. Then carefully trim their nails for them with a proper knife, and appeal to their pride—and children are apt to have a good share of this—to keep their nails so; examine them every day until they are old enough to take care of their hands themselves, and you can be sure that the habit will, in nine cases out of ten, be effectually cured. Nails should be kept in length to the end of the fingers. When too short they give the fingers a stunted look, and if too long they are inconvenient. The nails are susceptible of a high polish. They should be well brushed when the hands are washed, and polished with a coarse towel. If dark or brown-looking dip them once or twice a day in the following, and then polish with a towel: Hydrochloric acid two drachms, soft water, one ounce. This will render them exceedingly white and handsome. When paring the nails be careful not to dig into the quick.

Rules for the Sick Room.

- (1.) Bring in fresh flowers or something new every day; even the commonest green thing is better than nothing.
- (2.) Don't talk about anything unpleasant. Talk about something that will lead the patient's thoughts away from his aches and pains, and leave him in a cheerful and restful state of mind.
- (3.) Follow the doctor's directions implicitly.
- (4.) Never ask a sick person what he wants to eat. If he asks for anything that will not injure him, get it if you can. Never bring him much at a time. A little bit in a dainty dish will sometimes tempt the appetite when a large quantity would cause nausea.
- (5.) Expect sick persons to be unreasonable. They will fret and complain, no matter what happens, and must be borne with patiently.

HOOPER.

DEAR MINNIE MAY,—Leaving the dust-begrimed San Francisco, with its fogs and its searching winds, I last week took refuge on a large, stern-wheel steamer bound for Sacramento, fare, including bed, \$2. Leaving at 2 in the afternoon I arrived there the following morning at 5 o'clock, a distance of say 150 miles. There were but few passengers and little freight. Viewed from the deck of the steamer there is little to interest one for a long way up, as there is nothing but the eternal sameness of sun-baked and sun-burned hills to be seen. The green fringe of tule flags that skirt the river or embosom the islands in it lately reclaimed, is a positive relief. The country looks more desolate than usual this time of the year from the protracted drouth—at this time of the year the country always appears repulsive, from the almost total absence of rain during the summer. There are few towns all the way up, though this river drains one of the most important and fertile valleys of the State. I saw an army of Chinamen employed in grading the road-bed for another railway connecting Oakland and San Francisco; there is a road that connects the two cities that has been running for many years, but I presume that monstrous and mighty monopoly, the Central Pacific, know what they are doing in building another. The present one under construction winds its way for miles along the river front. I was much interested in visiting the Capitol, rather a fine building surrounded by beautifully-kept grounds; it has a very fine library belonging to the State, to which the public have free access—the only one worthy of the name in the State to which the public are admitted free. From its dome a fine panorama of the surrounding country is to be obtained; as the city is located on a plain, the aspect to the spectator appears rather monotonous. It is much hotter here than in "Frisco," hence linen dusters are all the go; and, again, malarial diseases are very prevalent. Ten years ago I caught it here and came near dying from it. The population of the city is but 40,000; many fine buildings, both public and private, though a long way behind Frisco I think. Here, as there, they complain, no doubt with reason, of commercial depression, a result in a great degree to be attributed to the drouth. I visited the great fruit orchard of Reeds, close to the city, containing some 160 acres. The sale of fruit, &c., amounts to about \$25,000 per annum; it was a beautiful sight to see the apple, pear and other fruit trees laden and often breaking down under their luscious loads; the largest and finest portion of their crop they wrap in paper, box them, and send them by rail East, of which, doubtless, you have often partaken. The resident portion of the city is thickly planted with shade trees of locust, poplar, fig, willow, elm and walnut, which impart a picturesque appearance as well as affording protection from the fierce rays of a semi-tropical sun. Churches are numerous. I went in the morning to a Presbyterian, in the evening to an Episcopal; able discourses at both; the Episcopal but poorly attended; the latter is neither popular nor wealthy. In returning I saw a steamer ashore, the river being so low; not uncommon this time of year. We took aboard large quantities of fruit and vegetables at various landings, grown on these rich and fertile islands, some of the most valuable land in the State, Chinamen the chief producers, and their name is legion; land lets on the islands from \$10 to \$25 per acre, but they are liable to inundation, and fever and ague. You have a plain, unvarnished story of my little trip to the Capitol, and it but remains for me to say with our Spanish fellow citizens, "Adios amego."

From yours very truly,
VIATOR.

The Farmer's Wife.

Up with the birds in the early morning—
The dew-drop glows like a precious gem;
Beautiful tints in the skies are dawning.
But she's never a moment to look at them.
The men are wanting their breakfast early;
She must not linger, she must not wait;
For words that are sharp and looks that are surly
Are what men give when meals are late.

Oh, glorious colors the clouds are turning,
If she would but look over hills and trees;
But here are the dishes, and here is the churning—
Those things always must yield to these.
The world is filled with the wine of beauty,
If she could but pause and drink it in;
But pleasure, she says, must wait for duty—
Neglected work is committed sin.

The day grows hot, and her hands grow weary;
Oh, for an hour to cool her head,
Out with the birds and winds so cheery!
But she must get dinner and bake the bread.
The busy men in the hay-field working,
If they saw her sitting with idle hand,
Would think her lazy, and call it shirking,
And she never could make them understand.

They do not know that the heart within her
Hungers for beauty and things sublime;
They only know that they want their dinner—
Plenty of it—and just "on time."
And after the sweeping and churning and baking,
And dinner dishes are all put by,
She sits and sews, though her head is aching,
Till time for supper and "chores" draws nigh.

Her boys at school must look like others,
She says, as she patches their frocks and hose;
For the world is quick to censure mothers
For the least neglect of children's clothes.
Her husband comes from the field of labor;
He gives no praise to his weary wife;
She's done no more than has her neighbor;
'Tis the lot of all in country life.

But after the strife and weary tussle
With life is done, and she lies at rest,
The nation's brain and heart and muscle—
Her sons and daughters—shall call her blest.
And I think the sweetest joys of heaven,
The rarest bliss of eternal life,
And the fairest crown of all will be given
Unto the way-worn farmer's wife.

"Semper Idem."

I looked in the tell-tale mirror,
And saw the marks of care,
The crow's feet and the wrinkles,
And the gray in the dark-brown hair.
My wife looked o'er my shoulder—
Most beautiful was she,
"Thou wilt never grow old, my love," she said,
"Never grow old to me."

"For age is chilling of heart,
And thine, as mine can tell,
Is as young and as warm as when first we heard
The sound of our bridal bell!"
I turned and kissed her ripe-red lips;
"Let time do its worst on me,
If in my soul, my love, my faith,
I never seem old to thee!"

Which Loved Best?

"I love you, mother," said little John;
Then, forgetting his work, his cap went on,
And he was off to the garden to swing,
And left her the water and wood to bring.

"I love you, mother," said rosy Nell;
"I love you better than tongue can tell;"
Then she teased and pouted for half a day,
Till her mother rejoiced when she went to play.

"I love you, mother," said little Fan.
"To-day I'll help you all I can;
How glad I am school doesn't keep!"
And she rocked the babe till it fell asleep.

Then stepping softly she fetched the broom,
And swept the floor and tidied the room;
Busy and happy all day was she,
Helpful and happy as child could be.

"I love you, mother," again they said—
Three little children going to bed.
How do you think that mother guessed
Which of them really loved her the best?

Use of Music.

I am not disposed to agree with those who regret that so many girls are obliged to spend time at the piano, while so few become artists. Even though great players are seldom made, there is a charm imparted to the plainest home, in which a young girl sits at twilight or in the evening invoking simple melodies from the ivory keys, to the delight of father and mother. The piano is the household angel of the period, and though it may seldom be struck by our firesides with the potent touch of the master, yet wherever its liquid harmonies float on the air, there is a spell of refinement, a soothing element to banish discord, and a spirit of magical tenderness. I love to hear its rippling notes, as I pass little houses in back streets, and I like to see the bright-faced children going past my door with their music-rolls in hand. The hours spent in practicing are not wasted, though the performer never becomes specially brilliant. It is worth all the money paid to the professor, if the young lady only learns from his instructions, patience, persistence, exactness of sight, attention to details, and facility in the use of her fingers.

I wish boys too could be taught music, as their sisters are. But in our social economy, the boys, unless destined for professions, are usually occupied with work, while the girls are still in the school room. Consequently, there will always be more cultivation of a certain kind among the young men, though we have all lamented that the tables are sometimes turned as they grow older. Girls too often stay very nearly at the same place as they mentally reached when they left school; while intelligent young men, with far less antecedent preparation, strike out paths of enquiry and investigation for themselves, and at forty, have gained a breadth and scope of intellectual power and acquisition which casts the woman of the same age quite in the shade.

Keeping Out the Flies.

Every housekeeper knows what a nuisance flies are in summer. Two weapons are powerful against them, cleanliness and darkness. Therefore the dining-room should be kept dark between meals, and care should be taken to sweep every crumb from table and floor. But it will not do simply to shut up the room, shutting up the flies in it. Close every window and door but one, and through that drive the flies out. This is not so hard as it may seem on paper, and practice makes perfect here as in all else. We have known a housekeeper who was so expert that she had only to wave her broom and the flies dutifully swarmed out as they saw the standard raised in air. Fly nets for the windows are comfortable appendages for living and sleeping rooms. Bought ready-made they are somewhat expensive; made at home they cost only a trifle. Have the carpenter—or if some one in the family knows how to handle tools, let him—make a frame of inch-wide lath, fitting the window frame. On this stretch mosquito netting—dark green is best—and fasten with tacks to the laths. The same netting over a frame of reeds, of osiers, or wires from an old hoop-skirt, make serviceable cake and butter covers. Bend one hoop into a round of the size wanted, then on this fasten two semicircular hoops, crossing each other at right angles in the centre above the hoop. This forms the frame, which, if of wire, should be wrapped with worsted; on this the netting is sewed, and a button on top serves as handle.—*N. Y. Herald.*

A young lady was at a party during which quarrels between husband and wife were discussed. "I think," said an unmarried elder son, "that the proper thing is for the husband to have it out at once, and thus avoid quarrels for the future. I would light a cigar in the carriage after the wedding breakfast, and settle the smoking question forever." "I would knock the cigar out of your mouth," interrupted the belle. "Do you know I don't think you would be there," he remarked.

HOW TO CHOOSE A WIFE.—That young lady will make a good wife who does not apologize when you find her at work in the kitchen, but continues at her task until it is finished. When you hear a young lady say "I shall attend church and wear my old bonnet and waterproof cloak, for I fear we shall have a rain-storm," depend upon it, she will make a good wife. When a daughter remarks, "Mother, I would not hire help, for I can assist you to do all the work in the kitchen," set it down that she will make a good wife.

Uncle Tom's Department.

MY DEAR NEPHEWS AND NIECES,—The evenings are growing longer and there are two or three hours of lamp-light before ten o'clock. These in most families are given to conversation, reading, and recitation, though there are those who work from an early hour till late at night, and rarely giving themselves an hour for amusement, nor will they allow their children to take a part in games or recreation. But your old Uncle Tom does not agree with such people. Children, both young and old, and parents too, would often be greatly benefited if they engaged in some sport or game, which would make them forget, for a time, everything but the amusement of the hour. Recreation is a necessary. If the brain is held steadily to one task, it will after a time give way and utterly refuse to work. The country is full of men and women whose brains are ruined from excess of work, and "an ounce of prevention is worth a pound of cure," if there is only a will to administer it. If parents would, instead of putting all their surplus money in the bank, invest in a piano or organ for the family, how great would be the pleasure for the wife and nieces to have a pleasant interview with its receptive keys! Chess, checkers, croquet, good books and magazines, and indeed, every innocent amusement should, as much as possible, be provided. If any of our nephews and nieces can favor us with any good games which will be amusing or instructive, we will accept with gratitude.

UNCLE TOM

PUZZLES.

128—DECAPITATIONS.

- 1. Behead a garment and leave a strong man.
2. Behead a chilice and leave a preposition.
3. Behead to cry loudly and leave a tool.
4. Behead a predicament and leave a luminary.
5. Behead to fetch and leave a circle.
6. Behead a promise and leave a ridge; behead again and leave a border.
7. Behead a massybody and leave a fastening.
8. Behead an article of dress and leave an implement.
9. Behead an eminence and leave misfortune.
10. Behead a portion and leave profession.
11. Behead a seat and leave a crossing; behead again and leave a gas.
12. Behead a part of a tree and leave a small chest.
13. Behead a hollow metallic vessel and leave a measure.

129—BURIED CITIES.

Chocolate is the best candy.
Keep it secret from every one.
Did you have nice times.
When in Mecca I rode on a camel.
I am feminine vehemently.
Remember "line upon line," etc.

130—INCOMPLETE SENTENCES.

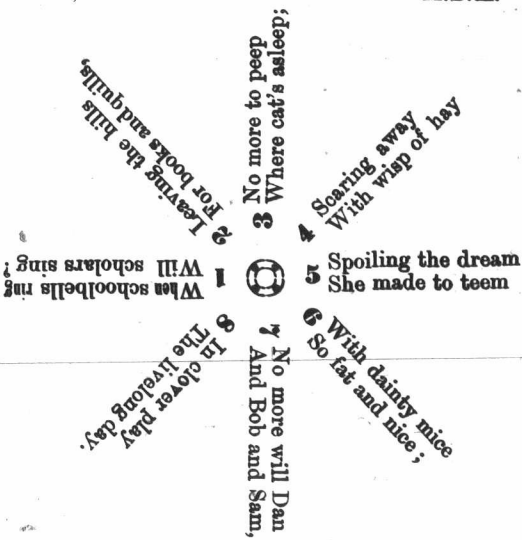
Fill the blank with a certain word and the second with the same word beheaded.

- 1. These were my great-grandmother's beads. They are very
2. It is not like a man to so about trifles.
3. All the rest are, I am the only left.
4. He told me a of the Revolution and of his ancestor who was a
5. Look at this beautiful necklace the gave it to me.
6. A dark covers the sky and I hear the roaring of the thunder.
7. Now through the clouds so Darts one bright, golden
8. See my robin happy Swiftly circling through the Now on leafy branches Then again their glad flight

PUZZLE BOY.

131—WHEEL PUZZLE.

A proverb of eight words. Find a word in each spoke. M.B.H.

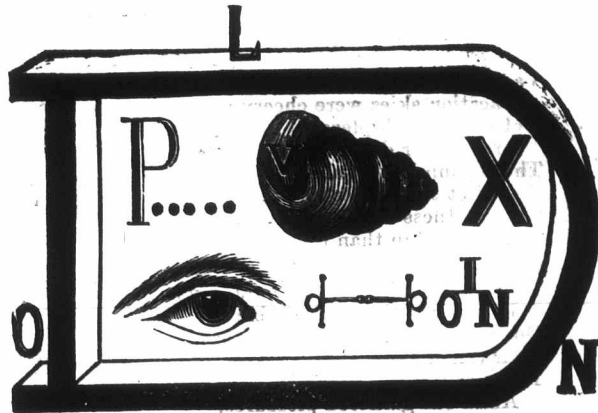


132—HALF SQUARE WORD.

- 1. A delightful language.
2. A mineral in common use.
3. One variety of dry goods.
4. A title.
5. A word expressing accent.
6. An abbreviation for one of the points of the compass.

JESSIE ANON.

133—ILLUSTRATED REBUS.



As we have not received any correct answers to this illustrated rebus, we insert again giving the answer, which may enable some of our young nephews and nieces to solve them another time.

134—BEHEADED RHYMES.

- I. I entered the door with careful — For how it was made I had often — And the Englishman shouted, "Mind your —,"
II. I love to think of that charming — As sweet as a bird song, fresh as a — That I heard in my dreams when once I was —

135—RIDDLE.

Very many mouths have I; From morn till night in bed I lie; I never walk—I always run, And travel much beneath the sun, A sailor I must surely be— I'm always on the road to sea. A. V. V.

136—NUMERICAL ENIGMA.

I am composed of 17 letters: My 2, 3, 13, 5, 6, is a fruit. My 17, 12, 15; 5, is a title. My 15, 14, 16, is a small animal. My 16, 4, 15, 11, 16, 7, is a Canadian city. My 9, 12, 15, 7, 1, is a title. My 8, 6, 15, 4, was a Roman Emperor. My whole is the name of a man celebrated in history for the important part he took in the affairs of the world, and his obscure death. PEARLE NICOLSON.

Answers to September Puzzles.

116—Andes, Sedan. 117—Tobacco. 118—Kiddermister. 119—Barnstable. 120—Doctor Basilius, DianA, OnionS, Cadi, Teal, Oil (Oh), RuM (N), BrasS. 121—Watering Can.

122—If you your lips would keep from slips, Five things observe with care: Of whom you speak, to whom you speak, And how, and when, and where.

123—King Richard the first. 1st Duke of Austria. Acre. 124—A Candle.

A DUES HOSTESS AUSTRALIA ADVANCE PILLS PIT A

126—Brake, Drake, Rake, Make, Wake, Cake. 127—Don't swallow intoxicating drink.

Answer to rebus in September Extra Number:—Provincial Exhibition in London.

Names of Those Who Have Sent Correct Answers to September Puzzles.

W. C. Pipes, Corinthia Crooper, Pearle Nicholson, Lizzie Strong, Henry Ptolemy, Harry N. Husband, Minnie Hyde, Alfred Brown, R. G. Boyes, William Broughton, Nora Hooper, Jane Shore, Maude Lynn, John Wright, Eleanor North, Kitty Lowe, Lucy Priddis, Maggie Johnstone, Louie Fairbrother, George Nast, T. Lothian, Maria Scott, Susan Jones, Stephen Williams, Francis Graham, Jennie Ford, Samuel Sutherland, Katie Dunn, Eva Spenser, Stephen Froman, Jessie Evans, A. McMillan, Lucy Niles, Edward Cruickshank, A. J. Seymour, Octavus Brown, Mary FitzPatrick, William Frost, Thos. Sidons, James McIntire, Nettie Maine.

The European Plan.

Yesterday evening a stranger, clad in a duster and carrying a carpet-sack, entered a hotel on Delaware avenue. He marched straight up to the counter, where the amiable landlord stood picking his teeth, and the moment he set his bag down the amiable landlord whisked it off and set it down with the pile of other baggage, in the rear of the bar.

"Please register your name," said the landlord, passing him a pen. "How much is it, mister?" "That depends on what you get. We keep hotel here on the European plan." "I say, mister," said the countryman, all in a tremble, "please give me that bag; I'll get right out and not say a word." The landlord glared at him, but made no movement toward the bag.

"Please, mister, give me my bag. There is nothing in it but a few shirts, indeed there isn't. Here's the key. I'll let you search it," continued the stranger, trembling still more violently. The landlord passed him the bag, and, as the stranger instantly shot for the door, the former exclaimed:

"Well, blame me if I ain't puzzled to know what kind of a fool you are." But the stranger paused to hear no compliments, and he was a good half-mile away before he took courage to lean up against an awning-post and mutter:

"Gracious! what an escape. Keeps a hotel on the you rope in plan, does he? I suppose he wanted to rope me in and perhaps kill me. Lord! what wicked places these cities are. I'll go home immediately." And he kept his word.

School Dress.

One of the best schools for girls in New York City publishes in its regulations, "Simple and easy-fitting dress required." The principals illustrate their precept by example, and wear, during school hours, calico dresses. A writer, in giving advice about school dress, insists that the school-room is not the place for the display of wealth or fashion, and therefore the school dress should be marked by simplicity.

"Anything which diverts the attention of the pupil from her school duties is an injury to her, but it will accord with the observation of teachers that fine clothes oftener work mischief to their wearer in this respect than mean clothes do. The highest-minded children are oftenest found in plain garb, while those be-rigged and be-ruffled and otherwise showily attired are generally quite destitute of intellectual home culture. Their mothers have been too busy with their clothes to pay much attention to their brains. This sounds severe; would it were not true!"

"While over-attention to toilet matters is a

hindrance to study, negligence and untidiness are to be avoided. Clean clothes, plainly made, need not be expensive, either of time or money, and a proper regard to personal cleanliness in all its details is what every person owes to himself or his associates.

"It is very desirable that the pupil should have at least two school suits, for in the crowded school-room the clothing soon becomes saturated with the exhalations floating in the atmosphere, and an airing of the clothes every two or three days is necessary to keep them fresh and sweet. Especially is this true of clothes that are not put into the wash-tub, and of shoes. Wearing these after a day's sunning and airing will give one a sensation almost as pleasant as that of putting on new clothes.

"As a rule, the more simply a child is dressed, the more attractive it is to all sensible people. The bewildering maze of ruffling and embroidery, and knife-plaiting and shirring, and great, broad, brown sash, big enough to shroud the child in, with which little girls and boys in kilts are dressed, is simply shocking to people of correct taste. Let us not have it in the school-room."

The Talkative Person.

If talkative people are sometimes great nuisances, they are, at other times, quite as much of a convenience. There are seasons when talking must be done, whether we have anything to say or not; when the ball must be kept rolling; when a pause in the conversation is almost as fatal as a protested note, and we are too weary or dispirited to hold our own, but feel it a blessed privilege to listen. At such moments the talkative person is at a premium, and seems to us like an angel in disguise. We begin to thank our stars that some people are born who do not dote on the sound of their own voice. This gush of words appears to rob every situation of constraint, whether it be a visit of condolence, the first awkward pause after grace, when everybody is afraid of seeming frivolous, or that embarrassing instant when memory is hastily searching the dusty chambers of the brain for some dim impression made there by a strange face which presents itself for recognition, and we feel like saying, as the boy said of his A B C's, "know you by sight, but can't call you by name." Sooner or later, however, we agree with Landor that "two evils may befall a man—never to be listened to, and to be listened to always;" when our own little wit is swamped by the torrent of his conversation, or our apropos bit of learning fails to secure attention; when, in short, we cannot engineer a cherished sentence in edgewise until it would be as much out of date as last year's almanac. In the meantime we have little or no defence against this garrulous being. Common civility prevents us from taking leave of him in the middle of a speech, and we must watch closely and wait patiently for any other loop-hole of escape. He takes no heed of yawns, and no note of time; he will keep you up of your bed till all is blue, and detain you in a pouring rain while he has his say. His ideas never want from being kept too long; his words are ferns on his tongue's end, or, rather, they are always dropping therefrom, like chain-lightning always ready to be kindled; he will find an audience, if it be only from a pinafore, or a woman peddling berries, an archipelago in a desert, he would harangue the If he were we do not by any means find that his universe; an any proportion to the degree of ineloquacity is in claim with his listener. He would timidity he may claim with his listener. He would no sooner think of waiting for an introduction be- is talent than of waiting for an fore exhibiting his minute must represent his notion idea. To be a deal out. But unless he silences us of eternal punishment, he will fill us with speech so brilliant that we forget ourselves and our puny powers, renders listening a delight, and makes us sorry when the thread breaks, he is in great danger of being considered a bore.

FRETTER.—One fretter can destroy the peace of a family, can disturb the harmony of a neighborhood, can unsettle the councils of cities, and hinder the legislation of nations. He who frets is never the one who mends, who repairs and too often evil; more, he discourages, enfeebles, and for the gloom disables those around him, who, but for the effect upon work and keep up brave cheer. The effect upon a sensitive person in the mere neighborhood of what a fretter is indescribable. It is to the body—more chilling than cold, icy mist is to the body—more chilling than the bitterest storm. And when the fretter is one who is beloved, then the misery of it becomes insupportable.

Hunting the Eggs.

Behind the purple western hills the sun is sinking low,
And its last bright rays are gleaming on the gentle brooklet's flow;
The cow-boy hast'ning homeward, sings a merry song,
As waving his leathern lash in air he drives the cows along.
And pretty, light-footed Mamie, sweetest of country girls,
With a gay pink sun-bonnet neatly tied over her dark-brown curls,
With a small splint basket on her arm, humming a tune so gay,
Gathers the white and pearly eggs among the new-mown hay.
"Get off, old Speckle! what do you mean? It is too late to set;"
And she drives the poor hen off the nest, with a snap in her eyes of jet;
Then singing a plaintive melody that hardest heart would charm,
She trips along the grassy path with her basket on her arm.
Under the vine-hung doorway, maiden and melody go,
Brushing the scented roses, bright with the sunset glow,
Up with the birds in the morning, to rest when the sun goes down—
Oh, who would leave such a gladsome life, to live in a dusty town?
Webster City, Iowa. MAUDE SUTTON.

School-Days.

Once more by mount and meadow side,
The merry bells are ringing,
Once more by vale and river wide
The school-room doors are swinging;
Forgotten books win pensive looks,
And slates come forth from cover,
For hand in hand to lesson-land
Go little lass and lover.

Vacation hours were full of joy,
Vacation skies were cheery;
Yet days which pleasant tasks employ
Are neither dull nor dreary.
The rhythmic beat along the street
Of feet that dance in walking
Gives witness true that three times two
Is better fun than talking.

What meed of bliss were ours, my friend,
If we, like these, were able
Our cares and discontents to spend
In vanquishing a table—
If we could be so light and free
Amid our garnered pleasures,
As these who sweet the tale repeat
Of runic weights and measures!

Ah! children dear, our later days
Have brought us wise anointing;
We see in all your sunny ways
The Father's kind appointing.
Your morning bell is ours as well—
We go to school to Duty,
Whose brow severe from year to year
Wears fadeless wreaths of beauty.

Take the Papers.

BY N. P. WILLIS.

Why don't you take the papers?
They're the light of my delight;
Except about election time,
And then I read for spite.

I knew two men, as much alike
As ever you saw two stumps,
And no phrenologist could find
A difference in their bumps.
One takes the papers, and his life
Is happier than a king's;
His children all can read and write,
And talk of men and things.
The other took no paper, and
While strolling through the wood,
A tree fell down and broke his crown,
And killed him—"very good."
Had he been reading of the news,
At home, like neighbor Jim,
I'll bet a cent that accident
Would not have happened him.
Subscribe! You cannot lose a cent.
Why should you be afraid?
For cash thus paid is money lent
At interest, four-fold paid.

Dinner Table Hints.

When taking a lady down, do not ask if she is "peckish" or "sharpset."
Do not say, "I hope they will give us a good tuck-out!"

When you are seated, keep calm, whatever there is for dinner.

Soup should not be chewed; you must swallow it whole.

Never hammer with your feet for the next course, or shout, "waiter!"

When anything nice is put on the table, do not chuckle, nor rub your chest.

When the entrees come round, make a free choice, but don't pocket.

Never take more than four helps of anything.

Do not sponge your gravy with your bread and squeeze it down your throat; it has an uneducated look.

Never speak with your mouth full. First, because it's vulgar; and secondly, because you can't.

If you feel uncomfortable symptoms arising from repletion, you must dissemble; do not call for brandy and peppermint drops.

If your fair neighbor asks what is the matter with you, hasten to assure her that it is not catching.

Crack nuts for your hostess—if your teeth are good.

Do not say, "I'm chock full!" when dinner is over. It has a foreign air about it.—Punch.

*Minnie Hyde has been successful in winning the handsome Chromo, having answered the greatest number of puzzles correctly in the two previous numbers. Now, my nephews and nieces, try again for the Chromo which will be awarded to the one who answers the most puzzles correctly in this and November number.

Don't Talk About Your Aches.

"A pain forgotten is a pain cured" is a proverb I think I have never heard, but I think it would be a good one. I know more than one person who cherishes ailments, and of them makes a never-failing topic of conversation, which is never agreeable, and ceases to be interesting to others after a time. If the purpose of such conversation is to obtain sympathy it certainly fails of its object. When one is really suffering, a regard for the feelings of friends would cause one to be very careful not to talk about it unnecessarily, for what is more distressing than to witness pain which one has no power to alleviate, and be continually reminded of sorrows that cannot be assuaged? Don't talk about them.

Stock Notes.

Short Horn Convention.

The sixth annual convention of the American Association of Breeders of Shorthorns will take place at Lexington, Ky., U. S., on Wednesday, Oct. 31st, 1877. S. F. Lockridge, Sec., Greenastle, Indiana, will furnish further particulars to those desirous of attending.

The convention promises to be more than usually interesting, and a cordial invitation is extended to all Shorthorn breeders.

The arrivals of live stock at Liverpool from the United States and Canada for week ending Sept. 15th, were much in excess of any former period, whilst the quantity of fresh meat was in excess of recent weeks. The total numbers of live stock were 831 head of oxen and 780 sheep. Of the former, 507, as well as the whole of the sheep, came from Canada, and 324 cattle from the United States. The condition in which the animals arrived augurs well for further development in the importation of live stock, which will, it is expected, assume larger proportions during the coming winter. The accommodation on board the steamers for the conveyance of live animals is exceptionally good, and they are enabled to land their valuable freight in prime order. The quantity of beef landed was 1,484 quarters, whilst the arrivals of fresh butter amounted to 2,900 packages. About 20 large fresh fish were landed during the week, thus introducing a new element into the food importation from America.

Messrs. Hornsby & Bro., of Eminence, Ky., have sold to Messrs. Birrell & Johnston, of Greenwood, Ont., the Gold dust colt Gold Leaf, for the highest price obtained by them for any of the stock they had at the Provincial Exhibition. Messrs. Hornsby have also sold to the same firm the trotting filly Fanny Barnet.

While attending the Provincial Exhibition, Mr. Jas. Dickson, of the township of Tuckersmith, Ont., purchased three shearlings, Cotswolds, two ewes and a ram, from Messrs. J. Suell & Son, Edmonton, paying therefor the sum of \$400.

Mr. John Stacy, of Lansdowne township, Co. Leeds, has purchased a very promising Shorthorn bull calf and a pair of Berkshire pigs, from Mr. James Armstrong, Spring Brook Farm, township of Vaughan, Co. York.

Read advt. of W. Long, Lansing, Ont., in this No.

The third prize team for agricultural purposes at the Provincial Exhibition has been sold for the high price of \$400. Mr. Allan Webb, of Blanshard, Ontario, was the owner.

The valuable horse, Anglo Saxon, owned by Messrs. M. Campbell & Son, Caradoc, was sold last week, in Jackson, Mich., to L. Penoyer & Co., for the handsome sum of \$900.

Mr. G. F. Frankland, of Toronto, Ont., has returned from England, where he has sold this season 1,700 head of cattle at an average price of \$130 a head. His nephew leaves shortly with another shipment, and Mr. Frankland follows him in the spring.

The Magie or Poland China hogs, from four pure and distinct breeds of hogs, viz: Poland, Big China, Big Irish, Grazier, and Bayfield, are regarded as very fine. The first three pigs of this kind were shipped to Liverpool, England, from Cincinnati, on Sept. 3, 1877, to Mr. Joseph Munson, Jr., of Liverpool, Eng., one boar pig, named Magie Boy; one sow pig, named Lady Kumlter; one sow, named Oxford Gem, by D. M. Magie, Co. Oxford, Ohio, U. S.

Be sure and attend the stock sale of Rodgers, Jeffs & Stoddart, at Bradford, on Wednesday the 24th October. Well bred stock and excellent bargains.

Commercial.

London Market.

FARMERS' ADVOCATE OFFICE, London, Oct. 10, 1877.

GRAIN.

Deihl, \$2 to \$2.10; Treadwell, \$1.95 to \$2.05; Red, \$1.90 to \$1.97; Spring, \$1.30 to \$1.80; Barley, 90c. to \$1.10; Peas, \$1.00 to \$1.10; Oats, 80c. to 90c.; Rye, \$1; Beans, \$1 to \$1.37.

FLOUR.

XXX, per 100, \$3.50 to \$3.75; Fall Wheat, do, \$3.25 to \$3.50; Spring Wheat, do, \$3 to \$3.25.

MEATS.

Beef, per 100 lbs., \$4 to \$6; Dressed Hogs, \$6 to \$6.75, live weight, \$4.75 to \$5.

FRUIT.

Apples, per bushel, 60c. to \$1.12.

PRODUCE.

Eggs, per doz., 12c. to 14c.; Roll Butter, fresh, 20c. to 22c. Tub Butter, 15c. to 18c.; Hay, per ton, \$10 to \$12; Straw, per load, \$2 to \$4; Turnips, 25c. to 30c.; Carrots, 25c. to 30c.; Potatoes, new, per bag, 55c. to 60c.; Onions, per bush., 75c. to \$1; Tallow, 6c. to 7c.; do., rough, 4c.; Lard, per lb., 10c. to 12c.; Wool, 30c. to 31c.

Toronto Market.

Oct. 9, 1877.

Fall Wheat, \$1.18 to \$1.25; Spring Wheat, \$1.05 to \$1.18; Oats, 34c. to 36c.; Barley, 45c. to 67c.; Peas, 68c. to 72c.; Dressed Hogs, per cwt, \$6 to \$7; Butter, roll, 24c. to 26c.; Butter, tub dairy, 16c. to 19c.

Liverpool Markets.

October 8, p.m.

Flour, 26s. 6d. to 32s.; Spring Wheat, 10s. to 11s. 6d.; Red Winter, 11s. 3d. to 13s. 9d.; White, 12s. 6d. to 12s. 10d.; White, 12s. 4d. to 12s. 8d.; Club, 12s. 3d. to 13s.; Corn, 28s. to 28s. 3d.; Oats, 3s. to 3s. 6d.; Peas, 40s. 6d.; Barley, 3s. 6d.; Pork, 48s.; Lard, 47s.; Bacon, (new) 40s. 6d. to 42s. 6d.; Tallow, 41s.; Beef, 92s. 6d.

New York Market.

New York, Oct. 8.

Flour firmer; wheat quiet, firm; Chicago at \$1.36 to \$1.37; Milwaukee at \$1.37 to \$1.38, held at \$1.39; Corn quiet, firm, at 59c. to 60c.; Oats quiet; Wheat, 2c. to 3c. better; strong and advancing; \$1.52 to \$1.53 for No. 2 red winter for October; Rye, quiet at 78c. to 82c.; Corn, 4c. better; sales at 60c. to 60c.; Barley, steady; No. 1 Canada, 95c.; Oats, dull; sales at 32c. to 30c. for mixed Western and State; 33c. to 44c. for white do.; Pork, dull at \$14.35; Lard, heavy at \$20.20; Butter, 15c. to 30c.

Live Stock Markets.

Chicago, Oct. 8.

The Drovers' Journal this afternoon reports as follows:—Cattle—Market was strong and higher, prices advancing 10c to 15c; good to choice shipping steers at \$4.60 to \$5.20.

Live hogs—There was a fair demand by all hands, and the market was pretty active at Saturday's closing prices. Light packing hogs sold at \$5.25 to \$5.90; shipping at \$5.40 to \$5.50.

Sheep—The market was steady and unchanged.

ST. GABRIEL CATTLE MARKET. Montreal, Oct. 8.

There was a fair demand for cattle at this market to-day, and the supply, although not large, was fully equal to the wants of trade. Prices ranged from 3c to 4c live weight, the outside figure being for choice cattle. Hogs were a glut upon the market, and sold at from 5c to 6c per lb. live weight. There was a good supply of sheep to-day, which were bought up principally by Mr. S. Price for shipment to Glasgow. He ships this week by the Manitoban between 600 and 700 sheep, which are the very best selection from the Leicester breed, and weigh about 140 lbs. each. Mr. R. J. Hopper bought a car-load of cattle and one and a half car-loads of hogs at 5c, and a few extra hogs at a fraction of 6c; and sold 20 cattle for \$500 and hogs at 5c to 6c. Mr. W. Sinkins, of St. Mary's, sold 9 cattle at \$32 each, being a fraction over 3c per lb., and one load of hogs on p. l. Messrs. Jack and O. Holland sold 19 cattle at 3c per lb. Mr. M. Elliott, of Kingston, sold 25 cattle at \$32 each, or 3c per lb. Mr. Geo. Wedenber, of Peterboro', had 13 cattle, and sold 8 at \$25 each, or 3c per lb.

The Cheese Markets.

Liverpool, 8th inst.—Cheese, new, 61s.

Little Falls, N. Y., Oct. 8.—350 dairy at 12c to 12c; two or three lots at 13c. About 200 August make, factory, at 12c to 12c. About 5,000 September make, factory, sold; 4,000 at 13c and 1,000 at 13c.

Albany, N. Y., Oct. 8.—Considerable activity in Little Falls cheese market to-day. Demand for good cheese for exportation is large, which causes continued good prices. About 90 factories represented, and over 8,000 boxes offered. Factories are selling off very close, owing to the good rates realized. Sales 12c to 13c; bulk going for 12c to 13c. These are better figures than on the corresponding day a year ago. Several hundred farm and dairy cheese sold for 12c to 13c, the most getting close to the latter price.

Utica, N. Y., Oct. 8.—Of 6,000 boxes of cheese offered, 500 boxes went on commission; the balance sold at 12c to 13c; extremes, 13c; leading factories, 13c; average market higher and active.

Ingersoll, Ont., Oct. 9.—At the cheese market to-day only five factories registered 1,315 boxes of cheese; over 6,000 boxes were represented. Makers are not willing to meet buyers' views. No transactions are reported.

For the corresponding week last year no sales were reported. Holders were asking 12c, and buyers offering 11 and 12c. London, Oct. 6, 1877.

It was late to-day before any offerings were made at the Cheese Fair. Finally, three factories offered 1,600 boxes, but no sales were reported, 13c. being refused.

New Advertisements.

TONTINE SAVINGS ASSOCIATION, INCORPORATED 1877.

Head Office, - London, Ont.

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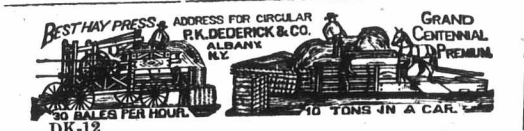
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ASK FOR THE DEVONSHIRE AND TAKE NO OTHER. \$1.00 per Box. Sole Manufacturer, John Lumbers, 101 Adelaide St. East, Toronto.

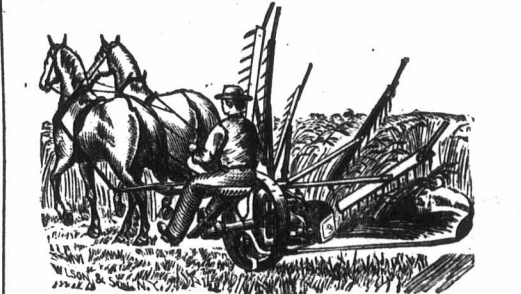
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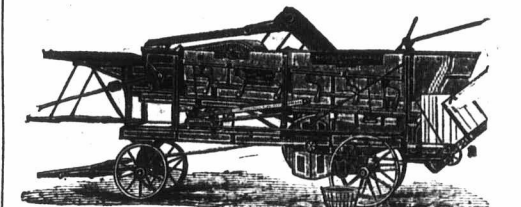
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Amount available of Premium Notes	\$130,191 20
Premium due by Agents, secured by short dated due bills from members and bonds	46,034 59
Due on Assessments	18,157 14
Bills Receivable	6,520 83
Mortgage and Office Furniture	5,163 09
Dominion Stock	\$25,000 00
Dominion Deposit	25,000 00
Cash in Federal Bank	9,129 34
" Molsons Bank	431 25
" Treasurer's hands (postage stamps, &c.)	840 31
	10,400 90

LIABILITIES, \$266,383 75

Bills Payable	\$25,000 00
Sundry Liabilities (small amounts)	321 75
	25,321 75

Total Capital Account, \$241,062 00

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Washing is the most important.
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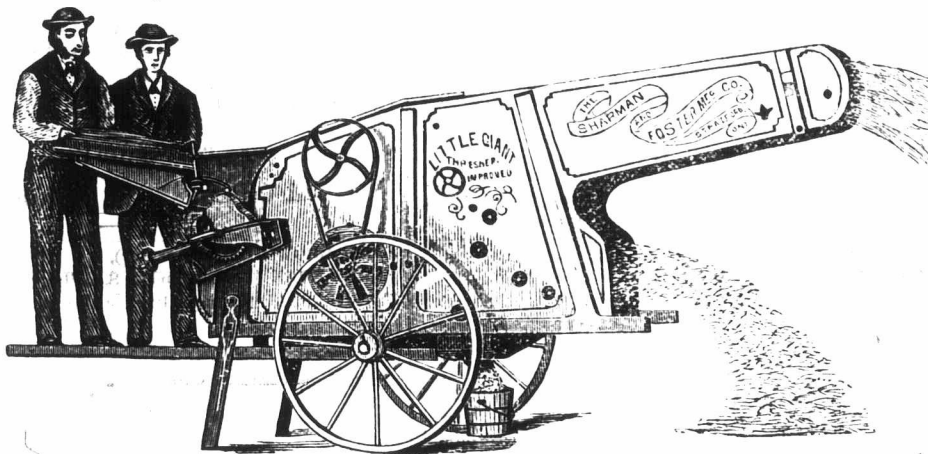


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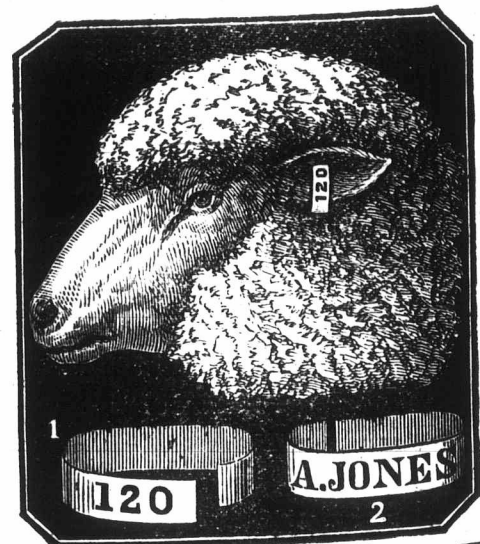
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