

# FARMER'S ADVOCATE

AND HOME MAGAZINE.

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## The Farmer's Advocate

—AND—  
HOME MAGAZINE.

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### TO SUBSCRIBERS:

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Our rates for single insertion are 20c. per line—\$2.40 per inch, space of nonpareil (a line consists on an average of eight words).

Manufacturers and Stock Breeders' cards inserted in "Special List" at \$1 per line per annum.

Condensed farmers' advertisements of agricultural implements, seeds, stock or farms for sale, or farms to let, not to exceed four lines, 50c., prepaid.

Advertising accounts rendered quarterly.

Advertisements, to secure insertion and required space, should be in by 20th of each month.

Letters enclosing remittances, &c., only acknowledged when specially requested. Our correspondence is very heavy and must be abridged as much as possible.

### On the Wing.

WALKERTON.

This is the county town of Bruce. It is very prettily situated on the banks of the Saugeen River. The town has been nearly swept away by a fire. Numerous blocks of brick buildings are now taking the place of the old frame and log buildings. It is located in a pretty valley, having fine hills almost surrounding it; the hills have sufficient slope to admit of cultivation. The land is of excellent quality. These hills will soon be occupied by handsome residences; some are erected already. The place has the appearance of thrift and prosperity, and is becoming a place of importance; in a few years it may be one of the prettiest inland cities in Canada. It now has about two thousand inhabitants. The residents along the lakes and frontier have been accustomed to consider their position much superior to that of the inhabitants of the northern part of Ontario.

Bruce raises more wheat than any other county in Canada. The land is much better than in many localities south of it. The appearance of the growing wheat crop could not be better than in this county; the blade of the wheat, the grass in the fields, and the turnip crops to be seen along the line of rail from Walkerton to Harrisburg, showed a decided and marked difference. We heard a farmer remark that he would rather have one acre of land near Walkerton than three near Harrisburg, Paris or Brantford. At the time when we came to Canada, land near Brantford or Harrisburg would be worth ten times more than at Walkerton. Now the farmers in the north can show a greater profit than those along the frontier.

The additional amount of snow that covers the ground is found to be more beneficial to farming than where there is a smaller quantity. Both crops and stock thrive better. Feeding stock on frozen grass and allowing them to eat the pasture bare to the ground, as we have too often seen where the snow does not cover the ground, is not as good for either stock or land as when it is sealed closely by the snow until the proper time arrives to use it. We should say to Canadians who desire to make a home—Do not fear the cold or snow of Bruce.

### THE NORTHERN AGRICULTURAL EXHIBITION.

We arrived at Walkerton on Wednesday evening. The great formal opening of this Exhibition took place on Thursday. Triumphal arches and banners were erected; the band announced the approach of the Lieutenant-Governor, Vice-Chancellor Blake and many of the leading local politicians; suitable addresses were given, and the Great Northern Fair was formally opened.

They have good grounds and have erected a large and commodious building, about as good as the main buildings in which our Provincial Exhibitions have been held; long rows of stabling and sheds for the stock are erected. The stables and sheds were well filled with good stock, far superior to what we expected, some of which had exhibited against Provincial prize animals and had gained the prize over them. Some sheep exhibited here would have gained Provincial prizes, but the owner considered he could not spare the time to attend that Exhibition.

Some very good horses were on exhibition here, just such as the country requires.

The general display inside the palace was highly creditable. The display of plums we thought far surpassed the display at any other exhibition; this fruit succeeds better here than it does in more southern localities.

A great luncheon was prepared in the town for the Lieutenant-Governor and others. The tables spread were not more than half surrounded by guests; the price of tickets, 75 cts., was rather more than the farmers liked to pay. Office-bearers and seekers were the principal attendants. The addresses were more of a political nature than agricultural. It is well for farmers to expend a little money in listening to good addresses; many farmers would not have begrudged the cost had they been there. Such luncheons, dinners or suppers are good schools. The addresses are well worth attention when our leading speakers come amongst us. The small attendance at the luncheon may partially be accounted for by the unfavorable state of the weather.

The rain paid no regard to the Exhibition. The grounds had been newly plowed, scraped and leveled, so you may imagine the effect of three days' rain on them. It was all mud and water; not an animal could be taken into the show rings,

they were in such a state; plants would swim or be buried; no one ever saw such a mess on any exhibition ground. As we were on our way to the main building, an elderly, stout old lady was standing on the end of a plank, umbrella in one hand and dress held up by the other. Some one asked her as we waded past her what she was going to do. "Do!" said she; "I will wait till they bring more planks."

Notwithstanding the mud and rain, there were a great many people on the ground. In another year the ground will be covered with grass; it never can be as bad again. Walkerton may ere long be raising its voice to get the Provincial Exhibition there. The expenses of this commencement have no doubt been principally paid by many of the town's people of Walkerton. Farmers are generally rather backward in establishing such exhibitions. Those who have been in the habit of opposing progress, or leaving it for others to labor for and pay for, we hope in future will take more active measures to aid all agricultural societies and agricultural meetings, as they tend to the advancement of farming.

### The Hessian Fly.

In the August number we gave illustration and accounts of this pest in three parts of the journal, with some suggestions in regard to preventing its damaging effects. We find, as expected, that the early-sown wheat is badly injured. Some pieces would yield a greater profit if ploughed under and the land sown with another crop. We know of no other effectual remedy to stop its ravages on the present crop; it is our impression that it will be best to abandon wheat culture for a time in localities where the fly has made its appearance. If we pay more attention to stock, we shall find more profit than sowing wheat to feed this pest. Wool, mutton, beef, pork or poultry will be found more profitable than sowing a precarious crop. Now the long evenings have set in, farmers have time to get up Farmers' Clubs and hold discussions. We had hoped that the Grangers would have had more discussions on agricultural subjects, but mercantile arrangements have drawn their attention too much from the course where we think they would have been most useful, and perhaps the most profitable. We hope to hear of more agricultural discussions from Grangers, or that Agricultural Clubs may be formed. The Hessian Fly must draw forth discussions. The wheat that is not affected by the Hessian Fly is looking unusually rank; many have not fed it off enough to prevent its smothering or rotting. We would prefer having it ready for its winter covering with half the blade that it now shows. If it is eaten off rather close the roots have now a good hold in the ground, and will be ready to throw up a good top in the spring.



### Township Agricultural Exhibitions.

There have been expressions made tending to discourage Township Exhibitions. These persons generally favor centralizing the forces, and holding one exhibition embracing many townships. This we leave as an open question.

We only visited one Township Exhibition this year; this was in the Township of Delaware, 12 miles from this city. Perhaps nothing could be more adverse to the success of any exhibition than these facts: Delaware is the smallest township in Middlesex; nearly half of it is occupied by Indians; the only suitable buildings are in one corner of the township, and the great Provincial Exhibition, one would have thought, would have satiated the inhabitants with exhibitions for this year. The reverse was the case. The effect appeared rather to stimulate the desire to see and to conquer. Nearly all the inhabitants of the township were there who could leave their homes.

The exhibit of products was highly creditable, and the interest taken was very great. When comparing it with the Provincial, in some things this smallest of township shows even surpassed the Provincial. There were a larger number of the farmers' wives and children here—perhaps three times as many in proportion to the number of men—than were to be seen at the Provincial. This is one of the greatest points in favor of the Township Exhibitions. The ladies do not like to be beat; they like to see their husbands, brothers or children excel, and when they take an interest they are apt to conquer. This was shown at this exhibition, as Mrs. P. Tole carried off the highest honors, namely, 1st prize for the best cow and the 1st prize for the best calf. We shook hands with her and congratulated her on her success. The face showed unspeakable satisfaction and pleasure exhibited by the smile on the lip, the cheerful countenance and moistened eye. It was a pleasing victory. Perhaps no other lady in Canada has with her own money purchased and raised, and carried off the 1st prize for the best Durham cow and calf at any exhibition.

We happened to be standing near the door of the Town Hall as some began to remove their goods. Some one gave us a sharp nudge; we turned to see what this meant, and we shall never forget the sight. A pair of keen, clear eyes caught ours, and the extremely happy appearance of a little grey-headed old gentleman, over 70 years of age, told the tale. His arms were clasped round a cheese; on the cheese was the red ticket for 1st prize. All he said was "What do you think of that? Only one cow and a half; I always get it." We presume he meant one cow and a farrow cow.

At this Exhibition were to be seen several large factory-men, who kept from 20 to 60 cows and make cheese from many more. Some of them have the best cheese-makers they can find, yet the little grey-headed old man, nearly 100 years old, takes 1st prize year after year for the best family cheese. Yes, factory-men, quality and quantity is what is wanted; well you have been filling your part, but the demand of the consumer is or will be a small cheese, and good quality.

We met one of the largest land proprietors in the township. We asked him what he exhibited. "I hae naething here; it wad na pay." There are some who can only look directly after the dollar. It is a blessing we have laws that compel such to aid, even in a small way, to these enlightening and cheering gatherings. We were as much pleased to see the large number of cheerful, happy ladies and children at this Exhibition as any of the grand sights at any of the larger Exhibitions. The Township Exhibitions are where the ladies and children turn out in the largest numbers. We have advocated and still intend to advocate their maintenance.

Another grand feature which redounds to the credit of this Exhibition was that at its close the band played "God Save the Queen." This tune alone must tend to inspire, awaken or renew the loyal feeling and respect to our beloved Queen more than many long, windy speeches. We say that this small Township Exhibition surpassed the Provincial, as they had a band and the Provincial had not.

### Marketing Produce.

There is an impression among many farmers that grain will rise in price. They argue that the war in the East must check production and cause a great demand, and that they will make by holding their grain; every possible chance of a rise is magnified; in the estimation of farmers generally the probabilities of loss are not so carefully scanned.

We have in a previous issue advised farmers to sell products as soon as they are fit for market, and to leave speculation to capitalists, who can command money cheaper than farmers can, and can keep produce at half the expense. The Russians, despite the war, have been rushing their grain into the English market as fast as possible. The immense wheat crop of America must find a foreign market at some price; speculators are not rushing in to hold grain now; merchants are merely purchasing to fill orders. The farmers are now the speculators by holding grain when speculators are not operating to any great extent. The present prices are good and highly remunerative. A farmer cannot act wrong in selling. The prospect of a rise is extremely small—so small that we fail to see it. On the other hand, there is a prospect of a fall; sooner or later it assuredly will come. Very few farmers have ever estimated the cost of holding grain. Money is worth 8 per cent.; nearly all the monetary institutions in this city are paying as much as that on permanent investments. Farmers who borrow have to pay a higher rate. It is worth more than 8 per cent. to farmers to carry on improvements or to make purchases. To show the loss more clearly, say a farmer has 100 bushels of wheat to sell; if worth \$1 in September, it would bring \$100 should he hold it. The loss from shrinkage, by insects in the bin, rats, mice, risk of fire and theft—some farmers lose by destruction by their own farm animals; add this to the interest the \$100 would bring him, and you will see that it must cost a farmer between one and two bushels of wheat every month to hold it. We have known farmers in England to keep seven years' wool on hand; some have kept grain and others hops, but the general result is a loss to the holder, and often a failure results by holding. This is particularly the case when prices are good. People hold for a rise; the rise does not come, but they still hold; they dislike to sell at less than a neighbor has received, and hope to be equal to him by holding. It may answer to hold produce when it is much below the cost of production. At the present state of the market no farmer can do wrong in selling all he can spare. The market price has receded since we first advised selling. Who can estimate the loss to holders?

### Absence From Exhibitions of Breeds of Cattle.

In the last number of the *Advocate* we referred to the entire absence of Galloway cattle from the Ontario Provincial Exhibition in consequence of the usual prizes for them having been withdrawn. At the St. Louis Fair there were few specimens of Galloways, and two other great breeds of cattle, the Holsteins and Ayrshires were not shown at all, owing to the fact that no premiums were offered to these classes of cattle. This was also the case with Herefords, a breed of beef cattle that are making Shorthorn breeders look to their laurels in

other States. Such action on the part of directors is, to say the least of it, injurious. The great object of agricultural societies is avowedly the encouragement of the improvement of live stock on the farms of the country, nor can we see any sufficient grounds for limiting to one or a few breeds of cattle, excluding others that also have their special points of merit. The Galloways as well as other breeds have undoubtedly their excellencies. As a proof of this we need but refer to the very high estimation in which they are held in that section of country from which they derive their name, and where they have been so long looked upon as most valuable stock, and suitable above all others for that country. Each breed has its special excellence. None will attempt to deny the value of the Shorthorns for early maturity and general excellence wherever the climate and state of agriculture are such that they are suited for, but there are districts where a race of cattle hardier and easier kept may be more suitable. In Canada the principle of favoritism or partiality to particular breeds has not been carried to the same extreme as in St. Louis, where Holsteins, Ayrshires and Herefords were all excluded from the prize list, though all well and favorably known to stock-feeders. At the Smithfield Show and other great exhibitions in England the Herefords take a high place. We give the following report of a late sale of Hereford cattle in Herefordshire in England:—

The fine old herd of Hereford cattle, which has been so long owned by Mr. William Tudge, Adforton, Herefordshire, was dispersed on the 20th September. The top price was reached by the magnificent cow Rosebud, which has won so many first prizes, including the red ticket at the late Liverpool show of the Royal English Agricultural Society. Mr. Arkwright, Hampton Court, secured her at 155 gs. He also got Beatrice at 100 gs., and her heifer calf at 100 gs. Beatrice is a splendid heifer. Lord Coventry gave 140 gs. for Giantess, a third prize Royal English winner this season. The ninety-four females, including heifer calves, averaged £33 17s 4d, or \$167 per head. One bull made 120 gs., and the average was £56 8s 5d each, or \$270 for the bulls.

### Meat Production for Foreign Markets.

The production of butcher's meat has for many years engaged the attention of the farmers of England, as it furnished the best means of increasing the fertility of their soil and provided for the sale of their produce in a form that was not open, to any great extent, to foreign competition. This department of farm economy has been so generally recognized as of the first importance, that the amount of meat produced for each acre under cultivation has been taken as a standard, in many localities, for determining the measure of success in farm management.

"The more cattle the more manure, and the more manure the better crops," which was often quoted as a proverb that could not be contradicted, even by those who did not adopt it as a rule of practice, has finally become the watchword of British agriculture.

It is impossible to pay high rents for the use of land without an abundant supply of manure, and this for the general purposes of the farmer is most readily obtained by feeding animals for the butcher.

In the production of grain the farmers of Great Britain were brought into active competition with the cheap labor of Russia and the virgin soils of America, and they therefore gave increased attention to the supply of the home markets with fresh meat, as there was no prospect of foreign competition in its production.

The advantages of this system were not, however, limited to the freedom from competition; that



was the leading object aimed at, but extended to all the interests of the farm.

As the production of meat increased, it was found that grain-growing became more profitable, not only from the greater yield obtained on a given area, but also from the greater area that was brought into a suitable condition for producing grain crops; in effect, the production of butcher's meat enabled them to grow paying crops of grain in spite of foreign competition. Moreover, manure in many instances became the leading object in feeding, and the direct profits of meat production were looked upon as of secondary importance. The cheap grains from foreign countries finally came to be purchased by the farmers themselves, to feed fattening stock, as the cheapest method of securing the desired supply of manure.

At the present time the experience of the farmers of Great Britain in feeding stock is of the greatest practical interest to the farmers of America, as it clearly indicates the direction in which their efforts to improve their system of farming may be most successfully made.

The recent experiments in the shipping of fresh meat and fat stock from America have demonstrated the fact that the British farmers can no longer retain the monopoly of these staples in their home markets. The success of this new enterprise cannot fail to have an important influence upon the agriculture of both countries, if the farmers of America make the best use of the opportunities now opened to them. The opening of a new market for one of the most desirable farm products should mark an era in the agricultural prosperity of this country by leading to the practice of a better system of farm management, in which the production of fat stock of the best quality is made an important, if not the leading interest.

It may, at first glance, appear that the farmers of Canada and the Eastern States are not, from conditions of climate and soil, particularly interested in the production of meat for foreign markets, and that the broad prairies of the West are destined to supply this demand.

A careful examination of all of the elements involved in this problem must, however, show that the benefits arising from this new enterprise cannot be exclusively appropriated by the Western farmers, and it may possibly prove to be true that the farmers of Canada and the Eastern States have a preponderance of advantages in their favor in supplying this demand.

The present system of stock feeding at the West is not the best adapted for furnishing meat supplies to foreign markets, and it is not probable that any decided change in this respect will be made in many years.

The farmers at the East have quite a margin in their favor in the cost of transporting their live stock to market, while the manure resulting from the process of feeding has a value that will more than compensate them for any supposed disadvantages of soil and climate to which they may be subjected. Under a thorough system of farm management, that provides for the best returns from every source of profit, the fattening of animals on the average Eastern farm cannot fail to give satisfactory results.

It may even be an object, in many localities where the best methods of practice prevail, to follow the example of the farmers of England in their system of feeding, and purchase the grain grown on the cheap lands of the West and convert it into meat for foreign consumption and manure for increasing the fertility of the soil under an intrusive system of cultivation. With this double source of profit at command, in connection with the saving in freights from their comparatively short distance from market, the farmers at the

East, on farms adapted to tillage, where stock feeding has long been neglected, have every inducement to make fat stock a leading interest. Thorough tillage, on well-drained land, must, however, go hand in hand with high feeding to give the best results in the older sections of the country where land is valuable, while the neglect of either of these interests may even prevent the profitable practice of the other.

Without considering in greater detail, in this place, the intimate relations of stock feeding to a high or intrusive system of farming, we will direct our attention to a brief examination of the principles that should guide the farmer in selecting the stock that he purposes to feed for the foreign markets.

An examination of the market reports in any of our large cities will show that but a small proportion of the animals sold are of the best quality, and it will further appear that the price of the cheapest stock varies greatly, while the best animals command a good price at all times at comparatively uniform rates. Every one familiar with the trade in fat stock will readily perceive that it will not pay to export animals that do not command the highest market prices, as too large a percentage of their value must be paid for transportation, and the prices are liable to be depressed by excessive competition.

The foreign demand will not in all probability affect the value of inferior stock in our home markets, but it will have a tendency to increase the prices of the best class of animals, even under a largely increased rate of production. The direct profits of feeding, under the best system of management, will, to a great extent, depend upon the ability of the animals selected to fatten rapidly at an early age.

In the improvement of the modern meat-producing breeds of cattle, sheep and swine, the tendency to early maturity has been developed until it has become one of their most important characteristics.

The saving in time through the rapid conversion of the vegetable products of the farm into an animal product of greater value, is not the only advantage to be gained in feeding young animals, although this in itself is of considerable importance. A young animal, through the activity of its organs of nutrition, will give a better return for a given amount of feed consumed than one that is older, provided all other conditions are equal. This rule applies alike to the coarse "native" stock of the country and the highly improved pure-bred of the most fashionable blood. The quality of this increase in live weight will, however, vary greatly in different animals, and a corresponding difference will be observed in the actual value obtained for the feed consumed.

In the coarse, slow-growing "native," or unimproved stock, when liberally fed at an early age, a large proportion of the increase in live weight will consist of bone and the coarser, soft parts of the system, so that the carcass of a given weight would command but a small price in the market. The improved breeds, on the other hand, in which the tendency to early maturity is well developed, will give a larger proportion of valuable flesh, which will command the highest price when placed on the block.

It must also be noticed that there is a great difference in animals of the same weight, in the proportion of choice pieces they furnish when cut up on the block, and that quality rather than the quantity will enable the feeder to obtain the highest price for the entire carcass. The young animal is to be preferred for feeding because it gives the largest return in live weight for feed consumed, but it must also be capable of converting this feed

into the best quality of flesh, to give the greatest profit.

In this connection it may be well to notice the fact that has been fully demonstrated by actual experiment, that young, growing animals will consume a larger amount of feed in proportion to their live weight than animals that are fully matured; but as the profits by feeding depend upon the returns obtained for feed consumed, rather than the amount of feed they are capable of eating, this cannot be urged as an objection to early feeding. The profits to be derived by the farmer from the export trade in fat stock, either dressed or on foot, will, therefore, depend upon the intelligence and skill that he exercises in devising the best system of management upon the farm as a whole, and the judgment with which he makes his selection of animals for feeding. Good stock and high farming are the essentials of the highest success.

Stock raising in its relations to feeding will be discussed in a subsequent paper.

#### American Beef for Europe.

The commissioner appointed by the *Scotsman* newspaper to obtain information on the subject so important to British farmers—how far the supply of meat from America was likely to reduce the prices of beef in the English markets—has finished his enquiry. To us Canadian farmers it is a subject of great interest. We have for some time been sending our surplus beef and mutton to English and Scotch markets, and we are anxious to know if we can continue to do so. Were the English markets to cease to purchase from us at remunerative prices the incentive for stock-feeding, and consequently for improved farming, would no longer exist. And this might occur from an over-supply being exported from America.

The commissioner in reviewing his investigations on the subject now gives his own impressions of what he has seen and learned. He has learned that if beef of prime quality—such as would command the highest prices—can be procured for the English market, it must be in very limited quantities. Cattle are numerous and grass and corn-producing lands are cheap, but there is little of what may be called really good meat. In previous numbers of the *FARMERS' ADVOCATE* we impressed upon our readers the necessity of feeding well-bred stock, and finishing them off in prime condition, if we are to compete for remunerative prices with the stock-feeders of Britain; and now our reasoning is fully borne out by the commissioner's remarks. Inferior beef can be sold in the English markets, but at very low prices—such as cannot be remunerative to the feeder and shipper. But let us hear him for himself:

"It may be stated that in spring a wrong impression seemed to prevail both in England and Scotland as to the parts of America which the imported beef was coming from; and therefore, also, as to the cost of its production. During the first three or four months of the present year a great deal of writing and speaking took place among agricultural communities on the subject of American beef, and somehow or other almost all these writers and speakers seemed to have got possession of the idea that the beef we were getting from America was produced on the cheap grazing lands of the Far West; for all their calculations were based on the cost of production there, and not in the older States, such as Kentucky, Illinois, Indiana, Ohio and Pennsylvania, where, in point of fact, the greater portion of American beef that has arrived in Britain has come from, and where the cost of production is very different from what it is in Texas and the other more westerly States. Advocates of the trade tell us that America can boast



of producing at least a moderate quantity of as fine beef as has ever been raised in England, Scotland or Ireland, and from this they would go on to quote the marvelously low cost of beef production in America, giving invariably the figures which really referred to the raising of the worst quality of American beef."

He gives an instance of the erroneous opinion generally held on this subject, a Nebraska stock-raiser saying that he could show as fine cattle as he ever saw at Mintlaw or any other place—that he can sell there better beef than he ever saw in Scotland, and adding, "They will be sold here for 4½d. at present rates of freight."

Referring to such assertions, the commissioner says:—"These are no new statements; they have been made again and again during the past twelve months, and at every point they are misleading. I frankly admit there is a much larger number of really good cattle (besides Shorthorns) in America than I was prepared to find. In such States as Illinois, Kentucky, Indiana and Ohio there are a great many more beef cattle than I expected there were, that would rank among the average of Scotch cross steers; but in those large western herds referred to by the writer quoted, not a pound of beef is raised that could be placed on an equality with an average pound of Scotch or English beef; there is not one animal in every thousand that could be classed amongst even a second-rate Scotch herd. Supposing the very best American beef were as good as any this Nebraska farmer ever saw in Scotland, he deceives himself and others in believing and stating that he can sell it at a profit of 6d. per pound in Glasgow—sevenpence per pound would not pay."

He contends that even beef of second quality, though a little of it is exported, is shipped at great risk to shippers, and must be abandoned, and that such beef sells at from four to four and a half cents per pound, live weight, which would make the cost in Glasgow about 5½d. per pound. He says:

"I do not hesitate to affirm that the ordinary or common beef of America—the beef of Texans, Cherokees and the 'common' American cattle so often spoken of in my letters—will never meet a steady demand in Britain, or realize such prices as would remunerate its exporter—at least so long as it remains of the quality it now is. And I expect to be able to show that a very large percentage of the whole American supply of beef must be classed as common American beef. My first impression is that until both the class of cattle and the mode of their treatment are greatly improved the British markets will never be disturbed by the ordinary beef of America, but that the best quality of American beef will be poured in upon us, and will find a moderately ready sale at a certain price. The questions are, what is the probable quantity of what is called the best quality of American beef? and, what is the price at which it can be sold at a profit in British markets?"

We repeat our former advice:—Feed stock on a larger scale than you have hitherto done, as the most profitable mode of agriculture, and as the best and cheapest way to improve your farms. Feed stock of the best quality—such as mature early and lay on flesh and fat at comparatively little cost. Feed well for the highest prices in the English markets. It is fully recognized by all actually engaged in the trade, and by many others who think over the matter carefully and impartially, that nothing but the very best quality of American beef will ever meet with even reasonable favor, or really pay for exportation.

PLUMS IN NEW YORK.—Schenectady, N. Y., is famous for its plum gardens. The *Utica Herald* says: The plum trees are usually protected from winter's climate changes by high fences, interposing dwellings, and special care. The crop is very large this year, about 10,000 bushels having been shipped from Schenectady to various points.

### 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 ½ ounce.

#### Selection of Animals for Breeding Purposes.

This is the primary and most important of all subjects for the consideration of the stock raiser. A serious mistake at this stage of his proceedings would undoubtedly affect him in a very material way in his after results. I cannot therefore impress too strongly upon my readers the importance of very careful thought combined with that best of all counselors—practical experience—being brought to bear upon this part of the our subject.

Taking the case of the purchase of cattle, there will generally be found to be one or two objects in view by the investor. These are, 1st, their dairy properties, or 2nd, their grazing and beef producing qualities. In the first case it is almost needless to remark that the milk producing proclivities of the animals are the chief consideration. Now, it is a well established fact that besides the udder and other ordinary lacteal parts of the cows, there are certain peculiar characteristics other than these which to the practised eye indicate a tendency to lactific secretions; and thus, as I shall show under "Breeding," we can reproduce and cultivate these natural tendencies and increase what we wish to establish. Again it is found that the true dairy animal is of comparatively little use for those fat producing qualities, which are so requisite in a grazer. To have a good milker we must avoid every tendency to fat, and in a like manner to secure the best beef, and those qualities which tend to the production of this commodity, we must get rid of all lacteal powers. Those characteristic points which indicate milk producing tendencies are: head small, but long; muzzle narrow; eye lively; neck long with little loose flesh hanging below; shoulders thin; forequarters light; hindquarters large; back broad behind; carcass deep; udder large and square, stretching forwards, not fleshy nor "flabby"; milk veins large and extending well up the stomach; teats short and wide apart.

In the selection of animals for grazing purposes alone, we must, as I have already said, look for those qualities which produce fat and avoid any tendency to milk. Now, as in the former case, we have here also destructive peculiarities which by constant observation have been ascertained as being characteristic of animals which take beef and fat on quickly, and these are found to be also capable of reproduction and enlargement. I now give those particular "signs" which indicate good grazing properties, frame large, though not coarse; back broad, loins strong; ribs well arched; hindquarters deep, and the "ham" carrying flesh well down; all well-filled up; forequarters deep and great width between the legs; head broad at base though not coarse; eye soft; hair soft and "tough" pleasant. Much also depends upon the eye of experience in little matters about the "look" of an animal which cannot be described.

For the purpose of ordinary farming, instead of having animals radically predisposed for either of the conditions to which I have just referred, it is perhaps better for all practical purpose to select animals whose progeny would combine, by careful selection, heavy flesh and strong constitution with good milking properties. This assimilating of the two grand constituents in modern stock breeding—milk and beef—is only a matter of careful observation and the mating at first of individual animals whose characteristics show a leaning, however faint, towards this point; and again by their progeny—weeding out the undesirable—and so on until the qualities wished for

are fully and permanently established. The desirability of this kind of animal for general farming purposes will at once be apparent to my readers.

Again, in dairy herds, where the animals are kept entirely for their lacteal power, if the progeny are required for a similar purpose, we must of necessity select sires from herds which are famous for their attention to the milking proclivities of the animals in it. Should, however, the female progeny not be required to fill up the blanks in the ranks of the dairy cows, or the male calves as bulls, then, for all practical purposes, both for the individual profit of the farmer and the gain to the public generally, we recommend the use of sires whose progeny will have the beef-producing qualities highly developed. The utility of this is at once apparent when we consider that the calves will thus have a cross in their blood which will materially aid their feeding; and whether they are fed by the dairyman himself or sold to the grazer, the advantage to the community is the same, as we have an animal which will feed more quickly with less amount of food and produce more beef with less offal than a like animal whose parents are both noted for their milk producing organs.

Well, in order to secure and permanently maintain all the desirable qualities in the stock to which I have referred, it is necessary that we have thoroughbred animals to work upon. I think that in these days when so much practical and daily proof is being given of this, it is hardly necessary to maintain it by argument. Still, in order that we may thoroughly comprehend the matter and understand the natural laws by which the fact is established, we must first of all realize what a thoroughbred animal is. A thoroughbred animal, then, is simply one which by a system of selection through several successive generations—always keeping in view any particular qualities which we may wish to preserve, and weeding out those properties which we wish to lose sight of—in the course of a certain time these particular qualities preserved and worked upon, become hereditary and certain of reproduction in a very marked degree. We can thus, in a succession of years, make nature produce an animal to suit our views of what it should be, and thus again taking advantage of nature's own laws, make these qualities permanently transmissible. A thoroughbred animal, then, may be said to be one of man's own making, and embraces the qualities in a high degree which he may wish to be reproduced, but which may be only partially visible in the original breed.

By the use, then, of thoroughbred animals (I mean the acceptance of the word in reference to all the different breeds of our farm stock) introduced from herds or flocks of well-known excellence, we have at once, without having recourse to the tedious system explained, introduced certain known qualities into our stock, and thus realize the advantage of these at the earliest opportunity.

Of course, as present prices go for home-bred stock, it is altogether out of the question to suggest that all the farming stock of the country should consist of that class of animals. However advantageous it might be, it is at present not attainable. But although this may not be attained all at once, it is still possible to do it by degrees and at very little expense. What we want is all our farmers to become either a Bakewell or a Colling. How simple a matter and how honorable a sight to see all the farmers of this or any country trying to improve their stock, not so much by paying extravagant figures for high-bred animals as by attention to those common grade animals now in their possession in the way of selection and weeding. What I would recommend the farmer of this country to do in order to improve the quality of his farm stock is to use sires of known high pedigree and excellent points upon their grade females, and by weeding out every year those unimprovable bony animals so irreconcilable with modern agriculture, they would in a short time realize the change in a better quality of animal produced and a consequent increase in the value received for them.

I shall take up the subject of "Breeding" in my next article.

J. E. B., Port Elgin, Ont.

#### The Immigration of this Year.

SIR,—I send you a copy of the *Manitoba Real Estate Register* that you may see what our progress is in the Prairie Province.

The ever rolling wave of emigration from the eastern Provinces and Europe is now tending



towards the fertile valley of the Red River of the North in an irresistible wave which nothing can now stop. The evidences of the wonderful fertility of our soil and healthfulness of our climate are so numerous and spontaneous that all objections are borne away by the logic of facts, and it is now certain that the mass of those who will seek a wider and richer field of investment and enterprise, during the next ten years, will take up their abode in Manitoba, and along the Saskatchewan and other valleys of the new North-west, and after that decade scarcely a Canadian will be left in the western States.

The greatest surety of the continuance of this wonderful and apparently spontaneous movement is to be found in the fact that it is entirely the result of enquiries answered by the private citizens, of which we ourselves answered some 900 during last year, and the voluntary information given by happy and prosperous locatees in writing to friends and neighbors in their former homes.

Since the opening of navigation up to our going to press over 4,000 hearty, well-to-do people have arrived at the wharves in this city, the greater part of whom have selected lands, and either settled upon them or returned for their families, and it is safe now to say that the close of this season will see our white population doubled, and each one settled being an advocate for this country with their old friends and neighbors that rate of progress can not well lessen in the future. Then will the Dominion be settled from the Atlantic to the Pacific, and its fields, manufactories, and mines, producing vast wealth, will make it one of the first nations of the world within a century.

Winnipeg, Manitoba.

A. W. B.

**Fall Show of the Assinack Agricultural Society.**

SIR,—The Fall Show of the Assinack Agricultural Society was held at Manitowaning on the 10th Oct., under most unfavorable circumstances, on account of a heavy fall of rain, accompanied by high wind, which continued throughout the day, and which has been the cause of scarcely more than two-thirds of the articles entered being brought in for exhibition. Nevertheless there were excellent samples of grains, roots, vegetables and seeds of all kinds, which I doubt very much could be surpassed by any grown in any part of the Dominion this year; indeed, at two of the recent shows, viz., Owen Sound and Orangeville, there were several specimens of vegetables and garden stuff sent from here, and I am told that there was nothing could come up to them. Wheat there was an excellent sample, Glasgow and Red Chaff particularly (the yield large, in fact I do not expect it will be necessary to import flour into the is and this year, as has been obliged to do. In another year or two there will be quite a quantity of wheat for exportation). Potatoes a wonderful show, many being over 4 lbs. Tomatoes good, and very large; [the same citrons]. Squash, pumpkins, beet roots, onions, turnips, cabbage were all large and well grown. Horses and farm stock were very good.

Manitowaning, Manitoulin Island, Oct. 13th '77.

**Planting a Hawthorn Hedge.**

SIR,—Will you through the columns of the ADVOCATE inform a subscriber which time it is best to transplant young Hawthorn plants—Fall or Spring—the best way of setting out a hedge, and how far apart each plant should be from each other, or if you could let me know sooner than the paper comes, as it is getting late in the fall, if it would not trespass too much on your time, you would confer a favor.

J. S. W., Holbrook.

[Hawthorn plants may be safely transplanted either in Fall or Spring, but it is now so late in the season that we would prefer waiting till early spring. The Hawthorn has not generally done well here in Ontario, though we have seen it in some places growing for over twenty years. In the old country we had it planted any time in the fall or spring, and we planted thousands of plants of it. We planted them from 12 to 18 inches apart, and when planting, cut the stem short and after a couple of years cut them down again that they might branch out near the surface of the ground and form a close hedge. When grown up no animal could force his way through, though

they were so tall that the best horse and most daring rider would turn aside from them.

The buckthorn is said to be the best hedge plant in this country. The common crab would, we think, form a good hedge, it is easily propagated and very hardy. We had it planted alternately in some instances in Britain and found it to answer the purpose well.]

**The Feeding Qualities of Yellow Aberdeen and Stone Turnips.**

SIR,—I wish to ask a few questions, which if you answer in the next number of the ADVOCATE, I shall feel quite favored.

1st—Will the late turnips, Yellow Aberdeen and the Grey Stone, be as good for feeding cattle and making beef as the Swede turnip?

2nd—Will either of the above-mentioned turnips keep to be good feed during the spring months, like the Swede turnip?

3rd—Does the little red ant hurt vegetation? If so, what is the best mode of destroying it? Here it is very thick; the ground during the hot summer is punctured by them every few inches. By answering you will oblige

AN OLD SUBSCRIBER, Waterford.

1st—There is no other turnip equal to the Swede for feeding cattle and making beef. Yellow Aberdeen holds the second place; it is a good, nutritive turnip, and in the first months of winter will, with good, early-cut and well-saved hay, "make beef"—better, however, with other food added, such as corn meal, oats or barley. Stained barley would be put to better use if so fed on the farm, than when sold for the low prices it brings in the market.

2nd—Neither of the above-mentioned turnips keep so well or so late in the spring as the Swedes; they should be fed off in the early months.

3rd—Fall plowing is the easiest and most efficient way to get rid of the red ants. Break up their winter quarters and expose them to the frost, and you will have little trouble with them afterwards.

SIR,—Will you furnish me with two more copies of the "Offer" and the "Accepted," if I send you two more subscribers?

J. L., Morpeth.

[We will continue to give those pictures to any old subscriber who sends in a new name accompanied with the cash.]

SIR,—Can you or any of your subscribers tell me where I can buy a pair of Toulouse Geese and a pair of Bronze Turkeys, also a few Leghorn chickens.

J. T., Nottawa.

[Some of our fancy poultry raisers should, if they wish to derive a profit by the sale of their stock, let the public know by advertisement where the several varieties may be had, and their prices.]

**Home-Made Superphosphate.**

SIR,—As I was perusing the ADVOCATE of Aug., an article on converting bones into a fertilizer took my attention. Will you be pleased to give me a little more information on the subject? Do you mean to put water enough to cover the bones? How long should the bones be steamed, or into what size broken, if used in that way? How to procure the sulphuric acid cheapest and best? How to test its quality, and what should be the cost of it per gallon.

R. G. M. & Bros., Roger Hill, Pictou, N. S.

REPLY.—Put water enough to moisten the mass of broken or of steamed bones through, and stir it thoroughly. The smaller the bones are broken the easier it will be to dissolve them. Bones broken very small are sometimes used as a fertilizer without being converted into superphosphate, and sometimes ground. When merely broken their action as a fertilizer is very slow, and consequently lasting. Steam the bones so long as they will break readily. A little practice will soon enable you to decide how long that may be. The sulphuric acid can be procured on the best terms at the Brock-Chemical Works, where it is manufactured.

SIR,—Can you inform me why the Prince of Wales' Prize has never been offered for Ayrshire cattle?

T.G., Oshawa.

[Perhaps the Secretary or some member of the Board of Directors of the Western Fair will please give the information.—Ed.]

**The Provincial Exhibition.**

SIR,—As I am a constant reader of your most valuable paper, I look to you for some information in regard to the management of the Provincial Exhibition, for the benefit of the agricultural class.

1st—How many constitute the Board of Directors, and how are they elected?

2nd—What salaries do the different officers get?

3rd—What salaries do the gate-keepers, ticket-sellers and care-takers get during the Exhibition?

4th—Who has the appointing of the judges, and how are they selected, and how many judges is each electoral division entitled to?

5th—What is the reason that some electoral divisions are asked for six or seven judges, and others only for two? Now, sir, for this question I am speaking for East Lambton. I believe there were only two judges asked for, one for sheep and one for cattle. Now, whoever the parties were who attended to this business, they must have thought we had no competent men to fill the office, or the same parties neglected their duty.

6th—What salaries do the representatives of each district get for their services during the four years of office, as I believe that is the length of time they hold office?

SUBSCRIBER, East Lambton.

[The letter published above we received when going to press. The questions are important in connection with the Board of Agriculture and agricultural associations. We expect the Secretary of the Board or some other competent authority will reply in the next issue of the FARMER'S ADVOCATE.]

**Poultry Yard.**

**Sunflower Seed for Fowls.**

We have, for years, been aware of the value of sunflower seed in the fall of the year, and in winter time, too, as a food for fowls. This plant should be grown by every poultry-grower in the country who has the opportunity to raise only a few stalks, even. For its properties for glossing the plumage of exhibition birds are altogether remarkable. Buckwheat, properly fed, will operate similarly; but the latter is, by far, too heating in its nature, in comparison with the other.

This plant is a very gross grower, but it yields wondrously, and may be set in any soil where other fruits or vegetables cannot be conveniently raised—for example, along the sides of fences, or anywhere where the soil is not easily cultivated as in the open fields. If given a good chance—as other grains have—it will grow luxuriantly, and will well repay its care; for its yield is many hundred-fold, under ordinary cultivation.

The great "Russian sunflower" is a new thing with us, in this country, and a marvelous improvement upon the old-style seed. The flowers are double the average dimensions of the common South American variety, so well known among us, and, as a bearer, it far excels the latter in the number of large seeds it ripens upon its more expanding and heavier stalks.

The Russian sunflower is, to the American, what stalk and ear of the field-maize are to the pop-corn variety, in ordinary culture.

**Keeping Poultry in Orchards.**

This is a matter that should be practised when possible. We believe that when farmers and fruit-raisers know the benefits arising from such management, they will at once adopt it. Last fall we visited an orchard in which fowls were kept, the owner of which told us that before the fowls were confined in it the trees made little or no growth, and only a corresponding amount of fruit was obtained. But what a change was evident now. The grass was kept down, the weeds killed, and the trees presented an appearance of thrift, which the most enthusiastic horticulturist could not but admire and envy. The growth of the trees was most vigorous and their foliage remarkably luxuriant. The fruit was abundant, of large size, and free from worms and other imperfections. This excellence was accounted for by the proprietor, who remarked that "the hens ate all the worms and curculio in their reach, even the canker worm." He found less trouble with their roosting in trees than he expected, and that a picket-fence six feet high kept them within bounds. His orchard was divided into three sections, and the fowls were changed from one to another as the condition of the fowls or the orchard section seemed to require.—Poultry World.



## Stock.

## The Cattle Plague.

A meeting was held in Cleveland on Sept. 29, the object of which was to ascertain what could be done in relation to the cattle plague which had been so fatal among the herds in that locality. Mr. Jewett, president of the committee appointed to investigate the extent and cause of this disease, reported substantially that a careful examination into the cause of disease forced the committee into the unanimous opinion that it is the Texas cattle-disease. To confirm the report he referred to certain localities, where all the Texas cattle are unloaded, and from whence they are taken to different slaughter houses and driven to different pastures, and in this way the disease is carried to native cattle. The laws of Indiana and Kansas relating to measures for the prevention of the spread of the cattle-disease were read and followed by comments. These laws were read for the purpose of showing that other localities had found it necessary to enact measures of protection against the disease, and comments were made to sustain such action, and, if possible, have similar laws enacted in Ohio. Those laws were passed by Indiana and Kansas to prevent the spread in these states of what is known as the Texas or Spanish fever among cattle, and comprise certain restrictions which prevent diseased cattle from passing through that territory. It was insisted by Mr. Brown, of Parma, where the disease is most prevalent, that such laws were necessary in Ohio. A communication from a number of leading cattle men in St. Louis was read which indicated that experience and investigation proved that Texas and Indian cattle are entirely free from the disease called the Texas or Spanish fever. Native cattle from the Northern States, on being taken to Texas, are subject to the same kind of sickness that prevails in the North. Texas cattle can be allowed among natives at any time during the cold months without any danger whatever to the latter, and it is only in the extreme warm weather that this sickness appears; also, that this same or a similar sickness will be produced by bringing natives in contact with any cattle brought from the extreme Southern climate, and is by no means confined to Texas or Indian cattle. This communication closes by saying that all the precaution necessary is simply to keep the natives so that they will not be allowed to come in direct contact with Texas cattle or with the ground or pasture over which they have been fed and driven. This communication was laid on the table by unanimous consent. A lively discussion followed. The farmers are solid that Texan cattle are the cause of all the trouble. A resolution was passed to petition the Ohio Legislature to pass a law to provide for the appointment of an inspector at Cleveland for all foreign cattle brought to this market; also to make it obligatory upon the city authorities to see that such a regulation should be enforced.

## Plain Words to Breeders of Short-horns.

In an article under this heading the editor of the *Levi Stock Journal* strongly condemns the purchasing at high prices, cattle, merely from their having a pedigree tracing their descent from a good or fashionable family of pure bred stock. He thus explains his position: "What we mean by pedigree mania is the willingness on the part of a purchaser to take an inferior animal with an extra pedigree, rather than an extra animal with an inferior pedigree." This is a question on both sides, of which much may be said. The latter part of his article, which we give below, gives good practical advice to purchasers and sellers:

The point to be made is this—we cannot afford such criticism. The great breeders of England made their reputation by breeding and showing animals, in every way superior to anything that could be produced by any other man from any other breed. It is true that sometimes an animal breeds so entirely after his ancestry that he lies himself. Such an animal is an exception, and should not be sold. Our position is this: An inferior Short-horn should never be sold. If it breeds better than it looks, it should be kept as a breeder, and if it does not breed any better than it

looks (as is generally the case), it should be sold for beef. Our advice is this:

1. Never place an inferior animal on the market except for beef, and it will do more to sustain the Shorthorn interest than columns of pedigrees.
2. Never offer a barren or unsound animal at public sale, nor at private sale if it be permanently so. It is not enough that the party state all the facts: that will not do away with the bad influences upon the sale. After two or three are offered at any sale people begin to suspect that the management has been defective. It casts a doubt and suspicion over the whole herd. Our advice to every man who finds he has a barren animal in his sale is to withdraw her, and state that he sells breeders and not barren animals.
3. There must be at all times the exhibition of the highest honor upon the part of the breeder. He must be ready to correct all mistakes promptly and fairly. The Shorthorn interest is to-day suffering under the blows of reckless breeders and traders.

We are glad to notice that the breeders of Iowa, in their convention last winter, passed resolutions of such a liberal and honorable character that whenever a vender announces that he will be governed by them full confidence will be given to him.

Now we have said plain words to breeders, we will also speak plain words to buyers. If you attend a sale and find even a portion of the animals are barren and inferior animals, make no bids, and thus force every such animal out of the breeder's market. If you intend to establish a herd, purchase good animals with good pedigrees; and then if you do not have the best success the first year, do not charge it all to the animals. It takes years to become a successful breeder. It is a profession requiring the highest talent. Breeding stock is a school in which the novice must pay heavy tuition fees, but one in which the successful man wins honor and a fortune. If the points here suggested be observed, we are confident the Shorthorn interest will have a glorious future.

## Animal Food in Great Britain.

Leaving babes out of the question, there are in Great Britain and Ireland 33,000,000 mouths which must be filled day by day. The *Standard* shows some interesting statistics as to the means of doing this. Nearly every country in the world contributes something to the great whole. The total live stock in Great Britain on the 4th of June last was 5,697,280 cattle, 28,068,815 sheep and 24,496,659 pigs. In Ireland, upon the same date, there were 3,996,117 head of cattle, 3,987,178 sheep and 1,479,999 pigs. The total supply of animal food of home growth, then, on the day the census was taken was 9,693,396 head of cattle, 32,157,993 sheep and 39,666,578 pigs. With the exception of swine, these figures are lower than those of last week, and the falling off of Irish beasts is very considerable. Of course only a moiety of the number mentioned above are available for meat supply; probably under one-half will be slaughtered during the year. The arrivals of live stock from Europe have lately been considerably augmented by shipments of dead fresh meat, and for several years past tinned meats have formed an important item of importation.

## Liquid Excrement.

How strangely we overlook the value of the liquid excrement of our animals! A cow, under ordinary feeding, furnishes in a year twenty thousand pounds of solid excrement, and about eight thousand pounds of liquid. The comparative money value of the two is but slightly in favor of the solid. This statement has been verified as truth over and over again. The urine of herbivorous animals holds nearly all the secretions of the body which are capable of producing the rich nitrogenous compounds so essential as forcing or leaf-forming agents in the growth of plants. The solid holds the phosphoric acid, the lime, and magnesia, which go to seeds principally; but the liquid, holding nitrogen, potash and soda, is needed in forming the stalks and leaves. The two forms of plant nutriment should never be separated or allowed to be wasted by neglect. The farmer who saves all the urine of his animals doubles his manurial resources every year. Good seasoned peat is of an immense service to farmers, when used as an absorbent, and the stalls for animals should be so constructed as to admit of a wide passage in the rear, with generous room for peat, to be used daily with excrement.—*Journal of Chemistry.*

## Obesity and Show Animals.

At the Warwickshire, England, Agricultural Society's dinner, Mr. Masfen had something to say on the excessive fatness of animals shown at fairs for prizes. The remarks will apply with force to a class of animals often shown at our fairs, but which public opinion, we think, is gradually driving out. From the report of the speech, in the *Mark Lane Express*, we glean the following:

The speaker said there was a class of men whom he might call itinerant exhibitors, and the agriculturists in Warwickshire and in other counties did all they possibly could to support those exhibitors in riding their hobby particularly hard. Those exhibitors thought nothing of rendering animals useless, and then showing them. They were to be seen not only in Warwickshire, but at Banbury and other county shows; they used to be at Manchester and Liverpool; they were at York and all the great Lincoln shows—in fact throughout the country. Those animals made an exhibition very attractive in the eyes of the public, but they were a great bug-bear to the tenant farmers of the county in which they were shown. Would that some one would try to do what could be done towards making the shows more practical? He had looked over the cattle, and there were animals he had seen more than once or twice before. What did those animals do towards supplying the tenant farmer with good beasts at a cheap rate? Nothing at all. It was merely a hobby ridden to excess by the owners. Noblemen and gentlemen were very fond, no doubt, of seeing their names in print as the possessors of something special in the way of stock, but if such animals were allowed to continue to occupy the position they did, agricultural societies would, in his opinion, be far short of doing that good to the country at large which the promoters of these societies intended. He trusted this subject would have the attention of the Warwickshire society and kindred associations, and that there would be a determination to do as was done at Birmingham, to make a rule that animals which were not fit for breeding purposes should be excluded from the competition. If some such alteration were made by agricultural societies their operations would be attended with much greater usefulness than at present.

In reply to a statement made by Mr. Ellwell, Mr. Masfen replied that he had been misunderstood. What he spoke against was the practice of making animals so obese that they were of no service.

## Feeding and Care of Stock.

The world's consumption of meat is rapidly increasing, and the public are much concerned about its price. It behooves farmers to produce it as abundantly and cheaply as possible, to devote increased attention to the improvement of stock and to discover more economical methods of feeding. He who develops his animals in the shortest time and at the least cost is the best farmer. Two-year-old beef and one-year-old mutton are becoming the order of the day among the thrifty producers, and under the influence of modern progress, in preference to the four and five-year-old cattle of former days. Old, full-grown cattle fatten more easily than young animals and will thrive on less variety of food. Young cattle need bran and oil-cake, for the development of bone and lean, or muscle, as well as hay and meal for the production of heat and fat. Farmers should select a breed that will fatten readily, and the animals should be kept growing every day; feed liberally, for, since the greater portion of an ox's food is consumed in keeping its body alive, it is only the surplus accumulations that pay the feeder any profit. A deficient supply of food only cheats the owner; a calf once checked in growth, will never develop into a valuable animal, and any creature that does not show a constant gain is a loss to the feeder, and should be weeded out of the herd. Weeding out the unprofitable animals is as important in the economy of cattle raising, as the destroying of noxious plants and weeds in the vegetable kingdom.

A great loss is sustained by the average farmer who sells his cattle in store condition, when every feeder knows that animals pay better for their keeping in the more advanced than in the early stages of feeding. In store condition they should be fed sparingly at first, then gradually increase the quantity and quality of the food, and since fattening cattle grow more fastidious in their tastes, it is desirable to keep the best hay and feed to tempt them in their latter days. Animals intended



for breeding or for the dairy are benefited by ordinary exercise, but if for the butcher, the less motion the more fat. Exercise accelerates the waste of the body; the harder a horse is worked the more food he requires, hence, in fattening cattle the quieter they are kept the more increase is obtained from a given quantity of food. All cattle require a quantity of food containing woolly fibre; its bulky nature commingling with the more concentrated grains and feed seems to detain the whole mass sufficiently long in the stomach to be thoroughly acted upon and digested. Warmth, combined with good ventilation, is highly important. It is necessary to secure the latter requisite without drafts, hence any openings should be at the highest point, and the best results may be obtained by an opening in the roof, divided vertically into two parts; the hot air rising and passing out at one part, while the cold, pure air pours down through the other. The barn should be warm, yet not so close as to induce sweating, which is weakening and otherwise injurious. The idea that some farmers possess, that exposure to the cold renders young stock hardy, is a fallacy.

Nothing is more important than regularity in feeding. If the usual time be allowed to pass, the animals become uneasy and worried, and every feeder knows a fretting animal will not fatten. A supply of good, pure water is absolutely necessary and especially if dry food is used exclusively. Rock salt should be kept constantly in the feeding troughs. Injudicious feeding is generally followed by scouring, and the nature and conditions of the excretions form infallible guides to the careful feeder. All cattle should be carded daily: it is well known to the groom that nothing will so improve the horse's condition, and in all animals it induces warmth and cleanliness, and promotes the healthy action of the skin. Very poor cattle will sometimes be found to be lousy, a remedy for which is a good wash with tobacco water. Animals of restless dispositions do not thrive as well as those of a quiet temper, and kindly words and gentle actions on the part of the feeder will be well repaid in their peaceful contentment and certain improvement.—*Am. Cultivator.*

**Keep the Animals Warm.**

The first cold blast of wind from the north is a reminder that animals, however tough and hardy, need shelter in winter. It will take less food to keep farm stock over winter in warm stables than when exposed to severe cold. Of course, good wood, stone, or brick barns and stables are expensive, and there are many farmers, especially in the recently settled districts, who have not the means to build such structures, but there is no one too poor to furnish some kind of a shelter for their animals. If a man cannot afford to build what he desires, let him do the next best thing, and build something which will furnish shelter, even if it is nothing better than a shed, with sods for walls, and a roof of brush or cornstalks. All attempts at elegance or extra convenience may be left out of the question where a man's purse is light; still, it is economy to keep all farm stock sheltered from cold, wind, and storms in winter, even if the owner does not possess enough of the humane feelings to care for their comfort.

More than one-half of all the diseases and parasites which infest farm stock are the direct result of neglecting to furnish them with proper food or shelter during cold, stormy weather. Cattle of all kinds, when forced to remain in muddy, wet yards, during cold weather, are liable to various diseases of the feet, such as hoof-ail and foot-rot, and the best preventive is dry ground, or yards littered with straw, or some similar coarse material. Standing a long time in filth, whether in the stable or yard, is almost certain to bring on diseases of the feet. All kinds of farm stock are liable to take cold when exposed to storms, and from this comes a weakened constitution, which invites various kinds of diseases and parasitic insects. Weakened vitality or vigor in either plants or animals opens the way to hundreds of parasites which are resisted by the healthy individual, and the farmer should keep his animals in a condition which will enable them to ward off the attacks of such enemies. He has only to think of his own comforts, such as nutritious food and warm clothing, and consider how the reverse of these conditions would affect him, to understand how it is with his animals.

It is unnecessary to go into details in regard to the building of sheds, stables, or other kinds of structures for sheltering stock in winter, as every man knows best what materials are at hand or

within reach suitable for such purposes, but the fact should be apparent to all breeders of animals that in all cool climates some kind of protection is required. Out on the plains and prairies of the west and south-west it is often asserted that sheep need no protection in winter, and it is even claimed by some that they do better without it than with it; but the frequent heavy losses by cold, starvation, and diseases plainly show that all this talk of mildness of climate is an error. Sheep and other farm stock may live through the winter without artificial shelter or more food than can be obtained on the range in these favored localities, but they would certainly do better with added comforts every winter, and occasionally heavy losses may be avoided by making the necessary provision to protect and feed them when severe storms prevail.

**Care of Ewes.**

A correspondent of the *Agricultural Gazette*, England, gives the following in relation to the care of sheep, which is as applicable here as there, except that we do not have to counteract the effects of watery food as they do, from the feeding of large quantities of turnips.—If there is no permanent yard, a temporary one can soon be erected by setting down a double row of hurdles and staffing them between with straw. We began a month before lambing to remove our ewes every night from the turnip pen to the yard, where they have a fodering of straw, night and morning, in the cribs; the yard is supplied with fresh litter daily. Here they have a dry, comfortable bed. Ample breathing space, uncontaminated by noxious vapors, gentle exercise and a moderate supply of pure water are conducive to health. It is surprising the quantity of barley or oat straw a flock of ewes will consume; the dry food has a salutary effect in counteracting the watery influence of the turnips. When the food of the breeding ewe consists principally of turnips during the last six weeks of gestation, the difficulty, and consequently the danger, of yearning is greatly increased. During the latter period of gestation the nutriment derived from the food is principally expended in increasing the size of the fetus *in utero*, instead of being stored up by the mother, hence the increased difficulty and danger of parturition. In order to strengthen the ewe and enable her to safely withstand trials through which she must pass, and to encourage the flow of milk, a mixture of oats and maize—half a pint to a pint per day—should be given for a month before lambing.

**FAT CATTLE SHOW.**—The Birmingham, England, fat stock show is to be held Dec. 1 to 6. The principal prizes to be contended for are, the hundred pounds' prize for the best Hereford in any of the classes, the hundred pounds' prize for the best Short-horn, fifty guineas for the best Long-horn, fifty pounds for the best Scot, and fifty pounds for the best animal in "other pure breeds," or cross-breeds, and the Elington challenge cup, value one hundred guineas, to be won three times, or in two consecutive years by the same exhibitor. Of this the *North British Agriculturist* says: "This has now been won once by four exhibitors, that is, by Mr. E. Wortley in 1873, by Mr. Robert Wright in 1874, by Mr. Richard Stratton in 1875, and by Mr. Samuel Kidner in 1876. There are also the usual liberal prizes for the various classes of cattle, sheep and pigs, besides those offered for poultry, corn, roots and potatoes.

**CATARH IN SHEEP.**—A recent writer says: The treatment consists in removing causes, good nursing, administering slightly mucilaginous drinks, as oatmeal gruel or linseed tea, along with a gentle stimulant, such as half a teaspoonful of ginger. The antiseptic effect of a small quantity of clean pine tar rubbed upon the sheep's nose, some of which the animal will lick off and swallow, will be beneficial. If there is fever, and the nose is hot and dry, the following may be given, viz.:—Epsom salts, ½ ounce; saltpetre, 1 drachm; ground ginger, 1 drachm. This should be mixed with molasses and placed on the back part of the tongue with a long, narrow-bladed, wooden knife or spatula. The animal's head should be held up until the whole is swallowed in repeated small quantities. Or the dose may be mixed with thin gruel and administered by means of a small horn.

An English sheep breeder sheared 125 Lincolnshire sheep this spring, all under 14 months of age, which produced 2,257 pounds of wool; 60 of their fleeces weighed 1,201 pounds, and 4 weighed 23, 24½, 25½, and 30½ pounds respectively.

**Dairy.**

**The Elmira Farmers in Council.**

From a report of the meeting of the Elmira Farmers' Club we take some extracts on subjects of great interest to us in our profession as agriculturists, adding some brief remarks. It would give us much pleasure to publish similar reports from our Canadian farmers, but as they give us no opportunity to do so, we take up our reports from Elmira, State of New York.

One of the first subjects brought before the meeting was, if bones will dissolve when broken to small pieces and placed with alternate layers of wood ashes mixed with water. In a recent number of the *FARMERS' ADVOCATE* we replied to a similar question, and we have since had enquiries for further information. The reply by the secretary of E. F. Club was as follows:—

"There is no difficulty in dissolving bones in this manner, but the process will be hastened if the mixture is moistened with chamber-lye and soap-suds, from time to time. Unleached hardwood ashes are best and should be used whenever they can be obtained. Another simple method of utilizing bones has been devised by a Russian chemist. It is as follows:—Mix together bones, ashes, fresh lime and water, in the proportion of forty parts bones, forty parts ashes, six parts lime and forty-five parts water. Leave until the bones soften and then stir the mixture with a spade. It forms a valuable compost."

**FEEDING BREWERS' GRAINS.**

W. B. Armstrong says:—I have fed brewers' grains with other feed for a number of years, and found them to be the best feed we can get, both for making beef and milk, and, if fed prudently with either hay, grass or corn fodder, they will make good milk. Some are pretending that the milk made from grains is destructive to life, but I can safely say, that you can not find a healthier class of farmers than the Orange county farmers. Our doctor says that longevity is on the increase.

President Hoffman says:—We ought to emphasize the mixture. Everything depends on the way brewers' grains are used. Mixed with other food in suitable proportion, they are valuable. The mixture with other feed, is what cows want. No one kind is a perfect feed in itself. As a rule farmers are not careful enough to give their cows variety in food. Some time ago I asked a man, "What is your principal feed?" he answered, "brewers' grains." "What else," I asked, "Nothing," he said, of course hay was excepted. Another said, "I feed beets; they are good to make milk." "Well, what else do you feed?" I asked. He had a similar answer. So it seemed that each farmer with whom I conversed believed he was doing well enough if he gave one kind of food besides coarse fodder. When I advised giving variety they said, "it cannot be done with profit." There is the mistake. Pork and beans make a very satisfactory meal for a hungry man. They might do for a week but they would make a poor diet for all winter. Mr. Billings told us once when we were estimating the value of turnips as cattle food that it would be as easy to fatten cows by throwing snow balls at them. Now I say, poor as turnips are, they go to make up variety, and may be fed with great advantage, although I do not believe they would make good food alone. There is no kind of grain nor roots suited for continued use without other food. We all know that barley is good nutritious food for stock. Now when it is malted and used by the brewer it has not parted with all its nutriment, so it may be still good for cattle.

In practical use I have found good results from very liberal feeding of brewers' grains, and I have found no bad effects. The best results I ever had from churning milks in winter was obtained while feeding brewers' grains. With them I used buckwheat bran, which is said to be the poorest feed made from any grain. The milk made from such feed is said to be light, and the butter from it white. Yet I found this mixture and good hay produced butter of good quality. I want all the kinds of food that I can get for my cows. Oil meal is good—there is nothing better as a concentrated feed; but other substances mixed with it are necessary to produce the best effects. If I can secure the supplies which I consider almost indispensable to profitable results, I would not take my



cows into winter without thirty or forty tons of buckwheat bran if I can get it; and eight hundred bushels of corn meal or its equivalent; and all the roots the cows can eat after consuming liberal feeds of the meal and bran, with good hay besides. When I began feeding brewers' grains I was told that they would stimulate milk production to such a degree that the cow would sink under it. Perhaps they might have such an effect in some cases when fed alone; but I saw a cow in this city shut away from other feed for fifteen months, as I was informed by Mr. Briggs, who told me that she had been fed nothing but brewers' grains during all that time, the sole addition to her sustenance being water; and she was fat. Speaking of the quality of the milk, he said, "It is better than I can get from your wagon." I suppose he meant to be understood that it was good as milk could be.

All who have been conversant with stock will be willing to endorse the opinion expressed by Mr. H. that no one kind is a perfect food in itself, and that the greatest profits to be obtained from feeding are to be had from a variety in food. From the opinion entertained of the low value of turnips for feeding we wholly dissent. 'Tis true that tur-

J. S. Van Duzer:—Last year a gentleman here from Jefferson County expressed surprise that we should churn milk, a practice which he declared almost unknown in his locality.

Mr. Bird:—In my experience as a dairyman I have been satisfied to churn the cream. It is certainly less laborious, and has proved quite satisfactory. I have churned only the cream for years. We have tried churning the milk after the cream was taken off, and we got no butter. I know there are men who say that the milk and cream churned together produce butter of better quality than can be produced from the cream alone. Some buyers say that they can distinguish readily between the products of the two methods, but I have seen them fail when they made the trial.

President Hoffman:—In this county the practice is to churn all the milk, or nearly all. It is not claimed that more butter is obtained than if the cream alone were churned, but it is believed that it has better quality, and that the butter so made keeps better. Of course there must be suitable provisions for handling and power for churning. With horse power, or better still, a dairy engine, it is not a hard task to churn all the milk.

Mr. Reid introduced the subject of pipes for

stakes and numbers for each kind. The packing clerk calls out the number and variety wanted, one man picks up the trees, another attaches the label, a third ties them up, a fourth carries them to the packing men; here they are carefully packed, damp moss is put about the roots, the boxes are tightened by a screw and wrench, and iron and wooden bands are nailed around them. While we were there they were packing a number of boxes for the Manitoulin Islands. Trees are sent from these nurseries to all parts of the Dominion, some few are sent to the States, and some have been sent to Australia.

The safest and best way to get trees that you can depend on is to send your order direct to some good established nursery, name every tree you order, and keep a copy of the order. If the trees are not right, and the fruit does not prove to be what you wanted, you have a remedy; but if you sign a paper to some pretender (and they are legion) you are very apt to be disappointed. These



PACKING FRUIT TREES AT ST. JAMES' PARK NURSERIES.

nips without other food in addition are not food sufficient for any animals, but it is also true that when fed in addition to hay or even to well-fed straw they do fatten cows, producing beef of a high quality. Of this the writer has had actual experience. Animals put into the stalls in fine condition, and fed on hay and turnips, were often well sold at a high price in Liverpool markets as good beef.

#### CHURNING ALL THE MILK, OR CHURNING THE CREAM ONLY.

On this question there was quite a difference of opinion. The Secretary of the Club read a letter from Mr. Warriner, in which he says:

"In the discussion before the Club last week I was a little surprised at the idea that clear cream produced as good butter as when churned with the milk. We have been led to believe and practice differently, for the reason that churning milk with the cream avoids much friction which injures the grain of the butter, which can readily be seen with a good glass; and when milk is set about three inches deep, at about fifty-eight or sixty degrees, more cream is secured by taking off about half an inch or so of the milk, as it seems to be a well-known fact that quite a portion of the cream remains below the surface."

conveying water for farm purposes. Pine logs bored and laid for pipes have been known to keep perfectly sound for fifty years, when laid in clay. So laid they were said to have been almost indestructible by rot; but they are liable to rot very soon when laid in loose earth or over gravelly knolls, where the bore is not kept full of water. In such cases it would be better to exclude the air by carting blue clay, if it can be procured, and packing the ditch closely with it. He had taken up the logs that failed in the loose earth and had replaced them with enamelled iron pipe. This pipe, of an inch bore, cost nine and a half cents a foot; it is in pieces which join together by screws; there is no rust—in fact, the water does not seem to have any effect on the enamel.

#### Packing Fruit Trees at the St. James' Park Nurseries.

When on the nursery grounds of Messrs. Pontey and Taylor, near this city, we were much pleased with the activity, order and work of the packing yard. A large number of men were on the ground, digging trees, shrubs and plants, and teaming them to the packing yard. The trees are laid along in rows, each variety by itself, with

are some good reliable agents traveling with fruit, books, bottles, &c., &c., but truthful and reliable agents in this line are about as scarce as hen's teeth; we have been duped by them more than once, and can count our losses by hundreds of dollars by having improper trees.

#### Chrysanthemums in Pots.

As these are now filling their pots with roots, they should on no account be suffered to want for water. The plants be best stood out doors and the pots partly plunged in a bed of ashes. As soon as the pots get well filled with roots the framework of the plants is next formed, and as the shoots extend they should be tied on to stakes to keep the branches from being blown about by the wind. For conservatory purposes a neat, upright growth is to be preferred to twisting the shoots round a framework in order to get the plants dwarf. It is an unnatural style, and not at all necessary. Growers cannot well be too particular in the matter of water, for if it be neglected, the lowermost leaves fade and turn yellow, and ultimately drop off, which gives the plants a naked appearance. As soon as the pots become well filled with roots, a little weak manure water may be given with great advantage, as it will assist the production of bold, well-colored leaves.—*New York Herald.*



**The Horse.**

**The Carriage Horse.**

The horse large enough and in every way suitable for a carriage horse is at the same time a good horse for the farmer's use, and for all purposes. The carriage horse needs size—1150 to 1200 weight, and with such substance he is a very respectable farm or team horse, and naturally is a good roadster. We glean the following from an article on this subject in the *Kentucky Live Stock Record* :—

To gain style, finish and gamey coach teams it is necessary to have a strong infusion of the thoroughbred blood. Many trotting sires scattered through the State of Kentucky possess all the requisites to breed the fine coach and coupe-horse; but we cannot name them for fear of giving offence to some extremely sensitive people. But what is wanted in a sire of coach horses is plenty of substance, well placed, deep and well proportioned body, strong and clean bone under the open knee, sound and tough feet, with fine and keen action, lifting their feet high and ranging in height from fifteen to sixteen and a half hands. It will not be out of place to say that Alexander's Edwin Forrest and his descendants furnish the best specimens of this kind of horse we have had for years. This strain mingled with mares possessing a strong infusion of thoroughbred blood would make a most capital cross, and produce an elegant and stylish coach and harness horse.

The great difficulty in matching horses or finding a pair of good matched horses is well known to dealers. Single horses of some style and finish can be found, but the great difficulty is in matching them. This is owing to the miscellaneous way in which horses have been bred for the last twenty years. A team, matched, sixteen hands high, well made, with style and finish, are hard to find, and command a fancy price; whereas five and twenty years ago any number of such teams could be picked in Kentucky. Another cause of this lack of coachers is the mania for breeding trotters, which have been bred far beyond their demand. If farmers will turn their attention to breeding fine coach horses, they will find a ready market, save the expense they annually incur in developing the speed of young trotters, and do themselves and the State a great profit.

**Horses in England.**

Mr. R. H. Hillhouse calls attention to degeneration in some classes of horses, in the *London Agricultural Gazette*, as follows: I saw a month ago a lot of buck-skinned, lathy, fiddle-headed horses, on the road at exercise, troopers! quite unfit for campaign, narrow middle pieces, small sheaths, weak necks, weeds! The heads of the departments ought not to overlook the injunction, *Respicere finem*; it is a national question, and one of moment to England. Why should our troopers be mounted on the foreigner's culls? Horncastle is just over, and a sharp trade was done on the export account. Horses are as essential as men in war; i. e. success, *ceteris paribus*, depends on the quality. I like a stiff dock, full sheath, circularity of rib formation—the true indices of constitution, Blood head, thin dock, flat cannons, oblique shoulders, and long quarters—attributes of breeding. Sound feet and legs for work. We send animals of real practical utility to the Continent! We get soft phlegmatic horses and a gorilla in return!! As we possess, the sort that—

"When the country is deepest I give you my word,  
'Tis a pride and a pleasure to put him along,  
O'er fallows and pastures he skims like a bird!  
For there's nothing too high, nor too wide, nor too strong,  
As the ploughs cannot choke, nor the fences can stop,  
Our clipper that stands in the stall at the top."  
Let us value our breed and maintain the standard.

Another line by Byron Webber, and I'll say adieu.

"A handsomer colt never danced on the daisies,  
That satin coat covers tough sinews. Yet hold!  
Let him collar the hill ere you carol his praises,  
Base metal will glisten as brightly as gold;  
Behold him! He's cut it!! Ears drooping, flag working,  
The beauty's a craven! The other runs well;  
She's plain and three-cornered, but—has not learnt shirking.  
Just remember, my boys, that breeding will tell!!

Blood! speed!! and bottom!!! The true characteristics of the English and Irish horse.

**Training Colts.**

We constantly see inquiries in the agricultural journals, from farmers, asking for some information as to the best method of handling trotting colts for speed. Without denying the knowledge which comes from experience, of professional

and patience is competent to perform. If the intention is to make a matured horse of the immature animal at two years of age, we acknowledge that professional experience may be required; but we believe that most sensible men are fast reaching the conclusion that the course pursued by some breeders in this connection is a suicidal one, and one not calculated to eventually fill the purse. If a colt is taken up for harness the fall he is two years old, and is driven gently a few miles every day with a light weight on a smooth road, if there is any trot in him he will come to it gradually, and will show by his gait and action what there is in him. If on the contrary he is driven in his suckling form, and is fed and blanketed, and sweated and rubbed, and speeded for half miles and quarters, when he is a yearling or a two-year-old, in nine cases out of ten he will give up, and you will have a useless, over-worked, hot-house animal on your hands. Of course there are many who hold contrary views from these, but we only ask the fair judgment of the average thinking men as regards the two systems of late and early training, and feel satisfied that experience and good sense will sustain us.—*Journal of Agriculture.*

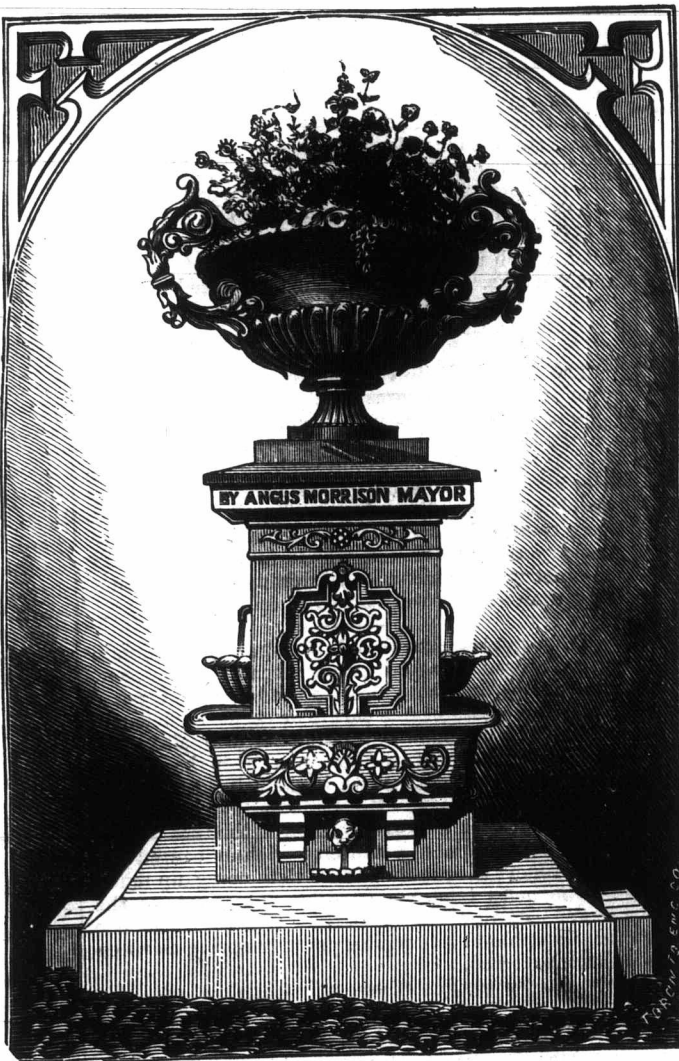
**A Worthy Example.**

When in Toronto last summer we noticed a handsome drinking fountain erected on the market. Horses, dogs and men were refreshing themselves at the different founts. The day was hot; one poor horse left his stand and took a drink, without the knowledge or consent of his owner. This fountain was presented to the city by the Mayor of the city. Such a gift stands as a memorial of use, and an example to the wealthy or benevolent. Our corporate bodies might with advantage erect drinking fountains on many a thoroughfare. The temperance organisations would do a great deal of good if they would expend their collections in erecting drinking fountains; they might save many a poor thirsty person from entering saloons. We hope many may follow the example set by Mr. Angus Morrison, and that every weary traveler may be able to get a drink of good, refreshing water fearlessly. We were so much pleased with the fount and the idea, that we instructed our artist to make a cut of it. It would be well to have a drinking fountain in every market square.

**Horses in Europe.**

Russia leads all other nations in the number of its horses. In 1876 she had 21,570,000 horses, or more than all Europe beside, and 60 per cent. more than are owned in the United States. Compared with other countries, Russia has one horse for every three and a half persons, Austria one for every ten, Prussia and Great Britain one for every eleven, France one for every twelve, and Italy one for every twenty-seven. Far back into the history of Russia the rearing of horses has always formed a notable branch of national industry.

The Government of Russia devotes special attention to the encouragement of horse-breeding. There are no less than twelve imperial studs, nine of which are in Europe and three in the Caucasus; there are also fourteen Government depots and country stables spread over the empire, each having from 60 to 150 stallions for public use, besides which are about 2,500 private studs that own 6,500 stallions and 69,000 brood mares. The Government offers prizes and medals at races and exhibitions for improvement in the various breeds. Over 400 horse fairs are held annually, and at fifteen of the most important of these from 2,000 to 10,000 horses are offered for sale, while in all some 300,000 change hands at these fairs. During the period from 1870 to 1875 Russia averaged an annual export of horses exceeding in number 25,000.



BY MAYOR MORRISON'S FOUNTAIN.

trainers, we would warn the casual breeder of the fact that nine-tenths of those who pretend to be "trainers" are nothing else than ambitiously disposed robbers, who with brazen effrontery have pushed themselves to the front, with no more right to the title of trainer than the veriest cowherd that ever followed his kine to the field. A little common sense and the average amount of patience will train a colt at much less cost and quite as well as your would-be professional trainer.

When a horse has reached maturity and gives promise of speed, it is time enough to call in the assistance of the professional whose greater experience will be of service. But upon what score do we look to a trainer to handle a colt? Can't we halter him, and bit him, and teach him to lead as well as ourselves? and if so, why do we seek the services of a man who robs us of from thirty to fifty dollars a month, for the performance of a duty so simple? If a colt is handled gently when a suckling, and is taught to "love, honor and obey" his master at that age, as he should be, his after-handling, until he is four years old, is something which any person of ordinary intelligence



## Agriculture.

## Fall Plowing and Drainage.

The value of fall plowing has generally come to be recognized in the West, and yet a large majority of farmers imagine that the later the land is turned over the better. Consequently this important work is left so late that the ground freezes up, leaving much land unplowed that should have been turned over. Again, many otherwise good farmers think that land may be plowed in the fall when wet, without detriment to its texture. It is true the injury is not so great as would have happened if plowed wet in the spring, since the action of frost during the winter mellow and breaks up the soil to a large extent. All that the observing farmer need do to satisfy himself as between land plowed wet in the fall and that plowed dry, or when in a friable state, is to make the experiment on contiguous lands and note the result.

We should never hesitate to plow land when very dry in the fall. It is only a question of power. The land plowed when very dry will come out in the spring in the nicest and most friable condition, and, as a rule, such land plowed early in the season will be in better condition than that plowed later. The reason is obvious. The very dry soil is turned up often in lumps, and thus a greater surface is exposed to the combined action of air, water and frost. Even for corn following a crop of small grain, we have had excellent success upon deep fall plowing—say 8 inches, even when not re-plowed in the spring. Nevertheless, the easiest and cheapest way to fit such land is to lightly re-plow it just before planting, since the labor necessary to fit it for the seed, with cultivators, is about equal to a light plowing. All that is needed in the spring following is to move the soil to a depth of three or four inches.

The chief value of fall plowing is when small grain is to be sown. For spring wheat and grass seed, it is absolutely necessary to success; and for barley, oats and flax, we consider fall plowing to be fully as much value as for wheat.

In fall plowing there will be a number of very important points gained. 1. The labor is accomplished at a season when the press of work is not severe, and the teams are comparatively idle. 2. The soil is generally in the best condition for plowing. 3. A crop of stubble and weeds is turned under, which, if well done, gives no trouble in spring. 4. The soil is thoroughly aerated and broken down during the winter, and if not disturbed until dry enough for working in the spring, will come out in a most friable state. 5. A tilth being brought at the surface, the bottom remains in that firm state necessary to the best success with small grain. 6. It enables the farmer to open water-ways and drain-furrows to carry off surplus water, thus often enabling him to get in his crops while his neighbors are waiting on the weather. 7. It causes the land to soon become warm in the spring, thus forwarding the season fully a week, and in the case of untoward weather, sometimes ten days. 8. It enhances the productiveness of the crop by allowing its roots to take hold of the soil while yet other land is sodden with water. 9. This advantage is carried all through the season, when it happens to be wet, since instead of the surplus water soaking into the soil, and therefore only cast off by the slow process of evaporation at the surface, the soil loses its heat, and often becomes so chilled from this cause as to occasion the crop to turn yellow.

We have lately taken up this question of surface drainage, and it is not necessary to refer to it again here, except to remark that it is the most important problem with which the Western farmer has to deal. It must always precede thorough drainage, from the simple fact that the average Western farm will not bear the cost of underdraining. The time, however, will come when our lands will bear this expense. Until this time we must use the means which we have cheaply at hand. These are fall plowing during the dry season, followed by a system of furrowing to such natural out-falls as will enable the surplus water to be carried easily and quickly away.—*Prairie Farmer.*

Mr. Hallett, of Bristol, England, well known for his successful experiments in improving the quality and yield of seed grains through careful selection, in relation to this question says: "Very close observation during many years has led me to the discovery that the variations in the cereals which nature presents to us are not only heredi-

tary, but that they proceed upon a fixed principle, and from them I have deduced the following law of development of cereals: 1. Every fully-developed plant, whether of wheat, oats or barley, presents an ear superior in productive power to any of the rest on that plant. 2. Every such plant contains one grain, which, upon trial, proves more productive than any other. 3. The best grain in a given plant is found in its best ear. 4. The superior vigor of this grain is transmissible in different degrees in its progeny. 5. By repeated careful selection the superiority is accumulated. 6. The improvement, which is at first rapid, gradually, after a long series of years, is diminished in amount, and evidently so far arrested that, practically speaking, a limit to improvement in the desired quality is reached. 7. By still continuing to select, the improvement is maintained, and practically a fixed type is the result."

Talking recently to a Northwestern farmer upon the difference between farming in his country and in the South, he asked: "Do you use wind-mills in the South?" When we assured him we had never seen such a thing in the cotton states, he expressed great astonishment, and assured us they were indispensable in his prairie country; for, said he: "Where streams are lacking we sink a well, place a wind-mill over it, and by its power draw all the water for our stock, and occasionally irrigate a piece of land." We thought much of this subject during the month of May last. Not a shower of rain fell from May 5 till June 10, and every day the wind blew steadily for at least ten hours during the day. Had our farmers erected wind-mills near the water courses they could have been made to pay for themselves during that time in irrigating the low lands, which in most cases became too hard to work, and upon which the crops seemed to grow not an inch in six weeks. Wind mills can be erected for less than seventy-five dollars each. Why do not our farmers use them.—*Charleston News.*

The *North British Agriculturist* says: The potato disease is still spreading. The wholesome portion of the crop in many a field, will we fear, scarcely pay lifting. That potatoes will be very dear eating before the next crop is obtainable is generally believed, and some go the length of expecting them to be nearly as dear as eggs. Store cattle are a stiff sale at reduced prices. Of the fleecy tribe ewes are dearest, which is attributable to the fact that they can be wintered on fewer turnips than hogs or wethers.

To keep roots sound and plump, Mr. Benjamin P. Ware, of Marblehead, a successful gardener, cuts off the fine roots close to the body, and pares away the crown of the turnip or beet sufficiently to destroy all buds or rudiments of buds. The thus doctored roots are then placed in barrels of sand or covered with earth in the cellar to prevent wilting. Removing the buds and rootlets prevents that corkiness so common with these roots when kept till late in winter, which is caused by the support of sprouts and rootlets using up much of the more tender and edible substance of the roots. Turnips and beets thus treated are as nice for the table in late winter or early spring as when first harvested.

Johnson says of millet that its grain is quite equal in nutritive value to the average of English wheats. No one can doubt its value after seeing a field of German millet ripe and ready for the sickle. It contains 9 per cent. of nitrogenous matter, 74 of starch and sugar, 2.6 of fat, with 2.3 of mineral matter.

Decaying vegetable matter about the houses, around the walls, and in the cellar, are prolific causes of diseases in the farm house. Ill treatment of cows, getting them excited and then feeding the milk to children, is a practice liable to be attended with fatal results. Bad ventilation, attended with impure air, causes catarrhal and skin diseases of our animals, especially when obliged to breathe the impurities of decaying manure. Better ventilation of sleeping rooms is urged, and more outdoor exercise for the farmer's wife.

Analyses of leaves and wood show that of earthy matter or ashes, the mature foliage of the elm contains 11 per cent.; the solid wood less than 2; the leaves of the willow more than 8 per cent., its wood only 0.44; those of the beech 6.67 per cent., the wood only 0.35; those of the European oak 4.06 per cent., the wood only 0.22; those of the pitch pine 3.13 per cent., the wood only 0.37.

## Clawson Wheat and Flour.

The real quality of Clawson wheat is now a subject of great importance to Canadian farmers. Of no other variety of white wheat has there been so much sown this season. This, in itself, is proof sufficient that its yield, at least in the past season, has given satisfaction to those who had sown it, and our recommendation of it to our readers for trial was well warranted. Its yield has been very large; so far, good—but there has arisen a prejudice against it; it has been said that its flour is not equal to that of some other varieties and that its market value is consequently less than that of other wheat. Of this we have no sufficient proof. There is very strong testimony that Clawson wheat is not only a good wheat for yield, but also that it makes good flour and gives the miller a large return. To this purport is the following letter from a correspondent of the *Country Gentleman*, which we here give somewhat abridged:—

Having grown this new wheat for the first time the past season, I have watched with much interest and some anxiety the varied reports concerning it which have appeared in your columns, and in various other portions of the agricultural press. Although much pleased with its appearance and growth, I confess to a deal of uncertainty as to its general flouring capacity, which, however, was entirely due to the few unfavorable reports emanating, as I then supposed, from reliable sources. Since the harvest, however, the subject has been definitely settled in my own mind, and all further solicitude in regard to the Clawson wheat is happily dispelled.

Last autumn I obtained 3½ bushels from one of your advertisers in New Jersey, it being the best sample received, and the finest seed grain I ever saw—white, clean and plump. I entrusted three bushels thereof to the care of a clay oat stubble, newly drained, and exposed to the elements; and, although the latter proved quite inauspicious, owing to a most unprecedented lack of moisture throughout, it wintered well, grew nicely and produced a fair crop, yielding better than the Treadwell, Deihl or Mediterranean, commonly grown here; and I think I can now show the finest wheat in the county. It is very white, plump, clean and hard, weighing 63 pounds to the measured bushel; straw very bright, standing up well; was fully ripe July 6th, and, contrary to the experience of many of your correspondents, I did not find it to shell any more than other varieties in the process of harvesting. It threshes nicely, being awnless, and having very little chaff, easy to handle, except that the sheaves were very heavy. Living within a few miles of a good custom flouring mill, I repaired thither with four measured bushels of this doubtful grain, half expecting to be told they could not grind that kind for the want of proper machinery. Well, I found the miller in charge to be a green German, just from Castle Garden. This fact was certainly not specially in favor of my test. In a few days I obtained from this grain—which I will assume to have been 252 pounds, not having weighed it—159 pounds of fine flour and 63 pounds of bran and middlings, there being a very small portion of the latter. The toll, 25½ pounds, had, of course, been taken out previous to grinding, thus leaving, if my assumed weight be correct, 4.4-5 pounds as waste in the process.

Although in truth the flour received was very beautiful indeed in every respect, and the miller pronounced it of the finest description, it was not yet ready for the table, and might prove treacherous on the kneading-board. It thus remained for my wife to fully complete the cereal test, which, of course, was to be in the form of bread, as all will doubtless admit that good bread flour is good flour, and good for anything else. Not to make any exorbitant claim for my wife as a bread-maker, however—they are so modest, you know—I was still quite satisfied to trust the Clawson reputation to her care. But she nearly failed to fully establish it at the first trial, by using a new variety of much puffed yeast, which proved entirely inflated with printer's ink, and quite spoiled our Clawson bread. The next trial, however, by the usual method, was entirely successful in producing most excellent bread, very white, light, tender, sweet and delicious, and since then our Clawson flour has made the very best of bread, cake, biscuit and whatever else was required of it; hence we regard it of the very first quality in every respect.

Whether or not this wheat be deficient in gluten,



as many imagine, I am unable to say, but I certainly find no occasion to mix it with any other variety for flouring, as one correspondent suggests. As to there being an art in milling there can be no question, but certainly my flour was not the product of much skill or experience, especially in the milling of grain grown in this country, with our appliances. I do not believe such special skill to be any more necessary for this than other wheats. A correspondent reports a miller who claims to have made a barrel of flour from 4½ bushels of the Clawson. It will be seen that my 159 pounds from 4 bushels, besides the toll, is still better than that. I was much pleased in reading an article in your paper on this wheat, from the pen of Mr. Geddes, a few weeks since. He considers the Clawson the best variety of wheat now known to him, and assuming for him a fair knowledge of modern cereals, it is strong talk, though for my own part I am inclined to believe him; at least, I have just put in a larger acreage of it than before, and sown no other. Last year it was sown broadcast, as evenly as possible. This season it was put in with Bickford & Huffman's drill, on the 12th ult.

#### The Farmers of the West in Their Glory.

Never were the prospects of the farmers throughout America brighter than they are now; and never was a change for the better more needed than from the harvest of '76 to that of '77. There are good paying prices for all the produce of the country, and a crop the heaviest on record. Whether the present prices may continue during the winter is a matter of uncertainty, but one thing is certain—the luxuriant crops are a blessing not only to the producer in America, but to those also in other countries who will be looking to the New World for the necessary breadstuffs. North American exports of grain will this year exceed any before known. The *London Times* of the 9th ult says:—“Since the beginning of the present year we have imported 23,000,000 cwt. of wheat, against 18,000,000 cwt. last year. Curiously enough the increased supplies have not yet come from the United States, which sent us nearly 4,000,000 cwt. less this year than last. Our chief sources of the extra supply have been British India, Russia, Germany, France and Egypt. No doubt India, Egypt and Russia have been stimulated to export more largely than usual by their financial necessities, but the figures are none the less significant. On that account it is just possible the corn dealers in the United States may hold back a little too long in the hope of obtaining higher prices, and it is quite evident from the ease of the market at present it will not yet, at all events, bear squeezing.”

Under the significant heading, “Fair Weather Ahead,” the *Prairie Farmer* represents the feeling of American farmers as follows:

On the 5th of the present month nine ocean steamships, with over 390,000 bushels of grain, sailed from the port of New York. The demand for freight accommodations is so great that the steamship lines have been compelled to put extra vessels into commission to meet the increased volume of exportations. Butter and cheese are shipped in large quantities, and canned goods, one of the most extensive of our native industries, are beginning to move actively. The experiment of shipping oysters is repeated, 245 barrels going out in one vessel. Another cause for congratulation is the material increase in the volume of the wholesale trade for home supply. In Chicago the merchants say trade was never better, and many of the larger establishments are running night and day to fill orders.

All these indications speak well for returning trade. The resources of the country are almost without limit, and can be drawn upon all the more freely because they have so long lain idle. The West with its vast fields of grain, the South with its cotton, and the North and East with their industrial and mechanical productions, form a union of articles for which there must always be more or less of a demand across the water. Europe has been suffering from the same commercial stagnation that has paralyzed us, but that she is recovering from it is evidenced by her demands upon our productions. All trade must, of course, be based upon the law of supply and demand, and the country may have been plethoric in rich crops and still be poor, were there no demand for them. It is cause for congratulation that the demand has come, and that the bow of prosperity beams so brightly.

#### Seeds for Next Year's Planting.

“Like begets like.” There can be no doubt in the mind of any reasonable man of the truth of this old proverb. Not only is it true in its full extent as regards animals, but it is also true of the inanimate objects that are to us as agriculturists, and to all who are dependent on our labors for the fruits of the earth, matters of great interest and of high importance. How important it is for us to select at all times the very best seed that it is possible for us to obtain—such seed as we may reasonably expect to give us crops in return of good quality. It must also be an object of great care to procure not only seeds that are good in themselves, but also most suitable to the climate and soil. To this important branch of farm husbandry farmers are paying greater attention than ever before. Agriculturists who devoted the powers of their minds as well as of their hands to this science—for such it undoubtedly is—have long been sensible of its importance, and have impressed it upon others; but it is only of late that farmers as a class have acted on this principle, and been particular in the choice of their farm seeds.

On this subject, “Seeds for Next Year's Planting,” the *Western Farm Journal* has a well considered article in its last issue, which we re-publish, slightly abridged, for our readers:—

The excellent crops of 1877 have not come of any unusual care observed in saving seed from the crops of the preceding year, but more likely from the partial rest given the land by reason of its having produced two light crops in succession, just preceding the present year. We may add another reason, viz., that the wet weather which came so freely after sowing and planting, and the dry weather of July, wore opportune events, producing, in the first place, vigorous growth, and in the second place, prompt filling, and thorough ripening of the small grains.

We cannot look for a frequent repetition of these influences, but on the other hand, good crops will come to the farmer, as a rule, only upon rigorous attention to all the means that usually contribute to their production. Among the most important of these is attention to seed. As we have before stated, the excellent wheat berry of the present year affords farmers ample guarantee in that direction, and it is a question whether seed for the coming two years should not be saved from this year's crops. The farmers of Europe are much more precise in these matters. Much attention is at present devoted to the selection of seeds. Ordinarily judicious siftings before sowings; steeping and skimming off the light grains are the practices employed. But not so much attention is paid to the selection of seed, the product of a different region, or of another latitude. The director of the agricultural school of St. Remy, in order to ward off the vicissitudes of temperature in the case of winter sown wheat, prepares a mixture of seeds cultivated in diverse localities, so that less blanks are caused by frost, or in the case of weak tillage on the part of a plant. Professor Ranjou, of Clermont, has drawn attention to the fact that the quality of seed varies in the same fruit, for example, with the position which it occupies. He recommends caution in selecting plants as seed-bearers, as the vigor of the plants may be deceptive; they are not always the most beautiful parents that produce the most beautiful offspring. In the case of fruit, make a choice of those that are most voluminous, and of the largest seeds therein contained, remembering that it is easier to perpetuate defects than good qualities. In a bunch of grapes the largest berries are those that have secured the most room.

M. Petermann, of Belgium, has studied the seed question as affected by latitude, in its bearing not only in the degeneracy of the grain, but on the diminished produce. Some countries are remarkable for their exemption from these two drawbacks, to a very superior degree; it is then these countries that less favored regions ought to apply for their seed supplies. When seeds are transported from a southern to a northern latitude, or from plain to mountain districts, they develop themselves in a shorter time than formerly, even under a lower degree of temperature. If the same species of seed after some years of culture, be transported southwards or to lowlands, they will surpass in earlier maturity, those spe-

cies which have never been changed. In the first transport the seeds increase in volume and weight. Leibig has stated, that in England, farmers prefer the seed of clover and oats raised in mountainous districts, for sowing in the plains, and Petermann attests, the same leaning prevails throughout southern Austria. With Swedish farmers the production of seeds has now become a specialty; it is also well known that clover seed imported from that country, is exempt from that terrible scourge, dodder. How does a higher latitude thus influence, in so marked a manner, the formation and maturity of grain? Schubler attributes it to the greater length of the days, and the more prolonged action of the sun, in promoting these chemical changes essential for the plants' vitality—as the transformation of the carbonic acid into the organic combinations, in the cells. Sachs has demonstrated, the influence of light, in the formation of starch, by the plant. In northern latitudes the colors of flowers, not only of the same species, but of the same varieties of plants, are more intense; the aromatic principles of plants—celery, garlic, onion, etc., are more strongly developed in higher latitudes. Cumin seed grown in Sweden is more odoriferous than that cultivated more southernwards, and white wheat imported from Southern Europe for sowing in higher latitudes, becomes more brilliantly white, each succeeding year.

#### How to Farm in Canada.

Under the above heading a correspondent of the *Montreal Witness* makes these remarks, as applicable on sides of the border.

Stating the fact that Canada is essentially a grain raising province he says:—“Such a state of matters cannot last long; the farmer of Canada will soon find that he cannot produce any grain for sale, and scarcely enough for his own use. Indeed, such husbandry has proved the most lamentable calamity to many a European country, and we would feel deeply grieved to see the same thing repeated over here. While yet there is time, let us draw all possible benefit from the experience of other countries, and let us not trespass on the laws of nature, but acquaint ourselves with them and be guided by them. The most important of these laws is to never expect from the soil more than you can return. Now every farmer knows by experience that continued grain crops make the soil poorer and poorer; he must return certain articles of nutriment if he wants to keep up its fertility. But where will he get them from? He keeps only a very few cattle, and has consequently very little manure. Buy them. Yes, it is good advice if they are to be bought and if the farmer can afford it. But how can he be expected to have any money left for such purposes. When he forces grain crops he must spend a great deal of labor upon his fields, hire many hands, keep a uselessly large number of horses, and notwithstanding the yearly increase of expense in cultivating the land, the return grows smaller and smaller. This will continue for some years, until he, within a comparatively short time, has succeeded in bringing his land to complete barrenness. To bring such land to fertility costs, in most instances, more than the land is worth. In travelling through the north of Germany and western parts of Austria, large tracts of land may be seen too poor to grow even the shortest grass. These fields tell the most sorrowful story of improvidence and thoughtlessness, and will probably remain a sad warning for another generation yet. We most sincerely hope that every farmer clearly understands that a continued cultivation of grain crops invariably must lead to his ruin.”

SEED WHEAT.—Farmers, in cleaning your wheat for seed, do not be satisfied with merely producing clean seed, aim to produce a grade of wheat that will weigh. Run it through the mill until every shrunken and small grain and weed seed is screened or blown out, even if you have to run it through three times, yes, five times; it will pay; aim at obtaining plump heavy grain, and when you harvest the product from this carefully selected seed, you will plainly see and know the benefit of giving time and care to the selection of seed wheat. This is the way to improve crops, do not look to cultivation alone, select good seeds as well. If farmers would take more pains in the selection of their seed and plants, as well as the fertilization and cultivation of their crops, greatly increased product per acre, with consequently less cost, and more profit, would be the result.



### Ontario Fruit Growers' Annual Meeting.

The 25th annual meeting of the Ontario Fruit Growers' Association was held in the City Hall, London, on the 25th September last. Rev. Dr. Burnet, President, occupied the chair. The following Directors were present:—P. E. Bucke, Ottawa; Col. John McGill, Oshawa; Chas. Arnold, Paris; Rev. Chas. Campbell, Niagara; Geo. Leslie, Toronto; Rev. W. F. Clarke, Welland; William Saunders, London; John Freed, Hamilton; D. W. Beadle, Secretary, St. Catharines, and other prominent members, amongst whom we noticed Philip Armstrong, Toronto; Mackenzie Bowell, M. P., of Belleville; Charles Rykert, St. Catharines; Mayor Pritchard, London; and also W. H. Mills, of Hamilton, and P. C. Dempsey, of Albury, P. E. County, and about 200 members of the Society.

#### DIRECTORS' REPORT.

The Secretary read the annual report of the Directors, which referred to the meetings which had been held during the year, and spoke of the delay which had been made in getting out the annual report of last year by the Department. The next report, it was announced, would be illustrated by a colored lithograph of Arnold's hybrid apple; and it was also intended to give to each of the members a plant of Burnet's hybrid grape. The membership has fallen off to a little over 1,000. The causes have arisen from hard times and from disappointments as to the trees supplied, arising mainly from carelessness of many members. The report also called attention to the change which had been made by the Legislature as to the election of officers, whereby the election of a Secretary-Treasurer was made to devolve on the officers elected.

The Treasurer's report showed the total receipts to be \$1,262.04, the balance in hand now remaining being \$332.56. The disbursements were mainly in connection with the exhibits at the Centennial Exhibition.

The President then read the following

#### ANNUAL ADDRESS.

The return of the Provincial Fair, and the annual meeting of the Fruit Growers' Association, bring with them the recurring duty of addressing you on some of the many subjects connected with fruit culture. Usually annual addresses are full of congratulations, and generally begin and end with these common themes. For years it has been my good fortune to be in a position to express not only my satisfaction, but the satisfactory expression of every member of our Association at the progress and development of the fruit interests connected with our Society. Similar expressions must be tempered this year, as the climatic changes have not been auspicious to fruit growing. A most abundant promise in spring has been followed by a very poor fruit crop, apples being almost a failure. The show of buds and blossoms was something wonderful. Two occasions of early frost, however, not only destroyed the buds, but even the branchlets to which they were attached. In some instances the latter frost destroyed the trees, and especially our pear trees. There can be little room left for doubt that the frost acted on the tree as if it had been blighted; a speedy application of the knife, however, in many cases preserving the limbs. A fond fancy leads to the indulgence of what may be a conceited notion, that similar causes account for the ordinary blight, viz., frosty and cold winds.

In some districts our fruit-growers had no cause to complain of the crop of small fruits. Strawberries were very abundant, and as a rule, very good. Seasonable rains helped them much. The same may be said of raspberries, currants, gooseberries and pears. They were very prolific, and made a fair return for outlay and labor. Peaches are abundant almost everywhere. Had the amount of peach-orchard corresponded in any adequate proportion to the demand for the fruit, the pecuniary advantages to be reaped would have been very great. The season's yield has given an impetus to the planting of peach trees which was greatly needed—the ill success of peach-growing for years past having damped the ardor of peach culturists. Grapes are an enormous crop, and early ripe. Plums are extra good, and most abundant, amply rewarding the toil of the husbandman. Apples are a failure. What of the crop that the frost and caterpillars left has been sadly damaged by the codling moth. We may add, however, as often happens in years of scarcity, the samples are good. There is little to

find fault with in the specimens of fruit at our Provincial Exhibition, and frequent remarks have been heard how agreeably disappointed many have been at the amount of good fruit at the Show. Fruit matters have as a rule been quiet during the season. Our interests have suffered, less or more, with all civil and commercial interests during the continuance of the hard commercial times through which we have been passing. When one member of the body politic suffers all the members suffer with it. A lull, too, was to be expected after the strenuous efforts which, as an association, you put forth at the Centennial. Our members' attention cannot always be on the stretch.

You will allow me, perhaps, to express my regret, which may be considered as a reminder of our duty, that we did not put in appearance and make representation of any fruits at the recent meeting of the American Pomological Society at Baltimore. I had invitation upon invitation from the venerable and hon. President of the Society, but felt myself unable to act as I would have liked, under our circumstances.

During the year a notable Act for the Encouragement of Agriculture, Horticulture, Arts and Manufactures passed the Legislature. The formation of Horticultural Societies in cities, towns and incorporated villages receives a large amount of encouragement, participating in all the privileges and grants accorded to Electoral District Societies.

We should have liked to have seen in the new Act that the grants to the cities of the Province had been equalized, and that St. Catharines and Brantford had been included in the beneficent arrangements of the Government. Both St. Catharines and Brantford are famous horticultural centres.

Our own association comes in for a share of the attention of our legislators.

The Hon. Mr. Wood was always ready to listen to the suggestions of your direction, and although the whole of the amendments to the Act brought before his notice have not been inserted, there are changes introduced which in the long run will greatly benefit your society. At this annual meeting you shall elect thirteen directors, one for each of the thirteen agricultural divisions, and within which division the director elected shall be a resident.

In present circumstances this may seem a hardship, and even a difficulty, but in the future this arrangement will greatly advance our provincial horticultural interests. The increased expense connected with the increased number of directors may lead you to take steps to ask for an increased legislative grant.

The plans which your direction have instituted for the well-being of the society meet with a fair share of success. The tree and plant distribution has assumed large proportions, and is productive of good results. Favorable reports have been received of the plants and trees already distributed, and of the very general satisfaction they have given to our members. The Directors of the Association have taken a new departure, and now distribute trees and plants the creation of our own hybridists. They have been anxious that the proverb shall be no longer verified, that a prophet is not without honor save in his own country. They now send out therefore, and give the preference to, the home productions of our own members. Glass seedling plum is proving a good grower, and giving abundant promise. Next spring Dempsey's seedling grape, the "Burnet," will be distributed. The savans among us declare that this grapevine is the king of all seedling grapes. Time will tell. We hear of competitors of no mean quality looming up in the distance. We heartily wish all success to all present, and to all future hybridists.

We have continued the illustrations of our Annual Report to Government, and although the strain on the means at the disposal of your Board is great, yet the result encourages them to proceed in the good work. People learn almost by the eyes as with the mind, and in the end these illustrations will form a valuable adjunct to the horticulturist in serving to help him make a choice of excellent varieties for cultivation. The discussions at our different meetings seem to gain in interest, and are gradually acquiring a wider scope. Our summer meeting at Stratford elicited a large amount of valuable information, and it will be long before the courtesy of Messrs. Jarvis, Woods, Hanson, and the other members of the Stratford Horticultural Society, are forgotten.

The earnest and indefatigable labors of our hybridists for years past have been leading our efforts

and discussions in the direction of new, hardy and prolific varieties of fruit trees, but in vain do we discuss the production of suitable trees, if the circumstances which surround us render their growth impossible or unproductive. Almost insuperable difficulties in fruit growing paralyze the efforts of the horticulturist. "Eternal vigilance is the price of good fruit," say to the contrary who may. In a season during which these difficulties have singularly abounded, it perhaps will be befitting that I direct your attention to a few of these difficulties, and the mode and manner in which the best and most devoted of our horticulturists overcome them. What an alarming list they make—the curculio, caterpillar, pear slug, canker and currant worms, the aphid and red spider, the grasshopper and phylloxera, the codling moth and the borer, and last but not least, the blight, black knot, bark louse, frost and mildew.

Well may the fruit culturist stand aghast, and almost in despair give up his labors in hopeless prospect of success.

My object is not to treat our insect pests and their depredations philosophically, or even entomologically—that is in abler hands—but briefly to enumerate in one paper, and shortly to state the most efficient means known for the sure accomplishment of their destruction.

#### SMALL FRUITS, AND THEIR INSECT DEPREDACTIONS.

First in order come the currants, red, white and black. None of these are worm-proof. They all numerous and destructive enemies. The inveterate leader of these hordes is the currant borer, "a small whitish grub with brown head and legs, which lives in the stems of the bushes, burrowing up and down, making them so hollow and weak as to be liable to break with every wind." These grubs appear about the end of June. The eggs are deposited by the parent, which in general appearance is not unlike a wasp, from the 10th to the 15th of June. A most effectual remedy, and the only one claiming the attention of the fruit culturist, is to cut out the affected stems and consign them to the fire-pile. Another potent enemy is the currant caterpillar, or measuring worm as it is called, which in its voracity strips the plant of every leaf, and only desists when the tree is under bare poles. The caterpillar is yellow, marked with rows of black roundish spots along the back, and in its movements forms a bow, which it bends and unbends in its forward progress. The moth which is the parent of this caterpillar is of a dull-yellow color, with brownish spots dotted over the wings. This insect deposits its eggs in May and June, and in from 21 to 25 days the worms may be expected to appear. Hellebore is an effectual cure. We have always been in the habit of applying the poison with a watering-pot. Since Mr. Van Wagner's "duster" came into our possession, we have applied the hellebore dry, after watering the bushes, and have found this mode of application to serve every practical purpose.

The gooseberry saw-fly is also an enemy to the currant. Its ravages begin in early spring. The leaves no sooner appear than this pest deposits its eggs in great profusion on the underside of the leaves. So speedy is the destruction by these voracious worms, that in a day the leaves entirely disappear. When well gorged they are of a dull-yellow color, and when in that state begin to weave their cocoons, from which the moths emerge at the end of June or beginning of July. They appear less or more throughout the summer, and unceasing vigilance is necessary to counteract their ravages. The same remedy is effectual in their destruction, viz.: repeated doses of hellebore. In my garden they were singularly plentiful this spring. On a yellow-flowering Rebus in the neighborhood of a sheltering wall, they stripped every leaf off in an incredibly short time, and when disturbed actually covered the ground with a beautiful carpet of yellowish-green color. The pupae as a general rule remain in the ground till the following spring, when they emerge, as eagerly bent as ever on the work of destruction, to the infinite detriment of the horticulturist.

#### INSECTS INJURIOUS TO THE RASPBERRY.

The roots, canes, leaves, flowers and fruit of the raspberry have all their peculiar enemies. We have never seen any enemy affect the root, but this arises from the difficulty we have had in making a proper approach to unearth this evil.

The Red necked Agrilus attacks the canes of the raspberry and blackberry in early spring. Their depredations are marked by an ugly swelling, which indicates the presence of the larvæ of,



this pest. The cane has all the appearance of being slashed, and under the ridges between the slashings will be found a small borer. The body is slim, yellow, approaching to white, composed of a chain of bead-like sections, with the anterior ones considerably flattened, adapting it greatly to carry out its depredations. It bores through the cane into the sap, lives there, traversing up and down the cane to secure abundance of sap-food. The head is brown, jaws black, and the whole body is about three-fourths of an inch long. In May the larvæ reach the pit core, there undergo their change, and early in summer the beetle appears. She deposits her eggs in July, and thus this circle of destruction is continually kept up.

One, and only one, effectual remedy is at the disposal of the fruit-culturist, and that is to cut out the affected canes and commit them to the flames. Too great care cannot be observed when trimming the vines in the spring to see that all the affected stems are eliminated.

The raspberry cane-borer is another potent enemy of this culture. The beetle is half an inch long, long-horned, slim black body, the thorax and breast pale yellow. They first appear in June, and after pairing the canes with a double circle about an inch and a half apart. Between the girdled circles the cane is punctured, an egg deposited, and hatched in a few days. The wound causes the cane to droop, and as they begin their destructive work and continue it throughout the most of July, the estimated damage is not easily realized. A free use of pruning shears is the only effectual remedy, topping the cane, so that the part operated on by the beetle is completely destroyed.

THE RASPBERRY SAW-FLY.

This is a four-winged fly, and appears in its winged state about the end or middle of May. This insect has dark metallic wings, the body is dark and the abdomen dull red. She deposits her eggs beneath the skin of the leaf by means of a saw-like apparatus, and in due time the young larvæ appear, and when full grown are over half an inch. They penetrate the ground and construct for their young little oval earthy cocoons, in which they remain until the following spring.

THE STRAWBERRY LEAF-ROLLER.

They are thus named from rolling up leaves with their webs to form a tent for protection. Ingeniously enough they provide for being disturbed by securing an opening at the open of the folded leaves, through which they descend to the ground by means of a self-made thread. Their larvæ attain their full size at the end of May or beginning of June, then line the twisted leaf in which they live with their web, and undergo their change. After the lapse of a few weeks, they make their egress in the form of a perfect moth. The effectual remedy is to crush the leaf with clippers in the shape of butter prints from the middle to the end of June. There is no need to make examination of the death of the chrysalid, being satisfied that the chrysalids have not escaped in the moths; a slight squeeze completely destroys the inhabitant.

THE RASPBERRY NEGRO BUG.

In eating raspberries we are sometimes disgusted with a disagreeable *buggy* odor. The insect that causes this uninviting flavor is black, with a white stripe on each side. He is a compact, *dutchy* fellow, seldom seen until it is too late to give him a wide berth. A sucker of rather singular construction enables him to first pierce and then suck the juices from the fruit. June and July are the seasons favored with the countless increase of these noxious pests. We have never heard of any effectual plan of lessening these pestilential fellows. They are not very fastidious in their likings, attacking not only the valuable and cultivated varieties of raspberries, but also the wild sorts, and they luxuriate on other plants of a less profitable nature, such as Pruslane, Speedwell and the like.

THE ENEMIES OF THE STRAWBERRY.

The strawberry [false-worm] has been very destructive to the strawberry plants during the past summer. Mr. A. M. Smith, of Drummondville, sent me along on trial some new variety and they completely riddled the leaves, and finally killed three-fourths of the plants. The average length of the larvæ when full grown is about six-tenths of an inch, pale white, greenish skin, semi-transparent and eight pairs of prolegs. These creatures also form cocoons by sticking together small fragments of earth, and in these making their change.

THE BLACK STRAWBERRY BEETLE

is another pest of common occurrence, very active and destructive. The beetle is "about three-twentieths of an inch long, dark body, and wing covers spotted with black, and ornamented with regular rows of punctures which disappear toward the tip." We are not aware that any remedy has been found readily destructive of the insect.

A CUT WORM.

This enemy is a night-worker, and requires careful watching. A patch of Nicanor of mine at Hamilton once nearly disappeared, until I had a visit from the late Mr. Mesten, who unearthed the caterpillar and taught me how to destroy him. In many respects he is not unlike, in his habits, to the cut worm that attacks young cabbage plants newly set out, and nips them off just on a level with the ground, and buries himself in the daytime. He is an inch and a half long, coiled up when at rest, and when jerked from his hiding place rolls along like a perfect ring. The color is dull green, and semi-transparent. They enter the chrysalis state at the end of June, and the moths appear about the middle of August. The only remedy is to search and unearth them in their caterpillar state—a sure guide in the discovery being the leaves of the vine being either partially or wholly cut, and dropping on the ground.

THE INSECTS AFFECTING THE CHERRY.

The greatest enemy the cherry has is the white and black Aphid. They breed in vast numbers under the leaves, which curl, it seems, for their protection. The insect is small, transparent, bright-eyed and long-legged. Its eggs are deposited under the leaves at the end of June and first of July. Their food is the juice of the leaves, and their ravages are often to such an extent that the trees are killed outright.

Having killed one of my cherry trees, after its death they attached themselves to the places where I had pruned and grafted a yellow Bellflower. No remedy is known to me worthy of mention, but that of destroying them by hand, whenever the clusters begin to appear.

THE CHERRY CURCULIO

is most destructive to the fruit. It not infrequently happens that the caterpillar is found by twos and threes in the same fruit. They render the cherry worthless, and, undestroyed, soon increase to such an extent as frustrates the whole labor of the cultivator.

INSECTS AFFECTING THE PLUM.

The great insect enemy of this fruit is the curculio, a "little Turk," as he has been termed from the crescent-like wounds on the fruit. This beetle is of a deep grey color, approaching to black, about two-tenths of an inch in length. It is in its general contour as like the seed of some of the fine varieties of grapes as it can well be. The formidable instrument which renders him so destructive is his snout or proboscis. With this the beetle pierces the tender skin of the plum, and therein deposits the ova. I have, with the point of my penknife, often removed the egg immediately after the operation, and thus saved the plum.

The insect undergoes transformation in about fifteen or twenty days in the month of June or the beginning of July. The larvæ that go into the earth as late as the 20th of July remain there in the pupa state until next spring.

(To be Continued.)

Raw and Cooked Roots.

Dr. E. Wolff, a German chemist, reports the following experiments in feeding roots to cattle. Two cows were experimented on, which together weighed 1,650 pounds. They received daily, during the whole time, 8½ lbs. of hay, 31 lbs. of oat straw, 4½ lbs. of rape-seed cake, 4½ lbs. of lentil straw, and the roots mentioned in the following table, which also gives the weight of butter and milk produced in the several cases:

Week of experiments,	Food, lbs.	Milk per week, lbs.	Butter, lbs.	Milk to 1 lb. Butter, lbs.
First, raw best.....	82½	248½	8½	30
Second, raw potatoes. 82½		282½	6½	42
Third, cooked beet..	123½	288½	9½	30
4th, cooked potatoes 82½		248½	9½	27

From the above it will be seen that the cooked potatoes greatly increased the butter without adding so much to the volume of milk as the raw ones, which made the milk of a thin and watery appearance.—*Agricultural Gazette.*

The Apiary.

Wintering Bees.

How shall we winter our bees successfully? This is a problem that apiarists have been endeavoring to solve for many years. Houses, cellars, pits, green-houses, and manure heaps, have all had their day; none of them answering the requirements perfectly, as safe repositories. The method recommended by G. H. Townley, of Tompkins, Michigan, is the most fashionable at the present time. His plan has been tried by many apiarists, and pronounced a success. It is to protect the bees with a covering of chaff, and leave them out of doors. Some of our southern apiarists say, that they have been chaffed to death the last year, with hearing so much about this chaff business; but we at the North will not mind the chaffing, if we can only protect our little pets, in such a way, that they will survive the winter's cold, and enliven our May mornings, with their happy hum. I'm now making my bees bedding; in order to keep their ticks clean, and free from propolis I've purchased white duck for sheets, costing twenty cents per yard. Indian head muslin would have been cheaper, but they might eat it through. When the sheets are all out, and whipped around to keep them from raveling, I'll make the ticks; as the ticks are to have the duck between them and the bees, any sort of material, that will hold chaff, will answer the purpose. Old grain sacks, or old calico will do very well—but if we expect them not to go out of fashion, we might as well make them of good material, so they will last for years. Each hive will need three cushions, and to have them nice, a band should go clear around, that the edge instead of being sharp, may be square, making a shallow box as it were, of cloth before the chaff is put in. Those which are to be put in on the sides I'll make of the size to fit nicely, when one frame is removed—tacking it through and through, so it will be of the same thickness. Those that are to go on top should be a foot thick, and fit nicely into the cap—so that when the bees are tucked up in their winter's bed, there will be no crack for cold draughts—for bees are as sensitive to cold draughts as a rheumatic. Mr. Townley says: "I am not very particular about the kind of chaff used, but after having tried wheat, oat, and buckwheat, and clover, I prefer the first named, as it does not get wet or damp as easily, either from rain or by dampness from the cluster of bees." I shall fix up my bees for the winter as soon as possible, having the entrance small in front, and giving plenty of ventilation above the cushions, so that there may be no dampness. The truth in a nut-shell, with regard to wintering bees, appears to be this: confine the bees to as small a space as they can crowd into, with plenty of food, pure air, warmth and dryness.—*Mrs. L. Harrison, Prairie Farmer.*

Land Draining.

The experience of Mechi and many others in England, and of Waring and others in this country, has taught that the depth of four feet, a pitch of one inch in ten feet, and a good discharge at all times and seasons are desirable. The depth of four feet gives a drain which will operate at all times, even in the coldest of our New England winters; it admits of a deeper and more perfect action of the frost in winter, and provides for its earlier departure in spring; it provides innumerable channels for the escape of water to a depth beyond the point where its presence is injurious, and furnishes channels for the admission of the air into the soil. We find by careful examination that the same channels which carry the water to the drains from the adjacent soil serve, when not occupied in that office, as conductors, whereby the atmosphere enters and aerates the ground at a depth to which its influence has never before penetrated. We further find that the roots of several kinds of grasses have extended in the vicinity of the drains to a much greater depth than upon ground of the same character not underdrained, and that the growth of the plants is in ratio to that of the roots. It also appears that since the introduction of the underdrains timothy, red-top, and especially clover, thrive to a gratifying extent upon very low, flat heavy clay, which formerly produced only an almost worthless variety of water-grasses. We are satisfied that a rainfall of one inch is immediately removed to such an extent, that never for a moment is the effect of stagnant water exerted upon the roots of plants in a space of at least forty feet on each side of an efficient drain.—*Maine Farmer.*



## Garden, Orchard and Forest.

### Farm Gardens.

PAPER NO. 3, BY P. E. R., OTTAWA.

In previous papers my remarks have been confined to fruits. I think it will probably be as well, as this season is suitable for sodding and transplanting, to give a few words of advice on the decorative plot in front of the house, which should be the most attractive part of the whole domain, but which I regret to say is very frequently used as a place for hauling logs to for the purpose of cutting them into firewood, or for pig-pens, or some other eye-sore or nuisance quite as objectionable as either.

To bring this portion into respectable subjection it is first necessary that it be perfectly leveled, sloping gradually from the house, so as to convey away any surplus rain-water. After setting the fence posts around the garden perfectly in line it is necessary to have a base board nailed to them, to set the lower end of the fence pickets on; this board should be put on with the aid of a common spirit level, so that it may be straight along the base or lower edge of the board; by the assistance of the level and a straight edge a similar level may be had round the house; from these two levels—the lower edge of the fence board and the house line—stretch a piece of fine, strong twine, and with the aid of a wheelbarrow or scraper level the soil to the string, two pieces of which attached to stakes say one foot apart at the house and six at the fence will greatly assist the operator; by stretching these quite tight a distance of from forty to sixty feet may quite easily be brought to a proper grade. The neatest and quickest way to cover this plot with grass is to sod it by cutting suitable pieces on an old pasture; if these are cut of a uniform width, and evenly laid, they soon give a fine appearance. Unfortunately sodding is a very laborious job and is often shirked for the easier process of laying down with grass seed. In all cases where at all practicable the plot should be well under-drained, unless the soil is gravelly or underlaid by a porous limestone. Drains may be made of tile, wood, broken stone, brush, gravel, or any suitable material. If the drains are deeply laid the earth should be tightly rammed in while filling, to prevent the soil from settling where it was removed. If the mode of seeding is adopted, deep tillage and manuring are the foundation of success, keeping the richest soil at the top. After sowing rake neatly over and roll the surface; this latter operation should again be performed in the spring. A good mixture of grass to sow is Red-top 7 parts, Kentucky Blue Grass 2 parts, White Clover 1 part. Timothy should never be put into a lawn, as it is too coarse and makes dreadful tufts, which are to be avoided. The clover and grass seed should not be mixed, but sown separately, as the grass seed is much lighter and cannot be thrown so far. The grass should be kept cut short from the first with a lawn mower or scythe, as this will cause it to grow thick, and form a dense carpet. Presuming the place has been sodded, the next thing to be done is to plant here and there a few evergreens, deciduous trees, and flowering shrubs and plants. It is strongly advised that no trees be planted within ten feet of the house, and fifteen or twenty feet is a more suitable distance. Every house should have a few Norway spruce and Austrian pines around it, as wind breaks; these beautiful trees have no equal, their foliage being dense and sweeping to the ground. Both should be planted quite small, not over one and a half or two feet high; as soon as they take hold they grow very rapidly. Of deciduous trees the native maple and elm do remarkably well, but the horse-chesnut

and cat-leaved birch are both beautiful objects in a landscape. Of shrubs probably the lilac is the most showy, and when in blossom its large flower spikes and sweet perfume are very attractive. This shrub is hardy all over Canada, and if well treated may be looked upon as giving to a certainty excellent results. In large grounds it makes a good ornamental hedge or blind, to hide objectionable sheds or out-buildings. As standards on a lawn they make a very showy object, as neither the stem nor the dark-green foliage are attacked by any insect pest, it therefore always looks neat and clean, and forms a handsome background for flower borders or lower growing shrubs. An annual autumn top-dressing of stable manure adds materially to the general appearance of both flowers and leaves next season. After the flowers have faded they should be removed, as running to seed weakens all plants, and the following year will be marked by more profuse blooming and much finer flowers. The indefatigable hybridist has been at work on this plant, and many new varieties may now be had if required, the flowers of which range through all the shades of blue and reddish purple to white. The Spireas are all very graceful and beautiful shrubs and should find a place in every garden, the pink ones are perhaps the prettiest. The Syringa is also a fine shrub, growing taller than the Spirea, but not so high as the Lilac. When in flower the petals are pure white, and these waxy blossoms, though small, are profuse, and have a heavy, but delicious scent. The Wigelco is also hardy and beautiful. The Guelder rose or snowball is so common that it is quite unnecessary to describe its beauty. When this shrub is bowed down with its heavy branches of white flowers in spring, it makes a magnificent contrast to its green surroundings. The Rose, of course, is always in order, and a few hybrid perpetuals should grace every lawn of any size. Bulbs always give flowers of an attractive appearance, and the following list will be found perfectly hardy for outdoor culture, Crocus Snow-drop, Tulip, and Hyacinth; these should be planted in good soil as soon as possible before the frost closes up the ground in Autumn. Some people plant them in the end of Sept., but later on in the season they do equally as well. Amongst these the two former open their flowers earliest, and may be seen thrusting themselves up through the ground almost before the frost has left. A pretty device may be made of crocuses by planting some bulbs in large capitals WELCOME SPRING. It is, indeed, a welcome sight to see the pretty flowers struggling to the light almost before spring has set in. The great drawback to this early beauty is that its blooms are rather evanescent, otherwise it would be a great favorite, as the variety of colors is very numerous and exceedingly brilliant. The Hyacinth is one of the most fragrant and consequently very popular amongst the bulbous flowers, and is frequently grown in the house during winter. For this purpose, fill a pot with sandy porous soil, plant the bulb in it so that its top will be on a level with the mould, water well, and set away in a dark cellar, for several weeks, during which time it will have made plenty of roots, but very little top. Bulbs thus treated may be brought out as required to the living rooms, and a succession of bloom maintained. Some people prefer flowering them in water, in glasses made for that purpose; the water should just touch the base of the bulb and be kept to that point as it evaporates. The darkening process should be practiced on these as well as on those in pots. Although this is a clean and pretty way of growing these flowers, the results are not quite so satisfactory as when planted in sand or moss. No very great success can be expected with flowers grown in houses heated

with hot air, or base burning coal stoves, unless the plants are kept at some distance from the direct action of the heat as these make the air too dry for plant growth. From 50° to 60° of heat is the utmost that is required, and if plants are kept in a cool room with a moist atmosphere, they obtain the best conditions for health. If required for show during the day time they may be brought to the warmer room, but should always be returned to cool quarters during the night. When planted in the open ground the bulbs should be set from three to four inches below the surface as this will prevent to frequent freezing and thawing.

### Fruit Growing.

The very great value of fruit whether grown for the market or for our own consumption is becoming more generally known to our Canadian farmers. Believing in the very great importance of the fruit garden to all classes, whether farmers or men who do not own or till a rod of soil, we have always given a portion of the *ADVOCATE* to this department, and hope for the future to make it even of greater interest and utility. The following extracts we take from an address by Mr. Hooker, delivered at the New York State Fair.

#### FRUIT GROWING AS A BUSINESS.

"Let me point out a few items of cost not always considered in this matter:

"*Cost of the Soil.*—Land enough must be granted to every tree or plant intended to produce fruit; an amount proportioned to the natural or the artificial size of the plant, that there may be sufficient space for the roots to feed in.

"*Cost of the Manure.*—Manure enough must be provided, and of a sort ascertained to be the best upon the soil you are using. Here, experience and trial alone can teach what and how much is needed.

"*Cost of Cultivation.*—Cultivation adapted to the plant and the condition of the soil must not be withheld. To fail to cultivate sufficiently, and save a little of the cost, is usually the road to a great loss of returns.

"*Cost of Sunbeams.*—I wish particular attention would hereafter be given to the wants of trees and plants in respect to sufficient sun. Now that the sunbeams are carefully studied, we are finding out that vitality of plants is as dependent upon their receiving the direct rays of the sun, that the leaves may act normally, as that the roots should have water or soil. Robbing the plants of the sun means poor quality, lessened quantity, and general inferiority of appearance. We cannot cheat nature, or hold back part of the price, without bringing upon our own heads a merited retribution. Crowding trees and plants is a very prevalent error, even among otherwise good cultivators."

#### FRUIT FOR THE HOUSEHOLD.

"Fruit-growing naturally presents the two aspects of fruit for home use, and fruit for sale. What is desirable to grow for market may not necessarily be most satisfactory for home use. It is impossible to secure all the fine satisfactions and desirable results which any species of fruit affords, if we confine our planting to those few sorts which possess the peculiarities which enable us to transport and place them in distant, or even near-by markets, in good salable order. The fruit grower should therefore enlarge his assortment of home fruits, so as to cover the different seasons, flavors and peculiarities of the various fruits, and restrict his market fruits to the few best shipping sorts, and push the extent and the quality of his market fruit, as far as he finds it profitable in money. To limit a family in a fruit section to the staple market varieties, would be to deprive them of the highest results of care in selections and culture in that direction. It is also true that some fruits, apples especially, are profitable to feed on the farm when they do not sell well.

"*Market Fruit.*—The first consideration in market fruit is good condition, beauty, and such a degree of excellence in quality, and adaptation to common uses, as will make the fruit satisfactory to people moderately particular. Poor fruit will not long be bought, and exquisite flavors will



not command extra prices from the masses; the average man or woman wants fair size, good looks, and a sound, wholesome condition. These essentials are to be found in some varieties of all our fruits, and constitute them good market sorts, when accompanied with a good degree of productiveness, and good keeping and shipping qualities. No fruit is worth planting on a large scale for market which has not received the public approval; new sorts work slowly into the markets. Locality produces such variation in the quality and adaptation of varieties of fruit for market, that local experience and information is the only safe guide in selecting sorts for this purpose. The necessity also of securing a succession of fruits, so as to have the best and most profitable for each particular time, complicates this matter, and demands close watching of markets, and large knowledge before proceeding to plant extensively.

"Fruit as a Specialty.—While fruit-growing in a general way may answer in some places, and in the hands of some men, as a matter of fact, the making of some branch of fruit-growing a specialty, such as the production of grapes, peaches, berries, apples or pears, is very commonly resorted to with good results, in particular places, and by those who have first succeeded on a small scale. This division of the business is natural, and to be commended, as giving the highest results, both in economy of cost, and highest samples of fruit and management. When some specialty can be followed under the most advantageous circumstances of soil, climate, access to markets, and ability to grow fine fruit to its full perfection, this species of planting offers the best opening known to the business."

#### The Concord Grape.

There is not a grape to-day so universally raised, so universally sold, so universally eaten, and we may add so universally liked as the Concord; and we may say liked deliberately. There is no other grape that may be eaten in such large quantities, and daily, without cloying the appetite. There are many grapes far more delicate to the taste; but the more delicate and sugary, the more easily they cloy. The plebeian Concord, the grape for the million, combines plenty of acid with its saccharine, and with not foxiness enough to be distasteful. Even the amateur to-day does not turn up his nose at the Concord. He is indeed often glad to get them, and the "great multitude of grape eaters have gone on every year pronouncing the Concord not only good, but they do actually prefer it for daily use to its more aristocratic relatives."

It must, however, be conceded that one reason for this is because they can get Concord, and plenty of them, and that cheaply. Those who have to buy prefer a pound of Concord at five cents to a pound of Delawares at double the price. Why? The average cultivator can raise five pounds of Concord cheaper than one pound of Delawares. When sold, the buyer will purchase a small box of Delawares for a taste, and a big basket of Concord to eat. He can take his fill of the latter and again return to them with a good appetite. Of all the hundreds of new varieties since brought out, the plebeian Concord alone has stood the test of various soils and situations, for it may be cultivated wherever Indian corn will ripen. The amateur indeed still keeps up his list of "delicate" grapes. As a rule they are delicate in more senses than one. So delicate that their fruit for the dessert is often very hard to get.

Notwithstanding the Concord is as easy of cultivation as corn, and that the crop is nearly as sure, it is nevertheless the fact that it is not cultivated by the farmer, as daily found in its season, for the family. Indeed, not half the farmers cultivate a single vine, when at least from fifty to one hundred vines should be grown, according to the size of the family. We say grown! We should have said grown and the fruit eaten in the family. One trouble is, we think, that farmers have had dinged into their ears by a theoretical class, that the cultivation of the vine is an arduum, that may not be understood by the masses. It is true, there is a fine art in the cultivation of the grape, as with the cultivation of any other fruit. When a fruit is not adapted to the soil special means must be used in the cultivation. As we said before, the Concord is generally adapted to cultivation. Fully as much so as Wilson strawberry, and may be about as surely grown as a crop of corn. It simply requires to be planted in a well drained soil, kept clean, moderately pruned, tied to a stake, and it will pretty well take care of itself.

We have heretofore given the simple directions

necessary for planting and pruning. It is not necessary to repeat them here. One thing, however, will bear repeating time and again, until every farmer has a vineyard, sufficient for the use of his family. Plant a few dozens of Concord vines and take care of them.

In the foregoing we are not to be understood as objecting to cultivation of other and more delicate varieties of grapes. The more the better, they all have their place, at least all varieties that may be adapted to particular soils and locations, or that may be cultivated by special means. What we wish is to call attention to one grape, and a very good one that is generally adapted to cultivation and whose fruit any one may have who will give it the care usually accorded to a special crop.—*Prairie Farmer.*

#### The Canker Worm.

In reply to a correspondent asking what is the best and cheapest preventive of the Codling Moth, and how to apply the same, and how often, the Massachusetts *Ploughman* gives the following practical answer. The remedy is now in good time:

"As stated last June the best way to stop the canker worm is to catch the grubs as they crawl up the trunks of the trees in the latter part of October, or the early part of November till the ground freezes, and again on the opening of the ground in April. The cheapest method is to tack to the trunk of the tree about two feet from the ground a strip of coarse tarred paper a foot wide and daub this around with Carolina tar or printer's ink—while the grubs are running it will need renewing every day in the afternoon, as the wind quickly dries the surface, enabling the grubs to walk over. They run mostly at night and on cool days and when very plenty will sometimes bridge over the belt of tar with the bodies of those which are stuck and thus gain access to the branches where the eggs are laid. If a long thaw occurs in winter thawing out the frost to a depth of six inches the grubs will sometimes start and will need watching. The tar will need renewing for about ten days after the frost is all out in the spring, or until no more grubs are caught, when the paper bands should be removed and the tar below them robbed off with some dry road dust. The female grub has no wings and cannot fly as the male does, and the females being all stopped by the tar no eggs can be laid or worms produced that year. The expense is trifling except for labor, and where very large orchards are to be protected it may be worth consideration whether a gutter of zinc filled with petroleum would not prove cheaper as it would only need attention about once a week. This is made square and attached to a box of wood, the space between the box and the trunk being filled in with fine hay or tan bark."

NEW KINDS.—T. Baines, a good authority on English fruits, says in the *Gardeners' Chronicle* that the gain amongst apples, pears, plums and cherries in any new kinds that have appeared during late years is doubtful, taking all properties into consideration, and comparing them without prejudice with the large number of good sorts that are well known and proved.

#### Singular Vitality of Trees.

A correspondent of the *Georgia Grange* gives the following account of a long sea transportation of trees, and their prolonged vitality under adverse circumstances. It is vouched for as being correct. The correspondent says:—

Mr. Parsons, our informant, said that before leaving Atlanta, two years ago, he gave an order to a house in that city for 130 apple trees, 100 pear, 30 grape vines, 6 figs, 2 mulberries, 2 walnuts, 2 pomegranates, and a number of peach, cherry and plum trees. He directed his order sent to Auckland via Liverpool. By the oversight or neglect of his agent, this selection of fruit trees reached its destination in precisely ten months, lacking two days. When the agent at Auckland advised Mr. Parsons of the arrival of his trees, of course this badly treated gentleman refused to receive them. But the agent was so anxious to have a test made of the vitality of the trees that he offered to share the loss in the freight, which was just ten dollars for a trip of seven thousand miles. Mr. P. agreed to the proposition, took the trees to his farm a little way out of the city, and after let-

ting them lie for forty-eight hours in his spring branch, he planted them out. Now for the result. Of the 130 apple trees, 120 were alive and flourishing beautifully in July, when Mr. Parsons left home. Of the pears, 13 lived and did well, 15 out of the 30 grape vines lived, 5 out of 6 figs, both of the mulberries, both of the walnuts. The stone fruit all died above the roots, but many of the roots were alive. These trees were packed in a large box, and remained in it as we may say for about ten months, and traveled 3,000 miles to Liverpool, and 7,000 to Auckland.

#### Protection of Birds in France.

According to the results of an action before the civil tribunal of Melun, in the Department of the Seine-et-Marne, it appears that in France a land-owner is not entitled to destroy upon his own property birds which feed on animals and insects injurious to his neighbors. He is even liable to be assessed for damages for so doing in a way that seems strange to English subjects. We are told that the plaintiff in the case referred to alleged that M. de Segonsac had ordered his gamekeeper to place, upon posts not far from his (the plaintiff's) land, snares, in which owls, bats, and other night-birds were frequently caught; that in spite of the repeated complaints made the destruction continued, and that in consequence mice and other vermin had increased to such an extent as to spoil his crops. The tribunal, holding that these facts, if proved, would render the defendant liable for damages, have appointed three neighboring farmers as experts to ascertain what damage, if any, has been done to the plaintiff's crops, and whether it has been caused by animals whose presence on his land is due to the destruction of birds of prey by the defendant. In the event of their answering these two questions in the affirmative, they are to assess the amount of damage done and report to the tribunal.—*London Farmer.*

#### The Amaryllis or Lilies.

A writer in the *Rural New Yorker* says: "What more charming or beautiful, or of easier culture, can be conceived than an Amaryllis? Many persons familiar with the regal beauty of an Amaryllis suppose it to be tender and only to be raised by the professional in a conservatory; but the truth is it is of much easier cultivation than many annual seedlings. *Amaryllis Johnsoni* is a most magnificent flower, of the easiest culture. The flowers are extremely gorgeous, very large, and resemble in shape *Lilium candidum*. The ground color is a brilliant scarlet, with a distinct white stripe down the centre of each segment. More than two flowers are rarely produced on a single stem; but it can be induced to furnish several of these stems in the season. Plant the bulb in pots of garden loam, taking care to have over half the bulb above the surface of the soil. *Amaryllis formosissima* is another very beautiful variety. Like the other, the flowers are very large, and of a brilliant dark crimson color. This variety, with even extraordinary good care, will flower but once, and then will seldom produce more than one or two flowers; but even one pays for all the care it requires for several years. Like the other, also, the top of the bulb must be well out of the ground to flower. The exquisite beauty of this variety recommends it to even the most indifferent amateur."

PRESERVING FRUITS.—Pears Apples and other fruits are now preserved in England by the following process: They are first reduced to a paste, which is then pressed into cakes and gently dried. When required for use it is only necessary to pour four times their weight of boiling water over them, allow them to soak for twenty minutes, and then add sugar to suit the taste. The flavor of the fruit is said to be retained to perfection. No peeling or coring is required, and the cost of the prepared product is but little more than that of the original fruit; the keeping qualities are excellent; so that it may be had at any time of the year, and bears long sea voyages without detriment.

We have kept pumpkins until August in a perfectly sound state, by simply placing them singly upon a scaffold in the cellar, where the temperature never reached the freezing point and ranged generally between forty and fifty. The cellar was dry, owing to the influence of a heater. Under such conditions there is no difficulty in preserving pumpkins or potatoes in the very best state to a late period in the following season.—*Germantown Telegraph.*



**Hyacinths in Pots.**

For hyacinths there is nothing better than common flower pots, and in those of 3½ inch single bulbs may be flowered in a most satisfactory manner. The pots usually employed are 5 inch and 6 inch, the last named being required only for selected bulbs, grown for exhibition. A rich light soil is indispensable, and it should consist of at least one-half of good rotten manure, and the remainder turfy loam, with a liberal allowance of sharp sand. The mixture should be in a moderately moist condition when ready for use. Fill the pots quite full of soil, and then press the bulb down into it, and press the soil down round the bulb to finish the operation. If potted loosely they will not thrive; if potted too firmly, they will rise up as soon as they begin to grow and be one-sided. They should be nearly covered with soil, except when grown in small pots, and then they must be only half covered, in order to afford them the largest possible amount of root-room. When potted, the coolest place should be found for them, and they should not have a drop of water, unless they go absolutely dry, until they begin to grow freely, and are in the enjoyment of full daylight. The pots may be roughly stored in a dark, cool pit, or any other out-of-the-way place, where neither sun, nor frost, nor heavy rains will affect them. They must be taken out as wanted for forcing. For a short time they must be placed in a subdued daylight, that the blanched growth may acquire a healthy green hue slowly, and they must be kept cool in order that they shall grow very little until they have acquired a healthy color.

Those to bloom at Christmas should be potted in September, those to follow may be potted a month later. If a long succession is required, a sufficient number should be potted every two or three weeks to the end of the year. If liquid manure is employed at all, it should be used constantly, and extremely weak, until the flowers begin to expand, and then pure soft water should be used instead. It matters not what is the particular constitution of the liquid manure, but it must be weak, or it will do more harm than good. The spikes should be carefully tied to neat stakes in good time, and a constant watch kept to see that they are not cut or bent, as they rapidly develop beyond the range allowed by their supports. When done flowering, remove the flowers stems, and keep the plants in frames supplied regularly with water until the leaves die down; then lay them on their sides in a dry sunny place, with their heads to the north, for about ten days; then shake them out, rub off the roots and clean them up, and store in a dry place.—*North British Agriculturist.*

**Pear-Blight and its Cause.**

By observation and close examination, the writer and some of his neighbors have traced pear-blight to poison, produced by a borer in the trunk or some main branch of the tree. The puncture, when recently made, may be seen from the outside, where the bark is smooth, and is about the size of a small pin hole. It extends into the live wood one-eighth to one-quarter of an inch or more, causing the discoloration of the wood where the sap circulates for an indefinite distance, below and above the wound, to its full depth.

This poisoned sap rises to the tips of the branches and blasts the twigs; it circulates under the bark, discoloring the inner coat and the new-forming wood, killing this new growth and the bark that covers it in patches distant from the wound. These spots of dead bark increase in size or show themselves elsewhere anew, spreading from one branch to another, until the entire tree becomes affected—spreading above the wound more rapidly and surely than below, until the entire tree is demoralized by the mortification that pervades its system, and it blackens and dies.

Trees so far gone that their trunks are surrounded by dead and live bark in alternate sections, sometimes come out in full foliage and bloom in spring, and maintain an apparently healthy growth in some branches, till their fruit is half-grown, but they succumb at last, being poisoned past remedy.

When the cause is discovered in season, trees can generally be saved by using the knife. Slit the bark through and on both sides of any gnarl, dead spot, or imperfection that the outer bark may show. Trim off smoothly and close to the trunk, every branch whose twigs show blight, and cover the cut with linseed-oil paint. Search for these mischievous little borers, and slit the bark through

the bore and also on each side of it. In this way, some trees may be saved; but, unless attended to immediately after being stung, this poison is too often fatal to the whole tree.

We do not assume to say that this insect is the only cause of the blight in pear trees. But we know that some trees which we have examined, were destroyed, or partially destroyed, by this poison borer. The insect itself, we have not yet been able to identify, though its mark is plainly unmistakable.

The apple-tree twig blight, like this pear-blight under our closest scrutiny, shows no trace of an insect in the blighted twig; though we suspect some injury to the roots of the tree, as the cause of this apple-tree malady, while the enemy of the pear-tree that we have discovered, works in the wood of the trunk.

More careful observations and more light on the causes of these tree-blights are urgently needed.—*Rural New Yorker.*

**Canadian Agricultural Notes.****Nova Scotia Provincial Exhibition.**

This exhibition was in every respect a great success. The Nova Scotians say that the province is not inferior to any other country in its capabilities for fruit growing and stock raising, and the other industries in such economy, and we are willing to acknowledge that they are not without some grounds for their boasting, judging from their exhibits at home and abroad. Colonels Laurie and Starratt, Prof. Lawson, the Eatons and Chases were represented by very fine animals. The Ayrshires were very fine animals, and were principally from Truro and Paradise.

**HORSES.**

In the prize list were the names of A. Dodge, of Wilmot, for best stallion, to breed horses for trotting, carriage or road; B. Starratt, of Paradise, for best saddle horse; S. Spurr, of Wilmot, for best sucking colt.

**CATTLE.**

Shorthorns—Best thoroughbred Shorthorn bull, 1st prize, Lord of Braemar, Bridgetown Agricultural Society.

Ayrshires—Best thoroughbred Ayrshire bull, 2 years old, Col. Starratt; do., 1 year old, Sir Wallace, Col. Starratt. Best thoroughbred Ayrshire heifer, 1 year old, Col. Starratt; best thoroughbred Ayrshire heifer calf, Col. Starratt.

**SHEEP.**

Long-wool, thoroughbred, best ram, \$6, Robert Spurr.

Grades, Crosses, &c.—Best 2 ewes, shearlings, \$3, Delancy Harris; best 2 ewe lambs, \$6, Arthur Beckwith.

**ROOTS AND VEGETABLES.**

No prizes in Early Rose potatoes. Best half bushel of any other potato, \$1.50, R. Marshall; Bresse's Early Prolific, \$1, J. W. Cornwall; Jenny Lind, \$1.50, J. W. Cornwall; White Calicoes, R. Spurr; Leonards, W. Dodge; Feeding Potatoes, W. M. McVicar. Long Red Mangel Wurzels, A. Longley. Carrots of any variety not enumerated in list, W. Dodge. Sugar Beets, A. Longley. Citrons, C. B. Whitman.

**GRAIN AND FIELD SEEDS.**

Shepody Buckwheat, A. B. Parker; Sweet Corn, W. Dodge; Field Peas, N. Burns; Timothy, S. Drew; Mangel Wurzel seed, W. Dodge; Flax Seed, Delancy Harris; Scutched Flax, not less than five pounds, D. Harris, Granville.

**DAIRY PRODUCE.**

Best tub or crock of Butter, salted, not less than 15 lbs., Col. Starratt. Best Cheese, factory make, S. Drew; best dairy, home-made, W. Armstrong.

**FRUITS.**

Apples—Best collection of Early Winter Apples, grown by exhibitor, A. Longley. Best general collection of Apples, grown by exhibitor, not more than 30 sorts, 5 of each, R. Marshall.

Single Varieties—Nonpareil, H. H. Morse; Northern Spy, H. Andrews; Ribston Pippin, M. A. Morse; Baldwin, A. Dodge; Rhode Island Greening, A. Dodge; Emperor Alexander, A. Dodge; Esopus Spitzenburg, C. Rumsey; Pomme Gris, D. Harris; Cayuga Red Streaks, R. Marshall; Golden Russett, D. Harris; Pound Sweet, W. Daniels; Roxbury Russett, D. Harris; Early Bough, W. Wheeler; Yellow Newton Pippins, H. H. Morse; Delaware Harvey, A. Longley; Paradise Pippin, O. Foster; Golden Drop, R. Spurr; Golden Ball, O. Foster.

Pears—Best doz. Beurre Rose, R. Marshall.

**Manitoba Agricultural Exhibition.**

The opening of the fourth annual exhibition of the Manitoba Agricultural Society caused unusual excitement in Winnipeg, the capital of the Prairie Province. Knowing the enterprise of the Manitobans and the great resources of their country, we expected that it would be a great success, and we have not been disappointed. The number of entries was 1109, a falling off of 116 from last year.

HORSES.—The exhibit in this department was excellent, and was decidedly superior to that of last year. There were exhibited 4 thoroughbred horses, 23 general purpose, 30 saddle and harness—in all 57 horses. First prizes were awarded to the following:—Thoroughbred stallions, Hon. Jas. McKay; heavy draught do., Jas. Harrower; general purpose do., Jas. Barbour; yearling colt, E. G. Conklin; colt, Robt. Bell; brood mare and foal, D. McDonald; brood mare and descendants, Hon. M. Royal; gelding or filly, Robt. Muir; gelding or colt, D. McDonald; pair carriage horses, D. T. Sinclair; pair heavy draught horses, Wm. Scott; pair general purpose horses, Ed. Romans; carriage horses, D. S. Sinclair; saddle horses, H. Sutherland.

CATTLE.—The number of entries in this class was not large, but included some superior animals. Walter Lynch, formerly, we believe, of Middlesex, showed a head of pedigreed Durhams, a two-year-old bull, six cows and heifers, and a bull calf. He bore off nine prizes, taking for a two-year-old heifer 1st, 2nd and 3rd prizes. A. G. Green also took a prize for a bull of any age, and J. Connor for a three-year-old bull.

SHEEP.—W. Thompson took three prizes, viz:—shearling ram, ram lamb, and two ewes. H. Rose, 1st prize, ram two years.

SWINE.—In superior excellence and great variety this class was well represented. Mr. Rose had pens of Suffolks, Chester Whites, and Berkshires. He took four first premiums and one second; Mr. Patterson, two first premiums and one second. Mr. Conklin took first prize for boar over one year old, and Mr. Sutherland 1 second.

POULTRY.—The display was excellent. There were coops of Game, Partridge, Cochon China, Brahmans, Leghorns, and other varieties.

VEGETABLES AND FIELD ROOTS.—The quality of those shown was superior to that of last year's exhibition, though not averaging so rank a growth. Potatoes, carrots, turnips, beets and mangolds were well represented. Mr. Kay, of St. Andrews, exhibited an assortment of 25 varieties of vegetables, and Mr. H. J. Ackland 44 named varieties.

The other principal exhibitors were, the Bishop of Rupert's Land, Hon. Jas. McKay, W. A. Fanner, Robert Morgan, Mrs. Pritchard, and Charles Mollard. Of these Mrs. Pritchard bore off fourteen prizes, besides three prizes for domestic manufactures.

One of the rarest ferns was recently found on the road to Liverpool, N.S., and the roots of it are now growing in the fernery at Bella Hill. The species is Woodwardia Virginica. It has been hitherto known to exist in only one spot in Nova Scotia, at Summer Rest, Northwest Arm, where it was discovered by Miss Lawson of that place. There are a few stations known in Ontario, Millgrove Marsh, near Hamilton; Pelham; Sphagnous Swamp, ten miles from Prescott; Augusta and Belleville.

EXTRACTING GRUBS.—They say that the openings made by grubs in the backs of cattle should be "enlarged with a penknife if necessary," and the grubs squeezed out. I know a better way than that. Take a small oil can, such as is used for a sewing-machine, put in soft, limpid oil, insert the tip in the hole made by the grub and press a little on the bottom of the can, forcing some oil around the grub, than press hard upon each side of the grub and it will come out with a pop. A dozen may be taken out this way in less time than one without the oil. These grubs should all be taken out of cattle's backs, as they injure the cattle, are painful, and each female grub taken out prevents several hundred being produced next year, and this is the time to do it.



The Family Circle.

"Home, Sweet Home."

Brian Taafe's Will.

BY CHARLES READE.

In a certain part of Ireland a long time ago lived a wealthy old farmer whose name was Brian Taafe. His three sons, Guillaume, Shamus and Garrett, worked on the farm. The old man had a great affection for them all, and finding himself unfit for work, he resolved to hand his farm over to them and sit quiet by the fireside. But as that was not a thing to be done lightly, he thought he would just put them to their trial. He would take the measure of their intelligence and their affection.

Proceeding this order he gave each £100 and quietly waited to see what they would do with it.

Well, Guillaume and Shamus put their £100 out at interest, every penny; but when the old man questioned Garrett where his money was, the young man said, "I spent it, father."

"Spent it?" said the old man, aghast. "Is it the whole £100?"

"Sure I thought you told us we might lay it out as we pleased."

"Is that the reason ye'd waste the whole of it in a year, ye prodigal?" cried the old man, and he trembled at the idea of his substance ever falling into such hands.

Some months after this he applied the second test.

He convened his sons and addressed them solemnly:—

"I am an old man, my children; my hair is white on my head, and it's time I was giving over trade and making my soul."

The two elders overflowed with sympathy.

He then gave the dairy farm and hill to Shamus, and the meadows to Guillaume. Thereupon these two vied with each other in expressions of love and gratitude. But Garrett said never a word, and this, coupled with his behaviour about the £100, so maddened the old man that he gave Garrett's portion, namely, the home and the home farm, to his elder brothers to hold in common. Garrett he disinherited on the spot and in due form. That is to say, he did not overlook him nor pass him by; but even as spiteful testators used to leave the disinherited a shilling, that he might not be able to say he had been inadvertently omitted, and it was all a mistake, Brian Taafe solemnly presented young Garrett Taafe with a hazel staff and a small bag. Poor Garrett knew very well what that meant. He shouldered the bag and went forth into the wide world with a sad heart but a silent tongue. His dog Lurcher was for following him, but he drove him back with a stone.

On the strength of the new arrangement, Guillaume and Shamus married directly and brought their wives home, for it was a large house and had room for all.

But the old farmer was not contented to be quite a cypher, and he kept finding fault with this and that. The young men became more and more impatient of this interference, and their wives fanned the flames with female pertinacity. So that the house was divided and the very home of discord.

This went on getting worse and worse, till at last, one winter afternoon, Shamus defied his father before the rest, and said: "I'd like to know what would please ye. Maybe ye'd like to turn us all out as you did Garrett."

The old farmer replied with sudden dignity: "If I did I take no more than I gave."

"What good was your giving it?" said Guillaume. We get no comfort of it while you are in the house."

"Do you talk in that way too?" said the father, deeply grieved. "If it was poor Garrett I had, he wouldn't use me so."

"Much thanks the poor boy ever got from you!" said one of the women with venomous tongue. Then the other woman finding she could count on male support suggested to her, father-in-law to take his stick and follow his beloved Garrett, adding: "Sure he'd find him begging about the country."

At the women's tongues the wounded parent turned at bay.

"I don't wonder at anything I hear you say. You never heard of any good that a woman had a hand in—only mischief always. If ye ask who made such a road, or built a bridge, or wrote a great history, or did a great action, ye'll never hear it's a woman did it; but if there's a duel with swords or guns, or two boys cracking each other's crowns with shillalaws, or a secret let out, or a character ruined, or a man brought to the gallows, or mischief made between a father and his own flesh and blood, I'll engage ye'll hear a woman had some call in it. We needn't have recourse to history to know your doin's; its under our eyes; for 'twas the likes of ye two burned Troy, and made the King o' Leicester rebel against Brian Boru."

These shafts of eloquence struck home. The women set up a screaming, and pulled the caps off their heads, which in that part was equivalent to the gentle folks drawing their swords.

"Oh, murder! murder! was it for this I married you, Guillaume Taafe?"

"Oh, Shamus, will ye sit and hear me compared to the loikes? Would I rebel against Brian Boru?"

"Don't heed him, avourneen," said Shamus; "he is an old man."

But she would not be pacified. "Oh, vo! vo! If ever I thought the like 'ud be said of me, that I'd rebel against Brian Boru!"

As for the other, she prepared to leave the house.

"Guillaume," said she, "I'll never stay a day under your roof with them as would say I'd burn Troy. Does he forget that he ever had a mother himself? Oh! 'tis a bad apple that despises the tree it sprung from."

All this heated Shamus so that he told the woman sternly to sit down, for the offender would go; and upon that, to show they were of one mind, Guillaume deliberately opened the door. Lurcher ran out, and the wind and rain rushed in. It was a stormy night.

Then the old man took fright and humbled himself.

"Ah! Shamus, Guillaume, achree, let ye do as ye will. I'm sorry for what I said, a'ra gal. Don't turn me out on the highroad in my old days, Guillaume, and I'll engage I'll never open my mouth against one of ye the longest day I live. Ah, Shamus, it isn't long I have to stay wid ye, anyway. Yer own

hair will be as white as mine yet, please God! and ye'll be thanking Him ye showed respect to mine this night."

But they were all young and of one mind, and they turned him out and barred the door.

He crept away, shivering in the wind and rain till he got to the lee side of a stone wall, and there he stopped and asked himself whether he could live through the night. Presently something cold and smooth poked against his hand; it was a large dog that had followed him unobserved until he stopped. By a white mark on his breast he saw it was Lurcher, Garrett's dog.

"Ah," said the poor wanderer, "you are not as wise a dog as I thought, to follow me." When he spoke the dog fondled him. Then he burst out sobbing and crying: "Ah, Lurcher! Garrett was not wise either; but he would never have turned me to the door this bitter night, nor even thee." And so he moaned and lamented. But Lurcher pulled his coat, and by this movement conveyed to him that he should not stay there all night; so he crept on and knocked at more than one door but did not gain admittance it was so tempestuous. At last he lay down exhausted on some straw in the corner of an out-house; but Lurcher lay close to him, and it is probable the warmth of the dog saved his life that night.

The next day the wind and rain abated, but this aged man had other ills to fight against besides winter and rough weather. The sense of his sons' ingratitude and his own folly drove him almost mad. Sometimes he would curse and thirst for vengeance; sometimes he would shed tears that seemed to burn his withered cheeks. He got into another county, and begged from door to door. As for Lurcher, he did not beg. He used to disappear, often for an hour at a time, but always returned, and with a rabbit or even a hare in his mouth. Sometimes the friends exchanged them for a gallon of milk, sometimes they roasted them in the woods. Lurcher was a civilized dog, and did not like raw.

Wandering hither and thither Brian Taafe came at last within a few miles of his own house, but soon he had cause of wishing himself further off from it; here he met his first downright rebuff, and cruel to say, he owed it to his hard-hearted sons. One recognized him as the father of that rogue Guillaume Taafe, who had cheated him in the sale of a horse, and another as the father of that thief Shamus, who had sold him a diseased cow, which had died the week after. So, for the first time since he was out of his home, he passed the night supperless, for houses did not lie close together in that part.

Cold, hungry, houseless, and distracted with grief at what he had been and now was, nature gave way at last, and, unable to outlast the weary, bitter night, he lost his senses just before dawn, and lay motionless on the hard road.

The chances were he must die; but just at death's door his luck turned.

Lurcher put his feet over him and his chin upon his breast, to guard him as he had often guarded Garrett's coat, and that kept up a little warmth in his heart, and at the very dawn of day the door of a farm-house opened, and the master came out upon his business, and saw something unusual lying in the road a good way off. So he went towards it, and found Brian Taafe in that condition. This farmer was very well-to-do, but he had known trouble and it had made him charitable. He soon hallooed to his men, and had the old man taken in; he called his wife, too, and bade her observe it was a reverend face, though he was all in tatters. They laid him in hot blankets, and when he had come to a bit gave him a warm drink, and at last a good meal. He recovered his spirits, and thanked them with a certain dignity.

When he was comfortable, and not before, they asked him his name.

"Ah! don't ask me that," he said piteously. "It's a bad name I have, and it used to be a good one to. Don't ask me, or maybe ye'll put me out as the others did for the fault of my two sons. It's hard to be turned from my own door, alone from other honest men's doors, through the viliyns," said he.

So the farmer was kindly and said, "Never mind your name; fill your belly."

By and by the men went out into the yard, and then the wife could not restrain her curiosity. "Why, good man," said she, "sure you are too decent a man to be ashamed of your name."

"I'm too decent not to be ashamed of it," said Brian. "But you are right; an honest man should tell his name though they draw him out of heaven for it. I am Brian Taafe—that was."

"Not Brian Taafe, the strong farmer at Corrans?"

"Ay, madam, I'm all that's left of him."

"Have you a son called Garrett?"

"I had, then."

The woman spoke no more to him, but ran screaming to the door. "Here Tom! Tom!" As Lurcher, a sympathetic dog, flew to the door, and yelled and barked fiercely in support of this invocation, the hulla-baloo soon brought the farmer running in.

"Oh, Tom, asthore," cried she, "it's Mistor Taafe, the father of Garrett Taafe himself."

"Oh, Lord!" cried the farmer in equal agitation, and stared at him. "My blessing on the day you ever set foot within these doors." Then he ran to the door and hallooed, "Hi, Murphy! Ellen! come here!"

Lurcher supported the call with great energy. In ran a little boy and girl. "Look at this man with all the eyes in your body!" said he. "This is Mr. Taafe, father of Garrett Taafe, that saved us all from destruction entirely." He then turned to Mr. Taafe and told him a little more calmly that for rent; but Garrett Taafe came by, put his hand in his pocket, took out £30, and cleared them in a moment. It was a way he had; he were not the only ones he saved in that way, so long as he had it to give."

The old man did not hear these last words; his eyes were opened; the iron entered his soul, and he overflowed with grief and penitence.

"Och, murder! murder!" he cried. "My poor boy! What had I to do at all to go and turn you drift, as I done, for no reason in life!" then with a piteous apologetic wail, "I tuk the wrong for the right; that's the way the world is blinded. Och, Garrett, Garrett, what will I do with the thoughts of it? And those two viliyns that I gave it all to, and they turned me out in my old days, as I done you. No minter!" and he fell into a sobbing and trembling that nearly killed him for the second time.

But the true friend of his son Garrett nursed him through

that, and comforted him as he recovered. But, as he did live, he outlived the tender feelings whose mortal wounds had so nearly killed him. When he recovered this last blow he brooded, but never shed another tear.

One day, seeing him pretty well restored, as he thought, the good farmer came to him with a fat bag of gold. "Sir," said he, "soon after your son helped us luck set in our way. Mary she had a legacy; we had a wonderful crop of flax, and with that plant 'tis kill or cure; and then I found lead in the hill, and they pay me a deal o' money for leave to mine there. I'm almost ashamed to take it. I tell you this to show you I can afford to pay you back that £30, and if you please I'll count it out."

"No!" said Mr. Taafe. "I'll not take Garrett's money; but if you'll do me a favor, lend me the whole bag for a week, for at the sight of it I see a way to—Whisper."

Then with bated breath, and in strict confidence, he hinted to the farmer a scheme of vengeance. The farmer was not even to tell it to his wife, "for," said old Brian, "the very birds carry these things about; and it is knowing ones I have to deal with, especially the women."

Next day the farmer lent him a good suit, and drove him to a quiet corner scarce a hundred yards from his old abode. The farmer got down and left him. Lurcher walked at his master's heels. It was noon and the sun was shining bright.

The wife of Shamus Taafe came out to hang up her man's shirt to dry, when lo! scarce thirty yards from her she saw an old man seated counting out gold on a broad stone at his feet. At first she thought it must be one of the good people or fairies, or else she must be dreaming; but no! cocking her head on one side she saw for certain the profile of Brian Taafe and he was counting a mass of gold. She ran in and screamed her news rather than spoke it.

"Nonsense, woman," said Shamus, roughly, "it is not in nature."

"Then go and see for yourself, man!" she replied.

Shamus was not the only one to take this advice. They all stole out on tip-toe, and made a sort of semi-circle of curiosity. It was no dream; there were piles of gold glowing in the sun, and old Brian with a horse-pistol across his knee; and even Lurcher seemed to have his eyes steadily fixed on the glittering booty.

When they had thoroughly drunk in this unexpected scene, they began to converse in agitated whispers. But even in talking they never looked at each other—their eyes were glued on the gold.

Said Guillaume: "You did very wrong, Shamus, to turn out the old father as ye done; now see what ye have lost by it. That's a part of the money he laid by, and we'll never see a penny of it."

The wives whispered that that was a foolish thing to say.

"Leave it to us," said they, "and we will have it all one day."

This being agreed to, the women stole towards the old man, one on each side. Lurcher rose and snarled, and old Brian hurried his gold into his ample pockets, and stood on the defensive.

"Oh! father! and is it you come back!—Oh! the Lord he praised! Oh, the weary day since ye left us, and all our good luck wid ye!"

Brian received this and similar speeches with fury and reproaches. Then they humbled themselves and wept, cursed their ill-governed tongues, and bewailed the men's folly in listening to them. They flattered him and cajoled him, and ordered their husbands to come forward and beg the old man's pardon, and not let him ever leave them again. The supple sons were all penitence and affection directly. Brian at last consented to stay, but stipulated a certain chamber with a key to it. "For," said he, "I've got my strong box to take care of as well as myself."

They pricked up their ears directly at mention of the strong box, and asked where it was.

"Oh, it is not so far, but I can't carry it. Give me two boys to fetch it."

Oh! Guillaume and Shamus would carry it or anything else, to oblige their long-lost father.

So they went with him to the farmer's cart, and brought in the box, which was pretty large, and above all was very full and heavy.

He was once more king of his own house, and flattered and petted as he had never been since he had given away his estate. To be sure, he led to mysterious hints that he had other lands besides those in that part of the country, and that, indeed, the full extent of his possessions would never be known till his will was read; which was safely looked away in his strong box—with other things.

And so he passed a pleasant time, embittered only by regrets, and very poignant they were, that he had heard nothing of his son Garrett. Lurcher, also, was taken great care of, and became old and lazy.

But shocks that do not kill undermine. Before he reached three-score and ten, Brian Taafe's night-work and troubles told upon him and he drew near his end. He was quite conscious of it, and announced his own departure, but not in a regretful way. He had become quite a philosopher, and indeed there was a sort of chuckle about the old fellow in speaking of his own death, which his daughters-in-law secretly denounced as unchristian, and, what was worse, uncanny.

Whenever he did mention the expected event he was sure to say:

"And mind, boys, my will is in the strong box."

"Don't speak of it, father," was the reply.

When he was dying he called for both his sons, and said, in a feeble voice:

"I was a strong farmer, and come of honest folks. You'll give me a good washin', boys, and a grand funeral."

They promised this very heartily.

So there was a grand wake, and the virtues of the deceased and his professional importance were duly howled by the old lady who excelled in this lugubrious art. Then the funeral was hurried on because they were in a hurry to open the chest.

The funeral was joined in the churchyard by a stranger, who muffled his face and shed the only tears that fell upon that grave. After the funeral he stayed behind all the rest that mourned, but he joined the family at the feast which followed, and behold! it was Garrett, come a day too late. He was welcomed with exuberant affection, not being down in the will; but they did not ask him to sleep there. They wanted to be alone and read the will. He begged for some reminiscence of his father, and they gave him Lurcher. So he put



Lurcher into his gig and drove away to that good farmer, sure of his welcome, and praying God that he might find him alive. Perhaps his brothers would not let him go so easily had they known he had made a large fortune in America and was going to buy quite a slice of the county.

On the way he kept talking to Lurcher, and reminding him of certain sports they had enjoyed together, and feats of poaching. Poor old Lurcher kept pricking his ears all the time, and and cudgelled his memory at the tones of the voice that was addressing them. Garrett reached the farm, and was received first with stares, then with cries of joy, and was dragged into the house, so to speak. After the first order of welcome, he told them he had arrived only just in time to bury his father. "And this old dog," said he, "is all that's left of him. He was mine first, but when I left he took to father. He was always a wise dog."

"We know him," said the wife; "he has been here before." And she was going to burst it all out, but her man said, "another time," and gave her a look as black as thunder, which wasn't his way at all, but he explained to her afterwards. "They are friends, those three, over the old man's grave. We should think twice before we stir ill blood between 'em." So when he stopped her, she turned it off cleverly enough, and said the dear old dog must have his supper. Supper they gave him, and a new sheepskin to lie on by the great fire.

So there he lay, and seemed to sleep. The best bed in the house was laid for Garrett, and when he got up to go didn't that wise old dog get up too with an effort, and move stiffly towards Garrett and lick his hand; then lie down again all of a piece, as who should say: "I'm very tired of it all." "He knows me at last. He was always a wonderful wise dog," he remarked.

In the morning they found Lurcher dead and stiff on the sheepskin. It was a long good-night he had bid so quietly to the friend of his youth.

Garrett shed tears over him, and said: "If I had only known what he meant, I'd have sat up with him. But I could never see far. He was a deal wiser for a dog than I shall ever be as a man."

Meanwhile the family party assembled in the bed-room of the deceased. Every trace of feigned regret had left their faces, and all their eyes sparkled with joy and curiosity. They hunted for the keys; first, quietly; then noisily. The women found them at last sewed up in the bed. They cut them out and opened the chest.

The first thing they found was a lot of stones. They glared at them, and the color left their faces. What devilry is this?

Presently they found writing on one stone: "Look below." Then there was a reaction and a loud laugh. The old fellow was afraid the money and parchments would fly away, and so he kept them down.

They plunged their hands in, and soon cleared out a barrowful of stones, till they came to a kind of paving stone. They lifted this carefully out, and discovered a good new rope with a running noose, and—the will.

It was headed in large letters, finely engrossed:

"THE LAST WILL AND TESTAMENT OF BRIAN TAARF."

But the body of the instrument was in the scrawl of the testator:

"I bequeath all the stones in this box to the hearts of those who could turn their father and benefactor out on the highway that stormy night.

I bequeath this rope for any father to hang himself with who is fool enough to give his property to his children before he dies."

### Minnie May's Department.

MY DEAR NIECES.—These cold days begin to make us think of our fall work in prospective—the making up of garments, and repairing shirts, socks, mittens, etc., for the little ones who have to trot to school in the winter mornings through the storms. Yes, it is a pleasure to see them snugly and warmly dressed, and how they enjoy the cold weather, with their little sleighs, skates, etc. But now, I am wandering from what I want to gossip with you about. Have you your house-cleaning done, winter butter packed, and soap made? the flowers taken up to adorn your homes, and the remaining ones properly attended to? There is hardly anything that makes work of any kind come so hard as always being a little behind. "Drive your work, and do not let it drive you," is an old adage which might profit some of us to heed and fully learn the value of its lesson. We often hear housekeepers remark, "My sewing is all behind; I have piles and piles of sewing to be done. We are all suffering for winter garments, and it seems as if I would never get time to make them." You will then see them sitting up till the wee hours in the morning, worrying and toiling, whereas the better plan would be to get a girl for a few weeks to help along with the hardest of it. It will be a saving of health, strength and good spirits, and perhaps a "doctor's bill." For everyday wear underclothing, common night-dresses, sheets, pillow-cases, etc., the unbleached cotton is preferable, as being easier to make up and wash,

and is more durable than the bleached. It can be whitened very quickly and easily by the use of chloride of lime; but we prefer the old method of bleaching on the grass. June is a good month in which to bleach upon the grass, there being less danger from mildew than later in the season. But now, dear nieces, don't forget to have nice, warm flannels in readiness. We think we hear some one say, "Flannels cost so much!" but it is better to wear good warm underclothing, and less expensive hats or dresses. Flannel should always be worn next the body, through the piercing winds of autumn, the bleak, cold winter, and damp, chilly spring.

MINNIE MAY.

DEAR MINNIE MAY,—I am a great advocate for meat puddings and pies; give me beef for puddings and pork for pies. Take pieces of lean, tender pork, the tender loin or the spare ribs are exceedingly nice when used in this way. Cut in inch pieces, boil till tender or long enough so as to remove all bone, season well with pepper and salt. Make a good common pie crust, line your dish with crust rolled thick, "place a cup up side down in the middle of the dish," then fill full with the seasoned meat, cover with top crust, in the centre of which is a small opening for gravy, bake slowly. When removed from the oven fill with water or gravy made thus: Boil all bones and bits of meat, not nice for pies, a long time, then strain; if you boil them the day before making the pies it is better. When cold, a thick layer of fat will rise to the top, remove all this; the broth should be a stiff jelly; put on the stove to warm; season lightly; fill the pies; the more the better; very nice eating either hot or cold.

Your niece, M. SIBTON.

MY DEAR MINNIE MAY,—My husband gives me the credit of rather excelling in the art of making tea biscuits, recipe of which I send to you, hoping some of your many nieces may be benefited from its use.

TEA BISCUITS.

For one pint of unsifted flour I take one rounding teaspoonful of best baking powder, one even spoonful salt, and sift through the sieve together. Thoroughly rub into this butter or nice lard the size of a hen's egg. Lay a little handful on the molding board and put the rest in a deep basin and stir in water (or skim milk which is better), just enough to dampen (not wet) the flour, and turn out on the board. The little dry flour that sticks to the edges and bottom, and the reserved handful must be sufficient to mold with. Mold as little as possible to get the dough together. Roll three-fourths of an inch thick. Work rapidly, especially after the wetting is added, and put quickly in a hot oven. The oven is the essential point, as, were every other part perfect, a moderate oven would spoil all.

Mine are at least two inches thick when they come to the table, and like a feather in weight.

Will some one kindly favor me with a recipe for cider pudding?

MRS. WARREN.

CIDER PUDDING.

One pint of cider, one-half pint of molasses, one teaspoonful each of ground cloves and cinnamon, one cup of chopped raisins, one-half cup of suet, pinch of salt, and flour enough to make a stiff batter. Boil two hours, and serve with hot or cold sauce, or both, according to taste. Milk substituted for cider will make an excellent pudding. If you have not suet use one-half cup of butter and a teaspoonful of soda.

TO BRIGHTEN A COPPER BOILER.

Use a coarse cloth; have a pail of very hot water; soap the cloth a little; sprinkle on plenty of pulverized borax, and rub the boiler well; rinse off with hot water, and dry with a soft cloth. The boiler can be brightened in this way as quickly as with acid.

CHRISTMAS MINCE-MEAT.

Three pounds of rib roast beef, five pounds of apples, one pound of fresh beef suet, two pounds of raisins stoned, one pound whole, two pounds and a half of currants, half a pound of mixed candied peel, the grated rind of three fresh lemons, the juice of two, two pounds of sugar, two nutmegs, dessertspoonful of mace, one of cinnamon, one of allspice, one of ginger, one of salt, a fruit syrup, and a pint of golden syrup boiled in two

quarts of cider until reduced one-fourth, and then poured over the whole. Of course the ingredients are separately prepared and afterward thoroughly mixed.

COLD CHICKEN.

Boil the chicken till tender; remove the flesh from the bones and chop it fine; season with salt, pepper, thyme and a dust of mace. Press it in an earthen pot; cut in slices and serve. This is an excellent dish for lunch or tea.

OYSTER PIE.

Make pastry and line a deep dish; put a layer of oysters at the bottom, season with bits of butter, salt, pepper and catsup, then a layer of cracker crumbs; so continue until the dish is filled; pour in the strained juice and cover with pastry, leaving an opening in the centre to allow the steam to escape.

APPLE MERINGUE PIE.

To a quart of nice apple-sauce (strained through a colander) put a cup of white sugar, a tablespoonful of butter, a teaspoonful of cinnamon, a pinch of salt and a little essence of lemon; beat the yolks of four eggs light and add to the apple-sauce. Fill the crusts and bake a light brown—no upper crust; then cover with a meringue of the four whites beaten with four tablespoons of powdered sugar. Sift a little powdered sugar over the top and brown lightly. Peach pies made in the same way are delicious.

CELLARS.

As the season comes for closing these places against the frosts, it is most essential that they be thoroughly cleansed and the drains put in order, that they may remain sweet and wholesome during winter. The health of the family often depends on attention to this, as the great secret now in the preservation of health is thorough and perfect drainage, that will prevent foul gases and poisonous air.

### Sunshine and Sleep.

No syrup of poppies, no tincture of opium, no powder of morphine, can compare in sleep inducing power with sunshine. Let sleepless people court the sun. The very worst soporific in laudanum, and the very best sunshine. Therefore it is very plain that poor sleepers should pass as many hours of the day in sunshine and as few as possible in the shade. Many women are martyrs and do not know it. They shut the sunshine out of their houses, they wear veils, they carry parasols they do all that is possible to keep off the subtlest and yet most potent influence which is intended to give them strength and beauty, and cheerfulness. Is it not time to change all this, and so get roses and color in your pale cheeks, strength in your backs, and courage in your timid souls? The women of America are pale and delicate; they may be blooming and strong and the sunlight will be a potent influence in this transformation.—Dr. Hall.

### A Sermon to Girls on Cooking.

Cooking-classes have been popular among fashionable young ladies of late years. But there is no cooking-class which quite equals in its opportunity for excellent information that which you find at home. Presuming that I am talking to a girl who has just left school, I advise you to make use of your leisure in taking lessons of your mother. There is an absolute, splendid feeling of independence in knowing how to make perfectly light, sweet, substantial bread. Then try your hand at biscuits, muffins, corn bread, toast and all the different forms into which breadstuffs may be blended. Toast seems a simple thing enough, but it is frequently so ill made that it does not deserve the name. Gruel, a necessity of the sick room, is often a hopeless mystery to women; who have the vaguest idea of how it is evolved from the raw material. After you have mastered the bread question, try meats and vegetables. Any bright girl who can comprehend an equation, or formulate a syllogism, can overcome the difficulties which beset her when learning to cook. Lucent syrups, golden cake, delicately browned bread, quivering jellies, melting creams, and the whole set of material things glorified, because made for love's sake and for the good of one's dear ones, are fit expressions for any woman. The charm of this accomplishment lies in the fact that it imparts to its owner a gratifying sense of power; it bestows on her, too, the power of blessing and resting those she loves best. Wherever the cook goes she takes



her welcome along. One may tire of the sweetest singing, of the loveliest poetry, of the finest painting, and the most witty conversation, but of good cooking never. Yet I will be sorry to have you contented to be only a cook, only a domestic machine. That is not my intention. Be artist, poet, inventor and well-bred woman; be the most and best that you can, and add, as a matter of course, ability to keep house well and to do all that good housekeeping includes.—*S. S. Times.*

**How to Prepare Feathers for Use.**

Make bags of coarse unbleached cloth—one to contain the geese and ducks feathers, and the others for chickens and turkeys feathers. When plucking the poultry cut off the wings first; and if not needed for dusters strip off the feathers from the parts nearest the body, and then peel off the feathery part from the quill, but take care that no skin or flesh adheres to any of the feathers. Put the bags into a brick oven, if you are the fortunate possessor of one, and keep them there, excepting when the oven is used for baking purposes—taking them out into the wind occasionally, and beating them with a stick. When you have collected enough to fill a pillow, cut the shape you desire out of bed-ticking, and stitch it round on the wrong side with coarse, well-waxed thread, leaving a small space at the top to put in the feathers. Now lay it on a table, and rub over it on the wrong side a piece of beeswax, just warmed a little, so that it will besmear the ticking. If you cannot obtain the beeswax, common yellow soap will do as well.

If you do not wish to use the feathers either for pillows or sofa cushions, they can be put into beds that have become a little empty. The geese and duck feathers make the best beds, but the mixed feathers do well for cushions. If any of the skin or flesh adheres to the feathers they will have a putrid odor, which may seem to be an unsurmountable objection to their use; but if after a family wash is finished the bag, tied up closely at the neck, is put into the boiler of soap-suds and boiled a few moments, moving it about with the clothes stick, and lifting it up and down and squeezing it out a few times, and is then taken out and hung in the air, and shaken hard, for several days, when the feathers become dry they will be light and free from any bad smell; and they can now be put into the oven, and thus kept from moths and be always ready for use.—*Country Gentleman.*

**A Murderous Sea Flower.**

One of the exquisite wonders of the sea is called the opellet, and is about as large as the German aster, with a great many long petals of a light-green color, glossy as satin, and each one tipped with rose color. These lovely petals do not lie quietly in their places, but wave about in the water, while the opellet clings to a rock. How innocent and lovely it looks on its rocky bed! Who would suspect that it would eat anything grosser than dew or sunlight? But these beautiful waving arms, as you call them, have use besides looking pretty. They have to provide for a large, open mouth which is hidden down deep among them—so hidden that one can scarcely find it. Well do they perform their duty, for the instant a foolish little fish touches one of the rosy lips, he is struck with poison as fatal to him as lightning. He immediately becomes numb, and in a moment stops struggling, and then the other arms wrap themselves around him, and he is drawn into the huge, greedy mouth, and is seen no more. Then the lovely arms unclose and wave again in the water.

**Poor Girls.**

The poorest girls in the world are those who have never been taught to work. There are thousands of them. Rich parents have petted them; they have been taught to despise labor and depend upon others for a living, and are perfectly helpless. If misfortune comes upon their friends, as it often does, their case is hopeless. The most forlorn and miserable women upon earth belong to this class. It belongs to parents to protect their daughters from this deplorable condition. They do them a great wrong if they neglect it. Every daughter should be taught to earn her own living. The rich, as well as the poor, require this training. The wheel of fortune rolls swiftly round—the rich are very likely to become poor, and the poor rich. Skill to labor is no disadvantage to the rich, and is indispensable to the poor. Well-to-do parents must educate their children to work. No reform is more imperative than this.

**Hope.**

Hope is comfort in distress,  
Hope is in misfortune bliss,  
Hope in sorrow is delight,  
Hope is day in darkest night.  
Nor wonder at this riddling knot,  
For hope is everything which she is not.

Hope, though slow she be and late,  
Yet outruns swift Time and Fate,  
And aforehand loves to be  
With most remote futurity.  
Hope, though she die,  
Immortal is,  
And in fruition fruit doth fairer rise.

**May Memories.**

Swiftly wound the silver river  
Where the grass grew deep,  
Through the mystic shade and silence  
That the woodlands keep;  
Underneath the chestnuts straying  
(Trembling fans o'erhead),  
With the creamy blossoms playing,  
How my bright hours sped!

As a dream when one awaketh  
Seems to me that day,  
Chestnut blossoms, gliding river,  
Fairlyland of May!  
City walls close in behind me,  
Summer joys are o'er;  
Where the sunshine used to find me  
I shall stray no more!

Other hands will pull the blossoms,  
Cones of pink and white;  
Mine are worn with daily labor,  
Tired from morn till night.  
Still I muse, but not in sadness,  
On those bygone days;  
Here my Autumn hath its gladness—  
Worth a thousand Mays!

**Tell-Tale Lips.**

I have noticed that lips become more or less contracted in the course of years, in proportion as they are accustomed to express good humor and generosity, or peevishness or a contracted mind. Remark the effect which a moment of ill-temper and grudgingness has upon the lips, and judge what may be expected from a habitual series of such movements. Remark the reverse, and make similar judgment. The mouth is the frankest part of the face; it cannot in the least conceal its sensations. We can hide neither ill temper with it, nor good; we may affect what we please, but affectation will not help us. In a wrong cause it will only make our observers resent the endeavor to impose on them. The mouth is the seat of one class of emotions, and the eyes are of another; or, rather, it expresses the same emotions, but in greater detail, and with a greater irrepresible tendency to be in motion. It is the region of smiles and dimples, and of trembling earnestness; of a sharp sorrow, or full-breathing joy, of candor, of reserve, of anxious care, or liberal sympathy. The mouth, out of its many sensibilities, may be fancied throwing up one great expression into the eye—as many lights in a city reflect a broad luster into the heavens.—*Leigh Hunt.*

**Geraniums.**

Last November I pulled from the earth a large scarlet Geranium, together with my double one, tied strings around them and hung them in the cellar, which, by the way, is a very dry one. In March I took them up leafless, to all appearance dead, put them in some common earth and kept them moist; they soon showed life and came out very well. Transferred them to tubs for growing flowers in my grounds, I think the last of May; they began to bloom immediately, and have had a profusion of flowers ever since, and a burhel basket would not cover one of them. I think there is nothing better for them than hen manure and plaster. If the cellar is very damp, put the geraniums in boxes of sand through the winter. Some questions were asked about the amaryllis. One year ago last fall a friend sent me one not looking very nicely, I put it in the cellar and said, go to sleep till I call for you. In March, as usual, I brought it out, not looking very well I assure you, but I watered it up and it soon bloomed; then I let it rest awhile, merely keeping life in it, then again watering well, and it bloomed again. It has now its third bloom, one stalk of six beautiful flowers.—*F. C. Y., in Floral Cabinet.*

This mode of preserving geraniums is very important, for by it we get a class of large, well rooted plants, which, if cut back close in the spring, send up a number of stalks and branches which give quite a profusion of foliage and flowers, and are therefore splendid for forming a massed bed. We say to all our readers, not only save all of your own plants, but give your neighbors who allow their plants to stand and kill down, and get theirs also, and you will have a stock of plants next spring to start a bed that will give you a mass of foliage.—*Recorder.*

"There are but two fine things in the world," says Malherbe, "women and roses." Lessing exclaims:—"Woman is the masterpiece of the universe." Bourbon says:—"The pearl is the image of purity, but woman is purer than the pearl." Thackeray writes:—"A good woman is the loveliest flower that blooms under heaven." Balzac says:—"Even the errors of woman spring from her faith in the good." Voltaire exclaims:—"All the reasonings of men are not worth one sentiment of woman." Lamartine asserts that "women have more heart imagination than men." Otway exclaims:—"Oh, woman! lovely woman! Nature made thee to temper men. We had been brutes without you." Burns says:—

God tried his novice hand on man  
And then he made the lasses, oh!

**How to Make Children Happy.**

Give your children a love for nature. It was our favored lot to be brought up by a loving, intelligent, Christian mother, and never shall we cease to feel gratitude to her memory for the many pleasant hours her early lessons have insured us. From childhood we were trained to admire and love natural objects. What an ovation was performed in honor of the first violet, and what a joyous discovery it was to spy the first pale primrose of the season! Even after long years of sorrow and trial, a thrill of happiness returns at the recollection of these innocent pleasures; of the approval she never omitted to manifest at indications of a desire to solve any of the many wonders of leaf and bud, and flower; of the pleasure with which she would survey our collections of variegated snail shells, or the arrangement of all the varieties of grasses we could collect. She also allowed us to feed caterpillars, (always, however, being most scrupulous as to the kindness with which they were treated,) and no words could describe our delight as we watched the wondrous change into chrysalis and butterfly, while she would take advantage of it to lead our thoughts to the still more wondrous transformation of the human body. The evening hours of an intelligent child might be profitably employed in arranging the shells, grasses, flowers, etc., collected during the summer, placing them carefully on paper or card, and writing the description of their classes, orders, or parts beneath. Live pets, also, deserve notice here, since tending, feeding, and nursing them afford great delight to children, and foster their kindly feelings.

By all means encourage brothers and sisters to love the same amusements. Of course those of an intelligent kind are meant, since we have no desire to transform our boys into women, or to make our girls romps. But in the study of botany, or natural history, one may materially aid the other. The boy will exhibit more courage and dexterity in securing the prizes, which the "neat-handed Phillis" can more deliberately manipulate and examine; or the girl may make a very pretty drawing of the various butterflies, beetles, etc., which the boy may color; while the neatest writer may add the description. A charming little volume might thus be commenced at a comparatively early age, which both would enjoy to review as they progress, and mark the improvement they have made. Or, again, a boy who was clever as a carpenter might be directed how to form very pretty baskets and vases for to hold the flower pots in the drawing-room or garden, while the girl could cleverly decorate them with pine cones (split down the centre in order to be more easily glued,) which, if wished, could afterwards be varnished; or bouquets of flowers might be skeletonized and bleached at the sole expense of time and trouble, and thus a charming ornament for the parlor would be produced. Hundreds of these little employments will suggest themselves to the mind of any intelligent mother, and she will then be spared the annoyance of a listless, "What shall I do? I have nothing to do!" that too often degenerates into ill-humor and peevishness. Never



mind how trivial the occupation, so that it be but useful, and trains your child to an abhorrence of idleness.

Never think it too much trouble to answer your children's questions. How often do we hear the tart reply, "I am sure I don't know child; pray don't tease me when you know I'm busy!" This is the surest way to stunt the child's mind. It is the most cruel and ruthless conduct possible, thus to deny a child the information for which he craves, and allow him to feel all the awkwardness and pain to which ignorance exposes him. Rather hail with joy these indications of a growing mind, and make the little inquirer happy by drawing him to you with a kiss, and as full and patient an elucidation as he may require.

Make your children happy in each other, encouraging them to feel that a pleasure enjoyed alone is only half enjoyed. If one of them buy only a farthing sugar-stick, teach him to feel a delight in offering a taste to the rest. As far as possible, let their presents to each other be of their own manufacture—not purchases. Let the boys carve silk-winders, or make bone crochet hooks, or copy in their style some favorite poem, transcribing it into a neat manuscript volume, perhaps adorned with original illustrations. Let the girls make bookmarks, satchels for school books, or a leathern cover for some favorite volume. Cherish the little outbursts of affection natural to them. Do not chide your boys for a few irrepressible tears at leaving home for boarding school, nor encourage "manliness" at the expense of brotherly affection, and do not grudge an hour bestowed upon a little pains-taking letter-writer or juvenile composer, who is anxious to give an account of various home details to the absent one. Let him write two or three sentences of his epistle each night, overlooked by an elder sister; the one will feel happy at being able to instruct, the other will be grateful at the sight of the letters that grow beneath his pen. By any means, at any expense of trouble to yourself make home happy to your children; let it always remain in their memories as a type of all that is peaceful, loving and attractive; let them constantly revert to it as a soothing remembrance in the hours of pain, sorrow or privation, and let its associations be so hallowed and precious as to restrain them in temptation and strengthen them in trial. Yours is a noble mission; oh, parents, see that ye fulfil it with that wisdom and gentleness which shall prove you worthy of the dignity and honor it confers!—*The Leisure Hour.*

#### The Turkish Bath.

Doubtless all readers know something of the "Turkish Bath;" many know that it originated among the Phœnicians more than three thousand years ago, and that it was more recently adopted, with some improvements, by the Greeks. The Romans, after conquering Greece, made great use of these baths, and the traveler visiting the " Eternal City" may still see traces of their ruins. The baths of the ancients were constructed with great magnificence, being inlaid with gold, silver, marble, and the finest mosaic. They were also very large, "the baths of Caracalla alone accommodating eighteen thousand bathers at once." The Goths and Vandals, out of enmity to the Romans, and also, we think, because of their inability to appreciate anything so refined and æsthetic in its nature, destroyed these baths wherever found.

The Emperor Constantine introduced these baths among the Turks of Constantinople, and from them we have acquired our knowledge. Although we can not boast of such superb baths as those of the ancient Greeks and Romans, we are not prepared to say that their effect on the human system is in any way inferior.

Having visited several of these baths—two of which are in New York city—a description of the different processes through which the bather passes may not be uninteresting. Our pet bath is on West Twenty-sixth street, near Broadway—ladies' hours from 9 a. m. till 1 p. m. Entering the hall, you are ushered into the reception room, where you register your name, purchase tickets, and, if you wish, deposit your valuables in the safe. You then enter one of the numerous dressing rooms, where you are furnished with a bathing sheet, and you soon emerge from thence draped only in classic folds of pure white linen; you then pass into the "Tepidarium" or first warm room, in which the temperature is usually 130°. At first the air seems unpleasantly warm and you try to avoid breathing it, but this sensation soon passes away—

you know that the room is well ventilated, and you begin to enjoy the delicious warmth which seems to embrace you in its silken folds. A kindly attendant gives you cool water to drink and soothes away any lingering nervousness. Should your head be oppressed—it seldom is, however—the congestion is soon relieved by spraying the feet with cold water. You sit or recline at pleasure, a gentle moisture soon begins to cover your body, and usually in twenty or thirty minutes you perspire freely. Most bathers find this heat sufficient to induce perspiration, but if more is required, you pass still further on into the "Sudatorium" or hot room, which has a temperature ranging from 140° to 160°. In the Russian or vapor bath one sometimes mistakes the moisture that collects on the body from the vapor for perspiration; but in this bath of pure, dry, hot air, you know that the moisture that covers you is the impurities of the body passing off through the pores of the skin.

After sufficient time you are taken into one of the shampooing closets. This room is also warm, and has floor, ceilings and couch of marble. ("The word shampoo is from the Hindostanee *tshampau*—to press, to squeeze," or, if you prefer Webster, you will find his definition nearly the same.) The attendant, with hands of velvety softness dipped now and then in tepid water, rubs the face, neck and shoulders, then the sides and limbs; then each portion of the body is gently pressed and wrung until every muscle and joint seems to have been stirred. You are then struck a series of light running blows, passing down one side and up the other, until you fairly tingle with new electricity. A brush is then dipped into a lather of perfumed soap, and you are so thoroughly brushed that you wonder if you will ever get away with anything but your skeleton. The lather is then rinsed off and you are sprayed, first with tepid water, which is made cooler if agreeable. Vigorous people here indulge in the plunge, but those of nervous temperament should omit it altogether, as the exhilaration induced is followed by languor and nervous exhaustion.

At last you are nicely dried and wrapped in the linen drapery, and again you pass into the reception room, where you may recline at will (or until the body is cooled to its natural temperature) on a soft couch. An indescribable sense of quiet and restfulness steals over you, and perhaps you sink into a dreamless slumber from which you awake to newness of life. Your dress—your skin is velvety soft, your step is elastic, your faculties are clear,—that great load of care that you brought with you has vanished under the magnetic influence of an artistic bath. You pass out into God's blessed sunshine with a song in your heart, and a determination to conquer all obstacles.

#### Suggestions for the Fireside.

"Consistency is a jewel," to be sure, and I certainly would be happy to possess it in a greater degree than I do. I will only add that it is my aim to constantly practice the principles of the following suggestions:

Be very kind and obedient to your parents, especially to your mother. Depend upon it, she is the best friend God ever has or ever will bless you with, and endeavor to retain the precious gift by a hearty appreciation of its magnitude. Never, upon any consideration, speak to her in a manner savoring of unkindness or disrespect. Pay particular attention to her advice, because it is given from a heart prompted by the deepest solicitude for your welfare. Tenderly endeavor to lighten her numerous burdens; let her trials and sufferings call forth your warmest sympathies.

By kindness and attention to your younger brothers and sisters, you will be setting them a good example, and at the same time be a comfort to your parents.

Manifest pride and pleasure in the society of your elder brothers. Make them appropriate presents occasionally, and prepare pleasant little surprises for them whenever you can. If they desire you to accompany them anywhere (brothers never desire sisters to attend an improper place), do so with an expression of thanks for the pleasure it affords you.

Conduct yourself toward your father in a manner savoring of filial affection. Let no opportunity to do him a favor pass unimproved. Express sympathy for him when he is tired or sick. A man of feeling always tenderly loves an affectionate daughter.

Try to cultivate a love for the society of your parents, for it will not injure you in the estimation

of others, but, on the contrary, it will have a tendency to elevate you in their good opinion.

Never misuse any of your relatives, as unkind reflections, with regard to kindred, are neither useful nor ornamental.

Be neat and tasteful in dress, and attend particularly to personal cleanliness.

Cultivate an easy and graceful manner, and always sit or stand with your body erect; don't acquire the habit of stooping over when you are ill.

Study the laws of health and practice them.

If you realize the advantage of a good education, you will of course make every possible effort to secure one.

Be one of those illustrious persons who always have a kind word for everybody. Let it be the ruling passion of your life to make others happy.

Try to be diligent and energetic in anything you undertake.

Be dignified, amiable and religious.

With these remarks I close the series of letters to the readers of the *ADVOCATE*. You may perhaps hear from me again on some general subject.

SISTER MARY.

#### A Love-Letter.

The reader, after perusing it, will please read it again, commencing with the first line, then the third and fifth, and so on, reading each alternate line to the end:

TO MISS M——.

The great love I have expressed for you is false, and I find my indifference towards you increases daily. The more I see of you, the more you appear in my eyes an object of contempt. I feel myself every way disposed and determined to hate you. Believe me, I never had an intention to offer you my hand. Our last conversation has left a tedious insipidity which has by no means given me the most exalted idea of your character. Your temper would make me extremely unhappy, and were we united, I should experience nothing but the hatred of my parents, added to the anything but pleasure in living with you. I have indeed a heart to bestow, but I do not wish you to imagine it at your service. I could not give it to any one more inconsistent and capricious than yourself, and less capable to do honor to my choice and to my family. Yes, Miss, I hope you will be persuaded that I speak sincerely, and you will do me a favor to avoid me. I shall excuse you taking the trouble to answer this. Your letters are always full of impertinence, and you have not a shadow of wit and good-sense. Adieu! adieu! Believe me so averse to you, that it is impossible for me ever to be your most affectionate friend and humble servant, L——.

#### Hints to Callers.

Always come whenever possible on washing day, even though an ironing day will suit your purpose nearly as well.

Endeavor to drop in just before meal time, and stay on any pretext until the bell rings, when it is very probable you will be asked to sit down at the table, no matter how inconvenient it may be to the family.

Be sure and report all the unpleasant things that the neighbors have said, of course in the smoothest and disinterested manner, which will not lessen the effect of the scandal in the least.

Do not fail to notice any defects in the house, furniture, or surroundings, and draw unfavorable comparisons between them and the neighbors' home arrangements.

Give a detailed description of Mrs. Smith's or Miss Brown's new parlor ornaments, and remark how much finer they are than those around you.

If your child has the whooping cough, of course don't mention the fact till it has played with your host's children for half an hour, and then insist on their kissing each other at parting.

Act with charity toward none and malice toward all, then go and wonder that people don't seem cordial or ask you to call again.

BEAUTY.—After all, the truest beauty is not that which suddenly dazzles and fascinates, but that which steals upon us insensibly. Let us each call up to memory the faces that have been most pleasant to us—those that we have loved best to look upon, that now rise most vividly before us in solitude, and oftenest haunt our slumbers—and we shall usually find them not the most perfect in form, but the sweetest in expression.



**Ancle Tom's Department.**

MY DEAR NEPHEWS AND NIECES,—Did you ever play crambo? One of our nephews kindly sends us an account of the game as played one evening when he was present, which he pronounces a pleasant and improving recreation, and splendid for the sharpening of one's wits and displaying their aptness at rhyming. The way it is played, each one of the party writes a question on a small slip of paper, and a word on a large piece. The papers are then all put in a box or something, well shaken and passed around, and each person in the circle takes one of each kind, and is required to write a rhyme answering the question and containing the word. After all are written, the question, word and rhyme are read for the amusement of the company. For example here are some of the results of the game, as played by the party of which our correspondent was a member.

Word.—"Cricket."

Question.—"Does he know much?"

1. Yes, indeed, at school he is as smart as a cricket,

And is always ready in the morning waiting for the wicket.

W.—"Another."

Q.—"What is the height of impudence?"

2. 'Tis the height of impudence, we think, To joggle another while taking a drink.

W.—"Still."

Q.—"What time does the moon rise to-night?"

3. 'Twas night, at nine when all was still, When the moon shone bright all over the hill.

And so on, but space will not allow me to give any more. The game is sometimes varied by the whole company using the same word and question.

Now my dear nephews and nieces try it at some of your parties, and write a full report of the result to Minnie May.

**To Our Readers.**

Write, one and all, dear readers, kind And let us know what's in your mind, Tell us of your household cares And what you use for kitchen wares. Send us all your best receipts With which you make up all your treats For the neighbors when they call, And spread out in the dining hall. Write us how you wash and iron, And how you do your weekly dryin', How you furnish out your home, How you starch your husband's linen, And renovate the underpinnen. What you do for the children's colic, And if you ever let 'em frolic. Remember, all, this rule to-night, Whate'er you do, be sure do right.

**PUZZLES.**

**137—ENIGMA.**

O'er lawns I rove and often climb the hill, And change my color often as you will; The courtier vain, philosopher and beau I often please, yet by strict rule I go Midst ladies fair; at routs and balls I'm seen, Yet with the cottage maid trip o'er the green. With British tar, on top-sail yard I shine, Or with the collier sink into the mine; Where armies march I constantly attend, Aye, and each soldier owns me as his friend; The greatest kings and princes bend to me, Yet I serve all with great humility; I aid both priest and statesman, philosopher and clown, Granddam and infant, rich and poor in country and in town.

PUZZLE BOY.

**138—GEOGRAPHICAL ENIGMA.**

I am composed of 12 letters:— My 12, 8, 3, 2 is a river in Africa. My 11, 3, 10, 11, 8 a range of mountains in Asia. My 1, 4, 9, 10, 4, 12 capital of one of the Eastern States.

My 11, 9, 8, 11 one of the Grand Divisions. My 4, 7, 8, 4 one of the United States. My 4, 1, 2 a river in Siberia. My 7, 11, 12, 12, 8, 1, 11, 3 a town in Missouri. My 7, 2, 3, 2, 12, 11 an island on the coast of Africa. My 11, 10, 7, 2, 12, 9 a town in Greece. My 10, 8, 10, 8, 6, 11, 6, 11 a lake in South America. My 11, 10, 3, 11, 12, 10, 8, 6 an ocean. My whole is one of the political divisions of Asia.

**139—CROSS WORD ENIGMA.**

My 1st is in month, but not in day. My 2nd is in oats, but not in hay. My 3rd is in gulf, but not in bay. My 4th is in ant, but not in bug. My 5th is in carpet, but not in rug. My 6th is in glass, but not in mug. My 7th is in dinner, but not in meal. My 8th is in tin, but not in steel. My 9th is in walrus, also in seal. You will do pretty well if you get the whole. They are scattered about from pole to pole. LOUISA HALL.

**140—NUMERICAL ENIGMA.**

I am composed of nineteen letters:— My 16, 5, 2, 14, 2 is a diadem. My 8, 2, 3, 7, 10, 4 means to trade. My 17, 11, 1, 4, 6 is a kind of clay. My 19, 15, 11, 12, 9 18 is to shun. And my 15, 1, 19, 13, 3 is clear. Whole I am a celebrated authoress. KITTY LOWE.

**141—REVERSIONS.**

- 1. Reverse a preposition and form a denial.
- 2. To depart, and a king of olden time.
- 3. A Spanish gentleman and of a movement of the head.
- 4. Temper and penalty.
- 5. The measure of sounds and to send out.
- 6. Troublesome animals and luminous body.
- 7. Part of the verb "to be," and a period of time.
- 8. A promise to pay and a governor of Connecticut for nineteen years.

**142—GEOGRAPHICAL REBUS.**



**143—CHARADE.**

Cut off my head, and singular I am, Cut off my tail and plural I appear; Cut off both head and tail, and strange to say, Although the middle's left, there's nothing there. My first's a rolling sea, My last's a flowing river, And in their mingled depths I sport and play, Parent of sweetest sounds, though mute for ever. MYRA.

**144—PUZZLE.**

My head is more valuable than any treasure; it is often preferred to even the finest gold, and yet those who thus profess to prize me first attack me with cold steel, and then crush me to death between heavy stones. I am belabored with a thousand strokes, and made to pass through the ordeal of both fire and water, and yet, in spite of it all, I give life to those who thus cause my death. MAGGIE JOHNSTONE.

**145—ENIGMA.**

I consist of 14 letters. My whole is a fragrant flower. I went to pick wild 1, 5, 7, 9, 2, 6, 14, 11, 10, 8, 3, 13, and found it blooming in the field where they grew. The 7, 12, 1, 3, 1 made the 9, 8, 7 very 13, 2, 14, 3, 5; and I did not care if the 6, 11, 8, 9, 7, 1 hurt my fingers. I 13, 9, 2 a sheep or 5, 2, 12 come and 6, 11, 12, 2, 1, 14 some of 8, 5, 1 leaves. A boy with a sly look (who 11, 12, 6, 1 bird's nests) came by with a 6, 9, 11, 7, 12, 2. He had also a 6, 12, 2, and 9, 11, 10, 12, 2, and aimed at the 6, 11, 4, 9, 13, 5, of a robin through the 6, 9,

7, 13. I was 13, 12, 7, 10, 8, 14, 11 than I can tell that he hit 8, 5. Then I took my 10, 12, 13, 4, 1 and 6, 14, 7, 11, 8, 4, 1 and went home.

146—Find two words in the English language of eight letters each, one of one syllable and the other of five syllables. W. BROUGHTON.

**147—SQUARE WORD.**

Fill the blank with the words constituting the square word.

Come out and see this brilliant — said a — in the — one evening to —.

**Answers to October Puzzles.**

In the first decapitation last No. "strong man" should have been "stony mass." 128—Frock, Rock. 2, Cup, Up. 3, Bawl, Awl. 4, Plight, Light. 5, Bring, Ring. 6, Pledge, Ledge, Edge. 7, Block, Lock. 8, Shoe, Hoe. 9, Hill, Ill. 10, Part, Art. 11, Chair, Hair, Air. 12, Bark, Ark. 13, Bell, Ell. 129—Thebes, Rome, Venice, Cairo, Nineveh, Berlin. 130—Gold, Old. 2, Brave, Rave. 3, Gone, One. 4, Story, Tory. 5, Pearl, Earl. 6, Cloud, Loud. 7, Gray, Ray. 8, Bait, Air, Swinging, Winging. 131—"When the cat's away the mice will play." 132—German. Emery, Repe, Mrs. Ay (assout instead of accent), N. 133—Provincial Exhibition in London. 134—Tread, Read, 'Ead. 2, Trill, Rill, Ill. 135—A River. 136—Napoleon Bonaparte.

**Names of Those Who Have Sent Correct Answers to October Puzzles.**

Cynthia Creeper, \*Minnie Hyde, Charles Emery, Harry W. Husband, P. G. Keyes, W. Broughton, Jane Shore, William Frost, Maude Lynn, Francis Blake, John West, John Williams, Fred James, Sarah Phillips, Lucy Mills, Eleanor North, Maggie Johnstone, Eva Spenser, Stephen Froman, William Shore, Edward Miller, Jennie Nord, Francis Graham, Nellie McIntyre, Lucy Priddy, T. Evans, B. Garnell, T. Shoebottom, John Scott, Francis Smith, James Long, Mary Adams, Jennie McKay, Florence Matthews, Lizzie Preston, J. H. Brenton, Effie Jackson.

**Humorous.**

We know a editor who offers to "take corn, wheat, rye, turnips, oysters, grindstones, rat-tail files, or anything else one can eat," in payment of subscriptions to his paper. There is nothing stuck up about that man either.

Chromos being about "played out," a Kansas paper offers a handsome young woman as a premium for the biggest lot of new subscribers, and now the Kansas girls are changing their tune and singing "I want to be a premium."

For a printer's wife, Em; for a sport's wife, Betty; for a lawyer's wife, Sue; for a teamster's wife, Carrie; for a fisherman's wife, Netty; for a shoemaker's wife, Peggy; for a carpet-dealer's wife, Mattie; for an auctioneer's wife, Biddy; for a chemist's wife Ann Eliza; for an engineer's wife, Bridget.

A thick-headed squire being worsted by Sidney Smith in an argument, took his revenge by exclaiming: "If I had a son who was an idiot I would make him a parson." "Very likely," replied Sidney, "but I see your father was of a different opinion."

A rheumatic old gentleman, whose son was careless about shutting the front door after him, called out to him one cold day, when he had left the door swinging wide, "See here, young man, you leave that door open too much!" "Do I?" was the response. "Then how much open shall I leave it?" "I mean you leave it open too often!" thundered the gentleman. "Oh! well, how often shall I leave it open?" politely inquired the son. The father did not dare trust himself to reply.

Independent Voter (to defeated candidate)—"The baby has got a new tooth, but the old lady is laid up with a cold in her head."

Defeated Candidate (gruffly)—"Well, what of it? What do I care?"

Independent Voter—"Well, before the election you used to take me aside and ask me how my family was coming on, and I've been hunting you all over town to tell you, and that's the way you talk to me! But it don't make any difference. I voted for the other candidate anyhow."

AN UNLUCKY LOT.—A man picked up a purse in the street one day, and advertised the fact. In ten days he was visited by sixty-one men, women, boys and girls, all claiming to have lost money. The sum found was but eleven dollars; but of each visitor who called, the finder asked: "So you lost fifty dollars, did you?" Nine-tenths of the applicants promptly replied, "Yes, sir." "Ah," said he, "yours was another purse."



He was making a call, and they were talking of literature. "The 'Pilgrim's Progress,'" she remarked, "always seems to me painful. Of course you are familiar with Bunyan?" He said he was—he had one on each foot, and they troubled him a good deal.

FASHIONABLE EMULATION.—Lady (speaking with difficulty),—"What have you made it round the waist, Mrs. Price?"

Dress-Maker,—"Twenty-two inches, ma'am. You couldn't breathe with less!"

Lady,—"What's Miss Jemima Jones' waist?"

Dress-Maker,—"Nineteen and a half just now, ma'am. But she's a head shorter than you are, and she's got ever so much thinner since her illness last autumn."

Lady,—"Then make it nineteen, Mrs. Price, and I'll engage to get into it."

One test of a great mind is in its instantaneous availability in an emergency. The boy who can drop a paper bag of eggs on the sidewalk and pass on without changing his gait, interrupting his whistle or looking at what he has dropped, has a future before him.

HAD HIM THERE.—A clerk in a New York mercantile establishment relates a colloquy from which a sprightly youth in the same store came out second best. A poor boy came along with his machine inquiring, "Any knives or scissors to grind?" "Don't think we have," replied the young gentleman facetiously; "can't you sharpen wits?" "Yes, if you've got any," was the prompt response.

Mamma (who has been quietly watching certain surreptitious proceedings),—"Willie, who helped you to that cake?" Willie (promptly),—"Hebben, mamma." Mamma (sternly),—"Sh-sh-sh, you naughty boy, how dare you tell such stories?" Willie,—"Taint my fault if it is a 'tory, ma. Didn't pa tell beggerman zat hebben helped zose zat helped zemselves?"

NEIGHBORLY.—"Can't stop a minute; baby's crying; but I just ran over to tell you that Mrs. Jones' husband came home a moment ago just as tight as he could be. Only think? Must go—knew you were not at the window to see him get home. Awful! Good-by, love."

"Home's the place for boys," said a stern parent to his son, who was fond of staying out at night. "That's just what I think when you drive me off to school every morning," said the son.

#### Strong Men.

Strength of character consists of two things—power of will and power of self-restraint. It requires two things, therefore, for its existence—strong feelings and strong command over them. Now we all very often mistake strong feelings for strong character. A man who bears all before him, before whose frown domestics tremble, and whose bursts of fury make the children of the household quake, because he has his own way in all things, we call him a strong man. The truth is that he is the weak man; it is his passions that are strong; he, mastered by them, is weak. You must measure the strength of a man by the power of the feelings he subdues, not by the power of those that subdue him. And hence composure is very often the highest result of strength. Did we ever see a man receive a flagrant injury, and then reply quietly? That is a man spiritually strong. Or did we ever see a man in anguish stand as if carved out of a solid rock, mastering himself? Or one bearing a hopeless daily trial remain silent, and never tell the world what cankered his home peace? That is strength. He who, with strong passions, remains chaste; he who, keenly sensitive, with manly powers of indignation in him, can be provoked and yet restrain himself and forgive, those are the strong men, the spiritual heroes.

There is nothing more indicative of refinement and a genuine culture in a family than bright, cheerful and tastefully decorated bed-chambers. Tasteful decorations do not necessarily mean expense, and it is possible to make a chamber look very pretty at a very small outlay. Indeed, in many instances, no outlay at all will be required beyond what would be incurred under any circumstances. The women of a family, especially, are apt to pass a good portion of their time in their bed-chambers, and in some houses the sleeping apartments are used alike for sewing-rooms, sitting-rooms and nurseries. It is worth while to obtain all the innocent pleasures we can find in this life, and there can be no doubt that life is pleasanter if most of its hours are passed in cheerful looking apartments.

#### "What the Wind Brings."

"Which is the Wind that brings the cold?  
The North Wind, Freddy; and all the snow;  
And the sheep will scamper into the fold  
When the North begins to blow.

"Which is the Wind that brings the heat?  
The South Wind, Katy; and corn will grow,  
And peaches redden for you to eat,  
When the South begins to blow.

"Which is the Wind that brings the rain?  
The East Wind, Arty; and farmers know  
That crows come shivering up the lane  
When the East begins to blow.

"Which is the Wind that brings the flowers?  
The West Wind, Bessy; and soft and low  
The birdies sing in the summer hours,  
When the West begins to blow."

#### The Two Apprentices.

Two boys were apprentices in a carpenter shop. One determined to make himself a thorough carpenter; the other "didn't care." One read and studied, and got books that would help him to understand the principles of his trade. He spent his evenings at home, reading. The other liked fun best. He often went with other boys to have a "good game." "Come," he often said to his shopmate, "leave your old books; come with us. What's the use of all this reading?"

"If I waste these golden moments," answered the boy, "I shall lose what I shall never make up."

While the boys were still apprentices, an offer of \$2,000 appeared in the newspapers for the best plan for a State House, to be built in one of the Eastern States. The studious boy saw the advertisement, and determined to try for it. After a careful study he drew out his plans, and sent them to the committee. We suppose he did not really expect to gain the prize; but still he thought "there is nothing like trying."

In about a week after a gentleman arrived at the carpenter's shop, and inquired if an architect by the name of Washington Wilberforce lived there.

"No," said the carpenter; "no architect, but I've got an apprentice by that name."

"Let's see him," said the gentleman.

The young man was summoned and informed that his plan had been accepted, and that the two thousand dollars were his. The gentleman then said the boy must put up the building; and his employer was so proud of his success that he willingly gave him his time and let him go.

The studious young carpenter became one of the first architects in the country. He made a fortune, and stands high in the estimation of everybody; while his fellow apprentice can hardly earn food for himself and family by his daily labor.

#### Masculine Selfishness.

Our education makes us eminently selfish. We fight for ourselves; we push for ourselves; we cut the best slices out of the joint at club dinners for ourselves, and light our pipes and say we won't go out; we prefer ourselves and our ease. The greatest good that comes to a man from woman's society is, that he has to think for somebody beside himself.

Remember, if a house is pleasant, to be in favor with the women is the great vital point. Don't turn up your nose because you are only asked to come in the evening while others are invited to dine. Agreeable acquaintances are made as well in the drawing-room as in the dining-room. Go to tea brisk and good-humored. Be determined to be pleased. Talk to a dowager. Take a hand at whist. If you know a song, sing it like a man. Never sulk about dancing—so you will get on and become one of a circle.—*Thackeray.*

#### How to Have a Loving Wife.

A correspondent sends the following to the *Phrenological Journal*—

If you would have a loving wife, be as gentle in your words after as before marriage; treat her quite as tenderly when a matron as when a miss; don't make her the maid of all work, and ask her why she looks less tidy and neat than when you first knew her; don't buy cheap, tough beef, and scold because it does not come on the table "porterhouse;" don't grumble about squalling babies if

you cannot afford to keep up a nursery, and remember that baby may take after his papa in his disposition; don't smoke and chew tobacco and thus shatter your nerves, spoil your temper and make your breath a nuisance, and complain that your wife declines to kiss you; go home joyous and cheerful to your supper, and tell your tired wife the good news you have heard, and not silently put on your hat and go out to the club or lodge, and let her afterward learn that you spent the evening at the opera or at a fancy ball with Mrs. Dash. Love your wife; be patient; remember you are not perfect, but try to be; let whiskey, tobacco and vulgar company alone; spend your evenings with your wife, live a decent, Christian life, and your wife will be loving and true—if you did not marry a heartless beauty, without sense or worth; if you did, who is to blame if you suffer the consequences?

#### Lord Justice Mellish.

The late Lord Justice Mellish, of England, was a remarkable man. The Lord Chancellor pays him this tribute:—

"The public and the profession recognized and admired in him learning which was rarely equalled, a faculty of reasoning which had not an imperfection, a perception of legal principles which amounted to an instinct. But above and beyond all these, his colleagues saw and loved a temper which could not be ruffled; a candor of judgment which was undimmed by any warp of prejudice; a force and spirit of exertion which triumphed over that which was almost the agony of physical suffering. Such a Judge it is difficult to replace. Such a man it is impossible to forget."

The *Spectator* publishes the following sonnet in his honor:—

Brave Soul, who well the anguish didst endure  
Of thy life's scourge; controlling more and more  
By patient will the taint, which baffled cure,  
Of fell disease; while rich in varied store,  
In subtlest reason schooled, the unclouded brain  
Braved toil and keen encounter, in disdain  
Of curtailed ease and tendance, to explore  
The Law's dim labyrinths and rugged lore,  
Great Advocate! who nobly didst maintain  
The entrusted cause, while throbb'd each nerve  
With pain;  
Judge of high aim, clear thought, unruffled mien,  
Masking thine inward pangs with brow serene!  
Soldier of Him who vanquished pain, well done!  
Joy to each loyal heart! thy well-earned rest is won.

#### Plowing Matches.

Four Provincial plowing matches take place this year in Ontario; some have already come off; also numerous county, and township and local matches. It is well to have these trials. Full particulars of each would occupy too much space. These trials do not show farmers which are the best plows for general use, as the awards for the best plowing are not given to land that is best adapted to receive a crop. The under-cut and cut-out make the land look well to the eye, but a fair, honest, square-cut furrow will yield a better crop than the fancy plowing will, and will clean the land better. Some of our manufacturers have been very liberal in their devotion to these trials of skill. Mr. Glen has headed the list in this western section by giving two Champion mowers, one to the trial which took place at Chatham and one to the trial at Ailsa Craig. The following are the prize winners at Ailsa Craig:—

#### PRIZE LIST.

FIRST CLASS.—1st prize, \$50 and a \$100 Champion mower, John L. Courtice, Goderich township; 2nd prize, \$40, John McGarvin, Chatham; 3rd prize, \$30, John Marquis, Goderich; 4th prize, \$20, Thomas Steele, Downie; 5th prize, \$15, William Phipps, Stratford; 6th prize, \$10, Wm. Dickson, Elma.

SECOND CLASS.—1st prize, \$40, Alex. Forsyth, Brussels, Huron Co.; 2nd prize, \$30, James Campbell, East Williams, Middlesex; 3rd prize, \$20, Jno. Haggart, Hibbert, Perth; 4th prize, \$15, Wm. Dunn, Downie, Perth; 5th prize, \$10, Wm. Thompson, Arkona, Lambton; 6th prize, \$5, Peter McDougall, Goderich, Huron.

THIRD, OR BOYS' CLASS.—1st prize, a splendid



Gray plow, presented by George Jackson, London, value, \$22, Duncan McEwen, Brucefield, Huron; 2nd prize, \$15, Wm. Gardener, Birr; 3rd prize, \$10, Jas. Dunn, Downie, Perth; 4th prize, \$5, A. Ingram, London, Middlesex. The judges were:— In the first class, Wm. Gray, Chatham; G. W. Hyde, Stratford; and Mr. Hutchinson, Goderich. In the second class, A. A. McArthur, Lobo; Jas. Ferguson, Chatham; and Jas. Thomas, Stratford.

Caution.

As we go to press we hear there are travelers about selling the Eldorado or Egyptian wheat. This wheat is very white; the head is bunching; it has not done well except in a very few localities; it is very apt to rust, and those who purchase it at high rates will not find it as profitable as some other varieties which can be procured at quarter the price.

MONEY TO LEND on the most liberal terms; apply personally or by letter to JOHN MARTIN BARISTER, &c., 438 Richmond Street, London.

See splendid offer of Railway and United States Government lands, in another column.

THE POULTRY WORLD.—Poultry fanciers and farmers who raise fowls for market will find this magazine very useful, as it is devoted exclusively to the discussion of matters pertaining to the breeding and rearing of poultry; and such other matters as are connected with the pursuit. Its appearance is very attractive, as it is adorned with numerous fine cuts, and, in addition, the publisher furnishes to his subscribers, at a nominal price, twelve magnificent Chromo-plates of modern varieties of fowls. Subscription, \$1.25 per year, or \$2 with the chromo-plates. Address H. H. STODDARD, Publisher, Hartford, Conn.

Patrons of Husbandry.

- New Subordinate Granges. 613—Southampton, Geo. S. Ingraham, M., Southampton, N.B. S. Fox, S., Southampton, N.B. 614—Sterling, S. D. Sills, M., Sterling, Ont., Ed. Caverly, S., Sterling, Ont. 615—High Bluff, James Howie, M., High Bluff, Manitoba, W. Errond, S., High Bluff, Man. 616—Oak Hills, John Thurston, M., Warkworth, Ont., E. J. Honey, S., Warkworth, Ont. 617—Phillipsville, David Nichols, M., Phillipsville, Ont., Alex. Acheson, S., Phillipsville, Ont. 618—Excelsior, R. H. Creed, M., South Rawdon, N.S., Thos. D. Knowles, S., South Rawdon, N.S. 619—Upper Newport, Francis Parker, M., Upper Newport, N.S., Ed. S. Creed, S., Upper Newport, N.S. 620—Hastings, Wm. Cood, M., Hastings, Ont., Hugh Collins, S., Hastings, Ont. 621—Brooke Valley, Robt. Roland, M., Walnut, Ont., Richard Taylor, S., Walnut, Ont.

Deputy James Arnsen, of High Bluff, Manitoba, says the prospect is encouraging for a rapid spread of the Grange in that Province the coming winter.

Stock Notes.

Bow Park Shorthorn Sale.

BRANTFORD.—The Bow Park sale of cattle, sheep and pigs came off on 18th Oct., on the agricultural show grounds, and was attended by a large number of farmers from the Western counties of Ontario, and by a good many from the States of New York and Michigan. The scarcity of money was, however, very obvious in the extreme caution displayed throughout the sale by the buyers. The cattle offered were thoroughbred Shorthorns of great individual merit, though not of fashionable pedigrees, and the prices obtained for them were not high. Thirty-nine lots were sold at prices ranging from \$80 to \$225. The Cotswold sheep were all sold at excellent prices. Night had begun to close in when the Berkshire pigs were reached, but nearly all of them were sold at remunerative prices.

The whole of the stock offered was of good quality and in fine condition, and though the prices were held by good judges to be above the mark of the present pinching times, we certainly think they ought to have been more liberal than they were.

[The above is the Globe report, but no account of the prices for the individual animals has been given to the public, as far as we are aware.—Ed.]

On the 13th November a fanning-mill test will take place in London, Ont., between J. O. Wisner & Son of Brantford and Jno. Stewart & Co., of London, for \$100 a side.

Mrs. Whitehead of Iberville, Que., imported, per steamship Lake Megantic, from Liverpool, in ignorance of our Cattle Prohibition Proclamation, some eleven cows, one calf and twenty sheep, valued at over \$10,000. These cattle are now detained at Grosse Isle by the Government, and cannot be landed. The circumstances are particularly annoying, from the great loss which will be sustained, and from the fact that the Government are powerless in the matter.

Our exportation of cattle to England and the U.S., is allowed in consequence of this very proclamation, prohibiting the importation of cattle into Canada from any country where the Rinderpest prevails.

The shippers of this stock were certainly very poorly posted in the regulations affecting their business, and we trust the importer will not lose by her zeal and well-intentioned enterprise.

At the sale of Barber's herd of Shorthorns, near Cincinnati, Ohio, U. S., on Friday, 26th Oct., the prices obtained were very low, and the animals did not bring anything like their cost. The Second Duchess of Kirkleavington (5 years) was sold to the Canadian Breeders' Association for \$1,225, and the Third Duchess of the same name—a calf—was purchased by the same Association for a similar figure.

Mr. Francis Lewis, of London, Ont., has purchased two sow pigs and also a boar pig out of Lady Elgin, from the celebrated Berkshire Herd of John Snell's Sons, Edmonton, Ont.

CANADIAN IMPORTATIONS.—A London, Eng., correspondent writes: "I hear that one of the largest importers of horses from Canada and the United States has entered into an arrangement to supply 500 horses to a German army contractor, to be delivered in the spring of next year. The party in question has, I believe, buyers in various parts of Ontario."

Commercial.

London Market.

Table with columns for various commodities and their prices. Includes items like Delhi wheat, Treadwell, Red, Spring, Barley, Peas, Oats, Rye, Buckwheat, Corn, Beans, Sheepskins, Hides, Eggs, Roll Butter, Tub Butter, Cheese, Tomatoes, Hay, Straw, Turnips, Carrots, Potatoes, Onions, Cordwood, Tallow, Lard, Wool, Flour, Fall Wheat, Spring Wheat, Coarse Shorts, Bran, Beef, Lamb, Mutton, Dressed Hogs, Hogs, Live weight, Apples.

Dairy Markets.

Liverpool, Oct. 31.—Cheese, 64s. Utica, N. Y., Oct. 29.—Eleven thousand five hundred boxes cheese offered to-day; one thousand went forward on commission; three to four thousand sold at 12 1/2c to 12 3/4c; extremes, 12 1/2c; leading factories, 12 1/2c average. The greater portion of Sept. cheese held over. The market was more active and lower. Little Falls, N. Y., Oct. 29.—The bulk of the cheese sold to-day brought 1/2c less than last week; 450 dairy cheese brought 11 1/2c to 13 1/2c, chiefly 12 1/2c to 12 3/4c; 7,500 boxes factory cheese sold at 12 1/2c to 12 3/4c. London, Ont., Oct. 27.—At the cheese market to-day four factories offered 1,900 boxes; prices asked ranging from 12 1/2c to 13c, 12c to 12 1/2c being offered, without transactions. The last market of the season will be held on Saturday, November 10th. Woodstock, Ont., Oct. 31.—The cheese market to-day was well represented by sellers. Several buyers were present, but made no offers. There were 5,175 boxes registered on the board. No sales reported. Ingersoll, Ont., Oct. 30.—8,480 boxes offered September and balance of the season; 12c offered for leading factories; no sales reported. Montreal, Oct. 30.—Butter and cheese dull; no transactions on which to base quotations.

MONTREAL BUTTER MARKET.

The state of the butter market in Montreal is simply this: Stocks are heavy and accumulating, and are not wanted in the English market, which has before readily absorbed our fall surplus of butter periodically. Yesterday cablegrams were received here from Liverpool, Manchester and Bristol, all of them urging most emphatically not to ship, as the markets there were depressed with over-supplies, and values were depreciating. It is time that farmers and country dealers, who may be holding their goods for higher figures, should be apprised of the actual state of the butter market, so that they may not be deceived, as a great many have been during the past week who brought their butter to market with the expectation of receiving 22c and 23c, but had to be satisfied with 18c. It would be well for parties in the country to bear in mind that while exceptional sales of finest fall-made may be effected, and are quoted in a small way at 21c to 22c, that to force even their fancy lots on this market about 18c would need to be taken, as we know of some good round lots of fine fall-made Townships changing hands yesterday at that figure. —Star of Oct. 29th.

Produce Markets.

Table showing produce market prices for Toronto, Oct. 30, 1877. Includes items like Superior Extra Flour, Extra, Fancy Bakers, Strong Wheat, Spring Wheat, Bran, Middlings, Shorts, Oatmeal, Cornmeal, Fall Wheat, Spring Wheat, Oats, Barley, Peas, Corn, Rye.

Flour: Market quiet and steady; sales, 250 bbls. superfine at \$6; extra at \$5.35; strong bakers' at \$5.50 to \$5.60; spring extra at \$5.45; superfine at \$5.20; fine, \$4.75; sales of 5 cars No. 2 Canadian spring on track equal to \$1.20 in store; nothing in others.

Table showing Liverpool quotations for various commodities. Includes items like Flour, Wheat, White, California Club, Corn, Peas, Pork, Lard, Bacon, Tallow, Cheese.

New York, Oct. 31. Rye Flour steady; \$4 to \$5. Wheat 1-4 to 1-2c better; sales at \$1.30 for No. 2 Spring. Rye firm. Corn firmer; sales at \$1.34 to \$1.35. Barley firm; No. 2 Canada 37c. Oats a shade firmer; sales at \$2 to \$2.7c for mixed State and Western; \$4 to \$4.3c for white do. Pork firm; \$15 to \$15.50. Lard without material change; \$8.87 1-2 to \$8.75. Butter 15 to 30c. Cheese 7c to 12 1/2c.

Live Stock Markets.

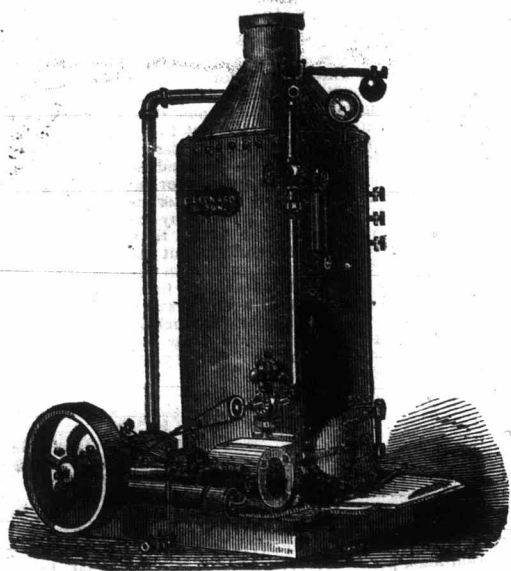
CHICAGO. Oct. 30. The Drovers' Journal this afternoon reports as follows:— CATTLE.—The market is steady for all grades, and the supply light. Best native shipping are quoted at \$5 to \$5.25; choice-corn-fed at \$4.50 to \$4.75; fat at \$4 to \$4.50; grassers at \$3.50 to \$3.75. Native butchers' are firm, active and scarce, cows at \$2.50 to \$3.50; steers at \$3 to \$3.50; bulls at \$2 to \$3. Stockers and feeders are strong; thin stockers at \$2.75 to \$3; better grades at \$3.25 to \$3.50; fair to good feeders at \$3.75 to \$4. LIVE HOGS.—The market opened weak, and closed 10 to 15c lower. Philadelphians are quoted at \$5.30; Boston \$4.70 to \$4.75; mixed packing at \$4.60 to \$4.80. SHEEP.—The market is steady and firm; sales at \$3.50 to \$4.25. BUFFALO. Oct. 30. CATTLE.—There was a fair demand, and prices were nominally unchanged. Sales of 40 cars; shippers at \$5.50 to \$5.65; butchers' at \$4.50 to \$5. SHEEP AND LAMBS.—There was a fair demand, chiefly speculative. Sales of 30 cars; fair Western sheep at \$4 to \$4.60; Canada sheep at \$4.50 to \$4.70; Canada lambs at \$5.25 to \$5.38. HOGS.—Market dull and declining. Sales of Yorkers at \$4.90 to \$5; heavy at \$5.10. Common grades are neglected.

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Bills Receivable	6,520 83
Mortgage and Office Furniture	5,169 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
<b>LIABILITIES</b>	\$266,383 75
Bills Payable	\$25,000 00
Sundry Liabilities (small am'ts)	321 75
	25,321 75
Total Capital Account	\$241,062 00

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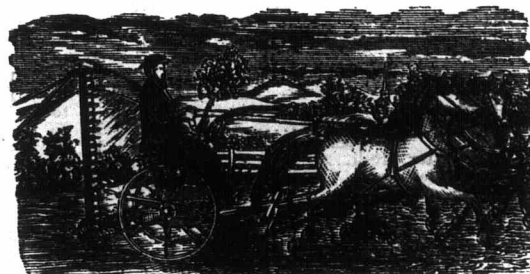
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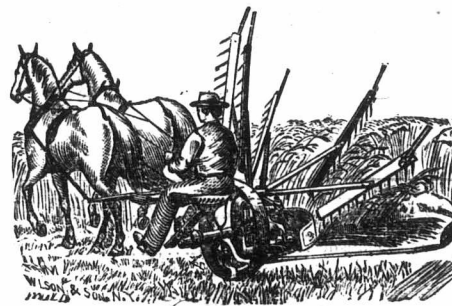
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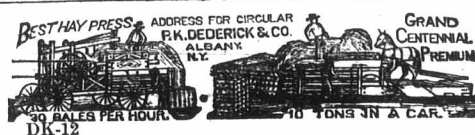
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