

# FARMER'S ADVOCATE

AND HOME MAGAZINE

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## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

WILLIAM WELD, Editor and Proprietor.

The Only Illustrated Agricultural Journal  
Published in the Dominion.

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### Our Monthly Prize Essay.

Our next prize of \$5.00 will be given for the best essay on "The best suggestions for the improvement and the advantages to be derived from moneys granted by Government for agriculture and the dairy interest." The essay to be handed in before the 20th instant.

### To Our Subscribers.

We would direct the attention of our subscribers to the date on their address on this paper.  
This date signifies the time to which the subscription is paid or from which the subscription is in arrear.

We respectfully request those whose subscriptions are expiring or have expired, to remit early for the ensuing year to relieve our busy season.

Subscribers will advise us when a remittance is not credited after the second month's number of paper has reached them. All errors must be promptly reported to have such satisfactorily corrected.

We have to return our thanks to a great many of subscribers who have already renewed and sent in new subscribers for 1883. Our prospects are brighter than ever for the coming year. A greater interest than ever to assist in swelling our subscription list and to improve the paper is manifested by all. For this we feel under great obligations, and we promise to do all in our power to merit this flattering support.

It is our aim to make the next volume better and more interesting than any previous one, and our list of premiums for obtaining new subscribers for 1883 are more liberal and of greater intrinsic value than those offered by any other publication. Send for Premium List and Poster.

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### The Month.

The past season has been so favorable for the growth of after-grass that the cattle will no doubt go into their winter quarters in good condition. The addition of a little hay or good straw, night and morning, would strengthen and prepare them for the change from summer to winter food. Calves should receive particular attention to keep them in good condition, for if allowed to fall away it will be both difficult and costly to recover their lost condition. Horses should now be well attended to, and given a little extra feed to enable them to get through the fall work in a satisfactory manner, and keep them in good condition ready for spring work. Warmth is as necessary as feed, so repairing and putting in order the stables and other buildings should be no longer delayed. Advantage should be taken of the open weather to do as much plowing as possible, especially on heavy soil, so that there may be less delay in the spring sowing. The present open season is favorable to draining operations, which may be carried on until heavy frost sets in. The ground being now dry, draining can be easier done than in the spring.

Don't forget when husking the corn to select the very best for seed.

New subscribers for 1883 will receive the balance of this year free, if desired.

Any subscriber desiring an extra copy for an intending subscriber should not hesitate to send their name and address on a postal card, and at the same time procure a copy of our Premium List.

**AGRICULTURE IN OUR SCHOOLS.**—As the Minister of Education has allowed the rudiments of agriculture to be taught in our schools, we would suggest that he issue a recommendation to school trustees to offer prizes to the boys and girls for garden plots, &c., cultivated by them, and that he himself give annual prizes for the neatest school grounds, particularly as regards flower-beds, shrubs and climbers.

### By the Way.

Times will be good until the crash comes. The sun shines, now, farmers; make hay. Be prudent, be economical, keep down expenses. Make every acre do its work, and clear off that mortgage.

**HORSE GNAWING A MANGER.**—"H. G. B." writes that he completely cured a horse of the habit of gnawing the manger and halter straps by saturating the woodwork and straps with kerosene oil. One thorough application produced a permanent cure.

Apples are better to feed to cattle, sheep or horses after being frozen hard once and thawed; they will then keep till spring without rotting or moulding, if covered with chaff; it changes the acid and there is no danger of choking; four quarts a day to cow or mare are good to feed with coarse fodder. I have used hundreds of bushels so. —[Coker Marble, Somerset Co., Me.

Many milk companies require farmers to whitewash stables and milk-houses once a year. But any one who has once enjoyed the luxury of a whitewashed stable will not be likely to discontinue the practice. Armed with a small force-pump and a barrel of whitewash, more whitewashing can be done in a few hours than can be done in a week with a brush.

Waldo F. Brown is not far from the truth when he says that on a majority of our farms a three years' trial of cultivating one-half the land which is now kept in grain, and the growing clover on the other half, would result in producing just as much grain as now, at a greatly reduced cost, with much more of comfort to the farmer and a wonderful benefit to the farm.

A farmer who has used a wagon with broad tires on wheels long enough to ascertain their relative value as compared with narrow tires, writes: "A four inch tire will carry two tons over soft ground with greater ease to the team than a two-and-a-half inch tire will carry one ton. The wheels are not so much strained by stones and rough tracks on the road, and the road is not cut up, but, on the contrary, is packed down and keeps smooth. The prevalent idea that the draught is increased by widening the tire is altogether baseless; on the contrary, a wide tire reduces the draught. The extra cost of the tire is repaid many times over every year in the extra work that can be done by a team.—Michigan Farmer.

There are many homes where no suitable ice-pond is near, or no ready means of hauling, nor any supply on sale as wanted. In such cases the plan described of moulding ice in boxes close by the ice house may prove quite a feasible method, especially where there is a "brace of bright youngsters" ready and willing to mould the ice-blocks and build them up. They would have the whole winter for the work, and would gain a good idea of the amount and power of frost, and of its fluctuations. Snow and sunshine could easily be warded off, and clear sound ice secured, purer and safer to use than that collected from an open pond. The labor and exposure would be reduced to a minimum.—[Quis-quis., in Tribune, N. Y.

Post-masters and school masters will confer a favor by allowing us to consider them our duly authorized agents to receive subscriptions and to grant receipts for the same.

"Always something new and good in the ADVOCATE."  
JOHN BOE, Milverton, Ont.

**English Letter, No. 42.**

Liverpool, Oct. 5th, 1882.

In several of my previous letters I have endeavored to impress upon your farmers the great desirability of their paying attention to sheep raising. Those who have taken the hint might now be reaping their reward; for all that I have said and urged is amply justified by the present state of our sheep market. Never probably within living memory have sheep been so scarce or so dear with us. At a recent sale on the borders of Scotland, sheep fetched as high as \$16 to \$18 per head, whilst good breeding ewes seem impossible to be had. A number of Canadian ewes have, I understand, been sent to Suffolk for breeding purposes, the attention being to put them to a good South-down or Oxford-down ram; get the lambs off early and then finish the ewes. This is said to be a very profitable business in many parts of England. The scarcity of good sheep in some parts of this country is now remarkable. In conversation with a farmer who came to see his brother off to Manitoba, the other day, I learned that in Gloucestershire, Hereford and Worcester, there is hardly a sound sheep left, the long succession of wet seasons and the ravages of the rot having played sad havoc.

In the low-lying districts, where heavy land prevails, this season has been little better than the three or four preceding, and, this same farmer told me, that on his heavy, clay farm, necessitating his keeping 30 horses, he has not been able to work a single horse for weeks together, either in ploughing or carting manure. In the higher lands things are better; but even there only very partial success has been attained.

I have ascertained from a friend, who has been travelling recently through the home of the Herefords, and visiting several of the principal herds, that the demand for this favorite breed, and especially for bulls, has not been so great as was expected, and ranchmen and others wanting to invest would now probably be able to get some very fair bargains. The leading breeders are well stocked, in expectation of a large demand from your side of the water. The run, however, has been mainly on "doddies" and other north country breeds, for some of which extravagant prices have been paid.

There are a number of Canadian buyers still in England endeavoring, principally, to purchase shire-bred stallions, but they are apparently not to be obtained at any price—that is horses fit for service next year. This scarcity will, no doubt, lead to a large increase of the colts kept entire; but there is not much prospect of a fall in prices for years to come.

Seeing that it is now only five or six years since the inauguration of the Anglo-Canadian trade in cattle, the improvement in the character of your exports is remarkable and highly creditable. Everyone remarks that the grass-fed cattle coming from Canada this year, are little, if any, inferior to the best classes of stock coming from our home breeders. In fact, with a little care taken in keeping the meat well on your stock, and giving them a little hard food to finish them off, Canadians will have little or no difficulty in getting the best prices going.

This is rather a dull season in all matters. The excitement of the Egyptian war is over, even Ireland is quiet, and the farmers, thankful for small mercies, are glad to get off a few shades better this year than has been their lot for a long time. As one farmer remarked: "It is not so much lower rents as better weather that they require; for, with seasons such as have been the rule, with no rent at all to pay, they could not make a profit." They are still living mainly in hope, and the harvests having been a shade improved, they are sanguine that the tide has turned at last, and a cycle of good years is before them.

**On the Wing.**

MANITOBA—No. 2.

BRANDON.—This is a prosperous and thriving town situated on the C. P. R., about 150 miles from Winnipeg. This is naturally the finest site for a city we have yet seen, either in Manitoba or the North-West Territory. The Assiniboine River runs through the city. We call it a city, as we have no doubt it will soon attain population sufficient to entitle it to that appellation, which is often applied to a houseless locality on the Western prairies. The soil here is not as tenacious as in Winnipeg. There is a fine valley on each side of the Assiniboine; from the valley the banks of the river rise to a good altitude in a sloping form, so as to allow streets to be laid out on the sloping hill, one above the other, and yet not too steep for easy travel. After the summit of the hill is attained, the land is undulating, thus affording an excellent opportunity for draining. About 2,000 inhabitants were in the place when we were there; but the growth of these prairie cities is such that one is bewildered at the rapidity with which they increase. The population may be doubled by this time.

Being very desirous of seeing more of the farmers and farm life than we had an opportunity of doing in the rapid transit we had made, we left our party to partake of the hospitalities so liberally prepared by the Brandonians. We enquired of a stranger we met in the street where we could procure a livery rig. On ascertaining our object, he immediately offered to hitch up his horses and drive us into the country. We accepted the offer and in a few minutes we were rolling over the prairie. Our Jehu was a strong, hearty-looking Englishman, a lawyer from Lincoln's-inn, London, England. He informed us that he came to inspect the country for the purpose of procuring land for his relatives; some of them were now residing in New Zealand and some in England. The name of the gentleman was W. Lester Smith. He had been in the country about a year, and had purchased 12,000 acres on Plumb Creek, in the Souris district. He was preparing a home for his relations. He considered the investment of capital would be more profitable here than in either England or New Zealand. He had already broken up 200 acres and had 50 acres in crop this year, and he appeared highly pleased with the prospects before him.

In the suburbs of Brandon we called at a brick-yard. We found that after removing about two feet of the surface soil, the ground became of a lighter color—a light-colored clay. It did not appear as tenacious or greasy to the touch as our clay. We thought it would not make good brick, and on examining those that were burned, we expected to hear a dull thud when we knocked them together, this being a test of good brick with us; but to our surprise, the bricks rang like a bell, indicating good material.

We drove over the prairie a few miles and halted at the residence of Mr. Charles Whitehead. This gentleman was seated in his buggy, and was just about to start around his farm. We informed him that we had but a short time to stay, as we must shortly return to catch our train. He said, "Jump into my buggy," and away we went over the plowed ground, around or through a 400-acre field of oats, about one-quarter of which were cut. The crop was as nice a standing crop as we could wish to behold; hardly a bit of lodged grain could be seen. The straw is very different from our straw in Ontario—much stiffer, stronger and brighter. Had we such a crop in Ontario, it would have been all lodged and tangled on every farm, but we never saw such a fine piece of standing oats before, in fact, we do not think they could be surpassed.

Two harvesters were at work; one man drove and attended each machine. The machines were going steadily along with a click, and dropping a sheaf at even intervals. These two Giant Harvesters were cutting and binding this crop at the rate of 20 acres per day. Mr. Whitehead says he will have 20,000 barrels of oats to sell. Last year they were worth 75c. per bushel at Brandon; this year Mr. W. will be quite satisfied if he realizes 50c. The influx of settlers and the construction of railways cause such a demand, Mr. Wastie, formerly of London, informed us, that last year when travelling through the Q'Apelle Valley, he paid \$3 per bushel for them to feed his horse. Horses do not work hard and live long in Manitoba.

In addition to Mr. Whitehead's oat crop, he has 20 acres of wheat, 6 of barley, 4 of potatoes, and 4 of mangles and turnips. He has commenced to raise a herd of Ayrshire cattle, has planted out a young orchard, and has a vegetable and flower garden. One of the choice plants that was pointed out to us with considerable satisfaction to all concerned, was a plant of the Russian mulberry, which had been procured from the FARMER'S ADVOCATE office. It had made a good growth, despite its having been transplanted after it had commenced to grow.

Mr. Whitehead invited us into the house, saying that as they were subscribers to the FARMER'S ADVOCATE, his wife would be much pleased to see us, as she thought much of the ADVOCATE. We entered a comfortable frame house, nicely furnished. We were introduced to Mrs. W., partook of a glass of buttermilk, and were invited to remain or come again. But knowing the train would not wait, we bid them adieu, jumped into Mr. Smith's vehicle and hurried to the station, and in a few minutes we were off with our party, most of whom had been enjoying the city hospitalities.

Do you not think Mr. Whitehead has done wonders, when we inform you that it was only on the 5th of June, 1881, that he took possession of his farm, then an unbroken prairie? The soil on Mr. Whitehead's farm is of a lighter nature than the land about Winnipeg, and it is not as rich as much we hear about; but Mr. W. thinks by judicious management he can maintain or improve the fertility. It will not produce as heavy crops of wheat as land on the Souris and other places, but from its rolling nature, the ease with which it is worked, and the advantageous situation in regard to market and a healthy locality, he envies not those farmers in the more fertile, level and more distant localities.

**A MANITOBA STOCK BARN.**

Mr. Whitehead, like most of the settlers, finds a great difficulty in procuring building material, but as his land is rolling prairie, he has adopted a very excellent and useful plan that may with profit be adopted by many. He has excavated three large cellars, leaving a good breadth of earth between them; they are excavated to the depth of about three and a half or four feet. The earth taken out is placed on the top of the earth around the excavation, thus raising it about three feet all around. This gives him depth enough to make good stabling for his stock. The top is covered with small poplar poles, and a few posts are set up through the centres of the widest openings to support the poles. When threshing his grain he sets his machine so as to throw the straw on the top of the poles, covering the whole to a good depth, so as to entirely keep the frost out, except at the openings or doors, which are easily made tight or double if necessary. Last winter it was so warm that he was obliged to cut openings to admit the air. This year

he intends to leave ventilating passages. We have made a drawing from memory, as we had not time to take a sketch when there. The cut and explanation may be of some benefit to some of our Manitoba subscribers.

#### Farmers of Canada.

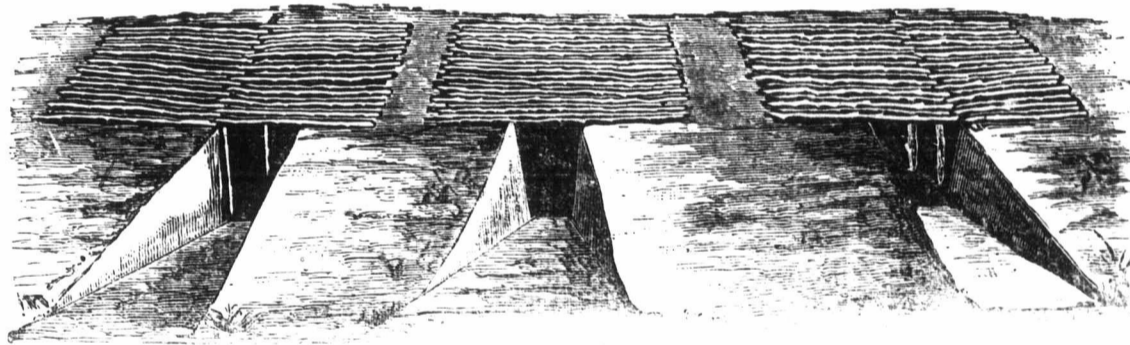
No nation of modern date has had such a grand opening for agricultural advancement as you have had—the vast extent of fine, cheap lands, with our healthy invigorating climate, affords homes for millions. In no country have agriculturists a better opportunity for obtaining homes and competency so securely and easily, and we have before us the history of all nations as a pattern and guide for our profit. We have the improvements of all nations to copy from, and, as far as agricultural advancement is concerned, the visits to any one of our great agricultural exhibitions by foreigners have convinced them that Canada as an advancing agricultural country stands unsurpassed in the world. The very best stock that England could produce has been brought to our country, and in agricultural machinery there is none manufactured that can surpass the production of our workshops.

No calling in life should tend to give man a greater feeling of independence of thought and a higher appreciation of morality, truth and justice, than farming; no body of men should have greater influence or power in the management of the affairs of the nation than the farmers. It is by their labor and care that all must exist. The question arises—do we, as farmers, hold the rightful position and influence we ought to hold? Are we one of the powers in the land, or are

we the serfs and slaves of all? Do we elect men to power to enact laws to make the poor farmer poorer, and the wealthy trader and manufacturer richer? Are we encouraging every monopoly to the injury of the plain, practical, industrious farmer? Are we deceiving ourselves in laying the foundations of oppression? Can we in any way obviate the tendency to oppress the farmer? What has been done and what should be done? Should we not openly and truthfully expose and condemn all attempts at deceit and fraud? Should we not attempt to furnish facts rather than attempt to cloak misdoings? Should we not openly discuss every step taken by those who have power, and examine whether they are laboring for the interest of farmers or for others, under the guise of advancement of your welfare? We do not pretend to say that other interests should not be looked after, but they all have their able and well-paid advocates to attend to them. The difficulty is to prevent many of them from depriving the farmers of their due proportion.

The Government of any country has much to do with the elevation or degradation of any class. Is the farmer the person who is or has been aided? Some may say the Government liberally grants money for agricultural advancement. Are the sums granted used for the interest and advancement of farmers, or for partizan purposes? Examine into the modes and devices that have

been practised to elect persons to positions nominally for the interest of agriculture. Have we elected men who have devoted their main attention to the farmer's interest, or have their influence, power and patronage been devoted mainly to other interests? Is it not possible for us to improve? Does not the waning popularity of that once useful institution, the Provincial Board of Agriculture and Arts, point to mismanagement? Has that power not been made subservient to other purposes than that for which it was established? Has not that been the cause of the disrepute into which it has fallen? Have not other grants for the agricultural interest been misapplied, and that knowingly and wilfully, by those from whose positions and duties better acts should have been expected? Is there any better way for us to attempt to utilize the grants with creditable advantage to ourselves and to our country, than to ask for more light, search for more truth, and act with more justice? Are we not right in trying to attain such a standard? If so, we ask each one of you to aid us in our labors. We believe that you give us credit for doing our duty—in attempting to improve the management of your exhibitions, and of all things pertaining to your interests. You can each aid us. Those who know or can see better than we can, would confer a benefit on their fellow men by expressing their views concisely, and showing the public if we are



A MANITOBA STOCK BARN

wrong, or throw out some useful hints or observations that might tend to improvement. The pages of this journal have been open for seventeen years to those who choose to advance the agricultural interest, and as this journal has more subscribers than all other agricultural journals in Canada combined, by giving information through it, you reach those who must in the future sway the interest of agricultural affairs in Canada. Let us have a good discussion about agricultural affairs in each issue during the winter. You can aid us in many ways to make the *ADVOCATE* of more value.

Each of the many questions above offer a foundation for an address, a lecture, or an essay. Each one should be able to answer frankly.

#### The Prince Edward Island Exhibition

Was held at Charlottetown, Oct. 11th, and was in every way a success. The exhibit of horses was excellent, especially in carriage and roadster stallions. The show of cattle was much too small for the capabilities of the Province, the entire lot numbering only 75, but some first-class animals were shown, notably some very fine Durhams.

In sheep there was a better competition than in any other class, the entries lot numbering 140, the greater portion being in pairs and pen, so that the animals on exhibition numbered several hundred, and altogether there was a very fair assortment in Leicesters and Shropshire-downs, but a pair of

Oxford-downs, recently purchased at the Kingston Exhibition, were the attraction of the sheep class.

In pigs the entries were few, but the deficiency in number was compensated by the excellence of the animals exhibited.

Of poultry there was a good exhibit, the birds shown being of first-rate quality.

**BUTTER AND CHEESE.**—It was very pleasing to note the array of butter tubs and baskets. There were no less than fifty entries of butter, comprising many hundred packages. The quality was excellent, and the judges had a difficult task in deciding which tub or basket contained the best butter. Another pleasing feature was the exhibit of factory-made cheese, which was admitted to be of superior quality. Of home-made cheese it is worthy of remark that the three prize takers were three sisters. Perhaps there is some family secret which accounts for the uniform excellence of their cheese.

There was a good display of agricultural implements, no ably among which was a fanning attachment to the ordinary threshing machine. It attracted much attention, and demonstrated its utility, taking the sheaves in at one end and pouring out the clean grain, fit for market, at the other. It is a simple, practical contrivance to lighten the labor and save the time of the farmer.

There was also an excellent display of vegetables, fruit and flowers.

#### The Western Dairymen's Exhibition.

This exhibition was held in Woodstock, the county seat of Oxford, Ont., on the eleventh and twelfth of October. The time was well

chosen, being after the completion of the fall wheat seeding, and the weather could not have been more favorable, being in the midst of our most lovely autumn weather, while the leaves are yet on the trees, the roads are at the best, and nearly every-

thing secured for the winter, which this year has tarried longer than usual in sending its blasting wind over the country, for up to the time of writing (Oct. 17th) no frost has touched the tenderest vine in our garden. But time and weather are not the only points on which a successful exhibition depends.

The exhibition hall was decorated with evergreens. The display of cheese was large and very good, some persons having sent large quantities to make a display. Notwithstanding all these favorable features, the exhibition was not a success, that is, speaking from the amount of instruction imparted or profit derived from it.

For this Western Dairymen's Exhibition we have to depend on reports—not those we have read—but from enquiries from those whom we deem most reliable to give information. For that purpose we attended the cheese market held in London, Ont., on the Saturday after the holding of said dairy exhibition; the London cheese market is the largest held in Canada. We attended between three and four o'clock, and met at that time fifty-three manufacturers, salesmen and buyers, and from these we obtained our information. Of this number only seven had attended the cheese fair, and only two of them were purchasers—showing only five Canadian dairymen out of this number that had attended. The first information received was that the Dairy Exhibition was as complete a farce as had ever taken place in Canada. The

attendance was most meagre—less than 200. Even those who exhibited merely took their cheese there and left it, but were not to be seen. "It was the dullest place I ever was at. I walked about the first day and could not see the cheese or any one to talk to. There was no cheese judged, because the officers of the Association took the two American judges for a drive through the country and did not return till the evening." The following morning the building was closed; until two o'clock in the afternoon none could go in except the judges. After the doors were opened there was not time allowed to enable the public to compare the cheese, as it was soon boxed up, just as if comparison was avoided. One good judge of cheese who was there informed us that one parcel that he examined and considered should have had a prize, was superseded by one of less merit. Nearly all the first prizes went north and around Stratford. The few that attended were nearly mad enough to kill the President of the Association. Some say he has been doing his utmost to curry favor with Americans for private or other purposes, and that the interest of Canadian dairymen has been entirely overlooked, and it is the last dairy exhibit they will attend unless it is placed under different management. Even the dairy interest, great as it may be, is not of sufficient interest to draw a crowd for two days to look at a lot of cheese shut up in boxes. When the dairy exhibit was held in connection with the agricultural exhibition at Ingersoll, it was a grand success, but this has been killed. The people of Woodstock are vexed. They expected a great crowd, and made preparations for it. Even a great dinner was prepared, but only about twenty-five attended. This is the result of attempting to trample on the dairymen. Why would not the best Norwich factorymen exhibit? What does it signify if prizes are given if the best do not compete for them? People that purchase cheese carrying off the first prize at this exhibition, must console themselves that they are only consuming the second quality of cheese made in Canada, because the best factorymen would not exhibit, and the best cheese are now lying on the shelves of their factories. In some classes there were not entries sufficient to compete for the prizes offered. The butter exhibit was a most pitiable display, only a very few parcels to be seen, not so many as at a Township Exhibition. The dairymen of Western Ontario as a body care nothing for the Exhibition, and when of interest to less than fifty people what can be the benefit of such an exhibition? The indignation expressed is worse than we dare publish. Why has this exhibition been such a total failure? Has there been any good result from it? Why has this been separated from the Provincial Exhibition, or from the Ingersoll Exhibition? Has the Government grant been expended for the dairy interest? Was fair play shown to the dairymen of Ingersoll? at the annual convention at Woodstock? Will the Government continue the grant to the dairymen unless better use is made of it? What steps would be best to take to secure a more beneficial result from the money granted to encourage the dairy interest? Has not this grant of money been expended intentionally for the injury of the Provincial Exhibition, and has not the principal mover in this expenditure been a member of the Provincial Board? Can a house divided against itself stand? We will give our monthly prize of \$5 for the best essay on the following subject: "For the best lot of suggestions for the improvement and the advantages to be derived from moneys granted by Government for the dairy interest and agricultural advancement."

#### Delaware Township Exhibition.

We had only time to attend at one township exhibition this year; that was at Delaware, twelve miles from London. This is the smallest township in the county, and the village is at one corner of it. Indians own nearly half the township and each township around it has a separate exhibition. Notwithstanding these and many other disadvantages, nearly the whole township assembled. The ladies and children were here in ten times the proportion they were to be seen at either of the Provincial or the Industrial Exhibitions. All appeared so happy and pleased, and the interest that was manifestly taken in examining the different exhibits we never saw excelled. There was no horse-racing, baby show, or other outside attraction countenanced by the Association. It was purely an agricultural exhibition. The number of entries was nearly double what it was last year, and the display of stock, roots and ladies' work had never been so varied and complete. The day was fine, the prizes and honors were distributed in a fair and impartial manner, a general satisfaction prevailed, and all, so far as we were able to ascertain, were desirous of its continuance and wished for its maintenance.

#### The Provincial Exhibition.

SIR,—I was surprised to see that no notice had been taken in your paper of the suggestions made by the Hon. E. Blake and Thos. White, M. P., at the dinner held in connection with the Montreal Exhibition. As you profess to be the champion advocate of the farmers' interest, I certainly expected that any remarks or suggestions upon agriculture by such an eminent man as Mr. Blake, would not have passed unnoticed.

At the Citizen's Dinner in connection with the Montreal Exhibition, the Hon. E. Blake suggested that a triennial show may be made a more worthy exhibition of the resources and progress of a Province than an annual one. Mr. Thos. White suggested that there should be one great show in Montreal one year, in Toronto the next, and in the Maritime Provinces the next; and he believed the whole Dominion would be better served than it could be under the present system.

I have no doubt that such was their opinion. I scarcely think that either of the gentlemen have ever studied the details in connection with an exhibition, or the expense attached thereto. I must say I think their ideas in this particular instance are impracticable. We have in our immediate neighborhood manufacturers of implements, machinery and fabrics, breeders of cattle, horses and sheep; we have the finest grain-growing country on the continent, but to send samples of the above and many others, say to Halifax and return, would entail an expense so large that few would venture on the experiment. The expense of sending goods to Montreal is a serious tax, indulged in only by a very limited number. There would be another strong objection to western manufacturers and others sending their goods very long distances to an exhibition, which is, that they would have to neglect such exhibitions as the Western Fair, at which fairs they annually receive a large amount of orders. It is to be regretted that the Dominion Exhibition, held in Montreal, was a failure. The same may be said of several other places. It appears from what I can learn that the only two exhibitions held this fall that were financially a success were the Western Fair in London, and the Industrial Exhibition in Toronto. If the other exhibitions, including the almost effete Provincial, would imitate the spirited example of the directors of the two successful exhibitions, there would be no need to bolster them up with a triennial exhibition.

W. Y. B., London, Ont.

[We look on this as one of the means devised to annihilate the Provincial Exhibition of Ontario. (Dominion Exhibitions that have been held hitherto were not successful. They failed to attract farmers; hardly any attended from Ontario.) We believe a Dominion Exhibition might advantageously be held if it were conducted properly; but as to this proposition, we do not think that the Ontario farmers would desire their funds expended in such a manner, and surely if there is to be a Dominion

Exhibition, why should not the North-west have an opportunity to participate, as well as the Maritime Provinces or Quebec? We feel satisfied that the farmers at Ottawa and Halifax will not receive any more instruction from a Dominion Exhibition at those places than from a Township or District show, whilst our stockmen and manufacturers who draw the attendance of farmers would reap more profit by exhibiting in Winnipeg than they did when exhibiting at the Dominion Exhibition in Ottawa. Because the Provincial Exhibition at Kingston this year, through stress of weather, was financially a failure, is that sufficient reason for abolishing it? The leading agricultural exhibition of the world, viz., the Royal of England, was held this year under similarly adverse circumstances, and although held in a populous district and in a neighborhood where a large attendance under any circumstances might reasonably have been expected, the people did not attend because of the wet weather. No matter how great the attraction, people will not turn out if the weather is unfavorable. The Royal Society lost many thousands of pounds, yet we do not hear of any attempt being made to abandon their annual meeting. We cannot do better than follow their example, and not be discouraged. Remove the existing evils in the management, and with favorable weather, our Provincial Fair could be made as successful as any fair held in the Dominion.

We regret that our space did not permit us taking notice of all things that we considered worthy of mention in connection with the fairs; for the same reasons we are unable to give descriptions of the Guelph and other fairs. We should like to have described the well-arranged Manitoba exhibit which was so instructive and interesting; also the dairy exhibit at Kingston, with its appliances for testing the milk of the various breeds of cows, and from which we gained more information upon dairy matters than at any exhibition that we ever attended. And the meeting of the Board, at which there were representatives from Ottawa and Guelph, when it was decided to hold a Provincial Exhibition next year. We presume the reason why Hamilton did not send a representative was the alteration of the Act, and she did not wish to be shown the cold shoulder for years, the same as Kingston.]

#### Judging Horses.

When attending one of our most successful exhibitions during this autumn, a practical farmer made the remark that we should try to make the directors appoint good judges on the heavy draft class of horses, as it is discouraging to breeders to have inferior animals given prizes to the rejection of better ones. We replied that we presumed the directors appointed the best they could get, and asked him to suggest a way for improvement. He replied: "Let judges be appointed from those who have had experience—men who have expended money in importing or breeding; they have learned more of what the value and merits of a horse are than those who have never invested money in them." The hint we thought an excellent one, such as might be of value to directors of agricultural societies.

#### Farmers' Clubs.

The Secretaries of Farmers' Clubs will confer a favor on us by forwarding the dates of their meetings, also reports of the subjects discussed.

Perhaps some of our readers who have used sulky plows will send us their experience.

### Freight and Passenger Rates on Railways.

A letter from Verdun Station, C. P. R., states that a passenger on the C. P. Railway, on August 14, was charged \$4.30 for a journey of 38 miles, and another person \$4.60 for the same journey. Nine cents a mile is, it would appear, a pretty round charge for travelling on a line for which the people first pay and then give it over to a Company.

Mr. T. W. McDermott, of Almonte, who recently returned from Portage La Prairie, Man., relates some interesting experiences of excessive charges on North-West Railways. He purchased at the Portage some sixty thousand bushels of wheat for the Pillsbury Flouring Mills of Minneapolis, and on enquiring of the Canada Pacific Railway Superintendent was informed that the lowest rates that could be offered from Portage to St. Vincent were \$67.50 per car. The distance is only 120 miles, or the same as from Ottawa to Montreal, over which route the rate is only \$15 per car. There being no alternative, Mr. McDermott accepted the rate, and on arriving at St. Vincent was informed that the cost from there to Minneapolis, about 450 miles, over the St. Paul, Minneapolis, and Manitoba Railway, was only \$56 per car. Mr. McDermott says he knows several farmers who have sold their properties in Manitoba and gone to the States because of the exorbitant charges on the Canada Pacific and St. Paul roads. In some cases it takes the price of two bushels of grain to pay for the transportation of one bushel to market. Freight is carried from Sarnia to Prescott, about 400 miles on the Grand Trunk, for \$55 per car.

There does not appear to be any reason why the passenger and freight rates on all our railways should not first be approved by the Supreme Court and then made law by Order in Council. Passengers and shippers should be allowed to appeal to any Court about local rates instead of waiting for any Government interference.

### The London, England, Dairy Show.

The seventh annual exhibition of the British Dairy Farmers' Association, just held at London, drew out a large class of Shorthorns, a very large class of Jerseys, some Ayrshire and Kerry cattle, and a few Dutch and Swiss. Entries of butter and cheese were fewer than last year.

Of Jerseys there were altogether ninety head, among which the judges had some difficulty in making their selections. Many well-known exhibitors, such as Lord Braybrooke, Mr. G. Simpson of Reigate, and Mr. Arkwright of Chesterfield, sent stock, but others, notably Mr. Wingfield Digby of Sherborne Castle, were not represented. Mr. J. Cardus of Southampton took first prize in the cow class, Mr. LeBrocq of Jersey second, and Mr. George Simpson third. In the heifer classes the prizes were—first to J. R. Corbett (Beckworth), second to Mr. E. J. Arnold, of Jersey, and third to Mr. P. J. Bidaux of Jersey. There was a third class of Jersey heifers, bred in the Channel Islands, and imported expressly for the show, and here Mr. E. J. Arnold of Jersey was first, Mr. G. Simpson second, and Mr. H. A. Rigg, Walton-on-Thames, third. The Guernsey cows were few but choice, and the three prizes fell to Mr. J. James of Les Vauxbelets, Guernsey. He also took first prize among the heifers of the same breed, the second going to Mr. E. P. P. Fowler of Southampton. Messrs. J. Welford & Sons of the Warwick Farm Dairy, who were the largest exhibitors of the show, had a number of valuable cows in all classes.

Of Shorthorns there were two classes—one for those qualified for the Herd Book, and the other for animals of the same breed without registered pedigrees. Of these the *Field* remarks:

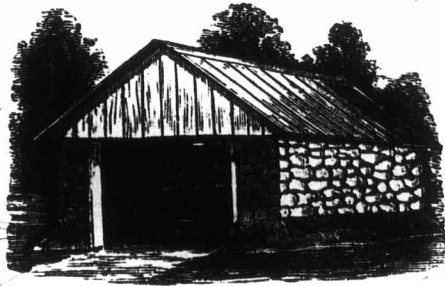
"There were some very useful good Shorthorns shown, and as a proof that pedigree cattle have won their footing in London milk-sellers' cow houses, the class was worth seeing; but it could not hold a candle to class 2 (i. e., that for unpedigree Shorthorns) from a dairyman's point of view. Class 2 had some magnificent cattle in it, and how any one could look at these and say that England wants a new dairy breed is a puzzle. Can any one in his mind's eye conceive anything more adapted to modern wants than the lot exhibited by Mr. Thomas Birdsey, Southcott Farm, Leighton, Buzard? He won first prize with his Primrose (which also stood reserve for the cup, and if milk had been recognized as merit, should have won it)."

One of the Shorthorn cows present was said to be giving 34 quarts a day, and another was suckling a triplet of calves, two bulls and a heifer.

### Hints and Helps.

#### A Farm Tool House.

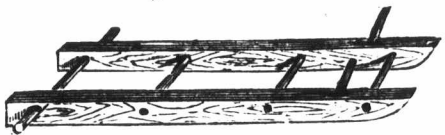
One of the most useful and money-saving buildings that a farmer can place on his premises is a spacious and convenient tool-house. It is generally the case that there is room enough in the various out-buildings to house the farm implements if it is economized; but it is a corner here, and a few feet of barn or shed floor there; sometimes in a cellar, and sometimes in a loft; possibly easy of access, but probably difficult; and in all such instances it is space originally intended and really needed for some other purpose. The main reason why so many farmers neglect protecting their implements from the weather when not in use, is the lack of convenient and roomy storage.



Our illustration is suggestive. It is adapted to a locality abounding with stone. The walls of the buildings are made of that material, laid without mortar. The foundation is placed below first, and the earth is banked on the outside to further protect them, and to throw off water. The top of the wall is leveled with mortar, and a two inch plank laid on to which the rafters are spiked. The latter are braced on the inside by nailing on cross-strips. The roof may be made of cheap material. There is one window in the end opposite the door. If the locality is not too much exposed there is little need of doors. The ground is the floor. The walls are but 6 feet high, and the structure should be 20x30 or 40 feet long.

#### Ice Ladder.

The ice ladder is used to draw the floating cakes up on the surface, and to load them upon the sled or store boat for removal to the ice house. We give an illustration of this ladder with description of making and using the same. It is a perfect implement for the purpose. The ladder is about 12 feet long and 20 inches wide. The upright pins must be strong, and the round at the end extend



through both sides to make handles. The latter is lowered into the water, and the cake of ice floated over it. Then draw out the ladder, and, at the same time, lower the handles. The pins will hold the cakes upon the ladder; when upon the surface it can be quickly unloaded by raising one side of the ladder. The ice should be taken to the house and packed at once.

We believe that those who go into black rasp berries for evaporating and canning, and the red canning (say nothing of market for fresh fruit), heavily now, will reap an abundant reward. A hint to the wise is sufficient.

Now that the long evenings are at hand, communications and questions, reports of Farmers' Clubs, &c., give us the benefit of your experience. When renewing your subscription state how you like your paper, offer suggestions for improvements in the paper. The paper is yours to improve, to build up, and to increase in usefulness month by month.

Friends of the FARMER'S ADVOCATE, show your copy of this paper to your friends. Tell them to try it just one year, and that if, at its expiration, they do not find it the most profitable investment they ever made—why, then, in that case, they may send the bill to you! Such words, you see, would forcibly demonstrate your good faith.

### Stock.

#### Cattle Diseases Spread by Earthworms.

The investigations of Pasteur, in regard to the transmission of contagious disease through the agency of earthworms, offer some important suggestions to our dairymen and stock-growers in regard to the disposition and burial of animals dying on the farm on account of diseases infectious and not well understood. Several instances occur to my mind where farmers with whom I am acquainted have lost a number of animals from year to year in succession from complaints that appeared mysterious. In one case, a dairy was broken up for a number of years in succession, the animals dying suddenly while at pasture and supposed to have been poisoned, though no evidence could be obtained against the suspected parties.

In this case the loss was very great, and was distributed over a number of years, absorbing much more than the income of the farm. The dairyman was a man of strict integrity and highly esteemed by those who knew him, and never having had an altercation or any trouble with his neighbors, with his acquaintances or hired help, he knew no reason why his animals should be poisoned. He examined very thoroughly his pasture lands, but could find no plants likely to injure his stock. Finally his lands were plowed up, and dairying for the most part was abandoned; and after an intermission of some years, on returning to the dairy business, no trouble was had with his herds. Though for a long time the cause of these losses was suspected to be poison administered by some person having ill will or a grudge against him, I think this idea was at last abandoned and the cause of the trouble attributed to some destructive element in the pasture land or the plants growing therein.

In another instance the losses for several years on account of stock dying of a mysterious disease were very heavy, and they continued without interruption until the place where the diseased animals were buried was fenced about, and his stock excluded from any contact with it. While looking over this cemetery of dead dairy stock, the farmer said to me that he had no doubt that the disease attacking his herd came from the dead animals buried in his pasture, and although the carcasses were buried deep in the ground, his stock roaming over the graves must have in some way taken diseases from this source. He considered the abatement of the troubles on his building a fence about the burial place so as to keep his herds from it, a conclusive proof of the truth of this theory.

Pasteur's investigation in respect to splenic fever have shown how grass grown over the graves of cattle dead of this disease and buried even for years, is a source of infection to animals feeding upon it. His discovery points to the agency of earthworms in carrying the germs of deadly bacteria from buried carcasses to living cattle. He obtained earthworms from the soil filling a pit into which the carcasses of animals dead from splenic fever had long before been thrown, and from the intestines of these worms he obtained the means of reproducing the disease in its most virulent form by inoculation. "He showed that the worms by casting out over the surface earth containing the bacteria germs, were the cause for their presence upon the vegetation which grew upon the spot, and that animals which ate of this vegetation were as certainly killed by the germs which they swallowed as were those which received the same germs through the prick of the inoculator's needle."

Now if one disease may be communicated in this way why may not others? The result of these investigations it seems to me is of great practical importance. From it we may learn that all animals dying of infectious diseases, or indeed of diseases not well understood, should be buried in places not accessible to healthy cattle, or where the vegetation growing on the graves cannot be eaten by stock. Farmers not infrequently are very careless in this regard, burying cattle dying of disease in such places as are most convenient and allowing stock to range and feed over the graves. I have no doubt that many farmers in their experience can now trace the deaths of cattle to this source.—[Cultivator.

We cannot afford to do without it. The girls are as much interested in it as the boys, and the mother as much as either of them. Yours, &c., PETER FRANKS, Vellore, Ont.

### A Revolution in the Mode of Supplying Meat Consumers.

[FROM OUR CHICAGO CORRESPONDENT.]

Unmistakable signs of the times point to a revolution in the mode of transporting meat from distributing centres to consumers.

Only a few years ago hog packing was confined almost exclusively to the winter months, but improved methods, first, the free use of natural ice, and latterly the generation of cold air by artificial means, have enabled pork packers to operate with heavy, fat grunners as well in July as January. So it has been with the growth and development of the dressed beef business. A score of years since it was a regular business at Chicago to send dressed beef from there to other cities, east and west, during cold weather, which would preserve the dead stock until its journey's end was reached. It was then a common thing for the meat to freeze so hard in transportation that its quality was deteriorated, and, of course, with the coming of spring weather, this method of supplying meat consumers had to be abandoned. Art again came to the rescue, and, finding a demand, proceeded to supply it. Refrigerator cars were introduced, and, by successive improvements, have been made to reach a degree of perfection which enables the dressed beef operator to land his wares during any month of the year at any distance from the starting point in vastly superior condition to the meat of animals shipped on foot the same distance. The business has been growing so rapidly within the past few years, and is just now meeting with such pronounced success, that handlers of live stock, between the western distributing centres and the eastern consuming markets, are greatly exercised, and, of course, are trotting out all the "stumbling blocks" they can place in the way of that method. Every great reform meets with bitter opposition from those who see in it a blow at their pecuniary interests, and it would be strange if this "new departure" did not meet with opposing elements. For a few years the New England States have been supplied with refrigerator beef, but the trade created no great commotion until the New York market was invaded a few weeks since by Chicago dressed beef. The butchers then made an "able-bodied howl," but as they could not afford to dress and sell the same quality of beef within 2c. per lb. of the price at which the refrigerator article afforded a profit, their howls can be of little avail.

The railroads, to a large extent, are hostile to the dressed meat system, as but half as many cars are required for carcasses as for live animals, and they of course favor the method which gives them the greatest amount of business. Stock yard interests naturally fight the system, but perhaps the most bitter enemies are those engaged in shipping live stock to, and handling it at, the markets where dressed meats now claim a share of the people's patronage.

A strong argument in favor of the system is the indisputable fact, that beef which travels one thousand miles in an even temperature after being slaughtered, is far more wholesome than meat from an animal which has been shipped alive that distance, and butchered before the soreness incident to such a trip is gone.

It is claimed that the horns, hides and offal are worth more in Chicago than New York; hence the folly of shipping them such a distance. From a humanitarian standpoint, the dressed beef system is incomparably better than the old way, for the animals are saved indescribable tortures by being slaughtered nearer the grazing grounds or feed lots. Then, again, there is an immense saving in shrinkage, feed bills, yard charges, loss by death, and being crippled, etc.

In short, the nearer the animals are slaughtered to their original pastures, the better it is for all hands. It may require many years to make a complete revolution in this business, but the dressed beef trade is certainly enjoying a "boom" similar to the one which Polled cattle created, and are still keeping up.

### Polled Cattle Sales in Scotland—Extraordinary Prices.

[BY OUR OWN CORRESPONDENT.]

Events of great importance to breeders and owners of Polled-Aberdeen or Angus cattle on both sides of the Atlantic, have taken place in Scotland within the last three weeks. I refer to the public sales of Polled cattle at Fintray, Montbleton, Advie Mains and Cortachy Castle. These sales were looked forward to with great interest, and drew together larger and better companies than were ever seen in this country at any former sales of a similar kind. Canada was well represented, and, as the sequel will show, secured a large share of the "cracks" of the various herds, Mr. Wilken, Waterside-of-Forbes, having made several most valuable purchases for the Hon. W. H. Cochrane, Hillhurst, and the Hon. J. H. Pope, Minister of Agriculture. The quality and breeding of the stock brought under the hammer were, undoubtedly, superior, but the prices far exceeded the calculations and expectations of everybody. In consequence of the keen demand for Polled cattle which exists in America, the interest in the "blackskins" in this country has quickened, and our home farmers who, a short time ago would have grudged to give more than fifty or sixty guineas for an animal of this breed, are now bidding their hundreds, two hundreds and three hundreds, as freely as ever they offered their fifties or sixties. The excitement at the sales ran high, especially when some representative of the Erica, Pride, Mayflower or Rose family was brought into the ring. The question is being frequently asked, how long will the present demand and high prices of Polled cattle continue? In the first instance there is no doubt it is the demand for Polled cattle in America that has raised the prices, as there is a comparatively small number of Polled cattle in this country; breeders, in view of the large drafts that have gone across the Atlantic, have had, as it were in self-defence, to increase the prices so as to prevent their herds from being completely exhausted. The high prices, however, have but stimulated the demand, and almost every day one reads in the newspapers of "more Polled cattle for America." How long is the demand likely to continue? Some people say prices have reached their flood-mark, others that they are yet bound to get higher. Rightly taking advantage of their opportunities, breeders may, in the meantime at any rate, reap a rich harvest, but in the midst of the present excitement they would do well to bear certain things in mind—that the number of Polled cattle is but small, and that if all the "plums" of their herds are bought up for America, the breed ultimately will, in its native home, become impoverished. Breeders will make every effort they can to meet the demand which has risen for their stock, and will gradually be brought to the necessity of breeding from animals of a mediocre, or even worse than a mediocre, description. Under such a system no improvement can be expected, and there may indeed be some danger of the breed failing to maintain its former reputation. In times of low prices farmers can afford to market all but the very tops of their cattle which are retained for breeding purposes. In this way a breed may be improved, and it is well that breeders at the recent sales seemed to be alive to the necessity of retaining some of the best specimens at home.

On Wednesday, 27th Sept., the entire herd of Polled cattle belonging to Sir Wm. Forbes, Bart., of Fintray, was exposed for sale in Aberdeen. The herd, which numbered twenty-one head, realized an average of £48, the highest price being 100 gs., which Mr. Walker paid for a two-year-old heifer named "Flower of the Nile," bred at Rothiemay, which was taken out for Hon. Mr. Pope. This herd was founded only a few years ago, and has scarcely had time to make itself a name in the country.

On the following day a large company assembled at Montbleton, near Banff, to witness the dispersion of the fine old herd of Polled cattle—it was started more than half a century ago—belonging to the representatives of the late Mr. Robert Walker. The principal family in the herd were the Mayflowers, from which sprang the Blackbirds—one of the best of which, Blackbird II., is now at Hillhurst—and the Lady Idas, both of which strains have produced noted prize-winners. The sale took everybody by surprise, the 40 animals sold bringing the hitherto unprecedented average of £97 15s. 7d. Major Gordon A. Doff, of Hatton, who presided at the luncheon, advised breeders in this country to keep the "plums" at home, but he could hardly have been satisfied with their destination, for the cream of the herd was purchased by Mr. Wilken, for Hon. M. H. Cochrane. Mr. Wilken bought five animals for this gentleman for the handsome sum of 1,000 guineas. This magnificent lot includes the highest priced animal at the sale—a massive, grandly-fleshed, six-year-old cow, named Lady Ida II., which was knocked out at 315 guineas—the highest figure which, up to this time, had ever been paid for a Polled animal. The cows were an uncommonly grand lot; as a rule strong, massive, heavily-fleshed animals, with great, springing ribs, and showing a distinct family likeness, the mark of the septemate breeding that was followed at Montbleton. The following is a summary of the sale:

	AVERAGE.	TOTAL.
15 cows.....	£128 2s.	£1,921 10s
6 two-year-old heifers...	105 10s. 6d.	633 3s
5 one-year-old "	71 3s. 9d.	355 19s
2 heifer calves.....	82 19s.	165 18s
2 bulls.....	176 18s. 6d.	353 17s
10 bull calves.....	48 1s. 9d.	480 18s
40	£97 15s. 7d	£3,911 5s

The average realized for the Mains of Advie herd, which was founded about twenty years ago, by the purchase of Old Rose of Advie, from Sir George Macpherson Grant, Bt., of Ballindalloch, and which was dispersed on Tuesday, 3rd October, at their highland home in Strathspey, was not so high as the Montbleton average by about £9. Still, the sale in every respect was a great success. The Roses were the best family, and were eagerly sought after. The herd which belonged to the representatives of the late Mr. Charles Grant, contained a large infusion of Ballindalloch-Erica blood, through the use of such sires as Elcho, Whig, Etonian, &c. The Mains of Advie cattle have for many years taken a leading position in the local shows, being distinguished for their robustness of constitution, wealth of flesh, grand quality and true breeding. The cows and heifer-calves in particular were a grand lot. Mr. Wilken purchased the highest priced animal—Mayflower 4th—a five-year-old of the Rose family, after the famed stock-bull Elcho, the price being 235 guineas. The following summary will show the character of the stock and sale:

	AVERAGE.	TOTAL.
14 cows.....	£118 17s 6d.	£1,664 5s 0d
4 two-year-old heifers	79 0s 3d.	316 1s 8d
9 one-year-old "	78 3s 4d.	703 10s 0d
12 heifer calves.....	66 17s 0d.	802 4s 0d
1 aged bull.....		147 0s 0d
2 bull-calves.....	34 3s 0d.	68 6s 0d
42	£88 3s. 0d.	£3,702 6s. 8d

Two days after, on Thursday, 5th, nearly two-thirds of the fine herd founded by Lord Airlie, whose sudden death in America, a short time ago, was so much regretted by his countrymen, were sold by auction, at Cortachy Castle, Forfarshire. Some four hundred breeders attended, and, high as the averages and individual prices at Montbleton and Advie Mains were, they were far surpassed here. Fifty-seven animals realized the unparalleled average of £108 11s. 5d., while the highest individual price was 500 guineas. This is the largest price ever paid for any animal of this breed, either at public or private sale. The animal that fetched this extraordinary figure was a four-year-old cow named Emerald of Airlie, a member of the far-famed Ballindalloch-Erica family, four of which (two cows, a one-year-old heifer and a six-months-old heifer calf) realized an average of £388 10s. Emerald of Airlie was purchased by Mr. O. Wallis, Bradley Hall, Northumberland; Mr. Wilken secured the one-year-old heifer referred to—a very sweet, evenly-fleshed youngster—for Hon. Mr. Cochrane, at 380 guineas. Sybil Ist., of Tillyfour, a member of the Sybil

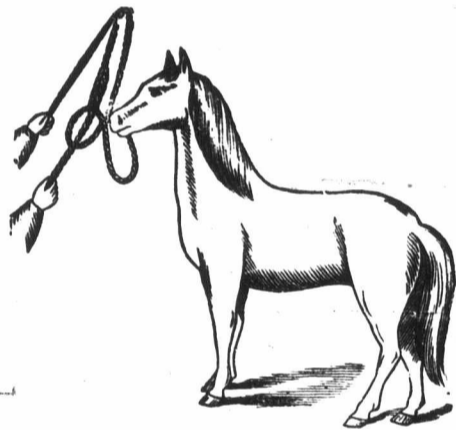
family, now rising eleven years old was taken out for the Earl of Strathmore, at 400 guineas. Thirteen of the lots sold passed the "three figures," the sale altogether being of an extraordinary character, a grand testimony to this fine breed of cattle. Mr. Wilken purchased two females for Mr. Cochrane, and five for Mr. Pope. Below I append a summary of the sale:—

	AVERAGE.	TOTAL.
22 cows.....	£125 18s 1d..	£2,769 18s 0d
4 two-year-old heifers..	214 4s 0d..	856 16s 0d
8 one-year-old heifers..	138 12s 0d..	1,108 16s 0d
7 heifer calves.....	93 7s 0d..	654 3s 0d
3 bulls.....	61 19s 0d..	185 17s 0d
15 bull calves.....	47 3s 4d..	613 4s 0d

57 £108 11s 5d £6,188 14s 0d  
Aberdeen, Oct. 16, 1882.

**To Halt a Wild Colt.**

Take a light pole, 10 or 12 feet long, or as long as you can handle to advantage, drive two nails into it about eight inches apart, the first about an inch from the end of the pole, with the heads bent a little outward from each other; then take a common rope halter, with a running noose, pull the part which slips through the noose back about two feet and hang the part that goes over the head upon the pole between the nails, keeping hold of the hitching part, which must be as long as the pole.



The halter is now so spread and hung upon the stick as to be easily put on to the head. If the colt is not excited or frightened, as you extend the halter towards him he will reach out his nose to smell and examine it, and while he is thus gratifying his curiosity you can bring the slack part under his jaw, and raise the pole high enough to bring the halter over and back of the ears, when, by turning the stick half way round, the halter will drop from it upon the head. This will frighten the colt a little, and cause him to run away from you, but this will cause the slack part passing back of the jaw to be tightened, and the colt will thus be secured.

**Sheep and Sheep Industries.**

That sheep were among the first animals brought under the domestication of man there is no reason to question. The assumption is borne out by the fact that their peculiarity of flocking together, their easy destruction by wild animals, their timidity, and at the same time reliance upon those who care for them, and the ease with which they are herded and driven, their great value, both in flesh and wool, rendering their subjection one of the first necessities of a nation emerging from savagery to barbarism—all these explain clearly why in the civilization of the race they have played so important a part wherever the wild types to which they belong may have been found.

So ancient is the domestication of the sheep that the animal from which they have descended is not known; but in scripture Abel is first recorded as having been a keeper of sheep; and this is also the first record, since no other chronicle goes beyond the flood. There is also no reason to doubt that the earliest barbarian tribes—who are always herdsmen, as distinguished from wild men, who live only by the chase—were keepers of sheep. And their diversified character also attests the antiquity of their domestication, not only as differing from any now known wild type, but as differing

widely in their characteristics from those of the first authentic historical periods.

It is somewhat curious that the wild sheep of Montana (*Ovis Montana*) comes nearer to the characteristics of the domesticated sheep than some of the so-called wild sheep now bred in confinement, as, for instance, the wild sheep of Barbary (*O. Tragelaphus*) resembles a goat still more than does our own wild species. So far as we can find, the principal varieties of so-called wild sheep now known, besides our own wild sheep of Montana, are: The Punjab wild sheep (*Ovis Cycloceras*), belonging to Northern India; the Corsican or Sardinian sheep; the European mouflon, as they are indifferently known (*O. Musimon*), this variety being found also in Barbary, Crete, the islands of the Grecian archipelago and other portions of Europe, Asia, and Africa. Then we have the Argali of Siberia (*O. Ammon*), and some others more obscure not necessary here to be mentioned. Whether the modern sheep really originated from one of these varieties or from a combination of the blood of several, is really not now essential to know. It would as a physiological fact be interesting; and it may be here pertinent to state that it is within the range of possibilities that the wild sheep of Montana may be the true original, since the first land capable of bearing terrestrial life is geologically shown to have been on this continent. The Chinese are said to have a tradition that they received civilization from this direction. This, with the added fact that the remains of a people more ancient than any on earth are so numerous on this continent, as well as those of animals, including the horse, that it would not be strange if ancient Asia received, with her civilization, from this land domestic animals as well.

The last hundred years have seen more improvement in sheep than the thousand years that preceded them. This, however, has been chiefly in the direction of an improved diversity in wool and in the superior quality of the mutton. In other words, in sheep as in other live stock, breeders have ceased to breed for general purposes, but for a particular purpose.

Up to about one hundred years ago, sheep were generally bred without reference to particular characteristics, except in a very few cases. One of the most remarkable instances is in the Spanish sheep; and until English breeders undertook the breeding of sheep in a scientific way, the sheep of the world, with perhaps the exception noticed, were mongrel varieties, of no fixed type or excellence. Since that time, and especially within the present century, the breeders of England have given the world mutton and long-wooled sheep of the greatest superiority; and the United States, fine-wooled sub-families of the Spanish, superior to any other in the world.

The great Australian continent is the principal wool growing country in the world, and our only competitor in fine wool to be feared, possessing as she does 80,000,000 sheep, as against our 36,000,000. The United States, standing first as she does among the nations of the earth, in the production of cattle and swine, and second in the production of horses, comes fourth in the production of sheep. Besides Australia, with her 80,000,000 sheep, the Argentine Republic of South America stands second with 68,000,000, and Russia third with 63,000,000. When, however, we reflect that the South American sheep, and those of Russia, are not only coarse, but inferior woolled, the production of valuable wool lies practically between Australia, the British Kingdom, Canada, and the United States.

What the future of sheep may and should be in America, it is not difficult to foresee. The great area of sheep-raising districts in the United States; the great plains and the valleys of the West and the Southwest; the area of cultivated farms in the Northern States between the Ohio river and the great lakes; the vast and fertile rolling prairies of the West and Northwest, already smiling with grain and grass-laden fields, or soon to be; Canada, a large portion of which is admirably adapted to sheep; and, last, but not least, the great hill region of the South, with its rich grasses and genial climate. All these, with few exceptions, are adapted to both wool and mutton breeds.

Is there any reason why, in the next decade, this country should not stand third in the production of wool, as she now does stand second in the production of valuable wool, and probably first in the production of heavy fine-wool? Is there any reason why the hill region of the South should not coin money for its people, by sending early lambs and juicy mutton to our great markets, at

high prices to the consumer, and at a low cost to the purchaser?

Is there any reason why every intelligent farmer may not extend his income through the keeping of more or less of the long-wooled or mutton breeds, especially adapted to ordinary-sized farms, especially when we know that these breeds cannot be kept in great flocks like the Merino?

There are reasons why the first proposition may not be accomplished; such as the greater profits arising from less confining and less venturesome lines in agriculture in new countries. There is no valid reason, however, why, if every farmer was alive to his interests in the years to come, this country should not stand, in 1893, as the third wool-and-mutton producing country in the world; or possibly as the second.

To the second proposition it may be answered that there is no reason why the South should not produce early mutton and valuable fleeces, except the fear of danger from a horde of rapacious dogs, and the slowness with which her people adopt lines of agriculture outside those it has heretofore been incorrectly supposed that country is capable of developing.

To the third proposition there is only one answer. There is no reason why the average farmer should not keep some sheep in connection with his other stock. The reasons why farmers do not more generally keep sheep are various—the principal one, however, being that the average farmer does not keep himself posted in what is going on about him in the world. He takes life easy; sees little of the world; is content to read that class of agricultural papers that are given away with the advertisements they contain, or sold at a merely nominal price. Hence, he gets not only cheap reading, but information calculated to lead him astray. The soil he tills yields so bountifully that he takes little or no care of the future, and is content with wheat after wheat, and other grains after their kind, to be sold off the farm when they should be fed. He has heard that the sheep's hoof is golden to the soil; but he does not know why. He has heard that the sheep pays twice; but he does not know how. Yet it is the why and the how that creates all the wealth of all civilized nations; for the why and the how simply mean making the most money out of the means at one's command. It should be remembered that the sheep fertilizes the soil whereon it feeds, and that its flesh and wool feeds and clothes many hundreds of millions of the population of the earth. This is why the foot of the sheep is so golden, and why the flock pays twice—once in the wool and once in the carcass.—*Breeder's Gazette.*

**Pig Breeding—Management of Breeding Stock.**

The young boar at four to five months old should be separated from his companions, and be accommodated with a roomy, warm sty, abutting on a large yard; this latter for exercise, of which plenty should be afforded in all favorable weather; and as he cannot be turned out into a grass field without extra precautions as to fencing, and only then when other pigs are absent, a proportionately large yard is required. His food should be generous in quality, though not profuse in quantity—the object being to produce a healthy, well-grown frame, covered with muscle rather than surplus fat, which latter is much against his usefulness as a sire. Nor is it desirable to push or force the growth too rapidly, as if at all disposed to extra development, he speedily is too large and heavy for young sows. He should be kept as far as possible from the other pig stock, so as not to induce restlessness, which sometimes militates much against the well-doing and condition of young boars.

Great difference of opinion prevails as to the proper age at which he should be allowed to mate with sows—some say twelve, others put eighteen months as the earliest period. I think myself that, when stunted to a few only, and not hard-worked, at twelve or fourteen months it will not be prejudicial to him, but the too frequent practice of almost unlimited service when young has the most prejudicial effect both upon sire and offspring; indeed, when fully developed, at two to two and a half years old, too much service is hurtful, but before that age it is doubly so. I am aware that many boars are not kept to that age, but, after being used for a year or so, have to make room for another young one. This is not the right way of breeding good stock, for many only when full matured seem to be able to be thoroughly prepotent.

There is a question concerning the management of a boar which may or may not be of greatest im-

portance, viz.: Is the progeny of one sow liable to be affected by any peculiarities of a sow of different breed or inferior breeding, to which the boar she is mated with has had previous access, and if so to what extent?

My own experience leads me to answer the first question in the affirmative. And as it is a subject that can scarcely fail to interest breeders, though many, most probably, will hesitate before giving full credence to it, I will, at the risk of extending this paper, give it at length.

After an interval of some years since I had kept pigs for breeding, a small paddock close to home was in need of a tenant just as I had the chance to buy a young sow brought direct from the Royal Farm, Windsor; so I took the one and bought the other, and very shortly after I bought a young sow carefully selected from the stock of the Earl of Ellesmere, but which the gentleman who selected her could not get to breed. I also purchased a very good-looking and well-bred boar, by a son of Peacock. All of them were small white pigs of very superior quality. I had the good fortune to obtain a nice litter from each sow—not one of which denoted slightest impurity of blood. The best

Nor is this all. A noted breeder called to see me some three or four years since, in great perplexity. After a greeting, he addressed me.

"You know what a grand lot of pigs I had, those black ones; well, would you believe it? every sow I've got has brought black-and-white pigs. However can it be? I have never had any but black pigs for years, never saw one before with a white spot since I had them."

My first thought was: Had interbreeding anything to do with it? and I asked the question.

"No, I kept the old boar you know, and the best of the sows, and they are just the same I bred those grand pigs from."

"Have you allowed him to serve white sows?"

"Yes, I have done that since I went to— A lot of my neighbours have sent to me, and I could not refuse them. You don't mean to say that can account for it?"

I gave my experience to my friend, and he said: "No more whitesows upon the place at any price."

I saw him again some twelve months since, when he told me that since refusing the use of his boar he has had no further trouble.—[W. Goodwin, Jr., in Live Stock Journal.

these prizes, were not attained without great expense and good judgment.

No. 1 represents the 3-year-old Devon that carried off the first prize. She is owned by Messrs. G. & A. Wood, of Islington. They are, perhaps, the most careful breeders of these animals we have in Ontario. They have a fine herd and have carried off the principal prizes in this class.

No. 2 represents the 3-year-old Hereford cow that carried off the first prize. She is owned by C. C. Brydges of Shanty Bay, who has for years been selecting and breeding from the best Herefords he could procure. He purchased some fine animals from Mr. Stone, and has imported several very choice animals from England. Such is the result of his judgment and care that he has now carried off the lion's share of prizes in this class.

No. 3 represents a first prize Berkshire sow, the property of J. C. Snell, of Edmonton, who stands high as a breeder of improved Berkshire



GROUP OF PRIZE ANIMALS AT THE LATE ONTARIO EXHIBITIONS.

gilts I kept, and one or two of the hogs beat everything against which they were shown with greatest ease. In due time, both sows (they had littered within a day of each other) were again served by the same boar, but a day or two previously a medical gentleman in the town, who kept a black sow, had sent her to visit him without my knowledge. The next time my sows littered both had several pigs with distinct black spots both on hair and skin, and both litters were in every respect far inferior to the former ones.

Desiring another boar, I went myself down to Worsley, and selected a most promising son of XL, out of a really good sow. I bred both the selected gilts out of the first litters and the old sows to him, in each case with the best results, not one having a spot of any kind. Just about the time several of these were served the second time, my brother sent a young Berkshire sow, which was in company with the boar a day or so. When mine came to pig, the young were spotted with black in a most disgusting manner, and one had a jet-black nose. Now I have long been aware that a young female is apt to sully a portion of her succeeding offspring if her first-born has been a cross-bred or of inferior parentage, but never before had so striking an example been apparent of the possibility of a pure-bred male thus influencing his offspring.

#### Group of Prize Animals at the Late Ontario Exhibitions.

Every good farmer has one class or more of animals which he deems most profitable. Each class possesses advantages not to be found in others. One is better adapted to one soil or locality, and for a particular purpose, than another. It is for each good farmer to ascertain the class which is best adapted to his purpose, and when that is decided, to obtain the best in that particular class ought to be the aim of the breeder. At sales that we have attended we have noticed that the purchasers of the best stock are principally the most prosperous farmers. This is the case, not only in farming implements and cattle, but in all other things. An illustration like the one we herewith give will impress on the mind some of the characteristics of the different breeds represented, and also let you know where to write if you should wish to procure a really good animal. The owners of these animals are all breeders of the different classes of stock. The high position to which these gentlemen have risen, and the obtaining of

pigs and fias having the best in Canada. We presume that the great hog crop of the States this day can be traced to show that Mr. Snell's stock has done quite as much or more to improve it than any other person's stock on this continent. The improved Berkshires being so superior to the old common stock, Mr. Snell has for a long term of years been shipping numerous fine animals of this class to the States.

No. 4 represents the first prize two-shear Shropshire ram, the property of Mr. C. C. Brydges, of Shanty Bay. Mr. B. has now a large flock of these valuable sheep.

No. 5 represents a French Merino ram, the property of G. Hood, of Guelph. Mr. Hood claims for this class of sheep that they will produce a better wool and mutton than we can produce from any other breed or cross of sheep. The best cross consists of a French Merino ram and either a Cotswold or Leicester ewe. The French Merinos are claimed to be much superior to the American Merino.



No. 6 represents the first prize Oxford ram, over two years old. This animal is the property of H. Arkell, of Arkell P. O. We heard the remark, when passing the sheep pens, that the Oxfords were the finest sheep on the ground. For size, handsome form, compactness, and length of wool, they really appear to be just what the observer said. Mr. Arkell's father was a great admirer of the Cotswold, and on his farm we have seen what we believe to be the largest number of Cotswolds in one flock on any one farm that we have visited on this continent. His son is still an admirer and breeder of the Cotswolds, but has now added the Oxford Downs to his flock.

A South Australian shepherd does not find the Canada thistle an unmixed evil since it furnishes more and better food for sheep during a protracted

Garden and Orchard.

The James Vick Strawberry,

Of which we give an illustration, is a new variety of strawberry brought out during the past summer. The color is bright scarlet, turning to crimson; surface glazed. The berries average large, and for quantity, quality and beauty the berry is reported to be all that is desirable. It scarcely seems possible that so many berries could grow upon one plant, but the engraving shows only a part of what one average plant produced. The berries grow so thickly together that a bee could hardly crawl between them. The fruit stems are long and stout, but are unable to sustain the great burden imposed on them, often 12 to 18 berries being on one fruit stem. It has been pronounced by eminent pom-

FORCING THE LILY OF THE VALLEY.—Mrs. H. C., Washington, D. C.: The lily of the valley is very easily forced for winter blooming. To do this clumps of flowering roots may be taken now from the bed in the garden and potted or planted in boxes in rich vegetable soil. The plants are put in a cold cellar for two weeks for a new growth of roots to be made, and then moved into a temperature of 55° or 60°, and well watered until they bloom. Fine bloom may be procured by setting the pots on boxes on a shelf over the kitchen range, where they will have bottom heat, and giving them plenty of water. When the flowers appear the plants may be brought to the window to color.

WINTER CARE OF BULBS.—C. R., Dover, Del.: The bulbs of gladiolus and tuberose should be taken up at once and removed to the cellar for preservation. The bulbs of gladiolus are new, the old decayed one being seen attached to it. Around the bulb are a number of offsets or bulblets which may be used for propagating new plants. These



THE JAMES VICK STRAWBERRY.

drouth "than any other plant that grows." Lambs especially take the flower-buds in preference to the best of grass.

Our poster and premium list for 1883 are now ready, and will be sent, with the ADVOCATE'S compliments, to all who may wish to engage in the laudable and profitable pastime of securing new subscribers for the leading agricultural journal of the Dominion. Balance of 1882 free to new subscribers. Commence your canvass at once, and secure the name of every good farmer in your neighborhood.

Referring to the leading features of the degenerated agricultural fairs of the period—including horse-racing, circus performances, "montebanks" and gambling booths—*The Western Farmer* remarks that the managers should "advertise them for what they are before inviting the honest industry and morality of the country to sustain them."

logists to be one of the most promising strawberries ever introduced.

Vick's Magazine says: Its merits as a prolific and profitable strawberry are now pretty well established.

THE POINTS OF MERIT

are briefly:

- (1) Fine quality, unusual vigor, and perfect blooms.
- (2) Color, form, and firmness of berry, which approach the ideal. No white tips; no coxcombs.
- (3) Ability to stand on vines a week after ripening without becoming soft, or rotting, or losing quality or much lustre. Instead of softening it shrinks a trifle and becomes firmer than when first ripe.
- (4) Uniformly large size and productiveness unequalled by any other variety. Two hundred and eight berries were counted on one average plant, and from one row, about 100 feet long, nearly two bushels of berries were gathered.

may be removed from the bulb and preserved. The new bulb will flower again next season, but the bulblets will require three years' growth before arriving at flowering age. They are not sown until the second spring, when they may be planted thickly in a bed, and will induce small, slender plants. Tuberose bulbs which have flowered will not flower again, but the offsets may be planted the next season and succeeding year until the third, when they will bloom. It is thus necessary to procure flowering bulbs for three years before one can grow them; after that they come in in succession each year by continuing to plant the offsets for new plants.

The article on the *disadvantages of planting deep*, in which it is shown that seed should not be covered in any sort of soil with more than five times its diameter of soil, and that seed buried two feet deep is as safe from germinating as if sealed up in a fruit jar, is well illustrated by the cuts and relation of experiments given in a pamphlet entitled "A Revolution in Wheat Culture," sent to applicants by Professor John Hamilton, the able manager of farm operations and business at the State College, Centre Co., Penn.

### Kitchen Garden for November.

This month warns us that winter is approaching, and preparations should be made towards carefully securing all products of the garden that are perishable by frost. Celery can be put away in trenches, which should be dug as narrow as possible, not more than 10 or 12 inches wide, and of the depth of the height of the celery. The celery is now placed in the trench in a perpendicular position so as to fill it up entirely, the green tops being on a level with the top of the trench. No earth is put to the roots other than what may adhere to them after being dug up. It being packed closely together, there is moisture enough always at the bottom of the trench to keep this plant from wilting. It must be gradually covered up from the middle of the month until winter sets in, when it will require at least a foot of covering of some light, dry material, hay, straw or leaves. It is important that the covering should be gradual, for if covered up at once it will prevent the passing of the heat generated by the closely packed mass of celery. Covered up in this manner it can be got out with ease during the coldest weather, and with perfect safety. The great difficulty most persons have is from stowing it away and covering it up too early. Beets, carrots and cabbages must be dug and secured this month. Horse radish, salsify and parsnips being entirely hardy and frost-proof, need not necessarily be dug, although from the danger of their being frozen in the ground the work had better be progressing. All clear ground should be dug or plowed and levelled, so that operations can be begun in spring with as little delay as possible. If draining is required, this is the most convenient time to do it. The sashes should be put on the cabbage and lettuce plants on cold nights, but on no account should they be kept on in the daytime, as it is of importance that they should not be made tender by being drawn up under the sashes. These plants are half hardy and it is only killing them with kindness protecting them from slight freezing. Rhubarb and asparagus beds should be covered with from four to six inches of rough manure or other litter. The crops from beds thus covered will come in earlier and will be stronger than if left uncovered.

### Beech Hedges.

I am a great admirer of hedges, whether intended for use or simply for ornament, and have been moved to recommend a hedge, no mention of which has appeared in print to my knowledge. This hedge is grown by sowing beech-nuts (in the fall, as they need the action of the frost) as you would sow peas, in a drill. It is better to break the sward slightly with some convenient tool, then to sow on the grass; but in either case the nuts should be slightly, not deeply, covered with leaves or straw. If the sprouts of sapling come up too thick, of course they should be thinned out, leaving the standing ones at a suitable distance from each other. They grow rapidly, and should be cut back as other hedges are, for a few years or until the trunk has sent out a sufficient number of lateral branches, though, if allowed to grow untrimmed, these branches will be thrown out; not as near the ground, to be sure, as if trimmed, but possibly, sufficiently low for all practical purposes in turning any stock larger than sheep. All who are acquainted with the growth of the beech in open land, know how scrubby its growth is, and that it seldom attains a height of more than 12 or 14 feet. I do not recommend this hedge for ornament, for it cannot be said to be very handsome; neither would I recommend it for cross-fencing; but for a line-fence, which is to be permanent, it is just the thing—rapid in growth, so hardy that it withstands the severest cold of winter and all climatic changes, and so tough and stiff in texture that, when it has grown to half the size of one's wrist, the largest, strongest and heaviest beast on the farm cannot break or bend it.

The beech hedge, when once firmly established, needs no repairs, and will last a "short forever,"

and when it begins to die, death will first show itself upon the topmost branches, working slowly down, requiring perhaps years to kill the lower ones. Sowing the beechnut is comparatively an inexpensive process. One a little more expensive is to transplant very small saplings from the woods—which (if they do well, and are not much retarded by transplanting) take root and start quickly, will do equally as well as sowing the nut, and give a hedge sooner. For a permanent hedge, I should say try beech, either by transplanting or sowing the nut.—[C. E. Hewes in Cultivator.

### Petunias for the House.

We have several common flowers—by that I mean flowers to be found growing in most gardens—which give excellent satisfaction in the house in winter. Most of these flowers are of the "accommodating" sort, using the word in the sense given it by country people, who mean by an "accommodating" person that he is one who will adapt himself to circumstances readily and not feel very much inconvenienced by any change from former circumstances.

Such a flower is the petunia. It has several features of merit: one is its profuse and constant blooming. In the garden it is generally covered with flowers, and it will do equally as well in the house if properly cared for. Another meritorious feature is its hardiness. It will stand extreme heat and the dryness of our usual sitting-room air, and also the low temperature of cold winter nights, when we carelessly let the fire die down. And a third point in its favor is, no insects ever trouble it.

It succeeds equally as well as a pot plant, trained to a trellis, or as a plant for basket use, allowed to droop. For the latter use it should be planted in a pot with some plant having more foliage, as the petunia does not have a great many leaves to cover the basket with. But in partnership with some plant that furnishes green while it supplies flowers it is very desirable.

For winter blooming lift the plant and the roots in an eight or ten-inch pot, cut back the top to within three or four inches from the ground; indeed, leave nothing but stubs. These will send forth plenty of new shoots and in three weeks you will have flowers on them. If you want a bushy plant keep the branches pinched in well. Use ordinary garden soil and give occasional waterings during the winter with some stimulant. Once in two weeks will answer. Keep the plant in a sunny window and remove all flowers as soon as they fade. The single varieties are the best. Cuttings can be rooted by the dozen in March to furnish a supply for the garden in summer.—[Farmers' Review.

### Fuchsias.

Fuchsias, which have been blooming all summer, should now have a period of rest. Gradually quit watering them, and set them away in some dry, shady place for a few weeks when the leaves will drop off. Then the soil may be partly washed away from the roots, and then replanted in pots of a suitable size in fresh soil, composed largely of leaf mould and sand if possible. The plant may also be pruned some, if need be, to form a good shaped bush. Iron scales, to be found around a blacksmith's anvil, may be mixed with the soil to good advantage. Water sparingly at first, until new growth starts, which will be in about ten days, after which the plant should never be allowed to become dry, especially when the flower buds appear, or they will blast and drop off. The fuchsia does not require a full sunlight, and can be placed back some distance from the window. There are only a few varieties that are good winter bloomers: Speciosa, Carl Halt, Lustre and Madam Marshall are among the best.

Fruit trees procured from the nursery, if planted out this fall, should be well heeled-in till spring. Many young trees are lost by doing this work carelessly. They may be injured in several ways. If the fine earth is not packed in solid among all the roots, air crevices will be left, and the roots will dry; and if the mice find their way into these crevices, they will finish what the drying has not done. The mice may be entirely excluded if the trees are placed in clean ground, away from weeds, grass or litter, and a ridge of smooth, solid earth is raised in the form of a ring about them. Mice will not ascend a smooth, solid bank of earth under the snow.

### Window Flowers.

What would our homes be without flowers? Dull, cheerless and bereft of one of their principal adornments. That plants have a charm, is evidenced by the careful way in which they are watched, and tended even in windows, where they are frequently crowded in such a way as to almost shut out the light. Houses should be so designed that we may have a few plants, which under such circumstances would be a real pleasure to behold? The extra cost of say a bay window to a house would not be much, and the amount of enjoyment which it would afford is beyond measure. It may be asked, what can anyone without a glass structure do to keep up a supply of flowers? to which inquiry we reply, he might do a great deal, as there are many plants that up to near the time at which they come into bloom succeed best out-of-doors, where they not only come shorter jointed and stocky, but are more floriferous than when placed under cover. Take Fuchsias and Pelargoniums, for instance, which if grown in windows become one-sided and drawn, but which, if placed in suitable spots, the one in partial shade under the friendly shelter of a wall, and the other in full sun, are always sturdier and finer than they are in any other position. Besides these two there are hosts of other plants that may be raised from seed annually or kept as bulbs, and for winter there are plenty of hardy subjects that are quite equal in appearance to tender exotics. It will be a help to many, perhaps, if we enumerate some, and give a few particulars as to the way they should be managed, but the chief point at starting is not to attempt too much, as it is more satisfactory to grow a few well than to have a quantity inferior as regards merit. The great disadvantages under which many labor is not having suitable soil, and yet it is astonishing what results may be attained with even street scrapings, especially if in collecting them they are largely mixed with the droppings from horses, which, containing as they do so much vegetable matter, help greatly in keeping the whole open and porous. All that is necessary to make the compost perfect and suitable for most plants are a few nodules of turfy loam and peat, both of which may be obtained at any nursery at a moderate rate of cost. The mistakes generally made by inexperienced cultivators in potting plants are not using sufficient drainage, and filling the pots too full of soil, but a more frequent complaint, perhaps, than either is the quantity of water which they give, and the way they allow them to stand in it and drown. More plants are injured and lost in this way than in any other, as it not only soddens the earth, but causes the roots to decay. Some will stand it and enjoy it, but they are only the few which are half aquatic in character. Drainage, then, being such an important matter for the others, the first preliminary to potting is to carry that part of it out properly, which is best done by first placing an oyster shell over the hole, and covering it to a depth of  $\frac{1}{2}$  inch or so with small cinders or charcoal. These will afford a ready outlet for the water, and if the pots do stand in the little that drains through at this time of year it will not be productive of any great harm. In winter, however, it should be poured away, or taken out of the saucers by means of a coarse piece of sponge, which dipped in, soon absorbs the whole without moving the plants. The common enquiry amongst amateurs is how often shall I water? Which leads one to suppose that they expect plants require water with the same regularity as we do our meals; but instead of this there are so many varying circumstances connected with the weather and the varying state of the atmosphere, that no set time can be stated. The amount of leafage, too, that a plant has, and the body of soil the roots are in, have much to do with the quantity of moisture it will take up, and the instructions therefore in regard to this matter must be general. There is one thing of great importance, which is, when water is given it should be sufficient to wet the entire ball, instead of being administered in dribbles, as is too generally done. A good test of a plant's condition is to try the weight, or rap the pot, which if dry will ring, owing to the shrinkage of soil from its side; but if wet the sound will be heavy and leaden. An experienced person, and one accustomed to look after the same plants, soon knows at a glance whether they want water or not, and until the necessary knowledge is gained it is better to err on the safe side than overdo them with water.

Cut off top end of beets, carrots, parsnips, etc., and put in dish of moss for winter house plants. You will be pleased.

## The Farm

## Essay on the Most Economical Food, &amp;c., for Harvest Hands—No. 5.

The matter of cooking for harvest hands is a branch of domestic duty to which the mistress of a farm house is called upon to devote her attention for a short time during every year, and as it is a somewhat arduous undertaking, it requires no small amount of tact and forethought on her part. It is one of those departments of housekeeping which can very seldom be delegated to an under servant, but requires at least the supervision, if not the actual labor, of the mistress or housekeeper.

My experience on the subject so far has all gone to show that, in one particular, at least, man differs but very slightly from any other animal that has been brought into servitude; that is, he works better when he is well fed. It is, in my opinion, poor economy to give men who are working hard all day in the hot sun from early morning till perhaps sun-down at night, "just anything that is easiest got," thrown rather than set upon the table, in any "any way that is handy" fashion.

If you want your workmen to render cheerful service give them plenty of good, wholesome, nourishing food; let them see that you care for their comfort; have your table tidy and keep your dining room as cool and free from flies as possible.

While everything that is provided should be good of its kind, I would not recommend that much labor or material be spent in making rich cake or any very great variety of pastry. I do not think this is what is needed in a farm house; it is nourishing food that will strengthen the muscle and repair the waste of the system, which should be found on the table that is surrounded by workmen. I think that to almost every meal there might, as staples, be found something like the following: meat, good bread and butter, biscuit and some kind of pie. A change might be made by occasionally substituting for the biscuit buns or currant loaf.

In addition to these staples there should invariably be potatoes to dinner and at least one other kind of vegetable such as may be in season, also some one or more of seasonable relishes, such as lettuce, cucumber, radish, &c., and generally some kind of pudding. To tea, if desired, a sponge cake or jelly cake might be added once in a while, and apple sauce or berries and cream. Breakfast is sometimes varied by having boiled eggs or toast.

A nice dish for dinner is to have baked apples served with cream and sugar, instead of pudding. While everything should be made good (it is poor economy to make pies and biscuits too tough and hard to be eaten), at the same time any approach to "greasiness" in cooking should be avoided. Biscuits may be spongy and pie crust rich, light, and flaky, without being greasy. It is a daily repairing and not a daily oiling that the human machinery requires.

Biscuits and pies should be made at least passably good and then baked in a moderately hot oven. Mixtures of flour and fat dried, rather than baked, in a slow oven, are neither palatable nor nourishing. Cold meats, too, should be always kept in a cool place to prevent the fatty parts becoming oily.

I am aware that in every household accidents will occur in the cooking. The bread may be sour or hard, the biscuits or pies mismanaged, or the meat badly cooked, but when this state of things is the exception and not the rule, they are readily looked over and put up with for once, by men who possess an ordinary amount of good nature.

On account of living at a distance from town, the meat part of our bill of fare consists chiefly of dry salt pork (some summers we have corned beef.) My plan is to use the hams and shoulders during the harvest, reserving the fatter parts for the cooler weather, when the men are not working so hard. We usually have the butcher call once a week, but after first going the rounds of his town customers and then driving four miles into the country, his stock, to say the least, is not always attractive, and it is difficult to obtain a good cut unless it has been previously ordered. Sometimes

a nice change is made by having to dinner a pair of roast chickens or a chicken pie. Occasionally, too, a lamb is taken from the flock and killed, which varies the monotony of salt meat somewhat. Usually one half of the lamb is exchanged with some neighbor who kills at another time. I find, when the farm hands are not numerous nor the family large, that half a lamb is quite as much as can be disposed of, without waste, before the men seem to tire of it. I think they do tire of lamb or mutton sooner than any other kind of meat.

I prefer having cold meat for supper and breakfast. It does not necessitate quite so much work. Apart from that I think it is healthier, and the men appear to relish it better than hot meat at those meals.

I will now proceed to give, as requested, a bill of fare for one week.

Monday—Breakfast 6 o'clock, a.m., sharp; fried ham, buns, pie, coffee. Lunch, carried to the field at 9 a.m., hot biscuit, apple pie, coffee. Dinner at 12 o'clock (punctually), fried bacon cut from the shoulder, boiled potatoes, baked dry beans, rice pudding, currant loaf, tea. Lunch carried to the field at 4 o'clock, p.m., cold biscuit, custard pie, coffee. Supper: when the men quit work for the night, cold ham, buns, raspberry pie, sponge cake, tea.

Tuesday—Breakfast (hours for each meal always the same), cold boiled ham, potatoes sliced and warmed, biscuits, apple pie, coffee. Lunch, buns, currant pastry, coffee. Dinner, fried ham and eggs, potatoes, green peas, apple pie, biscuit, tea. Lunch, hot biscuit, custard pie, coffee. Supper, cold ham, currant loaf, apple pie, raspberries and cream, tea.

Wednesday—Breakfast, cold pork, warmed potatoes, buns, toast, coffee. Lunch, apple pie, biscuit, coffee. Dinner, fried bacon and onions, green beans, hot biscuit, baked apples with cream and sugar, tea. Lunch, currant loaf, custard pie, coffee. Supper, cold shoulder of pork, buns, raspberry pie, baked apples.

Thursday—Breakfast, cold pork, fried potatoes, biscuit, apple pie, coffee. Lunch, biscuit, raspberry pie, coffee. Dinner, roast beef, potatoes baked with the meat, Yorkshire pudding, apple pie with cream, tea. Lunch, apple pie, currant loaf, coffee. Supper, cold roast beef, custard pie, biscuits, raspberries and cream, tea.

Friday—Breakfast, fried ham, potatoes, buns, apple pie, coffee. Lunch, hot biscuit, currant pastry, coffee. Dinner, Irish stew with toast, side dish of cold pork, potatoes, bread pudding, apple pie, tea. Lunch, biscuit, raspberry pie, coffee. Supper, cold pork, apple pie, biscuit, apple sauce, tea.

Saturday—Breakfast, fried ham and eggs, potatoes, buns, apple pie, coffee. Lunch, custard pie, currant loaf, coffee. Dinner, hot boiled ham, potatoes, green peas, steamed pudding, buns, tea. Lunch, currant pastry, apple pie, coffee. Supper, cold boiled ham, hot biscuit, raspberry pie, jelly cake, tea.

No cooking is done on the Sabbath, dinner being previously prepared on the Saturday, giving all an opportunity to spend the day in rest and devotion.

Invariably to every meal there is bread and butter, and, as I have before said, at least some one of the many relishes which are to be found in almost every farmer's garden during the summer.

It is a very difficult matter to lay down any fixed rule as regards a bill of fare, as the providing for each day is more or less dependent on circumstances, and every week is not alike. Frequently a change is made by substituting, as I have before said, for some of the fried meat dinners of the first of the week roast chicken or chicken pie, and by sometimes having lamb; the beef, too, is not on all occasions a roast, and in that case, of course, is served up in the most appropriate way.

We raise yearly quite a number of chickens and at times some other kinds of poultry, but none of it is ever marketed; the whole of the surplus stock finds its way to our own table, and we do not consider that their use is extravagant. In fact I think it is more economical to use fowls which are raised on the farm with very little expense than to buy fresh meat, especially when prices rule as high as they have done lately.

Oatmeal might sometimes be prepared for breakfast if the men liked it, and I might say here, although not exactly bearing on the subject in question, that it is a good plan to stir a few spoonfuls of oatmeal into the water which the men carry to the field to drink.

The lunching of the men may appear to some to be unnecessary and consequently not economical.

I think, however, there are some advantages to be gained by the practice. For one, the farming operations are all conducted on strictly temperance principles, which is not always the case where lunch is not given. Then the men work longer hours, thus getting through their work sooner than they otherwise would, and at the same time, while working longer hours, they do not do so grudgingly but cheerfully, as though they took a real pleasure in it. I am aware that lunching makes more work in the house, and that, too, at a season when the rest and recreation which many of our sisters in the cities and towns are enjoying is very tempting, and we almost envy them their ease, yet there is a certain satisfaction in conscientiously performing, to the best of our ability, every known duty of that station in life in which Providence has placed us. A woman may be called upon to work and yet she need not necessarily degenerate into a common drudge or become a mere machine; performing a daily routine, neither her womanly dignity nor her intellectual ability need be one whit lessened in consequence. I might say, too, that although the work is hard it does not continue long, not more than four or five weeks on an average, unless the farm is unusually large, and when they are over we can take to ourselves a little well earned rest and recreation.

In conclusion I would say that nothing should be wasted. It is the duty of every woman to "look well to the ways of her household" in this matter. It is the constant dropping of little leaks that dribbles away the profits. Every housekeeper would do well to choose for her motto the words of our Divine Master when he said to His disciples, "Gather up the fragments that remain that nothing be lost." Dry bread should be toasted or made into puddings. Stale buns and biscuit, too, can be worked up in the latter way. A nice way to use up dry bread is to soak well in either milk or water, smash it well with a pounder, then season with sage and onion and bake in the same pan in which the beef is roasting. At the table it is served up with the meat. I find most men like this kind of dressing, and it not only uses up the dry pieces but it makes the meat go further. Scraps of meat, too, should be saved in a cool place free from flies. When sufficient is collected a little onion and potato should be added and the whole made into a stew, which, with the dry bread of the previous day toasted and laid round the edge of the platter, makes a nice dish for dinner, supplemented by cold meat, and in some such way as this everything should be made to serve some purpose.

## Weeds and their Seeds.

BY E. LEWIS STURTEVANT, OF THE N. Y. AGRICULTURAL COLLEGE.

On September 28th one vigorous Pursley plant (*Portulaca oleracea*) contained 9 branches, the average branch 15 branchlets, the average branchlet 212 seed capsules, one average seed capsule 75 seeds, thus making for an estimate a grand total of 2,146,500 seeds.

June 21st, an average plant of Shepherd's Purse (*Capsella bursa-pastoris*) contained about 1,000 pods, each pod at least 20 seeds, and more bloom to come. A better specimen showed 2,200 pods and still blooming; a vigorous specimen had 4,400 pods at least, and still blooming. The number of seeds to a plant may therefore be estimated at from 20,000 to 80,000. A fair sample of Mallow (*Malva rotundifolia*) had 1,100 blossoms and more to come, each bloom producing 15 seeds; the estimate for the plant, therefore, 16,500.

A fair sample of Chick-weed (*Stellaria media*) showed 123 flowers and capsules, each of which produced from 7 to 10 seeds. A better plant showed 471 capsules, and many had opened and fallen. This plant flowers during a very long season, and the number of seeds upon the plant at one time may be safely estimated at from 1,000 to 4,000.

A plant of Corn Speedwell (*Veronica arvensis*) showed 43 pods with 90 seeds to a pod. A more vigorous plant showed 175 pods and about 101 seeds to a pod; another plant had 78 pods, and still another 123 pods. The number of seeds can therefore be estimated at from 4,000 to 15,000 to the plant. A specimen of the Thyme-leaved Speedwell (*Veronica serpyllifolia*) had 142 pods with about 58 seeds to the pod, or an estimated number of 8,000 seeds to the plant.

A fair, rather smallish plant of black mustard, (*Sinapis nigra*) had about 120 blossoms and pods. One pod had fifteen seeds; the estimate, therefore, 1800 seeds to the plant.

It does not require a very vigorous dandelion (*Taraxacum dens-leonis*) to throw up 10 or 20 blooms in a season, yet each head may contain 120 seeds or more, or from 1,000 to 2,000 to the plant.

A fair sample of Curled Dock (*Rumex crispus*), had 9 stems; one stem selected as an average one, had 21 flower spikes, one average spike counted 369 blooms. A single stem had, therefore, about 7750 blooms, and the nine stems about 69,000 blooms. A larger plant in the garden had 10 stems, the largest stem had 41 seed spikes, the smallest 20 seed spikes, the largest spike had 630 whorls, the smallest 219 whorls. The computed number of seeds is therefore at least 93,390.

On July 1st a vigorous plant of Corn Cockle (*Lychnis githago*), had 60 pods and blossoms; 2 seed pods had 49 and 62 seeds respectively; the total number of seed may therefore be computed at 3,300.

On June 25th an average flower of the Ox-eye Daisy (*Leucanthemum vulgare*) contained 802 and another flower 859 achenes to the flower. One plant had 72 and another plant had 120 blooms. While often there is but one stem to a seed, yet frequently there are more, up even to 23. One stem may have 13 blooms. The number of seeds to a plant may therefore be computed at from 8,000 to 96,000.

On July 6th a fair stool of Chess or Cheat (*Bromus secalinus*) had 211 heads, and an average head had eighteen seeds; the estimated number of seeds 3,798.

A fair sample of corn Chamomile (*Anthemis arvensis*) had 151 seeds to a flower, and 48 flowers to a stalk. This plant has from 1 to 10 stalks. The seeds can, therefore, be computed at from 7,000 to 70,000 to a plant.

On July 12th a vigorous plantain (*Plantago major*) had 8 flower spikes, and one of these, not the largest, had 561 blooms.

On August 29th an average-sized plant of pig-weed (*Chenopodium album*) had 28 branches. One branch bore 21 branchlets. One average branchlet bore 13 flower spikes. One average spike contained 108 seeds. The computation for the plant is, therefore, 825,552.

The seeding prolificacy of weeds is not so very surprising when we consider that in order to maintain themselves against the effort of man to destroy and to remain as weeds rather than as accidental plants, this fecundity is of the greatest consequence to the species; and that the plants we call weeds have become the select ones, those whose power of multiplication and resistance have either been originally very great, or else great by modification. Could select varieties of cultivated plants be maintained against such adverse influences as have been overcome by weeds, such a variety would become of incalculable value to the cultivator. Unfortunately, however, quality seems not correlative with resisting power of the species.

### Drainage.

SOILS, AND THE RELATION OF DRAINAGE TO THEM.

But very little attention has been given to land drainage in this country, until recently. A casual glance at our farms in the spring of the year, when many of them are partially submerged, and the farmer, with idle men and teams, is impatiently waiting for the slow natural drainage of flat land, and the evaporation of the rainfall by heat from the sun, before he can begin operations, will convince any observing man that the rapid removal of this surplus water would be an immense benefit to the agricultural community.

The practical feasibility of this work is at present the problem with many. The farmer asks himself and others, "can I drain my field or my farm thoroughly, and will the probable returns justify the outlay?" Valid and useful conclusions cannot be arrived at until we have availed ourselves of the experience of others, and have obtained correct ideas of the principles of drainage—what thorough drainage is, and what it will accomplish.

It may be well to mention a few of the benefits accruing from drainage which are of actual money value to the farmer. These benefits are not hidden away in the soil, but may be seen by any one who will compare a well-drained field with one which is wet and undrained.

First, there is no failure of crops on account of excessive rains. Almost every farmer may put down among his losses the partial or total failure of several acres of land to produce a crop, because, during some part of the season, the land was too wet.

Second, the soil is in condition to receive the crop at the proper season of the year, and it begins a healthy growth at once. This will add many dollars to the value of the field each year, and cost no more labor.

Third, the labor which produces a poor crop on undrained land, will produce an excellent one on the same land when properly drained. In this way crops are often doubled on what is called average farm land.

Fourth, by reason of the absence of surplus water in the soil, grain and grass are not "heaved" and frozen out in winter time.

Fifth, whatever fertilizing material is put on the land is made more available for plant food, for the reason that the soil is more porous and not surface washed, and fertilizers are at once incorporated in the soil. Undecayed matter put upon the soil decays more rapidly and becomes sooner prepared for the use of plants. Fertilizing gases held in the air are carried by the rain into the soil, making it more rich, instead of being washed away or taken with vapor into the air again.

Other advantages will be mentioned as we proceed farther, but these just named will perhaps be sufficient to show the importance of the subject. Each season as it comes turns another leaf of the book of Farm Economy, telling the same story in different ways, and emphasizing it at times in such a manner as to compel the farmer to heed its teachings.

### KINDS OF LAND REQUIRING DRAINAGE.

Flat land under cultivation is usually the first land which directs the farmers attention to draining. A season which is drier than usual shows to him that such soil, when not too wet, will produce a crop equal to his best fields. On this land the natural drainage is not rapid enough in the spring-time to fit it for the growth of plants. It is generally cultivated when too wet, which causes the soil to become compact, and in time of drought it shrinks and cracks, resulting in the ruin of the crop and more than loss of the labor; for the soil is in a worse condition than it was in the spring before the plow was started.

Channels or runs through cultivated land often are common where the land is rolling. Water flows down the slopes and oozes from the banks until these runs are so wet that they rarely produce a crop, and are a great inconvenience in cultivating.

### SOURCES OF WATER.

Primarily the source of all water of use or injury to the agriculturist is the rain-fall. Considered, however, with reference to drainage, we speak of *surface-water*, which rests upon the surface of the soil, a part passing down to the sub-soil, a part flowing over and passing off, and the remainder raised by evaporation or used by plants; *ooze water*, which passes through the soil below its surface and finally rests in some channel or flat land, saturating it until it is unfit for cultivation; *spring water*, which has its source in some one locality of the field, or proceeds from some distant source through its own channels in the sub-soil. These must be provided for by drainage, according to the nature of the case.

[To be continued.]

### Extraordinary Yields of Potatoes.

In reading the crop reports of Ontario, of 1882, we are surprised when we see the very great difference in the produce of the different sections, even of sections immediately adjoining. Even when we make all reasonable allowance for the difference that may exist in the soil, the superiority of the crops in some places must be owing to something more. Cultivation and the quality of seed may have been among the causes. In no other variety of crops is this difference so great as in the potatoes. The average yield of potatoes in one section is reported as low as eighty bushels per acre, and in the same report the yield is returned as over three times this yield. Compared with the highest of these reports of the yield of potatoes, for which prizes have been awarded, many instances may be well said to be extraordinary. As one instance, the Massachusetts Agricultural Society awarded prizes for several consecutive years to the person who would raise the greatest quantity of potatoes on an acre. The successful competitors, in every instance, raised over four hundred bushels to the acre, and in one instance the yield was over six hundred bushels. It is not at all impossible for any farmer to grow two hundred bushels an acre as an average. Poor crops, such

as eighty or one hundred bushels of potatoes, are raised by the farmer at a great loss. This should not be. Better to leave the ground untilled than grow crops at a loss. Good cultivation, good seed, and a dry and fertile soil will, in an ordinary season, produce very profitable potato crops. In Great Britain a yield of 500 to 600 bushels is frequently grown, and why not a crop at least approaching to that in Canada. Though extraordinary crops of potatoes are grown in the United States under the stimulant of prizes, the general produce throughout the country is very light. The United States Agricultural Department for this year gives the average yield of potatoes to the acre, throughout the States, as eighty-one bushels.

### Veterinary.

SIR,—I have lost several calves lately. When first attacked their eyes are heavy, and of a yellowish cast. They would not eat or drink, respiration heavy and quick; they would not stand up, and death occurred in a few hours. Upon making a *post mortem* examination, I found the covering of the heart and lungs and flesh on the fore-shoulders inflamed. There was pus; the flesh felt spongy.

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[The symptoms mentioned, also the *post mortem* appearances, would indicate an acute attack of pleurisy, the causes of which are sudden alterations of temperature, probably a cold rain on the animals, or a cold night after a hot day, violent exercise, such as being chased by dogs, &c., or being put into a damp underground cellar stable, after a hot day in the sun, or anything that in the human race would be called "taking a heavy cold." The treatment should consist of enveloping the breast and sides of the thorax, that is all over the ribs, in blankets wrung out in hot water, as hot as can be comfortably borne, covered with a dry rug. It will keep hot pretty nearly an hour. Keep it up 6, 8, or 12 hours, then rub in a good mustard blister from the throat to the breast, and over the sides put on a dry blanket, to prevent taking a chill. Give a saline laxative, say from 3 to 6 ounces of Epsom salts and a little ginger in a pint of water, according to the age of the calf, and after 24 hours, if the animal survives, small doses nitrate of potass, say 2 drachms a day, in water. The symptoms, also the *post mortem* appearances, may be so easily mistaken by one unaccustomed to the study of disease, that it would be advisable to call in a properly qualified veterinary surgeon, if there be a reliable one in the locality. You mention finding pus, but do not say where. I can hardly imagine a formation of pus in so short a time. Was it coagulated serum in the thorax?]

SIR,—What can be done for a cow with caked udder, and what is the cause of such trouble?  
J. S., Aurora, Ont.

[Causes: Blows on gland; lying on cold or sharp stones; leaving the milk unduly long in the bag; standing in a current of cold air; exposure in cold showers or inclement weather; rich milk-making food too suddenly applied, or indeed any general derangement of the general health is liable to produce this disease in an animal in full milk. Treatment: Give the cow, according to size, about  $\frac{1}{2}$  pound salts and a little ginger and baking powder. Foment the bag several times daily with hot bran and water or hot hops and water, then rub the bag well with goose grease or other oil.]

It may not be generally known that the Duke of Athole is one of the most extensive tree-planters in the world. There are already vast woods and plantations, says our contemporary *Land*, in Athole and Dunkeld, and as, of course, they exist for use as well as ornament, large numbers of trees have to be planted annually to maintain the woods. Indeed, every year the Duke plants from 600,000 to a million trees. During this season a plantation covering 2,000 acres has been completed. It may be remembered that the Duke of Athole's plantations were thinned of 80,000 trees by the gale which destroyed the Tay bridge. When the planter Duke began operations on a large scale in 1774, the Dunkeld hills were almost bare. During his life the Duke, who may be described as a true benefactor to his country, planted 27,000,000 trees, covering 15,000 acres.

## Poultry.

## Feeding Chickens for Market.

Now-a-days it is the custom among many breeders of table fowls to finish them off with a fortnight's close feeding, which is calculated to increase their weight considerably and give them a flavor which is at the same time rich and palatable. This is done in different ways. Some raise a lot of birds together, picking them up from their runs once a week and shutting them in a house together where they are crammed with prepared food, which generally consists of ground oats and suet or fat of even a cheaper kind. The birds manage to digest this soft food very well without exercise, put on flesh rapidly if in good health, and are soon ready, the period being ascertained by the feeder by handling, when they are at once killed. Some birds will not fatten, as it is called, although chickens do not really put on much fat at any time, but rather flesh, while if they are kept too long, or their food or drink be allowed to get sour, they sometimes go the other way. There are some men in England who are fatteners or finishers by trade, buying up hundreds of young birds from the cottagers and farmers, feeding them at home in the way described, and then killing and plucking them and sending to market. Some of these people do a tremendous trade, especially at those seasons of the year when prices rule high. They have the usual advantages enjoyed by middlemen; thus they always know the prices they are likely to obtain for their goods. The salesmen depend upon them, or always endeavor to suit them, because they are compelled to work together with men who really stand in a position as customers to them or one which is at least as important. This being the case, the fatterer, whose business is large and money always ready, is depended upon, to a great extent, by the little people in his district, who really breed for him, and are in reality compelled to receive his price. Thus he actually has a good margin which secures him from loss and enables him to do very well indeed. It is safe to say that as a general rule the breeders seldom get the benefit of high figures or anything more than a sensible advance when London prices are very high indeed.

Not very long ago we were at a farm where many hundreds of birds were bred each year and a system used which differs some from the above. At about 16 weeks the chickens were taken up and put in rows in little compartments, the floors of which were composed of a few slates of wood so that the manure could fall through into the drawer beneath, which was sawdusted. In front of each little cage was a trough of wood into which the soft food was placed, and this was composed of milk and meal boiled or fine greaves and meal also cooked. It was given in a thin, sloppy state in order to prevent the necessity of giving water as well, but the birds did well, although some difficulty was experienced in keeping the troughs absolutely sweet. Here some two or three hundred were caged and fed at once, and their places filled up as fast as they were taken out for market.

In France another system is adopted in some places where chickens are fattened by a machine, the invention, we believe, of M. Odele Martin. A nozzle is put into the bird's mouth, and, with a slight pressure of the foot, a quantity of soft prepared food is forced into the crop. This is, of course, regulated by the length of pressure and the state and size of the bird. Each bird is placed in a similar cage to one of those above named, but it stands on a perch to which its feet are fastened by a strap and more room is given to admit of its body being grasped by the feeder. In one large machine, however, which the maker has invented, the tiers of cages are placed in a circular form and revolve, the man taking up a position and simply pushing the cages past him as he proceeds. The food used in France is generally buckwheat meal and milk, which is very much relished, and is believed to be as good as any food which is known. We certainly believe it to be equal to ground oats, although they are about the best food for the purpose, and they are ground up husk and all. Oats are cheap enough, and so is buckwheat. It seems strange to us, and yet it is true, that while breeders neglect such grand foods as the above they will give 50 per cent. more money for compounds which are not one-half their value; but the public like being gulled, and it would perhaps be easier to sell ground oats a little spiced at \$5 than at the usual price. Another good food is maize meal mixed with fine sharps—to give the nitrogen which the maize is deficient in. This is used very largely in

the North of England and is very much appreciated. If a man would succeed with his poultry he must use good food and that fresh. Stale meal is dear because many of its properties have departed; hence meal should be always fresh ground—another example of the value of a mill at home.—[Mark Lane Express.]

## Poultry Topics.

Though the question of how to dispose of the surplus stock before cold weather sets in, is one of importance to the breeder at this time, there are other things to consider.

## REPAIRING THE HOUSES,

or building new ones, should not be put off beyond this month. Glass is broken, shingles off the roof, and things are not ready yet around the poultry house for cold weather. Lose no time in putting everything in trim, neat, comfortable condition, and you will not be caught napping by a sudden cold storm, or be obliged to apologise for the dilapidated appearance of things when a fancier friend pays you a visit. It is a good time, too, to say

## DON'T GET DISCOURAGED

if your chicks are nearly all cockerels, when you wanted pullets; if the hens do nothing but eat and the pullets refuse to lay an egg; if the finest bird you have up and dies in a night; if it seems as though there was little profit and less pleasure in keeping poultry. There is profit and there is pleasure in it, and those who have obtained most of both from it have felt, at times, just as you feel when discouraged. In the language of the worldly, "brace up and take a fresh hold."

## GATHER THE DRY LEAVES.

In the late fall the ground in many places, in village and country, is carpeted with dry leaves, which if gathered and stored for use in the poultry house during the winter, will be found most excellent to cover the floor with deeply. Into the leaves the grain may be thrown, and in the dry, warm litter, the fowls will scratch for their food and enjoy themselves hugely. In this, as in so many other things, a word to the wise is sufficient, and our suggestions are valuable, very often, simply because they prevent the common saying of "I didn't think anything about it, or should surely have done it."—*Bulletin.*

## How to Get Hens to Lay.

So much has been written and said on the management of poultry, that it would seem as if those who wish to speak on the subject for the future will be reduced to repeat what has been already uttered. This may be so; nevertheless, people forget so speedily that it is necessary to return again and again to the point if we want to do any good.

The following (says M. Garnot, in *La Basse-Cour*) is an easy and by no means costly method for obtaining a regular supply of eggs during winter, even when the weather is at its coldest. I cannot say that I invented it, but I can say that I have practised it for a great many years.

I will now describe the plan I adopt. As soon as the cold sets in, that is, about the 15th November, I have a quantity of hot dung carried into the poultry house, enough to cover the floor from ten to twelve inches deep. This is beaten down firmly and left till about the 1st of December, then every day for a month the layer of dung is supplied with a fresh layer of from four to six inches deep. At the end of this time the dung is turned over to mix it well, by which means an increase of heat is obtained; thanks to the successive depositions and contributions of the hens whose perches are above. And so I reach the middle of January, when I have all the dung removed, and begin the entire process over again; and this carries me on to the first fine days. By this means I am able to maintain during the coldest weather a regular temperature, and I have the pleasure of obtaining fresh eggs at a time when they are exceedingly scarce.

The expense of this method is merely the labor connected with it, and in winter time and labor is not dear. The manure which I take away is excellent—very superior to that which I have at the beginning, because the fowls' dung is added to it day by day. In this dung, too, the fowls find a large quantity of worms, larvae, and insects, of which they are very fond, and which they rarely get in winter time. I leave them at liberty to go out in the ordinary way; but they know that they should keep inside in unfavorable weather, and they stop and keep their feet warm on snowy days, when it is damp or when it freezes.—*Bulletin.*

## The Dairy.

## Dairy Farming.

Professor Sheldon recently delivered a lecture on dairy farming at Stranraer. He said it appeared to him that dairy farming would become of more importance in the future than it had been in the past, because milk and fresh butter they could not get from abroad; they would still have to depend on their farmers for this food. It was the question of cheese-making he was requested to bring more particularly under their notice that day. With regard to the conditions necessary to the success of dairy farming, the first was suitable land. The best for cheese-making was that of a sound soil, loamy, and which did not require much artificial manuring. This description of land was more particularly found in Somersetshire. Another important matter in the production of cheese was the cattle they used for that purpose. Taking them over all, there were none equal to the Ayrshire cattle, which yielded a heavier profit in the way of milk than any other cattle for the quantity of food they consumed. They seemed to put to better purposes the food they ate. He was glad to find that the Cheddar system was adopted in this county as it was the best; even in foreign countries it was the best, making allowance for the difference in soil and climate. A main feature in the success in dairy farming was, having cattle which yield the maximum quantity of milk. Proceeding to speak of the treatment of milk in cheese-making, a matter of the first importance was cleanliness. He strongly impressed on those present the importance of cleanliness. Milk, they saw, was a very peculiar thing, not being intended by nature to be exposed to the air at all. It was liable easy to decay, being an article of food specially provided by nature for the sustenance of the young. They wanted a temperature that was pure and cool. Having referred to the different kinds of cheese made, which he said suited certain districts, he was of opinion it could not be transplanted from one district to another. It was very odd that they should have so much to learn about cheese-making, and the fact that so many cheeses were not made perfect was a proof that they had a great deal yet to learn in this matter, and that there was something wrong. He next spoke of the acidity of the curd, and the proper degree of heating; he condemned the practice of breaking down the curd too quickly, which he said required very delicate usage, in order that there might not be waste. Under the Cheddar system they were very careful to break it down gently for awhile at the first. For this purpose large vats with double bottoms should be used. With regard to the ripening of the cheese, the temperature was variable, and nothing could be ripened unless it had a sufficient degree of warmth. There was some difficulty in making autumn cheese that would ripen quickly enough. It was generally found that the cheese made at this season took longer to ripen than that made in the summer time. There was a reason for that, and he instanced a case he had seen in America where the farmer took the morning and evening milk and heated them up to 80 or 90 degrees, letting them stand at that temperature for three or four hours before putting the rennet in; and standing at that temperature the milk ripened. The lecturer then referred to butter-making, saying this, more than the manufacture of cheese, depended upon the breed of cattle. The Jersey breed were the best because better tended, something like as the Arab tended his horse. There had been a reformation in the making of butter, and he cited as a great improvement the centrifugal cream separator. The washing of butter was of great importance, and one of the best ways was to wash it in the churn. In Germany butter was never touched by the human hand. He summed up the results of his address as faults in dairy farming, want of cleanliness, poor accommodation, having an improper aspect for dairy—it should not face to the south, but always to the north; inferior ventilation, neglected temperature, irregularity in work, as many of the dairymaids would leave their cheese-making to go to other household work. Another source of mischief was a want of interest in the work. They must take warm interest in their work, learn where they could, and never sit down as if they had learned nothing.

**Time Required for Curing Cheese.**

It is as difficult to tell the precise time at which a cheese is cured, as it is to name the exact date at which an apple is ripe, or the day when a colt becomes a horse. The curing of a cheese means a change from the tough and elastic condition of curd to a tender, inelastic, and plastic stage, and the acquisition of a new and peculiar flavor, and a greatly increased case of solubility. The changes which develop the new conditions are gradual in their action. They are analogous to those that take place in the ripening fruit, and, like them, may be hurried or retarded by a variety of influences. There is no definite length of time in which they must, or should occur. The time may be longer or shorter at the will of the cheese maker. The time of curing may be lengthened or diminished by decreasing or increasing the quantity of rennet used in curdling the milk, by keeping the pressed curd cool or warm, by using much or little salt, by little or much moisture, and by a scanty or free contact with air. By using rennet and moisture sparingly, and salt freely, a cheese may be made that will be three years in reaching its best condition for the table, or it may, by using rennet and moisture more freely, and salt more sparingly, with the temperature in both cases the same, be made to reach its best condition in the same number of weeks, or even in the same number of days by a little extra exposure to the air in manufacturing. There is no limit to the time in which the curing may be effected. That it may be, and sometimes is, ripened and made ready and in fine condition for the table the moment it is out of the press, we have been assured is an accomplished fact. Mr. James Whitton, a noted expert, near Belleville, Ont., and well known also as the recipient of a gold medal last year from the Industrial Exposition, at Toronto, for best cheese in the Dominion, has been experimenting the past summer in early curing, and he finds that curd made in the customary way, that is, at the usual temperature and with the usual quantity of rennet and salt and moisture, can, by keeping it in a fine condition and well exposed to the summer air, and thoroughly drained for 48 hours after it would be considered ready for the press, be cured fit for the table as soon as it leaves the press, the time being 56 hours from applying rennet to putting in press. This is the greatest shortening up in the time of curing cheese we have ever been apprised of, and seems to be about all that could be desired in that direction. We have before been aware of the great efficiency of air in developing flavor in cheese, and in hastening the curing process to such an extent that many cheese makers habitually bring out a distant flavor of cheese in their curds, by several hours airing, after they are generally supposed to be fit for pressing, but have not before known of so much curing to be done in the unpressed curd as to render it fit for use at once upon coming out of the press.

The Adam cheese, pressed in the form of a cannon ball, and about as hard, is a good specimen of the other extreme in curing. It is best when two or three years old. A cheese is considered cured or ripe when the flavor peculiar to cheese has become well developed.—[National Live Stock Journal.

**Night and Morning Milk.**

Dairymen abroad have been experimenting for the purpose of determining which yield of milk, the morning or evening's mess, is the richer of the two. The decision was in favor of the evening's mess being the richer for both butter and cheese making qualities. The milk of cows fed ground feed in winter was richer than that produced by the same cows from grass in summer. This is not a matter of very great moment to the dairyman, though he should keep posted on all these little points.

It is currently reported that the London and North-Western Ry., Eng., have made arrangements to supply passengers by their line with an abundant supply of milk. Many travellers prefer the lactical fluid to any other beverage; but we welcome the innovation as a means of promoting dairy husbandry on a large scale. The Company, it is said, have purchased, as a first draft, 500 cows; so that, with this stock as a beginning, it is difficult to estimate the quantity the Company propose to supply. The proposal, however, is one of those signs of the times which every stock-breeder will be only too glad to assist to develop.

**Fall Care of Cows.**

Every practical dairyman knows full well the importance of taking proper care of his cows. It matters not how well the other branches of the dairy are cared for; unless the fountain head, the cows themselves, are managed with a proper regard to their best care, there will surely be a deficit in the returns of the dairy at the end of the season.

There are several points to watch with regard to the proper care of cows. Supposing a man to be in possession of a first-class herd of dairy cows, properly bred, of fine constitutions, and large rich milkers. The first two of these conditions, breeding and constitution, may, with reasonable care, be kept up to the given standard; but the yield, especially in relation to quantity, is susceptible of great enlargement or deterioration. To hold the yield at its maximum, there are three cardinal principles to be kept in view: First, the feed; second, the general handling; and third, the individual comfort of the cow. In relation to the first, it is more a question of quantity of feed than particular adaptability, so far as the cow is concerned, for she is what may be called a gross feeder, and will consume almost anything that comes in her way. While it is true that some cows refuse many articles of food that are even wholesome; at the same time, such cows are exceptions to the rule, for generally they will not only eat what is put before them, but feed upon herbs and weeds, and drink water that works destruction in the dairy. The prime question, therefore, in regard to feeding, is one of economy, and each dairyman must, in deciding this question, be governed by his particular surroundings.

In regard to our second point, the general handling of the cows, any one who is familiar with dairy herds must have noticed the difference in their handling. One man with a herd of indifferent cows as to quality will often get a large percentage more in yield than another man with a much better herd. This often comes from a superior degree of handling. Just as one man can drive a fractious trotting horse faster than another. All this is dependent upon the natural adaptability of the man to the business, and when a man fails to make the cows yield, there is no use in arguing the question with him. He is simply not adapted to the business, and the sooner he hunts a new occupation the better for both him and the cows.

In regard to the third point, the individual comfort of the cow. Milk yielding is in some occult way connected intimately with the cow's nervous organization. If she is happy, contented and comfortable she will do her best, while the least shock to her nervous system upsets the whole business. The crack of a whip, the falling of a board, or other shock to the nerves, will reduce the yield of milk in a herd very materially. So the removal of the calf, or its rough treatment in the dam's presence, will sometimes peremptorily stop the flow of milk. This is often attributed to the ill will of the cow in "holding up" her milk, but doctors tell us of similar results with the human race. A mother receiving suddenly the news of a tragic death in the family, a father, mother or husband, will often completely stop the supply of milk for the little one, no matter how anxious the mother may be to feed it.

Another vital point with the cow is that of heat. A cold cow is the picture of misery, and a sure evidence of no profit. For this reason the cow stable should be got in readiness to receive the inmates the cold nights that come so suddenly and unawares in the fall. There is no point about the dairy of equal importance to that of keeping the cows well fed and warm.—[Dairyman.

What a contrast there is between the advantages of the expenditure this year of the Government money granted to the Eastern Dairymen's Association, and the expenditure in connection with the Provincial Exhibition when held in London. Here a full display of dairy goods and dairy implements was made. Not only were the goods exposed to view, but actual tests were made of the production of milk by different breeds of cows, and a test of the different qualities of milk, and the operation of making butter and cheese in the latest improved methods. The great favorite, the practical experimenter, writer and lecturer, Professor L. B. Arnold, was engaged as judge and operator. The dairy building here was continually crowded by those who were anxious to profit by the exhibit, and learn from so able and honorable an instructor.

**The Apiary.****Hints for November.**

By the time the November number reaches its readers, all colonies should as far as stores are concerned, be in a condition fit to withstand the rigors of the fast approaching winter; but if any have been so neglectful as to have colonies that are short of food, they should at once supply the deficiency. It will not do to further procrastinate, but full sheets of comb should be given them, or a solution of granulated sugar be fed them. The exact condition of every colony should now be known, at the latest, and weak and queenless colonies broken up and united. The experienced bee-keeper, or breeder of queens, may possibly defer this matter, but beginners should not delay an instant, else they may lose all their bees. Active preparation should now be made to pack the bees and put them in condition to withstand piercing cold and wintry blasts of the next few months. Those who have a fit receptacle for inside wintering, may delay putting their hives indoors till actual cold weather shows itself; but those who propose wintering their bees on their summer-stands, should at once put them in that condition which experience has shown to be correct. The plan which I have followed with complete success, for sixteen winters—have lost but two colonies during that time—has been as follows: I remove all the frames from the hives and clean them out thoroughly, then replace the fullest combs in the centre, giving the bees only as many as they can well cover, with at least five pounds of honey to each frame of comb, spreading the combs a little further apart than they are usually placed in summer, so that the bees may have more room in which to cluster. Place a division board on each side of the frames, and in between the division boards and sides of the hive put chaff, forest leaves, or some other material of that kind. On top of the frames I put, usually, a thin honey board full of 2½ inch holes—but this winter I shall use the device of Mr. Hill, of Mount Healthy, Ohio; on this honey board I put a piece of old carpet or some other porous substance, and on that I put a chaff cushion, or fill in with forest leaves to the top of the upper story. The entrance is left open about two inches for a strong colony, and less in proportion for a weak one. By the above means the bees are protected in their hives from cold winds, and sudden changes in temperature, which are the main sources of trouble in outdoor wintering. By using a honey board on Hill's device, a space is left over the top of frames for the bees to pass from one comb to another, and thus winter passages through the comb are avoided. By the use of holes in honey board, or a porous cover on frames where Hill's device is used, covered by an absorbent of some kind, the air in the hive is kept constantly pure, and free from excess of moisture, without a current of cold air constantly passing through the hive, and without taking away any of the heat constantly generated by the bees themselves, and which is found necessary for their existence. The absorbent used should be examined occasionally, and when found to contain any frost or excess of moisture, it should be removed and replaced with fresh material. An inch hole bored in each end of the cover, will allow the excess of moisture to mostly all pass out, and prevent its being retained. I cannot warrant the above method to be positively sure with every colony, as much depends upon the strain of bees, as to their wintering qualities, but I can say that I have made successful use of the plan, and shall continue to use it as the simplest, easiest and most economical of any I have ever seen recommended.—[Bee-Keepers' Exchange.

What is gained by the present method of exhibiting potatoes at fairs? The largest generally get the prizes. A potato may be perfect in shape and smoothness, in color of skin and shallowness of eye, yet may be poor in quality and also unproductive. There is no way for the judges to know anything of either the quality or productiveness, except taking the exhibitor's word.

"We would be very unwilling to dispense with its monthly visits. Our scientific farmers, of which we have a very respectable number, all place the FARMER'S ADVOCATE at the head of the list of agricultural papers. Yours respectfully, J. Woodsbury, Middletown, N. S."



**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 "Printers' Manuscript," leave open and postage will be only 1c. per 1/2 ounce. We do not hold ourselves responsible for the views of correspondents.

### Truro, N. S., Exhibition.

SIR,—A few notes on the Agricultural Fairs held last week may be of interest. Annapolis and King's County Fair was held at Annapolis Royal from 2nd to 5th October. The weather was fine, the roads in splendid condition, but the exhibition largely a failure. This was owing to lack of confidence by the farmers in the Committee, composed mainly of town lawyers, doctors and merchants, also to a general lack of interest, as well as dissatisfaction with fairs and judges appointed. The Windsor and Annapolis Railway gave very inadequate accommodation—no encouragement to exhibitors or visitors.

The apple and potato show was superior to any I have seen in Ontario; these counties have a world-wide reputation for the quality and quantity of these products—in fact the London (Eng.) market is supplied largely with long-keeping apples from this valley, and the Boston, New York and Philadelphia markets depend on Nova Scotia and Prince Edward Island for the finest grades of potatoes. Even in spite of an adverse tariff, the farmers here can ship their potatoes to the American markets and net handsome profits. This Acadia Valley, the land immortalized in story by Longfellow's "Evangeline," is, perhaps, the fairest and most productive part of our wide Dominion. Its salt marshes and dike lands; its vast sylvan orchards on hill and dale; and its extensive, highly cultivated potato fields have no parallel in Canada, not even in our fair Ontario.

Leaving Annapolis, I arrived in Truro in time to witness the opening ceremonies by Lieut.-Gov. Archibald, the military and Stellarton brass band. Truro is, I think, the prettiest town in Nova Scotia, and keeps pace with the times in manufacturing enterprises. The District Exhibition, held here from 3rd to 6th October, comprising the Counties of Cumberland, Colchester and Hants, was a decided success, for which the courteous Secretary, W. D. Dimock, and the Managing Committee, deserve credit.

The horses were good; cattle, some choice herds of Durhams, Ayrshires, Jerseys and Alderneys; sheep and swine rather inferior. The fruit and vegetables were very fine—a large and varied exhibit. The agricultural implements were mostly from Ontario. Patterson & Bros., Patterson, and J. Fleury, of Aurora, deserve special mention for plows, &c. The ladies' department was well represented in all its branches.

J. McL., Bridgetown, Nova Scotia.

SIR,—Please inform me about two breeds of pigs, if they are breeds,—the Cheshire and Chester White. Some say they are equal, if not superior, to the Berkshire. If so, can you tell me where I could get a boar, as I like a white hog the best.

W. P.

[We are not aware that there are two distinct breeds. We know that the county of Cheshire, England, has always been noted for its excellent breed of large white pigs. They grow to a large size and do not begin to fatten till they have done growing, when they put on flesh rapidly. Many people do not consider the breed as profitable as the Berkshires because they do not mature so early, but when the Cheshires are ready for the butcher they are much larger pigs. For a boar apply to some of the pig breeders who advertise in our columns.]

DEAR SIR,—Looking through October ADVOCATE, on page 275 I notice the paragraph about "an old polled cow," and am surprised at the trouble you have taken to give your readers the chaff, while rejecting the wheat, viz.:

That "Old Grannie" lived to the age of thirty-five years, and was even killed by lightning while in good health, grazing in an open field; that she dropped 29 calves, 25 cow calves and 4 bull calves, one of the latter having been bought for the Queen's herd. Both bulls and cows are too often sacrificed or rendered useless for breeding purposes long before they have ever reached their best estate, and before their possible merit as getters of valuable progeny can be determined; and this case of "Old Grannie's" prolonged life as a breeder, if laid before your readers, might have saved many a grand old cow to future herds and usefulness. It is not too late to make amends. As a Jersey breeder I am often indignant at your remarks on this breed. You call them "rats." I have one, Nabritza 5280, that weighs from 1500 lbs. to 1600 lbs. No other breed commands such high prices in the United States. The last auction sale this month of 75 head averaged over \$600 in New York, and the demand for females is so great that I am asked to engage my cow calves, at high prices, years in advance. Jersey butter is under steady contract at \$1 per lb. I cannot understand how good breeders in Canada have been so slow and so blind as to Jerseys. C. E. B., Yarmouth, N. S.

[The stock note about "an old polled cow" was not inserted without a full knowledge of her most illustrious record, but to show how affectionately Mr. W. Watson could write about her. We hope yet to give an illustration of "Old Grannie," and more particulars regarding her. We are not aware of calling Jerseys "rats." The words were "insignificant looking rats of cattle, as some of our farmers call them." See page 147 of June, 1882. We think a great deal of Jersey cattle, but do not wish our plain, thrifty and enterprising farmers to pay "wild cat" prices for Jerseys or Polled Aberdeens.]

SIR,—I am situated on the main line of the C. P. R., 60 miles east of Winnipeg, Thunder Bay branch; timber country here; disputed territory of Keewatin; cleared 50 acres last spring, sowed mostly oats and barley, sample spring wheat and turnips, potatoes and various kinds of vegetables, all of which are quite a success. I intend making a 1,000 acre farm; the soil is very promising; mine is the only farm at the village of Whitemouth, and for many miles east or west. I make preference of the woods to the prairie, although I have the stumps to contend with for a time. Bye-and-bye I will communicate with you about stump machines. I think very highly of the FARMER'S ADVOCATE as a first-class agricultural journal, although there are many things that do not refer to this country, such as artificial manures, &c. I have been here in Manitoba nine years, and ought to know something about this great country, as certainly it is destined to be. Yours,

W. J., Whitemouth, Man.

SIR,—Permit me to ask the directors of the Western Fair, through your paper, if it is possible to make a change in the mode of exhibiting horses. When people go for miles, lose time, and pay no small amount of expenses, pay for the privilege to see what they went for, and find the horse stalls all shut and locked up—if this is going to be the *modus operandi* for the future, they need not expect such throngs of visitors, as that sort of fun is played out. I heard scores of persons (some came long distances on purpose to seek sires for their colt progeny, and make selections for another year) say, that they were tired of being used in that way, and would stay at home in the future. I think norsemen also, as well as directors, are blind to their own interests. They lose a large amount of custom that they might have secured, if they had their stables open for inspection. People do not wish to stand around the horse-ring from morn till eve in order to get a glimpse of their favorite, and then not know any more than before. I have heard directors say that they have tried to keep the stable doors open, but it could not be done. Such talk is all nonsense, and a false excuse to hide their own annual blundering. Insert in the prize pamphlet—also make it imperative—that all horse-stall doors must be open for visitors' inspection from the hours of say 11 till 3 o'clock; this will end the difficulty, and London, as usual, can secure its show visitors something worth seeing.

Yours truly,

R. A. B., Cherry Grove, Ont.

### Mice in Orchards.

SIR,—We are very much annoyed by the depredations of mice in our orchard. Can you prescribe a remedy?

R. S., Myrtle, Ont.

[Remove all leaves, rubbish and stones from round the trees. The mice may be destroyed by placing a few sheaves of straw here and there for the mice to gather under. By turning the sheaves over the mice will be exposed and can easily be killed by one or two boys, and the help of a cat or dog.]

SIR,—Could you advise me which is the most profitable grape to grow in this section for earliness and good bearing; also the best time to prune, spring or fall?

H. R. S., Toronto, Ont.

[For general purposes the Concord grape is considered the best. The proper time to prune the vines is when the sap is well down. The month of February is preferred by many, but the vines often bleed when the pruning is done during that month.]

SIR,—Will you inform me the best place to procure a Southdown ram lamb, with probable price of first-rate animal? Also, what are the best works on sheep raising for a person with limited knowledge and experience, with cost by mail? I am sorry to trouble you, but don't know where else to get the information. By answering you will greatly oblige one who is very much interested in sheep raising.

P. W. F. B., Beaver Brook.

[We consider it rather late in the season to obtain a ram, as the best will, ere this, have been selected. We cannot recommend any particular breeder, but you will find the advertisements of the leading men in this class in our columns. Youatt on Sheep, the Shepherd's Manual, and Randall's Sheep Husbandry are good books. See our book list in usual columns.]

SIR,—Perhaps you may think the following worth inserting in your paper: We threshed, on my farm, this year, 555 bushels of fall wheat from 14 bushels. It was sown on the flats of the river.

A. R. F., Nairn P. O., Ont.

SIR,—Does the clover midge work on Alsike the same as on the common red clover. I have seeded down a good deal with Alsike with the intention of raising seed, but if the midge works in it the same as in the red clover I will plough it up. An immediate answer will confer a great favor.

A. McG., Claude P. O.

[We have had no personal knowledge of the midge in Alsike clover, but the testimony of some American journals is that it does not infest Alsike. We shall be glad to hear from persons who have grown this clover.]

SIR,—Are bones beneficial to grape and other fruit trees? If so, please say how to apply them.

A. B.

[The application of bones is of great benefit to fruit trees. A good plan is to dig a trench about 3 feet from the tree or vine with a sharp spade. This will prune the roots. Scatter about a peck of bones in the trench at a depth of about 12 inches. Cover over and trample the earth firm; old boots or old iron can be disposed of in this manner and with benefit to the fruit trees, especially pears and grape vines.]

SIR,—Being a new subscriber, I am well pleased with your paper. I think that there is not a house not only in Canada, but in any other country, that ought to be without it. I have learned a great deal the only year I have taken it. Hope I shall always be able to get it.

E. W., Carleton West, Ont.

One of the finest peach orchards in Ulster County is one owned by a Mr. Donaldson, near Clintondale, N. Y. Last spring, when he found that the fruit buds were killed, he cut every limb back two-thirds to two-fourths, making almost "stumps" of the trees. These trees were a mass of green foliage and wood, and had made such a growth that they were touching each other, being planted ten feet apart each way—in fact, the trees had as large tops as those not cut back, and showed three to four times the life and vigor.

SIR,—Will you kindly inform me how I can raise ten or twelve little pigs profitably, so that they will realize a profit when sold next fall. Oblige by giving the amount of food, and the cost, they will consume in a year, also stating how much to feed them on an average per day. I have no farm, but as I am learning to farm I am thinking of investing a little sum of money in live stock and running them on my employer's farm. A small bit of clover pasture would have to be included in the expenditure during the summer months. Also, could you inform me if I could profitably invest \$200 in cattle, mentioning how to feed them and the cost, also how long to keep them? Would it pay to buy sheep for breeding purposes? By answering the above you will oblige. A SUBSCRIBER, Strathroy.

[We have not space at our disposal to answer our Strathroy correspondent as fully as we could wish. It would require a book to do so. It would not be profitable to buy little pigs at this season and buy food to winter them. Better wait till spring, when, if you could have a clover patch to run them in, they will live on the clover with the addition of a little chopped corn or peas till the fall, when they will be ready to fatten off. If you have to buy the food it is doubtful if there will be much profit. It would be impossible to say how much they would eat in a year, and the cost, the markets vary, and the quantity they will consume will depend on their size. You will have to be guided by circumstances. Give each pig sufficient to eat and not waste. Ten or twelve pigs is a large number for a hired man to attend to beside his regular work. If you could get pasture, investing your money in sheep would be more profitable and would not require so much attention. If you could purchase a few ewes to lamb next spring, you would have both lambs, ewes, and wool to dispose of next year. It would cost very little to winter them.]

SIR,—Please give me a description of a house for raising early chicks without a mother. I want to raise one or two thousand during the next season. Have plenty of outdoor run, and can erect a suitable building, but want the very best plan there is for the health of the chicks to be raised. Could you also give me a plan of an incubator, or tell me where I could get a suitable one, and any other information necessary for success in the business.

C. W. H., Clarksburg.

[We are not in possession of a plan of such a house as you require. Artificial mothers generally form part of the incubator. There is only one incubator patented, or we believe manufactured in Canada. Of the working of it we have no knowledge. There are many made in the States, but we never heard of any of them proving successful. If you intend going into the chicken business on such an extensive scale, the cheapest and best incubator you can get will be a quantity of common hens. After they have raised a lot of chickens they can be fattened off. It will pay better than sinking money in an artificial incubator, which, notwithstanding the great puffs about them, are failures.]

SIR,—As I am desirous of propagating a quantity of red and black currants and Concord grapevines for my own planting, would you oblige me by answering, through the columns of your valuable paper, how and when is the best manner and time of setting and treating cuttings of currants and grapes especially, as I failed before.

A SUBSCRIBER'S SON, Auburn, Ont.

[The propagation by cuttings of currants may be done at any time from the falling of the leaf till the plants commence growth in spring. But when the best results are desired they should be taken off as soon as the wood is fully ripe. Select good, strong wood of the present season's growth and make the cutting about six inches long, cutting them off smooth just at the base of the bud. If all the buds except two or three of the upper ones are cut off before setting, the plant will not produce so many suckers. The advisability of this plan will depend entirely upon the manner in which the plants are to be grown, whether in tree or stool. If in the former, disbud; if not, plant them entire. Cuttings planted early in fall will usually become rooted by the time winter sets in. They should be covered with straw or some similar material to keep out frost or prevent the ground from thawing and freezing in winter. The cuttings may be made in the fall, tied in bundles, and buried in the open ground or cellar till spring. This is also the best way to treat grapevine cuttings. As the currant is one of the earliest plants to show leaves, the cuttings should be planted as early as possible.]

#### Marks of a Berkshire Pig.

DEAR SIR,—In your next issue please give us the marks of a pure Berkshire pig? Is the white tip on the tail indispensable? By doing so you will oblige.

A CONSTANT READER.

[The standard of excellence of Berkshire swine adopted in England is as follows:

COLOR.—Black, with white on feet, face, tip of tail, and an occasional splash on the arm....	4
FACE AND SNOUT.—Short, the former fine and well dishd, and broad between the eyes....	7
EYE.—Very clear, rather large, dark hazel or grey....	2
EAR.—Generally almost erect, but sometimes inclined forward with advancing age, medium size, thin and soft....	4
JOWL.—Full and heavy, running well back on neck....	4
NECK.—Short, and broad on top....	4
HAIR.—Fine and soft, medium thickness....	3
SKIN.—Smooth and pliable....	4
SHOULDER.—Thick and even, broad on top, and deep through chest....	7
BACK.—Broad, short and straight, ribs well sprung, coupling close up to hip....	8
SIDE.—Deep and well let down, straight on bottom line....	6
FLANK.—Well back, and low down on leg, making nearly a straight line with lower part of side....	5
LOIN.—Full and wide....	9
HAM.—Deep and thick, extending well up on back, and holding thickness well down to hock....	10
TAIL.—Well set up on back, tapering and not coarse....	2
LEGS.—Short, straight and strong, set wide apart, with hoofs erect, and capable of holding good weight....	5
SYMMETRY.—Well proportioned throughout, depending largely on condition....	6
CONDITION.—In a good healthy growing state, not over-fed....	5
STYLE.—Attractive, spirited, indicative of thorough breeding and constitutional vigor....	5

100

SIR,—You give your premiums to new and not to your old subscribers. Most papers give something each year to all their subscribers. Please explain why you do not give plants or seeds to all who take the ADVOCATE.

GRANGER, Welland, Ont.

[The premiums offered in another column are not to new subscribers nor to old ones particularly, but we offer first-class, useful articles which we buy in large quantities, thus giving much more valuable prizes than in cash to all who work for us. We give commission, either in cash or premiums, to all who aid us in procuring new subscribers. All leading papers have discontinued the practice of giving premiums to their subscribers. They give them all they can afford in their columns, whilst—by the other plan—the subscriber pays very heavily for a cheap chromo or a useless book.]

SIR,—I enclose a bug that is getting pretty thick around here. Would you please send the name of it. It eats the leaves off the squash and pumpkins.

R. D. W., Belleville, Ont.

[The insect enclosed is a striped bug (*Coreus trestis*). To get rid of the pests a little fine flour of bone should be sprinkled on and around the plants every two days.]

SIR,—I see in your advertising columns the "New American Dictionary" sent free on receipt of \$1. Now, as he asks us to refer to you and you ask us to mention the ADVOCATE, I thought I would write to you as to their reliability. Please answer in your next, if possible: 1st—Would the American dictionary come free of duty and all expenses paid? 2nd.—If not, what would the duty be? 3rd.—If the duty was not paid would it come to my address or the custom house?

J. H. H., Roseneath, Ont.

[The new American dictionary advertised in last month's issue is published in New York, and, as far as we are aware, the firm is reliable. There is a duty of 15 per cent. on books imported from the United States. The rule is to send you notice from the nearest custom house that a book or parcel will be sent to you on receipt of duty, which of course is mentioned, and then your book or parcel will be delivered to you without further expense.]

#### A Sure Preventive of Chicken Cholera.

SIR,—Several experiments have been made during the last five years by different parties for the purpose of preventing the spread of chicken cholera by inoculation or vaccination. We have, during the past two years, vaccinated the fowls in 19 different yards where the cholera was prevailing badly, and in each yard we left some common fowls not vaccinated and they all died. But of the two thousand vaccinated only eleven died, although they were in the same yard with those not vaccinated, that were all dying daily by the scores. We have every reason to believe that the chicken vaccination is as effective in preventing cholera among fowls as vaccination is in preventing small-pox among the human family. Vaccinate a hen and in eight days her system will be thoroughly inoculated. Then cut off her head and catch all the blood in some vessel; then pour the blood out on paper to dry; a half drop of this blood is sufficient to vaccinate a fowl, and the blood of one hen will vaccinate your whole flock. Catch the fowl you wish to vaccinate, and with a pen or knife make a little scratch on the thigh (just enough to draw blood). Then moisten a little piece of the paper with the dried blood on, and stick it on the chicken's leg where you scratched it; then let the fowl run, and you need have no fear of chicken cholera. As the result of my many experiments I have now dried blood enough to vaccinate, I would suppose, about ten thousand fowls, for which I have no use, as I do not sell patent medicines. If any of your readers are enough interested in poultry to try this preventive, by writing to me I will send, free of charge, enough dried blood to start with. All I ask is that you send immediately before the blood loses its strength, and report the result to your many readers.

W. H. G., Lanesville, Ohio.

A correspondent from Fredericton, N. B., asks some questions regarding rape seed and the growth of rape for sheep. An article will appear on this subject next spring.

#### Canning Enterprise in New Brunswick.

D. W. Hoegg & Co. have put up at Fredericton \$6,000 2-lb. cans of Indian corn, and ten tons of tomatoes, and would have put up four times as much if the farmers in the vicinity had supplied the material. Farmers have realized through the factory \$50 an acre for their corn. Hoegg & Co. have also put up baked beans. They expended for labor alone during the canning season \$6,000. They propose running their Fredericton establishment during the winter months in canning meats. They will require to use nine tons of beef, dead weight, or 18,000 lbs. a week, for the four months, and they expect to pay out for meat and labor during that time, \$20,000. The quantity of meat they will require will represent about 576 head of cattle, and we have no doubt as many animals in fairly good condition can easily be got in York.

An uncredited current article gives this good advice about WASHING A LIGHT WAGON:

"If it comes home muddy it should be cleaned before putting in the house. It may be inconvenient, but in the end it will pay. There is no need of taking it to a creek, and there attack it with the old scrub-broom. Take a bucket or two of water and a sponge and gently wash the top, then the bed, and wring out a chamouis and wipe so no water will stand on the varnish. Wherever water dries on varnish it will lose its lustre. A bucket and a sponge and chamouis and feather duster are as necessary adjuncts to a farmer's buggy as a wrench."

Professor Cook is of opinion that the apianian interest—number of beekeepers, colonies of bees, and the income from the business—in this country, if correctly stated, would surprise even the best-informed. The North American Association have appointed a committee to collect such data. Any person wishing to help in the work may send facts to Dr. C. C. Miller, Marengo, Ill.

Be sure and read our attractive list of premiums to workers in another column. No paper in Canada offers such inducements to good, pushing agents.



## Progressive Farming.

## Public Test of a Steam Plow.

A few days ago there was a large assembly of prominent agriculturists at Brampton to witness the public testing of what may be called the first steam plow used in Canada. The implement was manufactured by Haggert Bros. for the Qu'Appelle Farm Syndicate, and was drawn at the trial by a 25-horse power engine, with a double cylinder, built on the same principle as a locomotive, and can be started at any time, no matter in what position the wheels are, thus giving it a great advantage over the ordinary traction engine with one cylinder. The propelling power of the engine is obtained by spur and bevel wheels, geared direct from the main shaft to the hind wheels of the engine. The steering is done by the engineer, by means of a hand wheel attached to a worm and pinion on a shaft, around which pass two chains, one of which is fastened to each end of the front axle. There appeared to be no difficulty with the machine, it being entirely under control. Directly behind the engine is the water tank and wood tender. Behind the tender is the diagonal frame to which the plows are attached. It is supported at each of its three corners by a wheel, which adjusts the depth of the plows. The frame is attached to the engine by a cross chain passing underneath the tender. The plows, eight in number, turn furrows from five to six inches in depth and twelve inches wide. Although the frame is constructed for only eight plows, the engine is sufficiently powerful to draw twelve or sixteen.

The field plowed was about thirty rods in length, and the land was selected as for ordinary plowing, the engine passing up one side and down the other. Seven furrows were turned at once (one of the plows not being attached), and the work was considered by practical farmers present, including Mr. Fraser, the farm manager of the Qu'Appelle Farm Syndicate, as excellent. The soil was a stiff heavy clay, and the ground very hard and dry, so much so that farmers in the neighborhood are not plowing at all, and Mr. Fraser said that during his five years' residence in the Northwest he had never found the ground so hard as in this field. The general opinion was that the experiment demonstrated in a most satisfactory way the practicability of a traction engine propelling itself, and doing the work of a number of plows. These implements are doubtless destined to play a very important part in the rapid settlement of the Northwest. The level character of the ground, the freedom from stumps and other obstructions, and the fact that very deep plowing is not necessary, all combine to make that country just the field for them.

In England plowing is done in some localities by steam, but they generally use two engines, one at either end of the field, the plow being drawn by a steel rope. These cost about \$15,000, while the engine and plow made in Brampton can probably be sold for about \$3,000, or one-fifth the price.

## Feeding Cottonseed Meal.

As agricultural authorities are advocating the use of cottonseed meal as feed for cattle, and as it is likely to come more or less into use, the following caution in regard to its use, from a contributor to the *Country Gentleman* who claims to have had six years' experience with it, will be valuable:

"After several years' feeding, I have found one quart of cottonseed meal—free from husk—one quart of corn meal, and one of bran, to make the best and safest feed-ration, given twice daily, for a cow in full milk. The husk of cottonseed is indigestible, and will make trouble sure if fed to a cow. When I say bran, I mean either rye or wheat, but I like rye best. The effect of cottonseed meal on the butter is to harden it, to give it a good texture, and a fine, nutty flavor. Linseed meal has quite the opposite effect, and palm-nut meal will make the butter soft, and greasy too, although it largely increases the butter. But it is necessary to watch a cow closely when feeding cottonseed, and never to give any of it within two months before calving, or within ten days afterwards, and then begin gradually. Two ounces a day is quite enough for a calf under six months old, and indeed I have never yet found it of any advantage to a calf, while it can have corn, and

oats, and bran; I avoid using it for any animal except cows, or for fattening a beef animal.

"The English feeders give as much as 12 pounds a day of cottonseed meal to their heeves, but as this is fed with turnips and straw largely, it might be quite safe to use this even for a three-year-old—of course gradually leading up to a full ration. The cake is made at the oil mills in the South, and could no doubt be procured through any of our merchants who have correspondents at Charleston, S. C., Memphis or New Orleans, where it is made largely. It comes from the mills in small, flat, oblong cakes, which can be easily broken up and ground in a common farm mill, or in a country mill where corn in the ear is ground. It costs at the mills \$20 a ton, and retails at the North at about \$30, bags included. It is somewhat surprising that in view of the great interest existing in regard to this feeding stuff, we do not see it more prominently mentioned, but it may be perhaps because nine tons out of every ten made are shipped to England, where it is very popular for feeding to fattening cattle, and making 'baby beef' and mutton.

"I have not learned all this without paying dearly for my experience, as I very early lost a very valuable thoroughbred cow by an attack of garget from feeding cottonseed meal in a forcing experiment, and no more than four quarts was used in the day at two feeds. The effect was to cause the udder to become hard and the milk to cease, and when this trouble was removed by a long course of treatment, the udder gave only blood. Since then, I have had occasional trouble from the stupidity of hired men, who, knowing it was rich food, supposed four quarts would be twice as good as two, and so enlarged the quantity, or fed it to pigs, and killed them very quickly. Finally I mixed one ton of meal (34 bushels of corn ground), a ton of bran, or wheat sharps, as I could get it the most conveniently, and a ton of cottonseed meal, very thoroughly on a floor and then put it into the bin, and since then have had no trouble. Three quarts of the mixture is the regular feed when the cows are in full milk in the winter, which is my dairy season."

## What Handling Indicates.

Some butchers say that the quality of beef cannot be told by handling the hair and hide of cattle, or what is commonly known as "handling." Not long since this matter was discussed in our hearing, and on one side the idea that the hair and hide of a fat animal were indications of the quality of flesh they concealed was ridiculed. But on the other hand those who have had the most experience in handling cattle, as strenuously insist that one of the best tests in determining the quality of the flesh carried by beef cattle is the "feel of the hide." The subject, we learn, will be brought forward at the coming Fat Stock Show and probably some steps taken to determine in what good handling (in this sense) consists. Not long since this subject was referred to by Dr. M. G. Ellzey, of Washington, D. C., who suggested that it would be a move in the right direction for the agricultural colleges—if there are those connected with them who know how to judge of and describe a beast by "handling," and how to make an intelligible description of the carcass when slaughtered—to impart such information to the young men who attend their institutions. He considers it strange how many men have gone wild over Guenonism, (the milk-mirror theory) when a few exact observations would have settled the question as common sense ought to have settled it at the outset. Dr. Ellzey contends that there is neither anatomical nor physiological connection between the hair on the perineum of the cow and her lacteal glands; but he goes on to say that in the animal kingdom generally, coarseness of structure in one part is rarely, if ever, allied to fineness in other parts; a coarse, hard skin, and a dense unyielding cellular tissue, has never, we believe, been, and never will be, found over-lying tender, juicy marbled sparkling flesh. The general truth of this statement will never be questioned by those who have had much experience in the handling of cattle. It may not be possible to become so skillful as to indicate quality to very great exactness, but that a knowledge of good quality as indicated by touch, or "handling," is desirable, because useful, does not admit of question.

The handling qualities of cattle, as described by experienced handlers, are said to be good when the skin is moderately thick and the flesh is mellow and yielding to the touch, springing back to its original position when the fingers are removed

after pressure. It is so also with the skin itself upon taking it up between the thumb and fingers; when relaxed it immediately springs back to its natural position. These conditions—elastic skin and mellow touch—indicate a vigorous flow of good blood. The weight of the abdomen, and (in the case of dairy cows) large udder naturally draws the skin closely over the projecting bones of the hips and buttocks, and if it be easily movable and mellow over these bones, the cattle are invariably good handlers; while if the skin is tight and not easily movable, or difficult to lift over the hip bones and buttocks, the animal is not a good "handler," indicating a weak circulation and an unthrifty habit. Such animals are not profitable feeders, as compared with good handlers—a fact which experienced feeders and dealers understand; and it is by such men that the handling qualities of cattle are tested the most when they are buying stock to fatten. Herein consists a great advantage which improved cattle has over common stock. The former have been bred to secure these characteristics among others. On proper food such cattle give much the greatest profit to the feeder.—*Exchange.*

## Cheap Paint.

One of our correspondents enquires for a recipe for making cheap paint, and we cannot do better than give Prof. Knapp's experience as to the durability of paint composed of three parts crude petroleum and one part linseed oil, with mineral paint for body. Five buildings and considerable fence upon the Iowa Agricultural College Farm have been painted with this preparation. Upon some of them it has been one year, and thus far it has appeared to be fully equal to more expensive paints, in body, in durability and in retention of color. It is especially adapted to cheap out-buildings, covered with rough boards. If twenty-five pounds of white lead be added to each hundred pounds of mineral paint, the mixture answers a very excellent purpose for tenement houses. Many experienced painters have examined the buildings covered with this paint, and affirmed that it made a better covering than pure lead and oil. This is doubtless an extreme view. It may, however, fairly be considered as a reliable paint for protection of the fences and the cheaper farm buildings.

## Threshing Buckwheat.

The members of the Elmira Farmers' Club have been discussing the best way to thresh buckwheat, and the value of the straw. We take the following from the *Husbandman*:

President McCann said: "If I had as much as ten or twelve acres of buckwheat and wanted to get it threshed at least cost, I would wait until good weather had dried the bunches, then get a threshing machine to run it through in the quickest time. Of course, I would draw the buckwheat from the field directly to the thresher, with no extra handling as in mowing away. This course does not give the best grain, because some must be cracked and, therefore, damaged for flouring, although not hurt for feed. The principal advantage is in getting the work off one's hands in good time, in fairly good order, and at less cost than in any other way."

W. W. Armstrong said: "The very best way to thresh buckwheat is with flails, and the cost is but little greater than for machine threshing, perhaps no more when the condition is favorable. In former years I have raised a great deal of buckwheat, and I had some pride in getting the cleanest grain. My way was to leave the bunches in the field until the straw was well dried. Frosts intervening had the effect to make the stems brittle. With good weather, some time in October, I had flails ready, men engaged, all preparation complete, then in the morning after the surface of the ground was dried I had the bunches carefully lifted and set in new places loosely on the stubble. That allowed free circulation of air from bottom to top, so in a short time the bunches will get very dry. This stage reached, drawing began, and the flails were kept in motion until at the approach of night dampness gathered in the bunches, when work was suspended to be renewed in like manner the next day if suitable weather followed. I can not say for a certainty how much grain three flails may beat out in a short day, but in the hands of skillful operators, with the straw thoroughly dry, a day's work will not be much less than a hundred bushels, provided the crop is well filled. Threshing in this way insures the cleanest and best pro-

duct. Damp bunches, if they happen to appear, as they surely will when struck by the flails, are thrown aside, but when the work is done by a machine they go through and dampness is communicated to other grain, so diminishing the yield of flour and impairing quality as well."

A letter from a Pennsylvania farmer was read, in which he advised: "Save the buckwheat chaff and use it as an absorbent in the cow-stable. Being fine and dry it makes one of the best absorbents for this purpose. I find a corn basket full (1½ bushels) will absorb all the urine from ten cows over night and keep them dry and clean. I have made a practice of saving all of my own and buying off my neighbors for \$1.00 per load of 50 baskets, and I think it pays well."

#### Preparing Cattle for Winter.

There will necessarily be a great difference in the results between feeding turnips and straw, and the other foods which both chemistry and experience tell us will build up the tissues rapidly, making the soft parts plump and firm, and the whole body warm, no matter what the weather may be. He who relies upon turnips instead of corn meal and cake, consoles himself with the plea that he gets more bulk for his money—more filling than he would get with the concentrated article.

For the particular purpose we are directing attention to, viz., the bringing up into good flesh and strong condition animals that are thin and weak, in the short time that remains, the foods that contain eighty to eighty-five per cent. of water, the remainder being largely woody fibre, will compare very unfavorably with oats, containing only thirty per cent. of water, while containing about forty per cent. of starch, nearly six per cent. of oil, and seventeen per cent. of flesh-forming material; or, taking the estimate of corn meal, we find a like amount of water, or perhaps one per cent. more than in oats, with sixty per cent. of starch, seven of oil, and eight of flesh-forming material.

Now, the man who, thinking to build cattle up for winter on turnips, containing only ten per cent. of starch and no oil, will make very slow headway indeed. Preparatory to the coming on of cold weather, cattle require concentrated food, such as is the opposite of being watery and washy. A moment's consideration of the fact that oats or corn stand in value as seven to one, while the food value of turnips or carrots is as one hundred and fifty to one, will show that the latter should not be relied upon when strength and flesh need to be obtained without undue delay. It is intended to show by this statement of the relative values of the articles named, that seven pounds of oats or corn are equal in flesh-making value to a hundred and fifty pounds of the roots named. These are proper articles for use in connection with grains, but an animal cannot be built up as is required at this season of the year, taking on such vitality and vigor as will enable it to resist the cold weather of the winter months on these alone.—[Live-Stock Journal.

#### Drover and Collie Shepherd Dogs.

I have learned by observation a few of the merits and defects of the Scotch collie dogs when used for driving live stock, and it seems to me they are of sufficient importance to note down and publish. In England, perhaps chiefly in the central and southern counties, there is a short-tailed, or stump-tailed breed of dogs that has for years, perhaps for centuries, been employed by cattle dealers in driving cattle, though in frequent instances they are used in driving sheep. These stump-tailed drover dogs are from twenty to thirty per cent. larger than the Scotch collies. They are usually black, but frequently have a white stripe in the face, or a white nose, and generally they have white feet as high up as the dewclaws, or higher. In some cases these dogs are of a uniform grey color, with short curly hair, and the black dogs in most cases have smooth hair.

From his greater height as well as weight, the English drover dog is much better adapted to driving cattle than the smaller Scotch collie. Being taller, the short-tailed drover has a better chance to pinch the cattle higher up and further from their hoofs, by which he is in less danger from being kicked on the head. Moreover his greater weight enables him to "hold fast" in degrees impossible to the smaller collie dog. The drovers are not, perhaps, quite so active in their movements as the collies, but are more effective when driving or penning cattle. Their stump tails, which range

from two to six inches in length only, do not hinder the dogs in their work. The long brush tails of the collie dogs (so long that they frequently drag on the ground) are often trodden upon by the cattle they are driving, in this way causing hindrance, and often laming or maiming the dog just when his services are most required. As collie dogs are much in use at present in western cattle herding, it may be well to take these facts into consideration.

For sheep the Scotch collie is a very effective, and perhaps unexcelled helper. Sheep prefer the higher altitudes for the sake of the sweeter herbage they can gather there. At such altitudes the winds are frequently prolonged and strong. In such contingencies the long brush of the collie shepherd dog becomes of service in aiding him to turn around sharp curves. On the high and dry prairie ranges in Western Kansas and Nebraska, and in all localities where sheep can be most profitably raised and subsisted, there is the natural work and most suitable place for the Scotch collie dog. But on the lower and richer lands in the valleys of England and in America, and on the rich bottom and bench-land pastures of the West and Far West, the old-time English drover dog would be the most effective, and therefore the best dog to assist in penning, or driving cattle from one place to another.—[J. W. Clarke in Cultivator.

#### Sulky Plows, Etc.

Waldo F. Brown, writing to the Rural New Yorker, says that during the last few years the attention of manufacturers has been directed to riding or sulky plows, and quite a large number have been introduced. Most of them carry the plow directly under the sulky and between the wheels, but the ——— which I am using, attaches the plow to the side of the sulky, it running on the land with the horses attached directly to the beam of the plow, and drawing the sulky by the plow. By means of this arrangement the plow does not need to be taken out of the ground at the corners of the land, for it pivots round on the point. This plow does excellent work, and can be managed by a boy or anyone who can drive a team, as there is no lifting at all. I have never seen a plow that equalled it for turning under a heavy growth of clover or other green crops. It is furnished with rolling cutter and weed hook, and I have seen green bloom corn stalks 10 feet high turned under completely by it. I know of one other plow manufactured at

Ohio, with which one can plow without taking the plow out of the ground, but with this the plow is under and between the wheels of the sulky. A firm at another Ohio town make a sulky to which any ordinary plow can be attached, but I have never seen it work. The ——— has a pivot axle, so that the wheel which runs in the furrow leans, but an intelligent dealer in my village who handles several kinds of riding plows tells that it is too complicated for an ordinary farmer to keep properly adjusted. I am convinced that we have sulky plows of as light or lighter draft, even with the weight of a man added, than an ordinary plow cutting a furrow of the same size, for the weight of the plow being carried by the wheels must reduce the friction. I see no valid reason why the farmer should not ride the plow if he wishes to do so, and believe that riding plows will come into general use.

Mr. Edward M. Teall, Stockbridge, Mass., is another "thorough believer in and admirer of Jersey cattle" who is "heartily disgusted" with the advertising butter records of this breed, ranging from fourteen pounds per week all the way up to a score or more. For one, he wants to know just what the feed was during the periods in question. The true ability of a cow is indicated by the yield persistently given under a prudent, judicious system of keep. "Let us," he concludes in the *Breeder's Gazette*, "have some rules regulating future tests," and, finally, "statements under oath."

Of Soja hispida, or the Japanese Bean, "probably the most concentrated food furnished by the vegetable kingdom," Dr. Sturtevant says that it was, on the first of the month, three feet tall, of luxuriant foliage and crowded with small pods containing from one to three beans each, and bloom still forming. As a forage plant it seems to afford much promise; also for food, if it proves acceptable to the palate.

#### A Little Farm Well Tilled

During the summer and fall, on the London Market Square may be seen Mr. Abel Steel and his boy seated on an immense wagon box, well filled with the vegetables of the season. He is well known to the Directors of the Western Fair and all the surrounding county fairs, where he never exhibits his mammoth specimens without getting a host of prizes. At the late Western Mr. Steele took ten first prizes out of fourteen entries. His farm, situated in Lobo, near Melrose, contains only fifty acres, part of which he keeps in bush so as to supply himself with firewood and fencing timber. He also reserves a portion for hay, pasture and cereals. The remainder he cultivates for vegetables. When Mr. Steele, a few years ago, contemplated the purchase of this small farm, some of his friends advised him to have nothing to do with it, as it was nearly all a tamarac swamp. Mr. Steele carefully examined the soil and found it of this stamp—a thick alluvial deposit of unsurpassed fertility, a great portion of which might be accounted for, but a large track thereof would almost puzzle a geologist to analyze. Mr. Steele affirms that after digging three feet down in some places he comes on an inexhaustible supply of shells and a mixture of apparently decayed vegetable and animal matter. To this, together with the adoption of a thorough system of drainage, he attributes his secret of success. As he keeps day and date for everything he does on the farm, the following will show the operations or net returns for the season so far: Total number of acres plowed twenty-five, from which he took 21,000 cabbages, 4,000 cauliflower, 800 bushels of potatoes, 1,000 head of celery, 1,000 melons, 130 bushels of wheat, 180 bushels of barley, 140 bushels of oats, 1,200 dozen cobs of corn, 150 bushels of onions, 150 bushels of tomatoes, also carrots, turnips, &c., say 300 bushels, and three tons of hay. Besides, he keeps a number of cattle, pigs and poultry. His hired help averages one and a half hands all the year around. His family is small, but they materially assist him. His cabbage crop alone will net him nearly \$1,500. The total value of his crop is \$3,000, besides a quantity of live stock he will have for sale. This shows what good management, earnest application and sterling industry can do on "a small farm well tilled."

#### Cane Sugar in Ontario.

It is said that a gentleman who has managed a Cuban sugar plantation for several years, is about to start a large plantation and mill in the County of Essex, near Essex Centre; that the capital placed in the mill is about \$10,000, and that the best machinery is to be used in making Muscovado sugar. Sorghum sugar cane, which is cultivated to so large an extent in the Western and South-western States can be brought to equal perfection in this Province. In Essex almost every farm has its patch of sugar cane, varying from one acre to three or four acres in extent. There are several kinds grown, but the most in favor is the Early Amber, yielding, as it is done, about 300 gallons of syrup per acre. The farmers use a simple piece of machinery, merely two rollers, in crushing the cane, after which the juice is boiled into syrup. The sugar produced in this way is said to be equal in quality to that of Illinois. In that region some sensation has been caused this season by the success of the sugar works carried on at Champaign. These works are now said to be turning out daily "six crystallizing wagons of simple sugar, or melada, of fifteen hundred pounds each, which yields dry sugar, of a specified quality, 40 per cent., and 60 per cent., of course, of syrup, weighing from nine to ten pounds to the gallon. The grocers have the sugar for sale as common as apples or corn or flour, or other agricultural products of the country. The sugar is very light in color, though not quite white, free from the impurities often found in foreign sugar, tolerably dry, readily soluble, of agreeable flavor, and entirely lacking in the rank taste common to most sugars that have not been refined. For cooking purposes it appears to possess every desirable quality. Many would prefer it to a dry sugar, having hard crystals, as it is sweeter to the taste, being more soluble. The sugar of Ontario production is of a quality not inferior to the above. If what is now said of the production in Essex be borne out, we are on the eve of a fresh and very important development of our home resources.

## Farming for Boys.

BY THE AUTHOR OF TEN ACRES ENOUGH.

## CHAPTER VIII.

*Never kill the Birds.—Pets of all Kinds.—What Underdraining means.—More Horseradish.—Encouraging the Boys.*

From this point of observation they moved off to the garden, where they found everything in such nice order that it amazed and delighted Uncle Benny, who did not fail to point out to his pupils all the strong features of its management, comparing them with the miserably neglected condition of their own garden. Every fruit-tree had an old crook-necked squash hung upon it, far out of harm's way, pierced with a hole for a bird's nest. Mr. Allen evidently had a pride in this abundant supply of accommodation for the birds, for, addressing himself to the Spanglers, he called their especial attention to the subject. "Do you see, boys," said he, "how the birds are building in all these squashes? They are my journeymen insect-eaters. Do you know that these birds destroy millions of worms and bugs and millers, which prey on the fruits and flowers of the farm and garden? I could not do without them, as, if I had no birds I should have no fruit. I have tried it for myself, and it has been tried more extensively in European countries, where they attend to small matters of this kind much more attentively than we do here. Why, Tony, you know what the wire-worm is. Well, in a single department in France that worm has been known to destroy three successive harvests, each worth nearly a million of dollars. In portions of Germany, other insects have destroyed immense forests of large trees. One of the kings of Prussia once ordered all the sparrows killed because they ate his cherries; but two years afterwards he found his cherries and other fruits devoured by caterpillars. It was the same thing in Hungary, when the sparrows were generally destroyed; the insects, having no enemies, multiplied so fast that they consumed so much of the crops that laws were made forbidding the destruction of the birds. We shall have the same ruin here if we allow our small birds to be killed as everybody is now killing them. If we are to do without birds, we must make up our minds to go without fruit. This is the reason why every tree in my garden has its bird's nest. My boys never shoot a bird, not even an owl, for an owl is one of the farmer's best friends—better than a dozen cats about the barn. He is the sharpest mouse-trap that can be set, because he goes about after the mice, while the trap holds still until the mouse thinks proper to walk in. Even the common buzzard, that every fool shoots when he can, will eat up six thousand field mice annually—and how much grain would that number consume, or how many apple-trees would they nibble to death? No, no, boys, never kill the birds. Don't even drive them away, but coax them about you in flocks. It costs more to do without them than to have them."

On coming out of the garden, Mr. Allen led them into the open yard in front of his carriage-house and corn cribs. There was a great flock of pigeons picking up the remains of the noonday feeding which had been thrown to them. The Spanglers were delighted, and examined the pigeons attentively, but could not discover that they were any better than their own. The proprietorship of pigs and pigeons had already produced the good effects of making them observant and critical, thus teaching them to compare one thing with another.

"Now," said Mr. Allen to Uncle Benny, "these all belong to my boys. They began with only two pairs of birds, and you see to what they have grown."

"How many of them do you sell every year?" inquired Tony of the Allens, in a tone too low for the others to hear.

"Thirty dollars' worth of squabs," he answered, "and some seasons a good many pairs of old birds besides what we eat up ourselves."

"But who finds the corn?" inquired Tony, bearing in mind the bargain which Spangler had imposed upon them when consenting to his boys procuring pigeons.

"O," said he, "father finds it, but I'll show directly how we pay for it."

In addition to the pigeons there was a large collection of fine poultry, with a dozen broods of different ages, some just hatched out, the little fellows running round the coops in which the mothers were confined. There was also a flock of turkeys moving slowly about, with all the gravity peculiar to that bird. Uncle Benny made up his

mind he had never seen a more inviting dinner-party than those would very soon make.

From the poultry yard they wandered all over the farm. Everything was kept in the nicest order. No unsightly hedgerow of weeds and briars fringed fences, nor was a broken post or rail to be seen. The fencing had been made in the best manner in the first place, and would therefore last a lifetime. The winter grain stood up thick and rank, showing that the ground was in good heart. The corn had been planted, and in fact all the urgent spring work had been done, Mr. Allen having so managed it as to be ahead with whatever he had undertaken. Great piles of manure, with marl intermixed, were scattered about several fields, ready to be used on crops that would be put in at a later day. The springing grass on the mowing ground showed that it had been top-dressed with manure the preceding fall, and that the grass roots had been all winter drinking up the rich juices which the rain and melting snow had extracted and carried down directly into their ever open mouths. Everything about the farm showed marks of its being in the hands of a thorough man, who, in addition to understanding his business, had an eye to neatness, taste and economy.

Uncle Benny was impressed with the completeness of all that he saw. He called the attention of his pupils to the remarkable difference between the practice of Mr. Allen and Mr. Spangler, stopping repeatedly to explain, and enter into minute particulars. The results were so manifestly superior to any they had witnessed at home, that they did not fail to appreciate them. The old man's effort was to make them understand why it was that results should differ so widely. He told them the soil of the two farms was exactly similar, one farm, naturally, being as good as the other. The difference was altogether in the mode of management. Mr. Allen manufactured all the manure he could, and bought quantities of fertilizers. He sold some hay, because he produced more than he could use, but his straw was all worked up on the farm. He was quite as likely to set fire to his dwelling-house as to burn a pile of corn-stalks. On the other hand, Mr. Spangler took no pains to accumulate manure, neither did he purchase any; but even what he did collect was spoiled by the deluge of rains that carried off all its stimulating juices into the highway. As to selling hay he had scarcely enough for his own use, while more than once he burnt up a whole crop of corn stalks. Thus, while one farm was growing richer every year the other was growing poorer.

Presently they came to a beautiful meadow of at least ten acres, through the centre of which ran a wide ditch, with a lively stream of water in the bottom. After they came up to the bank the Spanglers observed an earthen pipe projecting from the opposite bank, and sprouting forth a strong jet of water. Proceeding farther they noticed another, and then another still. In fact they saw them sticking out all along the course of the ditch, about thirty feet apart. Every one of them was discharging more or less water. As they had never seen such things before, Tony inquired what they were.

"These are underdrains," replied Uncle Benny. "You know I showed the other day what surface drains were—now you see what underdraining is. Those pipes are called tiles."

"But where does all the water come from that we see pouring out of them?" inquired Joe.

"Come from? Why, it comes from everywhere—above, below and around the drains," replied Uncle Benny. "When a rain falls it soaks its way down through the earth, that is all that the earth don't require, and finds its way into the underdrains, and then runs off as you see. Then the water which rises from the springs under this meadow finds its way also into the drains, and is carried off like the surplus rain-water. If it were not for these drains the land would be so water-logged that nothing but wild grasses and aquatic plants would grow on it; but now you see it is yielding the very finest kind of grass. If your father's meadow now filled with ferns and skunk-root, were drained as this is, it would be quite as productive."

"Quite as good," added Mr. Allen. "This meadow was as foul and worthless as Mr. Spangler's when I began to underdrain. I never spent any money that paid me half as well as the money I have laid out in underdraining. It cost me about three hundred dollars to do this work, but the land is a thousand dollars the better for it—in fact it was good for nothing as it lay a few years ago. All the water you see pouring out of these drains was formerly retained in the ground. It is just as

much more than the land required. Now it has exactly enough, and it is the difference between enough and too much that converts a meadow into bog, or bog into a meadow.

He then led them to the upper end of the meadow, where the ground was higher and drier, though it had also been underdrained. Here were three acres set with horseradish. The harrow had just been run over the field between the rows, and the green tops were peeping here and there above the surface. Uncle Benny had travelled all the world over, and, as he was sometimes disposed to think, had seen everything there was in it. But he admitted that here was a thing new even to him; he had never stumbled on a three-acre field of horseradish until now. It was a great novelty to the boys, who knew nothing more of the cultivation of the plant than seeing a few roots growing on the edge of the dirty gutter at home, while they were utterly ignorant of its marketable capabilities.

The boys wandered some few paces away, and the Spanglers were examining the three acres with close attention, when one of the Allens exclaimed, "That's our acre—we take care of that—that's the way we pay father for our corn."

This piece of information was very satisfactory to the Spanglers. They had been wanting to know how the Allens contrived to feed their pigeons, whether out of their own crib or their father's.

Just then Mr. Allen and Uncle Benny came up, and the former said, "now this outside acre belongs to my boys and their sister. They take the whole care of it except harrowing the ground, but doing the hoeing, weeding and harvesting, their sister helping them to wash it and get it ready for market. I think it right to give them a chance to do something for themselves. I remember when I was a poor boy, that a very mean one was afforded to me, though I wanted so much to make some kind of a beginning. All the money this acre produces belongs to them. They keep regular account of what is done on it, charging themselves with the plowing, cultivating, and also with what we estimate their pigeons will consume. All the money produced from these two sources, after deducting expenses, belongs to them, and I put the most of it out for them as an investment, where it increases a little every year, and will be a snug capital for them to begin life with. I think it is the best investment, next to underdraining, I have ever made."

[To be continued.]

## How Man is Constructed.

The average weight of an adult man is 140 pounds 6 ounces.

The average weight of a skeleton is about 14 pounds.

Number of bones, 240.

The skeleton measures 1 inch less than the living man.

The average weight of the brain of a man is 8 pounds 8 ounces; of a woman, 2 pounds 11 ounces.

The brain of a man exceeds twice that of any other animal.

The average height of an Englishman is 5 feet 9 inches; of a Belgian, 5 feet 6½ inches.

The average weight of an Englishman is 160 pounds; of a Frenchman, 136 pounds; a Belgian, 130 pounds.

The average number of teeth is 32.

A man breathes about 20 times in a minute, or 1,200 times an hour.

A man breathes about 18 pints of air in a minute, or upwards of 7 hogsheads in a day.

A man gives off 4.08 per cent. carbonic gas of the air he respire; respire 19,666 cubic feet of carbonic acid gas in 24 hours, equal to 125 cubic inches common air.

A man annually contributes to vegetation 124 pounds of carbon.

The average of the pulse in infancy is 120 per minute; in manhood, 80; at 60 years, 60. The pulse of females is more frequent than that of males.

A Pennsylvania correspondent of *Farm and Fireside* reports a neighbor as having kept "seven cows and calves" the whole season on two acres of land by the soiling system. "He sowed rye on rich soil adjoining his barnyard, early last autumn, mowed rye till the clover was ready, and he has corn drilled ready for use when the clover is too old for soiling."



"Home, Sweet Home."

### The Household.

#### Meat Pies, and How to Make Them.

Most of us will agree with Sam Weller that "veal pies is werry good," and I think that the whole family of meat pies are equally delicious, presuming the crust is properly made, the meat judiciously seasoned, and the pie thoroughly baked—the three essentials in their manufacture; and if you fail in one you might almost as well break down in all of them. Does not your mouth water at the thought of a hot pie of beef-steak, rabbit, chicken or mutton and kidney on a cold day in winter; and is not a cold one of veal and ham equally acceptable in summer time?

I am here speaking of pies made in dishes only, as the raised ones require somewhat different treatment; and I trust that the following hints will be of service to amateurs in this branch of cookery, as the *modus operandi* is really very simple.

The various kinds of crust are too well known to justify me in giving recipes here for their manufacture. I will say, however, that I prefer "short crust" to any other for meat pies, and after that the "half-flaky," or "rough puff;" for the simple reason that rich puff pastry should only be served in small quantities, and lovers of meat pie always feel inclined to follow the example of Oliver Twist and ask for more.

With regard to the meat, my directions are brief and simple—viz., always partially cook by stewing slowly, and let it become cold. Before covering remove the fat from the surface, and take out some of the gravy, which can be re-heated and served with the pie; for if the cover is laid on over a dish full of gravy it will bubble up in the baking, and cause the crust to present a sodden, unappetising appearance, resulting in the waste of a great portion of it, for only the top layer, as I may term it, would, under these circumstances, be eatable.

Now, gravy is a great stumbling-block in the way of many so-called cooks; for a careless, indiscriminate sprinkling of salt, pepper and flour, with a dash of cold water, and *Hey presto!* the thing is done, so they think. Now don't take it for granted that I am about to recommend an extravagant purchase of gravy-beef—nothing of the kind; but I will ask you to remember that different kinds of meat require different treatment. For instance, good beef-steak yields rich gravy that only needs careful thickening and seasoning, and the addition of a little sauce—Yorkshire relish or something similar—with a spoonful of browning, not forgetting a pinch of dried mixed herbs, a bottle of which should be in every house; for, besides imparting to the pie an additional delicious flavor of their own, they bring out to the full that of the meat, game or poultry of which it is composed.

A little piece of kidney is a great improvement to mutton pies, and by all means use stock instead of water for the gravy, not forgetting that a drop or two of vinegar will tend to make the meat tender.

Milt, or "melt," as it is commonly called, will enrich the gravy considerably, so will a piece of onion first fried and then stewed with the meat; and while a whole volume might be written on the subject of seasoning, the great thing is to adapt it to the dish. And bear in mind, when making a pie to be eaten cold, it must be seasoned more highly than one to be cut into while hot, and that no amount of added seasoning after the pie is baked will make up for an insufficient quantity cooked in it; for it is the blending of the various ingredients that will result in a perfect whole.

Take care that your crust is of uniform thickness, not too soft, and smoothly made; also that it fits the dish easily without stretching, or it will surely crack and fall in the baking; and please add enough salt to cover a sixpence and a pinch of white pepper to each pound of flour.

Let the inner strip of crust be only just wide enough to cover the edge of the dish; for if cut irregularly and allowed to slip into the gravy it will be spoiled.

Make a couple of incisions with the point of a knife in the top of the pie, for the steam to escape, then ornament it according to fancy with the remnants of crust, which may be made into a plait or twisted and laid round the pie near the edge; or a wreath of small leaves overlapping each other, with the addition of a nice centre ornament, and a few larger leaves surrounding it, will have a good effect; but taste may be exercised *ad libitum* in this respect.

Now for the baking. Well, on this point I cannot give explicit instructions as to time; I can only say bake a moderate sized pie—say for six or eight persons—about an hour and a half, more or less, according to the heat of your oven and the thickness of your crust. The oven must be hot enough to fetch up the latter, but by no means fierce, or the pie will be brown before it is half baked; then a gradual steady heat must be kept up, sufficient to cook it thoroughly; and if it becomes too brown before it is done, cover it with a thick sheet of paper; and if not dark enough, an extra flash of heat the last ten minutes or so will finish the operation. But experience and that only, must be your guide; for no amount of reading without practical knowledge ever did, or ever will, teach the art of cooking to anybody.

And if by chance a cook, to whom my directions seem superfluous, should read this paper, she will at least ratify my statements that in nine houses out of ten among middle-class families a properly made meat pie is an unknown luxury.

A cold meat pie should be set upon a meat dish on which has been laid a spotless serviette, and then surrounded with a border of fresh parsley; thus pleasing the palate through the eye.

May I end my paper with a word of practical instruction? viz., that if you fail in this or any similar task, try and ascertain the reason of failure; for depend upon it the remedy is never far off when the want is clearly seen.—[Lizzie Heritage in Cassel's Magazine.]

#### Cheerful Rooms.

We are so influenced by our surroundings that it is very desirable they should be as pleasant as possible. It is not always in the power of the house-mother to live in the locality she prefers or to change its features to suit her tastes, but she may so furnish and arrange the interior of her house that it shall be charming and restful. The charm of a cosy home resides inherently in the mistress and not in what the furnisher and upholsterer can do to make a house comfortable. If fine mirrors and velvet carpets and plush-covered furniture and elegant carvings made happy homes, what blessedness would reside in a furniture store. Not till loved faces have been reflected in a mirror is it made at all precious to us; not till footsteps for which we fondly listen have pressed the carpet is its inanimate web dear to us; not till chairs and sofas have been consecrated by holding the forms of our friends do these soulless objects, however costly, have to us other than a mere commercial value. Unassociated with human feeling and sympathy, the most expensive and elaborate interiors are like roses without scent, like marbles without life. Every thoughtful person knows all this well enough, but for all that we are too apt to fancy that possessions like these bring happiness, while we suffer to lie unused such as are at hand and potent to yield abundant pleasure.

One of the chief requisites for a cheerful room whether in palace or cottage is sunshine. In the hot summer time a north room is endurable, but in winter we love those rooms best where the sun comes earliest in the morning and lingers longest in the evening. In such a room should the family life pass. And in its sunniest corner should be the invalid's chair, the grandmother's rocker, the baby's cradle.

In rooms into which the sun never shines recourse must be had to various devices to make up, so far as may be, for this grave lack. A sunless room should have bright and joyous color in its furnishings. The walls should be warmly tinted, the curtains give a rosy glow to the light that passes through them. An open fire may diffuse the sunshine but lately imprisoned in oak or hickory, or ages ago locked up in anthracite. Ferneries and shade loving plants may contribute their gentle cheer to the room and suggest quiet forest nooks.

Not less requisite than sunshine to the comfort of rooms is order and neatness. This should be impressed upon every every part of it. There is a certain *neglige* look to all attractive rooms, certain evidences of personality and individuality, but

these are as far as possible removed from disorder and carelessness. A book left lying on the table, a bit of needlework on the window-sill, an open piano, may indicate the tastes and occupations of the inmates without suggesting that there is not a place for everything in that room. There is such a thing as being too neat and too nice to take comfort in everyday life, and this is anything but cheerful. And then there is such a thing as being so disorderly and negligent that comfort and cheer are impossible. If the house-mother cannot rest while there is a finger mark on the paint or a spot on the window panes, she may make a neat room, but her splint will keep it from ever being cheerful. If she has no care for the "looks of things" her failure will be equally sure.

A bird singing in the window, an aquarium on the table in some corner, plants growing and blooming, domestic pets moving about as if at home, these give life and brightness to an apartment and afford constant opportunities for the pleasantest occupation and companionship. Books people a room, and pictures on the walls, if selected with taste, are ever fresh sources of enjoyment. You may gauge the refinement and cultivation of a family by these infallible tests, unless they have been selected by some outsider. Bits of embroidery, of scroll-work, and a thousand tasteful devices may contribute to the charm of a room and make it irresistibly attractive. The room in which one lives takes on the complexion and prevailing states of the mind of the occupant. If one is sunny, cheerful, tasteful, these qualities will be impressed upon his surroundings, and you will know him by them just as you would know a crab by his cast-off shell. There are lovely rooms in which there is not one piece of fine furniture, one bit of elegant upholstery, but where the taste of the occupants has found beautiful expression in calico and ingrain and wood engraving and such resources as bounteous nature bestows on us all—ferns and flowers and sunshine and domestic pets.

#### Novel-reading.

Carried to the extreme novel-reading is undoubtedly a vicious habit; but reasonably indulged in it is beneficial to the reader. It affords needed rest and harmless recreation. Fiction transports the wearied mind out of this workaday world and the reader forgets the burdens of the real in his sympathies with the unreal. He has the pleasure of emotion without the sense of duty; he enjoys feeling without being required to act. A real catastrophe not only excites the emotions, but it also sets every faculty to work to devise succor and relief; but an imaginary catastrophe stimulates the emotions of pity and yet allows all the acting faculties to sleep on and take their rest. Real society requires the observer to be also a participant; the society of a novel he may enjoy in absolute mental repose. Then, again, a good novel serves as a teacher. The wisest of novel writers work for a purpose, and generally succeed in teaching some moral lesson. No uninspired book is a better protection to a young man just entering life than "Pendennis;" no exhortation of the falsity of society surpasses that of "Vanity Fair;" "Oliver Twist" has done more to expose the abuses of the poor-house system than tons of blue books, and more to counteract the falsehood of "Dick Turpin" and the "Beggars' Opera" than a century of preaching. A good novel, then, is to be recommended—one that gives us a higher conception of life and its duties.

It is one of the worst misfortunes of woman that falsehood is not as a rule considered a dishonesty among them. To call a man a liar is like calling him a coward—an offence to the very soul and heart of his manhood, the very integrity of his being. To call a woman deceitful, a romancer, or falsifier, is not to honor her certainly, but not to dishonor her as it would dishonor her husband or brother. She is privileged to wear two faces under one hood, because nothing better is expected from her; and society condemns her sin as the sin of weakness which she is expected to commit, just as you expect a frayed rope to break.

A woman, on being asked to subscribe for a fashion publication in order to keep up with the styles, replied, with some spirit: "Do you take me for a heathen? I go to church."

FEMALE EMIGRATION TO CANADA.—Miss Leprancer (reading Lord Lorne's speech on the subject): The farther west the young woman went the more offers she got! Oh, mamma, let us go to Canada, as far west as possible!—[Punch.]

## The Family Circle.

**"Curfew Must not Ring To-Night."**

England's sun was setting o'er the hills so far away,  
Filling the land with misty beauty, at the close of  
one sad day;  
And the last rays kissed the forehead of a man and  
maiden fair—  
He with step so slow and weary; she with sunny,  
floating hair;  
He with bowed head, sad and thoughtful; she with  
lips so cold and white,  
Struggled to keep back the murmur, "Curfew must  
not ring to-night."

"Sexton," Bessie's white lips faltered, pointing to  
the prison old,  
With its walls so tall and gloomy, walls so dark  
and damp and cold—

"I've a lover in that prison, doomed this very night  
to die  
At the ringing of the curfew; and no earthly help  
is nigh.

Cromwell will not come till sunset," and her face  
grew strangely white,  
As she spoke in husky whispers: "Curfew must  
not ring to night."

"Bessie," calmly spoke the sexton (every word  
pierced her young heart  
Like a thousand gleaming arrows—like a deadly  
poisoned dart),

"Long, long years I've rung the curfew from that  
gloomy shadowed tower;  
Every evening, just at sunset, it has told the twi-  
light hour;  
I have done my duty ever, tried to do it just and  
right;  
Now I'm old, I will not miss it. Girl, the curfew  
rings to-night,"

Wild her eyes, and pale her features, stern and  
white her thoughtful brow;  
And, within her heart's deep centre, Bessie made a  
solemn vow.

She had listened, while the judges read, without a  
tear or sigh—  
"At the ringing of the curfew, Basil Underwood  
must die."

And her breath came fast and faster; and her eyes  
grew large and bright;  
One low murmur, scarcely spoken, "Curfew must  
not ring to night."

She with light step bounded forward, sprang with-  
in the old church door,  
Left the old man coming slowly, paths he'd trod so  
oft before.

Not one moment paused the maiden, but, with  
cheek and brow aglow,  
Staggered up the gloomy tower, where the bell  
swung to and fro;

Then she climbed the slimy ladder, dark without  
one ray of light,  
Upward still, her pale lips saying, "Curfew shall  
not ring to-night."

She has reached the topmost ladder; o'er her hangs  
the great dark bell;  
And the awful gloom beneath her, like the path-  
way down to hell.

See! the ponderous tongue is swinging; 'tis the  
hour of curfew now;  
And the sight has chilled her bosom, stopped her  
breath and paled her brow.

Shall she let it ring? No; never! Her eyes flash  
with sudden light,  
As she springs and grasps it firmly: "Curfew  
shall not ring to-night."

Out she swung—far out; the city seemed a tiny  
speck below—  
There, twixt heaven and earth, suspended, as the  
bell swung to and fro;

And the half-deaf sexton ringing (years he had not  
heard the bell);  
And he thought the twilight curfew rang young  
Basil's funeral knell;

Still the maiden, clinging firmly, cheek and brow  
so pale and white,  
Stilled her frightened heart's wild beating; "Cur-  
few shall not ring to-night."

It was o'er; the bell ceased swaying; and the  
maiden stepped once more  
Firmly on the damp old ladder, where, for hundred  
years before,

Human foot had not been planted; and what she  
this night had done

Should be told long ages after. As the rays of set-  
ting sun  
Light the sky with mellow beauty, aged sires, with  
heads of white,  
Tell the children why the curfew did not ring that  
one sad night.

O'er the distant hills came Cromwell; Bessie saw  
him, and her brow,  
Lately white with sickening horror, glows with  
sudden beauty now;  
At his feet she told her story, showed her hands  
all bruised and torn;  
And her sweet young face so haggard, with a look  
so sad and worn,  
Touched his heart with sudden pity, lit his eyes  
with misty light;  
"Go! your lover lives," cried Cromwell. "Curfew  
shall not ring to-night."

**The Story of a Dream.**

My only sister, Edith, married when I was  
scarcely six years of age. My mother died soon  
after that event, so I was left at home with my  
father and brothers. My father said I resembled  
my mother, and I think loved me better than any-  
thing on earth. The boys, too, indulged me in  
every whim. I don't think I had a wish ungratified.  
They said I was pretty, and in my youthful  
vanity I imagined myself beautiful. Ah, me!  
those happy days of my bright girlhood, when I  
was careless and light-hearted, dreading no evil  
because knowing none, are even now a pleasant  
memory to me.

My sister lived at some distance from home; ab-  
sorbed in the cares of her family she rarely visited  
us, but I spent nearly half of my time at Ellengeon,  
the name of my mother-in-law's place. I was  
deeply attached to my sister and her children, and  
I found a dear friend in the person of her gover-  
ness, Miss Gray. She was a fragile, golden-haired  
creature, with tender, intensely mournful, brown  
eyes, the saddest eyes I had ever seen; she was so  
fair and slight as to look almost childish notwith-  
standing her five-and-twenty years.

I liked her from the first; but she was very shy,  
and it was some time before my childish overtures  
of friendship met with any response; and even  
when we had grown to love each other, she still  
maintained an impenetrable reserve concerning her  
early life. She received no letters, avoided all  
society, and appeared to have a morbid terror of  
strangers. I had a girl's curiosity; but Miss Gray  
never spoke of herself, and answered all questions  
with a gentle reserve that was more repelling than  
rudeness. Ever ready to sympathize in the  
troubles of others, she never spoke of her own  
griefs—and griefs I was convinced she had. I de-  
termined that the owner of those sad, brown eyes  
had a history; but my sister laughed at what she  
termed my romantic notions. Miss Gray had come  
to her highly recommended; she was devoted to  
her little charges; there Edith's interest in her  
governess ended.

I was twenty when I first met Rupert Gordon.  
For two years I had reigned as a belle, and as yet  
my life had never known grief. The first time I  
looked upon his face, the first time I listened to  
the persuasive music of his voice, I loved him—  
loved him with all the mad recklessness of a head-  
strong girl's first love; I saw that he was hand-  
some, and my fancy endowed him with a thousand  
heroic attributes; then I knelt and blindly wor-  
shipped my idol. Oh, the passionate fervor, the  
deep, trusting tenderness lavished upon that  
shrine! I could scarcely believe in the reality of  
my happiness when he confessed his love and asked  
me to be his wife—his wife. I would have been  
contented to be his slave.

Surely the course of true love never did flow  
smoother than did ours. Rupert was all that was  
desirable; my father heartily approved of my  
choice; the relations on both sides were highly  
pleased; so it was settled that we were to be mar-  
ried at once.

The few months of my engagement passed rapid-  
ly away, and the time of my marriage drew near.  
Edith was unable to come to us until the day be-  
fore the wedding, and by my particular request  
Miss Gray and the children were to accompany her.

Now, it was one of my peculiarities that I never  
dreamed; but at this time, for three nights in suc-  
cession, I dreamed precisely the same thing. I  
thought I was clasped in Rupert's arms, close to  
his heart, and my happiness was complete; then  
Miss Gray, her pale face wet with tears, came and  
begged me to leave him. I could not account for  
it, but she inspired me with great terror, and I  
clung more closely to my lover. Gently, her sad

eyes gazing pitifully into mine, her ice-cold hands  
retained me, she loosed my clinging arms, and I  
saw Rupert vanish from me, and knew that he  
would never be my own again. Then I awoke.

The 17th of May was to be my wedding day.  
On the 16th Edith and her family arrived. After  
lunch that day I took Miss Gray up to my room to  
show her my wedding presents and trousseau. I  
was excited and more than happy as I tried on my  
wedding dress and peeped into the glass to see the  
effect.

Miss Gray, in her quiet, gentle way, was almost  
as excited as I. She listened to all my praises of  
my lover, and rejoiced in my happiness as though  
I had been her sister.

I was still standing before the mirror in my  
bridal robes, when Miss Gray, who was standing at  
the window, gave a sharp cry of pain and turned  
to me with such a ghastly face that I was fright-  
ened.

"Who is that? Oh, tell me who is that?" she  
grasped.

I looked out and saw Rupert coming up the  
avenue. My Rupert, with his happy, careless face.  
"That is Rupert, Miss Gray. Have you seen  
him before? Are you ill?" I asked, for she trem-  
bled like an aspen leaf.

She answered that she had mistaken him for a  
person she had known long ago; she was not very  
well; she would go to her room and rest a little  
while. Then she left me and I hurried to meet my  
lover.

About ten minutes later I sought Rupert in the  
library. As I descended the stairs I heard voices,  
and on approaching the door I heard Rupert say:  
"I thought you were dead," in low, constrained  
tones; then I entered quickly. Rupert stood by  
the window ghastly pale. Opposite, with a strange  
anguish in her eyes, was Miss Gray. I went di-  
rectly to him. At my approach he trembled con-  
vulsively.

"Rupert," I said, "tell me what troubles you."  
"Without a word he clasped me in his arms,  
and leaning his head upon my breast, burst into  
tears, sobbing like a child.

"Maud, come away; this man is my husband,"  
I heard Miss Gray say.

Her voice sounded like one speaking from a dis-  
tance. My Rupert another woman's husband?  
Was she mad?

"It is not true!" I cried; "It is not true!  
Rupert, dearest, speak to me and say it is not  
true."

"Heaven help me; it is true," he moaned.

Then for a moment I thought my brain was on  
fire. I was mad with pain and passion; I could  
not reason; I only knew that I loved him; I could  
not live without him. In my agony I shrieked  
aloud:

"Rupert, do not leave me! She cannot love  
you as I do! Oh, Rupert it will make no differ-  
ence! I love you—I love you!"

I heard Miss Gray's pleading voice, but I turned  
from her with loathing. Then mocking faces  
floated around me; Edith's tearful, my father's  
grave and pitiful, the boys' entreating; but my na-  
ture seemed changed in my despair, for I hated  
them all fiercely; were they not trying to separate  
me from my idol? A great black veil seemed en-  
veloping him, hiding him from me even as I held  
him. Then the darkness engulfed me, and insensibility  
came to my relief.

For weeks I lay at the gates of death, and  
throughout my long illness Mary Gray attended  
me like a sister. When I regained strength she  
told me the story of her life, the romance that as  
a heedless girl, I longed to know.

She had been governess to Rupert's sister when  
he was almost a boy. He fancied he loved her,  
and she loved him with all the earnestness of her  
nature. Yielding to his entreaties she consented  
to a private marriage. Then before many months  
had passed, she found that her young husband had  
already tired of her devotion, and longed to regain  
his freedom. Poor Mary! At first, she said the  
agony of the discovery had almost killed her; but  
at last she resolved to be a burthen to him no  
longer. During his absence she left the house,  
leaving a note for him to tell him that he was free.  
She came to my sister, and as the years rolled on  
Rupert persuaded himself that she was dead.

Mary Gray and I, both hopelessly loving Rupert  
Gordon as women can love but once in their lives,  
formed the covenant of friendship which has lasted  
even until now.

I saw Rupert but once again. On his death bed  
he called for me, and I went to him. He died  
with his hands clasped in mine, and his dear head  
pillowed on my breast.

### Minnie May's Department.

**MY DEAR NIECES.**—As we pass from the warm summer months into the cooler and chilly airs, which bring with them certain changes of dress and appearances, we become birds of darker plumage, and begin to adopt, almost without knowing it, the richer hues of the late autumn and winter.

Let me here ask whether my young friends



No. 1975.—Child's Dress. The pattern of this garment is cut in four sizes, 4, 6, 8 and 10 years old. 5 yards material, 24 inches wide, and 32 buttons for medium size.

take sufficient care of themselves by wearing flannel and merino underclothing? I fear many of you consider yourselves sufficiently well clad without them, but that is a sad mistake; if you do not feel the need now, you will probably realise the bad effects in after years. Nothing in the way of dress has ever been introduced which is more valuable than the union or "combination" under-garments of merino and lambswool, the undervest and drawers united in one. Thus covered from the waist, and nearly to the ankle, the wearer can dispense with heavy petticoats, and march about with ease and lightness. Although perhaps a little expensive to buy at first, these "union garments" wear well and long, and are cheaper in the end. Many doctors recommend silk underclothing in preference to any other, on account of its peculiar properties, which are supposed to be beneficial to invalids.

If we are poor we are certainly not to seem so. Judging from the richness and general magnificence of the silk, satin and velvets that are being produced for the coming season, there is a large number of most attractive novelties in styles of construction and ornamentation, to say nothing of the fresh fabrics, picturesque combinations, choice colors and new trimmings; dark greens, browns and blues, with several tones of red, are the colors for day wear.

One very suitable style for making a street dress of silk, woolen or velvet is a plain skirt which may be finished at the bottom with a hemmed, pinked or ravelled ruche, or with ruffles, pleatings or any desired trimming. The overskirt is formed either of a short full apron front and shawl back, or what is in greater favor still, full paniers, which may be set over the bottom of the basque or put into the waist-band, as in the case of a round waist; the back draperies may be round or pointed, or be finished with a large sash of the goods. These costumes may be made entirely of the material, or in combination with some other, according to the taste of the wearer. Military braid, either cream

or black, is also used a good deal for trimming street costumes, with frogs made of the narrower braids for the waist and sleeves. Coat bodices of a different material from the dress, continue to hold their own, and will probably do so for some time yet, as they are admirably economical, becoming and useful, and in these points they suit everyone

ceremonious occasions, being in special favor for weddings, etc.

Dresses for mourning wear follow the prevailing fashion in style of making in all cases, except that of the widows' mourning, which alone can be called "plain." The tight fitting coat seems to be the favorite street wrap for young ladies. Plush velvet and all kinds of cloths and coatings, and many varieties of suit goods, are suitable made in this way. A simple finish is



No. 1971.—Lady's Cadet Basque. The pattern of this garment is cut in five sizes, 32, 34, 36, 38 and 40 inches bust measure. Four yards material, 24 inches wide, for medium size.

No. 1969.—Lady's Overskirt. The pattern of this garment is cut in five sizes, 22, 24, 26, 28 and 30 inches waist measure. Five and one-quarter yards material, 24 inches wide, for medium size.

alike. Satin, plush and velvet, brocade and velveteen are all fashionable, and any of my nieces who may have their last winter's dresses in good order, as regards the skirt portion, with a new coat-bodice of some kind, will find themselves provided, at a small expense, with a new and fashionable winter dress.

A change in regard to the cutting of plain shirts has taken place, and many of them are not gored at all, but are sloped away at the selvages on each side of the breadths at the top, and have two front pleats like darts as well, so as to bring the front breadth and sides into the waist. This sloping is hidden by the panier trimming, which is all but universally worn. Train dresses are only used for



No. 1965.—Lady's Jacket. The pattern of this garment is cut in five sizes, 32, 34, 36, 38 and 40 inches bust measure. 3½ yards material, 4 yards ribbon, and 12 buttons for medium size.

preferred for suit coats; braids or silk cord ornaments may be arranged upon the fronts, across the skirt of the back and upon the wrists of the sleeves, and the edges may be finished with a single row of stitching, or when the coat is made of cloth, a very stylish effect is given by making the cuffs, collar and pocket laps of velvet or plush, but if the garment be entirely of those materials, no trimming is required except handsome buttons.

The fur capes of last season are still in fashion, but are now made much larger, and in some cases extend in depth below the elbow. Of course this adds greatly to their warmth, and in consequence we shall probably see that many young ladies will wear tight fitting dresses and coat bodices, gaining the needful warmth by means of one of these useful capes.

The dolman is still in favor with many, especially elderly ladies, plush, fur and passementeries forming suitable garnitures.

Velvet, plush, and beaver hats and bonnets will be most in vogue. The average hat is large, drooping slightly back and front, and profusely trimmed with feathers and birds. There is a grace about a long ostrich plume that cannot be obtained by any other garniture, long or short, many or few; they are liked, and the possession of a good full curly one is felt to be highly desirable.

Muffs are worn a great deal to match the costumes made of satin, velvet and plush, and trimmed with lace.

Tan gloves are very much used, the most fashionable being made to button at the wrist with two or three buttons, and to pull over the sleeve in a loose *neglige* style. Black gloves, as well as all dark shades to match the costumes, will be worn during the winter.

Now a word about children's fashions. The devices for little folks are designed alike for small girls and boys, the trimming upon the girls' garments usually being somewhat more fanciful than that upon the boys' clothes.

The long, half-fitted waists remain in favor, as they deserve, but there is no end to the pretty ways of ornamenting both the skirt and body portions. One exceedingly pretty style is a half-fitting sack shape, that may be deeply trimmed with pleatings, shirrings and puffs, wash laces and bias ruffles. It has an inserted centre-front, which may be of another goods, and upon which the front edges of the side-fronts are buttoned. It has a wide round falling collar and a stand up collar, and its wrists are prettily overfaced. A sash of the goods, or hemmed surah, or wine ribbon, may be worn with this charming yet simple style of dress.

A very pretty cloak is made double-breasted, sack fronts and a half-fitted short back, extended to proper width by a box-pleated skirt, with a round shoulder cape and large pockets upon the sides. Such a cloak is equally fashionable made plain or bordered with moss-trimming, plush, velvet, fur or feathers.

MINNIE MAY.

#### Answers to Enquirers.

**SAPPHO.**—You may re-curl feathers with a blunt knife, doing each filament separately and drawing between your finger and thumb.

**IGNORANT THIRTEEN.**—Use soft water for washing your hands, or put oatmeal or bran in it, and rub them with glycerine and water; also wear gloves out of doors.

**PERPLEXED.**—The yolk of an egg or purified ox-gall would take out the stain of milk from your navy-blue cashmere. Proceed with care, and do not wet more material than absolutely needful.

**BLUEBELL.**—1—Turn your fork around and lay it flat on its back upon your plate when you have finished. We should say "thank you" on every occasion, of course; you would decline a dish at table with "no thank you." 2.—We cannot give you a cure for fair eye-brows. Surely you do not expect a recommendation from us to paint your face? Be satisfied that you have any eye-brows at all, for many have none.

**LADY SARAH.**—The ruby-colored velveteen would be suitable for your Christmas party, trimmed with moire silk, or satin of a different shade of the same color. If the dress be dark, the trimming should be lighter, and, if light, it should be darker. 2.—The length of time requisite for learning a charade depends on your own quickness and memory. We cannot judge of either.

**FARMER'S DAUGHTER.**—1—The primary use of a table-napkin is to serve as a means of keeping the lips clean when eating; the second use is to preserve the dress from any accidental stains and grease-spots that may fall upon it while at table. 2.—The small insects in your bird-cage, of which you complain, may be kept away by hanging a little bag of sulphur in them.

**H. B. M.**—1—Never look at any strange man as you approach him in passing by, for sometimes a look may be taken advantage of by forward and impertinent men. Look straight onwards, and do not speak loud or laugh in the street. It is generally a girl's own fault if she is spoken to, and such is a disgrace to her, of which she should be ashamed to speak. But we must hope and believe that the liberties thus taken were owing to no light manner nor indiscreet conduct in your case. 2.—The initials "R. S. V. P.," mean "Repondez s'il vous plait" (answer if you please).

#### Recipes.

**ONIONS.**—Boil in salted water ten minutes, then put them in cold fresh water for half an hour; after that place in a stewpan with just enough cold fresh water to cover them, and boil gently till tender. Drain and serve with melted butter. Thus cooked, onions are deprived of their strong odor.

**OYSTER PIE.**—Line a deep dish with puff paste, dredge the crust with flour, pour in the oysters, season well with bits of butter, salt and pepper, and sprinkle flour over; pour on some of the oyster liquor, and cover with a crust having an opening in the centre to allow the steam to escape. One pint of oysters will make this pie.

**SAUSAGE MEAT.**—Two parts of lean pork and one part of fat are finely chopped; for three pounds of meat add two teaspoonfuls of salt, one of pepper, two of minced sage and a teaspoonful each of

mace and nutmeg. The seasoning is evenly mixed with the meat, which may be packed in jars and covered with melted lard to keep.

**SQUASH PIE.**—Hubbard squash is best for pies. After boiling press out all the water possible, which can only be done by putting it into thin cloths and wringing out with the hands. The drier the squash the better the pie. Mix with the squash white sugar, milk, cream, ginger, a little cinnamon, a little salt and a trifle of mace. Baked in a deep pie dish it ought to be a perfect success. When it rises into an oval it is done.—[G. H. H.]

**GINGER COOKIES.**—Two cups New Orleans molasses, one cup lard, one-half cup sugar, one heaping teaspoonful soda dissolved in three-quarters cup warm water, one teaspoonful ginger, one large teaspoonful cinnamon, one-half teaspoonful clover. Mix with enough flour to keep them from sticking to the board, and bake a nice brown color. I consider them just as good as the bakers' cookies.

**PASTE.**—Put half a pound of flour in a heap on the pastry board, make a hollow in the centre into which put a teaspoonful of salt and four ounces of butter. Mix with the finger tips, using cold water enough to make a stiff paste. Put the chicken into the dish, pour over it the gravy, fit on it a cover of paste, ornament it a little, and leaving some holes in the top for the steam to escape; bake it about an hour in a moderate oven until the crust is nicely browned. Then serve it.—[From Miss Carson's Cooking School Text Book for S. M. R.]

**CHICKEN PIE.**—Choose a rather tender fowl, pluck all the pin feathers, singe off the hairs with a piece of burning paper, then wipe the fowl with a clean damp cloth, draw it carefully by slitting the skin at the back of the neck and taking out the crop without tearing the skin of the breast; loosen the heart, liver and lungs by introducing the forefinger at the neck; and then draw them, with the entrails, from the rent. Unless you have broken the gall, or the entrails in drawing the bird, do not wash it; for this greatly impairs the flavor, and partly destroys the nourishing qualities of the flesh. Cut it in joints and put it into a hot frying-pan with an ounce of butter and two ounces salt pork cut in dice, and fry it brown. When it is brown stir an ounce of flour with it, and let the flour brown; season it with a teaspoonful of salt, a level teaspoonful of pepper, and a tablespoonful of chopped parsley; cover it with boiling water and let it simmer gently for an hour, or until the chicken is tender. Meantime make the

#### Advice to the Girls.

When a man chooses the profession of law he does not expect to be a musician and a journalist also; he knows that if he would succeed he must devote himself to the one chosen calling. When a woman marries she realizes that in order to reach lofty heights in wife and motherhood she must sacrifice lesser aims. She must be willing to lay aside the delightful occupations which have made her girlhood pleasant; she must know that from the hour her baby is laid in the cradle, dressed with loving forethought, to that darker hour when the mature man lies down to his last sleep, she will give full meaning to the words, "Constant care." That her mind once unfettered will be at liberty no more, but is bound by ties stronger than life or death to those who have come to her out of the great unknown. Wait awhile, girls; think it all over before you promise to become wives—to take these duties and burdens upon you. Sweet and satisfying as are the obligations of wife and mother, they are not to be taken lightly. A husband must not be looked upon as a sort of perpetual beau and children as extremely uncertain and improbable adjuncts. Unless, like Wilhelm Meister, your apprenticeship ended, you reach out of yourself and ask for larger duties, for a wider field of labor, you had better stay at home with father and mother, dignifying the relation of daughter, filling the old-established home with a mild radiance which would seem but a dim light in a new one.—*New York Post.*

Darwin acknowledged himself matched when his little niece asked him, seriously, what a cat has that no other animal has. He gave it up after mature deliberation, and then the sly puss answered, "kittens."—[*Altoona Tribune.*]

He slipped quietly in at the door, but catching sight of an inquiring face over the stair rail, said: "Sorry so late, my dear; couldn't get a car before." "So the cars were full, too," said the lady; and further remarks were unnecessary.—[*Boston Commercial Bulletin.*]

1883.

1883.

## GRAND PREMIUMS

FOR OBTAINING  
New Subscribers  
TO THE  
FARMER'S ADVOCATE AND HOME MAGAZINE.

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Your choice of one of our excellent and pleasing Lithographs.

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5. "THE LANGUAGE OF FLOWERS & FLORAL CONVERSATION," by UNCLE CHARLIE.

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Containing Pruning Blade, Jack Knife Blade and Budding Blade. Blades carefully forged from razor steel and file tested.

The plants and seeds will be sent in the proper season, either this fall or next spring, as most convenient to our dealers.

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N.B.—New Subscribers, for 1883, will receive balance of this year FREE.

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The name sent in must be a new one, and the subscription for one year (\$1.00) must be enclosed.  
The prize is for the agent who sends in the new name, and not to the new subscriber.

Choose your prize when remitting, otherwise a choice will be made for you.  
None of the above prizes are for sale.

Sample copies, posters and prospectuses, with cash commission allowed, sent on application.

## Uncle Tom's Department.

**MY DEAR NEPHEWS AND NIECES.**—As the long winter evenings are fast approaching it will not be out of place to suggest a few new games. A new and excellent game called "Tip" is very popular in Germany, and may be equally so in Canada when it becomes known. Any number can play, and it is adapted as well to the parlor as to the picnic. One of the company pours out from a paper package of assorted candy and small toys about as many pieces as the number of players, making the tempting heap in the middle of a table within easy reach of all. After one of the children has been blindfolded one of the number touches an article in the pile in order to point it out plainly to all excepting the one whose eyes are closed. The player then opens her eyes and is allowed to select one at a time and keep for her own all she can obtain without taking the "tip," or the piece that has been touched. If the player touches the "tip" first she gains nothing, for the moment she takes the "tip" she must give it up and the turn passes to the next player on the right. Another game called "Characters, or who am I?" is thus played:—One of the party is sent out of the room, when some well-known hero or equally well-known character from a book like Dickens' novels or Shakespeare's plays is selected, and when the absentee returns to the assembly, he or she is greeted as the person fixed upon, and he must reply in such a manner as to bring out more information as to the character he has unconsciously assumed. Another funny game called "spoons" is played as follows: One person takes his stand in the centre of the room with a handkerchief tied over his eyes, and his hands extended before him, in each of which he holds a large table-spoon. The other players march around him in single file, clapping their hands in time to a tune which may be sung or played upon a piano in any slow measure suitable for marching. When the blinded player calls out "spoons" all the others stop at once and turn their faces towards him. He then finds his way to any player that he can, and must ascertain who he is by touching him with the spoons only, which he may use as he pleases. If he guesses right, the person caught is obliged to take his place in the centre. If he is wrong he must try until he succeeds, which it is easy to do with a little practice, especially if the one who is caught joins in the universal laughter. All these games are suitable for both boys and girls, and, when played together, are much more enjoyable and beneficial, especially for the boys, as the girls' gentle manners tend to refine and influence the more boisterous style of the sterner sex. UNCLE TOM.

## PUZZLES.

## 1—CHARADE.

Where once I am erected, year after year I stand,  
And yet by day and night I hurry through the land.

I waken smiles and sighs and tears,  
I'm deaf as deaf can be;  
And when you want to travel fast  
You have recourse to me.

—ELIZABETH E. RYAN.

## 2—CHARADE.

Whole, I am what every person must do.  
Behead, I am a place of amusement.  
Behead again, I am a liquid.  
Transpose I mean relatives. —FRED MILLS.

## 3—ACROSTIC.

(1) A man's name; (2) a county of Ireland; (3) an Island of the West Indies; (4) a town of England noted for its castle; (5) the goddess of wisdom. Each word is of seven letters. The first line read horizontally and my centrals read downwards name an American novelist.

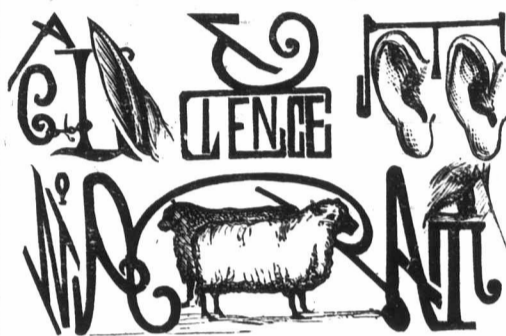
H. W. MACKENZIE.

## 4—ENIGMA.

I'm in white, not in black;  
In spike, not in tack;  
In bale, not in cask;  
In bottle, not in flask;  
In April, not in May;  
In brick, not in clay;  
In pine, not in larch;  
In February, not in March;  
In Isaac, not in Ned;  
In brown, not in red.

My whole is a place where a battle was lately fought. H. W. McK.

## 5—ILLUSTRATED REBUS.



## NUMERICAL ENIGMA.

6—My 2, 14, 6, 3, 1 is a play.  
My 10, 12, 13, 5 is a pronoun.  
My 8, 7, 4, 11 is slender.  
My 2, 14, 9, 6, 11 is to think idly.  
My whole was a commander in the Egyptian war. A. J. TAYLOR.

## DECAPITATION.

7—Whole I am afraid; behead me and I am correct; twice curtail and I am to dress. A. J. TAYLOR.

## CHARADE.

8—As a man was crossing a bridge, my first sprang after him and inflicted on the leg of his trousers my second; the man instantly caught hold of my first and threw it into the river, where my whole quickly bore my unfortunate first out of sight. ELIZABETH E. REGAN.

## Answers to October Puzzles.

- 1.—Manchester.
- 2.—Believe not each accusing tongue,  
As some weak people do,  
And still believe that story wrong  
Which ought not to be true.
- 3.—Tweed, weed, wee, we.
- 4.—  
S U N  
W H O  
E A R  
D A W  
E V A  
N A Y  
Norway, Sweden.
- 5.—  
SIX - IX = S  
IX - X = I  
XL - L = X
- 6.—  
H E A R T  
E N T E R  
A T O N E  
R E N T S  
T R E S S

## Names of those who sent Correct Answers to October Puzzles.

Charles French, Robert Wilson, Esther Louisa Ryan, Richard Kingston, C. Gertie Heck, Fred Mills, Annie Bowman, C. G. Keyes, A. J. Taylor, J. A. Key, A. Phillips, Gib Arnold, Charlie S. Husband, Jessie Howard, T. G. Sutherland, Belle Scott, Emma A. Herrington, George Cousins, Margaret Millman, Harold Ellis, Frank Lester, Addie Cowan, Minnie G. Gibson, Arthur Mabee, B. Mitchell, Geo. K. Butler.

DEAR UNCLE TOM.—Last fall when the frost set in, I put in an old tub a large quantity of peach-stones, covering them about a foot deep with mould and pea-straw; in May I removed the straw, and saw that they were beginning to come up; in June I transplanted them into the garden; they did very well, and there are some of them almost two feet in height. People here think they require to be taken up and placed in the cellar for winter. Is

that necessary, and, if so, must they be removed with clay adhering to their roots or without it? You will oblige by letting me know through the ADVOCATE for November.

E. E. R., Mount Forest, Ont.

[There is no necessity to take them up. If allowed to remain in the ground, they should be kept covered with straw; but if you prefer taking them out of the ground, they should have clay around the roots.]

## Not to be Deceived.

Four or five of us were enjoying our last pipe for the night in the smoking-room at Craigfalloch. We had had a long day's tramp over the moors, and the conversation lay chiefly between Jack Winstanley and Charley Vane. These two had been at Oxbridge about the same time, and discovered that, though they had never met there, they had a lot of friends in common. Of course they began telling each other who had gone into the Church, who into the Civil Service, who was dragging out life at an up-country station in India, who had got shot in South Africa and who had made a fortune in coloured yarns.

"Did you know Merton?" asked Winstanley.

"I think I've met him. Wasn't he a St. Bridget's man?"

"Yes; a tall, pale fellow, if you remember, with a straw-colored hat and a delicate gossamer beard that he never would shave off."

"Rather good family, eh?"

"Daresay. He was a very decent fellow, if he was a little strait laced. A parson, now, of course. Did you ever hear of a visit he once got from 'a fine old English gentleman, all of the olden time?'"

"No. Tell us the story."

"Well, Merton was really a good fellow, but he had been brought up at home—coached at the family rectory; you understand? He never got into scrapes like the rest of us, and in fact was the most irreproachable soul you ever saw. One term, Millbank's oldest sister, a mature lady of some thirty summers, came down to stay with some friends near Oxbridge, and the day after her arrival, wishing to give dear William a surprise, she ran over to see him early in the afternoon. Of course he got a cup of coffee for her, and they were having a pleasant chat in his sitting-room, when the scout comes in with a card, 'Mr. Edward Mandelay.'

"The gen'man sends his compliments, sir, and hopes it would be convenient for you to see his rooms. He had these rooms, he says, sir, when he was up here fifty years ago, and he has a great fancy to see them again."

"Very natural, very natural, I'm sure. I shall be delighted, Thomas. But wait a moment. Agatha—"

"Will it look odd for me to be here, dear?"

"Oh, no; but you see, if the old gentleman sees you here he'll be tempted to sit down and talk, and we shall lose all the morning. Here's the scout's closet. Run in, and I'll bring you a chair. I'll get rid of him as soon as I can."

"The fact is that Merton was so awfully afraid of being chaffed that he wouldn't have had it come to our ears on any account that a stranger had found him entertaining a lady in his rooms. Agatha was rather shy, and very glad to take refuge in the scout's closet."

"Presently in comes Squire Mandelay. A fine, bluff old fellow, something over seventy, a little shaky on his pins, red face, white mutton-chop whiskers, white hat, check tie—you know the style?"

"Happy to make your acquaintance, sir. Hope I'm not in your way. The scout told you, perhaps, that I used to have these rooms—ah! a good fifty-three years ago—before your father was born, I daresay? Dear me! How time flies! It all looks like yesterday—like yesterday! The same old view into the master's garden. Yes, the same old view. The same old pictures, too; and the old boy got up and tapped the frames; 'and I declare! the same old sofa. Dear me!'"

"Next, he walked round the room, stopping at the fireplace. 'Same old mantelpiece!' Then he got to the door of the scout's room, and turned the handle. 'Same old—' He had just opened the door, when he caught the flutter of a petticoat, and suddenly closed it.

"Ah!" says he, shaking his head, 'same old games! same old games!'"

"Sir!" gasps Merton, in an awful funk; 'sir! that's my sister! She—that is—'"

"Well, I declare! Same old lie! Same old lie!"



**The Highland Land Steward and his Clever Family.**

We take the following from a paper entitled "Reminiscences of a Commercial Traveller."—A Mr. David, from Edinburgh, in the nursery and seedsman line, paid a visit once in five years to a nobleman's estate in the far north, for the purpose of getting orders for the replanting of the fir trees which the rough blasts of the previous winters had destroyed. Upon the occasion in question the land steward, or grieve, was a man called Alexander Mackintosh; he was a quiet, inoffensive, and singularly reticent individual and the utmost Mr. David could extract from him were the monosyllabic answers "yes" and "no," as the case might be. As usual, when the bargain was completed, the nurseryman asked the land steward to clench the bargain with, of course, a glass of whiskey. Mackintosh never spoke, and even the electrifying influence of the "usquebaugh" availed not; his lips seemed hermetically sealed. Turning over in his mind some subject to get the Highlander to speak upon, he said—

"Oh! by the by, Mr. Mackintosh, I saw in the Scotsman, the other day, that a young man from this district had passed his examination as Master of Arts of the University of Edinburgh. I saw it was the same name as your own, Alex. Mackintosh. Is he any relation of yours?"

"My son."  
"Your son!" exclaimed Mr. David. "Why, he must be a clever chiel; the examination is by no means easy; it requires preparation, study, and, above all, indomitable perseverance. Why, you must be proud of your son?"

"Yes, yes," said the Highlander, and then relapsed into silence.  
"Well, I only wish I had a son who could pass with such honors," remarked the Edinburgh gentleman.

"Yes, yes," nodded the grieve, and added, "I am very proud of Alexander, but it is my other son I think most of."

"What, have you another son?" asked Mr. David, "and what may he be?"

"Oh, yes; I have another son; and he is a physician in Liverpool, in England, where he has a large practice, not among poor people, but in the most aristocratic part of the town. He makes much money, and is not old yet."

"Well!" continued Mr. David, "you have two sons—one of them a physician, and the other a Master of Arts. Why, you must be proud of them?"

"Oh, yes! oh, yes!" returned the ground officer.  
"And your excellent wife, Margaret, she will be very proud also?"

"Oh, yes, she is, poor body; but, if I had known," he remarked, in rising to leave, "that my family would have attained such eminence, and become so distinguished, I would have married a lady, and had another mother for them."

**A Conscientious Young Man.**

There is no moral object so beautiful to me as a conscientious young man. I watch him as I do a star in the heavens. Clouds may be before him, but we know that his light is behind them, and will beam again. The blaze of others' popularity may outshine him, but we know that, though unseen, he illumines his own true sphere.

He resists temptation, not without a struggle, for that is not virtue; but he does resist and conquer. He hears the sarcasms of the profligate, and it stings him (and that is the trial of virtue), but he heals the wound with his own pure touch. He heeds not the watchword of fashion if it leads to sin; the atheist who says, not only in his heart but with his lips, "There is no God?" controls him not; he sees the hand of a creating God, and rejoices in it.

Woman is sheltered by fond arms and loving counsel, old age is protected by its experience and manhood by its strength, but the young man stands amid the temptations of the world like a self-balanced tower. Happy he who seeks and gains the prop and shelter of morality.

Onward, then, conscientious youth! Raise thy standard and nerve thyself for goodness. If God has given thee intellectual power, awaken it in that cause; never let it be said of thee, He helped to swell the tide of sin by pouring his influence into its channels. If thou art feeble in mental strength throw not that drop into a polluted current. Awake, arise, young man! assume the beautiful garb of virtue. It is fearfully easy to sin; it is difficult to be pure and holy. Put on thy strength, then. Let truth be the lady of thy love; defend her!

**The Little Ones' Column.**

**Don't Leave the Farm.**

Come, boys, I have something to tell you:  
Come near, I would whisper it low—  
You are thinking of leaving the homestead,  
Don't be in a hurry to go.

The city has many attractions,  
But think of the vices and sins;  
When once in the vortex of fashion,  
How soon the course downward begins.

You talk of the mines, boys—  
They are wealthy in gold, no doubt;  
But, ah! there is gold in the farm, boys,  
If only you'll shovel it out.

The mercantile trade is a hazard—  
The goods are first high and then low.  
Better risk the old farm awhile longer;  
Don't be in a hurry to go.

The farm is the safest and surest,  
The orchards are loaded to-day;  
You're as free as the air in the mountains  
And monarch of all you survey,

Better on the farm awhile longer,  
Though the profits come in rather slow,  
Remember, you've nothing to risk, boys,  
Don't be in a hurry to go.

**A Story of All-Hallow-Eve.**

BY ANNE REPPLE.

I wonder how many of the children who roast chestnuts or duck for apples, All-hallow-eve have any idea how venerable are the games they play, or how, all the world over, young people are amusing themselves in pretty much the same fashion? In England, girls are strewing the ashes that are expected, though vainly, I fear, to spell the names of whoever loves them best. In Scotland, they are slyly sowing the hemp that their future husbands must come and gather. In Germany, they are making merry efforts to learn their fate with the help of the looking-glass that hangs by their bed. And many of these sports have been played for centuries, and were old even at the time of my story.

More than eighty years ago three little English children were arranging their mystic games for All-hallow-eve. They were alone in a tiny cottage, nearly half a mile from any neighbor, for father and mother had gone to the town of Ware, taking the baby with them, and would not be back before the next night; so Rupert, Margery, and little Nance, left to each other's company, were preparing without a shadow of fear to amuse themselves in their own fashion. Two big lumps of lead were ready to be melted, and then poured into water, there to assume hundreds of quaint little shapes; the chestnuts, carefully matched and named, were popping gayly about on the fire-place; and half a dozen rosy checked floats floated tauntingly in a tub of water, waiting for a courageous diver.

Rupert, a strong and active boy of twelve, captured his apple at every plunge, thrusting his curly head fairly into the tub, and never bringing it out until his teeth were firmly fixed in its glossy sides; Margery, who did not fancy getting wet, only nibbled at hers, and sent it bobbing about the surface of the water; while poor little Nance would dive boldly down, and come up gasping and choking, her blue eyes tight shut, the water streaming from her fair hair, and looking more like a half-drowned kitten than a little girl who had not succeeded in catching a slippery apple.

"It's no use, Nance," said her sister; "you will never get one, if you keep on soaking yourself all night. Let us see now who will be married and who will die. Rupert, you go into the garden, and bring me in some earth on a plate, while I get the ashes and water."

The boy took a dish of yellow stone-ware, and went out to dig up the mould. It was a clear night but blowing hard, and wild scraps of cloud came flying before the face of the moon, while to his left he saw the white banks of the river Lea, and could hear the rush of the waters as they swept angrily by. How high the river looked! thought Rupert, watching it, trowel in hand, and how loudly it sounded! He had never seen or heard it like that before, and for a moment he stood wondering what had caused this sudden rise. Then Margery's voice calling him for the earth he forgot all about, and in another minute he was back in the warm, bright kitchen, without a thought of the foaming torrent outside.

The little girl placed side by side on the table the three dishes, one of which held the mould, the other ashes, and the third clear water. Then she bound a handkerchief tightly over Nance's eyes, and after turning her around a couple of times to bewilder her, bade her go and put her hand in one of the plates. If she touched the water, she would be married; if her fingers wandered into the ashes, she would be married; but if she touched the earth first, then she would surely die before the next All-hallow-eve. Fully impressed with the solemnity of this awful rite, Nance slowly groped her way to the table, and after a moment's indecision put her little fat fingers softly down, when plump they went right into the water. Margery gave a shout of pleasure, and with a sigh of profound relief that her future was so securely settled, Nance unbound the handkerchief and handed it over to her sister. But with her matters were not so promising, for advancing with a great share of confidence, her evil genius led her straight to the ashes, greatly to her own disgust and Rupert's undisguised delight. It was his turn now; but just as his eyes were being bandaged, little Nance called out, "Look! Margery, look! the floor is all wet!"

With a bound the boy sprang to the door and opened it. Nothing but water met his eyes—water as yet but a couple of inches deep, but which was softly, steadily rising in the moonlight, while the rush of the river now sounded as if it were close by his side. In an instant he realized what had happened. The Lea, swollen by heavy rains, had overflowed its banks, and the water was gaining on them fast. Already it had entered the room where the frightened children stood, only half understanding their great danger,

"Go up stairs," shouted Rupert to his sisters; "and if the flood rises that high, we will climb out on the roof. Go quick!"

But Margery stood still, her brown eyes filling with tears. "Oh, Rupert," she cried, "the poor little baby ducks and chickens! They will all be drowned; and what ever will mother say when she comes back?"

Rupert never heeded her. The water by this time reached to their ankles, and to close the door was impossible. Thoroughly alarmed, he drew the little girls up the ladder-like staircase into their low attic. It would not take long for the waves to mount that high, and their only hope of safety lay in climbing up the steep sloping roof. Opening the window, he crawled cautiously out, and then helped Nance and Margery to follow him. Side by side stood the three children, and saw the sullen waters, white and foaming in the moonlight, surge and sway around them. Where could they look for help? Their father gone, their neighbors ignorant that they were alone in the house, and perhaps in the general terror forgetting all about them. Abandoned in their great peril, with only a boy of twelve to save them!

Poor little Nance sobbed and shivered as she crept closer to her brother's side; Margery, bewildered with fright, stood as if frozen into stone; but Rupert, with fast-beating heart and a despairing light in his blue eyes, watched the cruel waters as they rose, and tried to think how best to act for his sister's sake and for his own. He could hear in the distance cries and shouts, and could see bonfires blazing on many roofs—signals of the common danger. He knew that along the outskirts of the town, and through the scattered parish of Ware, relief boats were even now rowing from house to house to save those who lived in cottages too low to shelter them. He called until he was exhausted, but the only answer was the sullen roar of the Lea and the beating of the waves around him. Already they were lapping against the attic windows. Something must be done, and quickly, if he would save his sisters from perishing.

"Margery," he said at last, "would you be very much afraid to stay here alone with Nance, while I try and get some help?"

"Oh, Rupert!" shrieked the child, throwing her arms around him, "you would surely be drowned, and so would we. What can you do in such an awful flood?"

"I could try and swim to the manor farm," said the boy. "It is not more than half a mile off at the farthest, and there are plenty of floating boughs and fences in the water to rest me if I tire out. Margery, I must go, or we shall all drown together; and you know," he added, with a sob, "I promised father that I would take care of you."

"But to leave us here alone! Oh, Rupert, I should die!"

But Rupert's mind was made up. "It must be done at once," he said, "or it will be too late. Margery, try and be a little brave, and keep tight hold of Nance if the waves reach you before I can come back. Please God, I will save you yet." Then throwing off his shoes and jacket, he said once more, "Remember to keep tight hold of Nance," and plunged into the seething waters, in which no man could hope to live.

Margery's shriek died into silence, and clutching her little sister, she watched the slight figure tossed on the cruel billows as the boy swam bravely on. How long could his young strength avail against their mighty power?

In a minute he was swept out of sight, and with an awful feeling of loneliness, she crouched on the roof, holding Nance in her arms. Each moment passed slowly as an hour, while the waves crept ever higher and higher, until they washed against the children's feet as they clung closely together. What had become of Rupert? What would become of them? Nance's sobs were hushed from sheer exhaustion, and she only moaned and shivered slightly when the crawling water gained on them inch by inch. Some of her brother's courage had entered Margery's breast in this extremity of peril, and mingled with her broken prayers for aid were words of comfort to her little sister.

But every minute it became plainer to her that they could not keep their hold much longer. Chilled to the heart, their stiffened arms were gradually relaxing. The morning was beginning to break, and its dull gray light showed her nothing but the angry waves on every side. Familiar landmarks were all gone, and the child's lonely heart grew despairing in the midst of so much desolation. All hope was dying fast, when far in the distance came a dark speck, moving steadily over the solid waters, and growing larger and clearer every moment. It was a boat rowed by strong arms that shot forward to help them.

"Nance! Nance!" she sobbed, "they are coming! they are coming! Rupert has sent them, after all. He has saved us, as he said he would."

Another minute, and the two cramped and wearied little figures were lifted down from their perilous resting-place, and laid gently in the boat, Nance hardly conscious, but Margery trembling with the question she scarcely dared to ask.

"Where is Rupert?" she cried, "He sent you, I know; but where is he now?"

The men, two laborers from the manor farm, looked at each other with troubled eyes, but made no answer. Margery's pitiful glance wandered from one downcast face to the other, as she strove to understand what this silence meant.

"He must have sent you to us," she said, slowly, and as if talking to herself; "else how would you have thought to come?"

"Ay, that he did," answered one of the rowers. "He sent us truly, but he spoke no words to tell his tale. If we had not been a parcel of frightened fools we would have remembered you before."  
He stopped, and Margery looked at him with dazed and startled eyes. As gently as he could he told her how, two hours before, the drowned body of a little fair-haired boy had been swept by the torrent past the windows of the manor farm. Every effort had been made to bring back some spark of life, but it was too late. Struggling alone through the night in the great waters, the child's slight strength had long since given out, and the waves tossed their light burden hither and thither in cruel sport. He had striven with all his might, for his sister's sake, and he had rescued them; for when the little dead body was recognized, all remembered the helpless family in the cottage cut off from any assistance, and a boat was sent out immediately for those who might still be alive. Here they were, just in time, and Margery and her little sister were that day restored safe and well to their mother's arms.

And long years after, when children of her own gathered around her knee, Margery would tell them on All-hallow-eve the story of that dreadful night, and of their brave little uncle Rupert, who with boyish courage had risked and lost his life to save the sisters committed to his care.

**A Mystery Explained.**

One of the most learned and dignified members of the Austin bar got a terrible rebuff from old Uncle Mose last week. The old man had Jim Webster hauled up before justice Gregg for stealing his Spanish chickens. As Jim Webster has political influence he was defended by two prominent lawyers. Uncle Mose was put on the stand, and made out a bad case against Jim Webster, testifying to having found some of the chickens in Jim's possession, and identifying them by the peculiarities of the breed.

One prominent lawyer then undertook to make Uncle Mose weaken on the cross-examination.

"Now, Uncle Mose," said the lawyer, "suppose I was to tell you that I have at home in my yard half a dozen chickens of that identical same breed?"

"What would I say, boss?"

"Yes, what would you say?"

"I would say, boss, dat Jim Webster paid up yer fee with my chickens," and a pensive smile crept around under the old man's ears and met at the back of his head.

In this issue you will see the cut of W. Bell & Co.'s new organ factory, in Guelph, Ontario. The building is constructed of cut stone. The popularity of their melodeons and organs has been such that the orders could not be supplied in their old factory. They still retain the old factory, and every department is occupied. They now employ 170 hands, and we have yet to learn that there is a better melodeon made. We have used one of their instruments for nearly twenty years, and have not heard one that has a better tone to this day, and for music it is as good as a new one. The new styles may be more fashionable, but we are satisfied with our old tried friend.

They construct 15 instruments per day, and orders are in ahead of their capabilities of supplying as rapidly as wanted. This is the result of making a good instrument.

We are in receipt of the Report of the Montreal Horticultural Society and Fruit Growers' Association of the Province of Quebec, for the year 1882. It is a very valuable work, and of great interest, not only to the horticulturists of Quebec, but to every one throughout Canada who is desirous of the improvement of the Dominion. This volume is replete with useful information on planting and fruit growing. It gives brief descriptions, and prefixed to the report there are outlined the northern limits of thirty of the principal species of forest trees, and some particulars are given in regard to their distribution in various sections of the country. The articles on the several departments comprised in the work of the Horticultural Society must be of great value to their readers.

The attention of our readers is called to the advertisement of the Canada Business College. This College has been established in the city of Hamilton over 20 years, and gives a good practical education to young men and ladies.

**Special Notice.**

H. & I. Groff, of Elmira, Ont., took 150 prizes at the leading fairs throughout the Dominion, altogether amounting to the handsome sum of \$2,300. They have also taken 2 gold medals, 4 silver medals, a silver cup worth \$90, and two sets of Canada Short Horn Herd Books. They have made some very satisfactory sales, as follows: 2 heifers and two calves for \$1,000, to Mr. Henry Longworth, P. E. Island. There is at present a very great demand for their young stock, as they have taken more prizes for Durhams, Grades, and fat cattle than all the other exhibitors combined, which may be claimed as a great honor and credit to the County of Waterloo. They took at the Provincial Exhibition, held at Kingston, six Dominion medals, viz., gold medal for the best herd of Durhams, gold medal for the best herd of fat cattle, silver medal for the best herd of grades, silver medal for the best female Durham, any age, silver medal for the best fat Durham steer, silver medal for the best 5 Durham females, any age, bred and owned by the exhibitor.

**The \$100 Rebus.**

We have had numerous attempts at the solution of the \$100 rebus, on page 273 in the Oct. No., but not one correct answer. The nearest approach to a correct solution is the following:

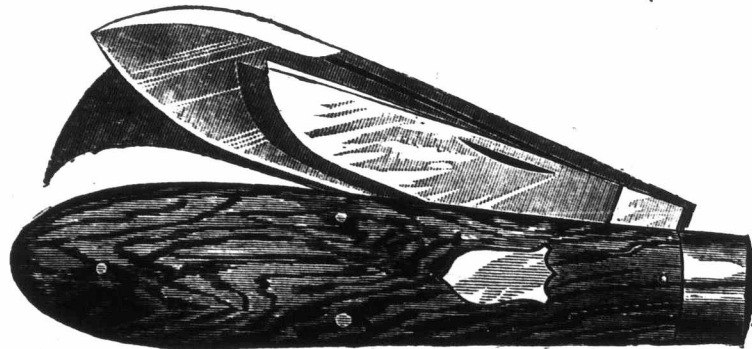
In the illustrated rebus I see the figure of "Mercy," in whose helmet is the "Star of Life;" in her right hand she holds the "Sceptre of Truth," which is "God's own Word;" in her left she holds the "Lamp of Love," which is to be a "Light to our feet," and beneath are the scales of "Justice," by which we all are to be weighed, and happy are those who are not found wanting. Such a rebus is profitable to both high and low, rich and poor.

M. THORNICROFT, Wanstead P. O.

As it is only half right, we will only award it half of the prize that was offered for the answer. The correct answer is: "Support Light, Truth and Justice." We cannot conceive why no one could solve it, but we trust each one of you will endeavor to carry out the principle. We do not purpose retaining the \$100, but to devote the remainder of it to Uncle Tom's Department during this and the coming year. We now offer \$5 to any one that will send us in a better rebus, original. This offer is open until Christmas.

**Common Sense Knife.**

We have much pleasure in presenting our nephews with a representation of the "Common Sense Knife," now given as a premium to any boy who sends in 3 new subscribers to the FARMER'S ADVOCATE for 1883. Remember, my young nephews, that all whom you get to subscribe now receive



Nov. and Dec. of this year free. I have seen the knife and it is a real splendid one; contains pruning blade, jack-knife blade and budding blade only think, three blades! No doubt you have each, as well as your father, wanted just such a knife many a time. The blades, the makers say, are carefully forged from razor steel, file tested and replaced free if found soft or flawy. Mr. Weld buys these knives in large numbers, direct from the manufacturers, and this accounts for his ability to offer to you this most excellent and useful premium for so little trouble. The knife, as far as Uncle Tom is aware of, cannot be procured in Canada.

Will you not each try and win a knife?

**Stock Notes.**

The attention of breeders is drawn to new advertisements of stock sales, &c., which appear in this issue.

A. B., of Ottawa, Ont., wants a Yorkshire boar. Owners of this strain would do well to use our advertising columns.

Mr. Bennison, of the Sutton Farm, Norton, Eng., has sold ten Leicester lambs, his own breeding, which fetched the high figure of £34 8s. Some wethers brought 65s. each.

Geary Bros., of Bil-Bro' stock farm, London, Ont., have just received another large importation of Polled cattle, and have purchased ninety head in Great Britain, which are expected shortly.

The sale of Jerseys belonging to Messrs. Smoke and Cook took place as announced on the 26th ult., and the attendance was good. The prices realized were considered satisfactory, and Messrs. V. E. Fuller, of Hamilton, Brown, of Simcoe, and Blaikie, of Toronto, were the leading purchasers.

John Jackson, of Abingdon, Ont., has added seven fine imported Southdown sheep to the Woodside flock, including a shearing ram and ram lamb from J. J. Coleman, of Norwich, England, and five shearing ewes from the celebrated flock of H. Webb, Cambridgeshire, England.

At the Carmarthen (Wales) Agricultural Show on 15th Sept., the Earl of Cawdor's black bull Duke of Connaught, which was first prizetaker at the Royal and the West of England shows this year, was beaten in the aged class by a more perfect animal belonging to Mrs. Currie, a local tenant farmer.

Mr. J. H. Barneby, of Sutley, England, on the 21st Sept., disposed of, by auction, a large draft of his celebrated herd of Hereford cattle, together with 200 Shropshire Down sheep. The sale was well attended and prices ruled high. The principal purchasers were from this side of the Atlantic, who mustered in strong force.

Simon Beattie, the well known importer of Toronto, Ont., and Annan, Scotland, brought out this fall between 200 and 300 sheep, principally Shropshires, Southdowns and Oxford-downs, also several Polled Aberdeen cattle. He reports great loss to importers in shipping stock lately. One importer lost 15 out of 17 horses, whilst Mr. B. lost 30 sheep during the passage. He gives great praise to the Dominion Line of steamships for their superior accommodation.

On the 14th Sept. last, 47 shire-breed horses on the estate of Mr. Waltham, near Wisbeach, Eng., were sold. A large gathering of agriculturists and breeders of this class of horses was present. Fillies averaged 100 guineas each, the highest being 150, given by Mr. Peter Robinson, of Esher farm.

Yearling colts averaged the same sum though 200 guineas was given for one, and another was bought by Mr. J. Howard, M. P., for 145 guineas. The yearling entire colts included one sold to Mr. Sewell, of Essex, for 270 guineas, and the same sum was given for a noted stallion, Lincolnshire. The total of the sale was over £4,300, an average of over £100 each.

The well-known herd of pure-bred Polled Aberdeen, or Angus cattle, belonging to Sir William Forbes, of Fintray, was disposed of at Aberdeen, on 27th Sept. Twenty-one animals comprised the lot, which had been selected from the best herds in

the country. Mr. Wilken Alford bought one-third of the herd, and several of the best animals will find their way to Canada and the States, to enrich the herds there. The ten-year-old cow, Flower of the Nile, brought 100 guineas, the four-year-old, Evelyn of Fintray, 76 guineas, and the yearling heifer, Lucy Eighth of Fintray, 71 guineas. For 16 cows and heifers an average of 61 guineas was obtained. The whole sale realised £1,008, or an average of £50 per head.

Messrs. Preece & Son, the well-known auctioneers of Shrewsbury, held their annual sale of Shropshire rams and ewes, from the flocks of noted breeders, in Shrewsbury, Smithfield, on 10th ult., when there was a good attendance of purchasers from all parts of the country. The average for the Earl of Shrewsbury's rams was about 14 gs. After these came a lot from Mr. J. Bowen Jones, which ran from 8 to 13 gs. The lot sent by Mr. Thomas, of The Buildings, Baschurch, averaged about 10 gs.; those sent by Mr. Ward, of Shrawardine Castle, averaged from 8 to 12 gs.; Mr. Bromley's Felton Butler, from 7 to 15 gs.; Mr. Holder's Bays-ton Hill, 7 to 12 gs. Of breeding ewes there was an excellent supply, the prices of which were very satisfactory.

SHROPSHIRE SHEEP SALES.—The whole of the flock belonging to Mr. Thomas Nock passed under the hammer at Sutton Maddock, near Shifnal. The averages are as follows: Rams, thirty-three, averaged £14 10s. 6d.; ram lambs, forty, £8 15s. 4d.; ewes, 225, £6 18s. 6d.; ewe lambs, seventy, £4 0s. 7d. The sale of the Shrawardine flock, belonging to Messrs. Crane and Tanner, took place on Sept. 12th, Mr. Mansell disposing of the rams and Mr. Lythall of the ewes. The thirty-one rams averaged £16 18s. 9d. Mr. T. Horrocks Miller, the purchaser of the No. 1 ram at 110 guineas, was also the purchaser of No. 22 ram at Montford, at 55 guineas, and a pen of ewes at 10½ guineas.

The first annual Fall Cattle Fair of the township of Zone will be held in Thamesville on 15th November, and will be open to all parties wishing to dispose of stock.

James Fullerton, of Cook's Creek, Man., recently sold to a Winnipeg butcher a six month's calf, which weighed 400 lbs. dressed, and has bargained to supply 15 or 20 more of the same.

F. Ratchford Starr, of Echo Farm, Litchfield, Conn., has presented the Jersey bull, Litchfield 15th, No. 5802, to the Province of Nova Scotia, his native Province, and the bull is in charge of the Central Board of Agriculture.

H. Sorbey, of Gourock, Ont., writes: "I have just returned home from showing Cotswold sheep at Peoria and St. Louis, where I was successful in taking a large number of prizes, and also in selling 30 sheep at prices up to \$15 each."

The Dominion Cattle Company, limited, has been incorporated with a capital of \$800,000. The promoters are Messrs. W. B. Ives, Hon. H. M. Cochran, Hon. A. W. Oglivie, R. H. Pope, Hugh Ryan, of Perth, and J. P. Wiser, of Prescott.

Two polled Angus two-year-old heifers—Queen of the May and Queen Mab, Fairy Queen tribe—and a number of Shropshire Down sheep, have been despatched for Sir Charles Tupper, Canada, to his farm of St. Andrew's, New Brunswick. The Shropshire sheep are bred by Mr. Ferguson, Kinnochtry, from the Earl of Strathmore's flock. Sir Charles wishes to stock his farm with horses, cattle and sheep from Kinnochtry.

T. & A. B. Snider, of German Mills, Ont., have lately sold 2 year old half-bred Percherons to J. B. Gibbons, and a 1 year old filly to Henry Cormlu. The Messrs. Snider were very successful prize-takers at the leading exhibitions, taking two silver medals, and report a good demand for young stallions. They add that their four line card in F. A. has brought them more customers for stock than any advertisement they have yet made.

Hon. Jos. Cauchon, ex-Solicitor-Gen'l for Canada, and the present Governor of Manitoba, has taken great interest in the improvement of stock in this Province. Especially is he entitled to great credit for the active interest he has shown in connection with the draft horses of that section, so necessary to a wheat growing country. Recognizing the superiority of the Percheron race, he is introducing them extensively on his large estates for breeding purposes. In pursuance of this object, he several times the past year visited the great importing and breeding establishment of M. W. Dunham, at Wayne, Ill., where he has purchased a number of lots of stock.

SALE OF SOUTHDOWN SHEEP.—A celebrated flock of Southdown sheep, at Old Erringham, in Essex, were sold recently, in consequence of the owner giving up breeding. Fifteen years ago he bought the stock by valuation at three guineas a head for ewes and two guineas a head for lambs. For the 1,206 head sold on Tuesday, £3,370, or an average within a fraction of £2 16s., was realized; 688 ewes sold at from 86s. to 54s a head; and 500 lambs at 53s. to 30s.; and 18 tups at £5 15s. 6d. to £3. The prices are the highest ever recorded at a large sale. Mr. Clark, agent for the Duke of Richmond, was prepared to purchase fifty ewes for a farm which will shortly come into hand, the tenant being about to leave, but the figures ruled so high that his grace's steward, as well as many others, had to leave unhanded.

SALES OF LINCOLN SHEEP.—At Lincoln Fair, Sept. 15, Mr. Grimes, of Hurnston, sold 28 Lincoln rams. One was bought by Mr. Cartwright, Methersingham, for 40 guineas; the average of the flock was £16 7s. 6d. The late Mr. Francis Marshall's flock (23) averaged £13 14s. No 12 was sold to Mr. Howard for 20 guineas. Mr. Dickinson, of Brantston, a small flock, averaged £11 14s. 6d.; the highest price was 17 guineas. Mr. Thomas Cartwright, of Dunstan Pillar and Blakney, averaged 11 guineas, 16 guineas being the highest price ram. The Ingleby rams, the property of Mr. Edward Paddock, were sold (59) at an average of £10 0s. 8d. Mr. Toryntee gave 18 guineas for No. 6. At Caistor fair, the Pantan rams were sold, the property of Mr. Henry Dudding, of Riby Grove, near Grimby. These rams have over a century of pedigree, and in 1874 made an average of £37 10s. 6d. for 70 rams, the highest figure for an individual sheep being 200 guineas, sold to Mr. Thos. Russell, of Auckland, New Zealand. On Saturday, 31st, rams averaged nearly 15 guineas; 34 guineas was the highest price, for a grand two-shear ram.

American Shorthorn Breeders.

The Board of Directors of the American Shorthorn Breeders' Association met in Chicago, U. S. A., on the 25th ult, to transact the business of the Association prior to the meeting of the stockholders, which convenes in the city on 22nd inst. The report of the committee on By-laws was adopted. The committee appointed to confer with the proprietors of the several herd books of the United States and Canada, with a view of securing a consolidation of the different books into one publication, report that they had received definite propositions from several proprietors. They had not received any unconditional offers from Messrs. Allen and Briesly, of the American Shorthorn Herd Book, nor from the Canadian Association. Col. Harris moved to accept the propositions of the proprietors of the Ohio and Kentucky Shorthorn record, and to discharge the committee from the consideration of the American and Canadian herd books. The report was finally laid on the table. Judge T. C. Jonas, of Ohio; T. C. Hammond, of Indiana and J. H. Pickrell, of Illinois, were elected as an Executive Committee. The Secretary was instructed to call for the payment of subscribed stock at the stockholders meeting of Nov. 22, and to notify the stockholders that at their meeting a proposition would be submitted to increase the stock of the Association to \$15,000. The meeting having decided to publish a Herd Book, much time was spent in discussion of the points requisite to registration therein. An effort was made to fix the standard at six crosses in this country to make any animal eligible for record, whereas under existing rules, it is simply necessary to trace the animals pedigree from English Shorthorn stock. The old code of rules, with some immaterial changes, was finally adopted. This Herd Book will be under the direct control of the breeders themselves. S. F. Lockridge is Secretary.

Commercial.

THE FARMER'S ADVOCATE OFFICE, London, Ont., Nov. 1, 1882.

The month of October just closed has been one of the most delightful and favorable for all kinds of farm work that has ever been experienced in this country. Notwithstanding that fall wheat was put in so late, wherever there has been moisture enough to bring the wheat up, it is now looking well, and in good shape for the winter.

WHEAT

Has ruled very quiet, and the movement has been very light compared with other years. The Montreal journals have been teaching the farmers of this country a lecture on the subject of "hoarding grain," and are appealing to the farmers of the Dominion to abandon the policy of holding back their crops in the expectation of obtaining higher prices.

The Herald reminds them: "That it is not alone the probable condition of prices at a later period in the season that the farmer ought to study; he must calculate the cost involved in storing his produce for six or eight months in order to ascertain the advantage or otherwise of such a course. He has to allow in his calculation a considerable margin for shrinkage of the grain; the cost of insurance, if he be a prudent man; and the loss of interest on the money he would be able to employ if his produce were at once marketed." "Taking these items into consideration," the Herald is of opinion "he will discover that an advance in the price of grain six or eight months hence will not more than compensate him for the risk and expense consequent on the storage; and if he carefully studies the present condition of the markets, the relation of supply to the demand, the conclusion will be irresistible that not only is he not justified in expecting a sufficient advance in values to atone for the delay in marketing produce, but that he will do very well if six months hence he obtains as high a price as is offered to-day." How far these observations are applicable to American farmers may be left to their own intelligence and to their own lively sense of self-interest to decide.

With heavy stocks in the principal English ports, there seems to be a disposition on the part of buyers there to confine their operations strictly to the wants of the moment. Advices from the West say "receipts are large and shipments small with no speculative demand." There is one good feature evinced by the trade this fall, and that is a growing feeling against corners and combinations.

FEAS.

The shipments have been very light as yet, and will not be excessive for some time, and if prices are kept reasonable, the demand will be quite equal to the supply.

CORN.

Another month of fine, dry weather has put this crop in fine condition for the winter, and will be an important adjunct to the farmer's stock of grain for feeding purposes.

CLOVER SEED.

As yet we cannot say much about the prospects of this crop. Reports are somewhat conflicting, and when there is any prospect of a shortage reports and estimates are always overdrawn. So much depends on the foreign demand, and the price at which this demand can be supplied, that it is as yet uncertain at what price clover seed will move.

HOPS.

Commenting on the situation on the hop market, the Montreal Gazette says:

"It is generally understood that with the exception of one firm, brewers in this city have laid in no supplies of hops worth mentioning, and owing to prices advancing upon them so rapidly, they have decided to restrict their operations to supplying immediate wants. As we have previously stated, there is a natural inclination to take the situation quiet and easy, but whenever sales occur they show a strong market. Yesterday one of the leading brewers of the city purchased a lot of 40 bales at 75c. per lb., which is the highest price yet realized for a round lot of hops in this market. In New York the market is again very excited, cable bids having been received there from London of £24 per cwt. for choice American, which has completely astounded the trade on this side of the Atlantic. The fact is now clear enough that England is even shorter of supplies than has been represented, and at any price she must have her hops or she cannot have her beer. The sale of a large lot of choice quality is reported in New York at 85c. per lb., and the excitement in the trade there is unprecedented."

APPLES.

There seems to be every prospect of a general scarcity of good apples, and prices are very firm. Some of the winter apples coming forward, chiefly Greenings, are found to be badly specked, and are consequently not fit to store away for long keeping. Prices for this class of fruit will therefore have to be shaded from those of other good winter varieties. Sales were made recently of a lot of 125 bbls. choice Baltimore at \$4.25, and bbls. good winter assortments at \$4. The sale is also reported of a car load at \$3.87 1/2, and a lot of 60 bbls. fall fruit at \$2.50. A fair amount of winter stock is being shipped to Great Britain, and a considerable quantity is being put into store. The total shipments of apples from Montreal to the United Kingdom from the commencement of the season to October 21st, was 23,173 bbls; from Boston, 35,562 bbls.; and from New York, 51,249 bbls., making a total of 109,984 bbls. shipped from these three ports this season. Engagements are reported by steamer from Montreal to Liverpool and Glasgow at 3s. per bbl.

CHEESE.

The market, after ruling very dull for nearly two months, has again revived somewhat. Sales have been pretty free the past week, ranging all the way from 9c. to 10c. for August cheese, and 10c. to 12c. for Sept. and Oct. Those who hold off for a few weeks longer may make 1/4 or 1/2 cent more, but even this will hardly repay the risk and uncertainty.

BUTTER.

The local as well as shipping demand is good for strictly fine goods; other sorts are not much wanted. There has been some choice lots taken by Boston and New York buyers for city trade at good prices.

FARMERS' MARKET.

LONDON, ONT., Nov. 3rd, 1882.

Table with 2 columns: Item and Price. Items include Red wheat, Deihl, Treadwell, Clawson, Corn, Oats, Barley, Poultry (Dressed), Chickens, Ducks, Geese, Turkeys, Poultry (Undressed), Live Stock, Milk cows, Live hogs, Eggs, Potatoes, Apples, Tomatoes, Roll butter, Tub, Crock, Cheese, Onions, Honey, Tallow, Lard, Wool, Clover seed, Timothy seed, Hay.

FLOUR AND MILL FEED.		
	Wholesale	Retail.
Pastry Flour.....	\$2 75	\$3 00
Family .....	2 25	2 50
Oatmeal, fine .....	2 75	3 00
"    coarse.....	3 00	3 00
Cornmeal .....	2 25	2 50

TORONTO, ONT., Nov. 3rd.		
Wheat, fall No. 1 \$ 95 to \$ 99	Apples, bri.....	1 50 to 2 25
Wheat, spring 1 00 to 1 00	Tomatoes, bu.....	0 50 to 0 75
Barley.....	Beans, bu.....	1 00 to 0 60
Oats.....	Onions, bu.....	1 00 to 0 00
Peas.....	Chickens, pair.....	0 40 to 0 60
Flour.....	Fowls, pair.....	0 50 to 0 70
Rye.....	Ducks, brace.....	0 50 to 0 70
Beef, hind qrs. 7 50 to 9 00	Geese.....	0 0 to 0 0
Beef, fore qrs. 6 50 to 7 00	Turkeys.....	1 25 to 1 50
Mutton.....	Butter.....	0 22 to 0 25
Lamb.....	Butter, dairy.....	0 18 to 0 21
Veal.....	Eggs, fresh.....	0 23 to 0 25
Hogs, per 100 lb 8 00 to 8 25	Wool, per lb.....	0 18 to 0 20
Potatoes, bag.. 0 70 to 0 75	Hay.....	12 00 to 16 00
	Straw.....	7 50 to 12 50

GRAIN AND PROVISIONS.

MONTREAL, Nov. 3.—The local grain market is quiet and without change to-day. No business reported. Canada white winter was quoted to-day at \$1 00 to \$1 02 per bushel, and Canada red at about the same figures. Toledo would cost about \$1 09; white Michigan about \$1 10 to lay down, but its place is taken by Canada white winter. Corn is about 90c per bushel. Oats, 35c per bushel. Peas, 90c to 91c per bushel. Barley, 60c to 70c per bushel. Rye, 63c to 65c per bushel. Flour is dull and without tone. Little business can be done. We are now within a fortnight of the close of navigation and it does not look as if prices were going to vary very much. The receipts are fair, and no doubt under light demands they will meet the requirements of the trade. Superior offered at \$5, and extra at \$4 90, at which prices sales are reported. On Change to-day 250 barrels superior sold at \$5 05, 125 bbls extra at \$4 92, 250 bbls do. at \$4 90, 250 Ontario bags (super-fine) \$2 20, with bags. Quotations:—Superior extra, \$5 00 to \$5 05; extra superfine, \$4 90; fancy nominal; spring extra, \$4 80 to \$4 85; superfine, \$4 55 to \$4 65; strong bakers', Canadian, \$6 75 to \$6 25; do American, \$6 75 to \$7 25; fine, \$3 80 to \$4 00; middlings, \$3 60 to \$3 90; Pollards, \$3 40 to \$3 60; Ontario bags, med., \$2 40 to \$2 50; do., spring extra, \$2 30 to \$2 40; do., superfine, \$2 20 to \$2 25; city bags, delivered \$3 30. Ontario oatmeal sells at \$6 to \$6 10 per bbl. Cornmeal is quiet.

PROVISIONS.—Butter, Western, 18c to 20c. Eastern Township, 20c to 22c; B. & M., 30c to 32c; Creamery, 23c to 26c. Cheese, 9c to 11c. Pork, mess, \$27 00 to \$27 50. Lard, 15c to 16c. Bacon, 14c to 15c; Hams, 15c to 17c.

Liverpool, Nov. 3.—Flour, 12s; spring wheat, 8s 4d to 8s 10d; red winter, 8s 4d; white, 9s, club, 9s; corn 7s 6d; oats, 5s 6d; barley, 5s 6d; peas 7s 4d; pork, 102s 6d; lard, 62s; bacon, 72s; tallow, 44s 9d.

DAIRY MARKET.

Liverpool, Eng., Nov. 2.—Per cable: Cheese, 59s 6d.

WOODSTOCK CHEESE MARKET.

Nov. 1.—The offerings to-day were 13,340 boxes; 430 August make, 10,460 September and balance of season, and 7,450 October and balance of season. The sales reported were 3,400 boxes of September and balance of season at 12c.

LIVE-STOCK MARKETS

BRITISH MARKETS, PER CABLE.

Liverpool, Oct. 20, 1882.—Supplies of States cattle have been moderate; prime stock sold quickly, lower grades dull. Prevailing prices are as follows:

Finest steers.....	Cents @ lb.	16 1/2
Good steers.....		15 1/2
Medium steers.....		14 1/2
Inferior and bulls.....		9@11

[These prices are for estimated dead weight; offal is not reckoned.]

The sheep market has been rather strong and prices remain firm as follows:

Best long woolled.....	Cents @ lb.	15@18
Seconds.....		13 1/2@15
Merinos.....		11@12 1/2
Inferior and rams.....		9@10 1/2

[These prices are for estimated dead weight; offal is not reckoned.]

GLASGOW—PER CABLE.

Glasgow, Oct. 30, 1882.—The general market has been less active, but values remain without quotable change. Best Canadian cattle are firm; inferior dull.

Present prices for cattle, and sheep (dressed weight sinking the offal) are as follows:

Top Canadian steers.....	Cents @ lb.	16 @ 17
Canadian sheep.....		17 @ 18
American Sheep.....		16 @ 17

Montreal, Oct. 30th.—There were about 450 head of beef cattle offered on the market this forenoon; only a small portion of them could be called good, while a large percentage of them were so lean in flesh as to be hardly fit to kill at present. The best heifers and steers sold at 4 1/2c. to 5c. per lb., the latter price having been paid by W. Kenwood for a pair of fine heifers which weighed 1,800 lbs. Fair conditioned steers and large fat cows sold at from 4 1/2c. to 4 3/4c. per lb., or from \$40 to \$55 each. Common dry cows in pretty good condition, sold at \$30 to \$35 each, or about 3 1/2c. per lb., and smallish dry cows not overburdened with fat sold at about \$20 each, more or less, or 2 1/2c. per lb. Pretty good lambs were sold in lots at from \$3.50 to \$3.75 per head and common lambs at from \$2.50 to \$3 each, while some of the poorer ones had to be sold at still lower figures. Fat hogs are rather plentiful and prices are declining. A carload of fairish hogs was sold to-day at 7 1/2c. per lb. and a few pretty good porkers at 7 1/4c. per lb.

NEW ADVERTISEMENTS.

AUCTION SALE  
—OF—  
SHORTHORN CATTLE

MR. ROBERT MILLER, of Pickering P. O., will sell by Public Auction, near Pickering Station, Grand Trunk Railway, on

Tuesday, November 14th, 1882,

the following valuable property:  
30 Head of Shorthorn Cows, Heifers and Young Bulls, 25 Cotswold Sheep, also his entire stock of Working Horses, Farm Implements, &c., &c.

As Mr. Miller is leaving for Manitoba, the sale will be without reserve. 203

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EVAPORATOR

The TOPPING PORTABLE EVAPORATOR will dry all kinds of fruits and vegetables. Four different sizes with heater attached, all ready for use. They will pay for themselves in from one to two weeks. Here is proof:—Say we take a No. 2 Dryer, that dries 10 bushels per day; in 6 days, 7 pounds to the bushel on the average, is 420 pounds per week. At the present prices, 12 1/2 cents per pound, this is \$52.50, which more than pays for the dryer the first week in use. Please figure for yourself.

Slicer, Corer, Apple, Peach and Potato Parers.

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Bulbs for Fall Planting.

Choice Hyacinths, named, 20 cts each.  
Choice Hyacinths, mixed, \$1.25 doz.  
Crocus, 15c. per doz., choice mixture.  
Tulips, 50c. per dozen, choice mixture.  
Snowdrops, 25c. to 50c. per dozen.  
Narcissus, varieties, 5c. to 15c. each.

All sent post-paid on receipt of price.

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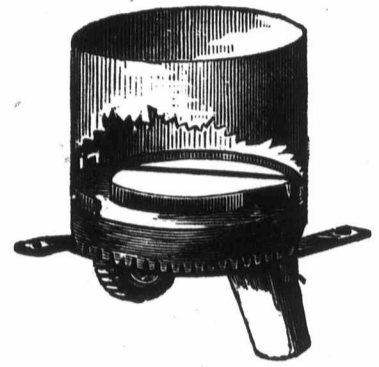
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We have young stock for sale by Imported Boars and out of Imported Sows.  
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**OFFICES: 14 Adelaide Street East, TORONTO.**

This Company takes particulars of Farms and other properties from the owners, and advertises very largely, both here and in the Old Country, and has become the recognized medium for the disposal of all kinds of Real Estate. They sell only on commission, and do not hold any real estate of their own.

Applications are taken from leading farmers throughout this Province, who need assistance on their farms, and are filled by young men from the Old Country, upon the following terms, viz.:  
The pupils introduced are usually well-conducted young men of the upper and middle class, who desire to learn thoroughly the work of a Canadian farm, with a view of ultimately commencing for themselves. The conditions under which the pupil is to be received are, that he shall be practically taught farming, being under the orders and control of the farmer, and assist with the work to the best of his ability in the same way as the farmer and his sons are accustomed to do; but at first, while he is strange to the life, consideration is to be shown as to the amount of work required from him. He is to live and be treated precisely as one of the farmer's family; is to receive board, lodging, and such washing as is usual with the farmer's sons; and to have a bed and bedroom to himself, with washing accommodation in it. The contract entered into is usually for one year and specifies that the farmer shall receive a cash bonus of a certain amount, and shall pay the pupil monthly at a certain rate per month. After the expiration of the first twelve months, the farmer and pupil may mutually agree as to future engagements. The bonus to the farmer is to be paid at the expiration of such probationary time (usually one month) as will enable both the farmer and pupil mutually to desire that the contract shall be entered into; this wish to complete the contract must be expressed in writing by both parties to the Canadian Office, who will then see that the contract is signed and the money paid. A copy of the contract, to be signed by the farmer, will be furnished with his application.

Parties desiring to invest their money in any business undertakings, or requiring partners, either silent or active, with capital, or wishing to dispose of their interest in established business, will do well to communicate with the Company, as it is receiving constant enquiry from capitalists and others seeking investments for their means.

The following farms amongst others are for sale by the Company:—

**BRANT COUNTY—Onondaga Township.**  
742—A fine farm of 266 acres; 190 cleared, and nearly free from stumps; 80 acres fine hardwood bush; productive soil, sandy to clay loam; never failing creek; well fenced with board, rails and stumps. Solid rough-cast house; 1 1/2 stories; 8 or 9 rooms; 3 good frame barns, and other buildings; 2 orchards, old and young, both bearing; close to school, church and post office; railway station three miles; Caledonia, seven miles. Price, \$13,500; \$5,000 cash, balance to suit; interest, 6%.

**BRUCE COUNTY—Culross Township.**  
2,047—The Moscow Farm; 300 acres; 200 cleared; 20 meadow; rich clay loam soil; nicely rolling; well fenced; creek and springs, with well at house. Elegant frame dwelling, 10 rooms; hired man's house; frame barn, drive house and shed; 6 acres orchard. School, 1 1/2 miles; post office on the farm; Teeswater, 5 miles. Price, \$11,500; half down, balance to suit; interest, 6%.

**GREY COUNTY—St. Vincent Township.**  
2,071—Valuable farm of 150 acres; 70 cleared; 20 meadow; 50 free from stumps; 80 hardwood bush; soil, sandy loam; good wells and fences; log dwelling; frame barn. Meaford, 1 mile. Price, \$6,000; one-third down, balance to suit, at 6 1/2%. The timber will pay for the farm.

**HALTON COUNTY—Trafalgar Township.**  
563—The Pettit Farm of 200 acres; 160 cleared; 15 rich flats, beside the never-falling 16-mile creek; 40 wooded with beech, maple, &c.; soil, clay loam, not heavy; first-class fences; large two-story brick dwelling; also frame house, and two barns, drive house, workshop, pigery, &c.; two first-class orchards; church and school, 1/2 of a mile; post office, 1 1/2 miles; Oakville, 4 miles. Price, \$15,000; one-third cash, balance to suit, with interest at 6 1/2%.

**LINCOLN COUNTY—Grimsby Township.**  
2,074—Excellent farm of 106 acres; 102 cleared and free from stumps; soil, partly clay loam and partly deep black loam; three springs; well and cistern. Handsome stone two-story house; large frame barn, nearly new; also old barn, with good drive house, stable, sheds, &c.; two orchards of six acres, all bearing. School, 1/2 mile; church, two miles; post and telegraph office and Grimsby station, 2 1/2 miles. Price, \$9,000; one-third down, balance on easy terms, at 6% interest.

**NORFOLK COUNTY—Middleton Township.**  
294—The Ronson Farm, 240 acres; 150 acres cleared, 90 wooded with beech, maple, &c.; soil partly clay loam and partly sandy loam, all thoroughly underdrained; good fences. Good brick house, 1 1/2 stories; 3 frame barns, on stone foundation, with other outbuildings; all in good repair; large orchard of choice fruit. School and church, 1 1/2 miles; Tilsonburg, 3 miles. Price, \$14,500; \$6,000 cash, balance to suit; interest, 7%.

**MIDDLESEX COUNTY—McGillivray Township.**  
226—A fine farm of 100 acres; 90 cleared and free from stumps; timber, beech, maple, basswood, &c.; well fenced; good clay loam soil; frame 1 1/2 story dwelling; barn and drive-house; small creek and well; splendid orchard; on gravel road. School and church 1/2 of a mile; Clandeboye station, 1 mile. Price, \$8,000; terms to suit, with interest.

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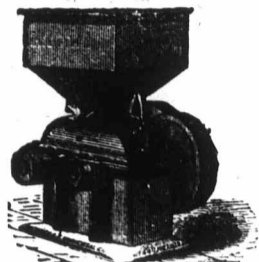
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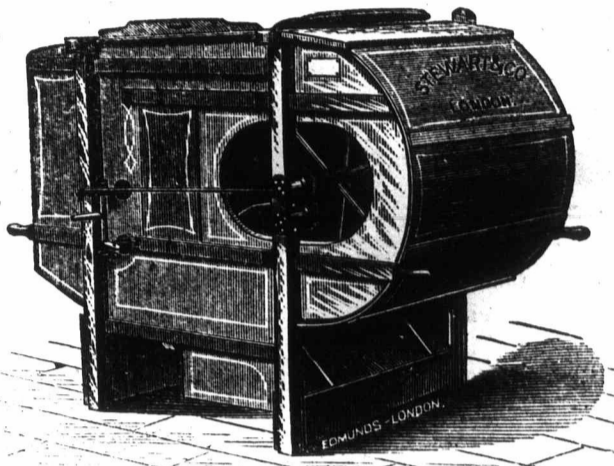
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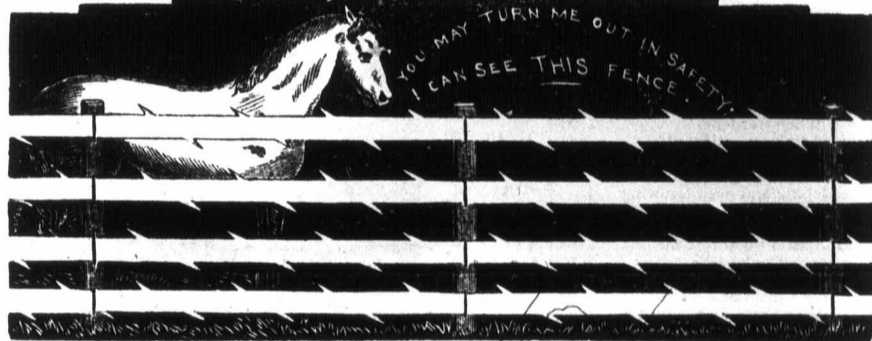
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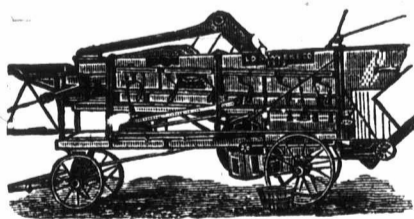
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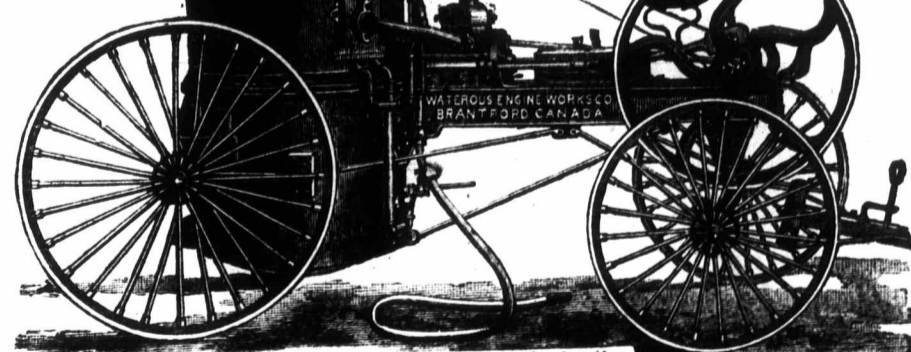
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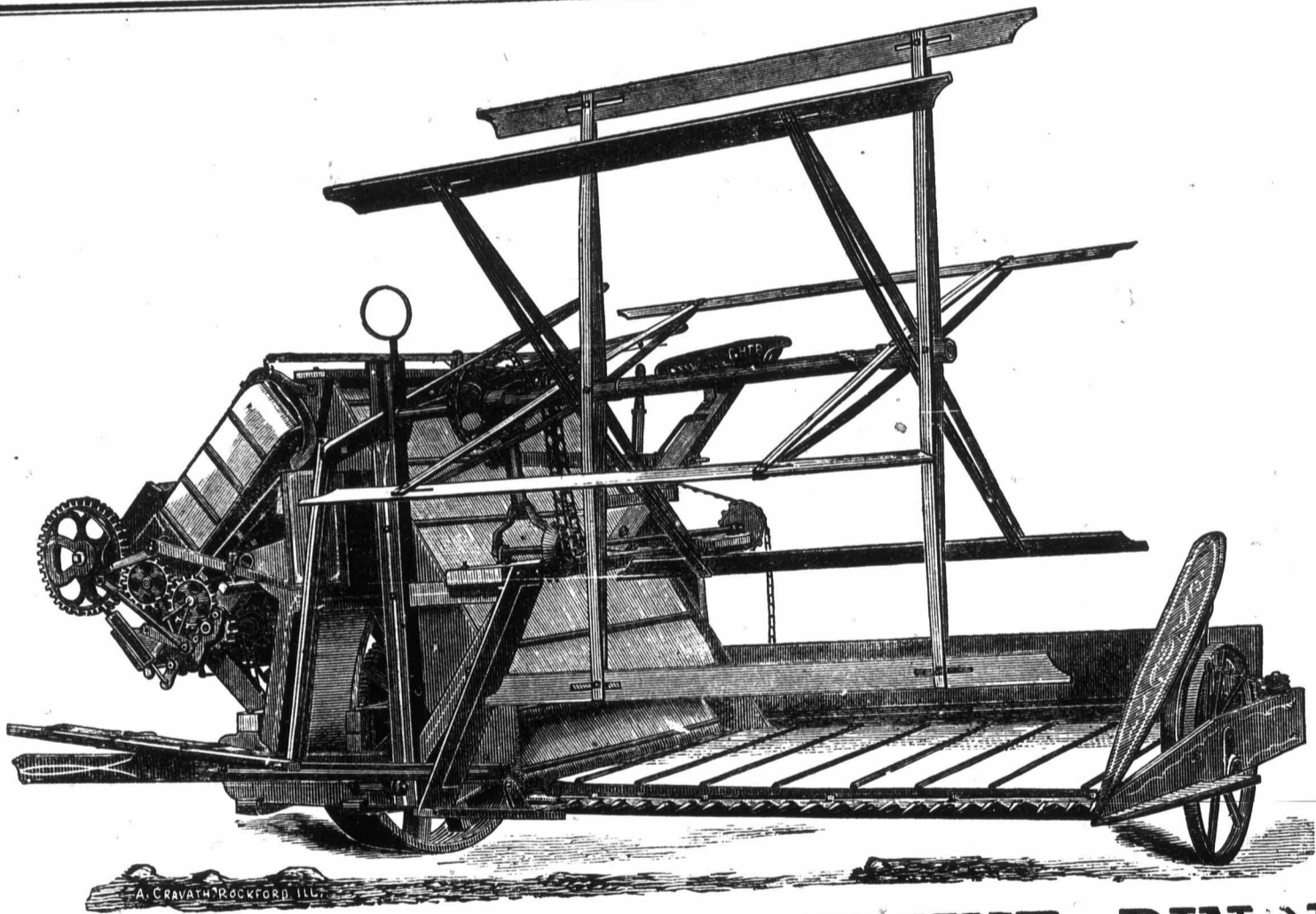
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