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DOMINION CHEMIST
Exp. Farm) Dec 31, 13
F. K. Doherty, Publications
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VOL. XLVII.

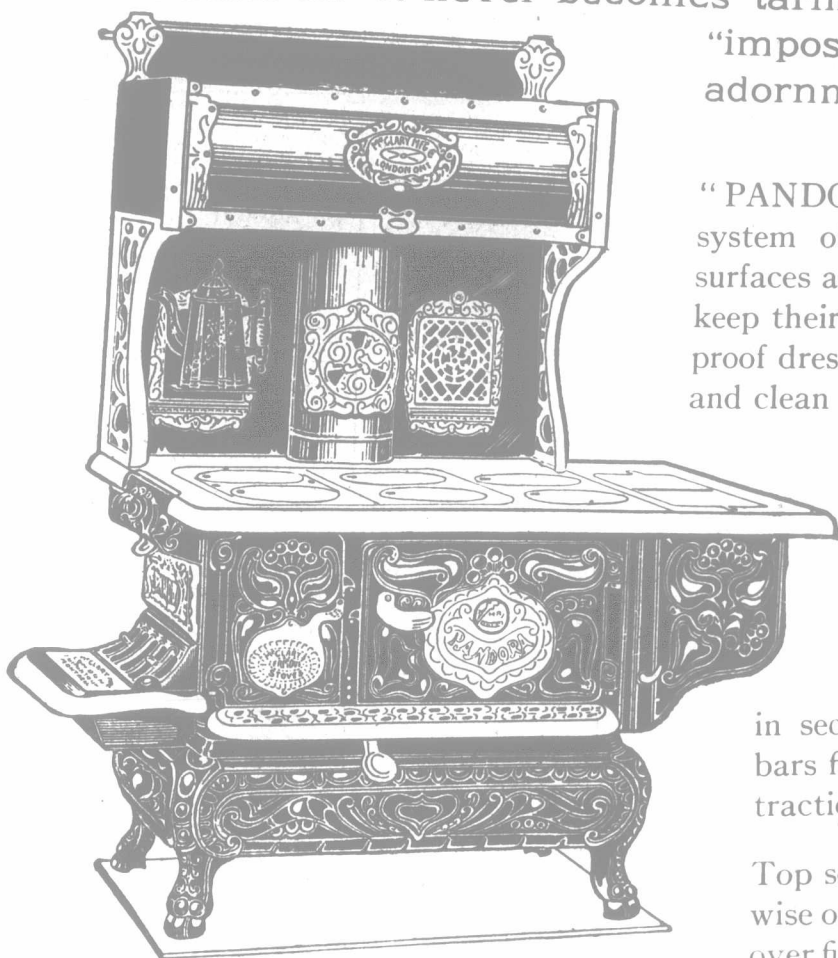
LONDON, ONTARIO, OCTOBER 10, 1912.

No. 1046

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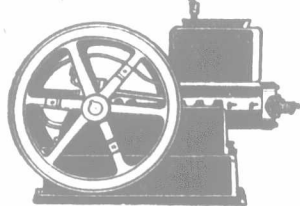
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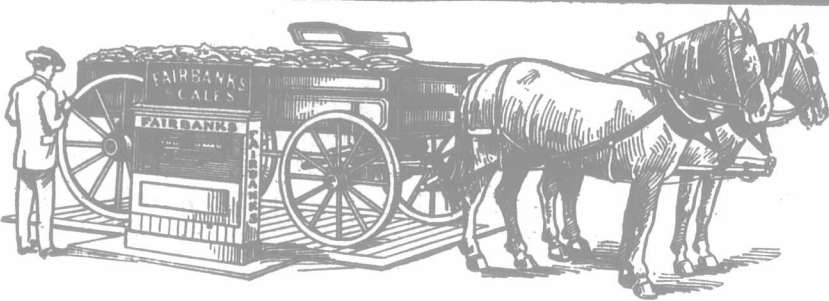
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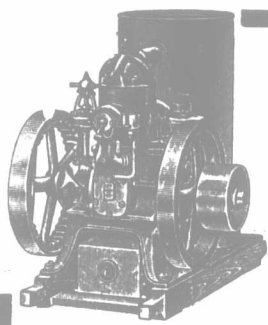
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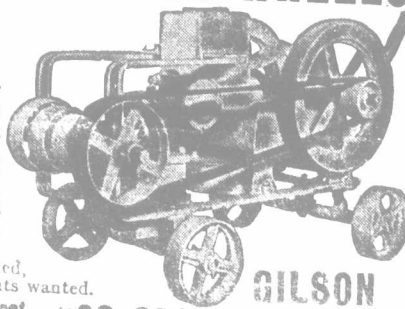
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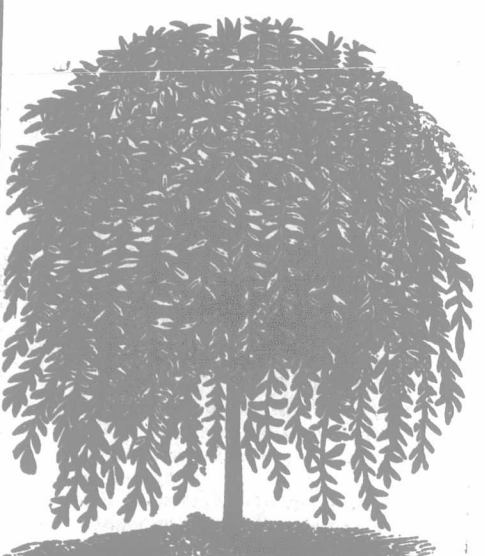
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Vol. XLVII.

LONDON, ONTARIO, OCTOBER 10, 1912.

No. 1046

EDITORIAL.

A folder boosting the National Dairy Show, of Chicago, sets forth that the dairy business in America aggregates over a billion dollars a year.

It is satisfactory to have the letter from President John G. Kent, of the Canadian National Exhibition, asseverating that upon securing the Garrison Common the Directorate were ready and anxious to provide better live-stock stables and a judging arena.

The large cities in the West are asking for boxed apples, remarked an Ontario operator lately returned from a Western trip. The city man without a good place to store fruit wants to buy it in small quantity, he explained, whereas the farmer customer of the smaller places prefers to take home a barrel.

It is queer that the Ontario Hydro-Electric Commission should take such pains to operate its farm-power exhibit so strictly on the quiet. The Farmer's Advocate made special efforts to announce its itinerary in advance, but could secure no definite or final list of places and dates. Even the local demonstration was nearly missed owing to postponement and uncertainty when it would be held, and the spectators present were but a fraction of those who would have been on hand had the affair been properly advertised.

Professional educationists have been apprehensive lest in the attempt to reform education to meet the needs of the times personal culture of the individual should be subordinated to utilitarian or economic ends. Were culture likely to be sacrificed by devoting a measure of attention to gardening, nature study and manual training, the apathy and opposition would be well justified, but experience proves the contrary. Christ was a carpenter, and a large proportion of all the intellectual giants of the ages have been reared in close touch with nature, many of them being trained of hand as well as head. A broad-based, well-balanced education cannot but make for personal culture of the highest order.

Unless Ontario wakes up she is going to be cleaned right out of the Western fruit market, remarked Lewis Jones, an apple buyer of St. Thomas, Ont., to The Farmer's Advocate last week. There was a great kick against last year's fruit from this Province, he said. Our apples are poorly packed, poorly assorted and over-pressed. They seem to bruise more easily, too, than fruit from the Western States. In a recent trip covering fifty Prairie towns and cities, including Winnipeg, Brandon and Regina, he saw only two small lots of Ontario apples. One lot was fair, the other culls. Pacific Coast fruit, on the other hand, is always as perfect as waxwork and reaches the consumer in prime condition. Good culture, thinning and care in picking and packing must account for the result. There must be some exceptions to these strictures on Eastern apples, for several co-operative associations and certain individual growers are sending good fruit to the West, but applying to the general output the criticism is only too true.

What Education Means.

The best definition of education we have ever heard comes directly from the original Latin derivation of the word—e (out of) and duco (I lead). It really signifies a drawing-out or development of the faculties, and the broadest kind of education is that which develops its pupil in the most directions. It is a perversion of the idea of education to assume that it applies only to mental faculties. It applies equally to the manual, the moral and the artistic. It is a common and egregious error to suppose that the great purpose of it is to acquire knowledge. Knowledge is inevitably and very desirably obtained in the course of education, but the acquisition of knowledge is not education, except in so far as it trains the faculties. Knowledge is a good thing to have, but, as Mr. McArthur points out, the Encyclopedia contains far more precise knowledge than any man can ever hope to master. Training is more important than knowledge. It is likewise a mistake to suppose that education and schooling are synonymous terms. A person may be highly schooled but poorly educated; or, on the other hand, may be broadly educated without ever having been near a school. Totally unlettered men may be found who are more broadly and more highly educated than some holders of university degrees. Intellectual crate-feeding does not produce educated men. Not a few who undergo that process emerge little better than pedantic fools. Education means training. All life is an education, and education is far broader than schools.

One-sided Education.

The conception designated in the foregoing paragraph has brought advanced thinkers all over North America to enquire whether a really well-balanced education could be acquired from the study of books alone. Their attention has also been pointed along this same direction of enquiry by the undeniable tendency of our schools to depopulate the rural districts, giving a large proportion of the cleverest pupils an impetus toward professional life, whether inclination ran naturally in that direction or not. Many a first-class farmer, and many a first-class mechanic, but especially, we repeat, many a first-class farmer has been thus spoiled to make a third-class teacher, doctor or lawyer. The stubborn fact must be faced that education as we have known it in the past has engendered a pronounced distaste for manual labor and a preference for sedentary employment. Why?

Consider the case of a farm boy whose parents have always bewailed their hard lot and hoped for a day when they could retire from the farm. The boy himself has doubtless had many a distasteful though wholesome experience of enforced work when he wanted to play. Probably his work was never made interesting by any scientific insight, any sign of progress, or anything except hard, hopeless grinding toil. The real interest of farm work and farm life has never been unfolded to him. He brings to school a barren forbidding impression of farm life.

And what does the school do for him? It introduces him at once into a world of literature and science and books, a world of learning, opening the door to new employment providing he be diligent enough to pursue his studies on through the higher institutions. Scarcely anything he learns relates to the life he leads at home. The examples in the arithmetic are nearly all drawn

from such crafts as carpet-laying, paper-hanging and so on. One would think he could learn to calculate the capacity of cylinders as well by figuring on silos as on tubes, but the text-book authors seem quite innocent of any such happy inspiration. The readers contain far too few lessons referring to plant and animal life or to rural conditions of any kind. The geography is not much better, while the history lays precious little emphasis on agricultural development. So all through; the whole bent of the curriculum is away from the practical affairs of farm life and towards the academic and the sedentary. The tendency is accentuated in most cases by the teacher, who brings to her school an impression that the farm is a good place for all the clever children to get away from if possible. So she encourages the brightest of them to secure an education and become "something better" than a farmer. The seed thus sown falls usually upon all-too-ready ground. Ambition is directed from the farm. And that is where rural depopulation commences. The members of The Farmer's Advocate staff were all educated in country schools and not one of them remembers ever being encouraged by his teacher to educate himself especially for farm life. Whenever appeal was made to ambition it was to get an education and "do better" than his parents. Yet statesmen and philosophers go up and down the country extolling the great occupation of agriculture, maintaining that it is the basis of the country's prosperity, urging the fine opportunities it presents and trying to persuade people to get back to the land. We preach in one direction and educate in another. Surely there is a screw loose somewhere. Either the preaching is humbug or the education irrational. We maintain the system of education is at fault. It is unbalanced because it fails to develop the manual, the pragmatic, the capacity to do things. It is also unbalanced because by direct and indirect means it turns the child's interest and attention away from the best, most wholesome, most interesting occupation of all. It fails to take advantage as it should of his natural interest in growing things. Our education is too bookish in method and therefore too academic in tendency.

Well Balanced Education.

It is at this point that many of our reformers have fallen down. They see the defect and jump to the conclusion that we must remedy it by teaching agriculture in the public schools. We must do nothing of the kind. That has been tried and did not work. It defeated its purpose. We have no business to teach agriculture as a subject in the public schools except in the secondary ones, and no business to attempt by education to draft tots of children wholesale into farming or any other occupation. We must remember first and always that the great purpose of education should be to develop or train the child in character as well as in mental and manual capacity. Education must never be prostituted to purely economic or utilitarian purposes. What we should do is to eliminate the prejudice against agriculture that is created by the present system, giving the child a broad, well-balanced schooling that shall train hands as well as head, inculcate the true dignity of labor and open his eyes incidentally to the real interest and pleasure of scientific agriculture. Then the boy with a natural bent that way will have it developed and

THE FARMERS ADVOCATE AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

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be encouraged to choose farming as a life work. The born mechanic will become a mechanic and the child with a natural predilection for law or medicine or pedagogy may still become a lawyer, a doctor or a teacher. We must exterminate root and branch the idea that farming needs no brains, and permeate the school instead with the idea that it is not the degree but the nature of a man's ability that should determine his life work. The thing to do is to relate rural education more closely and sympathetically to rural life by means of school gardening and nature study and by recasting the text books so as to introduce agricultural examples—and plenty of them—into the arithmetic, articles pertaining to rural life in the readers, more of agriculture into history and geography and drawing and so all through.

We stoutly maintain that so far from subordinating education to economic ends these changes will improve it in the fundamental respects of building character and developing brain power. To conclude, let us repeat a paragraph from a former editorial which was quoted at the time with hearty approval by an American exchange. We can phrase the point no better today.

Our school-teaching has been too abstract for maximum efficiency from a pedagogical standpoint. There is nothing like actualities, and especially living things, to interest a child. Let the juvenile mind study, for instance, the germinating seed, and, as the embryo plant unfolds, the child's mind will unfold with it in the most natural way. Thus shall we educate our youth along lines that will be continued into old age, conducing not only to educational efficiency, but to the training of an alert, informed, masterful people, who will raise the plane of agriculture, the plane of industry, and the plane of character and citizenship.

Wages the Last Charge.

Pursuing the chain of thought suggested by the editorial of September 25th, entitled, "Putting Land Out of Reach," one arrives at an explanation—a partial explanation at least—of the age-long labor problem, which exists alike on good and poor farms; in prosperous and unprosperous communities; on thousand-dollar fruit land and on eighty-dollar soil devoted to general farming. Always the problem is to secure enough help at wages which will leave a profit over cost of production. When the introduction of some new and more remunerative lines of farming makes the business more profitable for a time wages go up a little, help is attracted to the vicinity and the labor problem may be less acute for a time, but finally it resolves itself into the same old stubborn difficulty. Why is this?

Is it not largely because the minute profits advance land values go up also? The increased earning power of an acre is capitalized in the form of enhanced prices for farms, and this entails the necessity of meeting heavier interest or rental charges. The necessity bears most sternly on renters and proprietors working with borrowed capital, but does not exempt owners who are out of debt, for these, too, desire, if possible, to make interest on the nominal values of their holdings. Now, this interest or rental charge is fixed when one buys or rents a farm. It is inexorable; it must be met before profit can be claimed. It cannot be reduced, but, on the other hand, is increased every time additional facilities are purchased to lighten labor, or for any other purpose. The same holds true of taxes and insurance. They are fixed charges and must be met.

Labor cost, on the other hand, is more elastic. One can cut it down for a time by doing more work himself, or by getting more out of his men. It is open to the manager to try each time he engages a man, to get him cheaper, or at least to try to keep this item of expenditure from rising too high. Note that we say it is open to him to try. We do not say he can succeed. When help gets too scarce he either has to pay more or do without. The point we are trying to make is that labor is the one factor in the cost of production that is to a degree elastic. It is the only one not wholly fixed and established by forces outside the manager's annual control. Hence that is where the squeeze comes. The hard-fought proprietor, seeking to preserve a little reward for his own efforts, tries to keep down this factor of cost by hiring cheaply, and because he does so is often called "close" or "mean." We do not for a moment deny that some farmers go at the problem the wrong way. Instead of attempting to make labor accomplish more by labor-saving methods, they make the problem doubly hard for themselves by following out-of-date practices. Grant this, but the fact remains that there is an eventual limit to progress on that line, and when that limit is approached by the generality of farmers the pinch will again be felt, to a considerable degree, at all events, though perhaps not so acutely as at present. Is there not something wrong with an economic system which perpetually arrays labor and capital in this order with the pinch in the cost of production always on labor? How can interest charges be kept down?

Mr. Kent's Questions.

By Peter McArthur.

I am not sure that I am very grateful to Howard Kent for stirring me up with his list of "Whys." If there is one question above another about which I am absolutely befogged and at sea it is the question of education. I do not mind in the least getting into an argument with bankers and politicians. They are bluffing most of the time, and I can bluff back at them; but before a little child I am more helpless than the child himself. Nothing that I have learned or observed helps me a particle towards solving the problems of childhood. About all I feel reasonably sure of is that our educational system is wrong from top to bottom, but as I have nothing to offer in its place I have always avoided the subject. When it comes to the children, about all I feel capable of doing is to love them and kiss their bumps when they get hurt.

As Mr. Kent and the Editor of "The Farmer's Advocate" have already dealt with the list of questions, perhaps they will excuse me if I go off on a different tack. On the question of education

I have no settled opinions. I am merely groping for something that I am sure is the supreme good, but as yet I have found no hint of how it is to be attained. In my experience of life I have met men who had practically no school education, and yet they had all that I would wish a system of education to give to me or to my children. I have also met men who have had every advantage that can be derived from schools and colleges, and I found them of no more interest than a lot of trained seals. They could perform all kinds of mental gymnastics, and yet they were absolutely out of touch with the work and joys and sorrows of this big beautiful world in which it is our privilege to live. Education should enable us to understand, to do and to enjoy. And this understanding and doing and enjoying should not be confined to a petty round of duties that will enable us to slink through the world with as little effort as possible. The truly educated man exclaims with Terence, "Nothing that is human is alien to me." He is interested in everything, and at the same time so well-poised that nothing can debase or enslave him. There is too much talk about the purpose of education being to fit a man for his particular niche in the scheme of things. No man knows the scheme of things, and even if he did there is no niche big enough to hold a fully-developed man. There is a noble rebellion against the popular conception of a good citizen in Hamlet's outburst:

"What is a man,
If his chief good and market of his time
Be but to sleep and feed? a beast, no more.
Sure, he that made us with such large discourse,
Looking before and after, gave us not
That capability and god-like reason
To rust in us unused."

In that passage Shakespeare outlined the highest purpose of education. It is to so develop a man that he can make use of his wonderful capabilities, and a man so developed is worthy of his bewildering eulogy:

"What a piece of work is man! How noble in reason! How infinite in faculty! In form and moving how express and admirable! In action how like an angel! In apprehension how like a god! The beauty of the world! The paragon of animals."

At this point I wish to quote with all reverence that noblest of all conceptions of the child: "For of such is the kingdom of Heaven." I like to think that enfranchised spirits will have an opportunity to grow as the children grow before we begin to tamper with them and to impose on them our ideas of what they should do and be. Did you ever stop to think how much a child learns in its first burst of mental growth? It is no unusual thing for a child to learn two languages besides getting an understanding of the objects and actions by which it is surrounded before it is five years of age. If this development could go on unchecked the dullest child could learn more than the profoundest professor of them all before it reached maturity. Coleridge seemed to have hit the secret of this spontaneous education when he said, "A child learns because of the necessity it feels." Is there no way by which this feeling of necessity can be made to endure? Under our present system, instead of letting the child develop under the pressure of the necessity it feels, we imprison it in a schoolroom and try to shape it according to necessity that Dr. Pyne feels or—to get down to the man who is said to be at the bottom of our system—that John Seath feels. The natural development is instantly arrested, and the child is forced to pass through Moloch fires of competitive examinations. It is all wrong, hideously wrong.

Now let us stop for a moment and grope for that elusive thing Education. What is it? It certainly does not mean the accumulation of knowledge. The most learned man in the world does not know as much or know it as accurately as the Century Encyclopedia at my elbow. Knowledge seems to be a commodity that can be stored away in books where any intelligent man can get it when he needs it. Education seems to be a growth which enables a man to use knowledge. But how are we to make men grow? Few geniuses have been able to transmit their intellectual growth, and yet it has always seemed to me that geniuses are men who have been stimulated to great growth by some impulse of which we have no adequate knowledge. To state the case figuratively, perhaps human beings are like germs of growth enclosed in shells like a nut. Some fall in such conditions that they burst their shells and expand in rare atmosphere that their fellows never know. They cannot tell of what they have learned to know and feel because, as Shelley complains in his introduction to "Epipsychidion," their message "must ever remain incomprehensible from a defect of a common organ of perception of the ideas of which it treats." This growth is as likely to come to a day-laborer as to the greatest philosopher, and even though he may be unable to tell how or why, he ever after looks on life with a wisdom that has never been taught in the

schools or colleges. Perhaps the confusion that prevails in our school system is due to an effort to teach the principles of a culture that can only come by a growth which is beyond our comprehension. This leads to the conclusion, that the only part of our education that would be worth having, cannot be taught by any means as yet known. The struggle of our educators to devise a system of education that will give to our children a wisdom and culture than even the educators lack, has defeated everything. If they would stop trying to give an impossible education, our schools might then become training institutions that would be of immense value in the world. And this brings me back to where I can deal briefly with the questions asked by Mr. Kent.

 If our public schools were regarded simply as training schools that would help to fit children for their apparent work in life, they would accomplish much more than they do now, and they would not be causing so much distress by overcrowding the professions, and causing the farms to be deserted. The country schools would aim to teach boys and girls to get the most out of farm life, and the teachers would be trained to develop that capacity. In the towns and cities there would be technical schools to teach the arts and trades towards which the children would naturally turn to earn their livelihoods, and no matter what a child showed a bent for, the necessary school to give effective help could be found somewhere. Of course if our schools could by any means promote the growth that I think most people will agree constitutes real education, they should by all means be devoted to that purpose, but as that is impossible, they may as well be brought down to earth and turned into training schools that will help us to earn our livings in the ways that are necessary to us while living within our shells. If we ever break out of our shells, and are fitted for that higher education that will enable us to commune with the geniuses and the great of the world, we will not lack the means to get that culture and education. And in the meantime we must earn our livings, and our school system should help us to do it instead of forcing on us a system of culture that is still imperfectly understood. Tennyson says:

"Knowledge comes, but Wisdom lingers."

While wisdom continues to linger, let our schools give us the knowledge we need to do the duties nearest to hand, and that would mean giving to country boys and girls an education that would adapt them more and more to farm life. The method of doing this is very well suggested in Mr. Kent's questions and his answers to them. And if among the country children there are some who are better fitted for other occupations, it will not be too hard for them to get in touch with some other part of our school machinery, which will give them the education much more fully than is possible under our present system, which is too general in its scope to be useful for any particular occupation. And perhaps if we are trained to do the little everyday things, more of us will break from our shells and learn the greater things. Who knows?

Ireland as Seen Through Canadian Spectacles.

Having only a limited time at my disposal I had to make the most of every minute in Ireland. I travelled about 300 miles on the railway, stopped off at quite a few places and interviewed a number of residents. The country through which I passed consisted mainly of valleys and hills, the valley generally containing a bog in the centre, often covered with heather, all out in a beautiful flower. Very large quantities of peat are dug from these bogs, which is used as fuel by

the natives. It is different from our Canadian peat, in that it does not require to be pressed, but is dug out with a spade in pieces about the size of a brick and there is plenty of rooty fibre to keep it together. When dug, the bricks are put up in small open piles to dry, and when sufficiently cured, they are hauled in donkey or horse carts to sheds, or are put up in close stacks and protected from the rain. They make very good fuel. Many of the crofters do not have stoves or even grates, but are content with the old, large, open fireplace and wide chimney which is used for smoking the hams. Fire from peat is also said to make better oat cakes than heat from any other kind of fuel. Irish farmers could be divided into two classes, viz., the large farmers who make a specialty of raising hunting horses and beef cattle, and the small crofters who keep a donkey, a few goats and pigs, and geese and other poultry, and sometimes two or three cows, but no horses. The large farmers of the hunting horse and beef cattle have a little progression about them, and are generally moving on, but owing mainly to the increased wages and scarcity of help, these farmers generally do not cultivate as much land



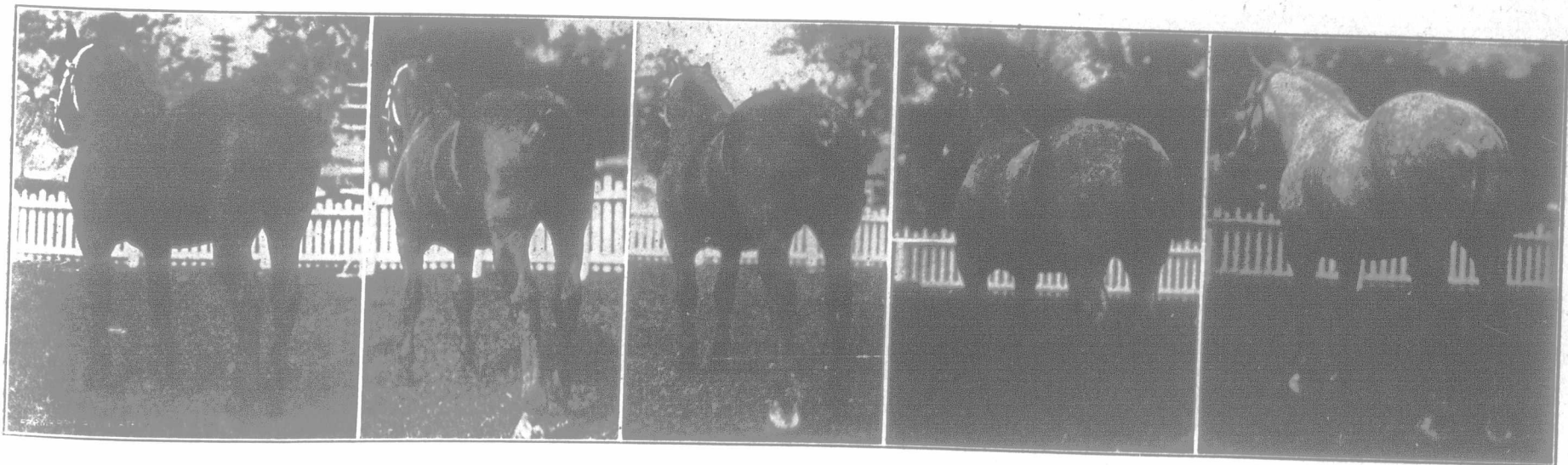
Early Training of the Colt is Good Policy.

as they ought, but have large portions of their farms in permanent pasture on which large numbers of beef cattle are finished, but as there are very few abattoirs in Ireland all cattle shipments are held up now on account of the foot and mouth disease, and the beef farmers are at their wits' end to know what to do with their beef cattle. The hunting- and army-horse mount industry is a very profitable one, as Ireland has deservedly a great reputation for that class of horses, and buyers go there from all parts of the world and pay good prices for the right stamp. Many of these farmers are taking advantage of an act of parliament passed a few years ago, making provision for the purchase of the farm by the tenant, and the tenants are becoming proprietors in many instances.

But the donkey-and-goat farmer is an entirely different man. He and his forefathers have been on their holdings for many generations, and are conservatives of the most conservative type. They generally have no lease and have no incentive to make any improvements, because if they do, the land agent will be demanding an increase of rent. The houses are generally small with low ceilings and thatch roofs, and many of them wooden chimneys, and quite often the donkey-cow-and-goat stable is attached to the end of the house or at best, so near to the house, as to be very much at variance with modern laws of sanitation. Then again the fields are laid out on what a Canadian might justly call an insane

system. The fields of perhaps from two to five acres are generally divided by large untrimmed thorn hedges, quite often on a curve, very much as if the planter had been trying to imitate the curve of a dog's hind leg, and many of the fields are V-shaped; in fact you will find them all sorts and shapes. Even although the farms are small, there seemed to be a large proportion in hay and although it was the end of August when I visited the country, there was very much hay out in the swath and in the cock, on account of the long continued rainy weather. I was told that they had a very great amount of rain, even in ordinary years, and that the climate is very uncertain. In some parts that I passed through, the farmers grow considerable quantities of flax; after it is cut and threshed, the fibre is put in a small pond for a short time, and then spread out in the fields to dry. On one fine day I saw different groups of farmers out in the fields threshing rye grass with the flails to obtain the seed. Each of the crofters has a potato patch, some of them in beds like old-fashioned onion beds. Many have a small field of oats, and another of barley, and a few a small piece of wheat. I was told that the donkeys are worth from £2 10s, up to £6, for the best stamp of an animal, and the goats from 10s up. I never saw so many donkeys and goats in all my life, as I saw in the three days I was in Ireland. I met a lady on the train who told me that after the death of her husband she went home to keep house for her aged parents, and in order to promote their comfort, she wanted to introduce an American stove, but her father positively refused to allow it to be taken into the house, the old open fireplace was good enough for him. We, in Canada are trained up in the way of introducing and adopting the best methods, the methods that will yield the greatest return for the least outlay, and it is hard for us to understand, much less sympathize with, the conservatism of the Irish crofter. But it has been ingrained in his nature for many generations, and it will take almost a miracle to get it out of him. Much of the land is also wet, and would well repay the expense of being tile-drained. In fact if I owned a piece of that country, I would first try to burn up the hedges, and if I failed in that, I would hire a traction engine and a strong chain and pull the hedge out by the roots. I would then drain the land, and afterwards divide it off into suitable single fields with woven wire fences straight and parallel and at right angles with one another, and I believe the money expended in doing this would soon yield a good return.

I visited several creameries, and interviewed the butter makers. They take in the milk from the farmers' carts, and separate it with a large power separator, and each creamery has several skimming stations at different points in different directions at a distance from the creamery, where milk is separated, and the cream hauled to the creamery where it is churned into butter. The creameries that I visited had up-to-date refrigerating plant, and paid for the milk by the result of the test, but strange to say they were only getting about 1s 1d to 1s 2d per lb. for their butter; a large portion of which was made into pound prints, and after the cost of making was deducted, the farmer was only receiving from 4 pence to 5 pence per gallon for his milk, which, I think, is scarcely as much per pound as our Canadian farmers got for the milk they sent to the cheese factory last summer, and the Irish farmer has both higher rents and higher taxes. The butter makers had several girls making the butter into pound prints, and one of the creameries bought in meals and feeding stuffs, and artificial manures wholesale, and sold them out to the patrons. The creameries were owned and run



The Champion String of Percherons.

At the Canadian National Exhibition, 1912. Imported and exhibited by Hodgkinson & Tisdale, Beaverton, Ont. Reading from left to right: Karnaval, stallion, two years; Rothorne, stallion, two years; Jovial, stallion, three years; Kossuth, stallion, two years; Icaque, mare, four years.

by co-operative companies of farmers. I was told that the supply of milk was considerably reduced of late years, and I don't wonder at it, as the Irish farmer ought to get more than a half-penny per pound for his milk.

There is a great agitation going on in Ireland for Home Rule. I understand that it is over 100 years since Ireland was formally brought under British rule, at which time, the Parliament House in Dublin was closed up, and since then the British Parliament in London has passed all legislation required for Ireland. But the Irish people say that the British Parliament has too much work to do, and that they do not understand the requirements of Ireland, consequently Irish interests are very much neglected. There is the Orange element, especially in the county of Ulster in the north, who are very much opposed to Home Rule, largely on the ground that they think, as the majority of the people in Ireland are Roman Catholics, if Home Rule were carried it would simply mean "Rome Rule." In conversation with the secretary of one of the largest Agricultural Societies in Ireland, I found out that there was an unwritten law which was strictly observed by both parties, that the president of the Society should be a Roman Catholic the one year, and a Protestant the next, and the secretary told me that this rule worked out very harmoniously, and that there was no friction. What was the Irish Parliament House is now used as banking offices, but many of the people look eagerly forward to the time when it will be again occupied as their own Parliament House, and they think that then their troubles will be ended. Of course, I am not possessed of enough information to say whether Home Rule would be best or otherwise, but this I am sure of, that the Irish farmers cannot be made rich, happy, and prosperous by an act of parliament, even if it is an Irish parliament, but each farmer will have to get a hustle on, and get those large winding hedges out of the way, and get the land thoroughly tile-drained, and cultivate the ground in a thorough and up-to-date manner, and if this were done I have no doubt that Ireland could support nearly double the rural population that it does to-day. Of course wise legislation by providing for fixity of tenure, granting loans to be expended on land improvement, and such like measures would greatly help but the population is made up of units and these units must move before there can be any real improvement. Of course an objection may be raised to the removal of the thorn hedges, in that it would do away with the industry in the making of black thorn walking sticks and the "shillelah", with which the Irishmen used to crack one another's crowns, but in reply to this argument, I would say that in this advanced age we think that it is much better to appeal to the gray matter inside the skull, rather than to apply

the argument to the outside of the skull with a black-thorn shillelah.

The large farmers give as excuses for not cultivating more of their land the uncertainty of the weather, the scarcity of help and the increase in wages. But if they wish to retain their men they must give them as good wages as they can get in other places, as I understand that many of the young Irishmen go over to England, and make more money than they could do in Ireland, and they can't be blamed for going wherever they can do the best. That is what the farmers do themselves, they sell their produce in the highest market.

Land can be bought in Ireland from £20 to £30 per acre, and I believe that an intelligent farmer with sufficient capital, can go there and buy land, and tile-drain and remodel the farm and make it pay, by adopting advanced methods.

D. L.

HORSES.

Hard ground cannot be blamed as the cause of sore shoulders this fall.

When stabling time comes give the colts the box stalls. Brood mares are also much better running loose.

"Better late than never," applies very well to breeding the mare. A fall colt has its advantages as well as disadvantages.

Don't forget when taking the horse off the pasture that bran is one of the best and most useful dry feeds for horses, and that because it has mild laxative powers it is especially useful for brood mares, and because of its high protein content it is well suited to the needs of young horses and growing colts requiring bone-and-muscle-forming rations.

If you have a horse to sell, weigh carefully the cost of feeding him through the winter against the increased price obtainable in the spring before disposing of him. Some shrewd horsemen are successful buying horses in the fall and selling in the spring. If there is money in feeding a horse through the winter for them, there must be an advantage to the farmer to feed his own horse until spring. Unless a high price is obtained, fall is not the time to sell, especially when feed is plentiful.

Will the Fall Colt Pay?

From time to time the Farmer's Advocate has published articles from practical horsemen relating their experience in raising colts, discussing the pros and cons of spring and fall colts and the cost of raising the same. Colt-rearing is one of the most important branches of our agriculture. The draft horse is, and will long continue to be, the chief source of power on the farm, and as his life of usefulness is short at best, it is necessary that a steady and persistent effort be kept up to maintain and increase the production of good colts whether they be foaled in fall or spring. This is not, however, answering the question, Will the fall colt pay? There are advantages and disadvantages to be reckoned with in breeding autumn foals as compared with those dropped in spring or early summer and there are many conditions which favor the fall foal to such an extent as to leave no hesitancy as to its being a paying proposition.

ADVANTAGES OF FALL COLTS.

With horses in great demand at high prices, a fall colt is certainly better than no colt at all. Here is a reason which should prompt many whose mares have not conceived earlier in the season to breed them again later on that an entire year's usefulness as a breeder be not lost. Because stallion owners and horsemen choose to select two months in the spring and call them the breeding season is no reason why a mare should not be bred later on, particularly if she fails to hold to the earlier service. A fall colt is surely preferable to no colt.

Under the present system of horsebreeding with a two months' rush season in May and June many stallions are very much overworked. Covering several mares a day continuously throughout this time and on special rush days one every two or three hours must have a weakening effect upon the reproductive powers of the horse. There is often very little wonder that so many mares fail to breed under such conditions and the wonder is that as many as do hold the service under these conditions. Some noted horsemen have said that for best results the stallion should not serve more than one or at most two mares a day, but whether this be true or not, few horsemen adhere to this rule. Observations made of breeding horses upon the range are said to bear out the statement, however, it being held that a stallion in the natural state never serves more than one mare a day and that during the evening. Here is a point where the fall colt should have an advantage. The mare is bred when the stallion is not overworked and consequently she should be more likely to conceive, and in the event of her doing so should produce a better foal.

Exercise for the mare has been considered one of the essential points in foal production. It seems to be necessary that the in-foal mare do some work in order to get sufficient of this as in most cases if she is turned loose in the yard or paddock she moves around very little. With the colt which is dropped in the spring the mare on the average farm puts in a winter of comparative idleness and is seldom if ever in harness. She is turned out for exercise, but frequently does not leave the stable door very far. After months of rest she becomes very heavy with foal and at this time is compelled to do her share of the spring's work, for a brood mare must and should earn her keep by work done. The spring's work is about the hardest of the entire farm operations. The ground is often quite soft, the cultivator or disk is no light load and the tongue is an annoyance, and, besides, the laws of nature, which demand that seeding be done as soon as the ground works well in order to get best results, make rapid work imperative. Here is where the mare and the foetus which is to be a spring colt are at a disadvantage. If the colt is foaled before seeding, unless the mare has had special work for winter exercise, this may be a drawback and the mare is in no condition for such work for some time after foaling, and if made to do it her milk flow is likely to be impaired and the colt's growth injured. The colt foaled in the fall escapes much of this drawback.

On most farms in this country labor is the most vexatious question at present. Colt-rearing requires that some extra attention be given to both mare and foal before, during, and after parturition. The rush of work comes in the spring and during the summer when little time may be stolen from the regular routine of farm operations to be given to the care of the colt. During the winter months there is time on most farms to handle the colt while he is yet with his dam and get him broken to lead and be handled with care. Such is not often the case with the colt foaled in the spring when other work does not permit. It is important that the colt's education begin at an early age.

Horsemen who have tried the practice assert that they have had less trouble in getting fall colts to eat oats and dry feed than with spring colts, and they also maintain that the colt foaled



Royal Cadet.

First-prize three-year-old Clydesdale stallion at Toronto. Sire Montrave Matador. Exhibited by Graham Bros., Claremont, Ont.

in the autumn goes on grass the next spring at weaning time in a better condition to make the best use of the grass, and at the same time receive less of a setback from weaning than the spring colt which at weaning goes on dry feed. These are some of the advantages put forward for the fall colt.

DISADVANTAGES.

Almost everything that has a good side also has one of less attraction. Fall colts have their disadvantages, and one of the first is the difficulty experienced in getting mares to breed at a season so as to drop their colts at the most opportune time in the fall. Many mares, particularly young mares, fail to show periods of oestrus in the late autumn, and with those which do it is often not well marked so they may be "missed" altogether. Again, nature seems to have decreed spring as the natural rutting and foaling time of the mare, and "bucking" against nature is not the easiest of tasks. So it is that much difficulty is sometimes experienced in getting mares with foal in the fall, and this is one of the greatest drawbacks to the whole undertaking.

A second and potent disadvantage in many districts is that the mare owner has not the same access to good stallions in the autumn that he has during the recognized breeding season of May and June when horses stand for service on routes throughout the country. Not all districts in this country are favored with a number of really high-class sires, and when the season is over and all of the stallions taken off the road and many of them disposed of, there may be a little more difficulty in securing the services of the horse desired, and a good mare should never be bred to an inferior horse, spring or fall.

What may be an advantage to the colt is not always so for the dam. While the fall foal gives the mare a chance to be on pasture during the summer when she is carrying the foetus, a condition which is a benefit to both, the mare is compelled to suckle the colt on dry feed, certainly an unnatural condition and one hard on her system. If plenty of roots and bran are fed the loss of grass may be practically overcome, but it takes more feed and it is far more difficult to maintain the brood mare making a foal in winter than in summer. In short, fall foals are rather hard on brood mares.

Size counts for much in colts especially of the draft breeds. We have become accustomed to reckoning age from the spring of the year of the colt's birth. Buyers do this almost invariably, and exhibition managements prepare their prize-lists accordingly. Judges lay stress on size, so until the colt is fully matured, if foaled in the fall, he is at a disadvantage in the show ring and on the market, where ages go by seasons, not by months.

The question of housing may or may not be important. Nevertheless it requires more and different accommodation for the mare suckling a colt, and the one whose colt is weaned. In the latter case two single stalls may be provided, although a box stall is advisable for the colt, while in the former case a box stall is a necessity. Besides the fall foal requires warmer quarters than the spring colt. This is not a very important matter now when nearly every farmer is equipped with capacious and warm stables, but it may be a factor in some instances.

WHEN THE MARE SHOULD FOAL.

These are a few of the arguments but still the question is unanswered, and the only way to answer it satisfactorily is for the breeder to weigh his own individual conditions and decide for himself. To have the bulk of the colts foaled in the fall instead of the spring, is a change which is not likely to occur. The spring is generally the best time for most colts to be foaled, but where mares have failed to conceive to earlier services and where special conditions of work, feed and space point to better results from fall foals, there should be no hesitancy in breeding them, as the time of year at which conception takes place has no bearing on the congenital or hereditary characters of the progeny.

As to the time that the autumn foal should be dropped there can be no set rule. Different circumstances warrant different dates of breeding. For average conditions perhaps the last two weeks of October or the first two in November after the heavy fall work is about completed, are as good as any. Foaled at this time the colt is ready to wean early in March, in time, in most seasons, for the mare to be at least partially fitted for spring's work. If foaling takes place too late in the season, the weather is often too cold and there is danger of loss from this cause, and when foaled at the time stated the mare and colt can safely and probably be let out on fine days. It should be late enough to escape hot weather and flies, and early enough to escape severe cold.

The British Horse and the Colonies.

It may be of interest to some of our horsemen to know just how many horses Canada imports from the Mother Country, compared with the number imported by other colonies. The Agricultural Gazette gives the following figures from the British Board of Agriculture's statistics regarding horses sent to British possessions:

Australia took 233, of which total 118 were stallions, and she paid £162 per head for the aggregate total. Canada took 1,978 all told, 430 being stallions, 1,152 mares and 396 geldings; the lot were assessed at £120,705, and were of the average value of £61. To the East Indies we sent 387 head, worth £54,651, an aggregate of £141. To New Zealand 33 were sent—i.e., 18 stallions, 13 mares and 2 geldings, and their value was £5,879, or £178 apiece. To the Cape of Good Hope were dispatched 203 horses, worth £22,199, an average per head of £100; to Natal, £87 apiece for 190 head; to Orange Free State, £97 apiece for 19 head; and to the Transvaal an average of £110 for 39 head. Seven horses have gone to the West Indies, costing £1,217, and giving a value of £174 each. This and the New Zealand figure of £178 are the highest of any paid by the colonies. Even Cyprus has paid an average of £50, Gambia £59, Malta £34, and Newfoundland £65. All told, to British possessions the 3,246 horses exported were worth £270,250, or an average value per head of £83. Surely these are facts positive that the horse industry is by no means dead. These statistics also prove what a vital force in colonial trade horse exportation really is.

LIVE STOCK.

Dry quarters are necessary for every class of farm animals, but more so with sheep than with others. Dampness, no matter what the source, should be carefully avoided.

With proper feeding upon skim milk and plenty of concentrates and roughage, a thrifty calf for the first four or five months should gain from 1.5 to 2 pounds daily.

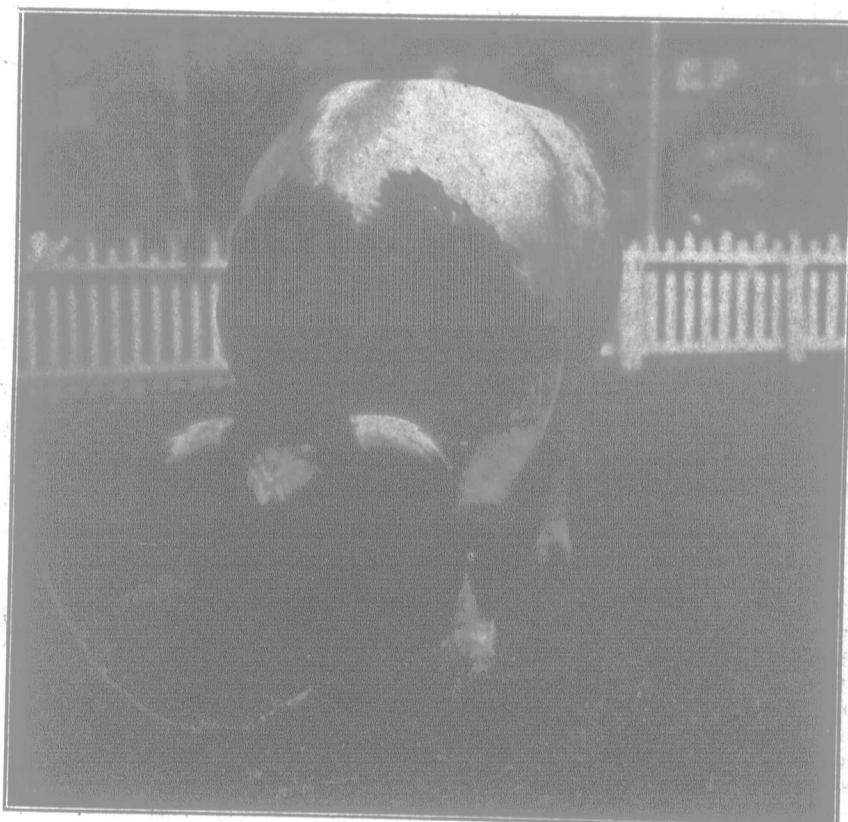
A skim-milk calf will very rarely eat enough grain to injure him in any way. It is a safe rule to follow giving them all the grain they will eat. Oat chop is as good as any for calf-feeding.

There is profit in baby beef. An Ontario County, Ontario, feeder sold a number of very fine calves (for they were under a year old) on Montreal market last spring for eleven cents per pound live weight. Among the number was one several months under a year old which weighed nearly 800 pounds. Such a price surely paid, and compared indeed very favorably with the prices obtained for three or four-year-old steers at that time.

In buying cattle to feed always remember that it costs more, as a rule, to put on gains per cwt. than the price per cwt. which the cattle are likely to bring when marketed in the finished condition. It is, therefore, necessary to make careful calculations on the spread in price between that paid in the fall and that received in the spring.

It has been estimated that the cost per cwt. of gain is from \$6.00 to \$10.00 according to the feed used and the class of cattle fed. This is generally more than the sale price of the finished product, so buy the heavy steer and figure carefully on the spread in price.

Steer fatteners have sometimes been heard to remark that all they got out of feeding their cattle during certain seasons was the manure. Manure is one of the important returns from cattle fattening, and one which, while often totally ingored, should be credited at its full value. A United States professor, from experiments carried out, estimates the amount of manure voided by a steer during six months of fattening at from three to four tons. What is this worth on the farm? This depends on how it is handled and what crops are grown, but the same authority values it at from \$9.00 to \$18.00 per steer on many farms.



Gainford Marquis =83755= (imp.).

Two-year-old Shorthorn bull. First in class and grand champion male of breed, 1912, at leading shows in Canada. Owned and exhibited by R. W. Caswell, Saskatoon, Sask.

Cost of Keeping Horses.

The truth of the statement that the methods of handling and the stable accommodations have a marked influence on the amount of feed required to keep a horse in good condition has been proven by investigations made in Columbus by the animal-husbandry students of the College of Agriculture, Ohio State University. These investigations have been carried on for several years; over 1,000 head of horses have been included. It was found that the concerns with the poorest accommodations for their horses and where the least care was given were paying out the largest amount for feed. The average cost of keeping horses in Columbus is 40.1 cents a day, and contrary to popular belief, heavy express horses are fed for nearly two and a half cents less than light driving horses. The lowest cost was \$89.02 per year, in the case of an underfed animal, and the highest cost was \$229.02, a stallion being fitted for show. One noticeable fact was the absence of variety in the ration, the principal roughage being timothy hay the year round, and it was common to find this feed given in excess. Corn and oats constituted the principal grains fed. In one instance a saving of \$11.15 per animal, or a yearly saving of \$669, was brought about by the use of four pounds of oat straw in place of a similar amount of hay.

Canada has been much concerned of late over her falling off in live stock. The United States is confronted with the same problem to a more serious degree. Census returns in that country show an immense decrease in cattle, sheep and swine. In 1910, as compared with 1900, there were in the United States 6,000,000 less cattle, 9,000,000 less sheep and 4,500,000 less hogs. Live stock getting less and population rapidly increasing is the dilemma of North America. During the last year over a million foreigners entered the United States to make homes, and Canada's quota of immigrants was never so large, and is increasing at a rapid rate, hundreds of thousands finding homes here annually. No wonder Chicago has experienced famine beef prices recently. Surely there is a bright future for the live-stock farmer.

Want Space for Arena.

Editor "The Farmer's Advocate":

I have read with much interest the editorial "Will it come" in your issue of September 19th, and fully agree with all you say. The Canadian National Exhibition wants the co-operation of the farmer, and especially the small farmer. Agriculture is the chief source of Canada's prosperity, and no exhibition can be a national exhibition without a complete display of Canada's agricultural resources.

In regard to the building of better stables and

a judging arena, we are as anxious as you can possibly be to have the work go on at once. We have the money in the treasury for the improvements. That the work has not been started before this, is not our fault.

The fact is, that we must have more room before we can carry out our extensive plans for the improvement of the live-stock department. That room is to be provided by the Garrison Common.

The Militia Department were to have surrendered this land to the city some years ago, but no doubt for good reasons of their own, have so far failed to provide accommodation for the troops elsewhere.

Until this is done it is impossible for the Exhibition Board to move in the matter. Now cannot the farmers help? Cannot they ask their representatives at Ottawa to urge on the Government to make the necessary changes. If the Exhibition gets the land it will do the rest. Help us get the land.

JOHN G. KENT.
President, Canadian National Exhibition.

Our Scottish Letter.

IMPROVED HARVEST CONDITIONS.

September so far has endeavored to make up for the deficiencies of August in the matter of weather. It has been a dry and pleasant month, and harvest in the earlier districts has seldom been got through under more favorable conditions. One prominent farmer was able to say yesterday that he had "led" his crops with fewer interruptions this year than even during the phenomenally dry season of 1911, and while the experience of everyone is not this, in the eastern part of the country, the harvest is now well over. In the west it is not so, but on the whole the prospects of a successful ingathering are quite good. There are heavy dews in the morning and sometimes a touch of frost, consequently the day is somewhat advanced before leading can be begun, and the September day is none too long. The heaviest item in connection with this harvest has been the cutting. The oat crop especially was very badly lodged, and recourse had in many cases to be had to the most ancient of all methods of reaping, i. e., the reaping hook. The most efficient reapers in this way come from Ireland, and this season they have been doing very well indeed. It is customary to hire them to do this work by the acre, and when operating on these terms it is marvellous how rapidly a gang of deft reapers can transfer the crop from the stalk to the stook. When the same forces are paid by the day, no one would suppose the work was on the same plane. A gang of men paid on this footing can put in the day very comfortably, and spin out the harvest delightfully. In some cases the reapers this year made a fresh demand every morning, and the farmer had no option but to comply. At the same time it is fair to acknowledge how admirably the self-binding machines have done their work under very trying conditions. With crops in many cases lying flat, it is marvellous how these harvesters get under it and cut it down. The patentees of these labor-saving machines have every reason to be proud of their handiwork.

In order to complete the harvest in a satisfactory way, we could do with quite another month of this weather, and it is hoped we may get it. By the end of October we should be in excellent mood for holding Harvest Thanksgiving services, which are still a feature of the religious life of many parishes. For a time gloomy forebodings were cherished with respect to the potato crop, but the fine weather of September appears to have checked the disease, and a much more hopeful tone now pervades the market. Should our desires be fulfilled with respect to the weather in October, the harvest of the potato crop will, in Scotland, be quite as favorable as the harvest of the grain crop. The root crop proper, that is of turnips and swedes promises to be unusually abundant, and the problem at present exercising farmers in the feeding districts, is not where to find winter food for stock, but where to find stock to consume the food.

FOOT AND MOUTH IN IRELAND.

The continuation of sporadic outbreaks of foot and mouth disease in England and Ireland is having a most disturbing effect on the stock markets, just when things are settling down, and there is a prospect of trade being resumed along its wonted channels, a fresh outbreak is reported, and standstill orders with their attendant grievances are enforced. The mischief of divided control in connection with diseases of stock is becoming very apparent, and some are recognising and urging the necessity of having one central authority for three kingdoms. It is novel to hear the claimants for political Home Rule demanding uniform rules and treatment for Ireland and Great Britain. It must be evident to every intelligent person that the necessary preliminary to uniform treatment is a central authority administering common orders. Unhappily this is what we have not got. When in 1911 there was a few out-

breaks of foot and mouth disease in the south and west of Ireland, Ireland mercilessly shut all its ports against Scottish stock, although there was something like 300 miles between the Scottish border and the area of the disease. Scotland has been absolutely free of the disease for about four years, and the Irishmen complain that our Board will not differentiate between the Irish ports and their hinterlands. It is surely clear that the complaints are ill-founded, and that the Irish breeders are simply being treated as they treated the whole of the British breeders a year ago. This is putting the case too favourably for the Irish breeders, because fat stock is being admitted from certain Irish ports, and slaughtered in the lairages at the foreign animals' wharves in England and Scotland. Scottish feeders want the Irish stores immediately; the Irish breeders should set their house in order as rapidly as possible, and get rid of foot and mouth disease. Recrimination does no good; the one thing to be aimed at is a clean bill of health in animals.

PERPLEXING FEEDING PROBLEMS.

The British Association this year held its meetings in Dundee. The meeting was remarkable, as being the first at which agriculture had a department all to itself. The President of the Department or Section was T. H. Middleton, one of the Assistant Secretaries of the Board of Agriculture and Fisheries, and a native of Cromarty in the Black Isle where his father and grandfather farmed. Mr. Middleton delivered a very interesting and lucid opening address. His subject was the improvement of the Improver—a phrase borrowed from an old agricultural writer. The papers read at the meeting of the Section were numerous. Some of them were unduly



Pen of Export Bacon Hogs, Tamworths.

First prize at Toronto; second at Ottawa. Fed and exhibited by T. Readman, Erindale, Ont.

learned, and scarcely appealed to the average farmer. Others, however, grappled with real live problems. One of these was the relation of the food consumed to the production of meat and milk. The influence of the consumption of roots on the composition and supply of milk is a problem which has often puzzled the more reflective men among feeders. It is now pretty generally admitted that very little is definitely known as to the economic side of cattle-feeding. The effects produced often appear to be sadly out of proportion to the amount of food consumed, and so far as milk is concerned those who have studied feeding and its influence on milk production most carefully are the least disposed to dogmatize on the subject. One thing is recognized, before there can be any advance in knowledge as to the influence of food and feeding on milk, there must be accurate and reliable data as to milk production. When milk records are discussed at a meeting of the British Association a great step forward has been taken in the collecting of reliable data—such as can alone furnish the only secure basis for any scientifically accurate findings.

HORSE, PONY AND SHEEP SALES.

Stock matters are in a curious state at present. The reasons for this have already been explained. In spite of all our troubles, the autumn sales of all classes of stock have yielded excellent results. When I last wrote we were on the eve of the Dublin Horse Show. That event passed off with its usual eclat. The weather was wretched on the fashionable day—the Wednesday, but it greatly improved on Thursday and there was, over all, a better attendance on the four

days than at the show of 1911. The Earl of Kenmare was singularly successful, winning both supreme championship and reserve with four-year-old horses of the true Irish hunting type. Mr. Kernohan, V. S., Ballywena, an accomplished horseman in the north of Ireland, won the cup for the matured horses with a beauty. Many outside would have preferred him to Lord Kenmare's young horses, but doubtless the judges weighed everything, including the difference in ages in making their awards. It was a peculiarly exhaustive and painstaking trial to which all the horses in the final were subjected, and well worth going far to see. Generally the tendency is in favor of a better-bred Irish Hunter for the heaviest weights. Gentlemen who ride up to 15 stones, i. e., 210 lbs., are finding that a lighter looking but more choicely bred horse will give a more pleasant ride than a heavier horse with less breeding. The former carries his rider longer and more comfortably even over a hard country than the latter. It is the old lesson—that quality is of greater value in a horse than quantity. The wearing horse is the cheaper horse in the end. Clydesdales have been selling quite well by public auction. At Perth pedigree sale this week, 103 head of all ages, chiefly females, made an average of £55 4s. 10d. A large number of two-year-old fillies were bought for the Canadian market at from £40 to £50 apiece. The great joint sale of Shetland ponies was held recently, and 126 head made the fine average of £15 11s. 10d. This is a price which pays breeders well, and there is quite a spirited demand for these model ponies, alike for the home and export market. There are two departments of the home trade—the fancy or riding and driving pony for the child, and the

pit pony. It is because we have this dual market that Shetland ponies continue to find a ready sale. Any breed prospers when there is a commercial market for its misfits. The famous Brookfield hackney stud of W. Burdett Coutts, M. P., has been dispersed. The average was £51 3s. 4d. for 48 head.

In the sheep and cattle world notable sales have taken place. The autumn ram sales have witnessed splendid trade for all kinds of pure-breds. One of the most successful tup-breeders we have, James Jeffrey, Deuchrie, Prestonkirk, who breeds Border-Leicesters, Cheviots, and what we call Half-breds, i. e., the produce of the Border-Leicester ram and the Cheviot ewe, has sold 100 rams of all these classes at an average of fully £12. At the Kelso ram sales a week ago he had the highest price for a shearing ram, £160. The Auchenbrain boys

who have succeeded their father, the late Robert Wallace, a well-known Ayrshire breeder, sold one at £120, and Messrs. Templeton, Sandyknowe, sold two at that money. The highest average was made by John Mark, Sunnyside, Prestonkirk. He had £28 18s. for 20, W. Jeffrey had £22 16s. for a like number, and Messrs. Templeton £21 14s. for 25. The highest individual price for a Scots ram stands to the credit of the native mountain breed. This is £180, paid at Perth by W. G. Hamilton, of Woolfords for No. 1 of the Letter consignment from R. M. Buchanan, Killearn. Letter is one of the oldest flocks of the breed. It has long held a high position, and five of the best shearlings at Perth, shown by W. Buchanan, made an average of £49. One other mountain breed, the celebrated Cheviots, have also been making new records. A dinmont (one-year-old) at Hawick, on Wednesday, made £125. He was bred and sold by Messrs. Dobson & Murray, Parkhall, Douglas, Lanarkshire, who had an average of £30 10s. for 12 beauties of the same age. Altogether flockmasters of every grade have reason to be satisfied with the trade of 1912. We have also had a series of cattle sales. At Perth, on Tuesday, at a joint sale of Aberdeen-Angus females of all ages, 53 head made an average of £23 4s. 11d. At Ballindalloch, on Wednesday, a draft of 29 from the famous herd of Sir John Macpherson, Grant, Bart., made an average of £50 11s. 7d., and 17 from the Aberlour Mains herd made £30 10s. 3d. At Mains of Mulben, on Thursday, fair trade also was experienced, an average of £30 12s. 3d. for 36 head being recorded.

SCOTLAND YET.
Glasgow, 20th Sept., 1912.

Ages and Weights in Cattle Feeding.

In what part or year of a steer's life (1,250 lbs., finished) is weight produced most cheaply, under average conditions?
Bruce Co., Ont. T. F. N.

This is a question which has been the subject of many arguments. It is important that every stock-feeder should know at what stage his feeders make most economical gains, and yet it is often hard to bring forth enough material to prove that any set age is the best age for making gains, as there are so many factors entering into the problem. There is no doubt but that cattle at certain stages of growth or of fattening make more rapid gains than at other stages, but these stages are different in different cattle. Experienced feeders have noted that as an animal reaches the "finished" condition it does not have as good an appetite as at the beginning of fattening, neither does the animal make so rapid or so economical gains, but the degree of finish reached determines to a very appreciable extent the price obtained on the market.

The composition of the animal increase varies considerably at different stages or different ages during feeding. The increase on a young animal which is growing rapidly contains large quantities of water, nitrogenous matter and ash, while the increase on an animal which has completed its growth consists chiefly of fat. It is clearly seen that the amount of food necessary to produce a pound of increase is considerably smaller in the case of the young growing animal than the older mature steer. Lawes & Gilbert carried on experiments with mature oxen passing from the store to the fat condition, and found the increase to be composed of 24.4 per cent. water, 7.7 per cent. nitrogenous matter, 66.2 per cent. fat, and 1.5 per cent. ash, showing that the increase during fattening contains from eight to nine times as much fat as nitrogenous matter. The composition of the increase would indicate that the young animal had the advantage.

The use made of the food fed is an important consideration. The young calf makes a most economical use of the milk or other food which it receives. Warrington, in his Chemistry of the Farm, states that a young calf can store up as flesh sixty-nine per cent. of the albuminoids in its milk and assimilate at the same time ninety-eight per cent. of the lime and seventy-four per cent. of the phosphoric acid. During the first few weeks of a calf's life ten pounds of milk, containing 1.3 pounds of dry matter, will yield one pound of live weight. A calf is often able to make gains in weight almost if not quite as rapidly as a fattening ox ten times as heavy. These extraordinary rates of increase are due, says Warrington, to the very large amount of food consumed in relation to the weight of the body, to the watery nature of the increase in a young animal and the small formation of fat.

We know that the young animal consumes more food in comparison to body weight than the older animal, that as the animal grows the amount of food consumed gradually increases, and at the same time the increase in live weight gained daily becomes gradually smaller unless fattening is reported to. Warrington quotes a table from German experiments, where only one-half the digestible fibre is considered, in which the amount of digestible food reckoned as starch for a calf weighing 165 pounds is 3.5 pounds, or 21.5 pounds per thousand pounds live weight per day, while there is a gradual increase per head and decrease per thousand pounds live weight until a steer weighing 935 pounds required 12.3 pounds, or 13.2 pounds per thousand live weight per day.

A great deal depends upon the size of the animal as to the amount of food required for maintenance. It requires a certain amount of food to keep the animal alive when neither gaining nor losing in flesh. If an animal has finished growing and is undersized there is a greater loss of heat compared with the weight than is the case in a larger animal. All food is measured as heat, so it requires more to maintain the smaller animal per unit of weight than the larger animal. Maintenance must be reckoned with first, fattening afterward. This has an important bearing on the question, for one steer might have attained full growth at, say, 900 pounds, while another might not be full grown until reaching 1,300 or 1,400 pounds. There would then be a difference in this respect in the feed required for these cattle in fattening. As fattening advances food produces a steadily diminishing amount of increase in body weight. Why? Simply because as the animal is fattened it increases in size, and the greater the size the larger the amount of food required in digestion, or, as chemists say, for internal work. The increase during the later stages of fattening contains less water, is drier, and is composed more largely of fat than in the earlier stages. The quantity of maintenance food required for a fattening animal is much greater than that necessary for a lean one. The condition or stage of fattening, then, has a direct bearing on the question. What one man would call

"finished" another might consider "half finished," and so we might go on indefinitely.

We must conclude with Henry, that gain in body substances by well-nourished young animals is relatively much greater than by mature animals, even when fattening. The unweaned calf, he states, may increase two to three pounds daily for each one hundred pounds of body weight, while a gain of 3 to 4 pounds daily per 100 pounds of body weight is large for the mature fattening ox.

The foregoing arguments pertain more particularly to the amount of the gain, dealing very little with the relative cost of this gain. At the Maryland Experiment Station experiments were carried on for two years with two Aberdeen-Angus steer calves. During the first year calf No. 1, weighing at the beginning 105 lbs., gained 447 lbs., or an average daily gain of 1.2 lbs. It required 430 lbs. of milk, 290 lbs. of concentrates and 200 lbs. of hay for 100 lbs. growth. During the second year this calf gained 434 lbs. (slightly less than the first year), an average of 1.2 lbs., daily taking 880 lbs. of concentrates and 760 lbs. of hay. The second calf weighed 97 lbs. in the beginning, gained 455 lbs. during the year, gained daily 1.2 lbs. on 410 lbs. milk, 270 lbs. concentrates and 190 lbs. hay the first year. The second year this calf gained 559 lbs., or 1.5 lbs. daily on 670 lbs. of concentrates and 600 lbs. of hay. Thus we see that the gains were practically the same the first year as the second, and it required three times as much concentrates and hay for a given gain the second year as the first. No milk was given the second year. Which would be more expensive, the increase made on hay and concentrates or that made on milk? Reckoning the concentrates at 1.5 cents per pound, hay at \$16.00 per ton, and the milk at \$1.20 per cwt., it cost nearly eight dollars more to feed the first calf the second year than the first, and he gained thirteen pounds less. The second calf gained 104 pounds more the second year than the first, at an extra feed cost of about \$4.50. These are only two calves, and cannot be used as an exact representation of all calves, but this gives some idea of the variation which takes place in feeding cattle, and it also shows the greatest profit in the first year's feeding operations.

Most feeders agree that the cost of fattening is influenced by age. To prove this Henry outlines experiments which were carried on by Grisdale at the Ottawa Experimental Farm, where 153 head of steers were fed, and the rate and cost of gains compared during feeding periods of about six months.

RATE AND COST OF GAIN FOR FATTENING STEERS OF VARIOUS AGES.

	Av. wt. at beginning.	Av. daily gain.	Av. cost of 100 lbs. gain.	For equal profit compared with calves	
				Purchase price per cwt. must be less by cents.	Or selling price per cwt. must be greater by cents.
Calves.....	397	1.8	4.22
Yearlings.....	883	1.6	5.31	35	27
Two-year-olds...	1,011	1.8	5.62	43	37
Three-year-olds...	1,226	1.7	6.36	53	43

"It is seen that six-months' calves, averaging 397 lbs. in weight, made an average daily gain of 1.8 lbs. during the fattening period of about six months, yearlings to three-year-olds averaging about the same. The feed cost of 100 lbs. of gain was \$4.22 with the calves and increased with the age of the animals, the gains made by the three-year-olds costing \$6.36, or fifty per cent. more than the calves for each hundred pounds.

"The greater cost of the gain by the older animals might have been offset by buying these steers as feeders at slightly lower prices per cwt. than the younger animals, or by a small increase in their selling price when fattened, which would be reasonable because of their superior condition. If the yearlings could have been purchased for 35 cents per cwt. less than was paid for the calves and sold at the same price per cwt., or if after fattening they could have been sold for 27 cents more per cwt. the increased cost of the gains by the yearlings would have been met.

"Under the usual market conditions young unfinished animals cost enough more per pound as feeders to counterbalance the lower feed cost required to make them fat. Mature cattle fatten more quickly than do calves or yearlings; hence when steers of different ages are fed for the same period the older animals will reach a higher finish, and therefore usually sell for a higher price than the less highly finished calves or yearlings. Older steers also fatten more uniformly and require less careful attention. It may be accepted as final that so long as the professional feeder can buy the older cattle with sufficient margin to fully overcome the increased cost of gains made in his feed yard he will consider it to his advantage to feed them in preference to younger animals."

It is admitted that it costs more to make the

gains on older cattle than with young animals, and it is not always that the feeder can get sufficient margin in purchasing to pay him to feed the older animal. Good baby beef sells very high, so it is doubtful whether the older animal will bring a larger price on the market.

From a table of the ages and weights of steers of the Shorthorn, Hereford, Devon, Aberdeen-Angus, Sussex, Red Poll and Galloway breeds, slaughtered at Smithfield Fat Stock Show from 1888 to 1895, we find that, as compared with two-year-olds and three-year-olds, one-year-old steers made the best average daily gains in each of the first five breeds mentioned, and in the other two, where only two-year-old and three-year-old steers were slaughtered, the two-year-olds did better than three-year-olds.

A point which may be a little in favor of feeding yearlings in preference to calves is that the labor in feeding may be a little less, as calves may require a little more attention. Again, if one has a lot of second-class roughage, yearlings might make a little more economical use of it than calves.

These are arguments gleaned from careful experiments cited by our best authorities. There are many factors influencing the answer, and we must say that it depends largely upon the steer, the feeds used, the comparative prices of the different feeding stuffs, the care and management of the steer during feeding, his size and condition; but, on the whole, under average circumstances, the greatest and most economical gains are made during the first year of the steer's life. This is a question in which every cattle-feeder is interested. Let us have an open discussion of it through these columns.

Sanitation, Ventilation, Drainage and Cleanliness.

In connection with the control of tuberculosis of animals the International Commission on the control of this dread disease gave out some hints in regard to sanitation, ventilation, drainage and cleanliness in stables, which apply to all stables in which stock is kept.

Dark, dirty, crowded stables are favorable to tuberculosis. Under these conditions the disease spreads rapidly, and is only kept out with difficulty.

Clean, airy, well-lighted stables, on the other hand, are unfavorable to the development of the disease. If brought into such a stable it does not spread so rapidly and is not so difficult to get rid of as in the first case.

A well-built, sanitary stable, need not be made of expensive material or of elaborate design, but should have plenty of light, air and drainage.

Light is very important. Direct sunlight is a great destroyer of germ life. Tubercle bacilli soon die if exposed to sunlight. It is a disinfectant, always ready to work without cost. Sunlight is also necessary to the health of animals. Men deprived of it for any length of time, as prisoners in jail, become pale and lose the appearance of health. Cattle that are constantly confined in dark stables become lowered in vitality and are ready to catch any disease with which they come in contact. For these reasons the cow stables should have plenty of windows on two or more sides if possible, so that the sunlight can reach every part of the interior some part of the day.

Pure air is also very important. In badly-ventilated stables the air is breathed over and over again until it becomes more or less poisonous. Animals kept in such conditions become gradually reduced in vitality. This change may not be noticeable to the observer, but becomes apparent if the animal is exposed to disease. It readily contracts disease and does not recover from it readily.

Stables should therefore have plenty of air space for each animal. This requires the ceiling to be high, the stalls roomy and the passages wide. In addition to this ample air space, some way of changing the air in a stable must be provided. This is done by suitable openings in the walls and roof, and comprises the system of ventilation.

Ventilation to be successful must provide for two things: first, the removal of the foul air from the inside; and, second, the bringing in of fresh air from outside the building. No system is good that fails to accomplish these objects without causing unnecessary drafts.

The usual way is to bring in fresh air through open windows, and in cold weather through ventilating shafts, which may be concealed in the walls or beneath the floor. The foul air is removed by open windows and by ventilating shafts from the ceiling to the roof, where they are usually protected by a hood. When both inlets and outlets are proportioned to the size of the building there should be a constant circulation of air, and no sensation of closeness should be perceptible in the stable.

Drainage removes the liquid refuse from the stables by suitable gutters and drains. It cannot do this unless the floor is water-tight and concrete flooring is therefore recommended. Urine

leaking through cracks in the floor until the soil beneath is saturated is a frequent source of foul odors and unhealthy stables.

Since the manure of tuberculous cattle often contains living tubercle germs in vast numbers, the importance of keeping it well cleaned out of the stable is readily seen. Such manure is not only dangerous to other cattle in the stable, but may be the means of conveying the disease to children. Often cows are seen with their flanks encrusted with dry dung. Parts often break off while the cow is milked, and some of it is likely to fall into the milk pail. The larger lumps are strained out, but the smaller particles remain, and also the tubercle germs, which are small enough to pass through any strainer. These stay in the milk and make it a fruitful cause of the disease in the young.

Stables should be cleaned out often and the manure put where it cannot be picked over by hogs or cattle. These animals are easily infected in that way. Cleanliness also includes keeping the walls and ceilings free from dirt, dust and cobwebs. These are all good resting places for disease germs.

Whitewashing the interior of the stable at least twice a year is a great aid to cleanliness, and also has a distinct effect in destroying disease germs. In many municipalities dairy stables are required to be whitewashed at regular intervals, and it is a practice that should be universal.

THE FARM.

What an Amateur Farmer Saw on a Trip. — I.

Editor "The Farmer's Advocate":

On the 26th of May last, four of us—two men and their wives—sailed from Montreal by Allan Line steamer for London. After a very pleasant sea voyage we landed at Havre, the well fortified chief seaport of France. Our ship remained two days, discharging cargo, chiefly wheat. We spent the first of the two days in the quaint old city of Rouen, a short railway ride from Havre, and the second day in Havre. Upon the streets of Havre we noticed donkey-drawn carts laden with garden truck, a small scale tied to the side of the cart and a large dog tied to the axle to protect the merchandise, while the woman in charge sought orders or delivered goods. Another cart was drawn by a harnessed dog and a boy, each pulling his share. A milk cart was drawn by a team of dogs. From Havre to Rouen we passed through very, very pretty, attractive and well cultivated country, in which were many busy manufacturing towns. Much grain had been sown for pasture and was being eaten off in regular rows—beginning at one side of the field or plot, by cows tethered. I suppose that by the time the cows would go over the field the first part would have grown up to again afford a good bite. There were numerous apple orchards by the way, but no very extensive ones.

From Havre we went to England, and as we travelled through English agricultural districts we were much impressed with the value of a tree, both for its shade and its beauty. One can scarcely realize the extent to which the beauty of rural England is due to its beautiful trees. How criminally foolish have we been in Ontario, as we have ruthlessly cut down beautiful trees that should have been spared, that everyone might have enjoyed their beauty, and that their spreading branches might have given beneficial and much needed shade and shelter to our horses, cattle and sheep, which often suffer as much from a hot sun as from cold and storm. Woodman spare that tree.

Upon the Lucy Estate from which Shakespeare and his companions, in their youthful pranks, stole deer, at Eaton Park, at Phoenix Park, Dublin, and at other places, we saw deer by the score or by the hundred, almost as tame as the cattle or the sheep. In Phoenix Park there are about 600 and to prevent an undue increase of the number, they have an annual "shoot." About as much sport I should think as to shoot cows in a stable.

Throughout the Old Country we saw sheep in large numbers and wondered if we should not have many more flocks in Ontario, especially upon our hilly, low-priced lands, so well adapted to sheep grazing and so comparatively useless and unprofitable for crop. Then I wondered why Ontario farmers have not before this insisted upon more stringent legislation to get rid of the dog nuisance. Compel the payment of a sufficiently high annual license fee upon every dog in town and country, make every municipality pay full value for sheep worried by dogs and there will be more dog skins for sale, fewer weeds and better crops upon the farms, and more money in farmers' pockets.

Wherever we went, in the British Islands or on the Continent, we found good roads and, usually, little heaps of broken stone in recesses by the roadside, for repairs. In consequence donkeys

and ponies were often seen drawing loads that many of our roads would require much heavier animals.

In England I observed some low-lying fields plowed in very narrow lands, ridged high in the centre, and this was quite apparent in the grass fields and grain fields alike.

In Covent Garden Market, London, and afterwards in other markets, we saw quantities of very

best until he is eleven years old, and that he will far outlive and outwork any other horse. Walking with the groom over a splendidly grassed pasture, I asked him how long since it had been broken up. He replied that it had probably not been broken up or reseeded for eighty years, and certainly had not been since he came to the farm forty years before.

From London we went by rail to Folkestone, passing, by the way, through extensive Kentish hop fields, and from Folkestone sailed to Bologne and on by rail to Paris. In Paris, as in Havre and Rouen, I saw that nearly all the carting and heavy street hauling was done by splendid large and well shaped Percheron stallions, often two, three and as many as five hitched to one load and they worked as quietly as geldings, which latter, save among the light horses, were comparatively rare.

From Paris we crossed Belgium, without a halt, on our way to Cologne, Germany. The land was well and neatly cultivated. The grain looked well and they were taking off a good hay crop. In Belgium, as in Germany, the women were doing a lot of the outside work. In France, Belgium and Germany much attention is given to forestry and reforestation. The trees, mostly pine, fir or other evergreens, were in regular, straight rows and, of course, different plantations differed in age and size of trees. In Ontario we have not been so mindful of the claims and necessities of those who are to follow us.

From the pretty, old cathedral city of Cologne we went by steamer a fair day's ride up the Rhine to Mainz (or Mayence). For the first part of the distance the country was level and the usual farm field crops were grown. From about Bonn we were in a valley, with mountains towering up on either side, cultivated to the very tips or peaks—all in patches of strips of varied colors; meadows already cut and of brownish green, ripening rye of yellow tint, oats, potatoes, sugar beets, each with its different shade of green, and with no fences to divide, the slopes of the mountain sides presenting the whole so clearly to our view as one grand sunlit patchwork, made a very pretty scene, not marred by weeds, stone piles, brush heaps or other evidences of careless husbandry. As we went further south we reached the grape country, and vineyards abounded with men dressing the vines, sometimes standing upon crags where it would seem difficult for a goat to find footing. Old castles in strong positions among the mountains upon either side of the river, added to the interest and gave evidence that in the centuries past the people had not always all devoted their time and attention to the peaceful pursuit of agriculture. An example of German thrift was given by the lettuce, cabbage and other garden vegetables growing on carried soil on the top of a thick old stone wall of the ruins of Heidelberg Castle.

From the soldier-paraded city of Mayence we went by rail to the old university city of Heidelberg, from there to the city of Frankfort, the birthplace of Goethe, north to Cassel, where is one of the palaces of the Kaiser, and on through Hanover to Hamburg, the chief port of Europe, from Heidelberg to Cassel hay-making was in full swing. Much of the hay was scythe-cut, but good many mowers and tedders were employed. It was a novel sight to us to see many milch cows, harnessed-up, drawing hay, plowing and doing other work. One man had a cow hitched to a scuffer cleaning roots. If women worked in the fields in seemingly larger numbers than the men, then why not the cows? The women workers were for the most part neatly attired, though many of them were in their bare feet. We noticed the absence of farm buildings, and were told that in that part of Germany most of the people lived in communities, which accounted for the many little villages of buildings with red-tiled roofs contrasting nicely with the green of field and forest.

Here and there were seen the old, low, windmills, pictures of which we so often see in book and paper and upon blue delft dishes, with their great long fans, canvas covered when at work, grinding grain, pumping water or furnishing power for small manufacturing. As in France, so in Germany we saw what appeared to be the common red poppy through the crops as a weed, in some places taking almost complete possession of areas, acres in extent, and giving a bright crimson hue to whole fields. One fellow traveller called it "Fire Rose", another "Mohn". By whatever name it seemed a beautiful nuisance. From Hanover to Hamburg the country is rather flat and, with its occasional canals, gives one a taste of Holland in advance. The land was much given to hay and pasture, with a good deal of pine and fir forest. Most of the many cattle were Holstein and we saw goats in considerable numbers. At Hamburg we visited the "New Market" and though we had visited other large markets, including Covent Garden Market in London, I never, any place else, saw such an immense crowd of people engaged in the selling and buying of



Three Gentlemen of Holland.



A Street Scene in Havre, France.

good-looking Australian and New Zealand apples.

We ran down from London to Lady Anne Blunt's Arab farm at Three Bridges, Sussex, where we inspected more than sixty Arab steeds, each one a beauty. The stallions, loose in their box stalls, were quiet as kittens and, without protest or any sign of ugliness, permitted me to go in and pet and handle them as I liked. The old groom said that an Arab horse is not at his

fruits, vegetables and flowers. From Hamburg we went, via Bremen, to Amsterdam, the world's diamond market, and from there by boat to Monnikendam and Volendam and the Island of Marken in the Zuyder Zee, our principal object being to see the people in their peculiar and grotesque costumes and quaint homes. Here, as elsewhere in Holland and Germany, the cattle were nearly all Holsteins, and among the black and white a few red and whites, just as good cows and as purely bred as the black and whites. In Canada and the United States, however, careful breeders do away with the occasional red and whites that come now and again in even the best herds with proudest pedigree, and none but the black and whites are allowed entry in our Holstein herd books. The only Dutch Belted cattle we saw were two cows in a park at Amsterdam. Nearly everywhere through Holland the land is below sea level and in some places many feet below. What a responsibility upon the protecting dykes! At one of these Zuyder Zee villages we visited a farm dairy and, about noon, saw taken from their

delft presses Dutch cheese made from that morning's milk. Everything was clean and neat although the well white-washed place was in winter used as a cow stable.

From Amsterdam we went to the Hague. Canals, some small and some very small, ran through the country in every direction and provided the chief means of transport. It seemed strange to see two men load newly made hay from the field in which it grew, upon a small scow and then tow the scow up a canal to the barn or stack. Cattle were so numerous that we appeared to be travelling through one immense extravagantly stocked ranch, and grass was the principal crop, with, in fact, little other crop in sight save the tulip and other bulb plantations and large gardens in the neighborhood of Harlem. From the Hook we crossed to Harwich and up to London and from London, through many manufacturing towns and good farming country, to Liverpool. From the last named city we visited the old walled city of Chester, and from there went by small river steamer up the river Dee to

Eaton Park the beautiful large estate, already referred to, of the Duke of Westminster. About the park, lounging under the superb old elms, were numerous bands of deer. We did not ask to see the Duke's famous race horses, nor did we chance to see the Highland cattle we were told roamed over some part of the estate.

From Liverpool, via Chester, we crossed North Wales to Holyhead to get the boat to Dublin. The Welsh scenery was varied and beautiful, with level plain, cultivated hillside and bold and rugged mountain and cliff. We saw much hay-making, many sheep and, in the Western parts, herds of fine Welsh black cattle, the cattle we saw in East Wales being of various kinds and colors. Here and there a donkey pastured and goats were frequently seen. Speaking of goats, we were told that their milk has a stronger taste than cow's milk, but it is better for babies, and that goats do not have tubercular trouble as cows do.

Grey Co., Ont. H. H. MILLER.

(To be continued.)

AGRICULTURE ON GOVERNMENT FARMS—II.

THE LONDON ASYLUM FARM.

Some weeks ago we published a somewhat lengthy resume of the agricultural undertakings as they are being worked out on the Brockville Asylum Farm, a farm which is yet comparatively new to advanced scientific methods, having been purchased by the Asylum authorities only very recently. Following up the idea of bringing before our readers the methods practiced by Government Institutions, in the hope that as well as being a matter of general interest to them to know how such institutions are managed, they may get some valuable new ideas applicable to a degree in their own field of labor, we visited the farm operated in connection with the Hospital for the Insane at London, Ont. This institution was established some forty years ago, and at that time about three hundred acres made up the entire holding. Of course a large portion of this was taken up as grounds and buildings. The farm now consists of six hundred acres, the latest acquisition being a fifty-acre lot this spring, and a large part of the land was until very recent years in a condition not suited for cultivation. There are two fifty-acre fields in the farm, which up to five years ago never produced a crop, being in a swampy underbush state, never having been properly cleared.

In 1908 Dr. W. J. Robinson was made superintendent of the institution, and although of necessity the greater part of his time is devoted to professional work in connection with his patients, he finds time to keep in touch with the agricultural end of the undertaking, a department which is exceedingly well managed and which is a source of great profit to the institution. Seldom indeed does one meet a man primarily engaged in professional work so enthusiastic over crops, cows and pigs, as is Dr. Robinson, whose office contains many photographs of the excellent herd of grade Holstein cattle kept, and complete records of every cow in that herd as well as many other important items pertaining to agriculture.

THE DAIRY HERD.

The dairy herd is perhaps the crowning feature of farm success at this institution. The writer has never seen a better aggregation of producers, and it is safe to say that considering numbers, this herd has a record equalled by few, and it is doubtful if another can be found in Ontario to beat it. During the year which ended October 31st, 1911, the fifty cows composing the herd averaged 8,493 pounds of milk each, and the best cow gave 13,160 pounds. The average of the best five was 12,013 pounds; of the best sixteen 11,025 pounds and of the best twenty-nine 10,022 pounds. Considering that one cow in the herd was farrow, five aborted, thirteen were in their first lactation period, eleven milked from six to eight months only, and that thirty-eight was the number completing the season of twelve months, this is a wonderful record.

This herd has been built up to its present state of superlative efficiency in the short space of four years. Only two cows remain in the herd which composed that of 1908, when systematic milk weighing and keeping of records were introduced. Milk-records have totally reorganized the herd, and placed it on a paying basis. By this means the poor cows are weeded out year after year, and better individuals fill their stalls. Any cow which in twelve months or in her period of lactation does not give 7,000 pounds of milk is discarded as being unprofitable. About fifteen per cent. of the entire herd goes every year failing to fulfil conditions necessary for a place among the good ones. It has been a culling system in the past and in a modified form is to remain so in the future, but in place of re-stocking from outside resources, the promising heifers will take the place of the unprofitable older cows. By re-

taining the best of the female calves from the good pure-bred Holstein bulls in service, and the heaviest producing cows, one of the best herds of young heifers in this or any country is ready to commence the first milking period next spring. A stronger-topped, better-constituted herd of heifers could scarcely be wished for than this lot. By carefully weighing the milk the best producers are noted, and this is the surest method of measuring up the heifers, for until a heifer is milked there is no other way of estimating her real worth, other than by her ancestors. Keeping the good heifers is, all things considered, the most satisfactory method of herd improvement.

Dairymen have advocated for sometime that a heifer should commence her first lactation early in life. This has been carried on to such an extent that at the last Ayrshire breeders annual meeting the argument was brought up that breeders are carrying the point too far, and that heifers should not drop their first calves until from twenty-eight to thirty months of age. In this connection it is interesting to note that three heifers in the asylum herd, which did not commence their first milking periods until four years of age, averaged during this season nearly 10,000 pounds of milk each, the best one, after aborting seven months after conception took place, giving 10,190 pounds, and the other two milked only ten months. These heifers attained good size before their growth was hampered by milk production, and the one still in the herd is as fine a type of grade Holstein heifer as one could wish. There may be something to gain as far as constitutional development of the heifers is concerned, in deferring breeding until they have reached a reasonable stage of maturity.

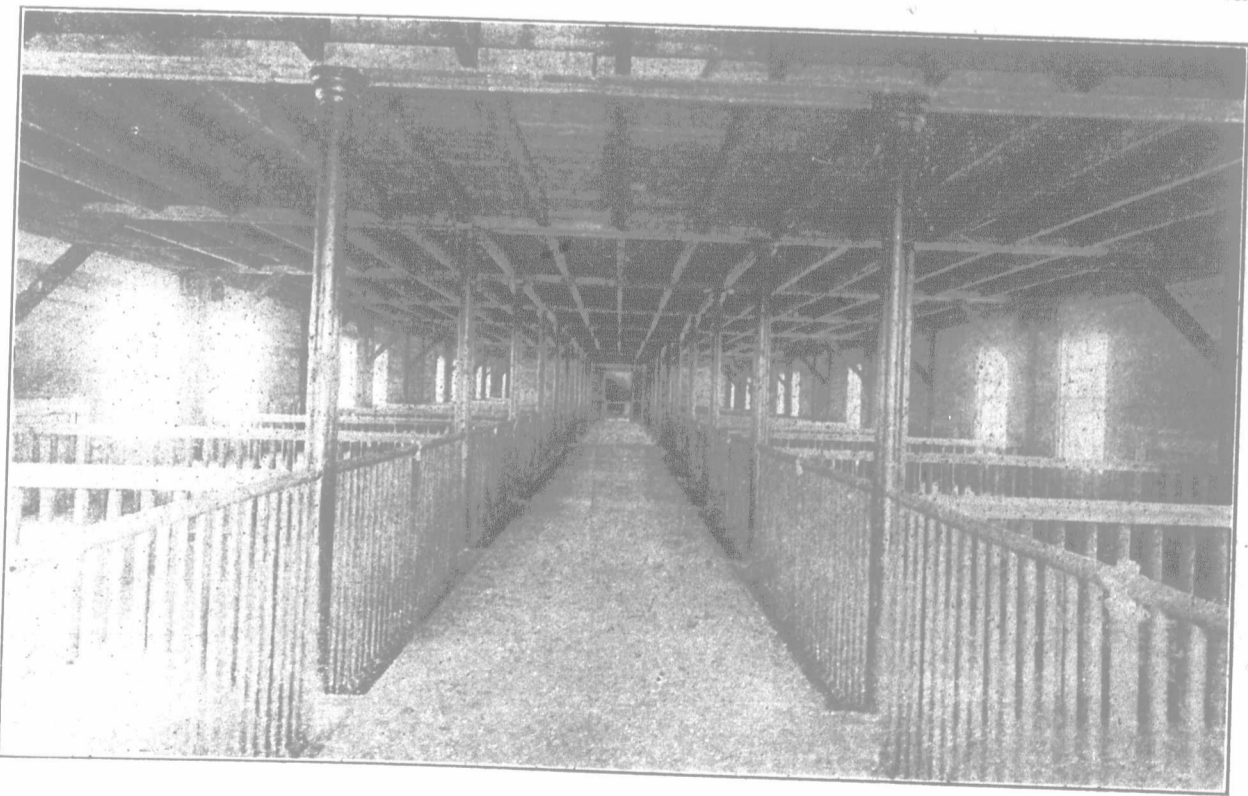
Records are never made without care and feed. Two silos holding approximately 240 tons of silage, hold the corn crop which is fed winter and summer. Eighteen to twenty acres of mangels and turnips are consumed annually, besides a very large amount of hay, principally alfalfa, of which about fifty acres is grown, and which this year has provided upwards of one hundred tons of hay.

The third cutting of this crop is being ensiled with the corn, and it will be interesting to know just how this keeps. The feeder states that he can notice an appreciable difference in the milk flow, when the cows are fed on alfalfa as compared with other hay.

The cows are stabled in a well-lighted cement-floored stable, tied with steel stanchions head to head, and watered in bowls in the stable. During the summer the cows run on good pasture, and are fed about eight pounds of a mixture of bran and rolled oats, as well as about thirty pounds of silage in two feeds each day. In the winter the grain ration remains about the same, the silage is doubled and the alfalfa and clover hay are fed cut, the roots being pulped and mixed with the silage. It amounts to this: the cows are given all they will eat up clean. The stable is kept clean and the cattle well cared for. Good feeding, careful weeding, and judicious breeding have served to make this one of the banner herds of dairy cattle in the country, and should give the average dairyman heart to know that they are all grades, and have been placed upon the present high pinnacle by careful management, and the keeping of records all being accomplished in a comparatively short time.

THE PIGGERY.

Very in importance with the dairy branch of the farm is the extensive piggery, where pigs of all sizes fill the well arranged pens. While "grunTERS" of all ages are continually on hand in great numbers, there is no mixture of breeds. Twenty-four brood sows are kept, all of grade Yorkshire breeding, the boars in service being pure-bred Yorkshires of the improved bacon type. From November the first, 1911, until the present time, \$2,700.00 worth of pigs have been sold from the farm, and 28,000 pounds of dressed pork have been put down for use at the institution. This pork is valued at eight cents per pound, a very low figure, at which it is worth \$2,240.00 making \$4,940.00 in gross returns from this source in less than one year, and there are on



The Piggery.

Note the high ceiling, the wide feed passage, the piping partitions, the feed-trough, and abundance of light.

hand some 300 pigs at the present time, 250 of which are nearly ready for the knife.

Last year a new pen was constructed, one hundred and twenty feet long by thirty-two feet wide. This is divided into twenty-two pens, ten feet by twelve feet. An eight-foot raised cement-floored passage runs the entire length of the building. The pens are cement-floored with a raised cement sleeping apartment in each pen. Part of the time, owing to the scarcity of straw, no bedding is given and of upwards of 400 hogs finished in the pen no evil effects of dampness or cold from lying on the cement floor has been noticed, "no cripples" or "stiffened" pigs having resulted. An abundance of light adds to the comfort of the pigs, one window consisting of twelve ten-inch by twelve-inch panes of glass being provided for each pen. Ventilation is secured through sliding doors in each pen, which lift by a rope running over pulleys to the center passage. Ventilators are also provided. A nine-inch drain runs down the center the entire length of the building, and the floors of the pens are so arranged that every two pens drain by a lateral into this main, and thus the liquid manure is carried out where it is proposed to build a cement manure receptacle to retain it. All the partitions and the fronts of the pens are made of iron pipe and are stationary, the feed being poured into the cement troughs through a small opening under the frame work of the front of the pens. Feed consists largely of kitchen refuse. No milk is provided. Shorts, frozen wheat and barley have constituted the grain ration this summer, and rather the best results have been obtained from the wheat. Shorts form the bulk of the grain feed ordinarily. The sows are very prolific, litters averaging at least ten pigs. The cost of the material for the pen was about \$2,200, and if the labor had been valued the entire cost would have been almost \$4,000. Pigs are one of the best paying assets of the farm, and considering that no milk is available for them at weaning time, extra good success is obtained from the method of feeding, which finishes the pigs at eight months of age.

CATTLE FEEDING.

Beef cattle have heretofore been purchased by the carload and slaughtered on the farm. It is now intended to feed these on the place and thus get more manure, which is valued highly by the management, and at the same time get cheaper beef. Under one of the barns on the farm, four cement-floored loose boxes are being fitted up in which cattle fattening is to be carried on. About thirty head of heifers will be put in and finished in as short a time as possible (likely about three months), their places then being taken by another consignment. The high price of beef has also had some influence upon the management in deciding upon this move. In connection with grass fattening of cattle some good results have been obtained this year. In an average lot of butcher's steers placed on grass for one month, two gained eighty pounds each. This was a very profitable gain considering that no feed was given other than that obtained in the field. Silage, hay, roots and a little grain is to form the winter feed of the fattening heifers, which are looked forward to as another step toward the goal of ideal farm practice.

ROTATION OF CROPS.

Some idea of the crops grown will have been gained from what has preceded. A three year rotation is practiced on all land coming under general cropping. Hoed crops are followed by grain which is in turn followed by hay completing

the cycle. About 100 acres of hoed crop composed of fifty of corn, about twenty of roots and the remainder potatoes, are grown every year. One hundred acres of hay and the same of grain complete the regular crop. Barley this year yielded as high as fifty bushels per acre, and the entire acreage of this crop averaged over forty bushels, so the three-year rotation is giving results. About twenty acres of corn is used for husking. The three varieties of this crop grown for fodder are Leaming, White Cap Yellow Dent, and Wisconsin No. 7. The latter is looked upon by Dr. Robinson as one of the best all-round silage varieties, considering stock and ears and maturity at time of harvesting.

There are at the north end of the farm two fifty-acre fields, a portion of which is very light sand, the remainder being black muck. Up to five years ago this entire area was practically useless, being overrun with undergrowth and wild herbage. In 1909 a system of underdrainage was put in one fifty, with the result that the 1910 crop of potatoes and corn from this field was worth at market prices \$2,800.00. The field was reseeded last year with a permanent pasture mixture, and this season cut over one hundred tons of first-class hay, besides giving an abundance of late summer pasture. The other fifty acres has been cleaned up, and this year produced a fair crop of oats, with which the same permanent pasture mixture was sown at the rate of twenty-four pounds per acre, and such a mat of grass as is now growing on this land has never been seen by the writer during the first year of seeding. The mixture used is that recommended by Prof. C. A. Zavitz, of the O. A. C., viz., alfalfa, 5 lbs. per acre; alsike clover, 2 lbs.; white Dutch clover, 2 lbs.; orchard grass, 4 lbs.; meadow fescue, 4 lbs.; tall oat grass, 3 lbs.; meadow foxtail, 2 lbs.; timothy, 2 lbs. This seeding is rather expensive, but Dr. Robinson firmly believes that the increased crop the first year pays many times over for the extra expenditure due to heavy seeding. He believes that it pays to sow any kind of grass seeds thickly. In the ordinary hay seeding mixture about ten pounds of red clover is used, and enough timothy and alsike to bring the total up to about eighteen pounds per acre. In the cleaning up of these two fields and getting them successfully seeded to permanent pasture, one hundred acres of waste, unproductive land has been reclaimed and placed in a condition to yield handsome returns. Drainage and good cultural methods have accomplished this, as the muck soil was so wet and the sand hills so light that nothing grew on them. During the present season, which has been a very unfavorable one for the corn crop, a thirty acre field of as nice corn as any farmer could wish, was grown on land which during the past five years has not produced, previous to this, one good crop. The land was so poor and light that it was not productive, and the present crop, the Doctor believes, was largely attributable to the fertility added to the soil by the growing and plowing down of a crop of red clover. It is gratifying to know that such poor land may be made very productive by the addition of humus, using red clover as the medium.

Prof. Zavitz annual pasture mixture of oats, 51 lbs., early amber sugar cane, 30 lbs., and common red clover, 7 lbs., has been successfully tried the cattle preferring it to any other grass on the place. The seeding was left over winter and an excellent crop of red clover was harvested the following summer, indicating that such is a good method of seeding down for a hay crop as well as for pasture.

LARGE FIELDS.

No large farm can afford to keep up a number of useless fences, and fences not well built and looked after are unsightly, and serve to introduce noxious weeds of all kinds. A rearrangement of fields is being made, whereby none smaller than twenty acres and several containing fifty will result. A road is being run for one and one-eighth miles lengthwise of the farm, and all fields will have this as their base, being about ninety rods long on one side of it, and fifty rods on the other. This will give access to every field, which will thus be on a direct road to the main dairy barn, allowing the cattle to take all the time they like in making the trip from the barn back to the pasture. Hurrying milk cows at this time is often not in the best interests of dairying.

HORTICULTURE.

The gardens comprise about fourteen acres and are maintained at the highest pitch of fertility. All kinds of vegetables and garden crops are grown for the use of the institution. No better fourteen acres of garden crops are annually produced than those which fed upon the well-nourished soil composing the London Asylum gardens.

The orchard is about twenty acres in extent, and has only been under good care for a few years. It is now well cultivated and thoroughly sprayed each year, and is yielding about 1000 barrels of fine apples annually as well as hundreds of baskets of plums, cherries and pears. Good care has placed it on a paying basis, and as time goes on it cannot but become more productive.

POULTRY.

As is the case on many farms, poultry is somewhat of a sideline at the institution. Four breeds of hens are kept, including Rhode Island Reds, Barred Plymouth Rocks, Brown, and White Leghorns. No very close egg records are kept, but returns indicate the Rhode Island Reds to be the heaviest egg producers of the strains of the breeds kept. Some six hundred laying hens are kept in all, being about evenly divided among the four breeds. Ducks to the number of one hundred and fifty, about twenty-five turkeys, and twenty geese are reared annually. Pullets are kept for laying purposes, the cockerels being crate fattened for three weeks before being killed. They are fed on the ordinary grain-fattening mash, dampened with water in place of sour milk, which is not available, and good results are obtained. This poultry is well housed in clean open-front houses with large yards to the south, and are considered a profitable branch, which might well be pushed to greater things.

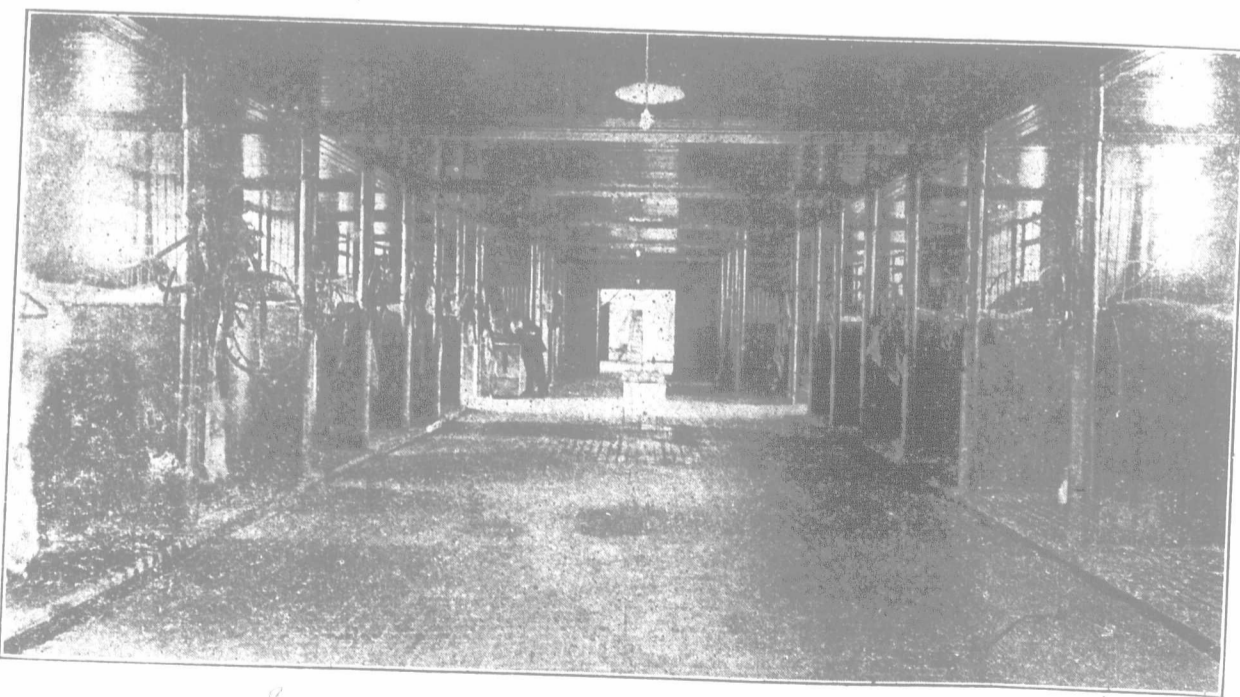
REFORESTRY.

It has been the firm belief of many prominent agricultural and forestry experts, that much of the land in Canada which is partially or totally unfit for agriculture, could be profitably employed in the growth of a new forest. Acting upon this belief, a strip of land six rods wide and three quarters of a mile long on the sand ridge at the north side of the farm, is being planted to white and Scotch pine, walnut and black locust. Some of the trees which have had two summer's growth are looking fine, and, planted five feet apart each way as they are, promise to be a remunerative undertaking on the kind of soil in which they are placed.

There are many features which cannot be done justice to in one short article. A horse stable seventy-five feet long and thirty-six feet wide with stalls for twenty-five head, including three box stalls in one end, and having an eighteen foot passage up the center between the two rows of stalls, is one of them. A water trough with running fresh water is situated in the wide passage, feeding is done through chutes from the loft above, the floors are of cement, and altogether it is a comfortable and convenient stable for the work horses with a harness room in one corner.

Agriculture is not a fad on this farm it is a profit-earning undertaking managed upon the best known scientific principles, and what is being accomplished while on a large scale, may very well be copied by farmers in so far as their conditions warrant. We may all learn something of value from our neighbors, so let us profit by the experience of the agriculturalists on our Government farms.

Experiments carried on at Rothamsted Experimental Station in England with wheat and manure give no evidence that either of these crops has any injurious influence upon the soil which would unfit it for the renewed growth of the same crop and that in the case of barley this factor is small, though it is probably real. With other crops, however, there is by no means the same possibility of continuous growth. In the earlier years of experiments at this station it was found impossible to continue the growth of Swede turnips on the same land from year to year, and again clover and other leguminous crops are well known to render the land "sick" and to prevent their renewed growth.



The Horse Barn.

The watering-trough is seen in the center, and a drive-house is situated at the far end

Hydro-Electric Farm Demonstration.

Practical demonstrations of the utility of electricity on the farm have recently been given in several parts of Ontario. The outfit, which is being operated by the Hydro-Electric Commission, of which the Hon. Adam Beck is chairman, consists of a transformer and a motor, each covered in, and mounted on trucks. The transformer takes the power from the high-voltage lines and transforms it into a suitable power for all farm operations to which electric energy may be applied. The motor is of 25-H.P. Mounted on a huge motor truck is a complete dairy outfit, including a cream separator, churn, butter worker, pump and milking machine. Besides these a tent is carried, in which all kinds of apparatus for cooking, heating, ironing and cleaning are demonstrated. On Monday and Tuesday of last week these good things were shown to the people of Middlesex County, and several farmers and their wives availed themselves of the opportunity of seeing Niagara power thresh grain, cut corn, milk cows, separate the milk, churn the cream, work the butter, pump the water, boil the kettle, heat the irons, toast bread, bake biscuits, sweep the floor, heat and light the room and several other important farm and household operations. It seems too bad that demonstrations of such value to the community should not be witnessed by more people, but whether it was because of lack of advertising or rush of farm work this particular exhibition was not favored with as large an attendance as its importance warranted.

The load on the motor to operate the threshing machine was about 12-H.P. and for the cutting-box about 15-H.P. The cost of the operation depends upon the price of power in the municipality where the work is done. With regard to the other operations, a 1/2-H.P. motor, costing \$65, will operate a complete dairy equipment, including separator, churn and butter worker; or a water pump 300 gallons per hour, 200-foot head; or a 1/2-ton refrigerating plant; or its equivalent in electric energy will operate 15-25 Watt candle-power lamps; or a flat iron, a tea urn, a coffee percolator, a toaster, a bed warmer, a fireless cooker, a stove, or a washing machine, sewing machine, electric fan and vacuum cleaner. A 2-H.P. motor, costing \$100, will operate a straw cutter, a turnip pulper, a grinder, a circular saw, or a machine milking eight cows at a time, or a complete dairy equipment, including separator, churn and butter worker, or a water pump 1,200 gallons per hour, 200-foot head, or a one-ton refrigerating equipment; and its equivalent in electric energy will operate an electric range, or the lighting of a large farm, including barns, roadway and all ordinary household appliances. This gives some idea of the possibilities of electricity on the farm, and we look forward to the time when rural districts into which Hydro-Electric energy is carried get as good and useful service as urban centres.

Field Selection of Seed Corn.

The increased yield of shelled corn per acre is the purpose of field selection. Strong germination is one of the incidentals that can be taken care of later by a germination test.

Knowledge of ancestry is almost as desirable for seed corn as for dairy animals.

Field selection gives some knowledge of ancestry.

Seed should not be selected from a stalk near barren stalks. There would be a strong chance that the barren stalk was one of its parents, and that it would tend to produce other barren stalks.

Moderately good ears from a thick stand are better seed than very fine looking ears from a thin stand where they have had an extra supply of sunshine, moisture, and plant foods.

Moderately long ears produced higher yields than short ears, twenty-one times out of twenty-two in five years' tests.

The lower-yielding short ears invariably exceeded the longer ones in circumference. Greater circumference, then, does not mean greater yielding power.

The heavier ears usually give higher yields. This weight should accompany reasonable length, circumference and shelling percentage. Immaturity must throw it out, however.

Creased-dented ears produced a little more than rough-dented ears. Ears selected from the plant averaged over three bushels per acre more than wagon-shelled seed from the same field. The wagon-shelled ears were shorter in size and general appearance, but the mother plant and its surroundings were not definitely known.

More information may be obtained from Bulletin No. 212 of the Ohio Experiment Station, Wooster, Ohio.

Although this corn was grown in Ohio, the results are worth our consideration. Differences in season should be kept in mind.—J. O. Rankin, Minnesota College of Agriculture.

Free Testing of Farm Seeds.

During the season 1912-13, the Seed Branch of the Federal Department of Agriculture will again test free of charge samples of seeds of grasses, clovers and cereal crops. This has been the policy of this branch since the passing of the Seed Control Act.

As a guide to growers, dealers and others who desire to have samples tested for purity, grading and germination, a leaflet of instructions has been prepared. Under twenty-three numbered paragraphs there are described, among other things, how to prepare, pack and address samples of seeds of various kinds. Useful notes are given on qualities affecting the value of seed. It is pointed out that injury to wheat from frost or dampness is usually apparent in the color and shrunken condition of the grain. While a hulled kernel of sound oats is usually semi-transparent and not brittle, a frosted kernel is dark and mealy, particularly at the tip, and is usually brittle. Instructions are given for cleaning grass and clover seeds, but growers whose farms are not clean are recommended to sell their seed in an uncleaned condition to a wholesale merchant who has special power cleaners. Persons who desire to have seed tested may procure a copy of this circular by applying for it to the Publications Branch of the Department of Agriculture, Ottawa.

Dealing with Corn Stubble.

Editor "The Farmer's Advocate":

Among the many articles written on corn cultivating, cutting and filling silos, I have never noticed anything on getting rid of the corn stubble after the field is cleared. I believe I have hit upon a plan which I think is far ahead of plowing down the stubble in the ordinary way, and I give it to my brother farmers for what it is worth. I believe I have received a great deal of information on a great many farm subjects through the medium of The Farmer's Advocate, and I am willing to give others the benefit of anything I know that would help anyone along. As soon as we have filled our silo and picked up all litter on the corn field, we take a sharp sheared single plow and turn out the stubble as shallow as can be done, that of course will leave the field in a pretty rough condition, but we take the harrow and give it a good dressing down and then roll it, and then leave it till about the last plowing in fall, then plow in the usual way, perhaps with a skimmer or chain to bury everything, this not only gets rid of that nuisance, the corn stubble you see sometimes in the spring and perhaps in the newly seeded clover crop, but if there happens to be any grass or weeds left in the rows it will be turned under with the stubble and be destroyed.

Oxford Co., Ont.

A. W. H.

The binder shells out less clover seed than the tramping of a mower team over the brittle heads in the swath, declares a Minnesota writer. The bundles are left unbound with the heads up to the sun if the binder is properly adjusted and managed. A tight rack catches such seed as shells out between the swath and the huller.

A Minnesota literary expert figures that farmers of his State could get into the millionaire-income class for one day at least by selecting their seed corn in the field. Two hundred dollars, he estimates, could be earned by one day's time spent at this work.



Yearling Heifer and Heifer Calf.

Granddaughters of Arthur's Golden Fox, included in sale of herd of Ira Nichols, Woodstock, Ont., advertised elsewhere in this issue.

THE DAIRY.

Scottish Cow Testing.

In reviewing the work of a Renfrewshire (Scotland) milk record society in the report of the Highland and Agricultural Society of that country, a writer says: "It may well be questioned whether any expenditure more profitable to Scottish agriculture has ever been made. The advantages of milk-recording may appear at first sight to have been chiefly obtained by those who possessed animals of great milking capacity, and were able, by recording, to have the value of their stock attested and to realize the prices which have increased from year to year for the best-milking stock. But in point of fact the benefit has been widespread. The fact that the milk-yield of 14,000 cows is now under systematic observation, so that a deliberate selection is going on among these animals is of enormous consequence in the agricultural economy of the country. Its importance is attested by the kind and degree of improvement to be found from year to year in almost every recording society. If this improvement were to average only twenty gallons of milk for each cow it might well represent an advance of twenty per cent. in the net profits of dairy-farming, but the effect of milk-recording goes far beyond the immediate economic gain, for the result of such a selective process is cumulative; and the creation on so considerable scale as has now been reached of a breed scientifically and systematically tested for excellence in milk-production must act powerfully through the influence of selected bulls on the whole dairy stock of the country, and the prosperity of the milk-producing districts."

The milk-testing movement is becoming worldwide in the dairy districts and well it should. "Boarder" cows live at the expense of their heavier-milking sisters and lower the average of the herd until very often the output is so small as to make the margin of profit very meagre and sometimes eliminate it altogether. Cow-testing and milk-records should be practiced in every herd in the country. It requires but very little time and is the best kind of sleuth to run down the robber cows and the best counsel for the defence of the profitable animals.

Avoid cold milk for the young calf. It means scours and endless trouble.

All things considered, the best method of building up the herd is by keeping the promising daughters of high-record cows.

Even if the heifer is nearly dry keep on milking her as long as possible during the first lactation period. If allowed to dry off early this time she will do it again, and if kept milking a long period this time this good habit is fostered.

Every cow should have a few weeks rest between lactation periods. Six weeks is none too much as a rule. To do justice to herself and to the developing foetus, she should not be called upon to give milk during this time.

For the good of the herd later on a heifer may be bred too young. It is doubtful whether there is much gained in the long run from having heifers freshen at an extremely early age. Their own development is impaired as well as that of their offspring, and it is generally safer to defer the first parturition until the heifer is from twenty-six to thirty months of age.

POULTRY.

A Poem to Order on Ducks.

Editor "The Farmer's Advocate":

Peter McArthur has been saying of the duck, as he did of the pig, there are no poems about it. Well, it is not hard to make them. I submit mine, and hope you will like it.

DUCKIES.

Duckies, duckies, duckies,
All in a row;
Waddle, waddle, waddle,
To the creek they go
Looking for the slimy bugs,
Snails, and minnows small,
And of fowls that gobble stuff
Ducks can beat them all.

Paddle, paddle, paddle,
Out they go, and in;
Gabble, gabble, gabble,
Don't they make a din?
Don't they have a jolly time,
Don't they make a row,
Holding business meeting
Or a sociable pow-wow?

Clatter, clatter, clatter,
See them beck and bow;
Patter, patter, patter,
What are they doing now?
See them preen their feathers;
See, their wings they flap,
And for all outsiders
They do not care a rap.

But alas, soon comes "Thanksgiving,"
Off go duckies' heads,
And their downy feathers
Make our feather beds;
And we lie so comfy,
When the nights are cold,
But the ducky-doodles
Are eaten up, or sold.

Duckies, duckies, duckies,
Succulent and sweet;
Duck is to me the very best
Of fowl there is to eat;
Long, too long, the turkey
Has held the place of state,
But get a piece of juicy duck,
And, "oh," but it is "great."

MRS. W. BUCHANAN.

Crate Feeding.

Editor "The Farmer's Advocate":

For years there has been and still is a continual cry from the large buyers of poultry that by far the larger percentage of the poultry they receive is not properly fattened ready for killing. True, here and there the farmer penned up his chickens for a week or two before selling and gave them all the cracked corn or whole grain they would eat; but the majority were just penned up the night before the huckster was coming, stuffed to their utmost, so they would weigh heavy, and let go at that.

Now, because the public does not like to buy just skin and bones, large dealers in poultry, and here and there enterprising individuals, have begun to take these poor lean birds and fatten them into first-class plump, tender poultry. For this grade of poultry they receive from a third to a half more than for the poor stuff. By this simple process of crate-feeding the birds are not only made better but there is quite a gain in weight.

One would be considered a poor farmer if he sold his pigs and cattle in a lean state to the but-

cher and let him fatten them. Fattening of fowls is just as much the rightful business of the farmer, and any farmer who sells his fowls in poor condition without first fattening them is letting the other fellow get a profit that belongs rightfully to him.

Many people seem to think the process mysterious, but it is not. The method I employ, and it appears to be about the same at all the plants I have visited in various parts of Canada, is about as follows:—

Provide a number of crates about 18 inches square and of convenient length with slatted bottom to allow the droppings to fall through, and slatted up and down in front to allow the birds easy access to the feeding troughs. Divide the crates into apartments about two feet long, so as to hold three or four birds nicely, according to size. These are placed on trestles to allow the droppings to fall through, and if more than one tier high a space about 4—6 inches is left between the tiers. In this space is slid a shallow galvanized-iron pan, which catches the droppings from the crate above. A board with a notch in it is nailed to each end of the crate and supports a trough usually made of $\frac{1}{2}$ x 3 or 4 inch boards. These should be made of planed lumber, so they can be easily kept clean. Crates made in six-foot sections are about as handy as any, but they may be of any length.

One cannot make a first-class porker out of a runt, neither can he make a first-class table fowl out of any old kind of bird. For the best results I prefer a Plymouth Rock, not too big-boned, and Wyandottes or Rhode Island Reds, grown on free range on the average farm, where they have enough feed to keep them growing nicely. Along about this time of the year a lot of these weigh four to five pounds, maybe a little less, and in some cases a little heavier. These are the fellows the fatteners like to put in the crates. Of course, with the many breeds of fowl now being raised, there are other breeds that will doubtless do as well, but these are, perhaps, the three most common general-purpose fowl. Of the three, my experience has been that the Rhode Island Red will make the greatest gain in the shortest time, but I should not like to say that the quality of any of them is superior to that of a well-fattened Plymouth Rock.

Having provided the crates and the birds, stir up a wet mash of ground grain, fairly thin, and let set over night, or if in the morning, until night, so it will get just a little acid, but not too much so, or it will be sour. I generally feed a mixture of about equal parts of ground oats and corn with some low-grade flour added. If you have milk available, by all means mix the mash with it, if not use water and add a little meat meal. I have had very good results using ground barley, and I know some very successful feeders who use a proportion of ground buckwheat. It has been my experience that it does not make so much difference what you feed as how it is fed.

I begin by feeding lightly for the first day or so, just putting a little in the troughs at a time so as not to give all they will eat at first, or else they will gorge themselves, and if you do that, it is best to let the birds run for a week or so and then put in the crate again. When they seem to have almost enough, clean out the trough and give water to drink. This may be left in the trough until next feeding time.

About the third day give all the birds will eat in half an hour in the morning, then clean the troughs and water. At night do the same. By doing this the birds will be always ready to eat. About twice a week provide plenty of grit. Keep a sharp eye out for any birds that refuse to eat. If you have any like this throw them out of the crate and let them run for a few days.

If the birds are regularly fed morning and evening (long enough before dark so they will have time to eat), in about fifteen days to three weeks the breast-bone will be well covered with flesh and the skin will have that soft kid-glove feel. Some may take a little longer, but it is not advisable

to crate-feed too long. I always judge by their individual condition. Usually three weeks is quite sufficient. I have tried feeding tallow the last week, but it seemed difficult to get the birds to eat it from troughs. If I had a cramming machine I would certainly use it.

In my opinion, the secret of crate-feeding lies in regular feeding, and being particular to clean the troughs after the fowls finish eating. This last is even more important than the first. My experience has been where this is not done the fowl get poorer instead of fatter. If one cannot observe these two points, and must leave the troughs full of feed, don't coop the fowl up, let them run.

In a regular fattening establishment one man can attend to two or three thousand birds, the number depending on the convenient arrangement of the building. On the average farm a few minutes a day will suffice to feed a hundred birds in crates.

Not only should young fowl be crate-fattened before marketing, but old fowl as well. If the old fowl are not fat, it will increase their weight, and even if they are fat a week in the crate will do wonders in making a tender bird.

I cannot say just how much is gained by crate-feeding, but my experience has been that crate-feeding will make on an average 20 birds, weighing from 100 to 105 pounds, worth about 12c. a pound, into 135 to 145 pounds, worth 17c. or 18c. a pound, in three weeks' judicious feeding. I am sure this is not a money-losing proposition.

There are various ways of killing, but for best results most buyers prefer birds properly bled by cutting the veins at the base of the skull. Hold the mouth open with the thumb and forefinger of the left hand, insert the blade of a small knife, with the back of the knife next the thumb, pushing it back to where the neck joins the head, and cut as if you were going to cut the head off. This will cut one artery. Then turn your knife over and repeat the operation on the other side. Then pierce the brain through the roof of the mouth and hook a can with a weight in it through the lower mandible to catch the blood. If the brain is properly pierced the feathers will just roll off. In some establishments the bird is stunned by a blow on the head, and most of the feathers are plucked off before it is bled as described. While this may make easier picking, in many cases the bird does not bleed freely. If properly bled and brain pierced there is no need of scalding, and it should be superfluous to say that poultry ought always to be dry-picked except for home or immediate use.

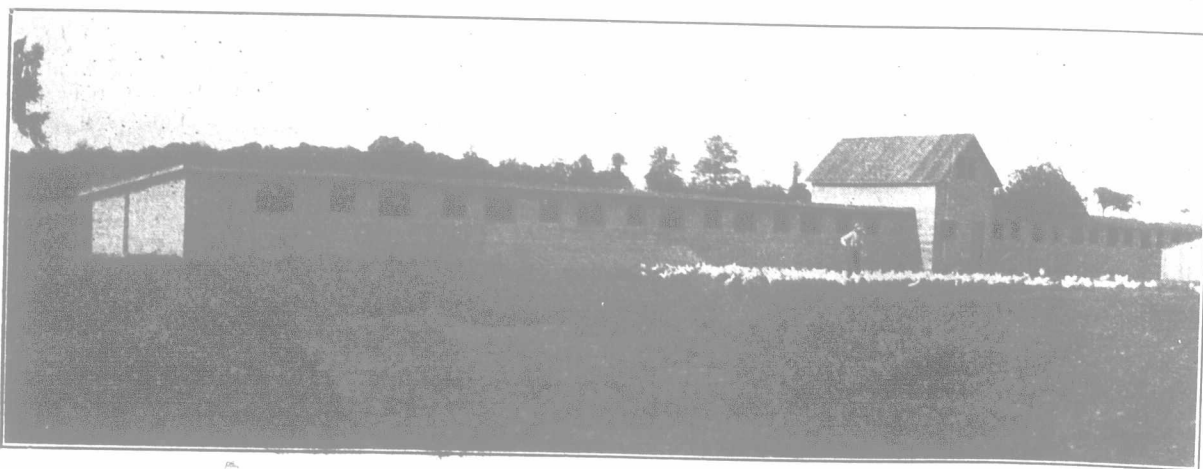
The way the birds shall be packed depends upon the wishes of the buyer. Generally about a dozen in a shallow box, neatly lined with parchment paper, with the weight and number of birds contained stenciled on the outside, is preferred. No matter how you pack, be sure to sponge off the bloody heads and dirty feet before packing.

As to where is the best place for the farmer to sell, the large poultry houses in Montreal, Toronto and London, some of whom are advertisers in "The Farmer's Advocate," are always willing to pay a good price for first-class crate-fattened poultry, far more than can usually be received in the open local market. As to which dealer, that will have to be a matter of choice.

In this connection, let me remark that the farmer in many cases sells his fowls dressed ready for the table on many of the smaller markets of Ontario for less than he could get for the same fowls alive in Toronto or London, and has all his trouble of dressing them for nothing. Many of the small Ontario markets have a regulation that poultry must be drawn before exposure for sale. At the present time, with chickens bringing 14c. to 15c. live weight in Toronto, many farmers are selling chickens, feathers and head off, and drawn, for from 16c. to 20c. per pound. These same customers when they go to the butcher pay at least this much for undrawn fowl. This market regulation regarding drawn poultry was no doubt caused by farmers exposing for sale birds with full crops, but it would be greatly to the farmer's advantage, and much safer for the town people's health, if poultry were starved and then sold in the local markets undrawn. If the farmer would only weigh up a few lots of birds before killing and compute their value at live-weight prices, then weigh next morning after the poultry is cooled and dressed, there would be a sharp adjustment in dressed poultry prices. Blood, feathers and entrails weigh heavier than they think.

To sum up the whole matter, for the farmer to make the most out of his poultry, he must keep pure-bred fowls, preferably general-purpose and of the American breeds, give them plenty of room when youngsters, crate-feed and finally carefully bleed, pluck and neatly pack. Such poultry brings the top prices.

Lincoln Co., Ont. G. S. PAXTON.



A Large Poultry-house.

Two hundred feet of poultry house on the Maple Leaf Poultry Farm, in Middlesex Co. (See article in issue of September 5th, page 1358).

Give the poultry the same attention, the same care and the same amount of thought that the larger stock get, and they will make a greater return for the capital invested than most other classes of live-stock on the farm.

GARDEN & ORCHARD.

Growers Should Control Evaporators.

Canadian fruit-growers find evaporation the most convenient method of disposing of inferior grades of fruit, but owing to the small orchards and the lack of co-operation, much valuable fruit for evaporating purposes is entirely wasted. In view of the large quantity of fruit lately blown off the trees, and the additional fruit that may be expected to fall during the usual storms before the close of the packing season in October, it would appear to be in the interests of Canadian apple-growers to organize the evaporating industry, not only to secure a product better graded and packed, but also to utilize a far larger quantity of the lower grades of fruit. This can be most conveniently done if the apple-growers unite into co-operative associations, not only for selling purposes, but for the purpose of establishing evaporators. An evaporating plant is not an expensive plant, nor is the necessary skill for managing it beyond that which can be readily obtained. The only really useful evaporator to the fruit-grower is the one controlled by the fruit-grower. Privately-owned evaporators seldom prove of much value to the fruit-grower, nor are they likely to promote the reputation of the country for good fruit.—September Fruit Crop Report.

A domestic quarantine has been established by the United States Department of Agriculture against the Territory of Hawaii designed to keep out of the United States Mainland the Mediterranean Fruit-fly, which exists in that island dependency.

APIARY.

An Open-Air Beekeeping Exhibit.

An open-air bee-keeping exhibit is to be installed on the grounds of the Panama-California exposition in San Diego.

Among the many unique features of the Panama-California Exposition in San Diego, there is being planned an open-air bee-keeping exhibit to be installed on the exposition grounds where there will be fully equipped apiary with honey house, extractor and tanks with everything necessary to illustrate just how bees are managed, and how all of the operations attendant upon the production and removal, packing and shipping of honey are carried on. The exhibit will also include a comb-honey apiary and a queen-bee rearing apartment, containing representatives of all of the varieties of bees of commercial importance and the methods employed in raising and introducing the improved strains of honey gatherers.

A novel feature of this exhibit will be plats of all the cultivated honey plants growing.

THE FARM BULLETIN.

P. E. Island Exhibition.

The Prince Edward Island Provincial Exhibition, which opened on Saturday, Oct. 24th, and lasted four days, was favored with ideal weather from start to finish. The attendance was the largest in the history of Island exhibitions. The management did everything possible to make it pleasant for everybody and there was very little friction evident in any of the departments.

On account of the very late harvest here, farmers could not spare the time to prepare many exhibits. This made the show in many respects smaller than usual, still there was a fair representation of all the products of the farm, garden and dairy of excellent quality to the fore. A great attraction near the main entrance was the tastefully arranged exhibit from the Experimental Farm, containing many varieties of grain in sheaf and bottles, vegetables, fruit, flowers, etc., which gave a very good idea of the excellent work done at that station by Superintendent Clark and his staff, some of whom were on hand at all times to explain methods followed in producing the exhibits and answering questions on all matters connected with the farm. The show stock was not quite up in all respects to some previous shows here. Still there were many good animals in all the classes, showing that our stockmen have a high ideal which they are persistently working up.

Shorthorn cattle, which had been making a very poor showing of late, put up a better exhibit this year. There were two herds on exhibition, each of which contained good specimens, especially in cows and young stock. The honors in this class were divided principally between Thomas Cass and Frank Sanderson. In Ayrshires the show was fairly strong and the qual-

ity good. Easton Bros., who are veterans in this line, showed quite a large herd in fine show condition, headed by Howie's Crusader, bred by James Howie, Hillhouse, Scotland. They got the herd prizes, and also first and championship on bull, as well as many other red tickets on cows and young stock. The other principal exhibitors, and strong competitors in some sections with Eastons were A. McRae & Sons, who have in recent years built up a herd of Ayrshires containing some grand individuals, prominent among them being Milkmaid, with an official record to her credit of 11,673 pounds of milk and 492 pounds of fat in her two-year-old form. This cow got first in her class and also championship of the breed. McRae also got a number of red tickets on young stock.

In Guernseys, Roper Bros. were out with their herd in fine form, notwithstanding the large circuit of exhibitions, including Ottawa, from which they had just returned so successful. They got most of the awards. Other entries in this class were from the herd of James M. Roper, who got a share of the prizes.

In Holsteins, Lea & Clark brought out a herd of 24 which, besides being of the very best breeding, give strong evidence of being performers at the pail. The herd is headed by Ida Rooker's Second, sired by this year's champion at Toronto. This herd was very strong in milk cows, but had been sold out of young bulls at previous shows. Quite a few in this herd have a place in the Record of Merit test. Most of the awards went to this herd.

One of the finest herds at the show, and one that evinced great care in selecting, was the heavy-producing, well-bred Jerseys owned by William Clark & Sons. The fine aged bull, Dreadnaught of St. Lambert, at the head, was first and champion. The cows are an excellent lot of producers, and the young stock gives evidence of great care in breeding. Sylvia of Maple Grove is one of the best cows and has an official record of 450 lbs. of butter in a year, with a test average of 5.6.

The display of horses was, as usual, good. In the Clydesdale and Shire classes there were two outstanding winners. The first was the Clydesdale stallion, Baron Kelvin, owned by John Richards, a Scotch-bred horse, sired by Baron's Pride, 9122. This horse was a prize-taker at Edinburgh in 1908, and after coming to Canada was first and champion at Toronto, 1911; at Ottawa same year at Winter Show. He is a big, massive fellow of splendid style and substance, with the best of feet and legs and good action. He was easily first and champion. The other was the imported mare shown by Wm. M. McRae. She was champion in her class and first for mare with foal at foot. Her foal also got the red ticket. She is perhaps as good as the best mare ever shown here, being of good weight, and nice, smooth, trappy action.

The second-prize stallion was an Island-bred horse, shown by George Dockendorff, a good specimen of the draft class. P. C. Brown, Char-

lottesville, got the red for his two-year-old stallion, while John Richards got the red ticket for yearling stallion. Among other winners in this class were Edgar Heartz, W. W. Crosby and John Tweedie.

The Carriage class had some good specimens, and the competition was close, especially in the sections for mares and fillies. W. S. McKie got first for carriage horse over 15 hands high. John McPhee got second for aged stallion. Byrne Bros., Albert Boswell, John A. Cumming and a few others were among the winners.

Sheep were a good show, but the pens were not so full as they generally are. All the breeds usual were in evidence, and the exhibitors pretty much the same as in previous years. Boswell and Nunn were among the largest exhibitors in Leicesters and black faces.

The pig pens were well-filled and represented all the breeds usually shown here. Among the most successful exhibitors in Berks were P. Brodie and Ings. Yorks were shown by Crockett, J. W. Callbeck and others.

The exhibit of poultry was quite large, and represented all the principal breeds.

Dairy produce made an excellent showing. The scores in both butter and cheese were pretty even and were all well up in the nineties. A large number of the factories had exhibits.

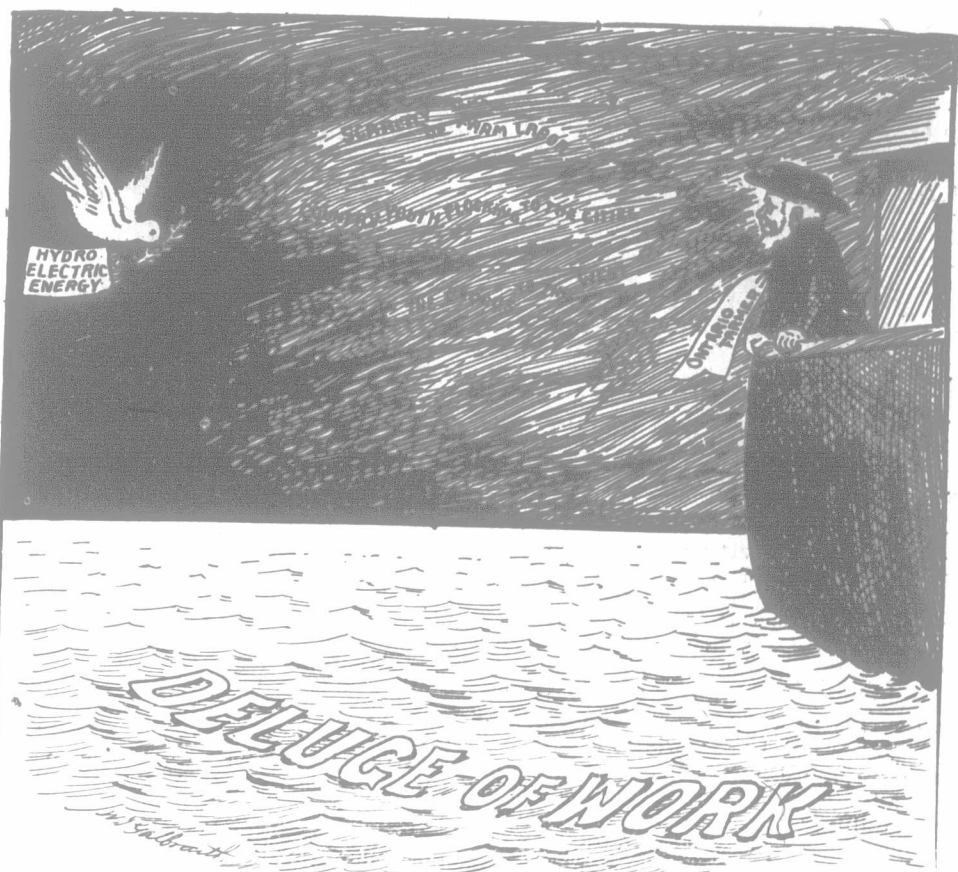
The record attendance at this show was due to the presence of Mr. Baldwin with his biplane, which made four flights during the show. This was the first exhibition in navigating the air ever given on Prince Edward Island.

The Nova Scotia Provincial Exhibition.

Another important event, which should mark a year's progress in agricultural affairs has passed. When we say that it should be a milestone in our progress, we do not wish to convey the impression that there was no progress worthy of note, nor that our Provincial Exhibition did not fulfil its purpose.

We believe that in no part of Canada have farmers made greater advancement of late years than in Nova Scotia. Furthermore, we believe that our Provincial Exhibition has been a potent factor in our progress. Yet, we are forced to confess, that to a stranger visiting the city of Halifax and the Exhibition grounds, the impression might be easily otherwise.

This is due to various and regrettable reasons. City people, as a class, do not properly appreciate agriculture, and consequently do not enthuse over an agricultural exhibition. Cheap railway rates bring a lot of people to the city to whom the exhibition is a secondary consideration. They wish to be entertained rather than instructed, consequently the visitor who goes for inspiration and education hears too much talk about the "exhibition being the same old thing over again," "same old cows," "same old horses," "same old fakirs," etc. While a great deal of this sort of talk



Hope.

[Note.—The cartoonist's idea of representation is rather happy in this season of continual rain.]

is with harmless intent, or comes from ignorant and irresponsible people, we are only human, and are adversely impressed.

Furthermore, the fact that the Fair Board receives no grant whatever, the expenses being equally borne by the Provincial Government and the City of Halifax, gives adverse critics an opportunity to howl about deficits, a word which savours of failure.

Some people claim that the increase in the number and interest in our local fairs, has taken the place of and interfered with the success of the Provincial Fair. Personally, we do not think so; we need both. The worst features about country fairs are that local papers, and local politicians too, are very apt to overestimate the quality of the exhibits. The exhibitor and visitor are led to believe that the prize winning animals at these local shows are ideals, when, as a matter of fact, the first-prize animals at County Fairs, in many instances, would be "trailers" in a ring at the Provincial Fair.

However, to a close observer, the Fair which has just closed has been the most successful in recent years.

The opening morning was far from pleasant. A downpour of rain prevented many people from going to the city. The fact that the Rt. Hon. R. L. Borden, who was expected to open the fair, found it impossible to be present, kept city people away, and the attendance was small. To make matters worse, the "air man" who was looked upon as a great attraction, tried a flight and had a mishap—broke his machine, and was quite seriously injured. The management retired that night with our sympathy.

For the balance of the show, the weather was all that could be desired. The judges were on hand early the second day, and were at work placing the awards on Ayrshires, Shorthorns, light horses, and various other minor departments.

HORSES.—Light horses were not up to the average—the only entries in Thoroughbreds being a brood mare and foal shown by Alice O'Brien. Standard-breds made a better showing. In aged stallion class, Dr. F. A. Ronan of Antigonish won first with "Maid's King"; the blue went to G. A. Mader on "Marshall M.", and the third to Blake Bros. In three-year-olds, Angus McGillivray was first, and E. B. Dodge second. The only two-year-old out was a strapping big colt shown by Miss E. L. Mosher. This fellow won second money from five starters in the colt stakes. For brood mare with foal by her side, first went to James A. Chisholm; second to Angus McGillivray, and third to T. D. Blaikie. There were only two four-year-old fillies out—first going to Halifax stables, and second to Marion Blaikie. The only entry in three-year-olds was from Halifax stables, and in two-year-olds, Angus McGillivray. Mr. Mader's "Marshall M.", carried off the diploma for stallion and three of his get.

While the Roadsters were rather a mixed lot, there were a few excellent individuals. The chief winners were: G. A. Mader, R. R. Bachman, J. F. Grant, C. H. Wisner, Marion Blaikie, Robt. Settle Jr., Fred Parsons, and L. B. Dodge.

In the Carriage class there were only four entries out.

In the General-Purpose class there was only one entry in each section, the three-year-olds and matched teams. In three-year-old section the prizes went to M. Dwyer, Wm. O'Brien, and John McDonald, in the order named.

For matched teams Fred H. Deal, W. W. Black and John R. McKenzie were the winners.

Heavy Drafters made a much better showing. In section for mare or gelding, four years old and upwards, Sharp & McNeill got first and second place, and Wm. O'Brien, third. The three-year-old section went the same way except third place, which went to Jas. Leslie. In two-year-olds, Wm. O'Brien was first; John R. McKenzie, second; and Sharp & McNeill, third. The yearling section went to Sharp & McNeill and Geo Dawes. Brood mare, with foal by her side, went to M. Dwyer, Wm. O'Brien and J. F. Grant. In matched teams, O'Brien was first, and Sharp & McNeill, second.

R. A. Snowball had it pretty much all his own way in Hackneys. He had a very nice lot of horses brought out in good fit, and deserved his winnings. The only other entries were McFarlane Bros., who got second in the aged-stallion class, and Jas. D. Cox in the two-year-old class, and Randolph Cox in the two-year-olds. In the two latter classes Snowball had no entries. Both championships went to Snowball.

Percherons were more numerous than at any previous fair, and while there were some good individuals, they did not create much excitement. The only sections where there was, were in aged stallions and yearling fillies. In aged stallions, J. M. Wentzell's entry had to give way to Frank Ellis on account of going lame. In the yearling filly section, Albert Fleming won over Chas.

Symes. In other sections he had about an equal number of entries.

Until the Clydesdales were brought out, ring-side talent was very indifferent. However, at the first call of this popular breeds, crowds began to gather and interest was keen. Although neither R. S. Starr, of Port Williams, nor S. A. Logan, of Amherst Point, (two of our most extensive breeders), were out, the sections were fairly well filled. The aged-stallion class brought out six good ones. Quality was an outstanding feature. However, as too often happens, size was somewhat lacking. McFarlane Bros.' "Baron Squire", a horse of beautiful conformation and quality, and a splendid mover, went to the top. Snowball's "Baron Belgradden," bred by R. S. Starr, won the blue, and McFarlane's "Vanderbilt" was third. In the three-year-old section, Snowball won first, and McFarlane second. In the two-year-old section, G. C. Cossar won with a big colt of excellent quality, with O'Brien second. C. P. Blanchard brought out the only yearling. In brood mares with foal by side, O'Brien had the only entries. In section for mare four years old and over, three good ones came out first and third went to Snowball, with W. W. Black between. At St. John, "Miss McKay" (W. W. Black's entry) had to be content with third place in the same company. She had been unhitched from a stone wagon to go to St. John, and the few days' rest had brightened her up wonderfully. R. S. Starr, who had placed them at St. John, readily conceded her right to the place which Mr. Henderson gave her at Halifax. The next few sections went to O'Brien and McFarlane Bros., with little competition. There was considerable interest in the male championship. The Corsan colt had many admirers, but when the two came together, Mr. Henderson did not take long to give it to McFarlane's "Baron Squire." Snowball won female-championship, and award for stallion and three of his get, also the Fairbairns cup for best five horses, any breed.

CATTLE.—While entries may have been more numerous at previous fairs, the general excellence, especially in dairy cattle, has never been exceeded.

Shorthorns.—This breed made a better showing than it has for some years. Besides the veteran exhibitors, C. A. Archibald and R. A. Snowball, Dr. I. M. Lovatt, of Yarmouth, a new exhibitor, showed a very creditable lot, and A. N. Griffin, who some years ago was a formidable competitor for honors in this popular breed, showed some excellent young animals. In aged bulls, with only two out, Archibald's massive "Prince Ideal" was an easy winner over Snowball's entry. "Prince Ideal" later carried off championship honors without a struggle. In senior yearlings, there were only two out, the red going to Snowball, and blue to Lovatt. Snowball had the only junior yearling. Calf, six months and under one year, went to Griffin, Archibald and Lovatt in the order named. Lovatt had the only entry in calf under six months. There were five out in aged-cow section. Archibald won first and third, with Lovatt between. In the three-year-old section, Archibald was again first and third, with Snowball second. A very creditable lot of two-year-olds came out, Snowball winning all the honors. The same animals were placed quite differently at St. John. In senior yearlings, Lovatt was first and third and Snowball second. First and second went to Snowball, and third to Lovatt, in junior yearlings. In section for calves six months and under a year, Griffin was first, Snowball second and Archibald third. Griffin's entry in this section was one of the best young things seen in recent years and was later selected for championship honors. First and second went to Archibald and third to Lovatt on calves under six months. Griffin was first and Archibald second for best three animals the get of one bull. For best two animals the progeny of one cow, Snowball won over Archibald. Snowball and Lovatt contested for honors in breeders' young herd, the former winning out. Archibald was to the front with graded herd, with Snowball second.

Herefords.—W. W. Black's Herefords were out in good form. He won all the firsts except in section for junior bull calves, where he had no entry. Walter Aylward was the winner in this section. The only other awards in this class were three seconds to Wm. O'Brien. The championships went to Black.

Grades.—In grade beef cattle, W. W. Black led the way, with Wm. O'Brien, who had some good stuff, the next largest winner. Other winners in this class were Thos. Aylward and F. S. Congdon.

Devons.—Devons were shown exclusively by Pinkney Bros., from Yarmouth County. In this class a little competition might be beneficial.

Ayrshires.—Lovers of Ayrshires must have been pleased with the splendid showing made by this popular breed. In aged bulls, five magnificent animals came out. There was a great deal of speculation as to how they would be placed, as

there had been some dissatisfaction at St. John. However, after due consideration, Alf. Kains, the veteran Ayrshire judge, decided in favor of McIntyre's bull, the St. John winner. The second and third went to M. H. Parlee and C. P. Blanchard in the order named. No entries in the two-year-olds. Senior yearlings brought out a lot of good ones. McIntyre Bros. captured the red, M. H. Parlee and Easton Bros. following. In the junior yearlings, McIntyre Bros. got first, C. P. Blanchard second and Retson Bros. third. For calf six months and under twelve, the ribbons went to Blanchard, McIntyre and Retson Bros., respectively. In section for calves under six months, Parlee, McIntyre and Easton Bros. won in the order named. In the aged-cow section, there was not an ordinary one in the thirteen that faced the judge. It was no easy matter to select winners, and the judge took his time. He finally placed McIntyre first and third, with Archibald's only Ayrshire entry between. The three-year-old section brought out nine more good ones. Blanchard was first, McIntyre second and Retson third. There were ten senior yearlings out. McIntyre led the way, with Easton and Blanchard following. Six junior yearlings came out and they were such a uniformly good lot that the judge said it did not make much difference how they were placed. He finally settled on the McIntyre entry for first, with Blanchard and Retson next. Easton Bros.' first-prize heifer at St. John was not placed. Aged-herd prizes went to McIntyre, Parlee and Blanchard in the order named. Young herds went to McIntyre, Blanchard and Easton Bros. McIntyre secured both championships. A handsome gold watch, donated by M. S. Brown & Co., for the best herd consisting of eight females and one male of any breed, was also secured by McIntyre. J. D. Irving, with his Holstein herd, was a very close competitor for this coveted prize.

Jerseys.—H. S. Pipes & Son had most of the entries in Jerseys, and won all the first prizes except three. Their herd was brought out in fine condition and deserved their honors.

Guernseys.—Perhaps in no one breed has improvement been more marked than in Guernseys. Besides the two constant exhibitors of this breed, H. W. Corning and Roper Bros., D. G. McKay, from Scotsburn, Hugh A. Dickson, T. D. Blaikie and John McDonald all took a hand in the game. Dickson won first for senior yearling bull and cow three years old. Corning divided the balance of the reds equally. The other exhibitors made a pretty fair division of the balance of the prizes.

Holsteins.—Although there was not an entry from either of the veteran Holstein breeders—Samuel Dickie & Sons or Logan Bros.—the breed made an excellent showing. Their place was largely taken up by a large entry from J. D. Irving, Buctouche, N. B., while Lea & Clarke and Harding Bros. also had large entries. Irving, who has recently purchased some of Logan Bros.' good ones, brought his animals out in good condition and won the big end of the money. He is to be congratulated on the start he has made. The other two exhibitors also showed good stock, but not in quite so good fit as Irving's.

There was not a large entry in grade dairy cattle, and with few exceptions they were no high-class.

Sheep.—There was a fairly good show of sheep, mostly from Prince Edward Island. The Boswells, who seem to be numerous, had representatives of most breeds and brought their sheep out in good fit. Cephas Nunn captured a good share of the ribbons in Shropshires and South Downs, while he had it all his own way in Hampshires. J. E. Baker & Sons and Burder Goodwin divided the prizes for Oxford. Retson Bros. and Boswells fought it out in Leicesters, while Symes had it all his own way in Cheviots. The Boswells and Cephas Nunn competed in Dorsets.

Swine.—The swine entry was not large, Yorkshires being the most numerous. They were shown by J. W. Calbeck, S. H. James and C. J. Keillor, whose winnings were in the order named. H. W. Corning had it all his own way in Chesters. Nobody interfered with Symes in Poland Chinas, and Baker swept everything in Duroc Jerseys.

The entry of poultry was good for such an early date.

Roots and vegetables were fair and the show of fruit was excellent.

Shipping Milk to Toronto.

Indicative of the distances from which cities now draw their milk supplies, dairy farmers at Dorchester, in Middlesex Co., Ont., have lately been shipping whole milk to a Toronto dairy company six days per week, receiving therefor \$1.40 per cwt., can supplied and returned cleaned, express charges both ways being paid by the company receiving the milk, which is carried by train about 110 miles.

The Broader View.

Editor "The Farmer's Advocate":

In these days when men occupying prominent positions are everlastingly advocating progress, when the climax of even invention appears to be in sight, thus reducing the pain with which at one time manual labor was attended, when the rising generation is expecting success from any source but the exercise of their own energy, we are unavoidably brought face to face with one of two things, if not both. Either there are certain positions being considered very undesirable, because of the great contrast between them and better positions, or else because of the appearance of persons occupying these positions, which some have already intimated. Or else a spirit of laziness has crept into society which has produced a feeling of disinclination towards positions which are not and never will be really easy. I think the position of the hired man is somewhat related to such as I have tried to describe. While such may be the case, I venture to say that it is just as necessary that these positions should be rightly filled as any others. Let hired men (of whom I am one) cry down their employers as they may, I will contend that farmers already have obstacles enough to overcome without being provoked or hindered by the hired man, and that many hired men manufacture their troubles on their own premises. Still, with all this, I am not forgetting there may be faults on both sides. In taking a broader view of hired men and their positions, I think a few facts may be noticed which should at least encourage us, and possibly create in other minds a desire to emulate. First of all, just a word or two about the very good health we enjoy, which is undoubtedly a blessing that even doctors might covet. Again, our health is obtained and retained at the cheapest possible rate,

and because of the abundance of fresh air we do not come into contact with those disease-producing sources in a way which the city folk are compelled to do. Then surely a change of work brought about by the changing seasons is something too good to trample underfoot. Now-a-days there are too many departments of work attended with immutability more or less, so that any position with a fair amount of change in its work must demand a fair share of consideration and respect. I do not deliberately exaggerate, but I doubt if any position could be freer than ours is, for to a large extent we are free from disease, free from care, and thus free from loss. Some, I know, will offer the suggestion that ours is a lonesome sort of life, which under certain circumstances is quite true, yet some of our best advantages are invented by this very lonesomeness. Any person can better reflect upon the past or look into the future when alone, or deeper interest can be put into our work, with the best time for correct calculation of things when alone. Something about the educational value of our position ought to be said. I will venture to say that all that is necessary in the way of education for making a successful farmer comes within the range and scope of hired men, and any man who hires out with good farmers, say from six to ten years, should possess a store of knowledge in some ways parallel with that of a student returning from the O. A. C. This education may be three-fold, comprising what he gets from his own experience, what his master or other persons on the farm tell him, and what he learns from papers and journals like the much-prized Farmer's Advocate. It is also both interesting and inspiring to note that we are co-operating with the mightiest forces that keep the wheels of progress humming. Truly we are an important item in assist-

ing to manufacture daily bread for the human race. I have been thinking that an increase in our ranks of fifty per cent. might stem the rising tide of the high cost of living if it did not solve the problem, for with more and better help farmers would increase their production, and moreover the excessive populating of the cities would thus be avoided. One fact, however, immovably remains—that is, farming and farmers will always be a necessity in this world, so let us put our best into life while we continue to hire out, knowing that a higher position is only reached by having done our best in the one below it.

Halton Co., Ont. J. H. ROBINSON.

Acting Canadian Trade Commissioner, J. T. Lithgow reports from Berlin that the German harvest will be lighter than usual this season, and the probabilities are that there will be a good market for Canadian apples. Last season about 120,000 barrels were recorded at Hamburg, and fully as many will be wanted this year. Mixed varieties in small lots are not desired by Hamburg dealers, who are asking for lots of 500 to 1000 barrels put up by the same packers under the same brand which would thus become known and appreciated for reliability. Low temperature and frequent rains are having an unfavorable effect upon the potato crop throughout the entire German Empire.

We all enjoy the paper very much and feel as if we could not get along without it. There is something of interest in it every week for all members of the family. Miss Farncomb and Junia always have such interesting and instructive items.

Simcoe Co., Ont. J. A. BONNEY.

GOSSIP.

Geo. Rice, Tillsonburg, Ont., manager for the Southern Ontario Consignment Sale Company, claims the date January 1st, 1913, for their auction sale of registered Holsteins at Tillsonburg.

The celebrated gray Canadian pacing horse, The Eel, with a pacing record of 2.02 1/4, died Sept. 27th, at Columbus, Ohio, after several days of illness of lung fever. The Eel was owned by F. W. Entricken, of Tavistock, Ont.

Sixty head of Clydesdales for Canada were shipped from Glasgow the last week in September, consigned to T. B. Macaulay, Montreal; W. W. Hunter, Olds, Alberta; William Miller, Kindersley, Sask.; Trotter & Trotter, Brandon, Man.; Edward Dingman, Stratford, Ont., and T. J. Berry, Hensall, Ont.

At his twenty-fifth sale of Aberdeen-Angus cattle September 25th, W. A. McHenry, at Denison, Iowa, sold forty-eight females for an average of \$160.60, eight bulls for an average of \$224.60, and the fifty head catalogued made an average of \$170.80. The top price realized was \$500, for the two-year-old heifer, Blackcap McHenry 86th, by Star of Denison, purchased by Fred. Roberts, of Iowa. The highest price for a bull was \$360, for the yearling, Protector of Denison, by Baden Lad. J. D. McGregor, of Brandon, Manitoba, was the purchaser of eight of the females, including the five-year-old cow, Pride McHenry 59th, at \$350.

The once celebrated flock of Border Leicester sheep belonging to Lord Polwarth, at Mertoun St. Boswells, Scotland, was sold by auction the last week in September. The Scottish Farmer, commenting on this sale, says: "It scarcely admits of doubt that the system of breeding at Mertoun had run to seed. It was a case of in-breeding run mad, and there is no merit whatever in the fact stated in the catalogue that the self-contained period (using only rams bred in the flock) had lasted for nearly fifty years. It lasted too long, and simply meant the ruin of what might have been a great national asset. In sooth, the Mertoun phase of things for the past thirty years was little better than a superstition." The highest price obtained was £25, for the five-year-old ram, Invincible, bred by Lord Polwarth, and the highest price for ewes was £24 apiece for a pair of two-year-old ewes. The average for 379 head was £5.

CRANFORD DAIRY SHORTHORN SALE

The famous herd of dairy Shorthorns, belonging to the estate of the late George Taylor, Cranford, Middlesex, England, sold by auction Sept. 25th, indicates the growing popularity of dual-purpose cattle. The herd of 187 head, including calves, sold for an average of \$415, the top price being \$2,500, for cow, Waterloo Baroness, purchased by Sir Gilbert Greenall, who takes her to Ireland, Mr. Sanday, Cheshire, being the most determined runner-up. Her calf sold for \$800 to Mr. Clark, Ireland. Forty five others sold for prices ranging from \$500 to \$1,250. Owing to the recent demand for bulls of this class only two were in the sale, the prices being \$350 and \$400.

TRADE TOPIC.

THE WEST CALLS FOR HELP.—Twenty Thousand Harvesters Wanted—The crops in Western Canada have been so heavy this year that it has been necessary for the farmers of the West to make another appeal for help. The demand for help is now more urgent than ever, and it will require at least twenty thousand additional men to complete the harvesting. In order to relieve the situation, the Canadian Pacific Railway has decided to run a Harvesters' Excursion, Monday, Oct. 14th, \$10 to Winnipeg, return fare from Winnipeg, \$18. Full particulars from any C. P. R. Agent, or write M. G. Murphy, District Passenger Agent, Toronto.

QUESTIONS AND ANSWERS.
Miscellaneous.

ROUND-ROOFED PLANK-FRAME BARN.

I intend building a barn 40 x 80 feet, with sixteen-foot posts, on cement-block basement. I intend to use the timber of an old barn that I have, otherwise I would build a plank-frame. Would you advise a round roof for that width, as I would like to use two tracks? Could you give me an estimate of timber required; also material for roof, and instructions how to build the roof? I intend to have three mows 22 feet, and a 14-foot threshing-floor. Would two trimmers, running lengthwise, be enough to carry overlays? Would the timber have to be larger to carry the round roof? I have beams 30 feet long, and I did not know whether I could splice them or not, or would it be better to put two posts in and a girt in center?
C. C.

Ans.—A plank-frame would be the best sort of construction for your barn, and these have been shown so often in "The

Farmer's Advocate" that it seems unnecessary to reproduce a drawing to illustrate the position of the timbers. With regard to an estimate of costs, I can give you the results of careful figuring of these from average prices of building material in Ontario this season. A barn 40 x 80 x 16 feet, if built of timber frame and covered with lumber and shingle roof, will cost \$978.02 for work and material. This does not include floors. A plank-frame of the same dimensions, and covered with rough lumber on walls and shingles on roof, can be erected for \$789.37, effecting a saving of \$188.65, and if a steel roof is used, a still greater saving can be made, as the same barn can be built for \$773.05, or \$16.32 less than if the roof was boarded solid and covered with wood shingles. I have gone into the question of building good barns at as low a cost as possible, and after travelling over the best-farming sections of Ontario and examining the farm buildings and studying the proper use of the building materials, I have been enabled to give the above estimates, and would surely recommend a plank-frame with a steel roof, not because it is cheaper, but because it is better.

If a barn is to be made thoroughly lightning-proof, it will be necessary to use corrugated steel on the walls as well. This raises the cost to \$905.72, but yet falls \$67.30 below the cost of a timber frame, wood-covered. The short time required to erect a plank frame and cover it with steel is what lowers the cost, and this detracts nothing from the stability and permanence of the building.

The following is the material for one end and one interior bent, and with this data your carpenter can make out a bill for the complete barn:

END BENT.

- 10 pieces 2 x 8 in. x 16 ft. posts.
- 2 pieces 2 x 10 in. x 28 ft. 9 in. purlin posts.
- 4 pieces 2 x 8 in. x 20 in. cross sills.
- 4 pieces 2 x 8 in. x 20 ft. cross beams.
- 2 pieces 2 x 10 in. x 26 ft. beam stiffeners.
- 3 pieces 3 x 6 in. x 16 ft. post stiffeners.
- 2 pieces 1 x 6 in. x 13 ft. purlin brace.
- 2 pieces 2 x 8 in. x 20 ft. gable stiffeners.
- 14 pieces 2 x 6 in. x 20 ft. end girths.
- 2 pieces 2 x 6 in. x 18 ft. end braces.
- 4 pieces 2 x 6 in. x 19 ft. gable girths.
- 4 pieces 2 x 6 in. x 17 ft. gable girths.
- 4 pieces 2 x 6 in. x 15 ft. gable girths.
- 1 piece 2 x 6 in. x 20 ft. gable girth.
- 2 pieces 2 x 8 in. x 20 ft. end truss.
- 3 pieces 2 x 4 in. x 15 ft. post stiffeners.

- 8 bolts 8 in. long, 1/2 in. diam., with washer.
- 30 lbs. 5-in. spikes.
- 12 lbs. 4-in. spikes.
- Double these quantities to provide for other end bent.

ONE INTERIOR BENT.

- 4 pieces 2 x 8 in. x 16 ft. posts.
- 4 pieces 2 x 10 in. x 28 ft. 9 in. purlin posts.
- 2 pieces 2 x 10 in. x 29 ft. 6 in. roof supports.
- 2 pieces 2 x 6 in. x 11 ft. 6 in. sub. supports.
- 4 pieces 2 x 4 in. x 3 ft. 6 in. struts.
- 2 pieces 2 x 8 in. x 5 ft. 4 in. main ties.
- 2 pieces 2 x 6 in. x 4 ft. 9 in., sub ties.
- 2 pieces 2 x 6 in. x 3 ft. 9 in. minor ties.
- 2 pieces 2 x 12 in. x 3 ft. 8 in. collar ties.
- 2 pieces 2 x 6 in. x 6 ft. 4 in. braces.
- 2 pieces 2 x 8 in. x 40 ft., or 4 pieces 2 x 8 x 20 ft. cross sills.
- 2 pieces 2 x 8 in. x 2 ft. short sills.
- 2 pieces 2 x 6 in. x 19 ft. roof-support stiffeners.
- 2 pieces 2 x 6 in. x 21 ft. 10 in. purlin-post stiffeners.
- 4 bolts 11 in. long, with washers.
- 14 bolts 7 in. long, with washers.
- 24 lbs. 5-in. spikes.
- 6 lbs. 4-in. spikes.
- Make bill as above for each bent required inside of end bents.
- Side timbers and rafters can be easily estimated by carpenter.
- This frame provides for roof with hip, and allows a rise of 18 inches in lower roof, and 8 inches in upper per foot of run, both rafters being the same length.

A. A. GILMORE.

APPROPRIATE SCRIPTURE.

When Henry J. Horn, now assistant to President Mellen, of the New York, New Haven & Hartford Railroad, was division superintendent of the Montana division of the Northern Pacific Railway, he lived at Livingston, Montana, and married a Miss Josephine Robinson. One day after the first baby came, Mr. and Mrs. Horn took the baby to church. Mr. Horn carried the child, and as the proud father and mother walked down the aisle the minister read from Daniel, seventh chapter, eighth verse: "I considered the horns, and, behold, there came up among them another little horn."—Saturday Evening Post.

His Father (after punishing him)—It hurt me more to whip you than it did you.

Tommy—Then all I've got to say is that you can stand an awful lot of punishment without hollering.

MARKETS.

Toronto.

REVIEW OF LAST WEEK'S MARKETS

At West Toronto, on Monday, October 7th, receipts of live stock numbered 49 cars, comprising 1,012 cattle, 208 hogs, 185 sheep and lambs, 48 calves, and 17 horses. No business was being transacted, but it was thought that prices would be the same as at the end of the previous week for cattle. Hogs were lower, selects, fed and watered, being quoted at \$8.25, and \$7.90 f. o. b. cars.

The total receipts of live stock at the City and Union Stock-yards last week were as follows:

	City.	Union.	Total.
Cars	69	415	484
Cattle	557	5,596	6,153
Hogs	2,324	6,189	8,513
Sheep	1,878	4,776	6,654
Calves	39	383	422
Horses	—	13	13

The total receipts of live stock at the two markets for the corresponding week of 1911 were as follows:

	City.	Union.	Total.
Cars	288	294	582
Cattle	8,615	3,338	6,953
Hogs	6,850	7,498	13,848
Sheep	6,331	2,663	8,994
Calves	528	104	632
Horses	—	115	115

The combined receipts of live stock at the two markets for the past week, show a decrease of 98 cars, 800 cattle, 5,335 hogs, 2,840 sheep and lambs, 210 calves, and 102 horses, compared with the same week of 1911.

It will be seen by the above figures that the live-stock receipts were liberal, especially for cattle. Trade, as a consequence, was dull, and prices declined from 15c. to 25c. per cwt. for the butchers' classes, and 25c. to 50c. per cwt. for exporters, of which there were 300 bought and shipped during the week. There was an excellent demand for feeders and stockers of good to choice quality, at prices that are not warranted when the present value of export steers is considered. Milkers and springers sold at steady to firm prices. Veal calves, sheep and lambs, of which there was a liberal supply, remained about steady all week. The hog market was easy all week, at \$8.75 for selects, fed and watered at the market, and \$8.40 f. o. b. cars at country points.

Exporters.—On Tuesday, W. Howard bought for Swift & Company, of Chicago, 98 steers for Liverpool, averaging 1,259 lbs., at an average of \$6.15, or a range in prices of \$5.90 to \$6.25; two bulls, 1,590 lbs. each, at \$5.35. On Wednesday, the same firm bought 100 steers for London market, 1,260 lbs. average weight, at \$6.15, or a range of \$6 to \$6.25; also 100 steers for Liverpool, 1,235 lbs. each, at \$5.99 average price, which was a decrease of 16c. per cwt. for the same grade of cattle. Many of the above cattle cost the drovers \$7 and \$7.25 per cwt. in the country, having been bought some time ago, before prices for this class of cattle began to tumble.

Butchers.—Not more than 40 or 50 of the choicest butchers' reached \$6.50 to \$6.55 during the week, and at the close about \$6.25 would be the top for the selected lots. Loads of good butchers', \$5.75 to \$6; medium, \$5.25 to \$5.40; common, \$4.75 to \$5; inferior, \$3.75 to \$4.50; cows, \$3 to \$5.25; canners', \$1.75 to \$2.25; bulls, \$3 to \$5.

Stockers and Feeders.—Feeders of good to choice quality sold at the highest prices of any stock on the market. Steers, 950 to 1,050 lbs., brought \$5.50 to \$5.75, the latter price being just 50 cents per cwt. less than the best-finished export steers sold for. Steers, 800 to 900 lbs., \$5.25 to \$5.40; stockers, 750 to 800 lbs., \$4 to \$5.25, according to quality, and common yearlings of inferior breeding and off colors, of which there are far too many in an old Province like Ontario, sold from \$3.50 to \$4 per cwt.

Milkers and Springers.—There seems to be no end to the demand for good to choice milkers and springers. Trade for them was brisk and strong all week.

Prices ranged from \$60 to \$95 each, two being sold at the latter price, and two at \$90 each. Medium to good cows sold from \$50 to \$55, and common at \$45.

Veal Calves.—Veal calves, for which there has been a continual demand all year at excellent prices, still remain firm, at unchanged quotations. Rough, heavy, grassy calves, sold at \$3.50 to \$5; medium to good, \$6 to \$8.50, and choice quality at \$9 to \$9.25, and sometimes \$9.50 for something of extra-choice quality.

Sheep and Lambs.—Light ewes sold at \$4 to \$4.25, and sometimes \$4.50; heavy ewes and rams, \$3 to \$3.50; cull sheep, \$2.50; lambs, the bulk sold around \$6 per cwt. all week; selected lots, \$6.15 to \$6.25; cull lambs, \$5 to \$5.50.

Hogs.—There is a decidedly easier feeling on the hog market. None of the packers will buy to put in their cellars any stocks at present prices. Prices paid now are for immediate consumption, and \$8.75 was the high mark all week for hogs fed and watered, and \$8.40 f. o. b. cars. At the close of the week prices were sagging, \$8.50 being the top price for selects, fed and watered.

BREADSTUFFS.

Wheat.—Ontario new, 93c. to 95c., outside; old No. 2 red, white or mixed, 96c. to 98c., outside points; Manitoba No. 1 northern, 99c.; No. 2 northern, 97c., track, lake ports, to arrive; feed wheat, 70c., lake ports. Buckwheat—70c., outside points. Peas—No. 2, 90c., outside, nominal. Oats—Manitoba extra No. 1 feed, 47c.; No. 2, 47c.; No. 3, 45c., track, lake ports; Ontario new, 35c. to 36c., outside; old No. 2 white, 44c. to 45c.; No. 3, 42c., outside. Rye—No. 2, 72c. to 73c., outside, nominal. Barley—For malting, 60c. to 63c. (47-lb. test); for feed, 48c. to 60c. Corn—No. 3 yellow, 76c., bay ports. Flour—Ontario 90-per-cent. winter-wheat patents, \$3.80 to \$3.85, seaboard; Manitoba wheat—Prices at Toronto are: First patents, \$5.70; second patents, \$5.20; in cotton, 10c. more; strong bakers', \$5 in jute.

HAY AND MILLFEED.

Hay.—Baled, in car lots, track, Toronto, No. 1, \$12.50 per ton. Straw.—Baled, in car lots, track, Toronto, \$10 to \$10.50 per ton. Bran.—Manitoba bran, \$22 to \$23 per ton; shorts, \$26; Ontario bran, \$23 in bags; shorts, \$25, car lots, track, Toronto.

TORONTO SEED MARKET.

Prices for alsike-clover seed advanced this week as follows: Alsike No. 1, per bushel, \$10 to \$10.50; No. 2, per bushel, \$9 to \$9.50; No. 3, per bushel, \$7 to \$8.

COUNTRY PRODUCE.

Butter.—Market steady, at unchanged quotations. Creamery pound rolls, 28c. to 30c.; creamery solids, 27c. to 28c.; separator dairy, 27c. to 28c.; store lots, 21c. to 24c.

Eggs.—Strictly new-laid, per case, 28c. to 30c.

Cheese.—Twins, 15c.; large, 15c. Honey.—No. 1 extracted clover honey, 12c. per lb.; combs, per dozen sections, \$3.00.

Potatoes.—Receipts were large, but quality none too good. Prices were lower. Ontario car lots, on track, Toronto, 65c. to 70c. per bag.

Poultry.—Receipts were large, and prices easier for live poultry, as follows: Geese, 9c.; ducks, 12c.; chickens, 13c.; hens, which are generally of a scrubby quality and poorly fleshed, 11c.

HIDES AND SKINS.

No. 1 inspected steers and cows, 14c.; No. 2 inspected steers and cows, 13c.; No. 3 inspected steers, cows and bulls, 12c.; country hides, cured, 13c. to 14c.; country hides, green, 12c. to 13c.; calf skins, per lb., 13c. to 17c.; lamb skins, 50c. to 75c.; horse hides, No. 1, \$3.50 each; horse hair, per lb., 35c.; tallow, No. 1, per lb., 5c. to 6c.

WOOL.

Unwashed, coarse, 13c.; unwashed, fine, 14c.; washed, coarse, 19c.; washed, fine, 21c.; repeats, 16c.

FRUITS AND VEGETABLES.

Receipts of fruit were not as large as

usual, as the bulk of peaches, as well as plums, have been marketed. Prices ranged as follows: Peaches, 50c. to 75c.; plums, 50c. to 75c.; cantaloupes, 35c. to 40c.; pears, 60c. to 80c.; grapes, 15c. to 25c., for six-quart basket, and 30c. to 50c. for eleven-quart basket; apples, barrel, \$1.50 to \$2.50; peppers, green, 35c. to 50c.; peppers, red, 35c. to 50c.; cranberries, Cape Cod, barrel, \$8.50; celery, dozen, 25c. to 35c.; cabbages, dozen, 35c. to 45c.; tomatoes, 25c. to 30c. per basket.

Montreal.

Live Stock.—The Montreal market, after showing considerable strength early in the week, fell off somewhat. Best steers sold at 6c. per lb., while fine were about 6c.; good, 5c. to 5c.; medium, 4c. to 5c., and common down to 4c. Butchers' cows were 3c. to 5c., and canning stock went as low as 1c. per lb. There was a good demand for sheep and lambs, sheep being 3c. per lb., and lambs 6c. per lb. Calves sold at \$3 to \$6 for common, each, and up to \$14 for choice. Hogs were steady, at around 8c. to 8c. per lb. for selects, weighed off cars.

Horses.—The market for horses was more active. Lumber camps are beginning to prepare for opening, and purchases of good, heavy horses are being made. The market held steady. Heavy draft horses, 1,500 to 1,700 lbs., \$300 to \$375 each; light draft, 1,400 to 1,500 lbs., \$225 to \$300 each; light horses, 1,000 to 1,100 lbs., \$125 to \$200, and broken-down animals, \$75 to \$125 each. Choice saddle or carriage animals sold at \$350 to \$500 each. Supplies continue light, and the tone of the market very firm.

Dressed Hogs and Provisions.—Fresh-killed, abattoir-dressed hogs steady, at 12c. to 12c. per lb. Lard, 10c. to 11c. per lb. for compound, and 14c. to 15c. per lb. for extra pure.

Potatoes.—Demand is good and the supply of choice stock limited, the crop being badly damaged hereabouts by wet weather. Cobblers were quoted, car lots, track, at 65c. to 70c. per 90 lbs., while in a jobbing way about 20c. per bag of the same weight was added to the price.

Eggs.—Receipts falling off, and market quite firm, quotations being 30c. to 31c. per dozen for selects, and 28c. for No. 1 stock. Seconds around 23c.

Syrup and Honey.—White-clover comb honey, 10c. to 11c. per lb., and 8c. to 8c. for extracted; dark comb, 7c. to 8c., and extracted, 7c. to 8c. Maple syrup, 6c. to 7c. per lb. in wood, and 8c. to 8c. in tins. Sugar, 8c. to 9c.

Butter.—The price again advanced on butter, to 28c., Township points, so that the market is very firm. There is absolutely no export going on. Finest creamery could not be bought here at less than 28c., and 28c. was being obtained from grocers. Nice stock might be had 1c. to 1c. less, and dairy butter at 23c. to 24c.

Cheese.—Exports continue large, and prices were steady, at 13c. to 13c. for finest Western colored, white being 1c. less; Townships, 13c. to 13c., and Quebecs 1c. less. Some quote a shade lower than the above prices.

Grain.—The market for oats was firm, and 100,000 bushels of American stock was being offered here. No. 2 Canadian Western oats, 54c. to 55c. per bushel, carloads, ex store; No. 1 extra feed, 1c. less; No. 1 feed yet 1c. less, and No. 2 feed 5 1/2c. to 5 1/2c. per bushel. Sample oats were 5 1/2c. to 5 1/2c., and No. 3, Duluth, 51c.

Flour.—Manitoba first patents, \$6.10 per barrel; \$5.60 for seconds, and \$5.40 for strong bakers', in barrels; Ontarios, \$5.25 for patents, and \$4.85 to \$4.90 for straight rollers. Jute packages 30c. less.

Millfeed.—Bran, \$23 per ton, in bags; shorts, \$27; middlings, \$28 to \$29 per ton; pure grain mouille, \$36 to \$38, and mixed mouille, \$34 to \$35.

Hay.—Prices steady, at \$15 to \$16 per ton for No. 1 hay; \$14 to \$15 for No. 2; \$13 to \$13.50 for No. 2 good; \$12 to \$12.50 for No. 3, and \$10 to \$11 for clover.

Hides.—Prices advanced to 12c., 13c., and 14c. per lb. for Nos. 3, 2 and 1 hides, respectively; calf skins steady, at 15c. and 17c., and lamb skins, 10c. up

to 70c. each; horse hides, \$1.75 and \$2.50 each; tallow, 1c. to 3c. per lb. for rough, and 6c. to 6c. for rendered.

Buffalo.

Cattle.—Prime steers, \$9 to \$9.50; butchers', \$6 to \$8.25; bulls, \$4 to \$6; stock heifers, \$4 to \$4.50; shipping, \$7.50 to \$8.25; heifers, \$4.75 to \$7.50; cows, \$2.50 to \$6.25; stockers and feeders, \$4.50 to \$6.40; fresh cows and springers, \$35 to \$75.

Veals.—\$4 to \$11.50. Hogs.—Heavy, \$9.50 to \$9.55; mixed, \$9.45 to \$9.55; Yorkers, \$8.75 to \$9.50; pigs, \$8.40 to \$8.50; roughs, \$8.25 to \$8.40; stags, \$5 to \$7.50; dairies and grassers, \$9 to \$9.40.

Sheep and Lambs.—Lambs, \$4.50 to \$7.25; yearlings, \$5.25 to \$5.50; wethers, \$4.75 to \$5; ewes, \$2 to \$4; sheep, mixed, \$3 to \$4.50.

Cheese Markets.

Madoc, Ont., 13c.; Brockville, Ont., 13c.; Kingston, Ont., 12c.; Napanee, Ont., 13c.; Picton, Ont., 13c. to 13 1/2c.; Cornwall, Ont., 12c. to 12 1/2c.; Ottawa, Ont., 12c.; Vankeek Hill, Ont., 12c.; Iroquois, Ont., 12 1/2c. to 12c.; Cowansville, Ont., 12c.; butter, 28c. to 28 1/2c.; St. Hyacinthe, Que., 12c.; butter, 27c.; Belleville, Ont., 12c., 12 1/2c., 13c., 12 1/2c.; London, Ont., 13c. to 13 1/2c.; Canton, N. Y., 17c.; butter, 31c.

Chicago.

Cattle.—Beeves, \$5.50 to \$11; Texas steers, \$4.50 to \$6; Western steers, \$5.90 to \$9; stockers and feeders, \$4.25 to \$7.75; cows and heifers, \$2.90 to \$8; calves, \$8 to \$10.75.

Hogs.—Light, \$8.60 to \$9.30; mixed, \$8.60 to \$9.30; heavy, \$8.40 to \$9.30; rough, \$8.40 to \$8.65; pigs, \$5.25.

Sheep and Lambs.—Sheep, native, \$3.25 to \$4.25; Western, \$3.40 to \$4.25; yearlings, \$4.25 to \$5.40; lambs, native, \$4.50 to \$6.85; Western, \$4.75 to \$7.

British Cattle Market.

John Rogers & Co., Liverpool, cable 12c. to 13c. per lb. for Irish steers.

A storekeeper recently had this experience with a customer: "Is yo' got enny haih fo' sale, boss?" "Any what, aunty?" "Haih, boss." "Hair?" "Yassuh, haih lak you got on yo' head." "Oh, hair." "Yassuh, haih." "Why, no, aunty; this is a dry-goods store, not a hair store." "Dat's what Ah 'lowed, boss; but missus tole me to cum yeah an' get free yahds mo' haih lak she done got yistiddy." "Oh, you mean mohair." "Yassuh, mo' haih."

AN HONEST MAN.

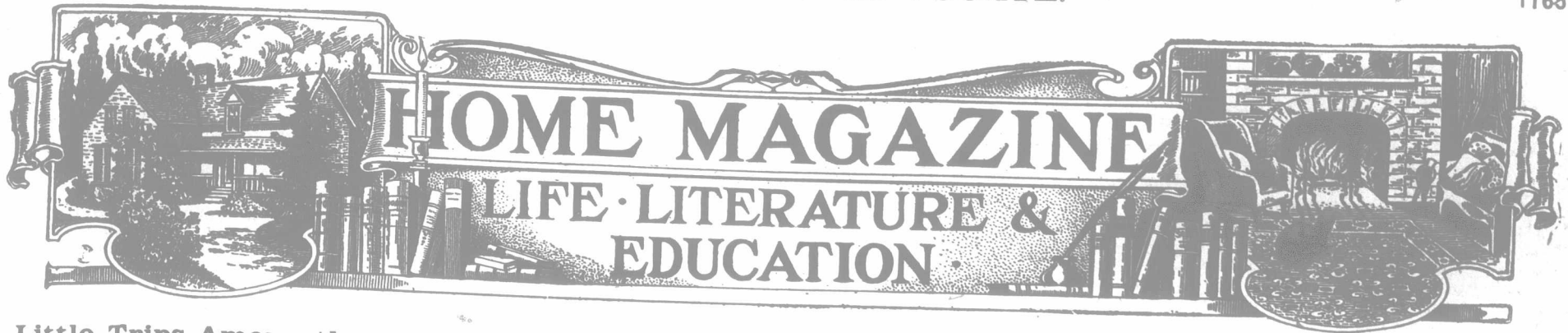
Ethel, aged six, had gone down the village street with her new doll. It could be plainly seen that she was in dire distress. She stood still, and after a close scrutiny of several men who passed, she accosted one.

"Say, are you an honest man?" she demanded.

"Why, yes, I think so," was the astonished reply.

"Well, then, if you're sure you're an honest man," said the little maid, "please hold my dolly while I tie my shoe."

"Sary Ann," sighed the Higgins boy in trembling tones, "if I git a red ear at the huskin' bee to-night, I'm a-goin' to do somethin'." "Are ye?" asked Sary Ann. "I be." "Whhat are ye a-goin' to do?" "If I git a red ear, I'm a-goin' to take a kiss from you." "If you take a kiss from me," asserted Sary Ann, giving her head a saucy toss, "you can be sure you'll git two red ears right away."



Little Trips Among the Eminent.

SIR DAVID WILKIE.
(1785 - 1841.)

When yet but a baby, scarce able to do more than toddle about the door of his home, he was found drawing the outline of a woman upon sand. "Who is it?" someone asked him, and the lisping reply was ready, "It's bonnie Lady Gonie" (Lady Balgonie).—Thus early in life did David Wilkie foreshadow the career that was to be his. Truly "the boy is father of the man."

At school, it was the old story of neglected lessons and slates filled with pictures. "He was the most singular scholar I ever attempted to teach," said Dr. Strachan, the master of the school, many years afterwards, when Wilkie had attained the height of eminence which makes the slightest attribute or incident of a life interesting.—And truly it was little wonder that the good schoolmaster, as well as the good clergyman father—for Wilkie was a "son of the manse"—was perplexed over the picture-drawing lad and his apparently hopeless future. What would you, reader, undertake to do with such a one?—"quiet and demure, yet with an eye and ear to all the idle mischief that was on hand in the school-room," much given to following gypsies and haunting fairs and market-places, much given to spending half-days all alone in the fields gazing intently at woods and sky.

Despairing of making anything of the lad but, possibly, a painter, the father at last relented and sent him up to Edinburgh. Here he occupied a small room, "up two flights of stairs, and furnished chiefly with a few sketches on the wall, a Bible, and a fiddle"; but he spent the working hours of the day at the Trustees' Academy, nailed down to working upon the antique, which he detested, his mind being still upon fairs and gypsies. During the time that he spent at the school, indeed, although he may have absorbed some principles, he succeeded in finishing but two pictures of note, drawings of himself and his mother, now owned by the Duke of Buccleuch.

In 1804 he was back in Cults again, free and gloriously happy, painting the worthies of his native village, making studies of them everywhere, even in church on blank leaves of his Bible, much to the shocking of his father. The result was his fine painting, "Pitlessie Fair."

By another year he had sold the "Fair" for £25, and started for London, with little money in his pocket, but a great ambition in his heart. "There is a raw, tall, pale, queer Scotchman come," wrote Jackson, a pupil at the Royal Academy, to a friend, a fortnight

later, "an odd fellow, but there is something in him."

In London, as in Edinburgh, it was the old story of pinching economy, but worse,—he was now on his own resources. Little, perhaps, he recked that he was compelled to dine at the cheapest places, when he dined at all: in such knocking about he came upon many quaint and odd characters for his pictures. A more irritating worry was the lack of money to pay his models, and, indeed, whenever possible, he painted from his own reflection in a mirror, being caught, upon one occasion, somewhat to his embarrassment, engaged thus dressed as an old woman. He always wrote home, however, cheerfully. In the quiet Scotch manse there was no suspicion of the straits through which he was passing, threatening even the breaking up of his health for sheer need of nourishment.

But "the darkest of the night often comes just before the dawn." In 1806, his "Village Politicians" was sent to the Academy, and proved to be the picture of the year. While Wilkie cowered at home waiting for the verdict, his two friends, Jackson and Haydon, were rushing to tell him the good news. They danced about him, they put his hat on his head, and dragged him off to the Academy, where they found the picture surrounded by an eagerly admiring

instead of a picture," says the delighted narrator, "were two new bonnets, two new shawls, ribbons, and satins, and heaven knows what, for his mother and sister. . . I never saw such simplicity of rustic triumph as glittered in Wilkie's expressive face."

The encouragement put new life and soul into Wilkie. He had now friends and admirers in plenty, chief among them Sir George Beaumont, art-lover and art-critic, who became his life-long friend. Setting to work with high heart, he rapidly produced his "Blind Fiddler" and "The Rent Day," and then, for the first time, could ease his homesickness by a visit home to bonnie Scotland. On his return, he painted the "Village Festival," which was purchased by J. J. Angerstein, for 800 guineas.

Then there followed rapidly "The Card-Players" for the Duke of Gloucester, a portrait of the Marchioness of Lansdowne, and other pictures. Wilkie was working more strenuously than ever, but now, when overworked, he was carried off to one of Sir George Beaumont's country seats, usually to Coleorton, to regain inspiration and energy. Haydon has given us a glimpse at one of these visits: "We dined with Claude and Rembrandt before us, and breakfasted with the Rubens landscape, and did nothing morning, noon or night, but

his father died, and his mother and sister came up to London to live with him. "Of the kitchen furniture," he wrote to his sister, "I do not know that you should bring anything except the old brass pan for making jelly, and anything else you may consider of value. There is an old Dutch press in one of the closets that my mother got from Mrs. Birrell; what state is that in? If it were not an article of great weight might it not be brought?" . . . These articles appear in the backgrounds of many of his pictures, for he cared not at all that some of the critics sneered, because of them, at his "pan-and-spoon style."

In 1814, when Napoleon had just left for Elba, Wilkie and Haydon went to Paris. Here, the first thing Wilkie did was to fall seriously ill, so that a doctor had to be called. Haydon and the physician seriously consulted together in Latin, then went out. On their return, what was their consternation on finding the sick man sitting up in bed, "laughing ready to die," and trying to teach his landlady English, the lesson he had chosen to make her say, being, "Peter Piper picked a peck of peppers off a pewter plate," etc.—The dour Scotchman could, indeed, have his bit of a joke, even at the expense of the fair sex, but further than that with the fair damsels he did not go. He never had a love affair, never married.

After studying in Paris for a time, the two returned, and Wilkie went to Scotland, where he visited Sir Walter Scott at Abbotsford, and met many other notables of the "land of brown heath and shaggy wood." "Laidlaw" was the exclamation of Hogg (the Ettrick shepherd), on meeting him. "This is no' the great Mr. Wilkie!"

During this tour he painted "The Scotch Wedding" for the Prince Regent, followed shortly afterwards by "Chelsea Pensioners Reading the Gazette of the Battle of Waterloo," an order for the Duke of Wellington, who paid him 1,200 guineas for the picture. This canvas was exhibited at the Academy in 1822, and great crowds came to see it, hailing the heroes represented in it with shouts of delight.

In 1824 he went to Edinburgh to collect materials for his "John Knox Preaching Before the Lords of the Congregation," and while there the Edinburgh artists, among whom was the young Edwin Landseer, gave a dinner in his honor, at which he made a powerful speech.

He was hurriedly recalled to London on account of his mother's illness, but arrived too late to see her before she passed away. At about the same time a brother returned from Canada, ruined and sick. Before the year was out he, too, died, leaving a widow and family depending upon Wilkie as their sole sup-

port.

In 1811, Wilkie was made a member of the Royal Academy. Shortly afterwards



The Village Festival.

From a painting by Sir David Wilkie, R. A., now in the National Gallery, London, Eng.

crowd. Poor Wilkie was almost overwhelmed. "Dear, dear!" he kept saying, "It's jest wonderful!"—The picture was sold to the Earl of Mansfield.

Congratulations—and commissions—now poured in upon him. He accepted them silently with a half-smile; his simple, kind heart, could not be spoiled by either praise or money. Haydon tells of receiving an invitation to his rooms to tea very soon after—for Wilkie could now entertain. When it was over, the Scotsman took him, with an air of mystery, into his painting-room. "There,

think of painting, talk of painting, dream of painting. We lingered on the stairs going up to bed and studied the effect of candle-light upon each other: wondered how the shadows could be best got clear as they looked. Sometimes Sir George made Wilkie stand with the light in the proper direction, and he and I studied the color; sometimes he held the candle himself and made Wilkie join me."

.....

port, and a list of financial deficiencies that almost beggared him before he had them straightened.

Under the heavy strain his health again broke down and he went to Europe in the hope of regaining it. At Rome, however, another blow fell in the news that a firm of printers who owed him a large sum of money had failed; but his courage never wavered. In the hope of being better able to meet his new obligations he studied and worked incessantly, a pleasant variation being a painting tour through Spain in company with Washington Irving.

In May, 1828, he was again back in London, "thinner and more nervous than ever," and with a number of paintings which did not please the public. During his tour abroad, his style had become entirely changed. He had given up the finished detail and the quiet coloring of his earlier pictures for a broader treatment and richer tones; above all, he had given up painting the simple home subjects that the people knew and loved, for more daring, historical compositions. He could no longer please.

The King, however, remained his friend and patron. In 1830, on the death of Sir Thomas Lawrence, he was made Painter-in-Ordinary to the Court. In 1836 he was knighted. When Queen Victoria came to the throne he was summoned to paint a picture of her First Council. In portraits, at least, he could still obtain many commissions, but he was steadily becoming more and more feeble.

In 1840 he went once more abroad, travelled through the Holy Land with the Bible as his guide-book, and stayed some time in Jerusalem. On the way home he died on shipboard, June 1st, 1841, and was cast to his last resting-place in Gibraltar Bay.

So ended the life of Sir David Wilkie, "a good artist, and a good man."

Pickles.

[A paper read by Mrs. D. McIntyre, at a meeting of the Sunderland branch of the Women's Institute.]

The custom of pickling seems to have been practiced since very early times, the ancient Greeks and Romans highly esteeming their pickles made from herbs, roots, and vegetables, preserved by vinegar. All vegetables and fruit used for pickles should be sound, and not over-ripe. Fruit can be pickled as well as vegetables.

The Vinegar.—Use only pure vinegar in making pickles, catsup and sauces. Cider vinegar is usually considered about the best for this purpose, but some prefer the "white wine." It is just a matter of taste, as vinegar is weakened by boiling, it should merely be brought to scalding-point, and then poured on the pickles.

Using Alum in Parboiling.—If articles to be pickled are parboiled or scalded, they will absorb the vinegar more readily, but they will not be so crisp. Cucumbers and gherkins are made crisp and green by dissolving a small lump of alum in the vinegar the first time it is scalded, but it is injurious to the health if too much is used.

Spices.—Use spices judiciously, so that all combine into a pleasant flavor without having one flavor predominate over all the others, and do not flavor so strongly as to entirely disguise the original flavor of the article pickled.

Brine.—The rule for the brine used for pickles is, "Strong enough to float an egg." The proportion is about 1 quart of water to 1 cup salt.

The Kettle.—Use porcelain-lined or granite kettles for putting up pickles. Use silver spoons and forks (or aluminum) for stirring, as the acids do not affect them.

Keeping of Pickles.—Pickles will become soft and spoil if exposed to the air, hence they should always be kept covered with vinegar. There should be two or three inches of vinegar over them. Keep the jar tightly closed. If pickles are put in jars and sealed while

hot, they keep better than in any other way. Pickles should be kept in a dry, cool place. They are best kept in glass. Never use glazed jars, as the salt and vinegar will dissolve the little lead used in glazing and form poison. No vessel which has held grease should be used for keeping pickles. Pickles are an agreeable addition to our food, but they should be eaten sparingly, as they are not easily digested.

Some Old-Time Echoes

WE VISIT A BOER HOMESTEAD.

X.

ON TREK IN THE TRANSVAAL.

Before our introduction to the Baas and his family, we new-comers had to go through a little preliminary drill as to what would be expected of us as guests. In whatever form hospitality might be offered to us, we were bound to accept it. Refusal, even though to swallow what was handed to us might threaten suffocation, would be an unforgivable offence. Having learnt our lesson, we presented ourselves at the door of a house which we were told was one decidedly cleaner and neater than is the rule in the Transvaal. It might have been cleaner, certainly, but then, again, it might easily have been much dirtier, as we learnt by after experience.

There was no lack of cordiality in the welcome tendered us, and, I believe, at the initial function of handshaking all round, from the father down to the baby, we all acquitted ourselves with credit. We had learnt that, according to Boer rules of etiquette, the hand of the father must be taken first, never that of the mother. To have reversed the order would have been an error of breeding not to be condoned.

After this ceremony had been satisfactorily concluded, we were seated formally around the house-place or living-room. The frau never rose from her seat, to which she might have been beeswaxed, so firmly rooted to it did she seem, her feet on the usual pan of charcoal, and herself fast developing that

necessary amount of fat, which renders a Dutch wife beautiful in her husband's eyes. She was very affable, and talked, though I understood not a syllable, with considerable volubility. By her side on the table, in whose drawer she safely deposits and withdraws again never, if she can help it, any stray coin her husband dutifully hands to her, she being the purse-keeper, was a Canadian Weir's hand-sewing machine, about some disarrangement of which she had some hope I might enlighten her. Could I have understood her I might have done so, but silence was my best wisdom, and I expressed my inability by dumb show. A rattle of cups and saucers announced the coffee, which is served without fail as a mark that you are received as one of the family. I had rather dreaded this ceremonial, having been warned that I might not quite like its every detail, I certainly did not. A young girl, one of the daughters, superintended the repast. Between the filling of each cup, she dipped it into a small pudding-basin, holding more coffee slops than water, by way of cleansing it. In her hand was a rag the size of a child's pocket handkerchief, and the color of the liquor itself with which she smeared it. This might have been borne with some measure of equanimity, but to see her wipe her own face leisurely at intervals with the same, was just the one drop too much which made the cup (our metaphorical cup) overflow. This happened to the literal cup, by a sleight of hand, which probably procured me a character for awkwardness, but which spared me a nauseous draught. Before leaving the farm we saw its fine grove of orange and lemon trees, and bore away bags of delicious fruit, besides eating as much as we liked. They were paid for indirectly, I believe, by one of the party who understood best how such delicate transactions are arranged amongst the Boers. Probably the coin itself was small, which found its way into the house-mother's money-drawer, for rich and luscious as these oranges are, they have the additional virtue of cheapness, too. Our return cavalcade



The Harvest Field.

From a painting by J. P. Hunt, exhibited at the Western Fair, London, Ont., 1912.

ch renders husband's and talked, able, with er side on she safely never, if n her hus- she being an Weir's me disar- come hope I have done so, m and I mb show, nounced hout fail d as one d readed rned that y detail, girl, one the re- ach cup, pudding- os than In her a child's or of the eared it. th some see her intervals me drop up (our is hap- eight of me a t which Before e grove and bore des eat- y were one of w such ranged he coin ts way drawer, oranges tue of valcade



Let's make a Jelly Roll—
With FIVE ROSES flour.

It *Strength* and *Fineness* hold your batter together in the long well-greased pan.

Bakes *evenly*.

Smooth Texture—soft, golden Crumb, spongy, porous, yielding.

No holes, nor lumps to *vex* you.

And when you turn it out on the damp napkin hot and *savory*, and you spread the under side with "jell"—

It doesn't get *soggy* nor *crumbly*.

Roll it gently, carefully.

Not a *crack*—not a *break*.

Perfect Smoothness—a Perfect Roll—*Yours*.

Bake anything, make anything.

Use FIVE ROSES—*bread and pastry*.

Melting puff paste—flaky pie crust—crinkly fritters—
tooth some rolls.

FIVE ROSES for anything—*everything*.

Be flourwise.

Five Roses Flour

Not Bleached



Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

arranged itself in the same marching order as the morning, with this difference, that the "gray," which had so strongly objected to convey me when outward-bound, testifying its objections thereto without scruple, pirouetting round at each little sluit, or ditch, with an eye to the stable in which he had idled for weeks, now stepped out freely, and even indulged me with a pleasant little canter or two after we had first mounted up, and then "sliethered" down the stony kopje, which stood between the Wonder-baum and the capital. * * *

AMONGST THE DUTCH.

Our stay in Pretoria was, from untoward circumstances, somewhat provokingly prolonged, and it was while there I gleaned some facts and figures of the quaint habits and customs of the most singular and yet interesting people amongst whom we temporarily found ourselves, a people then but little known to anyone outside of their own more immediate boundaries.

It was thus I wrote of them in my notes of about thirty-seven years ago, before the great transformation scene which has brought us all into a closer relationship, and turned enmity into friendship:

THEIR HABITS AND CUSTOMS.

"I must find a niche somewhere amidst my jottings for my little 'scrap-bag' of odds and ends about the Dutch of South Africa, and their old-world ways, which I gathered here and there, sometimes from one, sometimes from another; sometimes from answered queries of my own; sometimes from the 'chit-chatteries' of the hotel-table and general-room; and notably from John, whose powers of observation are of no mean order. Why might not this chapter be my niche, as well as another?"

"To understand this quaint people, and how it happens that they differ so much

Take A Handful Of "St. Lawrence" Sugar Out To The Store Door

—out where the light can fall on it—and see the brilliant, diamond-like sparkle the pure white color, of every grain.

That's the way to test any sugar — that's the way we hope you will test

St. Lawrence
Sugar

Compare it with any other sugar—compare its pure, white sparkle—its even grain—its matchless sweetness.

Better still, get a 20 pound or 100 pound bag at your grocer's and test "St. Lawrence Sugar" in your home.

ST. LAWRENCE SUGAR REFINERIES LIMITED, - MONTREAL.

67A

from the colonists of any other part of the world, it is necessary to take an imaginary kerchief, and with it to wipe away from the mind's tablets somewhat more than two centuries of time, and with them all the progress other countries and people have made therein. The Dutch of South Africa to-day probably differ very nearly as much, not quite, because of their national phlegm, from the Dutch of Holland, as they do from ourselves. Had an offshot of our nation

planted itself as a community, as these old Hollanders did years ago in some far-away land, inaccessible, partly because they chose it should be so, receding as others advanced, because they would not be meddled with, and content to do as their forefathers had done before them, should not we, I ask you, cut about as sorry a figure as they, when the outer world pounces upon us at last, and has its laugh at our antediluvian ways? Their very mode of living, that

veritable living in tents, accounts for much of all this. When a wagon has formed your home for weeks, nay months, and even years in some cases, would not even a one-roomed house seem spacious quarters? If you have not sat upon a chair for all this time, why need you be ashamed to squat? Habit becomes second nature, as we all know. Another habit of these good folks may even have its excuse. In their journeyings on and on, seemingly without aim, but really in search of 'pastures new,' water at times is a rare commodity, and has to be husbanded with care. The barrel slung under the wagon is liable to emptiness. A Dutch family wagon is usually packed full as any beehive, with human bipeds of all sizes and ages, and in every stage of unwashedness. When bucketfuls would not cleanse, what could a thimbleful do? Hence the faith put in the half-filled pudding-basin, and the tiny rag as a means of purification. The economy of it recommends itself to the Dutch mind, whilst to the Dutch body it is deemed all sufficient. Again, may we not find another excuse for this flaw in these our brothers? The old Dutch Bible supplies the sole literature they need. They take the simple words, each and all in their barest and most literal sense, without the aid of commentator or note. Frequent mention they find of the old custom of washing the hands and feet as a ceremonial more than for any other purpose; so, they argue possibly—at least I fancy it would be like them to do so—that if that sufficed them, why wash more now?

"To the uninitiated it might appear as if all Boer families were connected by ties of blood from their custom of addressing one another in terms of relationship. The young folks call their seniors 'Oom' and 'Tanta,' uncle and

BABY'S OWN SOAP

Best for Baby

Best for You

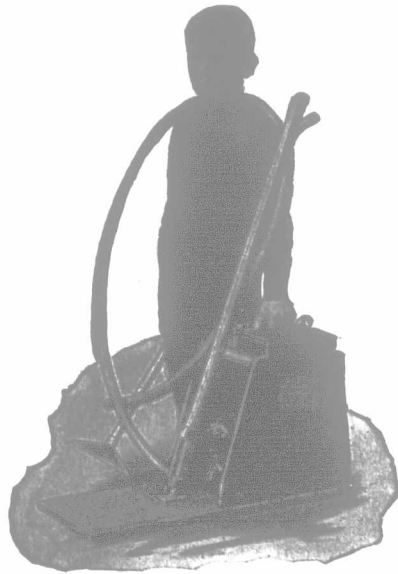


THE particles of pure vegetable oil which are rubbed into the open pores of the skin with the creamy fragrant lather of Baby's Own Soap renew the life of the skin—help nature along. It assures a soft, white, healthy skin and its use delights both young and old. Baby's Own is for sale almost everywhere.

ALBERT SOAPS LIMITED, MFRS., MONTREAL.

"King Edward" Vacuum Cleaner

Keep your Home Scrupulously Clean all the Year Round



You can do it with ease if you have this wonderful little machine in your home, and there is no reason why you cannot have it. Use it in place of your broom. Go over your carpets, hangings, mattresses, upholstered furniture, with it every sweeping day—it is a mistake to think the use of a vacuum cleaner twice a year will keep a house clean permanently—dirt and dust are constantly accumulating, and nothing but a good vacuum cleaner used often will remove them.

The "King Edward" is the only Vacuum Cleaner working on the correct and most effective system—double pneumatics. It requires a shorter stroke than any other hand machine, and is, therefore, extremely easy to operate—a child can use it and do more work with it than with any electric machine selling at \$100. The only reason for the low price of the "King Edward" is the fact that we sell direct to you—no middleman's profits, no store expenses—just actual manufacturer's cost and a small profit.

10 DAYS' FREE TRIAL.

You take no risk if you send for the "King Edward" Vacuum Cleaner. Fill in and mail the coupon to-day. Use the Vacuum Cleaner for 10 days. If it doesn't satisfy you, return it at our expense. If you decide to keep it, the price to you is only ———— **\$16.00**

The GEO. H. KING CO. LTD.
WOODSTOCK, ONT.

Gentlemen.—Please send me a King Edward Vacuum Cleaner on ten days' free trial, without obligation to me.

Name.....
Address.....

The Geo. H. King Co., Limited
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Manufacturers of Hand, Electric, Water Motor and Gasoline Power Vacuum Cleaners

aunt, and the seniors speak of their juniors as 'cousin,' the same name being applied to the latter amongst themselves. Any other title, such as we use, is never heard, except when an Englishman forgets their etiquette, and substitutes a Mr. or Mrs. for the more familiar appellation, and he must submit to being considered proud and reserved in consequence. It is a great drawback to getting on with the Dutch not to know their language. They are suspicious of some 'arriere pensee' when words are used which they do not understand, and they dislike legal documents or business papers being in a tongue they do not know. Whether they have grounds for believing that they have been deceived I cannot tell.

NO PROBLEM OF DOMESTIC HELP IN BOERLAND.

"Except Kafirs, there are none here who really rank as servants. A neighbor with a smaller purse and fewer flocks and herds, will accept an invitation to live near at hand, with the understanding that for certain privileges he shall render certain services, and in addition to this recognized form of service, there is always an interchange of neighborly help given and accepted which meets most of the emergencies of South African life.

THE BOERS A REVERENT PEOPLE.

"They are very religious, with views narrow, but clearly defined. Their children are simply taught God's own truths as in His revealed Word. They end, and I believe, commence, each day by prayer, and their meals are untouched until a blessing has been reverently asked. Their church is the Dutch Reformed Church, and their love and respect for their minister is a marked feature of their characters. They submit with much humility to the recognized authority of their 'Kirk Raad,' or Council, composed of men like themselves, only with a preference given to those who have won a position amongst them by their wealth, superior education, or more-marked piety. Matters of business, quarrels, and the breach of any social law, are laid before the Raad, and its decision accepted as final.

"The Doppers have seceded from the church. Their worship is conducted ever more dimly than that of the section from which they have separated, singing being excluded as wicked. They adopt a style of dress which of itself is a blow to vanity, and the faintest approach of mirth, even in private life, is treated as a sin.

"Missus would like to see a Nacht-maal?" said John, one day.

"What may that be?" ask I.

"It's when the Dutch come into town, once every three months, to go to church, and take the Sacrament, and get their babies christened, and the girls and boys confirmed, and they buy their goods, and sell their wool, and they visit one another. Oh! there are lots of wagons outspanned in the square then, and the place is full, full!"

"This Nacht-maal is a great institution, and has come of the necessity for occasional social intercourse amongst a people who, living so wide apart in their scattered homesteads, and upon farms so large that it is a day's journey to visit a neighbor, would otherwise never interchange an idea outside their own family, except when visited at long intervals by a travelling merchant, who, like the Troubadour of old, is sure of a hearty welcome and of being fed upon the fat of the land, so glad are they to have him as a guest. Transactions of every kind are carried on during Nacht-maal, and as far as a Boer can be jolly, he is jolly then, and so are his servants, and so are his young folks. Who knows but that it might have been at 'Nacht-maal' that our Pieter first saw his Gretchen? and we know what came of that.

"But the story of Pieter and Gretchen shall be reserved for next time."

H. A. B.

"What was your little boy crying about last evening?"

"Over his lesson in natural history."

"A child of that age studying natural history? You astonish me!"

"It's so, just the same. He was learning the difference between a wasp and a fly."

Hope's Quiet Hour.

Seeds Grow.

Let him that is taught in the Word communicate unto Him that teacheth in all good things. Be not deceived; God is not mocked: for whatsoever a man soweth, that shall he also reap. For he that soweth to his flesh shall of the flesh reap corruption; but he that soweth to the Spirit shall of the Spirit reap life everlasting. And let us not be weary in well doing: for in due season we shall reap, if we faint not.—Gal. vi.: 6-9.

That is a long text, but it is worthy of careful reading. Whatever kind of seeds we are sowing, in our everyday, ordinary living, will yield a harvest of good or of evil. "God is not mocked: for whatsoever a man soweth, that shall he also reap in due season we shall reap, if we faint not."

When a little child is given some magical brown seeds, and told that if planted in the ground they will change into flowers and vegetables, he is in a great hurry to perform the miracle. The seeds are duly planted and plentifully watered. Next morning the young gardener is eagerly looking for results. By next day he has grown a little discouraged, and very soon he digs up the hurried seeds to find out what they are doing. We smile at his impatience, but how often we are just as impatient when we have tried to sow good seed in God's harvest-field. We soon lose faith unless we can see some quick results. But often the seed has sprung up and produced fruit without the knowledge of the discouraged sower.

A few years ago there was a great religious revival in Wales. How did it start? Evan Roberts—the great leader of the revival—says that as he was walking to the post office one evening he passed a gypsy woman who said: "Good evening, sir." Her use of the word "sir," in addressing one who was only a miner, "went straight to his heart, and he asked himself why he had not said, 'Good evening, madam,' to the gypsy. 'From that moment,' he said, 'I felt that my heart was full of the divine love, and that I could love the whole world, irrespective of color, creed, or nationality.'" How little that poor woman imagined that her act of kindly courtesy would blossom out into a great revival of religious feeling that would transform the lives of thousands.

Then look at the harvest from the other kind of seed. A young man or woman reads a debasing book, or welcomes into the holy temple of the heart shameful thoughts. The guilty soul is filled with fear of consequences—but day slips quietly after day and no evil result is seen to follow. Then the fear fades and the evil thoughts crowd unhindered into the mind. Before very long they undermine the citadel of the soul, and the life drifts slowly away from God and holiness. Thoughts grow into words and deeds which would have shocked the man or woman a few years ago. The unchecked decay spreads until not only soul, but body, is diseased. A week ago I read a book on mental diseases, written by a specialist who was for years in charge of a large asylum. He says that a great many people become insane from business or domestic worries, many make shipwreck of the mind as a result of the drug or alcohol habit, and many end their lives in the asylum because they have not kept their bodies holy as the temple of God. As St. Paul says: "It is a shame even to speak of those things which are done of them in secret." Secret thoughts are seeds which will grow. Those who think evil thoughts gradually become evil in character; those who think of things which are lovely and holy, grow steadily more Christ-like.

Sin is a seed which—if allowed to grow unchecked—produces a harvest of misery and death. In the Bible stories we are allowed to look behind the scenes and see how dramatically sin is punished. Let us glance at two pictures of one woman.

Jezebel found her husband, the king of Israel, lying moodily on his bed with his face turned to the wall. He wanted the

vineyard of Naboth in Jezreel, but Naboth refused to sell the inheritance of his fathers. Jezebel taunted king Ahab with his weakness, then—with daring wickedness—she caused Naboth to be falsely accused of blasphemy and treason. Then he was stoned to death and the coveted vineyard won. It was a fatally easy thing to do, for Naboth had no one to avenge him—no one but GOD. Jezebel was not afraid of God's awful anger, because she had often dared His wrath and He had shown no sign of caring. She had won for Ahab his heart's desire, and was triumphant. Little she cared for the message of Elijah: "The dogs shall eat Jezebel by the wall of Jezreel."

Years slipped away, and the murder of Naboth seemed to have done no harm to the murderer. But one day the conquering usurper, Jehu, entered Jezreel—the city where Naboth had been stoned—and ordered Jezebel's attendants to throw their mistress out of the window. We know the terrible sequel, and how the prophet's words were fulfilled.

Sin is too dangerous a thing to be trifled with, and a sin done in secret, is perhaps the most dangerous of all. Forgiveness, the blotting out of transgression, is a miracle which only God can perform. Science gives no hint of the possibility of any act or word being blotted out. We are told by men of science that words spoken a thousand years ago are still vibrating through the ether. Though travelling with marvellous swiftness, they are only just reaching some distant star now, and might be caught up by "wireless" there. They have not fallen down dead. We are told that every thought a man conceives makes some change in his body—there is no doubt about its affecting his soul.

We may well be thankful that God Himself has taught us the almost incredible belief in the forgiveness of sins. We may well marvel when He changes sinners into saints, as He often does. But it is not safe to go on recklessly sinning, in the expectation that He will forgive and forget, as soon as a sinner is tired of being a prodigal, and decides to go home. The Father loves His children too wisely to let evil go unpunished. Because He loves, and is ready to forgive, the child must be taught the awfulness of sin. The wasted years can never be lived over again, the lost opportunities cannot be recalled.

"One stitch dropped as the weaver drove His nimble shuttle to and fro, In and out, beneath, above, Till the pattern seemed to bud and grow As if the fairies had helping been— One small stitch which could scarce be seen; But the one stitch dropped pulled the next stitch out, And a weak spot grew in the fabric stout; And the perfect pattern was marred for aye By the one small stitch that was dropped that day."

But the Bible, the Book which speaks most sternly about the danger of sinning, is full of hope for the penitent sinner. Christ—Who declared so triumphantly that He had "power on earth to forgive sins"—is still "God with us." He can be found by those whose sins are an intolerable burden, and can still say with all authority: "Thy sins be forgiven thee." But those who set out to follow the Great Sower must sow some good seed themselves. What shall it be? Go and ask Him. He can fill your hands with good seed and give you opportunities for sowing it where you are, or He can open the door of wider usefulness to you, if that is His desire. Never despise any chance of serving Him, no matter how small it may seem to be. Seeds grow!

Think of the brotherly spirit of the age. How contagious it is! Everywhere men are reaching out friendly hands to their brothers, and women to their sisters. There are friendly societies without number, social settlements, organizations like the Y. M. C. A. and the Y. W. C. A., philanthropic institutions for helping the poor, the sick, and the handicapped. Even the nations are being swept into the great movement of peace and good-will. Travel around the world a little, and you will see that it

is so. Think how quickly a great national disaster calls out a practical expression of helpful comradeship from the ends of the earth.

Where did all this brotherliness spring from? Why, the Great Sower planted it, and has waited patiently for blossom and fruit. JESUS lived and loved, and the beauty of that Life of perfect selflessness has captivated the hearts of men. We can't be satisfied to seek only selfish aims, when we see the beauty of a life of spotless unselfishness. God stoops tenderly to clasp hands with man, and men catch the inspiration of God's Idea of Love and reach out to clasp hands with their brothers. This is the age of brotherhood. As Stephen Phillips sings:

"In the years that have been I have bound man closer to man, And closer woman to woman; And the stranger hath seen in a stranger his brother at last, And a sister in eyes that were strange. In the years that shall be I will bind Me nation to nation And shore unto shore," saith our God. "Lo! I am the burster of bonds and the breaker of barriers, I am He that shall free," saith the Lord. "For the lingering battle, the contest of ages is ending, And victory followeth Me."

DORA FARNCOMB.

The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month in this department for answers to questions to appear.]

Care of the Hair.

To keep the scalp and hair in a good condition the "head" must be washed often enough to ensure cleanliness; about once a month is sufficient for most people, but if the hair is very oily, a washing once in every two weeks will be necessary.

Brush the hair and scalp thoroughly, though gently, every night, and be sure to keep the hair-brush clean. Women or girls with long hair should never use a wire hair-brush, although there is a kind with soft wire "bristles" that may be used with entire safety by men. When brushing the hair, part it, and brush the scalp until it tingles.

An excellent method of promoting scalp and hair health is to massage the scalp thoroughly with the fingers for at least five minutes every night. A very little olive oil, applied to the roots of the hair twice a week with a child's tooth-brush, is recommended for very dry, harsh hair. Dryness, by the way, often causes premature grayness. If preferred, a little vaseline or carboline may be used instead of the olive oil. Pulling the hair to keep the skin of the head loose from the bone will also help to keep the hair long and thick.

If one wishes to wave the hair, one should never resort to curling-tongs. Use kid curlers instead, wearing a little lace-and-muslin cap to hide the ugly things in the morning if the curlers are to be left in place until later in the day. These "boudoir caps," by the way, are much liked by those who have used them. They are made like small dust-caps, but of fine, white muslin, and have a deep frill of lace or lace and ribbon all round, which makes them very becoming.

A very good hair tonic is made as follows: Castor oil, $\frac{1}{2}$ pint; pure alcohol, $\frac{1}{2}$ ounce; tincture cantharides, $\frac{1}{2}$ ounce; oil of bergamot, 2 grams. Apply by massage until the scalp is glowing for five minutes every night.

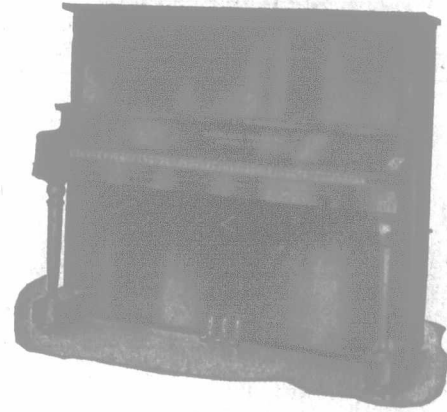
THE WEEK'S WASHING.

Dear Junia,—I wonder if country women ever realize what a shock it gives the passer-by to see the week's washing hung out on the front veranda to dry? There is something so inappropriate about father's shirt and Mary's petticoat and the baby's bib, when they are displayed against a background of imposing brick

How to determine the actual value of a piano

THAT problem confronts thousands of piano buyers every year. It will confront you some day—in fact, it may be necessary for you to solve it now. We propose to help you arrive at a wise decision—to give you the basic principles of piano excellence in order that you may be able to form a definite idea of the actual value of any piano you may buy. You see we make the

Sherlock-Manning 20th Century Piano "Canada's Biggest Piano Value."



Style 75

and we know exactly what a high-grade, first-quality piano costs to begin with, and what it should sell for. Now, here's the point—we will forward to your address inside information on the piano question—information that you should have before investing a dollar in any piano—facts that will save you a considerable sum of money when you are ready to buy.

This information will place you under no obligation to buy a Sherlock-Manning 20th Century Piano—you will not be pestered by salesmen—the only favor that we ask is that you write us a candid letter telling us fairly and squarely what you think of our business methods.

The Sherlock-Manning 20th Century Piano is a superb instrument throughout—it is built of the best material by skilled and efficient workmen and built to endure. Investigate the piano question and you will find out that the Sherlock-Manning has

- 1st—The famous Otto Higel Double Repeating Action.
- 2nd—Poehlman Wire—the best imported.
- 3rd—A strong, full-iron plate.
- 4th—Weickert Felt Hammers—the hammers that endure, and
- 5th—The famous Billings Brass Action Flange—the only flange that is impervious to weather conditions.

But investigate the Piano question for yourself. Then write to us and ask us to show you how we can sell you one of the world's best pianos and yet save you \$100.

Sherlock-Manning Piano & Organ Co.

London - Canada

(No Street Address Necessary)

A CANADIAN SCHOOL FOR BOYS

RIDLEY COLLEGE

St. Catharines, Ontario

Three separate residences; new, specially built and equipped. 1. Lower School for Boys under fourteen. 2. Dean's House, for Boys of fourteen and fifteen. 3. Upper School, for advanced Pupils. Gymnasium and Swimming Baths just erected. Fine Hockey Rink. Athletic Fields and Playgrounds unsurpassed. Eighty acres. Mild climate. University Scholarship won in 1909 and 1910. Boys prepared for Agricultural College.

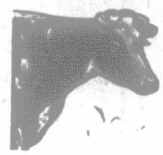
REV. J. O. MILLER, M.A., D.C.L., PRINCIPAL

LAKEVIEW HOLSTEINS!

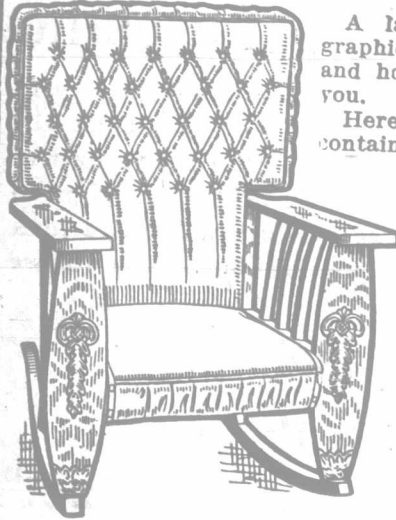
Offer bull born February, 1912, sired by our son, Colantha Johanna Lad, and out of a heifer that made over 13 lbs butter at two years old. She is a daughter of Count Hengerveld Jayne De Kol, and out of a 23.51-lb. cow with a 23-lb. dam. The seven nearest dams of this young bull average 23.32 lbs. of butter in seven days. Write at once for extended pedigree and price.

E. F. OSLER,

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A large illustrated book showing photographic cuts of the biggest values in furniture and home things you ever had presented to you.

Here is one example of what Catalogue 7 contains:—

This Cosy Rocker only \$6.95

A splendid rocker, exactly as illustrated, has solid oak frame with nice carvings on front posts, comfortable deep spring seat and with buttoned back, coverings of best grade imitation leather. Well worth \$10.00. Order to-day.

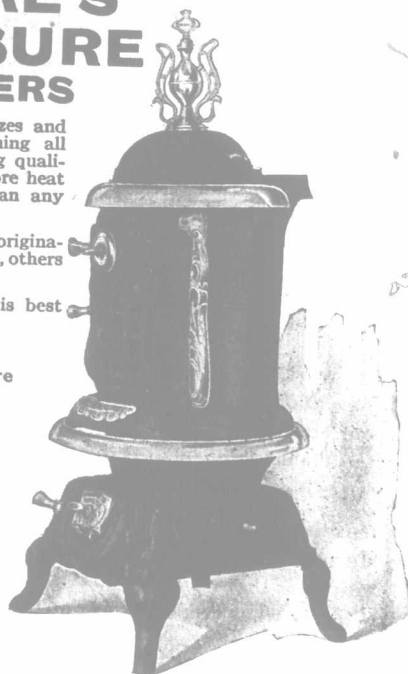
We Pay Freight Charges to any Station in Ontario.

THE ADAMS FURNITURE CO. LIMITED
TORONTO, - - - ONT.

MOORE'S TREASURE HEATERS



Art Treasure Base-burner—
Two sizes with oven.
Two sizes without oven.



Treasure Base-burners—
Made in 15 sizes.
Treasure Oaks—Made in 16 sizes.
Three sizes single heater.
Two sizes double heater.

Made in all sizes and kinds combining all essential heating qualities. Giving more heat for less fuel than any similar make.

We are the originators of this claim, others copy and follow.

The original is best in the end.

Agents Everywhere

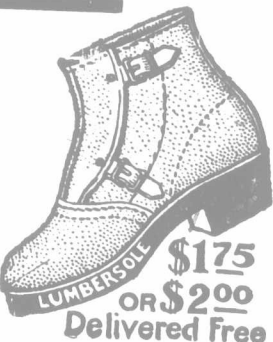
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HAMILTON, ONTARIO

SEND THIS AD. WITH \$2.00

for a pair of our Men's Best Quality LUMBERSOLES. It will mean foot-comfort for you all winter. LUMBERSOLES have wood soles that keep out cold and damp, and keep the natural

- Prices Delivered Free to Nearest P. O. or Express Office
- Men's Best Quality, 2 Buckle Styles, Sizes 6-12, \$2.00
- Two-Buckle Style, to fit all ages, Sizes 3-12, (Suitable for Ladies) 1.75
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- Men's Half Wellingtons, Sizes 5-12, 3.00
- Children's 2-Buckle Style, Sizes 6-2, Fit ages 3-10, 1.35
- Children's Fine Lacing Style, Sizes 6-2, 1.50
- Sixteen other styles for all purposes

Ask Your Dealer for Lumbersoles



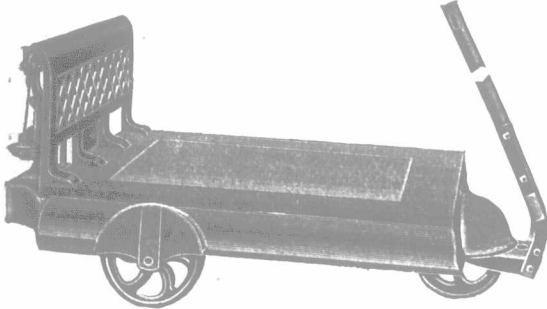
\$1.75 OR \$2.00
Delivered Free

warmth of the foot in the boot. Wearers tell us that LUMBERSOLES help rheumatism, being damp-proof. LUMBERSOLES not only keep your feet warm and dry in all weathers, but wear like iron and outlast two pairs of ordinary boots. Better than leather, rubber or steel shoes although less expensive. They are lightweight, comfortable and durable. We guarantee Lumbersoles and pay money back promptly to any buyer not entirely satisfied. Send this ad. with \$2 and we will ship you a pair to try. The cost is very little for the comfort you'll get out of them. We pay delivery charges to any point in Canada. Send for free catalogue of British-made goods, all kinds of footwear, socks, underwear, etc., etc.

LUMBERSOLE BOOTS

DEALERS WANTED
Scottish Wholesale Specialty Co.
134-155 Princess Street
WINNIPEG - MANITOBA

WAGON AND STOCK SCALE a Money-saver to You Mr. Farmer



So often you lose money because you are not quite sure of the weight of the article that is changing hands, and by just putting it on the scales your eyes are opened, and you are in a position to judge very accurately as to what this or that particular thing is worth.

Write to-day for our illustrated catalogue, telling you about the Three-wheeled Wagon and Stock Scale. Capacity, 2,000 lbs. All material and workmanship first-class and guaranteed.

ADDRESS

The Aylmer Pump and Scale Co. Limited, AYLMER, ONT.

or stone. Why any modest woman wants to display anything so intimately associated with her family life, as the week's wash, to the unsympathetic gaze of a passing public, is more than I can understand. No wonder father's shirt dangles its empty sleeves in undignified helplessness when it finds itself suddenly enjoying a shameless publicity. No wonder Mary's petticoat becomes big and bulgy with surprise when it finds itself suddenly stripped of its sheltering skirt. No wonder—but why go on? I suppose every woman will say it is to save work. Then, if it is, a pully attached to the barn, or to an apple tree, or to a post, and another attached to the back veranda, with a good long line between, would answer the same purpose and be much, oh! ever so much more artistic, and would display ever so much more good taste.

Talking about work reminds me of the discussion you have been having about what a man should do in the house. Do you not think that there is a danger of too much housework making the man a sissy? Think over all the men you have ever known who have taken kindly to washing dishes or rocking the baby or sweeping the floor, and count how many of them have made their mark in the world of men. Not one, I venture

came out of the ribbon onto the hat. It is not very bad, but I would like to get it out if possible. Also, what would cure a nose that is inclined to be slightly red. The skin is very sensitive. Thanking you in advance.

Bruce Co., Ont.

MRS. M.

If thorough scrubbing with castile soap and water will not take out the stain, I know of nothing that will do it; but you can easily make the hat a different color by treating it with one of the hat enamels, or with Maypole Hat Stain. These may be bought at a drug store. If you wash the hat with castile soap, be sure you dry it in the shade, as the sun will burn it to a brownish color. Consult skin specialist about the red nose.

FEATHERS—MINCEMEAT—HERMIT CAKE.

Dear Junia,—I am a constant reader of "The Farmer's Advocate," especially the Ingle Nook. I wrote to your corner once before, and this time have come for help, like many others.

Have a bunch of white, fluffy feathers, and would like to know how they could be cleaned.

Mince-meat.—Three bowls chopped meat, 5 bowls chopped apples, 1 bowl suet or



Crochet Yoke.

(By courtesy of the Corticelli Silk Co.) Make the diamonds first, then connect with crochet work.

to predict. The old Indian custom of despising the man who made a "woman" of himself by doing squaw's work, was an unerring instinct which is still strong in the men of all nations. Dear woman, you must make a choice. You can have a dear, sweet hubby, who will putter around the house, or you can have a man who takes no mean part in the public life of his community, or of his country. I never yet saw a "house-working" man who amounted to a row of pins in the world of men. Did you?

ANOTHER WOLF.

Middlesex Co., Ont.

CLEANING A HAT.

Dear Junia,—I, like many others, have come to the Ingle Nook for help. I have received many helpful hints through its pages, but I do not remember of seeing this. My daughter has a white, rough-straw hat, with a large bow of red ribbon, which got wet, and the color

butter, 2 bowls raisins, 1/2 bowl molasses, 1 bowl vinegar, 1 bowl boiled cider, 4 bowls sugar, 2 tablespoons cinnamon, 1 tablespoon cloves, 1 tablespoon salt, 1 tablespoon pepper, 3 lemons.

Hermit Cake.—Three eggs, 1 1/4 cups brown sugar, 1 cup butter, 1 cup chopped dates or raisins, 1/2 lb. walnuts, 2 teaspoons vanilla or lemon, 1/2 cup cold water or milk, 1 teaspoon soda with water, or baking powder with milk, lemon peel, and flour to make stiff like a fruit cake.

FARMER'S DAUGHTER.

Grey Co., Ont.

Here are two methods for cleaning feathers: (1) Take one pint (or less) gasoline, and add equal parts of borax and cornstarch, enough to make a thin paste. Put all in a pan and rub over the plume for about ten minutes, then let dry and shake out. Curl with the back of a silver knife. (2) Make a warm suds with soft water and Ivory

soap. Wash the plume in it, then dry in a windy place. This method is only good for ostrich feathers, as the water will loosen the glue that fastens "made" feathers together.

RENOVATING FELT HAT.

Dear Junia,—I am tempted to apply to your very useful department for a little information.

I have a dark-green felt hat which is rather spotted with white. The white marks came from its having got wet in the rain. Can you tell me whether anything will remove them, or restore the color? Otherwise the hat is perfectly good, and the black-velvet trimming is as good as new.

Perth Co., Ont. **GOLDEN ROD.**

Your hat presents a problem. Try sandpapering it. If that is of no use try removing the velvet and rubbing the hat well with Diamond Dye or Dyola. I know a girl who dyed a white-silk parasol green by this method last summer, and I don't see why it would not work with the felt hat. The only trouble would be that the color might run if you got caught in a rainstorm with it. If you are afraid to risk this, why not write to a professional dyer about it?

TOMATOES FOR WINTER.

Dear Junia,—I have always taken much pleasure in reading the Ingle Nook, and find it is very useful. I tried "Girlie's" recipe for date cake and thought it was fine.

Would you kindly give me a recipe for "parsley jelly"?

I have just been reading a good way for doing up tomatoes, and think it would be a grand way. The lady who gives the recipe for doing them says "she never has any spoil."

Fill a large, stone jar, with ripe tomatoes, then add a few whole cloves and a little sugar; cover them well with one-half cold vinegar and half water; place a piece of flannel over the jar well down into the vinegar, then tie down with paper. Should mildew collect on flannel, it will not injure the tomatoes in the least.

Kent Co., Ont. **DOLLY.**

Can anyone send directions for making parsley jelly?

The Scrap Bag.

TO REMOVE MUD STAINS.

Let them dry, then brush well. If a stain still remains, apply the following mixture: Two ounces fluid ammonia, 1 quart soft water, 1 teaspoon saltpetre, 1 ounce white soap. Let stand over night and shake well when it is used. Rub spots well with this, then rinse thoroughly with clear water.

NEW HATPINS FROM OLD.

Cover old, tarnished hatpins with a padding of cotton; cover with silk, then with a crochet outer cover of silk crochet thread or brilliant. The hatpin should exactly match the hat in color.

IRON - HOLDER.

Use the tops of worn-out shoes for iron-holders, if you use the old-fashioned irons. Line them with ticking.

TOOTH POWDER.

Buy prepared chalk in bulk. To ¼ part of ground castile soap add ¾ part of the chalk. Mix well, and flavor with wintergreen or peppermint essence. Good, and cheap.

WET UMBRELLAS.

Drain them with the handle down. If turned the other way the collected rain water rots the cloth or silk, and rusts the steel.

BAKING BREAD.

Don't have the oven too hot when you first put the bread in. If you do, a crust will form too soon and the loaves cannot rise as well. An hour is not too long to bake bread right.

About the Baby.

A very sensible and clearly-written little pamphlet entitled, "A Little Talk About the Baby," by Dr. Helen MacMurchy, has been sent to us, and should be in the hands of every woman who is interested in having her baby strong and healthy. It is furnished free of charge by the Provincial Board of Health, Toronto. If you need it, write for it to that office.

Grand Trunk Railway System

More Men Required to Harvest Western Canada Crops

\$10 to Winnipeg, October 14th

From all stations in Canada, via Chicago and St. Paul.

Plus half-cent mile from Winnipeg to destination, but not beyond Macleod, Calgary or Edmonton. Returning, half-cent mile to Winnipeg, plus \$18.00 to destination in Eastern Canada. The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg-Saskatoon-Edmonton. Ask nearest Grand Trunk Agent, for full particulars, tickets, etc., or write A. E. DUFF, D. P. A., Toronto, Ont.

Quality Oxford Downs Winners, bred from Imp. and prize-winning stock. 1 and 2 shear rams and ewes, ram and ewe lambs; many winners among them, the highest types of the breed. **E. BARBOUR, Erin P.O. & Sta. L.D. Phone.**

CORN I will buy Longfellow Corn on the ear. Communicate immediately for information with Geo. Tanguay, Quebec. **MENTION "FARMER'S ADVOCATE."**

Have City Conveniences



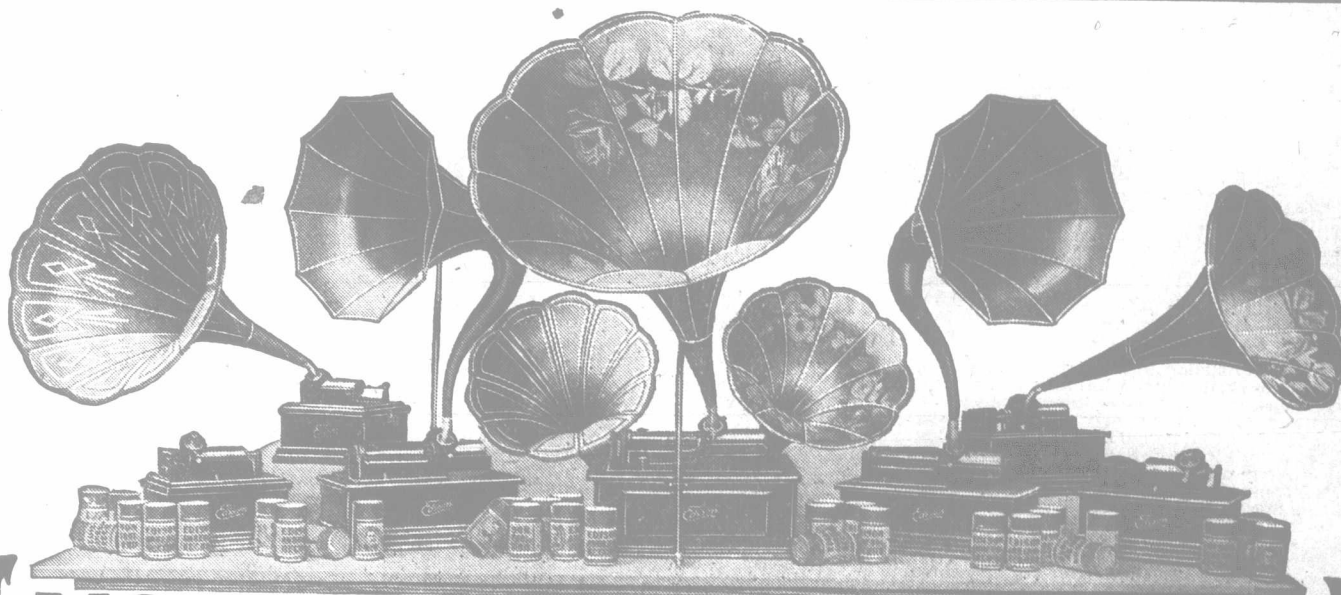
REPLACE the pestilent, draughty, dangerous and offensive out-of-doors closet with an in-doors closet which requires no sewer, no plumbing and no flushing system. Have city conveniences in your home.

Safeguard Family Health by installing a

"TWEED" CLOSET SANITARY AND ODORLESS

"Tweed" Closets can be installed in the bath-room, cellar, or any other convenient place indoors, merely requiring to be connected by a pipe for ventilation with a chimney hole. "Tweed" Liquid Chemical, used in connection with Tweed Closets, is both a deodorant and a disinfectant. Many hundreds of Tweed Closets have been sold in Canada. Send for illustrated price list.

Steel Trough and Machine Co., Ltd. Dept. 5. TWEED, ONT.



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Of These Wonderful New Style EDISONS Shipped

THE EDISON! THE GENUINE EDISON!—Thomas A. Edison's superb new style instrument shipped free on this REMARKABLE offer

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For the Phonograph is Mr. Edison's pet and hobby. He has worked for years to make this Phonograph excel all others, and now you may obtain any of these wonderful new style outfits on an ultra liberal offer.

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The Edison Offer We will send you a new model Edison Phonograph and your choice of all the Amber records on an absolutely free loan—no obligations, no deposit, no guarantee nor C.O.D. to us whatever. We want you to have all the waltzes, two-steps, vaudevilles, minstrels, grand operas, also the sacred music, etc. by the world's greatest artists. Entertain your family and your friends. Give plays and concerts right in your own parlor. Hear the songs, solos, duets and quartettes, the pealing organ, the brass bands, the symphony orchestras, the choirs of Europe's great cathedrals, the pianos and violin virtuoso concerts—all these we want you to hear free as reproduced on the Edison phonograph. Then—when you are through with the outfit—send it back to us.

Our Reason: Why should we make such an ultra liberal offer? Why should we go to all this expense and trouble just so you can have these free concerts? We'll tell you. We are tremendously proud of this new instrument. When you get it in your town we know everybody will say that nothing like it has ever been heard—so wonderful, so beautiful, such a king of entertainers—so we are sure that at least some one—it not you then somebody else, will want to buy one of these new style Edisons (especially as they are being offered now at the most astounding rock-bottom price—and on easy terms as low as \$2.00 a month). Perhaps you yourself will be glad to keep this outfit. But even if nobody buys we'll be glad anyway that we sent you the new Edison on the free loan—for that is our way of advertising quickly its wonderful superiority.



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We will send you our handsome new Edison book and full particulars of our wonderful free loan offer absolutely free and prepaid. You should see our grand new Edison book. It will give you the list of the thousands of records and all the machines that you have to choose from. Write today—do not delay. Get the free book and learn about this wonderful free trial offer. Send postal or letter, or just the coupon without any letter—but WRITE NOW!

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Without any obligations on me whatsoever, please send me your new Edison book and full particulars of your new special free loan offer on the new style, improved EDISON Phonograph.

Name.....

D2R

Address.....

He Bought Her a 1900 Washer

ONE OF OUR READERS TELLS HOW HER HUSBAND LEARNED

What Washday Means to a Woman

DEAR EDITOR:—Most men have no realization of what "wash-day" means to a woman. My husband is one of the best men that ever lived, but he laughed when I asked him one day to get me a 1900 Gravity Washer. I told him it would wash a tubful of clothes in six minutes.



John's "Busy Day"

I am not very strong, and the washing, with all my other work, finally got the better of me. I had quite a sick spell, and after things had gone at sixes and sevens for nearly two weeks, I suggested to John that he had better do the washing. We couldn't hire a girl for love or money, and the situation was desperate.

So one morning he started it. My, what a commotion there was in the kitchen! From my bedroom I occasionally caught glimpses of poor John struggling with that mountain of dirty clothes.

If ever a man had all the "exercise" he wanted, my husband was that man! Couldn't help feeling sorry for him, and yet it made me laugh, for I remembered how he made fun of me when I hinted so strongly for a 1900 Gravity Washer. When he finally got the clothes done and on the line, he was just about "all in."

That evening John came to my room, and in a kind of sheepishness—"What's the name of the firm that makes those washers you were telling me

about?" I looked up their advertisement and found the following address:

I. H. MORRIS, Manager
The 1900 Washer Company,
357 Yonge Street,
TORONTO, CANADA

That's all he said, but he lost no time in sending for their Free Washer Book. The book came in due time and with it an offer to send the 1900 Gravity Washer on thirty days' free trial. My husband jumped at the chance to try the Washer without having to spend a cent. "We'll have four weeks' use of the Washer anyway, even if we don't decide to keep it," he said! So he told the Company to send on the Washer.

It was sent promptly, all charges paid, and the 1900 Washer Company offered to let us pay for it in little easy payments. The next week I felt well enough to use it. It is the nicest Washer I ever saw, and it almost runs itself. Takes only six minutes to wash a tubful, and the garments come out spotlessly clean.

We were all delighted with the Washer, and wrote to the Company that we would keep it and accept their easy payment terms of 50 cents a week. We paid for it without ever missing the money and wouldn't part with the Washer for five times its cost if we couldn't get another just like it.

If women knew what a wonderful help the 1900 Gravity Washer is, not one would be without it. It saves work and worry and doctor's bills. Takes away all the dread of wash-day. I feel like a different woman since I have quit the use of the washboard. And if any woman's husband objects to buying one of these labor-saving machines, take a hint from my experience. Let the man do just one big washing by hand-rubbing on the old-fashioned washboard, and he will be only too glad to get you a 1900 Gravity Washer.

Anybody can get one on free trial, by first writing for the Washer Book. Excuse me for writing such a long letter, but I hope, Mr. Editor, you will print it for the benefit of the women readers of your valuable paper.

Sincerely yours, MRS. J. H. SMITH.

"The Farmer's Advocate" Fashions.



7592 Semi-Princess Gown, 34 to 42 bust. 7581 Girl's Box Plaited Norfolk Dress, 19 to 11 years.



7574 Plain Blouse, 34 to 42 bust. 7591 Girl's Dress, 6 to 12 years.



7578 Fancy Waist, 36 to 46 bust. 7596 Five Gored Skirt, 22 to 32 waist.

HOW TO ORDER PATTERNS.

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Price ten cents PER NUMBER. If two numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont.

A GOOD SELL.

A rancher in Montana wanted to sell his ranch. A neighboring rancher, who had an eye for real-estate speculation, came to him and said:

"Want to sell your ranch?"
"Sure!"
"How much?"
"Seven thousand dollars."
"Will you give me an option for that?"
"Yep!"
"What terms if I sell it?"
"I'll take a mortgage on it for half what you get for it."

Whereupon the foxy neighbor went out and sold the ranch for sixteen thousand dollars, and whereupon, also, the rancher who gave the option for seven thousand dollars had to borrow a thousand dollars for the privilege of taking a mortgage for eight thousand dollars on his own ranch.

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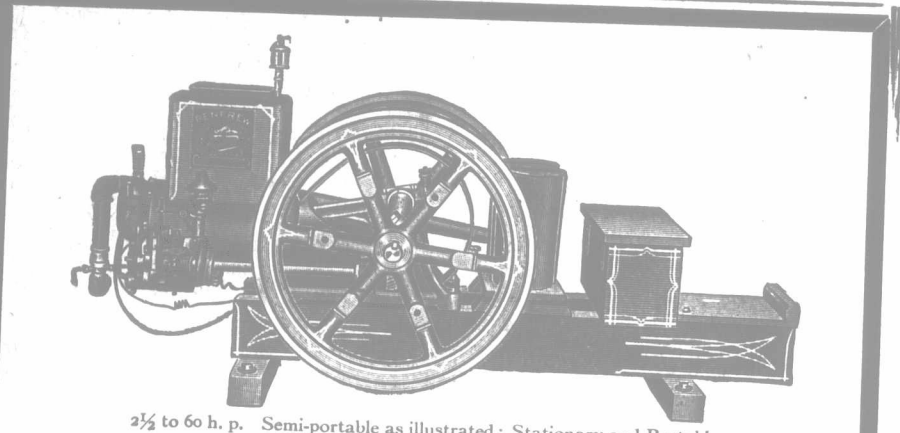
This recipe makes 16 ounces of cough syrup—enough to last a family a long time. You couldn't buy as much or as good cough syrup for \$2.50. Simple as it is, it gives almost instant relief and usually stops the most obstinate cough in 24 hours. This is partly due to the fact that it is slightly laxative, stimulates the appetite and has an excellent tonic effect. It is pleasant to take—children like it. An excellent remedy, too, for whooping cough, croup, sore lungs, asthma, throat troubles, etc. Mix two cups of granulated sugar with one cup of warm water and stir for two minutes. Put 2½ ounces of Pinex (fifty cents' worth) in a 16-ounce bottle, and add the Sugar Syrup. It keeps perfectly. Take a teaspoonful every one, two or three hours.

Pinex is one of the oldest and best-known remedial agents for the throat membranes. Pinex is the most valuable concentrated compound of Norway white pine extract, and is rich in guaicol and all the other natural healing elements. Other preparations will not work in this formula. The prompt results from this recipe have endeared it to thousands of housewives in the United States and Canada, which explains why the plan has been imitated often, but never successfully. A guaranty of absolute satisfaction, or money promptly refunded, goes with this recipe. Your druggist has Pinex, or will get it for you. If not, send to The Pinex Co., Toronto, Ont.

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Dyes Perfectly
Cotton, wool, silk or mixtures can all be quickly and easily dyed to just the right shade with Maypole Soap. No streaks. Even, lustrous colors that won't wash out or fade. Colors 10c, Black 15c, at all dealers, or postpaid with free Booklet "How to Dye" from F. L. BENEDICT & CO., 77A Montreal.

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Smooth, Steady Running
is a strong feature of this engine. The parts are as perfectly balanced as a clock, so that even under a heavy load, the

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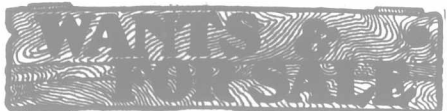
Gasoline Engine does not jump or crawl around. It needs no fastening down. This perfection of balance also reduces wear to the minimum. You will get many years of long, hard service out of the Renfrew Standard. And you'll like it, too, because it is so very easy to start. No cranking required; a little push on the wheel and away she goes. But to learn full particulars send for our Bulletin.

This is the latest and best type of Gasoline Engine for sale in Canada.

The Renfrew Machinery Co., Ltd.

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Sales Branches at WINNIPEG, Manitoba, and SUSEX, New Brunswick



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

ALL kinds of Farms—Fruit Farms a specialty. W. B. Calder, Grimsby.

BRITISH Columbia Ranches, Vancouver Island. Ideal climate, no cold weather; no hail, frost or bad storms; abundant crops assured; richest of soil, unsurpassed for growing grain, fruit and vegetables. The poultryman's paradise. Best market in the world. Improved and partly improved ranches, 5 acres and upwards. Easy terms of purchase. Come to the Pacific where life is worth living. Abundant sport, finest of hunting, fishing and boating. For further information and full particulars write Dept. F., Stuart, Campbell, Craddock & Co., 521 Fort Street, Victoria, or 425 Pender Street West, Vancouver, B.C.

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FARM FOR SALE—180 acres, 1st concession Delaware, 3 miles from Southwold Stn., 14 miles from London. Excellent grain and dairy farm; well watered; 6 acres apple orchard; brick house and suitable outbuildings. Apply: Joseph Weld, "Farmer's Advocate," London.

FARMS FOR SALE—Improved Wellington County farms. Now is the time to inspect. No obligation or expense. Jones & Johnston, Guelph.

FARM FOR SALE—212 acres rich clay loam, 200 acres under good cultivation, balance bush and pasture, no waste land, no stone or stumps, straight fences; barn, 60x90, hip roof, cement foundation and floors; cement piggyery and henry; stabling for 50 head cattle, 14 horses; root houses; lightning rods on barn, orchard; plenty hard and soft water; 11-room brick house, furnace; situated alongside the corporation of Bradford; High and Public Schools and churches; one mile from G.T.R. station. Apply: Drawer 276, Bradford, Ontario.

FOR SALE—Homestead near Foothills, Southern Alberta; convenient to station and school; good water. Also ten good lots, well located in Regina, bought some time ago; partly forced to sell; bargain. For particulars apply Box 40, Farmer's Advocate, London, Ont.

ON SHARES—Good Dairy Farm, 100 acres. All stock and implements supplied. State experience, age, and number of family. Address Allan Stewart, London, Ont., General Delivery.

SIT, as herdsman. Life exp., good milker, steady, sober; good references. F. Burbidge, 73 Terault Street, Toronto.

WANTED—Cash paid for Military Land Grants in Northern Ontario. Please state price and location. Box 88, Brantford.

WANTED—Married farm hand, by October 15th. Must be good plowman and milker, able to take care of stock. House on farm. Address: R. C. McCullough, Georgetown, Ontario.

WANTED—Experienced farm hand, month or year. S. Pelton, Falkland, Ontario.

WANTED—Good all-round married man to work on a farm by the year. Ernest H. Houlton, Strathroy, Ontario.

WANTED—Reliable woman to assist in general house-work. Plain cook; good home, all modern conveniences, healthy locality; good wages. Apply to Mrs. MacBeth, the Manse, Paris, Ont.

WANTED on Dairy Farm—married man with no encumbrance, must be experienced; wife to help in house. James McLaren, London Jct., Ont.

WANTED—A good young man wishing to improve himself, to work with pure-bred stock, chiefly cattle. Robt. McEwen, Byron, Ont.

100 ACRE FARM FOR SALE CHEAP, and on easy terms; well improved and in good state of cultivation. For particulars apply to owner, R. Lennox, Thornton.

\$5 PER ACRE down and \$2.50 per acre per month buys a Fruit Farm. Fertile land in sunny British Columbia. Facilities offered for making comfortable income in the most beautiful section of all Canada. Farms near busy town close to prairie. Write for particulars to International Securities Co., Ltd., Somebset Idg., Winnipeg, Man. This season I am offering lambs of both sexes; also breeding ewes. Prices consistent with quality.

E. E. LUTON, R. R. 1, St. Thomas, Ont. Phone 704 R4



Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

FOR SALE.—S. C. White Leghorn and Silver Dorking Cockerels from extra good laying strains, \$2.00 each. E. M. Crone, Mandaamin, Ont.

FOR SALE.—S. C. White Leghorn Cockerels exhibition strains, May hatched, choice birds \$2.00 each. Jos. C. Jackson, Woodstock, Ont.

JULY SALE—2,000 baby chicks; 10,000 hatching eggs; 500 yearling hens; 50 yearling males. Chicks, \$20.00 per 100; eggs, \$1.50 per 15. \$7.00 per 100; hens, \$1.50 to \$2.00 each; males, \$3.00 to \$5.00 each. B. P. Rocks, White Wyandottes, R.C.R.I. Reds and S.C. White Leghorns. Write to-day for illustrated catalogue. L. R. Guild, Box 16, Rockwood, Ontario.

News of the Week.

CANADIAN.

Rural schools in twelve counties of Ontario are holding fairs this fall.

Four colleges in Montreal, Presbyterian, Anglican, Methodist, and Congregationalist, have agreed to unite their forces and hold union lectures.

At the fair recently held in New Liskeard, no side-shows were permitted on the ground. The fair was purely agricultural.

A life-size statue of Joan of Arc, by the French sculptor, Verriere, was unveiled in Montreal on October 6th. It stands in front of the French consulate.

BRITISH AND FOREIGN.

Hostilities have begun between the Balkan States and Turkey, and an engagement has taken place at Harmanli, Bulgaria, in which 400 were killed.

China has obtained a loan of \$50,000,000 from a Belgian syndicate. The money will be expended on railway construction.

Sir Edward Carson, and thousands of followers in Ulster, have signed a covenant agreeing to resist an Irish Parliament.

Terms of peace between Italy and Turkey were signed at Ouchy, Switzerland, on October 4th.

In consequence of the hostilities between the Balkan States and Turkey, the British Mediterranean fleet has been ordered to the Levant. The Powers may intervene to compel Turkey to grant reforms and so secure peace.

The Windrow.



Walter Burley Griffin.

The Chicago landscape architect who won the first prize in the international competition for a plan for the Federal Capital of Australia.

A monument to Victor Hugo is being erected at Waterloo.

A new electric device enables doctors to keep in touch with the pulse of patients through a sort of telephone.

Among the exhibits of chemical products shown at the Eighth International Congress of Applied Chemistry recently held in New York, were artificial rubber, chemical silk, rubies, and other gems, perfumes—some of which were entirely new to the world, a substitute for celluloid, and several metal alloys.

The new Federal Capital of Australia, which will be the first city in the world to be entirely built according to plan, will cover five square miles in area. The plan used will be that drawn by Mr. Walter Burley Griffin, of Chicago, who won first prize in the international competition given for the planning of

the city. As yet, the Capital is without a name.

Dr. Sun Yat Sen has been authorized by the Pekin Government to build national railways covering a territory of 70,000 miles in extent. The roads in the interior will be built by mixed Chinese and foreign companies, but those in the frontier provinces will be built wholly by the Chinese Government.

"I have seen enough of the discord between capital and labor in Western countries, and the misery that besets the multitudes of the poor, that I am desirous of forestalling such conditions in China."—Dr. Sun Yat Sen, in "The Independent."

(Stay-at-home friend, to emaciated soldier just returned from the front)—Hello, Jenkins! Glad to see you're back from the front.

What? I know I'm thin, but didn't know you could see my back from the front.

Advertisement for 'Send for this Book of Musical Instruments' by The R. S. Williams & Sons Co., 143 Yonge Street, Toronto. Includes a small illustration of a book.

To Get White Swan Yeast Cakes

If you can't get White Swan Yeast Cakes from your grocer, send your name and address, and we will send free sample of

WHITE SWAN YEAST CAKES

and tell what grocer in your town keeps it.

White Swan Spices & Cereals, Limited Toronto, Ont.

MAKE YOUR OWN TILE

Advertisement for 'Farmers' Cement Tile Machine Co.' featuring an illustration of a tile-making machine and text describing its cost and availability.

"What animal," said the teacher of the class in natural history, "makes the nearest approach to man?" "The flea," timidly ventured the little boy with the curly hair.

Large advertisement for 'Gray Stationary Engines' featuring an illustration of an engine and text promoting a free engine book and the Gray Motor Company.

Advertisement for '20,000 HARVESTERS Wanted in Western Canada' by the Canadian Pacific Railway, including details about travel fares and ticket sales.



COWAN'S PERFECTION COCOA

A MUSCLE- BUILDING FOOD

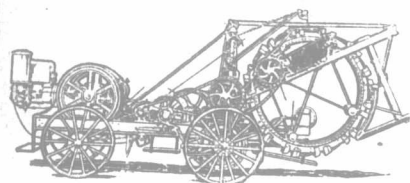
Growing youngsters work hard. They need food that is nourishing—food that satisfies the hunger and digests easily. Nothing is better for them than Cowan's Perfection Cocoa. Ground from the fresh Cocoa Beans, it has all the food value of pure Cocoa. It builds up the muscles and makes children healthy and strong. A cup of Cowan's made with half or one-third milk is a properly balanced food—one that the most delicate stomach can digest. And it is so delicious that it tempts the appetite when all other foods fail.

YOUR GROCER
HAS IT

213

"Grandpa
Let's buy them some
COWAN'S"

THE COWAN COMPANY, LIMITED TORONTO, ONT.



Get Into a Business Where You Have Big Profits

This you can do with a

BUCKEYE TRACTION DITCHER

The progressive farmer demands machine-made ditches, because they are cheaper, truer and perfect to grade. You can be kept busy nine or ten months in the year and earn \$15 to \$18 a day supplying this demand.

The BUCKEYE will dig 100 to 150 rods a day depending upon soil conditions. Small operating expense. It cuts the hardest ground finely, and digs the ditch to a perfect grade.

Made in two styles—gasoline and steam. One man can operate the gasoline, or two men the steamer.

Hundreds of hustling men are making big profits with the BUCKEYE. If you want to join them, write for Catalogue T—it tells the wonderful money-making possibilities of the BUCKEYE Traction Ditcher.

THE BUCKEYE
TRACTION DITCHER CO.
Findlay, Ohio.

**MERCHANTS
PRODUCE CO.**

Butter Eggs Poultry Honey
Beans Apples Potatoes, etc.

Our constantly growing trade demands large supplies of choice farm produce. We need yours. Write for weekly market letter.

57 Front St. E., Toronto
Established 1889

You can build cheaper—Your buildings will look better and will last a life-time if you build with



METALLIC

Proof against Fire, Weather Lightning and Vermin

"Eastlake" Steel Shingles.

The best steel shingle made and the cheapest to lay. Has been on roofs for over 25 years and is good as new now.

Metallic Stone and Brick, Steel Siding.

Looks exactly like stone or brick yet can be laid easily and quickly by any man. The best building material possible for homes, stores, etc.

Metallic Ceilings and Walls.

Makes the most sanitary interior finish possible. Proof against rats, mice and vermin—they last for ever. There is no plaster to fall, therefore no dust—nor paper to put on or take off, therefore no trouble.

Corrugated Iron Siding and Roofing.

For barns, sheds, granaries, outbuildings, etc., can be covered at a low cost. No wood sheathing necessary.

Eaves-troughs, Conductor Pipes, Cornices, Ventilators Finials and all Building Accessories.

It will pay you to send a postal card to us and let us know your requirements. We shall be pleased to offer you plans and suggestions that will help you.

THE METALLIC ROOFING CO. Limited

MANUFACTURERS

1189 King Street, West
Toronto

Branch Factory: WINNIPEG.
Agents in principal cities.

Please Mention The Advocate

The Beaver Circle.

OUR JUNIOR BEAVERS.

[For all pupils from First Book to Junior Third, inclusive.]

Dear Little Beavers.—Here are three more of the stories written for you by Senior Beavers. Don't you think they were kind to do this for you?

JEAN'S ADOPTION.

The clock in the main corridor of the Orphans' Home struck eight, and small Jean Brooks, with her nose against the window-pane, watched the rain patter down on the pavement below.

She was thinking of her mother who had died of the fever, and how, at night, they had taken her away and buried her in a pauper's grave. Then, when she (Jean) had been left alone, she had been taken to the Orphans' Home.

Although the matron, Miss Martin, had been very kind to her during the seven months she had been there, she was very lonely, and many a night she had cried herself to sleep for the want of her mother.

The girls were rather rough, and she had not cared to play much with them. She wanted to be left alone, and had often wished that some kind person would come and take her away from it all. Poor, friendless, little Jean!

A voice behind her brought her back to the talking and laughter of the girls in the room. She turned round, hastily brushing away the unbidden tears, and faced a large, over-grown, freckle-faced girl who tauntingly cried, "Look! girls, look! Here's Jean Brooks crying again. Isn't she a cry-baby; don't you think?" She turned and faced the girls, and some of them began to laugh loudly.

Poor Jean! Her face blushed painfully. "I'm not a cry-baby," she burst out, emphatically shaking her curly brown head.

"Well, Miss Spitfire," the girl continued mockingly, "if you're not in bed when Miss Martin comes in, you'll catch it."

Jean knew this, and as the other girl moved off, she obediently began to undress for the night. Nearly all the girls were in bed by this time, and soon the matron came in to say good-night.

After a restless night, Jean was awakened by the breakfast bell. The sun was shining in at the windows, and a little brown sparrow was perched in a nearby tree, chirping lustily. Some of the girls were already up and dressed. Jean hastily arose, and was soon ready to descend to the breakfast-room.

After breakfast they all went to the school-room, and the duties of the day commenced.

All the time, little Jean was wishing that something would happen to-day, and as she was leaving the room at recess, the matron called her into her private room.

Jean advanced slowly to Miss Martin's side, wondering why she had been called. "This is the child, Mrs. Watson," said Miss Martin. "I hope she will suit you." Then, turning to Jean, she said, "This lady would like you to go and be her little girl, Jean. Shake hands with her, my dear."

Jean timidly held out her hand, and Mrs. Watson stooped and kissed her. "I have no little girl, Jean. Won't you come home with me?" she asked.

"Yes; if you want me," Jean said softly. Then she bade her companions good-bye, and when she had been dressed in her Sunday frock, she went home with her new mamma.

Her new home proved to be a splendid house, with, above all, a kind mamma. Surely Jean was happy now.

Now, Puck, I have written this without any help, and hope it is not too long.

HAZEL SETTERINGTON
(First Form L. H. S.)

P. O. B. 143, Leamington, Ont.

A PUZZLE STORY.

"Why, dear me!" exclaimed mamma as she entered the nursery one dark, rainy afternoon. "Is it raining indoors, too? Where's my parasol?" and she caught up a pretty pink sunshade to shield her. This roused Betty, who sprang up, caught the parasol to her breast, exclaiming as she did so,—

"Mamma, that isn't for to-day!"

"Never mind Bett, mamma!" cried Hubert. "Come over and tell us a story—one that's different from the rest."

"Yes, do!" they all cried.

So mamma began as follows:

Well, if you want something different from the rest, I think I will tell you one that is half a story and half a puzzle.

The events happened at St. Jardines, and the hero of both story and puzzle is called Billy. Billy was a dear little fellow, and when he was still very young he came to live with us. He always had two great faults, which were—that he was very saucy, and that he thought a great deal, in fact too much, of his appearance, and spent most of his time in primping.

Well, Billy was with us at St. Jardines, and if he hadn't been, I am afraid I never would have been here now. For Old Jack (you remember him, Hubert) always smoked his pipe till very late at night, and Billy sometimes stayed with him. This time, however, Billy did not stay with him, and Jack didn't have anyone to bother him about going to bed, and—well—I don't know just how it happened, but Jack fell asleep in his chair, his pipe fell from his hand onto a pile of papers, and by the time Jack woke up the room was in flames. His cries woke Billy (who slept in the next room), but not us.

Quick-witted Billy, although pretty near frightened out of his life, ran up-stairs and ran around so that he woke mother first, then us.

"But now for the puzzle part," continued mamma in a brisker tone. "Betty, bring me your slate now.—Now," she continued when it was brought her, "Draw a five-inch square and divide it into inch squares, making—how many, Betty?"

"Twenty-five!" said Betty promptly.

"That's right!" smiled mamma. "Now, number them, so! There, let me have it a moment," and she proceeded to draw small squares in certain squares, as I have done.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

"You see!" she exclaimed, "each of those little blocks stands for a letter, and all those letters, eight in all, spell what Billy was."

"Why, wasn't he a boy, mamma?" asked Hubert.

"Now, that's telling!" smiled mamma. "I want you to find out who Billy was, and after you do you can get Mary to let you make some candy!" So saying, mamma left the room, leaving three little brains at work.

"E-l-l-q-r-r-s-u," spelled Betty slowly.

"Oh, I've got it, Hu! Listen—s-q-u-i-r-r-e-l. Billy was a squirrel!"

"Hurrah for Billy, the plucky little squirrel," shouted Hubert, as, on their way to the kitchen, they passed their mother's door.

L. WINIFRED COLWELL.
Brookville Station, St. John Co., N.B.

A HAPPY DAY.

By Stella Nelson, Huron Co., Ont.

It was a nice cool day in the summer. On the veranda of one of the prosperous-looking farm houses, two little girls were sitting talking. They

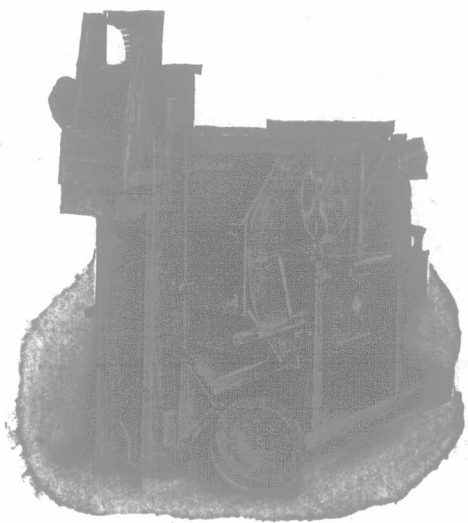
COMFORT SOAP

IT'S ALL RIGHT Not Like Ordinary Soap But Better

POSITIVELY THE LARGEST SALE IN CANADA

We Challenge Competitors

to put their fanning mills in your barn for a trial test with the "Kline" Fanning Mill. We welcome such a test, because in no other way is it possible to so decisively demonstrate the superiority of the



"Kline" Fanning Mill

on all kinds of grain. Once you see the "Kline" in operation, no other fanning mill will do for you. It is absolutely unequalled for separating wild oats, chaff, light and small grains, smutt and seeds. Has many features found on

no other fanning mill. Write for further particulars, prices and terms.

AGENTS WANTED IN UNREPRESENTED TERRITORY.

KLINE MANUFACTURING CO.
Limited
BEETON - ONTARIO

Please Mention The Farmer's Advocate



YOU NEED THIS WARM OVERCOAT

And you can get it for half of what it would cost you from your local tailor. It is made in England, especially for the Canadian climate. The material is heavy, close-woven woollen cloth. It is almost wearproof. Your local tailor could not possibly make you a coat like it for less than \$35.00 yet we will deliver it to you—duty and carriage charges paid—right to your door for \$16.75

This is the reason why: We buy our materials wholesale, direct from the mills. Your local tailor buys in single overcoat or suit lengths. When you buy from us, you save the four middlemen's profits that come out of the cloth before it gets to your local tailor.

You Can Prove the Value of Catesby Overcoatings for Yourself by making this test:

Send to our nearest Canadian office for a package containing 72 samples of overcoatings and suitings. When you get them, pick out the cloth you like best, take it to your local tailor, and ask him what he will charge to make you an overcoat or a suit of that quality of material. When he quotes his price, compare it with the price in the Catesby catalogue. We are satisfied to abide by the result. That's fair, isn't it? So send for the patterns to-day. Remember, we ship your overcoat or suit five days after your order gets to us in London, and the Catesby price includes payment of all duty and carriage charges by us. Write for the samples to-day, while the thought is in your mind

Address our nearest Canadian office.

CATESBYS Ltd. 119 West Wellington Street - Toronto
Dept. Coronation Building - Montreal
"A" 160 Princess Street - Winnipeg

Or write direct to CATESBYS Ltd., Tottenham Court Road, London, England

were cousins, and had lived beside each other all their short lives. Their names were Nellie and Marian. They had been told by their mothers that they could go for an excursion on the next day, and they were wondering where they would go. At last an inspiration came to Marian, who exclaimed, "Oh, Nellie, let's take a lunch and go to the river and stay all day!" This plan met with Nellie's full approval, and hereupon ensued a rush to their mothers to get permission. Consent was gained, and the girls proceeded to make pies and cookies under their mothers' instruction.

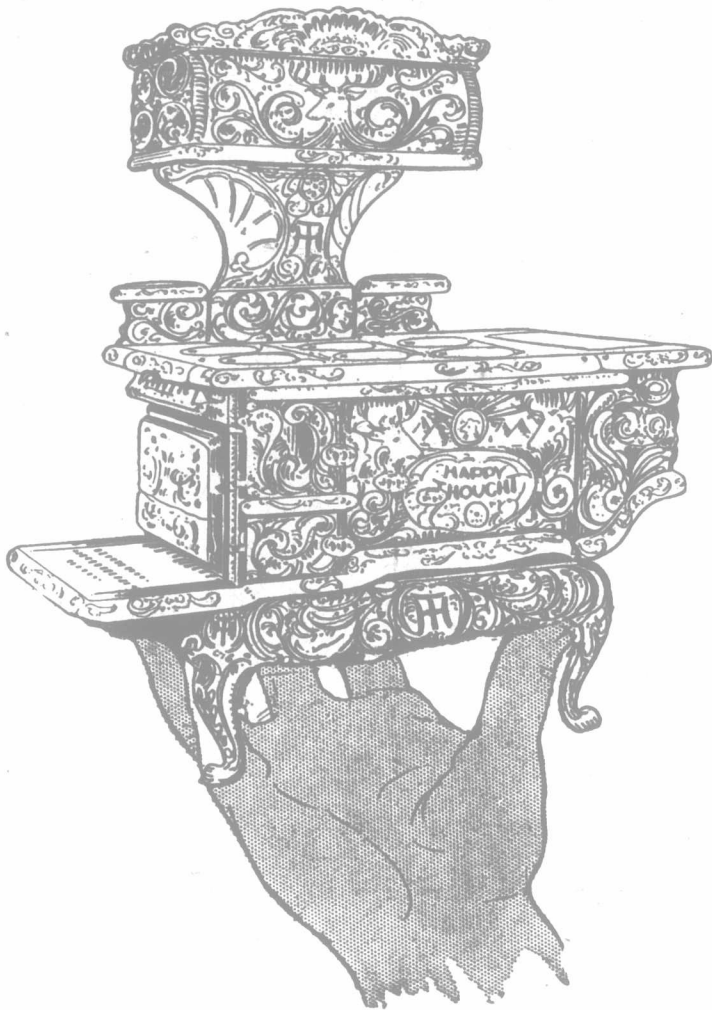
They went to bed in a state of great excitement, and woke up bright and early. They got ready, and then packed their lunch. Now let us peep into their basket and see what they had: a goodly supply of beef sandwiches, some nice apple turnovers, cookies, a supply of cake, a nice salad, apples, plums, and oranges, not forgetting materials for lemonade. They were very well supplied, you see.

Nellie's father hitched up her little pony and they got in, put in their baskets, and drove merrily away.

They arrived at their camping-place without any more serious mishap than having their hats blown off by the wind, and having to chase them. They chose a nice, shady spot to tie their pony, and after making him comfortable, proceeded to enjoy themselves. They played store on a stump, with stones for money, and also had lots of fun in the water. In due time they had their dinner, which was much enjoyed, for they were very hungry. After dinner they fished a little, but not very much, for they had a truly feminine horror of baiting and freeing their hooks. Only one little incident occurred which made their afternoon more exciting than it would have been otherwise. Marian was "padding" in the water when she happened to step on an old crab, which immediately showed its resentment by fixing its pincers in her toe. Oh, what a scream she gave! Nellie tried to knock it off, but couldn't, and the crab, disgusted with the shaking and beating, let go its hold and slid into the water. Poor Marian sat nursing her toe for a long while, but it soon ceased to pain, and she and Nellie were playing as merrily as ever in a short time.

They had their supper about half-past five and played a little longer. They then packed up the remnants of their lunch and started for home, after agreeing that it was the happiest day they had spent in a long time.

HAPPY THOUGHT



Back of This Stove Stands a Great Institution

Do you realize what it means to you to have a really satisfactory range in your kitchen? For twenty-five years the "Happy Thought" has been tried and tested under all kinds of conditions. It has proven over and over again its 100 per cent. efficiency.

Its use means actual dollars and cents to you every day.

You can buy stoves that cost you less than the "Happy Thought"; but you pay for that saving

many times over every year in the fuel such stoves waste.

The "Happy Thought" is a product of the skill and long experience of the greatest stove-making institution in Canada. It gives you full value in return for every cent you invest in it. It gives you full heat efficiency from every ounce of fuel you burn in it. It is the most profitable stove you can buy.

Over a Quarter Million Canadian women who have discovered this, use the "Happy Thought" every day.

HAPPY THOUGHT RANGES

Are sold in your locality. Ask your hardwareman.

THE WILLIAM BUCK STOVE CO., LIMITED, BRANTFORD, ONT.

Monarch Light Touch



The farmer, or any other business man for that matter, who does not keep an accurate and comparative yearly account of every department of his farm or business is soon "out of the running" with the man who does. The greatest aid to record work is the typewriter. The

MONARCH TYPEWRITER

is a splendid machine for billing, card indexing, loose-leaf work or correspondence, for the following reasons:

Construction Simple	Light Touch
Parts Accessible	Easy to Operate
Visibility Complete	Easy to Learn
Non-shifting Carriage	Long Wearing

Let us give you a demonstration of the Monarch machine in your home. A post card will place literature and full information in your hands immediately. Easy payments. Write now for full particulars.

MONARCH DEPARTMENT

Remington Typewriter Co., Ltd. 144 Bay St., TORONTO, ONT.

When Writing Advertisers, Please Mention "The Farmer's Advocate"

The Mending Basket

A "PATCH" SUGGESTED.

Editor "The Farmer's Advocate":

As I have been much interested in reading the different letters under the heading of Women's Work on a Farm, I am going to venture to say a few words. They may not amount to much, but they tell of life on the farm as I have found it. I have been a farmer's wife nearly thirteen years, and there is no other place for me. I find pleasure in going out in the morning and helping milk my share of cows, when all is well inside, as it gives me an appetite for breakfast, and I think the nice milk and butter are so much relished when one knows just how they are got. And the garden which we women help to plant and hoe is very convenient just now to get a nice boiled dinner from, when, if we had to buy the vegetables, perhaps we would not have them at all.

I think it must be mismanagement for a woman to have to take cold meals, and I think it would be selfish for one to think a man was not entitled to a little rest at noon when he has been in the hot sun all the forenoon. I like to see them enjoy a rest, and perhaps a smoke, on the lawn in the shade. I don't think we women need to complain this summer about the heat of the stove we have to stand over, for I have really felt the need of a nice warm fire a greater share of the summer, and have done a lot of baking, too. I have five children, the eldest twelve, and I find them a comfort rather than a trouble. I let them help me with what they can do of the light work before and after school, and you would be surprised if I were to tell you what all they can do to help me, and they get so much interested in it. They sometimes call themselves "The Mistress." I think helping in this way will make far better men and women of them.

I have had ten to cook and work for all summer, and I find that by arranging my work for each day, and doing that work on the day laid out, I can get through it nicely and have time to read the evening paper a few moments after it is delivered before time to get tea.

I am sending a few verses which I think ought to be suggestive to women as well as men:

To the preacher life's a sermon,
To the joker life's a jest,
To the miser life is money,
To the loafer life is rest.

Life's a picture to the artist,
To the rascal life's a fraud;
Life perhaps is but a burden
To the man beneath the hod.

Life is but a long vacation
To the man who loves his work;
Life's an everlasting effort
To shun duty, to the shirk.

To the earnest Christian worker
Life's a story ever new;
Life is what we try to make it
Sister, what is life to you?

Now, as I have written a long letter,
for the first one, I think I will close
with this little rhyme I heard long
since:

"As there is so much bad in the best
of us,
And so much good in the worst of us,
It behooves the most of us,
To say nothing of the rest of us."

LOVER OF THE FARM.

Wellington Co., Ont.

ANOTHER "PATCH."

Have just finished reading the article by Sherard McLeay, and it has taken my thoughts back to the time when I nearly made the same mistake as the woman pictured in this article. Life is a problem, but after all, aren't we all to a great extent, "creatures of habit"?

Don't you think it merely lack of self-respect, and also lack of will-power, to allow ourselves to become merely drudges? I do not believe there is one man in a hundred who would wish it, and I firmly believe it is almost always

a woman's fault when she leads a life like that. If her highest aim were keeping her husband's love and respect, and being a woman worthy of being called mother, she never would fill her time in that way. If a husband and wife would only begin right by being "chums," and talking things over, finding out what really pays to put work on and what does not, using their brains before they go into things! Take turkeys, for instance; unless a person uses judgment in regard to their feed, they will find they have cost them more than they get for them, and all their work thrown in. Also cows: we think we can make just as much by fattening a few extra cattle and keeping just cows to provide butter and milk for ourselves.

Then, again, if a mother is to keep in touch with her children, she cannot afford to become a drudge. She owes them her help and sympathy. If she gives too much of her time to other things she cannot do this, and she owes it to herself, to her husband, and to her children, to decide what is the right thing to do, and to do it; to get help in the house if it has to be, although I have found from my own experience, that we were happier when we shared the work, bought ready-made clothing, etc., perhaps getting help for house-cleaning, etc. Farming nowadays will certainly provide for a family without all that rush and tear, and what is more, men hate it. They would far sooner, when they are accustomed to it, have the man milk the cows and do little extras, and have their wives fresh, and nicely dressed.

Then I think it is most necessary for a woman on a farm not to neglect social duties, keeping in touch with others. Nothing helps along like competition.—Get out; see what others are doing for their families; find out the easiest and best ways of doing things. By comparing notes, life is made easier for both. Make life interesting and bright. The young people in our part of the country have started a tennis club. The girls who play give a glowing report. They say quite often they have gone there almost too tired to play, but have always found, although it is a strenuous game, that the change rested them. I know we older ones have spent a number of pleasant afternoons watching them.

In my opinion, if the farmers' wives would look at things from the highest point of view, the farmers would adapt themselves to it and enjoy it. What is the sense of piling up money for the children, while perhaps neglecting their education, and taking the joy out of life for all the family? No one will be satisfied, and if the parents live to be old, they will miss that beautiful communion of minds that may only be won by a great deal of common sense and consideration.

Our pictured friend "trailed through the wet grass after berries." What was the sense? If her husband would not have them on the farm, why not do without? They are not a necessity. I found it much wiser to live very plainly while the children were small. It was easier for me, and I knew they would not thank me if their digestion was defective when they reached an age to judge for themselves.

I have gone through lots of extra work, and my husband has never complained that I shirked in any way, and I cannot say that my husband imposed on me. I love the farm and my home, and hope all the splendid, clean-hearted young farmers around here will get wives worthy of them.

Hoping to see other opinions on this subject, I think this is a much-needed discussion. Most sincerely,

ADA STILLHOUSE.

"Who made you?" inquired a lady teacher of a lily-headed boy who had lately joined the class.

"I don't know," said he.
"Don't know? You ought to be ashamed of yourself, a boy of fourteen years. There's little Dickey Filton, he is only three, he can tell, I dare say. Come here, Dickey—who made you?"

"Dad," lisped the infant prodigy.
"There," said the teacher triumphantly; "I knew he would remember."

"Well, he oughter," said the stupid boy; "taint but a little while ago since he was made."

QUESTIONS AND ANSWERS. Veterinary.

FATALITY IN PIG.

I fed my pigs with dry barley scattered on the ground. At five months old one became sick and refused to eat, and died. A little blood escaped from his mouth after death.

Ans.—The pig died from constipation. A purgative of 2 ounces Epsom salts might have saved him. Feeding the barley chopped, and mixed with an equal quantity of shorts, would probably have prevented the trouble.

FATALITY IN CATTLE.

I turned 40 head of young cattle out on 50 acres of new meadow and 9 acres of rape. In three days I found a yearling dead. In a day or two longer another yearling was sick and bloated. We gave him a cupful of coal oil, but he died in about 24 hours. Our veterinarian said he thought it was laryngitis, and advised change of pasture, which we gave. The calves nursing the cows have since died. Our veterinarian has sent a larynx to Toronto for analysis, but has received no word yet. Each animal died a few hours after rain.

Ans.—Your veterinarian is in a better position to diagnose than I, and probably he has definite word from Toronto before this. Without more definite symptoms than you have given, I would say that the cattle died from indigestion, caused by eating too greedily of wet grass and rape. If this be so, you should be able to pasture your rape and meadow by allowing the cattle an hour or two on it when it is dry, the next day increasing the time, and gradually, day by day, doing so until in a week or ten days they might with reasonable safety be left out all the time. Instead of using coal oil in a case of bloating, give to a yearling three tablespoonfuls of oil of turpentine in half-pint of raw linseed oil.

TRADE TOPIC.

THE CALDWELL CUPS.—The Caldwell Feed Company, of Dundas, Ont., who make a specialty of manufacturing feeding meals for stock, are showing a good deal of public enterprise in offering four large silver cups for competition at the Guelph Fat-stock Show in December. Nearly all of the larger firms doing business in competitive lines of manufacture, make yearly appropriation for advertising purposes. The Caldwell Feed Company have decided to give a portion of this year's appropriation directly to their customers in the shape of extra prizes at the above-mentioned show. Anyone who intends to exhibit live stock should write the Company's Head Office at Dundas for full particulars. Cuts of these cups, together with the firm's advertisement, appear elsewhere in this issue.

GOSSIP.

SHIRES AT TORONTO.

In our report of the Canadian National Exhibition, issue of September 12th, in the class for Shire horses three years old, W. Pearson & Son, Hamilton, were credited with winning second prize on Flamboro King, by Alake 2nd. Flamboro King was not shown, the winner of second place being Nottingham David, owned by Wm. Hassard, Weston, Ont. The error occurred by this horse, which was an added entry, not being catalogued, and Flamboro King being catalogued and not out. The remarks as made regarding the second-prize winner, apply to Nottingham David.

Catesbys, Ltd., an English firm manufacturing made-to-measure clothes, is making an interesting offer to Canadians. They make suits and overcoats to measure, and to prove the value of these goods, will send free, to any reader who writes, mentioning this paper, a package containing 72 pattern pieces of suitings and overcoatings, and they say when you get the samples, pick out the cloth you like best, take it to your local tailor and ask him what he will charge to make you a suit or an overcoat from that quality of material. Then compare his price with the one they ask. That certainly seems to be a fair offer in these days of keenly-competitive business, so that readers interested may do well to send to the Canadian office, 119 Wellington Street West, Toronto, and get a package of these samples and make the test.

T. H. Hassard, Markham, Ont., in his new advertisement in this issue, calls attention to his great stud of 65 imported Clydesdales and Percherons, all of which are for sale, many of them prizewinners in Canada, Scotland, and France, and others extra good show propositions that have not yet been exhibited. Parties interested may find good bargains in this fine offering.

SENATOR BEITH'S CLYDESDALE IMPORTATION.

The latest arrival from Scotland of a big importation of Clydesdales is that of Hon. Robt. Beith, of Bowmanville, Ont. Many of the best Clydesdales that found their way to Canada from the land of their birth in the last forty years were imported by Mr. Beith. No man on this continent has a more enviable reputation as a judge of Clydesdale and Hackney horses than Robt. Beith, and very few, if any, on either side of the lines has done more judging at the big shows of both countries than he in the last thirty or forty years, and with universal satisfaction, so far as it lies within the power of man to give satisfaction in the show-ring. The expert judgment that has made his reputation is manifest most strongly in the lot just landed, fifteen fillies and three stallions. Of the fillies, eleven are two-year-olds, three are three-year-olds, the other five years old. It is very doubtful if ever before was a lot of fillies imported that showed such a remarkable uniformity in size, draft character, and quality. There is very little to choose among them. All are up to a big size, with faultless underpinning, and a man can buy one of them, or a matched pair, by correspondence, and get a high-class purchase. The five-year-old is Jessie Laura, a brown, one of the very thick kind, with quality galore in her underpinning. She is got by Sir Hercules, dam by The Scottish Hero. The three-year-olds are a big, thick lot. Bell of Blackhill has five numbered dams, and is sired by the Royal Northern champion, Girvan Chief; Kate Hunter has four numbered dams, and was sired by the great Crossrigg, by Baron Solway; Lady May also has four numbered dams, and was sired by Gold Star. The first-named is a bay; the other two dark browns. The two-year-olds also show the same high-class breeding in the matter of numbered dams, most of them with four or five. Two of them are sired by the popular Baron Albion, and dam's by Gold Link, and the unbeaten Cairnbrogie Stamp. They are a particularly well-matched pair of show-ring quality. One, with lots of the breed's foundation blood, is Nannie Armstrong, by Edward Darnley, and dam by Lord Lothian. This is true Clyde breeding, and she is a big, drafty filly. Several of the others are bred along the same drafty lines—scarcely one of the lot that will not reach the 1,800-lb. mark—and some will beat it. All around, they are one of the best lots ever imported, a fact that should be remembered by intending purchasers. Prominent among the stallions is the renowned Baron's Best, three times winner of first prize at the Highland, besides many other firsts and championships. Not many of his kind have ever found their way to Canada. He has all the qualifications of a draft horse, faultless quality of underpinning, and perfect action. He is a bay, eleven years old, sired by the invincible Baron's Pride, dam by the noted prizewinner, Rosemount. Royal Ribbon is a brown two-year-old, by the Cawdor Cup champion, Memento, dam by the world-famous Macgregor, by Darnley. This is intensive breeding, as through his four numbered dams he combines the blood that has made the breed famous. He is a particularly nicely finished colt, very smooth, and has lots of quality. Gallant Solway is a brown two-year-old also, got by Dunure Gallant, dam by Baron's Solway, grandam by Montrave Mac. He, too, has four numbered dams, and is one of the great two-year-olds of the year, choke-full of quality, he has the character and form that develop into champions. Not many of his kind ever come to this country. The famous Hackney stud that for so many years has brought out the winners, is still as strong as ever, particularly in young things. Some right choice yearlings and two-year-olds are coming on that will be heard from another year, as well as harness pairs.

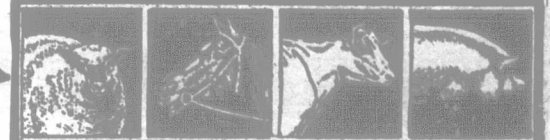
MOLASSINE MEAL



For HORSES Keeps them in good health. Prevents and eradicates worms. Is equally suitable for work horses or race horses. Saves Veterinary expenses. MILCH COWS MOLASSINE MEAL wonderfully increases the flow and quality of the milk and makes rich-flavored butter and cheese. Dairy experts know its value. Healthy cows give more and better milk than unhealthy ones and when milking days are over are in better condition for the butcher. STEERS MOLASSINE MEAL will fatten steers quicker and better than any other food. SHEEP AND LAMBS can be made ready for market very much quicker. MOLASSINE MEAL makes rich-flavored meat which commands top prices. PIGS

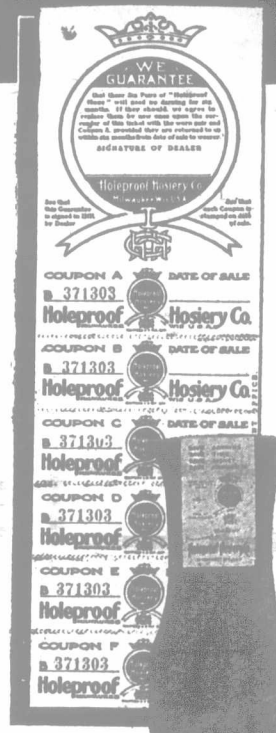
fetch higher price, and are always ready for market three weeks earlier when fed on MOLASSINE MEAL. MOLASSINE MEAL keeps all animals in perfect health and condition and enables them to obtain the full nourishment from their entire food. It makes a great saving in the feed bill, as it not only replaces an equal quantity other food, but animals get the full food value from the other food. Get the genuine made in England. Try it this winter. Ask your dealer, or write us direct for full feeding instructions.

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Today Six Pairs Guaranteed Six Months 25c to 50c a pair—Men, Women, Children One Box Ends Mending!



YOU are wasting your comfort when you wear darned hose. Holeproof Hose for men, women, children and infants END darning at once and for all time. Get six pairs today. Wear them SIX MONTHS! If any wear out we'll replace them free. A definite GUARANTEE SLIP with six coupons goes with each box of six pairs. It covers EVERY STITCH of the stocking, not just the heel and toe. We have sold hose under this guarantee for the past thirteen years. Why worry with hose that wear out in a week when there are hose like these?

Soft—Light—Stylish—Silk or Cotton Guaranteed

We make Holeproof Hose in cotton for men, women, children and infants, six pairs \$1.50 up to \$3, according to finish and weight, guaranteed six months. We make them in silk for men and women; three pairs for men, guaranteed three months, \$2; three pairs for women, guaranteed three months, \$3. One Million People are today wearing "Holeproof" because of their wonderful quality, their softness, comfort, light weight and style. You ought to wear them. We pay the top market price for our cotton yarn—an average of 70c a pound. Common yarn costs but 30c. We use silk from Japan, the best we can buy. There are no finer hose to be had.

Trial Box Order Coupon. Holeproof Hosiery Co. of Canada, Ltd. 43 Bond St., London, Can. Gentlemen: I enclose \$....., for which send me one box of Holeproof Hose for..... (state whether for men, women or children). Weight..... (medium or light). Size..... Color (check the color on list below). Any six colors in a box, but only one weight and size. Name..... Street..... City..... Province..... For Men and Women—Black, Light Tan, Dark Tan, Pearl, Lavender, Navy Blue, Light Blue. For Children—Black and Tan only—medium weight only. (370)

FAMOUS Holeproof Hosiery FOR MEN WOMEN AND CHILDREN Send Trial Order Now! Send the coupon to your left for a trial box TODAY! See how good hosiery should wear—even the lightest weight—even silk hosiery. Note the style, feel the comfort, SAVE DARNING! Don't pay out good money for anything less. Indicate on the coupon the color, weight, size and kind you want. Send the money in any convenient way. Thousands buy from us this way. We guarantee satisfaction as well as the hose. HOLEPROOF HOSIERY CO., Limited 43 Bond Street London, Canada Are Your Hose Insured?

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Ample Fire Chamber with large feed door.

Radiator of heavy steel plate of best construction to retain heat.

Flanged Fire Pot heavy and durable, with large radiating surface.

All joints absolutely gas tight.

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Water Pan conveniently situated.

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AND SECOND ANNUAL EXHIBIT

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Union Stock Yards, TORONTO

TUESDAY and WEDNESDAY, December 10th and 11th, 1912

GRADE PURE-BRED CATTLE, HOGS, SHEEP, POULTRY
Entries close November 30th, 1912

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PROF. GEO. E. DAY. J. H. ASHCRAFT, Jr., Gen. Mgr.

For Premium List and Entry Blanks, address:

C. F. TOPPING, Secretary, Union Stock Yards, Toronto.

Important Auction Sale OF HIGH-CLASS REGISTERED JERSEYS

Property of IRA NICHOLS, Woodstock, Ont. This sale will be held on the last day of Simcoe Fair, at SIMCOE, on
Thursday, Oct. 17th, 1912
On the Fair Grounds, commencing at 3.30 p.m.

The herd comprises 20 head registered Jerseys, ranging from 6 months to 5 years of age; also one Holstein under 3 years; all females but one Jersey bull calf, 11 months. All that are old enough will be fresh in milk; four beautiful yearlings about due to calve; some of the younger yearlings in calf to sire whose photo engraving appeared in Sept. 5th issue of this paper. See also "Clara Minto"—1866—illustrated in this issue, who has a record of 1,357 lbs. milk in 30 days. This herd is strong individually, and will prove an attraction to bidders who are looking for producers of quality. For further particulars, write:

IRA NICHOLS, Prop., Box 988, Woodstock, Ont.

When Writing Advertisers, Please Mention "The Farmer's Advocate"

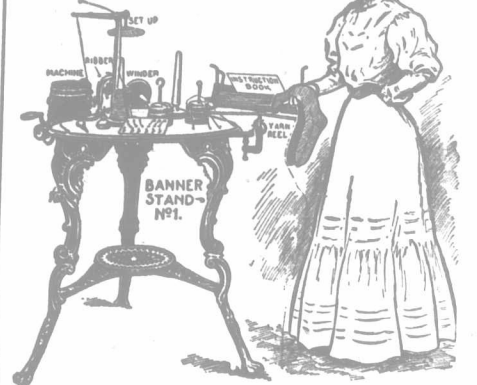
GOSSIP.

NATIONAL DAIRY-SHOW JUDGES.
Following is a list of cattle judges slated for the National Dairy Show, Chicago, Oct. 24 to Nov. 2: Ayrshires—Geo. P. Grout, Duluth, Minn. Guernseys—F. S. Peer, Ithaca, N. Y.; J. L. Hope, Madison, N. J.; Prof. Geo. C. Humphrey, Madison, Wis. Holstein-Friesians—W. J. Gillett, Rosendale, Wis. Jerseys—H. G. Van Pelt, Waterloo, Iowa. Brown Swiss—W. E. Janes, Ithaca, N. Y.

T. D. ELLIOTT'S CLYDESDALE IMPORTATION.

A few weeks ago there appeared in these columns a short review of the big importation of Percheron stallions and fillies made by T. D. Elliott, of Bolton, Ont., consisting of ten stallions and eight fillies, the high-class character of which has only to be seen to be appreciated by admirers of the great French draft horses. Lately, Mr. Elliott arrived home with his 1912 importation of Clydesdale stallions and fillies, made up of twelve stallions and six fillies. Of the stallions, one is eight years old, two are five years old, three are three years old, five are two years old, and the other a yearling. Little need be said of the character, breeding, and quality of this lot, as the many years' experience in selecting horses in Scotland for the Canadian market, and the invariably high-class character of his past importations, are a guarantee that in this lot is the kind the country demands, with big size and ideal draft type, strong, flat bone, nicely-sprung ankles, and big, wide feet, the predominating features. The five-year-olds are, Baron Rosedale, a bay son of the renowned Baron's Pride, dam by the H. & A. S. champion, Rosedale. This is a horse of show-ring finish, smooth, stylish, and strictly high-class quality. The other is the rangy, stylish-going, handsome horse, Cyllene, by the great Baron of Buchlyvie, dam by Grand Prince, grandam by Lucky Getter. He is one of the handsomest Clydesdale stallions in the country, and with it all has lots of size and character. The three-year-olds are all up to a size that will easily reach the ton when developed. Dux is a bay, by Up-Dux, dam by Silver Age, grandam by Darnley. He is a colt of great substance, and carries a stylish top and great quality of bottom. Northern Light is a brown, by Baron's Enigma, dam by Royal Surprise, grandam by Pandora's Prince. He, too, is well up in style, with big size and draft character. The other is Madura, by Baron Enigma, dam by Pandora's Prince, grandam by Scottish Hero. This is a massive, thick colt, of great draft character; one of the great three-year-olds of the year. The two-year-olds are exceptionally drafty in type, not one of them but will go to the ton or over, and withal they are extra good at the ground. Black Chief is by the famous Everlasting, dam by the noted Up-to-Time. A half-brother, by the same sire, is Kirkland, with dam by Up-to-Time also. They are a big, right drafty pair, with lots of quality. Another, extra well-bred, and one of the best two-year-olds that has come over this year, is Seneca, by Prince Shapely, dam by Royal Favorite, and grandam by Gay Gallant. Others are by the noted Pacific, and the good-breeding horse, Culinan, a grandson of Baron's Pride. The fillies are also up to a high standard, two and three years old; four are in foal. Among them are three-year-olds now up to 1,700 lbs., and not near to their limit, sired by such noted horses as Mikado, Royal Abundance, Top Fashion, Mamilius, and Lord Falconer, and dams, in the same order, sired by Royal Chief, Prince of Galway, Lord Lothian, Flashwood, and Crown and Feather. There is no better selection in the country in both stallions and fillies than Mr. Elliott is offering, and the selection comprises over forty head, which gives a wide range for intending purchasers of Clydesdales or Percherons. Mr. Elliott is also offering at a bargain price, the noted Thoroughbred stallion, Sunrise 17893, winner of many a hard-fought race, and the sire of many winners, sired by Sir Dixon, or Top Billet, dam by Hindoo. He is a brown, fourteen years old, fresh as a yearling.

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Home knitting is quick and easy with any one of our 6 Family Knitting Machines. Socks and Stockings, Underwear, Caps, Gloves, Mittens, etc.—Plain or Ribbed—can be knitted ten times as fast as by hand, and for far less than they cost ready-made.

A child can work our machines. Besides your own family work, you can make good money knitting for others.

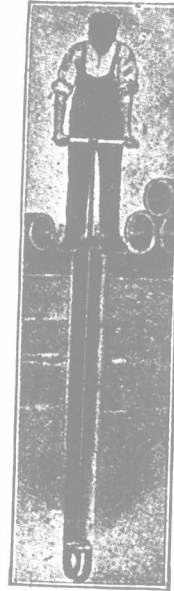
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For Township Roads. For Side Walks.

Stone and Stump Pullers.
Bob-sleighs.

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Ferrets, \$3 Each.

Also ornamental Pheasants for sale. Peafowl, red-patched; silver and blue foxes, mink, marten, fisher, etc., bought and sold.

JOHN DOWNHAM, STRATHROY, ONTARIO

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.
2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.
3rd.—In Veterinary questions the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.
4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

ALUMINUM VS. COPPER FOR LIGHTNING ROD.

1. Is aluminum or copper wire the better to use as a lightning conductor?
2. What are their relative values?

J. S.

Ans.—1 and 2. Aluminum, where length and cross section are equal, has 55 per cent. of the electrical conductive power of copper. The advantage, however, is on the side of aluminum when weight is equal. But iron wire, well galvanized, though having only one-eleventh (1-11) the conducting power of copper, is better as a lightning conductor. The same efficiency as a conductor can be secured at less cost by using a greater number of wires, and it is a safer rod to use. Sir Oliver Lodge found, by experiment, that a sudden discharge of electricity when transmitted along a copper wire is quieter than when an iron medium is used, and is likely to be accompanied by a spark or flash which might start a fire. He therefore, except in special conditions, recommends the use of galvanized wire in preference to copper. T.

HIRE MAN'S HOLIDAYS.

1. Is a hired man supposed to help do the chores on Sundays?
2. What days can he claim as holidays?

3. Is there any law that a hired man can only claim one Sunday off in two, and is bound to get up any time in the night or morning to do necessary work?

I should be glad if you would answer these questions, and give me any information regarding hired help. W. F.

Ans.—1. He is supposed to do those that must of necessity be attended to daily, and every day.

2. He may claim as holidays, after doing necessary chores, Sundays, New Year's Day, Good Friday, Easter Monday, Victoria Day, Dominion Day, Labor Day, Thanksgiving Day, Christmas Day, together with any other day appointed by official proclamation as a holiday.

3. It depends upon the agreement between the parties, or, if there be no agreement on the point, the hours must be reasonable for both parties, having regard to all the circumstances of the particular case.

SAND-BUR.

This plant appeared in the garden two years ago. It is spreading fast. What is its name, and what is the best method of fighting it? R. W. H. Elgin Co., Ont.

Ans.—The specimen inclosed is a grass, known to botanists as *Cenchrus tribuloides*, and locally by different names, such as bur-grass, Michigan sand-bur, and hedgehog grass. It favors sandy ground, and when it becomes established in gardens and along pathways, proves to be exceedingly troublesome. The needle-pointed spines on its seed-covering are armed with microscopic barbs; one who has not had experience in removing a lot of them from a little child's clothing can hardly conceive how distressful they may be. In the South, this grass becomes perennial, but with us it winters over only by its seed, hence cultivation that kills the summer growth or hinders it from seeding until the frost comes, will eradicate it. Burning over the ripe or nearly ripe grass, will kill most of the seed. The treatment will vary with the conditions, but a suitable method will occur to one bearing in mind that he is dealing with an annual whose seed, and consequently the mature plant, is difficult to handle, but easily carried from place to place. J. D.

SIPHONS.

Would you kindly advise me, through your paper, the best way to draw water from a well about 270 feet from my barn? The well is 12 feet deep, and the fall to the barn, a distance of 270 feet, is 9 feet. Well carries about 6 feet of water. Would an inch pipe, laid 3 feet in ground and once started or filled, with a stop-cock at low end, answer; or would it need a pump for starting each time it was needed?

READER.

Ans.—The question is not quite clear. Is the well twelve feet deep, and the fall to the barn from the top of the well nine feet, or is the fall reckoned from the top of the water in the well, which is said to contain six feet of water? If the point where you wish to deliver the water is below the water level in the well, then a siphon can be used, and no pump would be necessary after the pipe had once been filled with water, provided the obstacles, if any, in the way are not too high. Siphons work all right up to a height of about thirty feet. Of course, the pipe must be airtight. In this case, provided the water is once started by pumping in water or pumping out air, it should work all right.

BOOK REVIEW.

WOOD'S SCHOOL AGRICULTURE.

We are indebted to the press of the Orange Judd Co. for another new textbook on Agriculture for Rural and Graded Schools. The author is Principal M. N. Wood, of the Pittsville, Wis., High School. Soil, and its culture, are treated in the first 60 pages; about 90 are devoted to plants, crops, trees; and as much more space to live stock. Several of the chapters are closed with suggestions for practical experimentation, and tabulated summaries of their leading topics. The text is profusely and appropriately illustrated with 15 full-page colored or tinted plates, and 180 engravings. The subject matter is up-to-date, and the typography in keeping with the well-known standard of its publishers.

While the book was probably intended for pupils, the examination of its chapters shows that their best use is as a guide to the teacher. The author is right in stating that instruction in agriculture should include demonstrations of practical value, and should appeal to the intelligence rather than to the memory of the pupils. The text of these chapters, and the right use of the suggested bibliographical references, will qualify a teacher who knows the distinction between information and education, and how to make it in his teaching, to do very useful work in this important subject. Teachers and trustees will make no mistake in adding Wood's School Agriculture to the school library. Price, through this office, 90 cents net, postage 5 cents.

GOSSIP.

D. C. Flatt & Son, R. F. D., Hamilton, Ont., announce their intention to sell at public auction in November, 50 imported Clydesdale fillies, advertisement and particulars of which may be looked for in future issues of "The Farmer's Advocate."

IMPORTANT SALE OF JERSEYS.

On October 17th, at Simcoe, Norfolk County, Ont., on the fair grounds, the last day of Simcoe Fair, as advertised, will be sold by auction 20 head of registered Jerseys, the property of Ira Nichols, Woodstock, Ont., from six months to five years old, all females but one, a bull calf eleven months old. All the cows, and heifers old enough, will be fresh in milk. Four beautiful yearlings are nearly ready to calve, and some of the younger yearlings are in calf. This herd, we are informed, won all the first prizes at five local fairs in 1911. Pictures of two of the young heifers included in the sale may be seen on another page in this issue. These are granddaughters of the noted bull, Arthur's Golden Fox, one of the most potent sires of the breed in Canada. There is also in the offering one registered Holstein, under three years old.

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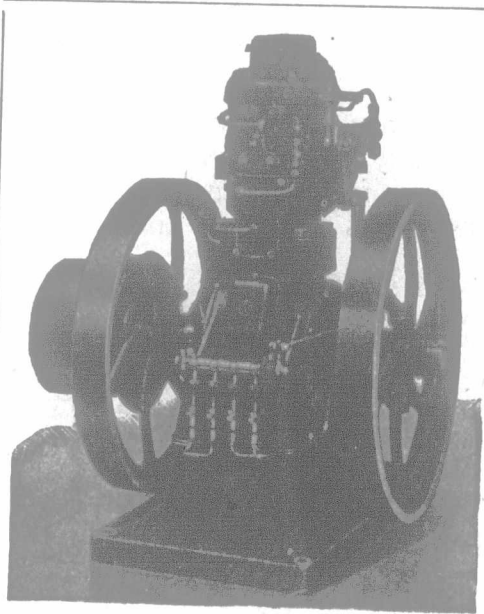
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A brand new, well made, easy running, easily cleaned, perfect skimming separator for \$15.95. Skims one quart of milk a minute, warm or cold. Makes thick or thin cream. Thousands in use giving splendid satisfaction. Different from this picture, which illustrates our large capacity machines. The bowl is a sanitary marvel and embodies all our latest improvements. Our richly illustrated catalog tells all about it. Our wonderfully low prices on all sizes and generous terms of trial will astonish you. Our twenty-year guarantee protects you on every American Separator. Shipments made promptly from WINNIPEG, MAN., ST. JOHN, N. B. and TORONTO, ONT. Whether your dairy is large or small get our great offer and handsome free catalog. ADDRESS,



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BOLINDERS SEMI-DIESEL CRUDE OIL ENGINE

This handy little tool will save you hundreds of dollars. Not alone in replacing labour but in upkeep and running cost as compared with Gasoline engines. A 12 H.-P. Gasoline Engine costs you 30 cents to operate per hour. Our Crude Oil Engine only costs 6 cents per hour. Our engines are designed and built to stand hard work. They will outlive three or four gasoline engines. There is absolutely no risk from fire or explosion as it uses non-inflammable crude oil.

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164 Bay Street TORONTO, ONTARIO

TREES + AMERICAN SAW MILL = \$

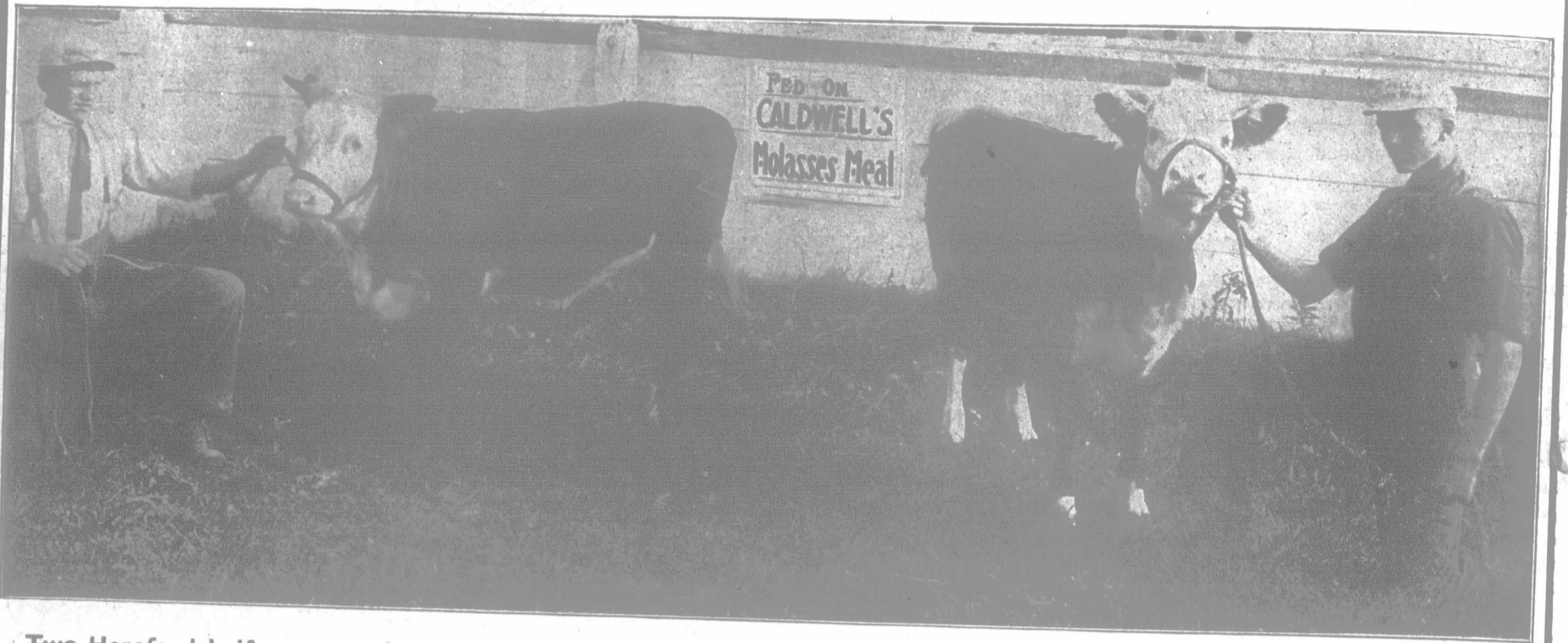
YOUR TREES + AMERICAN SAW MILL = BIG PROFITS

Here are the prices lumber brought in New York this summer, per thousand feet:—birch, \$18 to \$55; chestnut, \$19 to \$57; cypress, \$26 to \$60; maple, \$18 to \$50; oak, \$25 to \$62; pine, \$20 to \$42; spruce, \$22 to \$30. Ten 16-foot logs averaging 14 inches thick make 1000 feet of lumber. You can saw it for \$4 to \$5 per thousand with an "American" Saw Mill. Do you see the profits? Look over your trees and see what you have. Ask for our new book No. 32 which tells the whole story. Do it now, while you are interested. Address nearest office.

In the largest mill or on the farm the American is recognized as Standard.

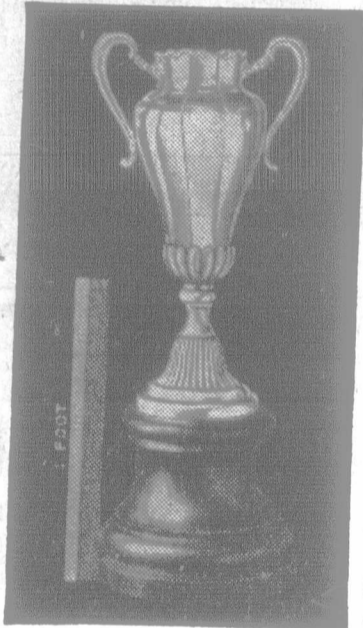
AMERICAN SAW MILL MACHINERY CO. 113 Tenth St., Hackensack, N. J.
Chicago Savannah New Orleans

If you are going after one of these beautiful Silver Cups presented by THE CALDWELL FEED COMPANY for the best conditioned horse, steer, sheep and hog at the Ontario Provincial Winter Fair at Guelph, this photograph should interest you.



Two Hereford heifers, over one year, first and second at Toronto, also at Ottawa, the property of W. H. Hunter & Sons, Orangeville. These heifers were fitted for these fairs on CALDWELL'S MOLASSES MEAL.

You have a fair chance of winning one or more of these beautiful SILVER CUPS at the Ontario Provincial Winter Fair



There are no strings to these **special** prizes—the cups become the property of the owner of the winning animal. Our object is to encourage farmers and stockmen alike to **get** and **keep** their animals in **first-class condition** and to **support** the fair.

So we have decided to give four Silver Cups as **special** prizes to the owners of the **best Horse, Steer, Sheep and Hog** shown at the



Ontario Provincial Winter Fair, Guelph



The Twenty-ninth Annual Provincial Winter Fair will be held on December 9, 10, 11, 12 and 13, 1912. (See official catalogue.)

You have very little more than two months to get your entries into **A.I. condition**, and although this is neither the time nor the place for us to say much about **CALDWELL'S MOLASSES MEAL**, yet **prominent farmers and stock-raisers know** it to be, by all odds, the **quickest and most economical** conditioner of cattle you can buy. Your competitor will be using it. **Can you afford to give him this advantage?**

These are photographs of the Cups, which are 22 inches in height. They will be exhibited during the show in the building.

Here's hoping **YOU'LL** be one of the lucky winners.

The CALDWELL FEED CO., Limited
Dundas, Ontario



NOTE.—If your dealer does not carry a stock of CALDWELL'S MOLASSES MEAL, write direct to us.

Trinidad Lake asphalt
Amorphous saturated wool felt
Trinidad Lake asphalt

Avoid roofings that crack like old shoes, because—

the oils of their pores dry-out after short exposure to sun and air, and leave the roofing lifeless and leaky. Get the permanent roofing—

Genasco
THE TRINIDAD-LAKE-ASPHALT
Ready Roofing

The natural oils of Trinidad Lake asphalt are lastingly stored in it. That's the difference between natural and artificial.

They keep Genasco pliable—always ready to resist every condition of weather that attacks it.

Put Genasco on the roof of all your farm-buildings, and forget it.

Mineral or smooth surface. Several weights. In handy rolls. Ready to lay—and easily done by anyone. Ask your dealer for Genasco. Write us for the helpful Good Roof Guide Book and sample—free.



The Kant-leak Kleet, for smooth-surface roofings, makes seams watertight without cement, and prevents nail-leaks.

The Barber Asphalt Paving Company
Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

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Canadian Distributors:
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Montreal, Quebec and
Winnipeg, Man.

D. H. Howden & Co., Ltd.
200 York St., London, Ont.

"Go North Young Man!"

WHY?

Because there are millions of acres of agricultural land in Northern Ontario in some cases free, and in others at 50 cents per acre, excelling in richness any other part of Canada, blessing and waiting to bless the strong, willing settler, especially the man of some capital.

For information as to terms, home-stead regulations, special railway rates, etc., write to

H. A. Macdonnell
Director of Colonization
TORONTO, ONTARIO

HON. JAS. S. DUFF,
Minister of Agriculture

ABSORBINE



will reduce inflamed, swollen joints, Bruises, Soft Bunches, Cure Boils, Poll Evil, Quitor, Fistula or any unhealthy sore quickly; pleasant to use; does not blister under bandage or remove the hair, and you can work the horse, \$2 per bottle delivered. Book 7 E free. ABSORBINE, J.E., liniment for mankind. Reduces Painful, Swollen Veins, Gout, Wens, Strains, Bruises, stops Pain and Inflammation. Price \$1.00 per bottle at dealers or delivered. Will tell you more if you write. Manufactured only by W. F. YOUNG, P. D.F., 258 Lyman Bldg., Montreal, Ca.

When writing mention Advocate

QUESTIONS AND ANSWERS.
Miscellaneous.

BUILDING—NOTICE TO QUIT.

1. Can a man in a country place build any sort of a building near his own residence, and also near his neighbor's residence?

2. Is it necessary for a landlord to give notice to tenant to vacate a farm leased for one year only? J. E. V.

Ans.—1. Yes; provided it does not amount to a nuisance.

2. No; the tenant is supposed to go out at the end of the year without any notice to do so.

LUMP JAW.

Kindly let me know the best treatment for lump jaw in its early stages.

R. K.

Ans.—The iodide - of - potassium treatment has given the best results; but you must give sufficient of the drug to produce what is called iodism, the symptoms of which are: a loss of appetite, and refusal to drink, slaving, and a discharge of fluid from the eyes. Commence by giving one dram three times daily, and increase the doses by ten grains daily, until some of the above symptoms are shown. Then discontinue giving the drug for three or four weeks; when, if necessary, repeat treatment. If taken in the early stages, this treatment seldom fails, and is often successful in cases of considerable standing.

HORSE AND COLT WITH WORMS

I have a five-year-old horse and a one-year-old colt that have worms. Please let me know the best way of treating for worms, also difference in dose for the five-year-old and the one-year-old.

G. A.

Ans.—For the older horse, take 1 1/2 ounces each of sulphate of iron, sulphate of copper, and tartar emetic, and 1 ounce of calomel. Mix, and make into twelve powders. Give a powder every night, and morning in damp food, or mixed with a little water as a drench. Give nothing to eat but bran, and after giving the last powder, in about eight or ten hours, give a purgative of 8 drams Barbadoes aloes and 2 drams ginger. Feed bran only until purgation commences. About half the dose should be enough for the colt. Mix the same quantities in twenty-four powders, and give one every night and morning as directed for the horse.

WATERPROOFING CEMENT-BLOCK WALL.

How can cement blocks, being the wall of a granary, be painted or treated so as to be perfectly damp-proof?

N. E. M.

Ans.—We are not in a position to answer your question satisfactorily from personal knowledge, but quote the following suggestions from a booklet issued by the Canada Cement Co.:

"Concrete may be made waterproof by either internal or external methods. In both methods the concrete should be a rich, wet mixture. When the work cannot be completed at one time, great care should be taken in joining new concrete to the old so as to make a water-tight joint.

"Internal waterproofing may be accomplished by several methods:

"By proportioning the aggregates to make the concrete of the greatest possible density.

"By adding hydrated lime to the dry mixture—about 5 per cent. of the weight of the cement used.

"By adding patent waterproofing compounds.

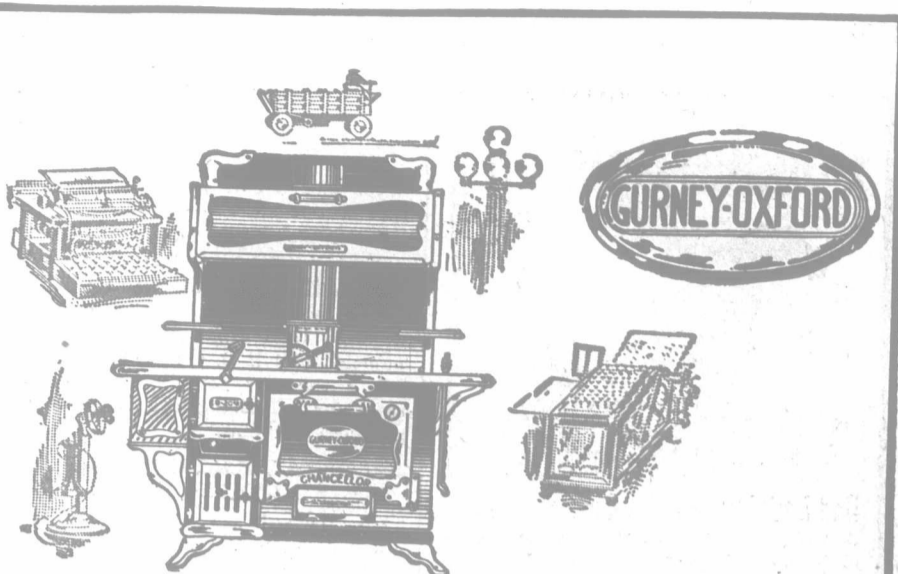
"External waterproofing is applied to the exposed surface when the concrete is in place, on the side which is exposed to the water.

"Various methods are used, such as plastering with a rich mortar, a wash of neat cement and water, or a wash of soap-and-alum solution.

"Patented liquids applied as paints are used, forming either a glazed surface or by being absorbed by the concrete and filling the pores.

"Asphaltum, or layers of tarred paper or felt, are applied to the surface or between successive layers of concrete.

"The method to be used will depend a great deal upon the special conditions of the case at hand."



The GURNEY-OXFORD
is an efficient RANGE

A business is kept up-to-date because it means a difference between profit and loss. The successful business uses such modern time-and-labor-savers as typewriters, adding machines and electricity. Woman's work in the home is also a matter of profit and loss. If she has improved and modern tools, she gains time and leisure and better results. If she has old-fashioned ideas to contend with, she loses energy and effort and peace of mind.

The Gurney-Economizer is the greatest single improvement ever devised to simplify cooking. It regulates the fire and heat of the oven with one direct motion. The heat of the fire is distributed by a scientific arrangement of flues that keeps the oven uniformly heated. The grates hold the fire on the least possible surface.

The Gurney-Oxford Range is a most efficient piece of household furniture. It puts the kitchen on the same labor-saving, up-to-date basis as a successful business.

The Gurney Foundry Co. Limited
TORONTO - CANADA

MONTREAL HAMILTON WINNIPEG CALGARY VANCOUVER

CLYDESDALES OF CANADA'S STANDARD

My second importation for 1912 has arrived, my third will be here in six weeks. In stallions or fillies I have the farmers' kind at farmers' prices. Come and see me.

GEO. A. BRODIE, Newmarket P. O.
Newmarket or Stouffville Stns., G. T. R.; Gormley, C. N. R. L.-D. 'phone from either

A Few Choice Clyde Fillies—I am offering several choice and particularly well-bred Clydesdale fillies from foals of 1911 up to 3 years of age, imp. sires and dams. Also one stallion colt of 1911, imp. sire and dam. These are the kind that make the money.
HARRY SMITH; Hay P.O., Ont. Exeter Sta. L.-D. 'Phone.

Stallions — CLYDESDALES — Fillies

I have a big importation of Clyde stallions and fillies just landed; a lot that cannot be duplicated to-day in Scotland, and never was in Canada. Let me know your wants.

ROBT. BEITH, Bowmanville, Ont.

When Writing Advertisers, Please Mention "The Farmer's Advocate"


Warranted to Give Satisfaction.
Gombault's
Caustic Balsam



Has Imitators But No Competitors.
A Safe, Speedy and Positive Cure for
 Curb, Spint, Swoeny, Capped Hoof,
 Strained Tendons, Founder, Wind
 Puffs, and all lameness from Spavin,
 Ringbone and other bony tumors.
 Cures all skin diseases or Parasites,
 Thrush, Diphtheria. Removes all
 Bunches from Horses or Cattle.
 As a Human Remedy for Rheumatism,
 Sprains, Sore Throat, etc., it is invaluable.
 Every bottle of Caustic Balsam sold is
 Warranted to give satisfaction. Price \$1.50
 per bottle. Sold by druggists, or sent by ex-
 press, charges paid, with full directions for
 its use. Send for descriptive circulars,
 testimonials, etc. Address
 The Lawrence-Williams Co., Toronto, Ont.

SAVE-THE-HORSE
 (Trade Mark Registered.)

SPAVIN REMEDY



"I would not take \$5.00 for your book alone," writes Mr. Lanson Decker, of New Paltz, N. Y., April 25, 1912.

A retail druggist in a "live horse town" within 50 minutes ride from New York City, writes: "I am selling three times more Save-the-Horse than any other one Veterinary remedy; when they want the GOODS that cures they come back for Save-the-Horse."

GIVES GOOD REASON WHY HE HAS FAITH
 City Weigher and Gauger,
 D. CAMERON Montreal, June 10, 1912.

Troy Chemical Co., Toronto, Ont.—I have a road horse that has shown signs of heaves, and I thought I would write and ask you if you thought he could be cured. I have used your Spavin remedy on three different occasions with great results. Awaiting your reply,
 ROBT. A. CAMERON.


Whether on Spavin, Puff, Tendon, or any kind of lameness, a permanent cure is guaranteed. Seven-teen years a success.

\$5. And every bottle sold with an ironclad contract to cure or refund money. This contract has \$60,000 paid-up capital back of it to secure and make its promise good. Send for copy.

TROY CHEMICAL COMPANY
 148 Van Horn St., Toronto, Ont.
 And Binghamton, N. Y.

Druggists everywhere sell Save-the-Horse with a signed contract to cure or refund money.

INSURE YOUR HORSES



FOALING INSURANCE.
 A small premium will secure a policy in our Company by which you will be fully insured against any loss resulting from the death of your mare or its foal, or both. All kinds of insurance on Live Stock. Transit Insurance covering horses on board cars for 5, 10, 15, 20 or 30 days.

PROSPECTUS FREE ON DEMAND.

General Animals Insurance Company of Canada

Head Office: 71A St. James St., Montreal

OTTAWA BRANCH:
 No. 106 York Street, Ottawa

Toronto Agency: J. A. Caesar,
 Room 2, Janes Building, Toronto, Ont.

Her Husband—"The census officials state that the average family consists of four and a fraction persons. How do you account for the fraction?"

His Wife—"Oh, that is the husband."

QUESTIONS AND ANSWERS.
 Veterinary.

PUFFS BELOW KNEES.

Colt about 5½ weeks old has for four weeks had a soft puff on the lower part of the outside of each knee. There is no lameness nor apparent inconveniences.
 L. J. W.

Ans.—These puffs usually disappear gradually without treatment. It will be wise to leave them alone for a few months, and if they have not disappeared before the new year, blister them. Details for blistering are frequently given in these columns.

PARTIAL PARALYSIS AND IN-APPETENCE.

Cow calved July 8th. She was in good condition. Now she milks fairly well, but eats poorly, and is stiff, and has little power of hind legs and back.
 SUBSCRIBER.

Ans.—This is partial paralysis. Keep her in a comfortable box stall. If necessary, assist her to rise. Take 3 ounces each of sulphate of iron, gentian, and ginger, and 6 ounces of nux vomica. Mix, and make into 24 powders. Give her a powder three times daily in a pint of cold water as a drench. Feed often and in small quantities, and as digestion improves, increase the quantity and lengthen the periods between meals. V.

NASAL GLEET.

Horse had laryngitis last winter. I poulticed and blistered his throat until he got over the acute stage. Now he occasionally is short-winded, and occasionally has a nasal discharge. The glands of the throat are enlarged. He does not thrive well.
 S. T.

Ans.—He has nasal gleet, which is hard to treat. Give him 1 dram of sulphate of copper three times daily. It may be that an operation, which consists in trephining into the cavities of the skull, will be necessary. The enlarged glands can be reduced by rubbing well once daily with an ointment made of 2 drams each of iodine and iodide of potassium, mixed with 2 ounces vaseline. V.

MULTIPLE ABSCESSSES.

Cow got hurt and a lump formed in her udder. In a few days that disappeared and another appeared. My veterinarian lanced this and liberated a large amount of pus. In a few days longer she aborted, and since then several abscesses have formed, all in the left side. She now has one on the left leg, one on the left side, and one on the left shoulder.
 A. R.

Ans.—This is a form of blood poisoning. Give her 40 drops of carbolic acid in a pint of cold water as a drench three times daily. Open all abscesses freely, and flush the cavities out well with a five-per-cent. solution of carbolic acid. Feed well. V.

ENLARGED KNEE.

When three months old my colt hurt her knee, and the joint became quite puffy, which condition has continued. She is now over three years old, and the joint appears as though the knee-cap was split.
 S. BROS.

Ans.—A horse's knee is not supplied with a knee-cap, hence your diagnosis is not correct. The puffiness has been of such long standing a cure is very doubtful. The puff may be reduced in time by the daily application of an absorbent. Get a liniment made of 4 drams each of iodine and iodide of potassium, and 4 ounces each of alcohol and glycerine. Rub a little of this well in once daily. Do not look for quick results. Continue treatment for at least two or three months. V.

GOSSIP.

John Elder & Son, of Oakland Stock Farm, near Hensall, Ont., are offering for sale their present Shorthorn herd—Scotch Grey =72692. He is described as an exceptionally fine roan bull, has headed the herd for nearly four years, and is just in his prime. He has been well taken care of, and is a great handler, even-fleshed, straight-lined, a grand feeder, and all right. Will sell or exchange. They also offer five other bulls, one year and over, sired by Scotch Grey.

DO YOU FEED
OIL CAKE?
 The best food known for live stock.
 Fine ground, coarse ground, pea size, nitted.
 If your dealer cannot supply you, WRITE US.
The DOMINION LINSEED OIL COMPANY, Limited
 BADEN, ONTARIO
 MANUFACTURERS

Imp. Clydesdales and Percherons
 I have 65 head of Clydesdales and Percherons in my barns to choose from, a great many of them are prizewinners in Canada, Scotland and France, and other extra show horses that have not yet been shown. I have never had so many good horses at one time before. Intending purchasers would do well to see through my barns before buying. My horses are all for sale and at right prices.
 MARKHAM P.O., G. T. R., and LOCUST HILL, C. P. R., three miles.
 LONG-DISTANCE TELEPHONE
T. H. HASSARD

Union Stock Yards of Toronto, Ltd.
HORSE DEPARTMENT
 Auction Sale Every Wednesday Private Sales Every Day
 Railroad Loading Facilities at Barn Doors
W. W. SUTHERLAND, In Office. **J. H. ASHCRAFT, JR.,** Manager.

Champion Percheron Stallions and Mares
 We have at our stables some of the finest Percheron stallions ever imported to this country. The large drafty kind, with the best of feet and legs. Our winnings at the shows are a guarantee to all that we handle only the best. We also have a full car, 22 Percheron mares, blacks and grays, 2 to 5 years old, most of them in foal to great French sires. This is the best lot of mares ever brought to Canada. Correspondence invited from all interested parties. Prices right and terms to suit.
R. HAMILTON & SON, Simcoe, Ontario

GRAHAM & RENFREW COMPANY
CLYDESDALES AND HACKNEYS
 Our winnings at all shows are your guarantee that whatever you buy from us will be the best in the land. You cannot afford to buy without first seeing our importations.
 Address all correspondence to Bedford Park P.O., Ont. Telegrams to Toronto. Telephone North 4483, Toronto.

Just Arrived—Clydesdale Stallions and Fillies
 Bigger and better than ever before is our 1912 importation just arrived. Stallions with size, character, quality and breeding. Fillies of high-class breeding and quality for show or breeding purposes. Come and see them. Terms and prices right. **JOHN A. BOAG & SON** Queensville P.O. and Sta. on Toronto to Sutton Electric Line L.-D. Phone.

PERCHERON STALLIONS
 Our 1912 importation of Percheron stallions supply the trade for ideal draft character, flashy quality of underpinning, stylish tops and faultless moving. Let us know your wants. Any terms arranged.
EAID & PORTER, Simcoe, Ontario

IMPORTED CLYDESDALES
 A few choice young stallions always on hand and for sale. Frequent importations maintain a high standard. Prices and terms to suit.
BARBER BROS., Gaitneau Pt., Que., near Ottawa.

ORMSBY GRANGE STOCK FARM, Ormstown, P. Que.
 My fall importation, which will be the largest yet made by me, will be personally selected, will arrive last week in September. Good colors, heavy bone, best of pedigrees and reasonable prices. Wait for them if you want good ones.
D. McEachran.

QUALITY AND SIZE IN CLYDESDALES
 For the best breed produces in the combination of size, character, quality, breeding and action, see my 1912 importation of Clyde Stallions and Fillies. Prices and terms unequalled.
JAMES TORRANCE, MARKHAM, P. O. and Sta., G. T. R.
 Locust Hill, C. P. R. L. D. Phone

MT. VICTORIA STOCK FARM, Hudson Heights, P. Q.
 We have some very choice young stock for sale, both sexes. Clydesdales and Hackneys from champion sires and well bred dams, at reasonable prices.
T. B. MACAULAY, Prop. **E. WATSON, Mgr**

Clydesdales and Percherons
 Stallions and fillies of either breed. Over forty head to select from. Draft horses in reality, as well as in name. Highest types of the breeds. Come and see them. Terms to suit.
T. D. ELLIOTT & SON, BOLTON, ONTARIO



The Best Way to Clean SEPARATORS

USE

Old Dutch Cleanser

Just the thing for scouring the many different parts so hard to get thoroughly clean by ordinary methods.

Large Sifter-Can 10 cents.



NOTICE TO HORSE IMPORTERS GERALD POWELL

Messrs. Hickman & Scruby COURT LODGE, EGERTON, KENT, ENG.

Live Stock of all Descriptions Draft horses of all breeds a specialty.

Aberdeen-Angus—A few bulls to sell yet; also females. Come and see them before buying.

Walter Hall, Washington, Ont. Aberdeen-Angus of Show Form and Quality.

Spruce Lodge Shorthorns and Leicesters Will price cheap young bull from 6 to 14 months;

Shorthorns—Nine bulls and a number of heifers for sale at very reasonable prices.

Robert Nichol & Sons, Hagersville Ont MENTION "FARMER'S ADVOCATE."

QUESTIONS AND ANSWERS. Miscellaneous.

KEEPING CIDER.

Is there any way of treating apple cider to keep it from spoiling or turning into vinegar?

INQUIRER.

Ans.—See reply to similar question, page 1630, issue Sept. 12th.

MAN LEAVES BEFORE TIME IS UP.

A hires B for eight months, at \$26 per month. At the end of first month, A finds B does not do enough work for wages he receives, and speaks to him about it.

D. C. R.

Ans.—Going upon your own statement of the case, we should say that you had proposed a fair settlement, and that he could probably not collect any more.

SPRUCE GALL-LOUSE.

I am sending you a sample of my Norway spruce trees. They are dying from some disease or grub working among them.

J. H. J.

Ans.—The trouble with your spruce trees is that they are attacked by a spruce gall-louse. Of these insects there are several species, and the same remedy will not always apply to each of these.

SAGE CHEESE.

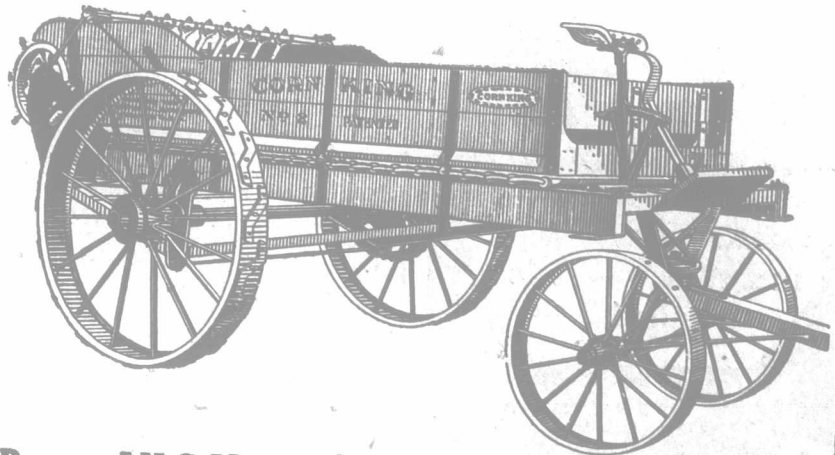
Can you tell me if there is a cheese factory in Ontario which makes sage cheese?

V. C.

Ans.—We do not know of any cheese factory in Canada manufacturing sage cheese, but you could probably have your local cheesemaker produce some on order.

No. 1. The distinguishing features of sage cheese are a mottled-green color and a sage flavor. It is a modified form of the cheddar variety.

No. 2. A second method, quoted from "Fancy Cheese in America": Drop the green coloring made from the leaves of corn and spinach upon the curd after milling.



Buy an IHC Manure Spreader for This Good Reason

THE evaporation of water from soil greatly increases the danger of crop failure during a dry season. Every drop of water held in the soil improves the chances of getting a good crop.

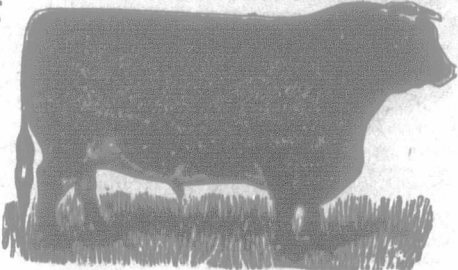
I H C Manure Spreaders Corn King and Cloverleaf

These machines will spread manure properly on any kind of ground. The wheels cannot slip because of the "Z" shaped lugs on the rims, which insure ample tractive power without excessive jarring of the machine.

The IHC manure spreaders are made in sizes convenient for every farm, garden or vineyard, endless or return apron. The IHC local agent will show you the many good features which make IHC spreaders the most effective and durable on the market.

INTERNATIONAL HARVESTER COMPANY OF AMERICA (Incorporated) At Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton

Present Special Offering 20 High-Class Scotch Shorthorn Heifers 10 High-Class Young Shorthorn Cows 5 High-Class Scotch Shorthorn Bulls



ARTHUR J HOWDEN & CO. Columbus, Ontario

I Have SHORTHORN Bulls and Heifers, SHROPSHIRE and COTSWOLD Rams and Ewes, CLYDESDALE Fillies and Colts

Scotch Shorthorns—Present offering: Three young bulls of serviceable age, from imp. sires and dams.

1861 Irvine-Side Shorthorns 1912 Offering for sale young bulls and heifers that are the result of over 50 years successful breeding.

SALEM SHORTHORNS Headed by Gainford Marquis, undefeated bull of three countries. See our show herd at the leading fairs, starting at Winnipeg J. A. WATT, SALEM, ELORA STA., G. T. and C. P. R.

Scotch Shorthorns FOR SALE. One promising 12 months Imported Bull calf, a Marr. Flora, recently imported; 12 bull calves from 6 to 11 months old, all by Imported Sire—some good ones among these; also 30 choice cows and heifers in calf, at reasonable prices.

Shorthorns of breeding and quality—Our offering this year in young bulls and heifers, out of Scotch cow, and sired by our great Mildred Royal, are put up on show lines, and strictly first-class.

Orchard-Grove Herefords I have lately made a big importation of the leading herds of Illinois. In my herd you now have 25 Bulls to select from; a big range of Heifers and Cows. High-class show and breeding stock a specialty.

L. O. CLIFFORD, Oshawa, Ontario, G.T.R. and C.N.R. When Writing Advertisers, Please Mention "The Farmer's Advocate"

After all there is just one best range on the market—it is called **McClary's Pandora Range**

Shorthorns, Cotswolds, Berkshires

For sale: 5 yearling bulls, 12 bull calves, cows, heifers and heifer calves. In Cotswolds: Lambs and shearing ewes. Will book a few orders for Berkshires, fall fitters.

Chas. E. Bennycastle, P. O. AND STA., CAMPBELLFORD, ONT.

1884 Maple Lodge Stock Farm 1912

Have some SHORTHORN HEIFERS two years old from cows giving 50 pounds milk per day, and in calf to my stock bull, Senator Lavender. Grand young LEICESTERS from imp. Wooler of Sandy Knave, champion at Toronto, and imp. Royal Connaught.

A. W. SMITH, MAPLE LODGE, ONTARIO
Lucan Crossing, G. T. Ry., one mile.

SPRING VALLEY SHORTHORNS

Herd headed by the two imported bulls, Newton Ringader, =73783=, and Scottish Pride, =36106=. The females are of the best Scottish families. Young stock of both sexes for sale at reasonable prices. Telephone connection.

KYLE BROS. - - - Ayr, Ontario

Fletcher's Shorthorns Our herd of Pure Scotch Shorthorns (Imp.) or direct from imported stock, is headed by the grandly-bred Bruce Mayflower bull, Royal Bruce (Imp.) = 55028 = (89909) 273853. Choice young stock for sale.

GEO. D. FLETCHER, R.R. No. 2, Erin, Ont.

Shorthorns for Sale—Three strong-boned bulls of serviceable age, two large cows with calves by side; choicest breeding and heavy milking strain.

STEWART M. GRAHAM, Port Perry, Ont.

GEDARDALE SHORTHORNS Shorthorns of all ages, pure Scotch and Scotch topped, imp. and Canadian-bred, choice heifers, choice young bulls, also the stock bull Lord Fyvie (Imp.); anything for sale.

Dr. T. S. Sproule, M. P. Markdale, Ontario.

"There seems to be a strange affinity between a darky and a chicken. I wonder why?" said Jones.

"Naturally enough," replied Brown. "One is descended from Ham, and the other from eggs."

HE WAS TROUBLED WITH HIS HEART

HAD TO GIVE UP WORK

Mr. Alfred Male, Eloida, Ont., writes: "I was troubled with my heart for two or three years. I thought sometimes that I would die. I went to the doctor, and he said he could not do anything for me. I had to give up work. My wife persuaded me to try Milburn's Heart and Nerve Pills. The first box relieved me, so I kept on until I had taken seven boxes, and they cured me. I would not be without them on any account, as they are worth their weight in gold. I advise my friends and neighbors who are troubled with heart or nerve trouble to try them."

To any of those suffering from heart or nerve trouble we can recommend our Milburn's Heart and Nerve Pills with the greatest confidence.

Price 50 cents per box, or 3 boxes for \$1.25. If your dealer does not have them in stock, send direct to The T. Milburn Co., Limited, Toronto, Ont.

QUESTIONS AND ANSWERS.

Miscellaneous.

ALSIKE POISONING.

My horses are on alsike-clover pasture, and their legs itch and swell and the hair comes off. Is it alsike poison? What is the remedy, if any?

R. E. D.

Ans.—It is not unusual to find the condition described where horses pasture for any considerable time on alsike. Give each horse a purgative of six drams aloes and two drams ginger. Feed nothing but bran until purgation commences. If this fails to purge, repeat the dose in 48 hours. Follow up with one dram iodide of potassium night and morning. Wash their legs with a five-per-cent. solution of Creolin, or of carbolic acid.

PIGS HAVE FITS.

I am feeding whole buckwheat to my pigs, and it seems to affect them unfavorably, giving them fits and seemingly great pain. What is the cause, and can it be remedied?

N. S.

Ans.—While buckwheat is a fairly good pig feed, fed in moderation, it is not considered good practice to feed it alone. It should always be mixed with other grains, and only about a third of the mixture should be buckwheat. Moreover, it should always be fed ground. It may be that something else is troubling the pigs, but remedy the feeding conditions, and if the trouble still remains after a reasonable time, try some purgative medicine.

ARREARS OF TAXES.

A bought a quarter section in Saskatchewan in June, 1907, and in February, 1909, he sold it to B. In 1910, B sold it to C. In July, 1912, B received a tax notice from C for taxes for 1908 and 1909, for which neither A nor B had received any notice from municipal tax collector. C withholds these taxes from B in his payment on land. Who should pay the taxes?

The said land had no improvements done on it whatever until 1910.

Ontario. A SUBSCRIBER.

Ans.—In the absence of express agreement on the point, A and B should each contribute in proportion to the time they respectively owned the land. Their not receiving tax notices would not affect the question. As between B and C, the latter is quite right in withholding the amount of the arrears.

KEEPING ICE WITHOUT SAWDUST.

1. I am building a cement-block milkhouse and ice house combined. I will have the ice at one end of the building. If by putting in a cement-block partition and having the ice-room airtight, could I keep the ice without sawdust?

2. Would the ice-room need ventilation?

3. Would it be advisable to put green oats, mixed with corn, in a silo?

E. A. M.

Ans.—1. Not successfully, without considerable further insulation. We are putting up an ice house designed to keep ice without sawdust, and the insulation is as follows: For the floor, a layer of grouting, then an inch or two of cinders (six inches or a foot would be better), then hollow tile, then cement finish. The walls are double-studded, resting on a 15-inch cement foundation, and comprise four-ply of matched lumber, two outside and two inside, with damp-proof building paper between in each case. The hollow space, twelve inches across, is filled with planer shavings. The ceiling is insulated the same way as the walls, and has a double-hatch in the ceiling through which ice is to be put in and taken out. A trapped tile drain will carry melted ice-water from the center of the floor. Such an ice house is costly, but very fine if one can afford it. Your cement-block wall, if very tight, may take the place of one ply of lumber, though we should prefer the latter. Still, by strapping inside the cement, then covering with damp-proof paper and one ply of lumber on the interior, with paper between, and filling the space with shavings, you would probably secure good satisfaction.

2. No.
3. We think not.



SAVE LABOR IN THE COW STABLE

This book will show you exactly what you can do with your present stable buildings to make them more sanitary and easier to clean and how much it will cost. Wooden stalls rot out and make dirty stables. Iron and steel equipment is not expensive and it saves its cost many times over in labor.

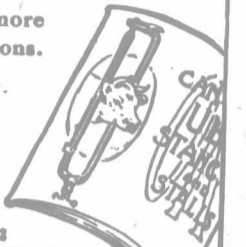
Chains and Halters are out of date. Learn more about the stronger and simpler Stanchions.

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Your Old Barns can be Re-fitted. Drop us a line and get your free copy of this illustrated booklet.

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L GALT, ONT. Limited



THE AULD HERD

A. F. & G. AULD, Proprietors, Eden Mills, Ontario
SHORTHORN BREEDERS

We have ten high-class senior and junior bull calves for sale, Toronto and London winners. Out of imported and Canadian-bred cows and by Scottish Signet, Bud's Emblem and others. Prospective buyers met at either Guelph or Rockwood.

Correspondence invited. A. F. & G. AULD, Eden Mills, Ont.

SHORTHORNS

Have now a choice lot of young bulls to offer; also with something nice in heifers. Catalogue of herd and list of young animals on application.

H. CARGILL & SON, Proprietors, Cargill, Ont., Bruce Co. JOHN CLANCY, Manager



OAKLAND 50 SHORTHORNS

Herd header for sale, Scotch Grey = 72692 =, still in his prime, a beautiful roan and a grand handler, straight lined, quiet, active and alright, and one of the choice bulls in Ontario; also five other good bulls, one year and over.

JOHN ELDER & SON, HENSALL, ONTARIO

Clover Dell Shorthorns

Choice young stock of both sexes. Dual purpose a specialty. L. A. WAKELY, BOLTON, ONT. Bolton Station, C. P. R.

Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred. Brampton Stockwell the sire. A few good cows and some calves for sale. Production and quality.

B. H. BULL & SON, Brampton, Ont.

Ayrshires and Yorkshires

We now offer at bargain bull calves dropped in July, 1911. All bred from (imp.) sire and from either imported or home-bred. Some choice February pigs; also young pigs.

Alex. Hume & Co., Menie, Ont.

City View Ayrshires

Bonnie's Messenger 32762 at head of herd, both dam and gr. dam R. O. P. cows. One yearling bull and calves of either sex. Will sell a few cows. JAMES BEGG, R. R. No. 1 St. Thomas. One and a half miles from all stations.

Hillcrest Ayrshires

At head of herd is Ivanhoe of Tanglewild, a son of the champion Ayrshire cow, Primrose of Tanglewild, R. O. P. test 16,195 lbs. milk and 625.63 lbs. fat; 60 head to select from. Inspection invited. F. H. HARRIS, Mt. Elgin, Ont.

STONEHOUSE AYRSHIRES

Are coming to the front wherever shown. Look out for this at the leading exhibitions. Some choice young bulls for sale, as well as cows and heifers. HECTOR GORDON, Howick, Quebec.

Ayrshires of production, type and quality.

I can supply Ayrshires that will please the most exacting critic. Young bulls or females of any age, the kind that swell the bank account. R. M. Howden, St. Louis Sta., Que. L.-D. phone.

High-class Ayrshires

If you are wanting a richly-bred young bull out of a 50-lb. a day and over cow, imported or Canadian-bred dam and sire, write me. Females all ages. Prices are easy. D. A. MACFARLANE, Kelso, Que.

SPECIAL PRICES

to clear, before going into winter quarters, on three fine spring bull calves, sons of Auchenbrain Good Gift, first-prize aged bull at Dominion Fair, TROUT RIVER, QUE. Tuberculin tested. McMILLAN & LEGGAT, Huntingdon, N. Y. C. R.

Burnside Ayrshires

Champions in the show ring and dairy tests. Animals all ages and both sexes for sale. L. A. DISTANCE PHONE IN HOWICK

R. R. NESS, Howick, Quebec.

SUMMER HILL HOLSTEIN CATTLE and YORKSHIRE HOGS

Our senior herd bull, Sir Admiral Ormsby, is the sire of the world's record 2-year-old for yearly butter production. Also sire of the highest record four-year-olds in Canada. The dam of our junior herd bull over 70 head. In Improved English Yorkshires we have won 95 per cent of first prizes at Toronto Exhibition for ten years. We are still breeding them bigger and better than ever. Buy Summer Hill D. C. FLATT & SON, R. F. D. No. 2 Hamilton, Ontario Bell phone: 2471, Hamilton.

IMPERIAL HOLSTEINS

I can supply bulls ready for service and younger ones, also heifers out of R. O. M. cows, averaging 27.19 pounds. W. H. SIMMONS, New Durham P.O., Oxford Co.

HOLSTEINS OF HIGHEST QUALITY

Our Holsteins have won wherever shown. Our herd is away up in the official records. They are bred from the world's best producing blood; there are none better. Let us know your wants in either males or females. M. L. & M. H. HALEY, Springford P.O. and Sta., G. T. R. L.-D. Phone.

When Writing Advertisers, Please Mention "The Farmer's Advocate"

HOLSTEINS



We are now offering some young bulls from 4 to 10 months old, got by the great sire, Ida's Paul Veeman, which has daughters with 20 lbs. of butter in 7 days as 2-year-olds; also some cows and heifers freshening in Oct., served by Veeman. Write or come and visit the herd for particulars.

H. C. HOLTBY, Belmont, Ont.

SPRING BROOK HOLSTEINS and TAMWORTH SWINE

Two rich-bred bulls for sale, 15 months old; popular strains; "Record of Merit" ancestry, good individuals; bargain to quick buyers. Thirty Tamworth pigs ready to wean, bred from imported stock. Price, \$8 a pair. Express paid to Ontario points. Order early if you want any. Choice stock.

A. C. HALLMAN, Breslau, Ont., Waterloo Co.



PURE-BRED REGISTERED Holstein Cattle

The most profitable dairy breed, greatest in size, milk, butter-fat and in vitality. Send for FREE illustrated descriptive booklets.

HOLSTEIN-FRIESIAN ASSOCIATION, F. L. Houghton, Sec., Box 127, Battleboro, Vt.

Holsteins of Quality

Write us to-day for our proposition, telling you how any good dairyman may own a registered Holstein bull from a Record-of-Performance cow without investing a cent for him.

MONRO & LAWLESS, "Elmdale Farm" Thorold, Ontario

The Maples Holstein Herd

offers a splendid lot of bull calves, all sired by Prince Aaggie Meethilde and all from record of merit dams. For pedigrees and prices write

WALBURN RIVERS, Folsen, Ontario

Maple Grove Holsteins

Herd headed by King Lyons Hengerveld, whose 17 near female ancestors have butter records from 30.50 to 34.75 lbs. in 7 days, including world's records for 7 and 30 days.

H. BOLLERT, R. R. No. 5, Tavistock, Ont.

Ridgedale Farm Holsteins

We have four bull calves left for sale, from high-testing dams; sired by Imperial Pauline De Kol, whose 15 nearest dams average 26.20 lbs. butter in 7 days. Shipping stations: Port Perry, G. T. R., and Myrtle, C. P. R., Ontario County.

R. W. WALKER Utica, Ont.

Glenswood Stock Farm 5 BULL CALVES, fit for service, out of big milking strains, at low figure for quick sale.

THOS. B. CARLAW & SON, WARKWORTH, ONT. Campbellford Sta.

The motorist was bowling along well above the legal pace, when a terrified clucking told him he was running foul of some wayside poultry.

"I'll trouble you for fourteen shillings, guv'nor," observed a gentleman in corduroys, who appeared on the scene.

"That'll be three-and-sixpence apiece for our chickens."

"But I've only killed two," remonstrated the motorist, as he took off his goggles and gazed at the victims of twentieth-century science.

"Them other two'll never lay a blessed egg arter this," declared the countryman.

"Dear me, is that so?" exclaimed the surprised man in oilskins, as he dropped the sum demanded into the outstretched palm. "It's due to fright, I suppose?"

"Partly fright, p'r'aps," chuckled the countryman; "but I reckon it's mostly cos they're cocks."

She Had Such Beautiful Hands

that it was perfectly evident that she used SNAP, the original hand cleaner, to remove the grime of housework.

Hand cleaners by any other name do not smell as sweet. Avoid rank imitations, and remember the name



SNAP

Order from your dealer to-day. Save coupons.

QUESTIONS AND ANSWERS. Miscellaneous.

PERSISTENT SITTERS.

What is the easiest and surest way of curing a hen of sitting? A. L. C. Middlesex Co., Ont.

Ans.—Shutting up "sitters" separately in small coop and feeding well has been found effective in four or five days, and perhaps a still better plan is to close the chronic sitters in with a bunch of cockerels. A Macdonald College poultry expert recommends a swinging coop suspended by cords. The quickest, most certain and permanent cure, is to convert them into a pot-pie, so long as the appetite for pot-pies holds out.

A LONG-USED WAY.

A small river flows across the front of my farm, between the buildings and highway, also across corner of my neighbor's farm, a small portion of which, commonly known as the "flats," has never been fenced. The occupant of my farm has always had the privilege of crossing this flat, thus gaining the highway without crossing the river. Now my neighbor has fenced this piece of land, thus blocking my exit.

- 1. Can he now fence this, thus blocking the privilege which has obtained ever since the land was settled?
2. If he can fence it, can he hinder me from crossing?
3. If not, who should have to put up and maintain a gate?

Ans.—1 and 2. The statement as to the length of time the way has been used and enjoyed is somewhat vague, but it is probable that a right to it has been acquired by prescription from long and continuous user. So, while your neighbor is entitled to fence the parcel of land in question, he probably cannot do so legally to the extent of interfering with your continued enjoyment of the way.

3. Under the circumstances, we think that it would be for your neighbor to do it.

ADJOINING LANDOWNERS.

Some years ago, before we purchased this farm, a neighbor (who was noted for his bull-headedness) had occasion to rebuild part of the fence between his farm and this one. He is said to have bragged that "he knew he was moving the fence on this place, and was going to keep it there." The line-stone shows it to be over a few feet on what is now our farm. I think the original was a board fence, and in some places was in such good shape that he let it stand. In the meantime the places have changed hands, and a plum hedge has sprung up—or trees were planted, and are now a hedge—and grown up to and beyond the stumps over on to us. This hedge is a nuisance to our orchard in that it harbors insects, mice, and black knot. The snow often lies six feet deep there most of the winter, giving mice a chance to work well up on a tree. Ours is a good neighbor, and all the rest of it, but when it comes to fixing up this thing, is a little slow, and his wife wants those plums on both sides and in the middle. If a line were drawn through from stone to stone I suspect a lot of those trees would stand on us.

- 1. Who owns the fruit that grows on branches overhanging our orchard?
2. Who owns the trees on this side of the line between those two line-stones at either corner of the field?
3. Tell me the right way to go at this to get a good wire fence up. (This is his part of the line fence, but we would put it up if he were agreeable.)

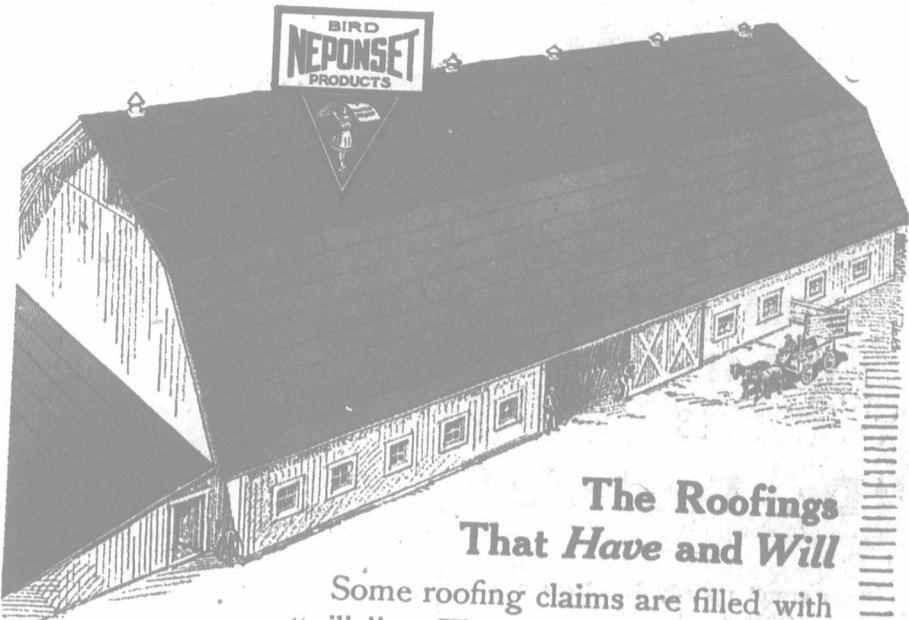
But the trouble is, if a fence were run through considerable of that hedge of plum trees would have to go, and his wife lose her plums.

Ontario.

Ans.—1. Your neighbor—assuming, of course, that the branches in question are of his trees.

2. You probably do.

3. If you cannot induce your neighbor to come to some reasonable arrangement in the matter, without further delay, call in the local fence-viewers, under The Line Fences Act (Revised Statutes of Ontario, 1897, Chapter 284).



The Roofings That Have and Will

Some roofing claims are filled with "wills"—"They will last"—"They will not need repairs"—etc., etc. You hear a great deal about what the old-time shingles have done.

NEPONSET PAROID ROOFING The Real Rival of Best Shingles

and other NEPONSET Roofings are the roofings that prove to you what they have done before asking you to judge what they will do. For instance: In 1898, a warehouse was roofed with NEPONSET Paroid. Last year when the warehouse was torn down the roofing was found to be in perfect condition. Isn't that the kind of a roof you want on your farm buildings? Make sure that you get it next. Send for dealer's name and

Blue Print Barn Plans—FREE

Designed in shape and size especially for Canadian farmers.

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AVONDALE HOLSTEINS



Our herd's records are up to 30 lbs. for mature, 29 lbs. for 3-year-olds, 21 lbs. for 2-year-olds. Our stock bulls are Prince Hengerveld Pietje and King Pontiac Artis Canada, carrying the richest blood and highest records of the breed. Young stock for sale.

LORNE LOGAN, Manager. A. C. HARDY, Brockville, Ont.

KING SEGIS WALKER

The highest pedigreed sire in Canada. Average record of dam, gr. dams, and g. gr. dams: Butter, 28.36 lbs.; milk, 544.42 lbs.; fat, 4.24 lbs. Fee for service, \$25. This sire's get are 80 per cent. females. For sale: A grandson of King Segis and Pontiac Pet, record 37.67 lbs. butter and the world's champion; also a bull calf whose dam is a daughter of Pontiac Korndyke, and A. A. FAREWELL, OSHAWA, ONTARIO.

FAIRVIEW FARM'S HERD OFFERS sons of Pontiac Korndyke

25983, the greatest sire that ever lived, and the only bull that ever sired 12 daughters that have made 7-day records above 30 pounds each. Do you want your next bull to be a brother to such cows as Pontiac Lady Korndyke (38.02), Pontiac Pet (37.67), Pontiac Clothilde De Kol 2nd (37.21), Sadie Vale Korndyke (36.20), and eight others above 30 pounds? If you do, write me for price on a son of whose dam is a daughter of Rag Apple Korndyke and Sir Johanna Colantha Gladi. E. H. DOLLAR, HEUVELTON, NEW YORK. Near Prescott.

EVERGREEN STOCK FARM Present offering: Two young bull calves

good individuals; nicely marked and well bred; the dam of one of them being Unicyclay Abbecker, the cow that topped the consignment sale of the Oxford District Holstein Breeders' Club. Priced right for immediate sale.

A. E. Hulet, Norwich, Ont.

Holsteins, Yorkshires, Hackneys

Our herd of over 30 Holstein females, from calves up, are for sale. Come and make your own selection. In Yorkshires we have a large number of young sows, bred and ready to breed, of the Minnie and Bloom tribes. No fancy prices asked.

A. WATSON & SONS, R. R. No. 1, St. Thomas, Ont. L.-D. phone from Fingal.

Maple Hill Holstein-Friesians—Special offering: Bulls from one to fifteen months

old. The growthy kind that will give good service. One from a son of Evergreen March, and all from Record of Merit dams. Write for particulars.

Bell Telephone. G. W. CLEMONS, St. George, Ont.

Woodbine Holsteins—Herd headed by King Segis Pontiac Lad, whose sire's

dam is the champion cow of the world. Sire's sire is the only bull that has sired five four-year-olds that average 30 lbs. each. Dam's sire is the bull that has sired two 30-lb. three-year-olds. His two great grand sires are the only bulls in the world that have sired two 37-lb. cows. Bulls and bull calves for sale.

A. KENNEDY, Ayr, Ontario.

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THE ONLY GENUINE AND ORIGINAL EXTRACT OF WILD STRAWBERRY IS

"Dr. Fowler's"

This grand remedy has been on the market for sixty-five years, and is, without a doubt, the best medicine known for the cure of

DIARRHOEA, DYSENTERY, COLIC, CRAMPS, PAIN in the STOMACH, CHOLERA MORBUS, CHOLERA INFANTUM, and ALL SUMMER COMPLAINTS.

If an unscrupulous druggist tries to talk you into taking any other preparation when you ask for "Dr. Fowler's" refuse to take it, and insist on getting what you ask for. Price 35 cents per bottle. See that the name, The T. Milburn Co., Limited, is on the wrapper, as we are the manufacturers and sole proprietors.

Farnham Oxfords and Hampshires

FLOCK ESTABLISHED IN 1881.

Present offering: A lot of first-class ram lambs of both breeds, by imported champion rams. Also a number of yearling and older ewes and ewe lambs of both breeds. Prices reasonable.

Henry Arkell & Son, Arkell, Ontario. Long-distance phone in house.

Southdown Sheep

The market to-day demands quality. It pays to breed what the market wants. Can you do this more cheaply or quickly than by heading your flock with a right good ram of this most perfect of mutton breeds?

Orders taken for a few sturdy young rams for all delivery.

ROBT. McEWEN, Alloway Lodge Stock Farm Byren, Ontario

Cattle and Sheep Labels

Size	Price doz.	Fifty tags
Cattle	75c.	\$2.00
Light Cattle	60c.	1.50
Sheep or Hog	40c.	1.00

No postage or duty to pay. Cattle sizes with name and address and numbers; sheep or hog size, name and numbers. Get your neighbors to order with you and get better rate. Circular and sample mailed free. F. G. JAMF'S, Bowmanville, Ont.

PURE SHROPSHIRE FOR SALE
20 Ram Lambs and 20 Ewe Lambs, born April, sired by a DRYDELL Ram. Price \$10 to \$12 each, including Pedigree. Also Ewes from one to six years old \$10 to \$15 each; also pure St. Lambert Jerseys, all ages. Prices moderate. For particulars write, H. E. Williams, Sunnylea Frm, Knowlton, P.Q.

Cotswolds and Shropshires—At Toronto I won 1st on flock, champion on both ram and ewe in Cotswolds. I have for sale a big lot of shearlings and lambs of both breeds and sexes; strictly high-class.
J. MILLER, Jr., "Blairgowrie Farm," Ashburn, Ont.

Oxford Down Sheep, Shorthorn Cattle, Hampshire Pigs—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, Buena Vista Farm, Harriston, Ont.

Oxford Downs—Choice reg. ram and ewe lambs, \$10 and \$12 each; also a few yearling rams and ewes at close prices.
W. A. BRYANT, Cairngorm, Ont.

For Sale Pure Bred Jersey Bull Calf, sired by C. A. C. bull, Brampton, Merger, age 6 months, in good condition. Price \$35.00 (Thirty-five dollars) including registration. W. E. Gordon, 450 Paisley Rd., Guelph, Ont.

Judge—Didn't I tell you I didn't want to see you here again?
Prisoner—That's what I told the cop, your honor, but he wouldn't believe me.

QUESTIONS AND ANSWERS. Miscellaneous.

MAKING CIDER.

Will you kindly tell me the way to make cider?
J. G.

Ans.—Cider should be made from sound, ripe, clean apples, and the fruit should possess a sugar content of not less than 7.5 to 8.5 per cent., so a few sweet apples are necessary. Cider is simply the fruit juice of the apple, and is made by grinding the apples into a pulp and squeezing out the juice by means of a press. Regular cider mills and presses are used where it is made on any considerable scale.

FOUL IN THE FEET.

1. What shall I do in order to prevent a disease which is spreading among my stock? The nature of the disease is in the form of a running sore in the foot, between the two toes. The first we notice is lameness, then a swelling of the foot, and finally the breaking and running. Some of them continue to be lame two months, while others are better in about two or three weeks.

2. How shall I treat it?
3. What is the name of the disease?
4. Would it be advisable to destroy the cattle, and do the Government allow the owner any percentage for the loss of the beasts?
W. J. C.

Ans.—This is foul in the feet, caused by standing in or walking through irritating substances, as liquid manure, swampy land, rushes, etc. The extreme wet season may have caused it by making yards, lanes, and even pastures, muddy. Place in dry, comfortable quarters. Cleanse between the clouts by bathing with warm water. Apply hot poultices of linseed meal, or boiled turpentine with a little powdered charcoal. When the inflammation is allayed, dress three times daily with carbolic acid one part, sweet oil twenty parts. In some cases it is necessary to pare away some of the hoof. If proud flesh has formed, apply a caustic, as equal parts of butter of antimony and tincture of myrrh, applied with a feather once daily for two or three times. If they do not yield readily to this treatment, call your veterinarian. Do not think of destroying the cattle, as the disease is not a contagious one.

MORE MOURNING DOVES.

I saw in "The Farmer's Advocate" a reward of one thousand dollars if anyone could find a pair of wild pigeons nesting. I expect that would be rather hard to do, especially at this time of the year. But there are some to be seen in this neighborhood at the present time. I told a neighbor I thought I saw some on his place, so during the week he saw about twenty, so he 'phoned me and told me they were wild pigeons without any mistake. He said it must be close on to forty years since they were around before. They are of a slate color, but they do not look quite so large as the tame pigeons to me, as I saw them sitting, and in their manner of flight they resemble the tame pigeon.
T. B.

Ans.—This letter was forwarded to Prof. Wm. Lochhead, Macdonald College, Que., a copy of whose reply, addressed to our correspondent, is appended:

Your description of the pigeons you saw is not very definite, and I am inclined to believe that you are mistaking the mourning dove for the passenger pigeon. Every wild pigeon is not a passenger pigeon. Mourning doves are quite plentiful, but the passenger pigeon of forty years ago has not yet been located, in spite of the awards offered. With this I am sending you a colored illustration which will enable you to distinguish clearly between the mourning dove pigeon and the wild passenger pigeon. If after careful reading of the pamphlet and comparison of the birds, and if after careful observation at close range you still think that the wild pigeons in your locality are passenger pigeons, then you may write me again, and I shall have some expert visit your locality and make a report. I may say that the award is still available, and would only be too gladly given to any person who has found the long-lost passenger pigeon.
W. LOCHHEAD.

Keep Stock Vigorous and so avoid troublesome, expensive diseases
Pratt's Animal Regulator will keep your cows, horses and hogs in perfect condition—capable of working harder, producing more, and resisting disease.
25c, 50c, \$1. 25-lb Pail, \$3.50
Pratt's Heave Cure affords quick relief for heaves \$3c, \$1.
"Your money back if it fails!"
Pratt's Profit-sharing Booklet FREE at dealers, or write us. Our products sold by dealers everywhere, or
PRATT FOOD CO. OF CANADA, Ltd., Toronto.

1913 Almanac Free

Shropshires and Cotswolds!

In SHROPSHIRE I have for sale 35 imp. shearing rams and ewes from some of England's best flocks, a lot of fine home-bred rams and ewes bred from Minton and Buttar ewes. In COTSWOLDS a lot of rams and ewes, and an extra good lot of lambs. A few of each breed fitted for showing. Order early and get a good choice. Prices very reasonable.

Claremont Station, C. P. R., three miles. Pickering Station, G. T. R., seven miles.
John Miller, Brougham, Ont.

Belmont Shropshires and Southdowns

I have a grand lot of rams and ewes for sale, both breeds. Anyone wanting a good ram, or a few good breeding ewes, should write me at once and get the first choice.

C. Hodgson, Brantford, Ont.

MAPLE VILLA OXFORD DOWNS AND YORKSHIRES

This fall I have the best lot of lambs I ever bred. I have plenty of show material, bred from the best stock procurable in England. Order early if you want the best. Ram lambs, shearings and ewe lambs. Yorkshires of all ages.

J. A. Cerswell, Bond Head P. O., Ontario
Bradford or Beeton stations. Long-distance phone.

SPRING VALLEY SHROPSHIRE

I am offering for sale shearing and ram lambs, shearing and ewe lambs, of highest quality and breed type. Prizewinners among them. Bred from imported stock. Order early.
THOS. HALL, BRADFORD, ONT., P. O. & STA.

DORSET SHEEP SPRINGBANK OXFORD DOWNS

Choice stock of either sex. Write me before you buy. H. ROBERT THEAL, FULTON, ONT. Grassie's Station, T. H. & B.

Pine Grove Yorkshires

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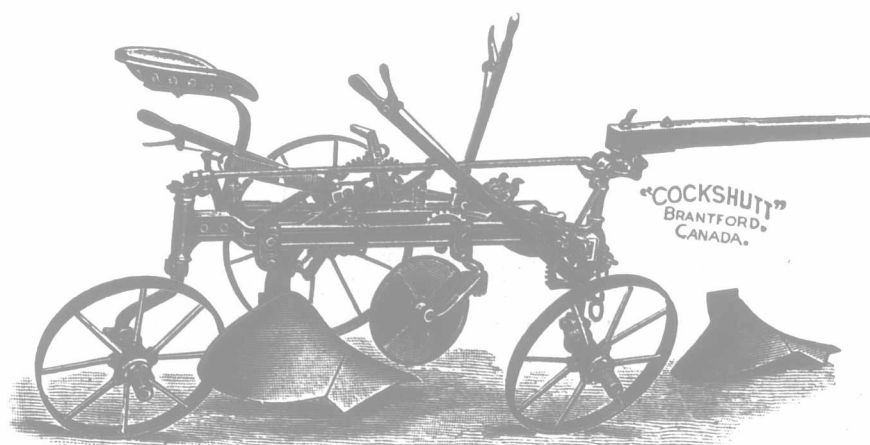
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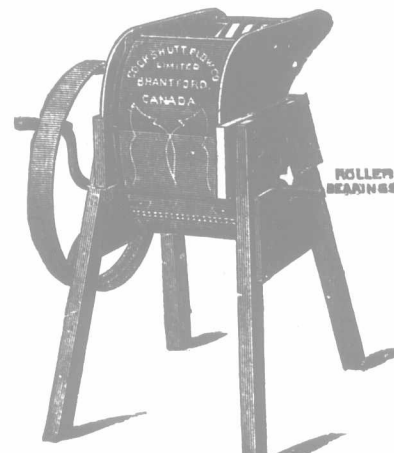


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