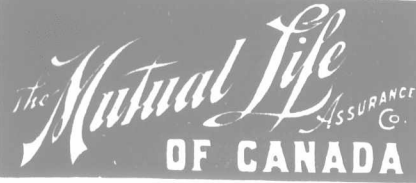


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As "results speak louder than words" so also a Company that can point to a "successful record of 37 years" is sure to receive the patronage of the Canadian public which is quick to discern sound and progressive management in the interests of policy-holders.



has just such a record for successful management from the establishment of the Company in 1870 up to the present day, as the following summary will show:

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Add present Assets, Dec. 31, 1906.	\$10,385,539.84
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Manufacturers. Our free catalog explains all. Correspondence solicited. Agents wanted.

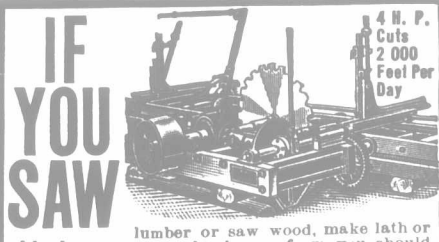
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All sizes Saw Mills, Planers, Edgers, Trimmers, Lath Mills, Shingle Mills etc. Complete line wood working machinery. Catalogue free.
American Saw Mill Mch'y. Co.
113 Hope St., Hackensack, N. J.,
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THE SPICE OF LIFE.

In a certain preparatory school in Washington an instructor one day made the statement that "every year a sheet of water fourteen feet thick is raised to the clouds from the sea." "At what time of the year does that occur, Professor?" asked a freshman. "It must be a sight worth going a long way to see."

His honor, Judge Addison, had once to deal with the problem, "When does an egg become stale?" The plaintiff suggested that in summer eggs became stale "about a week after they came to market," but the judge declared that the real test of an egg's staleness was the moment it became fit for use at a contested election.

Ouida is a great lover of animals. She hates cruelty and is a particularly fierce opponent of those who dock the tails of horses. Discussing the absurd reasons that are given for this tail-docking fashion, she told a little Florentine story.

"A great cardinal went driving through the city of Florence with his horses' tails cut egregiously short. A woman took the cardinal's coachman to task for this.

"How," she said, "can our gentle cardinal favor a fashion so abominable as this one of tail-docking?"

"Madam," the coachman answered, "it is my reverend master's kindness of heart. He is a member of several societies for the prevention of cruelty to animals, and he docks his horses' tails in order to prevent them from annoying the poor little flies."

The belief that an editor knows everything is widespread, but one small boy has discovered the limitations of the editorial mind. Here is an anecdote as we got it from a contemporary: "Father," asked the small son of an editor, "is Jupiter inhabited?" "I don't know, my son," was the truthful answer. Presently he was interrupted again. "Father, is there any sea serpents?" "I don't know, my son." The little fellow was manifestly cast down, but presently rallied, and again approached the great source of information. "Father, what does the north pole look like?" But, alas! again the answer, "I don't know, my son." At last, in desperation, he inquired, with emphasis, "Father, how did you get to be an editor?"

One day some Americans on a visit to Wales expressed a wish to see a certain old and historic church. The incumbent was only too pleased to show them round, especially as he believed it would end in a donation being given to his parochial fund. He is as proud of the school as he is of the church, and finished up by asking them in there also, and inviting them to question the scholars. One of the party accepted the invitation.

"Can you tell me, little boy," said he to one lad, "who George Washington was?"

"Iss, surs," said he, "he was a 'Merryman' gen'ral."

"Quite right," said the American. "And can you tell me what George Washington was remarkable for?"

"Iss, surs, 'e was remarkable 'cos 'e was a 'Merryman' an' told the trewth." The American didn't question further.

KNOW HIS PLACE.

The village carpenter had given so generously of his services and sound advice toward rebuilding the little memorial chapel, that, when it was completed, all the summer people agreed that he should be asked to speak after the luncheon which was to follow the dedication exercises.

The day and the carpenter's turn to speak came duly.

"Ladies and gentlemen—dear friends," he began, his good, brown face very red indeed, "I am a good deal better fitted for the scaffold than for public speaking!"

Then he realized what he had said, and sat down amid roars of laughter.

PANDORA RANGE

HOLDS FIRE ALL NIGHT

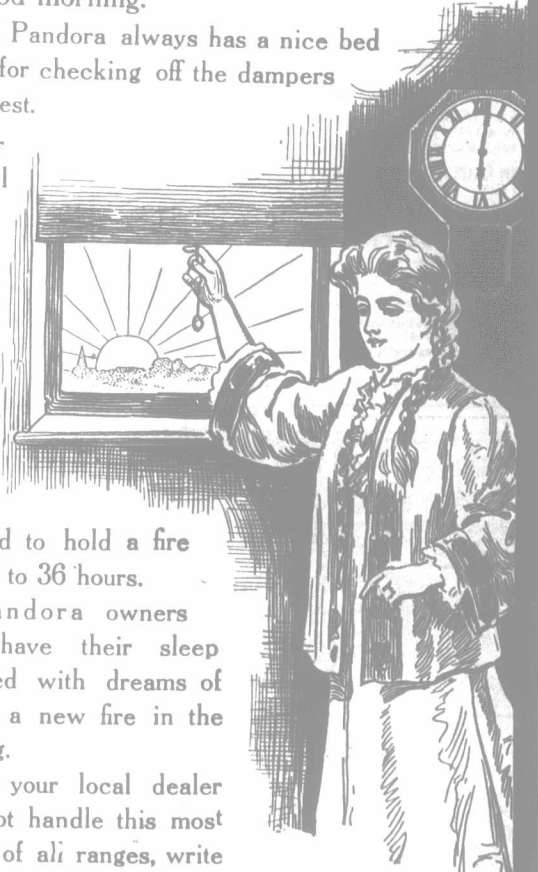
The good housewife always feels like bestowing upon the Pandora a cheerful "good morning."

Why? Because the Pandora always has a nice bed of hot coals as a reward for checking off the dampers closely before retiring to rest.

In five minutes after turning on the drafts she will have a good, strong fire.

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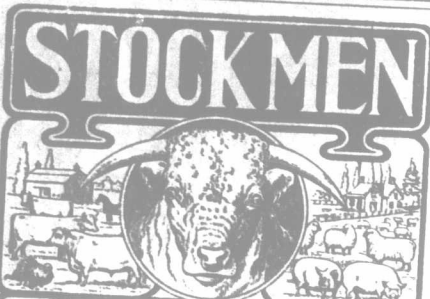
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Makes all sizes of stone, from 4 to 24 inches long, in 5 widths of wall, in any design. Write for Catalogue A to
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 Niagara Falls, Ont.

TRADE TOPIC.

MANURE SPREADERS A NECESSITY.—The old way of handling manure was wasteful in the extreme. First, it was allowed to wash away and ferment in the barnyard. Then, at a convenient season, it was hauled out and thrown in piles in the field, and the same wasting process was continued. Finally, it was spread by throwing it in forkfuls, and in hard lumps over the ground, leaving it in a condition in which the ground could not get the benefit of even the fertilizing contents still remaining. With a view to preventing this great waste, the International Harvester Company of America is offering to the farmers of the country, through their local dealers everywhere, three most excellent machines. These are: The Corn King, the Cloverleaf, and the Kemp Twentieth Century spreaders. These three machines are now being advertised in this paper. Some little suggestion of the features of each appears in the advertisements. We direct attention to this advertisement as being something which goes straight to the matter of the farmer's prosperity. Every farmer without a spreader should be interested in it. If you do not own a spreader, read these advertisements, and then make a call on the International agent in your town, and take the matter up with him. We vouch for it that you will not regret having bought a first-class manure spreader. The International agents will be able to furnish catalogues and all information.

The attention of farmers and dealers is called to the advertisement in this paper of an important auction sale, at Tillsonburg, Ont., on Thursday, November 14th, of matched ponies, roadsters and brood mares and colts, high-grade Holstein cows and heifers and Shropshire sheep. This stock should prove attractive, and secure ready buyers. Look up the advertisement, and write for particulars to W. C. Burn, Tillsonburg, Ont., mentioning "The Farmer's Advocate."

THE SPICE OF LIFE.

One of the jokes Lewis Carroll, the author of "Alice in Wonderland," didn't dare publish, according to his biographer, who found it among his papers, is the following:

A schoolboy asked, "What is the meaning of average?" at once replied, "The things hens lay eggs on."
 When requested to explain his answer, the boy said: "I read in a book that hens lay on an average two hundred eggs a year."

A very attractive auction sale of 15 imported Clydesdale fillies is advertised by Mr. Wm. Meharey, of Russell, Ont., to be held at the Buller House, Ottawa, on Tuesday, November 26; on seven months' time, without interest. This is a choice selection of fillies, two and three years old, recently landed from Scotland. They are large and smooth, have splendid action, and are choicely bred, and in good condition, and all bred to noted stallions in Scotland. This will be a rare chance to secure a good young mare with foal, and time to pay for her. Remember the date, November 26th.

A fat woman, bearing a number of bundles, entered a crowded tram car. The only semblance of a seat she could find was a small space at the right of a disagreeable youth. Into this space, sufficient only for an individual of ordinary size, the fleshy woman squeezed herself, much to the annoyance of the youth. After a moment or so the woman produced a cheese sandwich, which she proceeded to devour with every evidence of relish. At this the youth gave her a look of ineffable disgust, and drew the skirts of his frock coat closer to him.
 "I suppose, me lad," good-naturedly said the woman, "that ye'd prayfer to have a gentleman sittin' next to ye?"
 "I certainly would!" snapped the youngster.
 "So would I," calmly responded the fat person.

Riches Have Wings

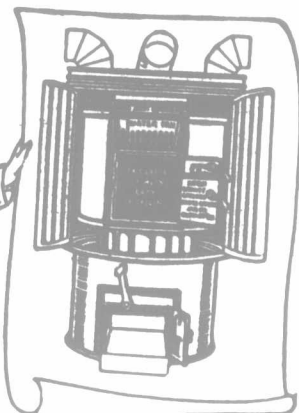
And use them too,

In escaping from your Dairy, if Cans, Pans, Cocks, Creamers or Inferior Cream Separators are employed in Skimming.

De Laval Cream Separators

CLIP THE WINGS OF ESCAPING RICHES
 BOOK FREE TO YOU.

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Cost Less than Stoves

A Hecla Furnace, installed on Hecla principles, will keep your house comfortable throughout the winter at less fuel expense than it would cost you for stoves. It is the old story, of course, of concentration meaning power. In a Hecla, you get all the heat from the coal you burn and where you want it. The whole house is comfortably, and evenly heated and ventilated.

Hecla Furnaces

are equally adapted for mild or severe weather—always ready for any demand made on them. They are the only hot air furnaces that are absolutely healthful and sanitary.

No other furnace is made with the Fused Joints that patented feature of the Hecla which makes the escape of gas, dust or smoke into the house an impossibility. Let me tell you about these Fused Joints and about other features of the Hecla in which you will be interested.

See your nearest dealer or write "Clare's Furnace Builder" for new illustrated catalogue and estimates.

Clare Bros. & Co. Limited, Preston, Ont.

HOW MUCH TIME IN A YEAR WOULD A

"TELEPHONE"

IN YOUR LOCALITY SAVE YOU?

They are not expensive. Why not have one, and save time and worry? The organizing of a company is a simple proceeding—write to us and we will teach you how to make it a money-making enterprise. We are the only firm in Canada who manufacture everything and anything pertaining to a "TELEPHONE."

Northern Electric & Manufacturing Co.,

Cor. Guy and Notre Dame Sts., Montreal
 181 Bannatyne Ave., Winnipeg.

The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established 1866

Vol. XLII.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1876.
LONDON, ONTARIO, NOVEMBER 7, 1907.

No. 789.

EDITORIAL.

DEFECTIVE DISCIPLINE IN THE SCHOOLS.

Editor "The Farmer's Advocate":

As few questions seem to be of more general interest to your readers than that which pertains to our educational system, I may be pardoned for adding to the contributions already received. I have been following, for some time, the arguments presented in your columns, both for and against present conditions. One side declares that our system is not ministering to the needs of the masses, that our public-school teachers are incompetent, and that the results obtained are not equal to those obtained twenty-five years ago. The other side simply contradicts those statements. Now, without discussing the merits of either side—for both are partly right—I do not think that the real weakness has yet been touched. The fault is not with the system; that, while not by any means perfect, has been working in the direction of progress. But the fatal defect in our schools is the lack of discipline, the failure and often inability to inculcate principles of obedience and respect. Discipline was the strong feature of the old log schoolhouse, and made up for many defects, both in the school system and in the academic or professional qualifications of the teacher. And, after all, discipline is three-fourths of education, since the acknowledged aim of education is the formation of right habits—in short, of character—and, without proper discipline, that object is utterly impossible of attainment.

Two things at least are responsible for this loss of discipline, the disappearance of all but a few male teachers, and the laxness of the home training throughout the length and breadth of our land. From the time a boy reaches the third book, until he leaves the public school, he should be directly under a male teacher. Not that I mean to say that there are no female teachers who can enforce discipline in the ordinary meaning of the term, under any circumstances, but there is a certain training and influence which a boy needs at that age that he must get from contact with a masculine spirit, or else not at all. To recognize clearly the evil results which have attended the supplanting of male teachers, it is only necessary to refer to some of the American schools, both High and Public, where there is not a single male teacher on the staff. The discipline of such schools is notorious. This is a defect hard to remedy, especially in a time of national prosperity like the present, but one essential of any scheme must be increased salaries.

The second cause to which I referred is simply one phase of our national life from which there is no present escape. We have passed from a sort of Puritan discipline to the other extreme. But the records of history warrant us in assuming that time will gradually bring us to a middle course. Until that happens, any system which can be devised will be more or less unsatisfactory. At present, residence schools seem to be solving the problem with a fair degree of success; but here, as elsewhere, the results depend upon the ability and personality of the person in charge.

As yet, our educational system is only in the experimental stage, but the next ten years will probably see a vast change in it—a change, too, which will not tend towards reduced cost. More and more the spirit seems to be gaining ground that, if people want education, they must pay for it.

H. S. BERLANGUET.

Kenora, Ont., High School.

THE UNDOING OF THE FARMER.

United States Secretary of Agriculture, James Wilson, if he is a Yankee, is yet a Scotchman, and disclosed, in his speech on "The Unproductive Farm," at Syracuse, N. Y., the other day, some of the thinking characteristics of his forbears. First of all, he dispensed a little American hifalutin about the prosperity of the "best in the world," but quickly settled down to a close analysis of the way in which the people have wasted their inheritance, describing them as soil-robbers, wood-robbers, water-robbers, and mine-robbers. He declared that conventions such as that before which he was speaking might be called in every State to consider the decreased productiveness of the soil near great centers of population. Why the decrease?

The old-fashioned farmer fought a good fight. He struggled to educate his children, and the education which the State gave them did not help them to success in living on the soil, but actually led them away from the farm and left him to battle alone. Everything taught them had a tendency towards anything but agriculture for a career. The nation offered new farm lands for nothing. It gave away mines and forests for nothing, encouraged railways and protected the factory, enabling these industries to outbid the farmer when he wanted help; and the schools equipped the boys and girls for every vocation but the farm, and tempted them away.

Have we not been doing precisely the same thing in Canada?

Secretary Wilson next recounted the varied and costly educational efforts made by Federal and State Governments for the resuscitation of agriculture, such as the provision for agricultural and mechanical colleges in every State and Territory, and, more recently, research and publication work through the Department at Washington. He referred to the improvement of the farm papers and the introduction of agriculture in the secondary schools, as has been done in Alabama, Georgia and other States. These schools are expected to be feeders of the agricultural colleges, and will, observed Mr. Wilson, open up, to students who go no further, opportunities for beginning the study of what pertains to their life-work.

But why, "The Farmer's Advocate" desires to ask, should the "beginning" date in the secondary or High School, when it is in the public school that the foundation is laid, and for the great majority of our growing population, the educational superstructure, in so far as schools can rear it, is completed? Indeed, in this fatuous policy we have one of the anomalies of the age, which Public-school Inspector Hughes, of Toronto, fittingly characterized, in his note in our last issue, as an educational policy thirty years behind the times. Faulty at the base, the educational edifice of the nation can never be right, no matter how much is spent upon secondary schools, colleges, experiments and Government demonstrations. Public-school grounds and buildings, the courses of study, the pedagogical training of the teachers, and their subsequent oversight, must all be lifted to a higher plane, unified in their purpose, exalting the ideals of a life nearer to nature, and so training eye and ear, hand and head, that there will be the disposition and the capacity to turn with confidence to the soil for a competence, and find upon the land the life worth living.

Turning to Secretary Wilson's observations on the decreased value of farms in the Eastern and Middle States, because growing the old staple crops in the old-fashioned way had become un-

profitable, he discerns that these very lands are particularly well adapted to special crops and special industries that new conditions will make most profitable. As one illustration of a persistent and losing adherence to outworn methods, he cites the management of pasture lands, the area of which increases as help becomes scarce. Instead of one lonesome variety, the pasture should have growing upon it all the grasses and legumes suitable to the soil and climate, making a more perfect ration, and the cheapest for the production of meat and milk, replacing organic matter to resist drought, and feeding subsequent crops. There are few first-rate pastures anywhere. Farmers are caught napping in this respect oftener than in any other feature of the farm.

Mr. Wilson, in conclusion, predicted that these neglected Eastern lands would be brought back to their primitive fruitfulness, because, being within hearing of factory whistles and school bells, within sight of church spires and colleges, they only need intelligent management to return paying harvests.

FOR DRYNESS AND FRESH AIR WITHOUT DRAFTS.

A sermon of wisdom is contained in two sentences of Mr. Gilbert's article on poultry-housing in "The Farmer's Advocate" of October 31st. "To-day," he says, "the great aim is to have houses so constructed as to admit as much fresh air, without draft, as possible. We are trying to make our birds fit the climate, rather than the climate the birds."

Stockmen and physicians are discovering that the same principle applies to horses, cattle, sheep, swine and human beings. Nature never intended that animal life in northern zones should live all the year round at summer temperatures, and attempts to produce such artificially in winter are bound to result in excessive cost, while the important considerations of ventilation and exercise are almost certain to be sacrificed, to the serious impairment of constitutional vigor, and at the risk of untoward results from those occasional unwanted exposures which the best of care cannot always insure against.

In writing thus, no plea is urged for pioneer rations of "brouse," or for pitiless barnyard exposure. Judicious shelter from weather inclemency is an essential factor in profitable stock husbandry, as it is in the comfort and well-being of the human race. But there is a happy medium between inhuman exposure and irrational pampering, and the judicious stockman who hits upon that medium is, as a rule, far less likely to be inconsiderate or cruel than the unthinking farmer who lowers the vigor of his animals by confinement in close, damp, ill-ventilated stables, and then compels them betimes to shiver in the marrow-chilling current of a morning stable draft, or maybe of a bleak barnyard prospect. There is or should be common sense in all things.

For winter stabling, we believe in moderate protection, without coddling—moderate protection implying the provision of an atmosphere that will be fresh, dry and well ventilated, without perceptible drafts. In the past builders have labored under a vague impression that a house or a stable would be warm so long as it were tight, hence we built basement cellars and strove to chink up all the cracks, too often forgetting to make any provision for systematic ventilation. In time we found that these stables were unwholesomely stuffy and damp, while many were surprised to find them only moderately warmer than the more open byres, proving that considerable heat is lost

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

AGENT FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
WINNIPEG, MAN.

LONDON (ENGLAND) OFFICE:

W. W. CHAPMAN, Agent, Mowbray House, Norfolk Street,
London, W. C., England.

1. **THE FARMER'S ADVOCATE AND HOME MAGAZINE** is published every Thursday.
2. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairy-men, gardeners, stockmen and home-makers, of any publication in Canada.
3. **TERMS OF SUBSCRIPTION.**—In Canada, England, Ireland and Scotland, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
4. **ADVERTISING RATES.**—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
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14. **ALL COMMUNICATIONS** in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (LIMITED),
LONDON, CANADA.

through thick stone walls, even though there be no exchange of air whatever. At last we have realized the unwisdom of attempting, in ordinary circumstances, at least, to maintain stables always above freezing-point, and the modern idea is for free ventilation without unpleasant drafts. We shall be disappointed if the extensive use of muslin curtain in doors, windows, and perhaps wall spaces, does not conduce greatly to this desirable end. Those who have installed stable waterworks systems may have to take them out, but that will not be a bad thing if it leads to the provision of suitable troughs in sheltered sheds, where the stock may receive a noon-day feed and exercise at will.

NEARLY 3,000 INQUIRIES.

During the twelve months, from November 1st, 1906, to October 31st, 1907, there were, by actual count, 2,200 questions answered through the columns of "The Farmer's Advocate," besides several hundred discussed in the "Home Magazine," making a total of well on to 3,000. All these were questions actually asked by bona-fide subscribers. Some papers are in the habit of "faking" inquiries, to maintain an appearance of interest in their query departments. "The Farmer's Advocate and Home Magazine" has no temptation to manufacture questions, even were it so disposed, for the immense number actually submitted by subscribers tax the limits of our space and the energy of our editorial staff. And yet there are no bars put up. We are bound to handle all the sensible questions that come to hand from subscribers in good standing, but the amount of work entailed by this volume of correspondence explains an occasional delay in replies, and is one of several reasons why we cannot extend the service to non-subscribers or to inquirers who forget to sign their names.

Some of our friends might lighten our task considerably by refraining from sending trivial

inquiries, the answers to which are of no practical value. Foolish questions are often the hardest to answer accurately. Sometimes, it seems, too, that the more information we publish on a given topic, the more interrogations it draws out. After a subject has been fully treated by editorials and contributions, it is of the nature of supererogation to ask questions on the identical points covered, yet this is repeatedly done. It would save us unnecessary work, and do far more good to the individual if he would keep his files of the paper indexed and in order, read up what is published, and, in the light of the knowledge and variety of viewpoints thus obtained, work out his own particular problem for himself. It would lead to something like mastery of the subject, whereas the spoon-feeding system, which so many desire, militates against the development of self-reliant thinking. But, despite the foolishness of some inquirers and the thoughtlessness of others, we believe our Questions and Answers Department is an invaluable feature, worth far more than the yearly subscription price to every thoughtful reader. Thoughtfulness on the part of our readers can help to make it better.

RAILROADS AND THE PUBLIC RIGHTS.

One way or another, our hustling contemporary, the Toronto World, manages to maintain its reputation for battling on behalf of public rights. Lately it has taken up the cudgels for an improved Ontario railway service, especially for the towns and rural districts. The World's contention is, in substance, that the two great trunk railway companies which serve this Province, having their headquarters at Montreal, habitually neglect the Province from which they each draw an immense proportion of their revenue; that they have no executive officers in Ontario with any authority of consequence; that the patrons who have a grievance of any kind, whether it be a ticket to be refunded or difficulty in securing an ordered freight car, have to appeal to Montreal, where scant consideration is manifested and costly delay often experienced; that many of the best passenger cars are used for American through traffic at 2 cents per mile, while the people of Ontario who subsidized the roads and who largely support them, are charged 3 cents for a comparatively slow and mean service; that the small cities, towns, villages and country shipping points are shamefully neglected as to character of service and fulfilment of orders for rolling stock, to such a degree, in fact, that the dissatisfaction of customers, owing to delayed shipment of goods, is in many instances forcing manufacturing establishments to move away from the small center or go out of business; that the railroads have most of the press muzzled by special transportation rates and by advertising patronage, and that a large number of members of Parliament are little more than retainers of the transportation companies.

In support of this formidable indictment, the World invited communications giving instances of injustice and neglect. Immediately the evidence poured in, was seized upon, published, and the companies fearlessly upbraided, while local Parliamentary representatives were shamed into spasmodic activity; and it begins to look as though the World has done more already to secure a decent railway service for this Province, and, incidentally, the rest of Canada as well, than the Ontario Government's stillborn Railway and Municipal Board bids fair to accomplish in a century at its present gait.

"The Farmer's Advocate" sympathizes heartily with the World's campaign. High-handed disregard of public interest by the beneficiaries of Canadian money grants and franchises has reached a point where the intelligent Canadian public will stand for it no longer. A powerful weight of opinion is accumulating in favor of demanding that Canada require from her transportation companies a service at least as good as that offered the United States customers in the competition for American traffic. It is time for a change.

Out on the Ontario branch lines of the Grand Trunk Railway to-day, what do we find? A slow, dilatory passenger service, handed not infrequently by surly, underpaid employees, inferior locomotive power, and disreputable stations in which to wait for dilapidated old cars, furnished with

wooden-rimmed, shabby-plush-covered seats, hardly fit for second-class service. Yet, when it comes to buying a ticket, it is a plump, first-class fare, and always the fraction of the nickel to the good. We are supposed to be pleased with this service, because our grandfathers trod the blazed trail. And if a train is late, do you find out how late? Not if the station agent can help it. Reticence appears to be their established policy. As a case in point: On Saturday evening, Oct. 12th, the writer was passenger on a G. T. R. train for Toronto. One hour and fifty minutes it waited in Hamilton. Why? None of the passengers seemed to know. Some said there was no crew to take the train, others vaguely alluded to a wreck. No one knew, and no one inquired at the ticket office. They knew from past experience it was useless. So they sat and fumed and put in the uncertain vigil as best they could, trusting for deliverance to Providence and the Grand Trunk! The delay may have been unavoidable, but no official came through the train to announce the cause or give any information as to the probable length of the wait. How much longer will the travelling public stand for deceit and reticence where frankness is their first due?

The freight service is worse than the passenger, because the abuses are more exasperating and costly. It will do good to have these cases reported. Our columns are open for the ventilation of authenticated grievances experienced by Canadian shippers of live stock and agricultural produce, also the losses and annoyances of farmers who have suffered long and driven far looking for freight that lingered by the way.

The feasibility of an improved service is proven by the invariable smartening up that follows the advent of a competing line, and it is reasonable to suppose the companies, as well as the patrons, are benefited by the increased promptness, consideration and civility that results from the stimulus. Where competition is lacking, publicity through press and Parliament is the only alternative. It is, therefore, in no spirit of hostility that this matter is aired, but merely a sense of need and public duty; and, in the end, we believe it will pay the railroads to accede to the popular demand and spruce up.

WHY TEACHERS' SALARIES ARE LOW AND DISCIPLINE LAX.

Although entirely aside from the crucial point emphasized repeatedly this past summer in our editorials on the question of education, the contribution by Mr. H. S. Berlanguet, B. A., headed "Defective Discipline in the Schools," touches a further and important weakness in modern schooling, a weakness which is, moreover, as pointed out by Mr. Berlanguet, common to our home life. It certainly is true that, from the extreme of iron-clad Puritanic legalism, sentiment has swung to the opposite extreme of laxness, until the child has become, in many cases, not exactly the father, but almost the master of father and mother. There is need for more general inculcation of the fine grace of obedience on the part of American youth, of respect for authority, and of civility both in public and private. This duty begins in the home.

With regard to the old, familiar complaint that teachers' salaries are too low to insure pedagogic efficiency, we have no objection to offer. Salaries of school teachers are ridiculously small, and we shall never have a proper standard of rural education until ratepayers become more generally seized with the importance of it and realize that parsimony in public-school education is a huge blunder. Whether or not it is well to raise salaries by legislative enactment, as some advocate, is, however, a question in which there is wide room for difference of opinion.

Before loading onto the humble ratepayer all responsibility for the meagre salaries of teachers, it might be well to inquire why, in view of this long-prevalent condition, there has repeatedly been a superabundance of Model and Normal candidates. Is it not because the trend of our educational system has been to draw away from agriculture and other productive industries into the overcrowded professions? Teaching, being a very accessible one, and a convenient stepping-stone to others, was chosen by many young men and women, and

the competition of teachers for schools, combined with the penuriousness of many taxpayers and trustees, forced down salaries, which the Government, in turn, was asked to arbitrarily raise.

In our opinion, the best way to raise salaries is to reduce the competition, by introducing a scope and kind of education that will allow and encourage each boy to develop along the line for which he is "cut out." Our schools at present fail to do this. Unintentionally, but persistently and effectively, they have led nearly all the cleverest boys away from the farm, the factory and the forge, and inclined an undue proportion of them to prefer positions as teachers, clerks or lawyers, at starvation wages, rather than those various walks of life which, under a more rational, better-balanced and less "bookish" school influence, they would have elected to follow.

Teachers' salaries, like commodities of commerce, are chiefly regulated by the relation of supply and demand. When public educational systems are reformed along rational lines, the problem of teachers' salaries, like the labor problem and many others, will be advanced a long step toward a satisfactory solution.

HORSES.

PONY OUTFITS AT BROME CO. FAIR.

One of the most attractive features at the Brome Co., P. Q., exhibition this season was the pony outfit ridden and driven by little Miss Doris Cleveland Ralston (daughter of A. E. Ralston), illustrated by the companion pictures in this issue of "The Farmer's Advocate," just as they appeared in competition and in the grand parade, where they made a great "hit," well deserving the honors won. Doris is nine years old, and Trixie six. Duncan Anderson, who was present at the show in the capacity of a judge, expressed his delight with the turnout, heartily commending such features in preference to the so-called "attractions" that have degraded so many fairs and tended to ruin them as educational institutions.

GROOMING PAYS.

On the Experimental Farm at Lacombe, Alta., we are required to spend ten minutes every morning and fifteen minutes at night in actual work of cleaning each of our horses, and in fact we spend, quite often, half an hour apiece in the evening.

I have been asked time and again this summer how many horses we have. When I tell them that we put in a crop of about ninety acres, plowed fifty this spring, besides doing all our experimental work, with five horses, and took off a crop of hay of nearly one hundred tons, they all look surprised at the condition our horses are in.

I think that it is labor well spent, for, if your horse is lazy and slow, and you have to keep a stock of whips in supply to get a day's work out of him, a far cheaper way is to keep your horse thoroughly cleaned, and he comes out of the stable in the morning as if he hadn't done a day's work for a month. A good idea is to rub the back of the fetlock joint and the pastern with the palm of the hand for, say, half a minute to each limb. It is a wonderful preventive of sores, etc., at the fetlock and pastern.

The horse is, has been, and will be, man's greatest help in the power line, no matter how many inventions come out to take his place; and every comfort we can give him, in common sense, should be his, and the better he will do our work for us.

C. E. CRAIG.

THE SHORTAGE OF HORSES.

There is a reported shortage of ten thousand foals this year in the British Isles, a decrease in the horse supply large enough to be serious, and likely to be far-reaching in its results. Among our own breeders, there were fewer colts produced this year than last, the decrease being due largely to the heavy mortality in foals at birth. In Ontario and on the other side of the line a similar condition prevails. There is a heavy shortage in the visible supply of all kinds of horses, while the demand in all classes for high-quality animals was never more active. It looks as if horse prices must go higher, especially values for horses of the higher grades. The motor-car was widely heralded as the likely death-knell of the horse-breeding industry; so the bicycle a few years earlier was going to drive horses entirely from the roads; the invention of the steam engine, a century before, seemed likely to put horses altogether out of existence. But the development of all these means of reducing horse energy for power and motive purpose seems only to increase the de-

mand for the equine species. And the indications are that this demand is going to become steadily greater. The automobile has ceased to be a novelty, and in the larger American and European cities those who can afford to do so are returning to the horse. There are hundreds of motor cabs in New York that are now never seen outside their garages, while the "sinful rich" sweep down the boulevards and through the parks, their equipages moved by the noble power of yore. The demand for horses seems likely to steadily increase. They will be in demand even when the navigation of the air becomes a fixed reality. Present indications are that they will be a mighty profitable line for farmers to give increased attention to. There is little danger of an over-supply.—[Farmer's Advocate, Winnipeg.

LAMENESS IN HORSES.

SPRAIN OF THE FLEXOR TENDONS.

Sprain of the flexor tendons (usually called sprain of the back sinews) is a frequent cause of



"Trixie" Under Saddle.



"Trixie" Before the Carriage.

after bathing, apply an anodyne liniment, as one composed of two ounces laudanum, one ounce chloroform, one ounce acetate of lead, and water to make a pint. When the acute soreness and inflammation have subsided, change to cold water and a stimulant liniment, as one composed of two ounces oil of turpentine, two ounces tincture of arnica, four ounces alcohol, and water to make a pint; and, in an hour after applying the liniment, apply a bandage that has been soaked in cold water (commonly spoken of as "a cold-water bandage"), to be left on until time for next bathing. If a thickening of the tendons remains or lameness continues for longer than two or three weeks, a blister should be applied. In some cases repeated blisterings are necessary, but, unless the lesion has been very severe, the case is likely to yield to ordinary treatment.

SPRAIN OF THE SUSPENSORY LIGAMENT.

This is a ligament that extends on the posterior surface of each cannon bone, in front of the flexor tendons, and close to the bone, from knee or hock to the pastern. It is attached superiorly

to the bones of the knee or hock, is flat and thin, passes down close to the flat, posterior surface of the bone to near the fetlock joint, where it divides; one portion passes outwards and downwards, and the other inwards and downwards to the anterior surface of the limb, where they join the extensor tendon of the limb at about the pastern joint. The edges of the ligament can be readily felt in the healthy limb, and in highly-bred, clean-limbed horses can be readily seen. Severe sprain of this ligament, with rupture, is often seen in race-horses, and is called "breaking down." In these cases lameness is very acute, the fetlock pad descends, sometimes as low as the ground, and the toe of the foot turns upwards when the animal walks. Horses that have suffered from this severe lesion will make a partial recovery, but a thickening of the part is always permanent, and the patient never again able to stand training, but may be useful for slow work. It is not of this severe lesion we wish to write, but of ordinary sprain of the ligament, without extensive, or, probably, without any rupture. This may occur in any horse from slipping, heavy drawing, driving over rough ground, etc.

Symptoms.—The symptoms are not as easily noticed as in sprain of the tendons, as a sprained ligament does not present well-marked swelling. The lameness will be more or less severe, according to the extent of the lesion. When standing, the patient will point the foot, and during progression will stub the toe, and avoid, as far as possible, letting his weight rest upon the heel. Careful manipulation with thumb and finger will locate the seat of trouble. The course of the ligament from knee or hock to the fetlock joint should be carefully followed, and gentle pressure exerted all the way down. When the sprained part is reached the horse will evince pain in the usual way. It will be plainly noticed that there is almost an entire absence of the local heat and swelling that is present in sprain of either muscular or tendinous tissue, but the sensitiveness to pressure is well marked.

Treatment.—In ordinary cases, the same treatment adopted for sprain of the tendons will suffice, but it is often noticed that the lameness is

lameness in both fore and hind limbs. These tendons extend from the knee to the foot, and from the hock to the foot, on the posterior aspect of the limbs. This lameness is more frequently seen in horses used for drawing heavy loads, but it is not by any means unknown in light horses.

Symptoms.—The symptoms of this lesion are easily recognized. Lameness, more or less severe, according to the severity of the lesion, will be noticed, the patient going principally on the toe, not wanting to let the heel come to the ground in severe cases. Examination discovers the tendons swollen and hot in some part between knee or hock and foot. In severe cases they are swollen their entire length. Pressure upon the swollen part causes pain, manifested by the patient quickly lifting the foot, and, if pressure be continued, he will rear on his hind legs.

Treatment consists in shoeing with a high-heeled shoe, so as to throw the tendons in a position of partial repose. Give rest and low diet, bathe with hot water several times daily, and,

more persistent, does not so readily yield to treatment, and is more liable to recur; hence, in most cases, a longer rest is necessary. In severe cases where there is rupture of a part or whole of the ligament, with greater or less descent of the fetlock pad, it is necessary to place the patient in slings, pad between the hoof and fetlock joint behind with batting and bandage, in order to support as well as possible and prevent to some extent the descent. Soothing treatment, as in other cases, should be adopted at first, followed by cold and stimulant liniments, and this followed by repeated blisters. A rest of several months is necessary.

"WHIP."

LIVE STOCK.

OUR SCOTTISH LETTER. THE SHORTHORN SALES.

Only one theme could be of much interest to readers at this time. The great Shorthorn sales of the season are over, and once again "Old Amos" comes out very-much on top. He was a wonderful man, the old Quaker (Cruikshank), and, in the Shorthorn world, "his soul is marching on." All the same, in the midst of our northern jubilation, let us not forget Tommy Bates. The only remaining Bates herd of cattle in England of any dimensions is that of Mr. Joseph Harris, at Brakenburgh Tower, Carlisle. It was formerly at Calthwaite, in the same grassy county of Cumberland. Mr. Harris sold a draft from his Bates herd, under Mr. Thornton's hammer, a few weeks ago, and got capital prices. His cattle have a style that you do not quite find in the thick, fleshy Cruikshank type. A blend of the two, if you get them to "nick," does splendidly, only wisdom is profitable to direct in work of that kind. Forty females at the Brakenburgh-Tower sale averaged £99 18s. 8d., and nine bulls averaged £50 19s. 8d. The buyers were all home breeders, and, indeed, one feature of all the Shorthorn sales lately has been the comparative inaction of the Argentine buyers. Mr. Harris got 285 gs. for Duchess 139th, a four-year-old cow. He had 270 gs. for another Duchess, a year older, and 265 gs. for a two-year-old Duchess, as well as 200 gs. for a Duchess heifer calf. The yearling bull, Duke of Cumberland 21st, made 260 gs., his buyer being the well-known Gloucestershire stockman, J. T. Hobbs, Maisey Hampton, Fairford. Other Duchess cows made 150 gs., and a red heifer calf out of the 270-gs. cow made 155 gs., the buyers being Messrs. Dean, Dowsby, Lincoln, who were also extensive buyers last week at the northern sales. They are very extensive breeders, both of Shorthorn cattle and Lincoln sheep. A two-year-old heifer of the Wild-Eyes tribe made 155 gs. Another of the Duchess race made 150 gs., and a Duchess-of-Cumberland heifer calf, 14th of the race, made 160 gs., to Mr. Cazalot, a well-known dairy Shorthorn breeder in Kent. These figures show that, given good cattle, well cared for, and not "run to seed," nothing can beat a "bit of Bates," when you come to the sale-ring. Style and milking qualities always count in the female, and that is as it should be.

Mr. Thornton has also had a series of quite successful sales in other parts of England. At The Duffryn, Newport, Mon., Mr. Richard Stratton has a fine old herd of the Moss Ross tribe. He sold 55 of these lately, making an average of over £36 each, which was quite good. Great Shorthorn sales are also to be held this week in Yorkshire, where Mr. Thornton conducts sales every year. The demand for good cattle continues

very brisk, but anything of secondary character does not make much money.

The Northern Shorthorn week of 1907 will not soon be forgotten. Mr. Duthie broke all his previous records, making an average of £409 16s. 3d. for 17 bull calves, or not far short of ten times the average which he made in 1889. Twenty-eight bull calves in that year made an average of £45 each, and the averages have, with little intermission, steadily increased ever since. The highest figures this year were 750, 720, 700 and 530 guineas. Last year the highest figure was 850 guineas, but the average for 18 bull calves was £304 15s. 10d. Mr. Duthie and his neighbors may well be congratulated on a week of phenomenal trade. The four bull calves from the new Uppermill herd of Mr. John Marr, which were sold at the same time, made an average of 100 gs. each, but the next best sale of the series to Collynie was that of Mains of Sanquhar, Forres, on the Friday. There, the 56 head catalogued made the splendid average of £75 9s. 9d. There was a two-days' sale at Aberdeen intervening. On the first day 120 head made the average of £49 13s. 10d., and on the second 96 head made an average of £38 10s. 1d. At all of these sales, home buyers took the "plums." There were Argentine operators, but they either had not deep enough purses or were afraid of the vagaries of the tuberculin test in Buenos Ayres. Aberdeenshire breeders, as the readers of this letter are doubtless aware, have set themselves resolutely against recognizing or giving any guarantee that cattle will pass the test. Mr. Duthie has led them in this, and he certainly has lost nothing by assuming a resolute attitude.

On the first day at Aberdeen, Mr. A. T. Gordon, who was recently judging at Toronto, got as high as 180 gs. and 120 gs. for two-year-old heifers. Mr. Anderson, Saphock, Old Meldrum, who has an excellent herd, got 500 gs. for a yearling heifer, which, if not a record, is certainly a very high price. Mr. Bruce, Heatherwick, who also owns a fine old herd, got 116 gs. for a yearling heifer from an Irish buyer. On the second day, Mr. Anderson, Wardes, had 120 gs. for a two-year-old heifer. A new breeder, Mr. Cornelius, from Cheshire, was a good buyer. He gave 260 gs. for a two-year-old heifer bred by Mr. Morrison, Phingask, Fraserburgh, and 300 gs. for a yearling heifer bred by Mr. Godfrey Hill, Little Haddo, Methlic. Generally after the first day at Collynie the chief demand was for heifers. Yearlings and two-year-olds of superior breeding and merit were making big prices.

The Messrs. Law, who are leaving Mains of Sanquhar, Forres, for another big farm in that neighborhood, had a capital sale the same week. Mr. Duthie gave 170 gs. and 150 gs. for a couple of cows. Mr. Crawford, Co. Tyrone, gave 200 gs. for a third cow. A two-year-old heifer from Holl made 120 gs., the Messrs. Dean, Dowsby, being the buyers. A third Morayshire breeder, Mr. H. M. S. MacKay, Burgie Lodge, made a notable contribution to this sale. He got 106 gs. for a two-year-old heifer, and 160 gs., 240 gs. and 200 gs. for yearling heifers, the two highest-priced heifers going to a Ross-shire farmer, Mr. John Gordon. Messrs. Dean gave 240 gs. for a bull calf bred at Mains of Sanquhar. In the afternoon of the same day another sale was held in the town of Forres, and an Irish breeder, Sir H. H. Smiley, Ardmore, Laine, had the honor of selling heifers at long prices to three of the most-noted Aberdeenshire breeders. Mr. Duthie took one at 155 gs.; Mr. James Durno, Jackston, took a second at 130 gs., and Mr. James Durno, Westertown, took a third at 150 gs. The week was rounded off with a sale at Perth on the Saturday,

at which 83 head from the principal breeders in Fife and Perth made an average of £28 10s. 3d. Colonel Munro, Mains of Murthly, who has a fine idea about a Shorthorn, sold a heifer for 160 gs. to Sir. H. H. Smiley, Laine, and Mr. Stephen Mitchell, of Boquhan, got 100 gs. for a two-year-old heifer.

Stockmen generally have had a splendid season. The worst thing about agriculture just now is the wet weather. September was a lovely, dry month, but deficient in hard, drying winds. October is half gone, and the rain has been falling almost every day. An immense amount of grain is still in the fields, and unless there be a cessation of the rainfall, the outlook for the grain-grower and potato-grower, in spite of good prices, is black enough. It is not ordinary rain; we are having downpours and floods which threaten to work disaster in many districts.

Several of the principal cheese shows are over. The summer was too damp for the cheesemaker, and the quality is not up to the mark. Whether any great improvement may be looked for in price cannot be foreshadowed, but meantime there is nothing wrong with the price in Scotland, although the English maker has had to take 10s. to 12s. less per cwt. of 112 pounds than he was getting a year ago. The Scots cheddar is expected to hold its own, because your Canadian make seems also to have suffered this year.

At the London Dairy Show, last week, great interest was taken in the mechanical milking of cows by the Lawrence-Kennedy machine. The practical demonstrations were eagerly followed, and the system of milking in this way is likely to become more general than it has been. The Lawrence-Kennedy machine is certainly a wonderful implement. Another machine is being prospectively from the ingenious workshop of Messrs. T. & R. Wallace, Castle-Douglas. It, too has its advocates, and sooner or later—and sooner rather than later—we will see cows more and more milked in this way.

"SCOTLAND YET."

BUYING AND FEEDING BEEF CATTLE.

Editor "The Farmer's Advocate":

About the same number of cattle as usual will be fed in this locality this winter. There are quite a number of feeders, but it is hard to get the right kind. I think the best kind to buy would be good, well-bred yearlings, so that they would make good butcher cattle or light exporters next June. Prospects are for good prices.

When putting the cattle up, I generally feed them on cornstalks. I have fed them rape, and they do well after it. We stall feed, and do not dehorn. For bulky feed, our main reliance is oat straw and turnips. I feed hay twice a day and oat straw three times, and enough that they will leave sufficient to bed themselves and their calves. Two of such turnips as I have this year make a good feed for a yearling. My grain ration is oats and about one-quarter peas, for both wintering over and finishing. I think that oats are the cheapest feed to buy, for they are the best and safest.

Ontario Co., Ont.

JAMES LEASK.

THE CATTLE TRADE IN ALBERTA.

Pat Burns, the genius of the Alberta meat and cattle trade, has been cogitating upon the conditions which prevail in the cattle business. The settling of the range, the tightness of money, the hard winter, the disinclination on the part of farmers to feed cattle, the rapid increase in population, and the prevailing strong tone of the meat markets the world over, have all contributed to shaping the conviction in the cattle king's mind that prices for beef will be high next spring. This fall cows and young stock are being forced off the ranges and farms, and out of the country. Mr. Burns, seeing this cleaning-up process going on in Alberta, has been preparing to insure his trade against any serious lack of supplies next spring by contracting with farmers and ranchers to pay from four and one-half to four and three-quarter cents per pound, live weight, next spring, for winter-fed steers, an increase of about two cents of spring over fall prices. It is not a question of whether or not live cattle will reach these prices next May, that point is settled for a large number already, and the dressed-meat market will stand it, for the simple reason that Mr. Burns controls the trade. But there is a question whether an unlimited number of cattle can be sold for four and a half cents and upwards. If local butchers do not have to hustle for their cattle, the Calgary man will be able to dictate an arbitrary price on account of the protection of distance and tariff walls. This is the galling aspect of the cattle trade from the Alberta farmer's standpoint, that, no matter if cattle are worth 10 cents per pound live weight, the Alberta dealer is protected by duty and freight, and if he pays full value, it is largely a matter of sufferance.

There is a probability, however, that the winter-fed cattle will command a price two cents



Solving the Labor Problem.

Photo by R. R. Sallows.

above the prevailing figure. This fact owing to reasons already enumerated, and this should leave a good margin to the feeder men, though feeds are high-priced. It is quite within the range of probability that along in April and May there will be, out West, quite an active demand among local butchers for winter-fed steers at above five cents, and the surplus over home consumption should not fall much below that figure, despite the influences which surround the larger markets.

THE YEAR'S FEEDING PROBLEMS.

It is a long time since farmers were confronted with problems similar to the ones which face them to-day. For a number of years crops have been good and feed abundant, but this year we find a decided change, and farmers who have been encouraged to be somewhat prodigal in their methods of feeding during the past few years, are now appalled by the necessity for strict economy. On every hand we hear complaints of a shortage of feed, and the fear of being short has created something like a panic among some farmers, and panics always bring fresh evils in their train. It is important, therefore, that every farmer should take time for careful consideration before becoming frightened, and should decide upon his line of action only after a calm and dispassionate study of the circumstances by which he finds himself surrounded.

SHALL WE REDUCE THE STOCK?

Even among men who are fairly well supplied with feed for their stock, we hear talk of selling off the stock and marketing hay and grain at the tempting market prices which prevail. It is true that there are some so unfortunately situated that the sale of at least part of their stock is a matter of necessity. This process is sure to cause a glut in the market of the kind of stock offered, and low prices are bound to prevail. The men who are really compelled to sell are, therefore, deserving of our sympathy, and it seems as though there is little to offer them in the way of consolation. But, to the men who have feed, and think it too valuable to feed to their stock, a few words of caution may not be out of place. In the first place, it must be remembered that the forced selling of stock already referred to has had a depressing effect upon the value of animals not fitted for market, and every man who dumps his stock on the market, either through necessity or choice, is helping on the downward trend of prices. The man who is not compelled to sell, therefore, has need to do some careful calculating before selling his stock, because the selling of stock in a poor market, in order to sell feed on a high market, may prove to be anything but a profitable operation. A great deal of the food consumed by stock has very little market value, and one of the strong points in favor of keeping stock at any time is the prevention of waste. In working on this problem, the farmer should estimate how much marketable feed his animals will likely consume under economical feeding. Then, he can estimate how much more profit he would get from this feed if he sold it than he would likely get if he fed it to his stock. From this margin of profit in favor of selling feed, he must deduct probable waste due to empty stables, and the loss incurred by selling his stock on a poor market. He must also take into consideration the probable effect on future crops of the absence of the accustomed manure pile, and when he has summed up all these things the chances are that he will decide upon retaining as much of his stock as he can. In addition to all this, it must be remembered that if a man has been handling his stock wisely it should have improved under his management, and he may find serious difficulty in replacing it, even at much higher prices than he received. Though he may be compelled to let go part of his stock, those animals of proved merit as breeders should be retained. Every man must be his own judge as to what is best for him, but let him take very careful counsel with himself before he decides to sacrifice his stock.

UTILIZING STRAW AND COARSE FODDERS.

It is many years since the need for economy in feeding was so forcibly brought home to the farmer, and yet, even this year, many straw stacks are to be seen where apparently no serious effort has been made to save the straw; in fact, many of them seem specially designed to waste as much straw as possible. When the price of hay is soaring, as it is this year, straw is not to be despised, and a special effort should be made to save as much as possible of the oat straw and chaff for feeding purposes. Good oat straw, run through the cutting box and mixed with pulped roots, will be found quite palatable for cattle, and can be used as the main part of the bulky ration for yearlings, two-year-olds and dry cows. If some hay can be spared, it would, of course, be a great improvement to mix the cut straw with an equal amount of cut hay. The clover hay, however, will be wanted especially for the milking cows, the calves, and for ewes and lambs in the

spring. Of course, the milking cows and calves will need some meal, but if good clover hay and roots are available, the meal can be kept down to a minimum. The yearlings would also be the better of some meal, but the feeder must shape his operations according to what is at his disposal, and he may find it advisable to carry some of his stock through the winter in thinner condition than would be desirable in an ordinary year. The man who has silage this year is fortunate, though silage is not, by any means, a substitute for meal. The great secret of cheap feeding is to utilize cheap foods by making a special effort to render them palatable. If an animal relishes its food, it will make better use of it and keep in better condition than if the same foods were fed in such an unappetizing form that the animal eats them under protest.

Idle horses can be made to subsist mainly on clean oat straw and sound, clean roots. Carrots, mangels, sugar beets or turnips will answer the purpose. If hay is scarce, even horses doing a moderate amount of work can be made to use a good deal of straw, but some grain will be necessary. If hay is more plentiful than grain, it would be more economical to feed more hay and less grain to working horses. Of course, if the horses are at heavy work, they must be fed accordingly, but there is an immense waste of feed in the average horse stable throughout the country during the winter months.

If sheep are kept, any pea straw should be carefully saved for them. Pea straw, roots, and a very little clover hay once a day, will keep them going until the lambs appear, when more clover hay and a little grain should be added to the ration. If no pea straw is available, more hay will have to be used, as sheep do not make good use of the straw of cereals, though they can eke out an existence upon it if necessary.

ECONOMICAL FEEDING OF SWINE.

The amount of grain required by pigs can be reduced considerably by the liberal use of sugar beets or mangels. If turnips are used, they can be made more appetizing by boiling until thor-

oughly soft, and in this way pigs can be induced to eat a larger proportion of roots. Small potatoes should be carefully saved and thoroughly boiled for pigs. Pigs eat them better if the potatoes are boiled in a minimum amount of water, thus making the potatoes as dry and mealy as possible. Potatoes have a considerably higher food value than roots when properly prepared. All kitchen refuse having any food value can be utilized to advantage in the piggery, and skim milk is exceptionally valuable in saving grain. The object must be to make everything count to the best advantage.



Idelamere.

Aberdeen-Angus bull. First and champion, Royal and Highland Shows, 1907. Shown by T. H. Bainbridge.

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GRAINS AND OTHER CONCENTRATED FOODS

As to the kinds of grain or other concentrated foods which may be employed to best advantage, it may be noted that so much depends upon circumstances that it is almost impossible to discuss the matter, except in the most general way. Generally speaking, the farmer has to take advantage of what he has at his disposal, and use it in the most economical manner possible. Sometimes he can sell one kind of grain to advantage and invest the proceeds in something which gives better value for the money. It is in just such cases as this that the farmer feels the need of knowledge regarding the peculiarities of composition and the food value of the more common feedstuffs. It is true that no one can arrive at more than an approximate estimate of the relative value of differ-

ent foods, but even this approximate knowledge is helpful. Just at present frozen western wheat is attracting a good deal of attention, and it is a product deserving of notice. The value of the product will vary considerably, depending upon the degree of maturity it had reached before being frozen, and its freedom from rubbish. Unfortunately, analyses of frozen wheat are not available, but it is reasonably certain that its composition will not differ a great deal from ordinary wheat. Some years ago frozen wheat was tested at the Central Experimental Farm as a food for hogs. In these experiments the frozen wheat gave reasonably satisfactory results, but was especially valuable when fed in combination with other grains. For all practical purposes, we may regard clean frozen wheat as approximately equal to barley, and not much behind average wheat in food value. Wheat of any kind, however, should be fed in combination with other grains, such as oats, barley, etc.

Other foods sometimes are put on the market at reasonable prices, and the farmer should always be on the watch for feed bargains. By carefully husbanding the feed at his disposal, and judiciously spending his money in purchases, the farmer can often turn what appears to be a lean year into a prosperous one. It must be borne in mind, however, that true economy in feeding does not consist in starving the animals, but rather in the careful selection of foods, in seeing that no food is wasted, and in preparing foods in such a way that they are relished by the animals, thus causing the animals to give better returns for food consumed.

G. E. DAY.

THE FARM.

A NEW WEED.

Editor "The Farmer's Advocate":

The weed, belonging to the mustard family, sent in by Mr. O. Pollard, Yarmouth Township, in the County of Elgin, is the most interesting plant that I have seen for a considerable time.

I cannot find any record of its having been observed in Canada before this year. Judging from the specimens received, the plant has the aspect of a vigorous, common mustard, but it can easily be distinguished from the latter by the dark veins or streaks in its otherwise-similar yellow flowers, by its wider, flatter seed-pods, containing four rows of seeds, by its odor when bruised and rubbed, and by the smoothness and greater succulence of its foliage. The last specimen received here had had its central stem cut off, but it recovered sufficiently to send out eleven strong branches from a root nearly

a half inch thick. Its botanical name is *Erucasativa*. I do not know what common name it bears in the parts of the Old World where it is indigenous.

Mr. Pollard's account of it is that last May, in partnership with a friend, he purchased from the Rennie Co. two and a half bushels of alfalfa seed. With this, and four and a half bushels of barley for a nurse crop, he seeded a nine-acre field. Before the barley headed out, he noticed that the crop was full of this mustard-like weed, so he proceeded to mow it at once. A few weeks after the mowing he noticed the weed coming again from the cut stems; this was in July. "Then," he says, "we went through the field and pulled every plant of it that we could see. In some places they might be a couple of rods apart, in other places only a foot or two." Even this did not eradicate it, for a few weeks later it was found necessary to go through the field again. Altogether, the quantity pulled, Mr. Pollard says, would make a heap as large as a half load of hay. He notices another crop coming on now, which the frost will likely prevent from ripening its seed.

If the seeds of this weed have as much vitality as most of its near relations, the farmers who have got an infestation of it, and allowed it to ripen, may have a hard fight with it. No pains should be spared to prevent its getting back into the soil if it has been harvested with a crop. Of

course, it remains to be seen how it will stand Canadian winters and our methods of cultivation. Whether the plant is hardy or not, Mr. Pollard's evident purpose of taking no chances has everything to commend it. In the case of pernicious weeds and insects, timely prevention is a thousand times better than cure.

The specific name *sativa* indicates that the plant was sometime and somewhere used for food. In an old botany by Gilbert Burnett, he speaks of its having been used as a culinary herb three centuries before his time, and adds that its strong and peculiar smell, which many people consider nauseous, has probably caused its discontinuance as a food plant.

J. DEARNESS.

FLAX CULTURE.

According to the report of the Ontario Bureau of Industries, the production of flax in the Province of Ontario is comparatively insignificant. Yet I presume that for the past thirty years the growing of flax has been a comparatively common crop in this vicinity. For many years the town of St. Mary's boasted of two flax mills, and provided a good deal of work for all kinds of helpers, including women, children, old men, teamsters, etc., till winter, when each mill would employ twenty to thirty men till spring. As the country grew older and people grew richer, it became increasingly difficult to get land for flax and labor to handle it. Consequently, the margin for the manufacturer grew smaller and smaller, till now the last remaining mill, it seems, is to be idle, and the raw fibre shipped away to be manufactured into twine. The land most used for flax is "new," or first-breaking. There are several reasons for this. Being sowed by hand or a grass-seed sower, and pulled by hand, rough ground and stumps are of less concern. It is also a good crop to rapidly reduce the nitrogen and fit the land for a grain crop that will stand up well. It also withstands wet soil and cold seasons fairly well, and has few fungoid or insect enemies. As this kind of land became less available, resort was had to old pasture, and, in some cases, any soil that appeared rich in nitrogen. The average rental for best land has now risen to \$12 per acre, the owner to do the plowing and preparation for seed, also harrowing and rolling after sowing. As everything goes off, the soil is left in good tilth, but much poorer, especially in nitrogen, and for this reason farmers generally do not care to rent much of their land for \$12 per acre; and as the manufacturer cannot well afford to pay more, the industry must soon decline, unless the introduction of the flax-pulling machine (which has been invented this season), or the manufacture into twine, will so lessen cost of production or manufacture that the rent of the land can be raised. Mill-owners will also accept flax by the ton, but, as labor is scarce on the farm, it is usually most profitable to rent by the acre. Farmers do not grow it for the seed or grain, as it can only be top-threshed by the ordinary machine, and not even that when we have the self-feeder. During the past season, flax was one of the few crops that averaged fair to good. The average yield would probably be one and a half to two tons per acre, thoroughly dried in the stook. It was also well headed, and would probably yield well in grain, although this is a secondary consideration. The wet weather early in the season retarded the growth on low, undrained land. As hinted above, it is a crop that appears to need what is commonly called a rich soil, and one would suppose that it might be profitably grown in the newer sections of the country, the sheaves top-threshed, and the straw baled and shipped to be manufactured. It requires some care in harvesting, or much seed will be wasted by shelling. It is somewhat worse than the common cereals in this respect.

J. H. BURNS.

PRESERVATION OF PITCH-PINE FENCE POSTS.

A bulletin giving an account of a series of experiments undertaken by Mr. B. C. Buffum, to determine the life of pitch-pine fence posts, and discover, if possible, some cheap method of treating them to prolong their usefulness, has just been issued by the Wyoming Experiment Station. The experiments covered a period of sixteen years, hence would appear to be comprehensive. Posts were inserted (1) coated with tar 2½ feet at bottom, (2) not treated at all, (3) treated with crude oil or petroleum 2½ feet at bottom, (4) with a tar band at ground surface, (5) with crude-oil band at ground surface, (6) with crude oil covering 2½ feet of bottom and the oil burned off, (7) with coating of tar 2½ feet of bottom and tar burned off, (8) band of crude oil at surface and burned off, (9) band of tar at surface and burned off, (10) one foot of bottom dipped in tar, (11) one foot of bottom dipped in tar and tar burned off, (12) well-charred posts, 2½ feet simply burned to produce a char, (13) one foot dipped in crude oil, (14) one foot dipped in crude oil and oil burned off.

The posts were set on April 15th, 1891, and

were dug up on June 27th of this year, the inferences drawn being as follows:

"The best treatment, and one which was eminently successful in preserving the posts, was dipping the lower ends in crude petroleum and burning off the oil a sufficient distance to come above the ground when set. This seems to drive hot oil into the post, which, with the protecting char cover, keeps it from decay. Sixteen years had made but slight inroads on the posts thus treated, and they apparently would last indefinitely. This dipping can be done very cheaply, and will undoubtedly pay.

"Simply dipping 2½ feet of the bottom of the posts in crude oil or in tar did fairly well. The oil seemed a better protection to the posts than did the coal tar. Posts that were well charred by burning came in about third place.

"There is little advantage to be gained by simply oiling or tarring a band to protect the post from dry rot where it comes through the ground, and less from any treatment of only a portion below the ground. Such oil band helped preserve the post, but the time taken to apply the oil in this manner would make it more expensive than dipping the entire lower end of the posts."

ASSOCIATION OF FARMERS' INSTITUTE WORKERS.

The Convention of the American Association of Farmers' Institute Workers, held in Washington, D. C., from October 23rd to the 25th, was a success in attendance, interest, and the value of the varied topics discussed. The roll-call showed over 100 delegates on hand.

After the formalities of welcoming the delegates, by Prof. Hayes, Assistant Secretary of Agriculture, who touched on his favorite theme of agricultural education being extended to the rural schools, and who took the place of Secretary Wilson, who was out of the city, and the re-



Photo by R. R. Sallows. Flax Field in Stook.

ply by President G. C. Creelman, of the Agricultural College, Guelph, Ontario, the Convention got down to business.

President Burnett, of Nebraska, outlined concisely and clearly the objects and aims of the Farmers' Institute system. He emphasized the fact that the older methods and objects had not grown any less important, but the work was progressive, and the future Institutes would be successful, as they adopted and utilized, to the best advantage, the agricultural extension work. The burden of his address, as well as those of many others of the delegates, was that the Institute must help the men with whom it comes in contact, by assisting them to adopt those methods which would increase the productiveness of the farm and make farm life both pleasant and profitable. The valuable work which the women were doing to uplift the home was not overlooked.

Superintendent Taft, of Michigan, emphasized what the President had said, and laid much stress on the personality of the Institute worker.

Reports from States, Provinces and Territories showed that nearly every section had some kind of an organization, and that the work was becoming more popular and effective every year. Where hundreds of dollars were formerly used, now thousands are used to extend agricultural information.

Prof. Holden, of Iowa, a veritable enthusiast in agricultural extension work, spoke of the success of taking the gospel of agriculture to the people through what might be called normal training schools and round-table talks.

Depends on the Men.—Mr. F. H. Rankin, Illinois, in submitting a report of the Committee on Institute Organizations and Methods, emphasized that much of the success of the organizations was due to the men connected with them. As far as

possible, an Institute worker must be full of his subject and enthusiastic in presenting his matter, so that his hearers would be stimulated to go out and do things.

Mr. A. M. Soule, Georgia, contended that there were three things which would contribute to the success of the organization, viz., the location of the central office, the administration, and the financial support it received.

Mr. Bracken, Saskatchewan, discussed it from the development of new districts, in which he advocated co-operation in the various agricultural movements.

"The Institute Lecturer" was ably dealt with by Mr. Latta, Indiana; Mr. McKerrow, Wisconsin; and Mr. Calvert, Ohio—all of whom agreed that the ideal Institute lecturer was the exception, rather than the rule, yet there were many good, average men who were successful in farm practice and acceptable speakers that were doing good work in every State and Province.

Should Co-operate.—It was the opinion of Mr. Butterfield, Massachusetts, and Mr. Butler, North Carolina, that co-operation with other educational agencies was necessary. They were in favor of using every means available which would uplift the farmer and his work.

Movable schools of agriculture found warm advocates in Messrs. Creelman, Ontario; Martin, Pennsylvania, and Dawley, New York. They would use the best available help obtainable from the agricultural colleges and experimental stations for this purpose, and men who knew what they were talking about, and who could convey that information to others in a very practical way with living demonstrations.

Boys' and Girls' Institutes have not been very largely tried, but Mr. Taft, Michigan; Mr. French, Idaho, and Mr. Carson, Texas, thought that there were great possibilities along this line. The simple money prizes offered in the competitions in some States for corn, etc., were not enough. The competition must be educational as well.

Women's Institutes.—The matter of Women's Institutes found able exponents in Miss Maddock, Ontario; Mrs. Raymond, Illinois; and Mrs. Wells, New York. This work was practically new in many States, and in some was unattempted as yet. In Ontario it has found its highest development, where over 400 organizations are in existence.

Mr. Crosby, of Washington, D. C., and Mr. Agee, of Pennsylvania, were very strongly in favor of introducing courses of study in agriculture into the Institute, as were a number of other

delegates who were advocates of agricultural education extension work. Prof. Crosby outlined a five-day Institute in potato-culture, in which the potato would be dealt with from its origin, through its different phases of development, until it was marketed and made into a wholesome article of diet.

Prof. Zavitz, Ontario, and Prof. Hunt, Pennsylvania, dealt with the interesting question of field-demonstration work. It was one of the most valuable contributions to the Conference. Prof. Zavitz, in a concise, clear-cut paper, outlined the work of the Ontario Experimental Union, which was a practical demonstration of the question at issue, and which had resulted in untold good to the farmers of Ontario.

"The Woman Lecturer," dealt with by Mrs. Lee, Ohio, and Mrs. Wallace, Pennsylvania, was advocated along similar lines to what was said of the qualifications of the man lecturer. It was admitted by a number of Institute directors that she was much harder to get than men, and when once got she was hard to keep. All agreed that she was a most desirable feature in the future success of the Institute system.

Travelling Libraries.—Mr. Rankin, Illinois, and Mr. Galbraith, Ohio, thought that the travelling library was a most useful thing, but deplored the fact that their expectations, in a practical way, had not been realized.

Dr. Tome, of Washington, D. C., outlined a utility annual report, and Mr. Putnam, Ontario, thought the report of the future must be short, and perhaps specialize one or two important features each year.

Mr. Ellsworth, Massachusetts, and Mr. Dawley, New York, thought that the Field Institute was a useful method of imparting valuable information.

Mr. Raynor, of Ontario, gave some observations on holding such meetings in Ontario, to improve the production of clean clover seed and larger yields of grain. A number of States were trying them. Mr. Elliott, Ontario, though that monthly meetings, well organized and worked properly, were productive of much good, and encouraged the spirit of co-operation.

Resolutions pertaining to more financial support by the Federal authorities, the utilizing of Federal experts through the Institute organizations only, the encouragement of agricultural extension work, and the wish that Mr. O. C. Gregg, although no longer a superintendent, should continue to aid the Association by his presence and wise counsels, were passed.

The report of the nominating committee resulted in the election of Dr. Butler, North Carolina, for President; J. L. Ellsworth, Massachusetts, Vice-President; John Hamilton, Washington, D. C., Secretary-Treasurer; and Messrs. Putnam, Ontario; Calvert, Ohio, and Chamberlain, South Dakota, the Executive Committee.

It may be said a most successful convention was closed, in which much of a helpful nature must have been gleaned by every Institute delegate present.

T. G. RAYNOR.

THE DAIRY.

THE LONDON, ENGLAND, DAIRY SHOW.

At the annual dairy show, held at the Agricultural Hall, Islington, London, October 8th, 245 cows competed for the prizes in the inspection and two-day milk and butter tests, and, as an idea of the extent of the show and the variety of interests represented, we mention that the total number of entries amounted to 8,175, including goats, poultry, pigeons, cheese, butter, hams, bread, honey, eggs, roots, etc.

The Agricultural Gazette, in its report of the cattle, says: "Year by year the numbers of Shorthorns entered for show increases, and upon the present occasion they were considerably in excess of former years; and, as if to demonstrate the dual-purpose character of the breed, the majority of the exhibits possessed all the typical features of the beef-producer, whilst comparing favorably in the points indicative of dairy qualities with the purely milking breeds. Probably no better lot of dual-purpose cattle had ever before been seen at the dairy show, even those animals entered in the non-pedigree classes showing more breeding than in former years, very few, if any, of the nondescript, milking-machine type of animal being in evidence. In fact, so great was the merit in both the pedigree and non-pedigree cow classes that the judges gave an extra prize in both. The show of the breed was, in fact, an ocular demonstration of the increased attention that is now being paid to the pedigree milking Shorthorn, which not only gives a satisfactory account of itself at the pail, but, when its milking capabilities are waning, will quickly put on the flesh essential to render it a remunerative beef-producer that will appeal to the butcher who will not be tempted by the cow that has left all her substance in the milk-pail."

In the milking trials, the 12-year-old cow, Melody, the third-prize winner in the registered Shorthorn class, by inspection, yielded, in the two days, 137.7 pounds milk, the average fat percentage being 3.07. In the class for Shorthorns not eligible for registry, Mr. Nelson's Daisy, whose picture is given in this issue, placed third in the inspection, was easily first in the test. She gave 120.06 pounds of milk in the two days, average test 6.3. In the one-day butter test, she made, from 61.02 pounds milk, 4.64 pounds butter—a remarkable record, indeed. The third-prize cow in the unregistered Shorthorn class, in the milking trial, gave 135.6 pounds milk in the two days; and in the butter test, 2 pounds 11 ounces butter in one day.

The Jerseys, while making a strong showing in the inspection classes, were not as strong in the milking and butter tests as usual at this show. The first-prize cow in the milking trial, Mr. J. H. Smith-Barry's Post Orbit, gave 78.4 pounds milk, testing an average of 5.22 in the morning milkings, and 6.50 in the evenings. The third-prize cow gave 91 pounds milk, testing 4.02. In the butter test, the first-prize cow, Post Orbit, yielded 2 pounds 4 1/2 ounces from 38 pounds milk 182 days after calving. The second-prize cow made 2 pounds 9 1/2 ounces butter from 40 pounds 11 ounces milk; ratio, pounds butter to pounds milk, 15.78. It is said that seldom have the inspection and the milking awards so often gone to the same animals, though, in the case of the cow making the best individual record, she was an exception, having been placed third in the inspection.

THE RISE OF FOODS AND DAIRY FARMING.

Editor "The Farmer's Advocate":

Your queries in reference to the food supply for stock open up a rather wide question. In the first place, the scarcity of feed is greatly overestimated. At Annandale we have just as much feed as we ever had. In some things we are a little less, but in some a little more, and I believe this is true of several other places. Of course, it is true that there are small sections where there has been a partial failure, but then we have often had that before, and still have no great rise in price over the whole country.

I think we will have to look deeper for the rise in the price of feeding stuff of all kinds. There has not really been much fed yet, and an anticipation of a shortage would not raise prices so much so early. In fact, the rise in prices might be considered about what we might expect from the fact that the consuming public have been increasing at a very fast rate. Towns and cities have been growing, while the country, as a whole—the producers—have been at a standstill, if not decreasing. Of course, when consumption increases faster than production, it can be only a question of time until there is a shortage of production. Perhaps some of us who have thought about this question did not really expect to see it in our time, but now that it is here, it looks very much as if it were here to stay, and the question will be not "Back to the Land" because it is a saner and a better life, but "Back to the Land" or starve.

We have seen something of the increase in this country of the urban population over the rural, but those who have travelled in the States will see a greater example of this. Cities have made

closer, until now we find the cheese going out of the factory all summer scarcely a week old, in many cases only a few days from the hoops. We probably see here the reason of the shipping of the green cheese. In spite of the cry that has been against it, it has still been taken right up, almost to the hoops. The true reason will likely be that the food supply is short; and, although the dealers did not like it that way, still they had to take it or do without. Another reason why it would look as if consumption had overtaken production is that, to look at any line, we will find rather a shortage. While I consider that the shortage of this year's crop is overestimated, there is no doubt that the produce is selling at a very high price, and that is where it affects the feeder—the man who has been turning his products mostly into manufactured produce, whether hogs, beef or dairy products.

Taking, for instance, the production of bacon. The supply of hogs has been rather short. What condition will we have, then, when the production of hogs is cut down, as, no doubt, is the case. In fact, I know of some farmers that have killed off their fall litters, rather than raise them. Young pigs, in fact, six or eight weeks old, cannot be sold at a price of raising them, and if prices for the fat hogs are not raised, undoubtedly the best way would be for the farmers to kill off the little pigs, because there is not much profit in winter hogs in any case. It is not a question of buying any feed for them, but because grain is so high it will pay better to sell the grain than to feed it to the hogs. Of course, this must make a great shortage in hogs produced very soon, because there will not be so many raised next spring, either, and cutting down the feeding of

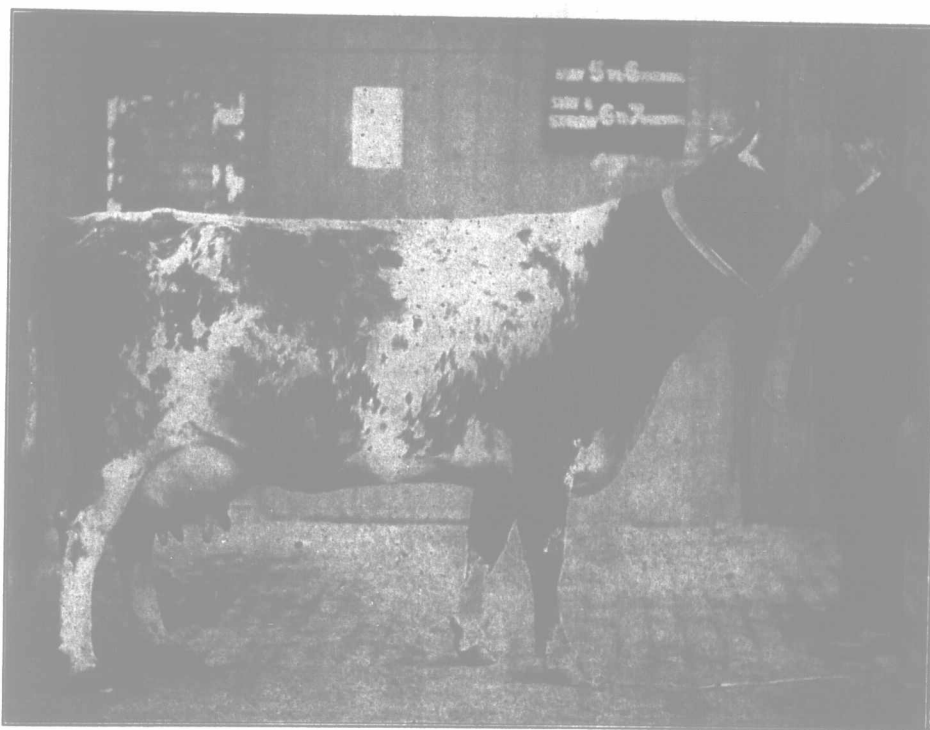
hogs will raise the quantity of grain to be marketed. In fact, I consider that if it depended alone on the conditions in our own country, grain would be cheaper next spring than it is now; but no doubt there is a shortage in other places which seems to be able to absorb the crop.

Coming down, then, to the dairy business, we find, as dairy produce is more perishable and less carried on hand, the rise in price is more sensitive when a shortage comes, and the rise comes more quickly. Although grain and feed may seem high to feed, yet milk and all its products are rising proportionately, and there is no doubt but what the price will be quite as high for milk and its products as the extra price for grain. In

fact, already people are talking about 40 and 50-cent butter, but 30 cents is quite a rise from what it formerly was, when we used to sell at this time of the year at 20 cents. Cheese is taken right up to the hoops, almost, not being kept in any factory, and there will, no doubt, be a further rise there.

What is also helping to raise the price of dairy products is that the demand for milk has been spreading. The condensaries are increasing in number, and we may easily know by the price they are able to pay for milk that they are doing a profitable business and can pay a good price. Of course, this milk goes into districts where dairying is not carried on, and it opens up other markets for dairy products. The outlook, then, for dairy products is very good, at least from the producer's standpoint. The consumer, probably, will not feel so good over the high prices, but we are now considering the producer, and not the consumer. Undoubtedly, there will be a decrease in some quarters of the production of milk, because many always do get cold feet very easily; but for those who have been doing their best to produce plenty of the right kind of feed and improve their cows, the dairy outlook, I should say, was very bright.

Coming to your questions, then, feed being high in price, even if it is grown, it will be the best policy to feed it to those cows that are in the best condition to make the biggest return for it. Those cows that have been milking all summer and are not producing so heavily, would probably be better if they were dried up when they get



Daisy.

English Shorthorn cow; not eligible to registry. First and silver medal, London Dairy Show, 1907. Record in butter test, 4 lbs. 1/2 oz. butter from one day's milking. Per cent. of fat in morning's milk, 5.84; in evening's milking, 6.9.

a wonderful growth, and we often wonder really how many of the inhabitants live. All those people must eat to live, and there must be a lot of produce to satisfy them somewhere. On the other hand, throughout many of the States the farms have been abandoned, and probably in no place is the production greater. In fact, it could not well be because the population of the rural communities has been decreasing, but, by the aid of improved machinery, farmers have been able to produce somewhat more individually, but probably have nearly reached their limit there.

Then, the opening up of the Northwest has produced a lot of grain, which has helped to stave off the scarcity of produce, but now they have a shortage the prices at once rush up. What would it be if they had had a greater shortage? In fact, is not the world's food supply getting too low? Statistics would not be altogether to be depended upon as to the world's food supply, because allowance would not likely be made for the change in the condition of the country. Formerly, grain used to be held over sometimes from year to year, but there has been little of that done in recent years. Farmers keep feeding more grain, and, as they grow the grain calculating to feed it, they would not carry much over, no matter what the ruling price might be. We see a better example of this in the case of how close the producers are selling up in the cheese business. Not long ago several months' cheese would be in the storeroom at the factory, and in many cases cheese was carried over at the factories all winter, until next spring. It has been gradually sold up

down to a small quantity, and let them get in better condition for next year's business; but for many who have cows fresh in the fall and winter, it will pay to take the very best possible care of them, and the increase in the price of milk will pay well for the increased price of feed. Besides, if cows that freshen in the fall and winter were allowed to go down in their milk now, they would be practically useless next summer, when feed will be cheaper and grass comes, and there is no doubt whatever that the price for the products will still be high.

As to my plan for the profitable production of winter milk, we have plenty of ensilage to feed all the cattle we have from now until grass comes, or longer. We have also a good supply of sugar mangels. The barns are full of straw, which was cut green and well saved. We have here, then, the basis of a good food supply for milk. We have also about the usual supply of hay, and our way of feeding is to feed the animals about all the silage they will eat, and all the straw they want. The quantity of bran or meal fed with the silage will depend upon the state the cow is in and how much she is producing. The same way with mangels. Those that are fresh and milking heavily will be fed more mangels, and a small quantity of hay will be fed every day. We do not expect to vary any from the usual practice of feeding, because the produce is selling at an increased price, quite as much as any grain or bran we may feed them. Not only that, but we have to look to the future of the herd. If they are let go down, it would take considerable time to get them back to producing right. On top of that, again, as mine is a pure-bred herd, and we raise all the calves from the cows, those that have not been well fed and not kept in good condition will not likely be as good as from cows that are in good condition. A man who has a pure-bred herd, or is raising stock, cannot afford, under any circumstances, to allow his herd to go down. Milk will net us about \$1.50 to \$1.60 per 100 pounds this winter selling to wholesalers, and condensers are paying about the same. GEO. RICE, Oxford Co., Ont.

A YEAR TO PROVE THE GOOD FARMER.

Editor "The Farmer's Advocate":
Feed is so high this fall that farmers are slaughtering their cattle wholesale. Not 75 per cent. of the ordinary number of cows will be kept over this winter. Hay is now worth \$18 per ton, bran \$25, corn meal \$34, shorts \$33, oil cake \$34. Oats are exactly 2 cents a pound. At these prices, bran and oil cake seem the cheapest, especially for those farmers who have silage from fairly well-matured corn.

I always advise economy in feeding, even when food supplies are plentiful and low in price. But, by economy, I mean that nothing shall be wasted; that is, everything eaten up. Moreover, to be economically fed, a cow must receive only such quantities of feed as she pays for, which means that a poor cow can never be economically fed, however low the price of feed may be.

This is one of the reasons why I believe that high prices for millfeed and roughage will be a benefit to the farmers, for it will teach them to feed carefully and to discard their poor cows. Another good thing is that the progressive farmer, whose modern methods are usually laughed at, is the one most likely to come out on top this year, and the effect will be to open the eyes of his less-advanced neighbor; for any fool can keep dairy cows and make some kind of a showing when prices of feed are very low and prices of milk and butter comparatively high. But when food supplies are very high-priced, without any kind of a proportionate advance in the price of milk and butter, is the time when the careful dairyman, who knows what his cows are doing, will have his innings.

I cannot advise economy in feeding, except in the way mentioned above. Our method of feeding is not the best, perhaps, and might not suit many, but we give it for what it is worth. We have no iron-clad rules, and the idea is to feed each cow according to what she does. Generally speaking, we give about 40 pounds of silage and 10 pounds of hay per cow per day for roughage. A small cow will probably need less, and a big one more. We soon find this out, and act accordingly. There should be practically nothing left in the manger when the cow has finished her meal. The grain ration is about one pound for four pounds of milk. Here, however, we sometimes go out of the beaten track. For instance, we might give a little more to a heifer with her first calf, so as to keep her milking as long as possible; also to a few of our cows which are entered for the Advanced Registry test. These get practically all the millfeed they will clean up. But we insist on this latter part of the contract between them and us. Some breeders will, no doubt, be found whose cows have given a wonderful quantity of milk on hardly any food at all, but our cows require something to eat, and lots

of it, to produce nine, ten and eleven thousand pounds of milk in a year. As long as they pay for what they eat and leave us a fair profit, we don't begrudge them what they get; and when they do not pay for what they eat, we get somebody to eat them, by sending them to the butcher. To feed this way, as it has been said over a thousand times, requires the use of scales, Babcock tester, and a knowledge of what the cows eat. Nothing extraordinary about the matter, just a close attention to business, a desire to know how it pays; in fact, nothing more than the smallest storekeeper would do—keeping track of what we give and what we receive.

It is impossible to say which feeds should be given, as you must first consult the cow. For instance, when immature corn is put in the silo, and you have alfalfa as roughage, you would be inclined to feed some corn meal if it sold about the same price as bran. But suppose—which does sometimes happen—that a few of your best cows will not eat corn meal? What are you going to do? You can't force it into them the same as you would a dose of castor oil. So, you must know the requirements of each cow, and feed accordingly.

Generally speaking, however, the farmer would be helped quite a bit by having some idea of the relative values of the different feeds. For instance, it would be folly for me to grind oats, which are worth \$40 per ton, and feed it to cows instead of bran, which I can buy for \$25, for it has been conclusively proven that ground oats are only worth about 10 per cent. more than bran for dairy cows. If, however, a man only had bran, at \$25 per ton, to feed to very young pigs, it would pay him to buy ground oats at \$40 per ton, and even sift these oats, for bran is too coarse and bulky for the stomach of the young pig, which would not thrive on it.



Woodland Victor De Kol.

Holstein bull. Second in class, Ottawa Exhibition, 1907. Owned and exhibited by J. H. Caldwell, Fallowfield, Ontario.

I may say, in concluding, as it has been said for years, that the farmer will have to keep closer tab on his business, or else he will be forced to quit farming. Keep fewer cows, only the best; weigh and test the milk, take some means of knowing approximately what you feed them, and you will make a fair living. But if you keep on groping in the dark, you will surely, unless you have a special Providence for yourself, some day come to grief and go out of business. GUS LANGELIER, Quebec Co., P. Q.

ALFALFA TAKES THE PLACE OF BRAN.

Editor "The Farmer's Advocate":
In this section of the country there is enough of feed for all kinds of stock. The high prices for grain is inducing many farmers to draw it to market. On this account, it may tell against winter dairying and hog production. Where feed is scarce, and has to be purchased at current prices, it will require great economy to make a profit out of winter dairying, even with the good prices for butter, with the average cow. I would suggest that farmers let those cows that are light milkers go dry and keep them up in good condition through the winter, so that they will be ready to produce milk when they freshen in the spring. A dry cow can be kept much cheaper than a milker. On the other hand, I would feed well the good milkers, and the profitable results may surprise many owners of cows.

For profitable production of milk, it requires good cows, cheap feed, and the right kind of a man to look after them. For the last year and a half we have not spent one dollar for feed of any kind on the farm. Our feed consists of silage, roots, alfalfa and red clover hay. This

year we have not much red-clover hay, but a good supply of alfalfa.

I think we could make the cows give more milk by feeding an allowance of bran and grain in addition, but it would greatly increase the cost of production.

We have a good deal of well-matured corn (grain) in the silage, and the alfalfa takes the place of bran very well, at very small cost.

When feed is short, there is a danger of cows becoming thin and being badly infested with lice. Let farmers look carefully after this, use some of the many good preparations sold for their destruction. It is cheaper to feed one mouth than a thousand. H. GLENDINNING, Ontario Co., Ont.

NEW BRUNSWICK DAIRY PROSPECTS.

Editor "The Farmer's Advocate":

In this locality farmers are, as a rule, milking quite or nearly as many cows as usual, as this may be considered the dairy center of the Province, and producers are looking forward to better prices for milk supplied to dealers in St. John, as well as higher prices for dairy products. The St. John trade is steadily increasing year by year, thus cutting into creamery business as time goes on. Personally, I think it rather a backwoods fashion to economize too much in feeding. I think all stock, especially cows, should always be fed well, and, while feed should be carefully fed—not wasted—I would advise a well-balanced ration, believing, with fairly good grain crops, straw can be fed at least once a day with profit while the roots last, thus saving hay to some extent.

My plan of feeding may not meet with approval of dairymen generally, but it suits me. In the morning, cows are first fed hay by farmer

himself, and stables cleaned (manure cellar) by help; then milking; then roots (or, later in the winter, scalded chaff or cut stuff, with grain mixed). After breakfast, cows are turned out to drink, bedded and fed hay. This only takes about half an hour, more or less, for twenty cows. They are then left to lie down and rest until a short time before milking, when a ration of dry feed, generally mid-dings or a mixed-grain feed, is given them, and stables cleaned out again and bedding evened up. After milking, if straw is plentiful, fill up their mangers with it, and it will be eaten with a relish, and what may be left is put under them. If enough grain and roots are fed, they will not only milk well, but will look well, too.

The advantages of this plan are that the farmer can oversee the feeding himself and have most of the day for other business; the work is nearly all done morning and late afternoon; the cattle are more contented than with noon feeding, and seem to do better, with considerably less labor. King's Co., N. B. H. T. HAYES.

PAYS TO FEED GOOD COWS WELL.

The September yields in various cow-testing associations afford some interesting and striking comparisons: Cowansville, Que., 111 cows, 48,795 lbs. milk, 2,139.1 lbs. fat; St. Marc, Que., 114 cows, 60,045 lbs. milk, 2,675.0 lbs. fat; St. Prosper, Que., 113 cows, 78,455 lbs. milk, 3,304.8 lbs. fat. From practically the same number of cows, the owners at St. Prosper obtained 27,660 lbs. milk and 1,165.7 lbs. fat more than did the owners at Cowansville. Butter-fat is particularly valuable nowadays. It pays to feed good cows well. Most of the farmers in the association at St. Prosper have been feeding soiling crops this summer. There is a first-rate combined creamery and cheese factory in operation. Some average yields per cow at other places are: Ste. Emelie, Que., Oct. 2, 130 cows, 426 lbs. milk, 4.5 test, 19.4 lbs. fat; Culloden, Ont., Oct. 6, 278 cows, 601 lbs. milk, 3.8 test, 22.8 lbs. fat; New Glasgow, P. E. I., Sept., 142 cows, 532 lbs. milk, 3.6 test, 19.6 lbs. fat; Jonquieres, Que., Oct. 6, 132 cows, 452 lbs. milk, 4.4 test, 20.3 lbs. fat. Ottawa. C. F. W.

WILL NEED TO ECONOMIZE GRAIN.

Editor "The Farmer's Advocate":
In reply to your inquiries regarding feed conditions in this locality, I beg to submit the following answers:

While the number of hogs fattened or wintered may and probably will be materially reduced, I do not think there will be any reduction in the number of cows milked, but there will be greater economy in feeding than usual, especially grain. It seems to be the general opinion that there will be no profit in feeding much grain to any kind of stock at present prices. I am under the impression that very satisfactory results can be obtained by mixing cut straw and hay with pulped roots and ensilage, and that it will prove quite as profitable fed without grain as with it, at present prices of feed grain. I would suggest that the above mixture be prepared a meal or two ahead, and moistened, if necessary, so that it will start to heat a little, being careful, however, not to allow it to become mouldy or stale. Of course, if a farmer has grain of his own growing, I think it would pay to feed it with the above mixture in limited quantities; but where he has to purchase grain for feeding, I would advise extreme economy in feeding it.

LORNE FOSTER.
Ontario Co., Ont.

20,778 POUNDS MILK FROM ONE COW IN 12 MONTHS.

Visitors to the Ontario Agricultural College during the past summer were shown a Holstein-Friesian cow, called Boutsje Q. Pietertje De Kol, which was expected to produce twenty thousand pounds of milk within the year. As a matter of fact, she has actually exceeded this estimate. From October 27th, 1906, to October 26th, 1907, she has given 20,778 pounds of milk, testing a fraction over 3.76 per cent., and containing 781.91 pounds of butter-fat. The cost of the feed, as charged up by the College authorities, was \$72.66. The value of the butter-fat, at prices that have been paid neighboring farmers by the College creamery, was \$190.38. If the 20,000 pounds of skim milk and buttermilk were to be valued at, say, 20c. per cwt., it would amount to \$40. Adding this to the value of the butter-fat, the total yield of butter-fat and skim milk would equal \$230.38. Deducting the cost of feed, we have a profit, over feed consumed, of \$157.72. At the prices for cream which have been received during the past year by her former owner, Mr. Geo. Rice, of Tillsonburg, Ont., the butter-fat in this cow's milk would have been worth \$224.57. The skim milk in this case would have been, say 175 cwt., worth \$35, making total proceeds of \$259.57; or a profit, over cost of feed, of \$186.91. To state this cow's record another way, according to the rule for estimating butter yield by adding one-sixth to the butter-fat, the estimated quantity of butter which could have been made from this cow's milk was practically 912½ pounds, which is about six times the yield of the average cow of this country. This is a wonderful record, one which very few cows would be capable of making. Prof. Dean writes that so far as he is aware, it is one of the best, if not the best, ever made in Canada, and he doubts whether any cow beginning her record before she was four years old has a better one.



Boutsje Q. Pietertje De Kol.

Holstein cow. Owned by Ontario Agricultural College. Record, from Oct. 27th, 1906, to Oct. 26th, 1907, milk, 20,778 lbs.; average test, 3.76 per cent. butter-fat, equal to 912.23 lbs. butter.

GARDEN & ORCHARD.

HORTICULTURAL PROGRESS.

Prepared for "The Farmer's Advocate" by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

LEAD ARSENATE AND PARIS GREEN.

The growing popularity of arsenate of lead during recent years has been quite marked. Horticulturists have felt that something as effective as Paris green, but cheaper, was desirable, and when the good results from the use of arsenate of lead became better known, many fruit-growers gave it a trial, with the result that it is taking the place of Paris green in some places.

A bulletin was published recently by the Connecticut Experiment Station, New Haven, Conn., entitled "Lead Arsenate and Paris Green," in which these two insecticides are compared, chemical analyses given, and formulas recommended. The bulletin is No. 157, and was prepared by J. P. Street and W. E. Britton.

The partial solubility of the arsenious oxide of Paris green in water resulting in injury to foliage, is a weakness in this well-known poison, for, while bad effects of the arsenious oxide may be obviated by the use of lime in the mixture, it is not always used, and had results from burning of the foliage are often reported.

Arsenate of lead contains arsenic in a practically insoluble form, making it possible to use more poison without injury.

The chemical analyses of eleven brands of arsenate of lead showed that they differed considerably in composition, the arsenic oxide ranging from 11.29 to 21.91 per cent. The Vreeland brand (Vreeland Chemical Co., New York) showed the highest percentage of arsenic oxide, being 21.91 per cent. Swift's arsenate of lead, which has been sold in considerable quantities in Canada during the past two years, ranked fourth, with 14.91 per cent. All the samples except Swift's were taken from stock which was on hand in the Station Museum. Swift's was bought on the open market. The author states that, "Allowing for the variations in the process of manufacture, it would seem that the content of arsenic oxide in the various commercial lead arsenates was conditioned more by the wetness of the material than by anything else. The content of water in the samples analyzed ranged from 33.65 to 58.44 per cent."

Arsenate of lead keeps in suspension longer than Paris green, which is one of its advantages over the latter, as it insures a more even distribution of the poison. It is important to have the arsenate of lead in the form of a paste, as it will stay in suspension longer and will distribute much better than if the material is dry, although, even when dry, it stays in suspension longer than Paris green. It is said not to be quite so effective when used with Bordeaux mixture as alone, which is probably due to the fact that the Bordeaux mixture renders it quite insoluble.

The adhesive properties of arsenate of lead are greater than those of Paris green. It is claimed that a single application of arsenate of lead will

give as good results as two or three applications of Paris green, as it will adhere to the foliage much longer.

Arsenate of lead contains only from one-third to one-fourth as much actual arsenic as Paris green, hence must be used in much larger proportions; three pounds to a barrel of water is what is usually recommended. Used in such large quantities, it is a little more expensive to use than Paris green, but the results are said to more than offset this. The manufacturers' prices for arsenate of lead, as given in the bulletin, are: "In 100-pound kegs, from 9.5 to 13 cents per pound; in 5 to 20-pound buckets, from 11 to 16 cents per pound; and, in 1-pound cans, from 11.5 to 17 cents per pound."

The effect of arsenate of lead on insects is not so rapid as Paris green, hence in the case of insects which are eating rapidly—like Colorado potato beetle—it has not been found so useful at the Experimental Farm, for the first application, at any rate, as the Paris green. On account of its greater adhesiveness, however, it is desirable for the later sprayings. It is recommended in the bulletin to use arsenate of lead a little sooner than Paris green would be used, to make up for its slower action.

HOMEMADE ARSENATE OF LEAD.

The formula for making arsenate of lead is given by the writers as follows: "Dissolve 24 ounces of lead acetate or 20 ounces of lead nitrate in one gallon of cold water; also, separately, dissolve 10 ounces sodium arsenate in three quarts water, both solutions to be made in wooden vessels. Pour the separate solutions into the spray tank, containing from 100 to 150 gallons of water; a white precipitate of lead arsenate immediately forms. This preparation may be made several times stronger without the least danger of injury to the foliage. The freshly-precipitated, homemade arsenate seems to keep in suspension better than even the best commercial preparations."

The formulas recommended by the writers are:

Formula for Lead Arsenate: Lead Arsenate, 3 pounds; water, 40 gallons.

For Paris Green: Paris green, 1 pound; fresh quicklime, 3 pounds; water, 80 gallons. Or, Paris green, 1 pound; air-slaked lime, 100 pounds.

A great advantage that Paris green has over arsenate of lead is its intense green color, making it impossible to mistake it for anything else, thus fatal accidents from using it for something else are very rare.

IMPROVEMENTS IN VEGETABLES.

Up to within recent years, nearly all the new varieties of vegetables which were originated and offered for sale were produced by seedsmen. Of late, the experiment stations have taken up the work of vegetable-improvement, and the New Jersey Station, at New Brunswick, N. J., is one which has been among the foremost in this work. The report of the Botanist, Byron D. Halsted, for 1906 contains 138 pages, in which are described the many varieties of vegetables produced, the objects in view in the cross-breeding experiments, and the methods employed in the work, with descriptions of how the work of selecting and breeding true to type is done.

The principal vegetables which have been used in breeding are beans, corn, eggplants, squashes and tomatoes, although some work has been done with Martynias, okra, onions, peas, peppers, salsify and udo. A stringless snap variety of bean, with fleshy pods, bearing small white seeds, and productive, is one of the main objects in the work with beans. A greater length of grain in medium-season, main-crop varieties of corn is sought for, and, as an example of the parents used to obtain this, mention may be made of the Country Gentleman and Stowell's Evergreen.

A new egg-plant, with bell-shaped fruit, pink outside and white within, also a white-fruited kind, have been originated.

In squashes, earliness with productiveness is sought, also a new shape which is neither flat nor crook-necked, but broad and with a short, straight neck. This squash is to be free from warts. The experiments with squashes have given very promising results.

It has been thought desirable to originate a tomato somewhat the shape of a goose-egg, with the interior filled with flesh and with few seed cavities, although the ideal tomato of the ordinary type is not overlooked. One of the most promising tomatoes produced is the Marvelosa, a cross between the Marvel and Ponderosa, which was tested at Ottawa this year and found to be quite promising.

A large number of varieties have been already originated by Prof. Halsted, and seed was distributed last spring to a number of experimenters. Mention was made in a former chapter of "Horticultural Progress," of these varieties, with notes on those which were thought to be of greatest promise at the Station. A collection was received at the Central Exp. Farm, and some of the new things are quite promising, though in

most cases the variety does not come sufficiently true to type to be reliable. In the New Jersey report there are published reports of a large number of persons who have tested the new vegetables. The work this station is doing should commend itself to the vegetable-growers, as, in the past, so-called novelties in vegetables were often nothing more than old vegetables under new names. Now novelties of merit have an authentic history.

Second Annual Report of the Ontario Vegetable-growers' Association, 1906:

The Second Report of the Ontario Vegetable-growers' Association for 1906 appeared some weeks ago, but has not been noticed in this column before. This report is a great credit to so young a society, and contains a large amount of very practical information, given by men who are commercial vegetable-growers themselves. The prize essays on potato, cauliflower, celery, tomato and onion culture are worth several times the membership fee of \$1.00, and, to one who is a beginner in market-gardening, they might be the means of saving or making many dollars. Other interesting articles in this report are: "Experiments with Tomatoes," "Growing Tomatoes Under Glass," "Forcing Grand Rapids Lettuce Under Glass," "Fertilizers in Relation to Vegetable-growing," "Forcing of Early Vegetables," "Melons and Melon-growing."

The report is published by the Department of Agriculture, Toronto. The secretary of the Association is H. B. Cowan, Toronto.

PROTECTING FRUIT TREES FROM MICE.

Thousands of dollars' worth of injury is done to fruit trees every year by mice, which girdle them during the days and weeks following heavy falls of snow. The mice burrow along the ground in search of food, and coming upon young trees commence to gnaw the bark. As a rule, they are not very troublesome in orchards where clean cultivation is practiced and no rubbish allowed to accumulate as a shelter for them; but, even in these, it pays to provide some sort of protection against mice and rabbits.

Wooden veneer wrapped loosely about the trunk, and tied, has been found an excellent means of protection, and is at the same time a first-rate preventive of sunscald, being, for this reason, particularly commendable for northern districts, where sunscald is often a cause of much loss.

A mound of earth about a foot high around the base of the trunk will often turn mice, and even careful and timely trampling of snow is frequently effective, though as this chore is liable to be neglected at crucial times, it is not advisable to depend on it.

THE PLAN OF PAINTING THE TRUNKS.

Last year before the Ontario Fruit-growers' Association, W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa, reported very favorably on the results of experiments with painting the trunks to protect them from mice. The paint was not recommended for peaches or cherries, as at the Virginia Experiment Station some injury to these trees occurred from its use. For apple trees, however, it was found entirely safe at Ottawa as well as in Virginia. Ready-mixed paint should not be used, as it may contain some injurious mineral oil. White lead and pure linseed oil should be mixed together to a consistency about the same as for an outside coat on a building. With this, the lower part of the tree should be heavily coated.

Still another, and a very good form of mice protection, is wrapping the trunks with building paper, and, judging from Prof. Sears' 1906 annual report on an experiment tried at Truro in the winter of 1905 to 1906, ordinary newspaper proved quite as effective as building paper, alternate rows of trees having been wrapped with each in November, 1905. In an orchard of some hundred and seventy-five trees, only one or two lost the papers by blowing off. This is often a serious trouble, but can be prevented, Prof. Sears believes, by the proper method of putting the paper on. This we describe as follows, in his own words:

"Our system has been to start with one corner of the sheet of paper, and wind it about the trunk, being sure to start low enough down so that the paper will connect well with the ground at the bottom of the tree. This brings us out, at the end of the operation, with the opposite corner of the sheet, and gives the wind a much poorer chance to get hold of the paper and tear it off, which is a common difficulty with papers where they are put on by starting with one side of the sheet. We end by tying the paper at three points with binder twine, and throwing a little earth about the foot of the tree and tramping it down to make the connection secure there. The past season we allowed the papers to remain on the trees until nearly the end of the season of cultivation to guard against accidental damage from horses and cultivators."

WINTER PROTECTION FOR STRAWBERRIES.

Editor "The Farmer's Advocate":

I have a strawberry patch which I have trained to narrow rows by cutting the runners. I would like to know whether I would be likely to destroy my patch if I plowed a furrow over each row from each side just about freezing-up time, and removed the same in the spring by harrowing, or, perhaps, raking it off. I expect to cultivate continuously in the spring until ripening time, and would like to let the patch renew itself in these cultivated spaces after picking-time, and, after it has done so, plow the old row over these new rows for their winter protection.

Wentworth Co., Ont.

G. F. D.

Ans.—We have never tried the plan suggested of managing strawberry plantation, hence are not in a position to speak definitely upon it. However, I would have some doubts about the success of the thing. In the first place, although it might be quite possible, under most favorable conditions, to cover the plants with the plow, and have them come out all right in the spring, it is more likely, however, that the earth covering would smother out the plants. Then, again, with regard to renewing the plantation from the old patch after picking, we have found that this is not a satisfactory method.

The plan I would recommend would be to cover the plants lightly this fall, as soon as the ground freezes, with a mulch of loose, strawy manure, or other such material, which will be sufficient to protect the plants from alternate freezing and thawing, and yet not heavy enough to smother out the plants. This mulch should be removed as soon as danger from frosts is over in the spring, and left as mulch between the rows. This helps to retain soil moisture quite as well as by cultivation, and protects the fruits from being splashed with soil during heavy rains. It also enables pickers to gather the fruit immediately after rains without getting into the mud. On the whole, I think this is not only a better, but a cheaper plan than keeping plants cultivated up till the fruiting season.

With regard to renewing a plantation, we have proved repeatedly that the best results come from selecting vigorous young plants from a new plantation which has not yet borne fruit, and planting these early in the spring. If these are not allowed to fruit the first season, they should make sufficient runners to make a row of good strong plants for fruiting the following season.

There is nothing like experimenting, however, to find out definitely just what methods seem best adapted to varying conditions. I would suggest that you try part of your plantation in the way you have outlined, and the other as I have described, and then you may see for yourself which will be more satisfactory under your conditions. If you decide on this plan, we shall be pleased to hear as to which you find more satisfactory.

Ontario Agricultural College. H. L. HUTT.

APIARY.

SAVE THE PIECES.

The year 1906 was a very unfavorable one for the bees. The winter and spring were both against good results in wintering and building up for the honey flow, where extra good preparations had been made the previous fall, and extra care bestowed in the spring. Then the honey flow, which should have rewarded the efforts of the spring, failed to materialize in a great many places, and, as a consequence, there was not sufficient increase to make up for the losses of the winter and spring. This naturally had a discouraging effect on the owners of the bees, many of whom, no doubt, last fall were careless in preparing their bees for what proved to be an even more disastrous winter and a spring which apiarists will in future refer to as simply desperate. And the summer which followed, such as it was, produced practically no surplus honey, except in a few localities.

This series of setbacks, following one another without a break, has resulted, as might be expected, in a large decrease in the number of bees in this part of the country. Indeed, it is estimated by those who are in positions to know best, that there are not more than a quarter as many colonies in the Province as there were some three years ago. Further, what bees there are left are not likely to be in such good shape for the approaching winter as they would be after a time of prosperity, so that severe losses may result in a great many places again next winter and spring, and the already depleted apiaries may be broken into still smaller pieces.

But don't throw up the sponge yet, Mr. Beekeeper, no matter how hard you may have been hit. Any game that is worth playing is worth playing to a finish, and, if you have any bees left, even if it be only one last colony, give them all the care and preparation you know of, just as if they had stored a hundred pounds of surplus last summer, for they would have done it if they could, and it is not their fault that they could not. Put them into winter the very best you know how, for next year may be the best on

record. Save the pieces of your scattered apiary, for honey is honey just at present, and the man who gets a crop next year, or for several years, most likely is pretty sure of a price that will make him glad he didn't give up. And save the hives that the bees have died out of, for they are worth good money. Don't let them kick around and become broken up. If the festive bee moth made a summer tour of your vacant hives, and left a bunch of web and cocoons as big as a turnip in each one, don't throw the whole business away as useless, but cut out the little corners of comb that the moths didn't need and save them up. There is good wax in them that can be taken out any time during the winter, and wax is worth money. Are there odd covers, bottom-boards, queen excluders, division boards, feeders, etc., etc., lying here and there about the premises, reminders of the days when honey was piling up so fast you wondered what you would do with all the money you would get for it, and when swarms were swarming in such rapid succession you could hardly keep track of them? Gather them together, and pile them away somewhere. You or some one else will need them some day, and they won't keep very well lying around promiscuously. Save the pieces!

E. G. H.

POULTRY.

WHAT IS THE BEST HEN FOR THE MONEY?

Editor "The Farmer's Advocate":

I have of late been breeding White Plymouth Rocks, and find them a very satisfactory breed for the farm. I can house about 100 birds conveniently, giving at least 12 square feet of floor space to each fowl. I have been using trap nests during the winter months, or part of the winter, for several years, and it has taught me many things. If I find a good, true-typed bird, full of vigor and fertility, and a persistent layer, I keep her until she dies, having found that, as a rule, a bird which lays exceptionally as a matured pullet, lays almost as many eggs per month as a hen, and decreases more or less each following year; while some of the poorer layers as pullets will lay very much less as yearling hens, and are often useless the third year. I have never been able to pick out layers by any sure method except the trap nest, although the good layers are usually busy, and go to roost with crops full of feed.

My method of rearing is very simple. I breed from a few good ones. They must be full-grown, the females often over standard weight, with full, well-fleshed breasts, broad backs, and lots of vigor, mated to a male not too large, but well put together, and of the desired type. I mark the eggs as laid with the number on the leg-band of the hen, and set each hen's eggs separately. As they hatch out, I toe-punch the chickens, so that in the fall I shall know which was the sire and which was the mother. These chicks are put out on unlimited range in flocks of not more than twenty or thirty, in colony houses, and brought in about September. The off-shaped, both males and females, are gotten rid of; the undersized and unhealthy are not wanted. The pullets are put in pens where they are to spend the winter, fed on wheat, ground bone, or meat scrap and oats, and allowed to run out part of the day for a supper of green food. When they get accustomed to the nests, the traps are dropped, and then one finds which hens pay their board. Some will lay month after month 20 to 25 eggs apiece; others make a spurt, and then rest for a month or two and start again; another will, perhaps, not lay at all, while others will only lay an egg apiece every two weeks. Some lay eggs two pounds to the dozen, or thereabout; others one and a half pounds to the dozen; some don't even go that. Some are white-shelled, and some lay brown or flesh-colored eggs. Some lay eggs with shells that are soft or thin and brittle, while others lay eggs of normal size and good firm shells almost continually.

But what of that? We set the eggs separately. This excellent layer has her eggs put under a hen; perhaps the eggs look all right. Testing-time comes—a few weak germs, no chicks; the next lot a few chicks, half of which the mother hen kills by stepping on them. Then there is the second hen; her eggs are like the eggs laid by hen number one. Her eggs hatch out, and there is nothing but empty shells left in the nest. The chickens are strong. We toe-punch them. The hen which mothers them never seems to step on them. We mix the two lots, and they are put with the one hen. In the fall, when chicks come in, eggs from hen number one have hatched out a fair number, but only a few are left. Eggs laid by hen number two seem all to have hatched; they seemed to have grown nicely, and almost all the chicks survived.

My experience has been that some hens lay well, and almost every egg will hatch into a strong chicken; another will lay almost as well, but in almost every egg laid during three successive hatching seasons, mated to different male birds. Other hens, again, will lay eggs, of which a small

or maybe a fair percentage are fertile. When fall came, there would be an occasional promising chick. The chicks from these different birds were in turn used as breeders, when I found out, to my very great surprise, that fertility in eggs was, to a very marked degree, hereditary. The few surviving pullets of hen number one had not many chicks to their credit, while chicks from hen number two laid eggs which were all hatchable.

I have laid particular stress on fertility, and I have found that, as far as laying powers go, like produces like; also that full sisters lay eggs of the same shape, or resembling those laid by the mother, and often much the same size, some, but not too many, improve on the mother. If a man wishes to succeed in poultry-raising, he can, with a few tested breeding hens, mated to a proper male bird, fed on good wholesome food, kept dry, clean and comfortable, raise from eggs laid by these hens, set under a few hens, vigorous, high-class chickens, free from all white diarrhoea and other anæmic conditions due to improper housing and feeding, low vitality in breeding stock, and hatching by artificial means, which in many makes of incubators means unnatural methods. Were we farmers to use more common sense in poultry management, and get right down to the bottom of things, poultry—the neglected poultry—could be made a revenue-producer second to none. Just pick out the hen that lays plenty of large, normal eggs—eggs which will hatch. Keep the best and kill the rest. Keep the general-purpose fowl, let it be Rock, Wyandotte or Orpington. Vigor and fertility are the keystone to poultry-raising, the lack of which has sent, is sending, and will send, many poultry plants to financial ruin, and has put many a would-be poultry-breeder into some (to him) more remunerative business. It is not the breed, but the individual.

The chicken fever took hold of me quite a few years ago. I almost ruined my whole flock by artificial methods of incubation and breeding from everything. It took 100 eggs to hatch 25 chickens; half of them died, and the survivors were not much good. Proper housing is absolutely essential, but many a good bird winters in a packing-box, while some of the good, up-to-date houses are filled with consumptives. So, I have confined myself to a discussion of the Yankee's question, "What is the best hen for the money?"

Is not this the foundation of all farm crops which are to be raised with profit: Seed selection, strong germs, good vitality, and food, sunlight, air, and care, to raise the crop to maturity.

GEO. A. ROBERTSON.

Lincoln Co., Ont.

A FARMER'S POULTRY-HOUSE.

Editor "The Farmer's Advocate":

Having been in the poultry business quite extensively of late, I will try to answer your questions as far as experience permits. I keep from ninety to one hundred hens in the winter, all pure-bred Barred Plymouth Rocks. My henhouse is 16 x 24, on a cement foundation one foot above the ground. The walls are double-boarded, with tar paper between them, the outside lumber being matched. It is 12 feet from the sill to eaves, which gives me a second floor, used for setting the hens in the spring, and for keeping feed in during the winter. It is ventilated with galvanized pipes extending about three feet above the roof, and having four windows on the south side, 2 ft. 10 in. wide each, and extending from the top of the sill to within one foot of the upper floor. This allows the sun, when it is low in the winter, to shine nearly to the opposite wall. The floor is of cement, kept covered with six inches of fine, clean straw.

Now, as regards an ideal poultry house, the site has much to do. It should be on the south side of the farm buildings and straw stack, where it is high and dry, if you have to draw gravel to make it so. Then, by having a small slide door on the side next to the stack large enough for the poultry to pass through, you will find the hens working around the stack most of the time, whereas, if you confine them all the time, they are sure to shrink in their egg yield.

In regard to the roosts and nests, which are very important, both as to convenience and cleanliness, I will try to describe the very satisfactory way I have mine placed. I have a row of nests and four rows of roosts running across both the east and west ends, from the north side to within three feet of south side, which would make them about thirteen feet long. The nests are fastened to the wall just high enough so the fowl, when standing on the floor, cannot see into the nest, thus preventing her from eating the eggs and driving off other birds. The nests should be just large enough to permit one bird in each nest, with a roof steep enough to prevent the chickens from roosting on it. Four feet from each end wall I have a square-bottomed trough, wide enough to clean with shovel. This is 30 inches from floor to top, which is 8 inches deep, and hung from joists above. It is tight-boarded from back part

of trough to within 2 feet of ceiling, at a point above the nests. Four poles run lengthwise, and one foot above these boards, for roosts. This allows the use of a hoe to scrape down into the trough anything that fails to roll down itself. The above-mentioned arrangement gives a clean place to gather the eggs, with a walk under the roost and between the row of nests and the suspended trough for the droppings, a clean floor, and entirely to the use of the poultry. I have found mine very satisfactory for the number of birds kept, this allowing about 4 square feet to the bird.

Elgin Co., Ont.

SUBSCRIBER.

CURTAIN VENTILATION—TRAP NESTS.

Please answer the following questions through your "Questions and Answers" department:

1. Which would make a better curtain to drop before hen roosts on cold nights, cotton or old sacking?

2. Would you advise placing cotton, for ventilation, on front windows, or both front and end windows of henhouse? Front, facing south-east, has three windows, and end, facing north-east, has one window. Cotton is to be stretched on lower half of window frame, and upper half to be of glass.

3. Please tell how to construct cheap and substantial trap nests.

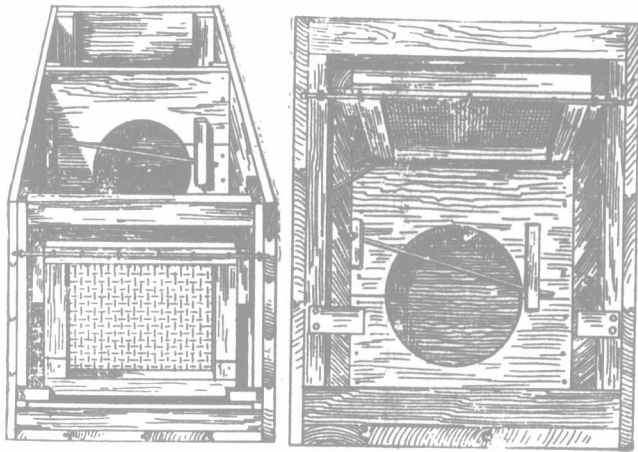
W. S. McI.

Ans.—1. The one essential of such a curtain is that it be of open mesh. If the sacking is looser in texture than the cotton, so much the better.

2. As a rule, we believe it is more satisfactory to have the curtain only on the one side, the south, of course, by preference. It could do no harm, however, to provide a curtain for the north-east window, and use it when weather conditions seemed to call for it. The expense of an extra curtain or two is quite inconsiderable.

3. The accompanying illustrations, showing the design of the Maine State trap nests, were published in "The Farmer's Advocate" a year or so ago. We reprint them now, with the subjoined description. The nest is very simple, inexpensive, easy to attend and certain in its action.

It is a box-like structure without front end or cover, 28 inches long, 13 inches wide, and 16 inches



Trap Nest.

deep, inside measure. A division board, with a circular opening 7½ inches in diameter, is placed across the box, 12 inches from the rear end, and 15 inches from the front end. The rear section is the nest proper. Instead of a close-made door at the entrance, a light frame of 1 by 1½-inch stuff is covered with wire netting of one-inch mesh. The door is ten inches wide by 10 inches high, and does not fill the entire entrance, a space of two inches being left at the bottom and one inch at the top, with a good margin at each side, to avoid friction. It is hinged at the top and opens up in the box. The hinges are placed on the front of the door rather than at the center or rear, the better to secure complete closing action. The trap consists of one piece of stiff wire about three-sixteenths of an inch in diameter and 22 inches long. This piece of wire is shaped so that a section of it, 11 inches long, rests directly across the circular opening in the division board, and is held in place by two clamps, one on either side of the circular opening. The clamps fit loosely, and the slots are long enough to allow the wire to work up and down about three inches, without much friction. The next section of wire is eight inches long, and it is bent so that it is at right angles with the 11-inch section. It passes along the side of the box, 11 inches above the floor, back towards the entrance door, and is fastened strongly to the wall by staples, but yet loosely enough so that the wire can roll easily. The remaining section of the wire, which is three inches long, is bent toward the center of the box, with an upward inclination, so that it supports the door when it is open and rests upon it. The end of the wire is turned over smoothly, forming a notch into which the door may slip when opened.

As the hen passes in under the open door and then through the circular opening to the nest, she raises herself so that her keel may pass over the lower part of

the division board, and her back presses against the horizontal wire, as she passes it, and lifts it enough, so that the end supporting the door slides from under it, and the door swings down and passes a wire spring, near the bottom of the box, at the entrance, which locks it and prevents the hen from escaping and others from entering.

THE FARM BULLETIN.

FARM VALUES IN NEW YORK STATE.

At the recent conference in Syracuse, N. Y., called to consider the question of the decreased value and production of farm lands in proximity to the large cities, it was brought out that in the thirty years ending 1900, the value of farm property in the State had decreased by \$126,000,000. In the twenty years ending with 1900, the number of males engaged in agricultural pursuits in the State was reduced by 13,312; while the number of males engaged in other gainful pursuits increased by 814,000. In the same period the number of farms decreased by 14,338, while the percentage of farms occupied by their owners declined from 83.5 of the whole to 76.1 per cent. In the ten years ending with 1900, the rural population decreased by 115,923, while the city population increased by 1,371,543.

The reasons for the foregoing condition of affairs were ably discussed by Secretary of Agriculture Wilson whose address we have reviewed editorially elsewhere. Another speaker, Prof. W. H. Jordan, of the State Experiment Station, Geneva, showed that a change in the direction of improvement had set in, as a result of fairer legislation in relation to agriculture, improved rural schools and more up-to-date methods on the farm. Prof. Jordan declared, with well-directed emphasis, that one of the greatest calamities that could afflict the race would be the passing of the soil into the hands of an inferior race of men.

HARD-WHEAT FLOUR.

Editor "The Farmer's Advocate":

I have read with interest your editorial referring to the superiority of soft-wheat flours for pastry purposes, and the advisability of blending it with hard-wheat flour for bread-making. Unfortunately, I missed the copy of "The Farmer's Advocate" containing Professor Harcourt's article on this subject, but I am under the impression that one or two features, which are extremely important, were not considered at all. The writer has done a great deal of experiment work along these lines during the past three years, and is thoroughly convinced that for a nice colored, crisp, well-flavored pastry, combined with economy, a good hard-wheat patent is superior to any soft-wheat flour.

There is a prevailing opinion that hard-wheat flour requires more shortening, for which some of the leading millers have been largely responsible, owing to the fact that they have advised the public that it was necessary to use more. Such is not the case. If the same amount of shortening and water is used, we have found that owing to its higher absorbing power, it requires some 17 to 20 per cent. less of the hard-wheat flour. This means a saving of approximately \$1 per barrel. The question immediately arises, if all other ingredients are equal and less flour is used, it must result in less pastry. This is true, so far as weight is concerned, but the nutritive value is still greater, and as hard-wheat-flour pastry requires to be rolled thinner than the soft-wheat, it will go just as far.

We, of course, must consider the greatest good to the greatest number, which, in this case, is the consuming public, the majority of whom will only keep one flour in the house. As hard-wheat flour is admitted to be the best for bread-making purposes, the mills using this class of wheat exclusively are making fancy patents, which are ideal all-round family flours, suitable for bread, cake or pastry. As to the use of blended flours for bread-making, this is again a matter of economy. Professor Chas. D. Woods, of the Maine Agricultural Station, in speaking of feeding stuffs, made the following statement: "The cost per lb. of protein in a given feeding stuff is of more importance than the ton price." The same thing applies to human feed. Consequently, if we pay \$6 for a barrel of hard-wheat flour, containing 12 per cent. protein, the latter costs approximately 25c. per lb. If we pay \$5 for a barrel of soft-wheat flour, with 9 per cent. protein, the cost is 27.2c. per lb., and a 50-per-cent. blend of the two, at \$5.50 per barrel, would mean a cost of 26.1c. per lb. protein. Dr. Hutchison, an authority on dietetics, makes the following statement: "An ideal food would contain one part of proteid to 4.2 parts carbohydrates."

A good hard-wheat patent would contain about one part of proteid to six parts carbohydrates; a soft-wheat patent of about one proteid to 8.5 carbohydrates, and, as bread forms the staple article of diet in many of the homes, it is important that the flour from which it is made has as high a proteid content as is consistent with the proper elimination of the outside covering.

M. A. GRAY.

Montreal, Que.

POOR COPY

PRINCE EDWARD ISLAND'S HARVEST.

Among the many influences tending to populate the West at the expense of Eastern Canada are the dazzling facts and figures of Western crop production played upon with ingenious purpose by writers and speakers who ring the variations on our wonderful Western heritage. In saying this, no reflection is cast. All Canada has reason to rejoice that the vast Canadian plains region is being triumphantly advertised before the world, and it is well, indeed, that a considerable quota of Easterners have settled there to found Canadian institutions, and impress on the heterogeneous swarms of settlers homogeneous Canadian characteristics. Nor would we see the westward migration stemmed. At the same time the most casual observer must conclude that of late years, it has been of rather too great volume for the good of the Eastern Provinces. It is evident that some people have lately been leaving good opportunities behind, and it is well, at this stage, that the Eastern press should give a little heed to advertising the resources, production and capabilities of Ontario, Quebec and the Maritime Provinces. Of these, Prince Edward Island is the smallest in area, and yet this year her million-acre farm has produced quite a tidy crop of agricultural wealth, to say nothing of the oyster, lobster, cod, mackerel, herring and other marine wealth harvested about her saline shores. The following estimate of farm produce, grown on P. E. Island in 1907, is published over the signature of S. E. Reid, Provincial Commissioner for Agriculture:

Wheat, 650,000 bushels; barley, 200,000 bushels; oats, 9,000,000 bushels; buckwheat, 49,000 bushels; mixed grains, 500,000 bushels; hay, 168,000 tons; potatoes, 4,000,000 bushels; other root crops, 4,000,000 bushels; cheese, 2,000,000 lbs.; butter, 500,000 lbs.

Unlike some other States and Provinces, where vast aggregations of capital bulk large in the total wealth, Prince Edward Island can truthfully claim that the proceeds of her harvests are quite equitably distributed. There are few rich people in the Island Province, but, on the other hand, few poor ones, and practically no paupers or indigents. A rugged original Celtic and Saxon stock has been nurtured amid invigorating conditions of soil and climate, producing the thrifty Prince Edward Islanders of to-day—a people who have won acknowledgment all over the continent, and who only need better winter communication and marketing facilities to make their Province, to a greater degree than it yet is, a flourishing community of prosperous homes.

THE SCALE-INFESTED FRUIT.

Your readers will be pleased to know that prompt action has been taken to obviate the danger of infestation with San Jose scale from the American pears that were shipped in to the Grimsby Canning Factory. As soon as it was known that a car of these scale-infested Kieffers, from Delaware, was being unloaded at Grimsby, a public meeting of fruit-growers was held, and communication made with the Minister of Agriculture. The inspector was at once sent over, and the worst carload condemned and shipped back to the United States. But this car was only one of twenty of the same kind; so, after conference with the officials of the Canadian Cannery, Limited, who had imported them, and were having them distributed among their various factories, it was decided to allow the pears to be bagged in the cars and taken to the factories and thoroughly scalded, under direction of scale inspectors, so as to destroy the scales before paring.

The Minister and his advisors considered this the wisest course, because it caused the least loss to the canners, and yet thoroughly protected the fruit-growers.

L. WOOLVERTON.

SASKATCHEWAN CROPS.

Late official returns received by the Saskatchewan Department of Agriculture from a thousand correspondents in all parts of the Province, indicate that the total wheat yield for 1907 is nearly 30,000,000 bushels. Earlier and less conservative estimates had placed it at 35,000,000. According to the last estimate, the acreage under crop is 1,965,774 acres, and the average yield about 15 bushels per acre. In 1906, the acreage was 1,730,586; average yield per acre, 21 bushels, making a total production of 37,000,000 bushels. It is too early, as yet, to estimate accurately how the crop will grade. Certainly, the average quality will be considerably below last year, and some of the crop will be unfit for any purpose except feeding. The opinion has been ventured that the lower milling grades will sell for as much as the highest grades did last year, and some go so far as to claim that the 30,000,000-crop this year may realize as much as the 37,000,000 bushels harvested in 1906. Considering, however, that a considerable proportion of the total crop has to be reserved by the farmer for seed and bread, it is building pretty high to say that the marketable surplus from a crop of 30,000,000 bushels will net as much as the marketable surplus of last year's crop, which was not only much more abundant, but graded very high. Nevertheless, Saskatchewan is much better off than might have been feared.

Mr. Wood, the painstaking and capable herdsman under whose care the enormous record of 20,778 lbs. milk in twelve months was made by the Holstein cow at the O. A. C., has given up the charge of the dairy herd and gone to the Central Experimental Farm, Ottawa, to take charge of the herd there.

THE BRITISH CROPS OF 1907.

"It must always be a matter of congratulation to all classes of the community, whether dwellers in town or in country, when agriculture has its gleams of prosperity. The oldest, most permanent, and most universal of all industries, it has too often during the past thirty or forty years been 'down on its luck.' Hard times have come to many a farmer, ill-prepared by training or experience to meet them, and he has gone under in the race of life. The laborer, too, has left his native fields for the showy, but precarious, attractions of the town, leaving behind him an inefficient residuum for the tillage of the soil; and some have been inclined to despair altogether of the business of agriculture. We do not share that despair. As farming becomes more scientific, and the earth yields larger increase, there is already more profit, and, consequently, more attraction, in agriculture than there has been for many years; and we can all unfeignedly rejoice when so good a harvest as this year's rewards the husbandman's toil in the past and kindles his hopes for the future."—[London (Eng.) Times.]

FARM VS. VILLAGE TAXATION.

Editor "The Farmer's Advocate":

I do not wish to criticise your editorials on public-school systems in that they tend to wean young people from the farm to fill American cities. I am only one out of thousands who would never have owned a farm if I had not left the farm and gone to the city. However, I will give you some facts about your public school wherein you can probably help us out. I am in the Princeton school section, and own a farm valued at \$3,000. Copy of tax-card:

To county tax	\$ 7 20
To township and school	16 00
To school section 21-3	12 80
To school section 21-3	6 00
Total	\$42 00

Princeton boasts of one small school, called a high school; sometimes as high as three teachers; two general stores, and one of them valued at \$10,000, paying a total tax of about \$17. A carriage-maker owns a splendid home and shops, and pays about \$7, and all other property in comparison.

Why is it the business and village property is not taxed according to its value, like farm property? Is not \$42 an outrageous tax? Your tax system is rotten, worse than it is in Chicago. Is it any wonder the Americans threw the English tea into the sea? Oxford Co., Ont. JUNO.

[Note.—The above communication seemed to imply such unwarranted discrepancy in the taxation of village versus county property that we suspected there must have been an error in the citation of figures, and, accordingly, wrote the township clerk of Blenheim, to whom we are indebted for the following illuminating reply.—Editor.]

Editor "The Farmer's Advocate":

I submit, with pleasure, the following particulars: In the first instance, your correspondent, "Juno," is assessed for \$4,000 instead of \$3,000 as stated. The statement of his tax, as given, is correct, levied according to the following:

County tax, 1 8-10 mills on the dollar.....	\$ 7 20
Township and general school, 4 mills	16 00
School tax, sec. 21, 3 2-10 mills	12 80
Deb. school tax, sec. 21, 1 5-10 mills	6 00
Total	\$42 00

Further, he states there are two general stores, one of them valued at \$10,000. Permit me to say, with all fairness and due regard to my friend's valuation, that there are no two business places in Princeton worth \$10,000. The facts are these, the best store in Princeton, and the one he evidently refers to as paying a total tax of \$17, is assessed for \$2,700.

County tax, 1 8-10 mills.....	\$ 4 86
Township and general school, 4 mills	10 80
School tax, sec. 21, 3 2-10 mills	8 64
Deb. school tax, sec. 21, 1 5-10	4 05
Total Tax	\$28 35

Just a misrepresentation of \$11.35. The other store in the village is assessed for \$2,600.

County tax, 1 8-10 mills.....	\$ 4 68
Township and general school, 4 mills	10 40
School tax, sec. 21, 3 2-10 mills	8 32
Deb. school tax, sec. 21, 1 5-10 mills	3 90
Total tax	\$27 30

The carriage-maker, whom he states pays a total tax of \$7, is assessed for \$800.

County tax, 1 8-10 mills	\$ 1 44
Township and general school, 4 mills	3 20
School tax, sec. 21, 3 2-10 mills	2 56
Deb. school tax, sec. 21, 1 5-10 mills	1 30
Total tax	\$8 40

I have not included the statute-labor tax in the village lots, which would make their tax considerably more.

These are facts which cannot be disputed, and where "Juno" got his information, I am at a loss to know. However, one thing is clear. It is both fitting and becoming any sane man to know his ground before he asks the editor of any medium to give an explanation on any question, the premises of which is based wholly upon supposition or the product of his over-fertile imagination. I am free to admit that under the new assessment Act there are discrepancies existing, some of which are difficult to adjust; but, so far as is possible, I believe the assessors of this township try conscientiously to do their duty in a way that every rate-payer shall bear his proper proportion of the tax.

HUGH ALLAN,

Oxford Co., Ont.

Clerk, Tp. of Blenheim.

LUXURY DEPRIVES NECESSITY.

Yet another paper has delivered itself on the servant question. The Toronto Mail and Empire concludes a column editorial with the following paragraph, which drives one point pretty squarely home:

"Probably the very heart of the trouble is in the housewives themselves. The louder they cry to be relieved of housework, the more they convince girls that housework is contemptible. Their profuse apologies to visitors who may surprise them in some little domestic employment is a further advertisement of their loathing for it. In the face of these facts, of what avail are sweetly-scented, beribboned essays on the dignity of labor, and platitudes about making things pleasant for their hired help? That there are thousands of women who are so genuinely busy in the cares of rearing children that they have no time for housework in no wise alters the fact that more thousands have the time, but not the inclination, for baking, cooking, dusting, sweeping, etc. The latter are just as wealthy as the former, and can afford to pay for the help they don't need, thus increasing the demand, and putting up the price of labor. Women to whom help is a luxury take servants from women to whom it is a necessity, with the result that dissatisfaction is general. One way to lessen the demand is for parents to train their children to do housework, even if the time should be stolen at the expense of a little greater proficiency in the art of china-painting and burnt-leather exercises."

CHINESE IMMIGRATION.

For the first nine months of the year 1907, ending with September, 782 Chinese entered Canada, and contributed, by way of poll tax of \$500 each, no less than \$391,000 to the Dominion treasury. They are still arriving at Vancouver in fairly large numbers as compared with the preceding two years, and by the end of the year it is probable that the total of the Chinese capitation tax will run close to half a million dollars. It is understood that many of them are being brought over by contract, the \$500 head tax being advanced by several rich Chinamen in this country, for whom they agree to work.

The increased poll tax of \$500 has now been enforced for three years. During the first fiscal year it was in force, 1904-05, only eight Chinese entered the country. In 1905-06 the number was 22. In 1903-04 there was a large influx, in order to escape the coming increase of the tax from \$100 to \$500, the number for that year being 4,719. For 1902-03 the number of Chinese immigrants was 5,243; for 1901-02 it was 3,523; for 1900-01 it was 2,518; for 1899-1900 it was 4,231, and for 1898-99 it was 4,385. The total immigration since 1898 has been 25,441.

LOCAL TELEPHONES IN GLENGARRY.

The Glengarry Telephone Co-operative Association, with lines covering a goodly portion of Lochiel Township, is now an established fact. The work was completed recently, the central office being at Lochiel. Already phones have been installed in some twenty homes, covering points at McCrimmon, Laggan, Fassifern, Lochiel and Glen Sandfield. Subscribers have free use of the telephones anywhere on the line, but pay messages and conversation must be sent through pay station. Non-subscribers have use of telephones at pay stations only. For the nominal sum of five cents, subscribers of the Co-operative Association may speak to subscribers of the Bell Telephone system in Alexandria, and when using the long-distance, the Bell Telephone rates are charged plus the rate fixed by their own company. Mr. Peter Chisholm is the president of the company, and Mr. M. J. Morris, also of Lochiel, is the secretary-treasurer. Mr. Chisholm writes thanking "The Farmer's Advocate" for information on independent telephone lines given last spring, which aided in carrying out the project.

FORTHCOMING SHOWS.

Nov. 30th to Dec. 7th, International, Chicago.
Dec. 9th to 13th, Ontario Winter Fair, Guelph.
Feb. 12th to 14th, Ontario Horse-breeders' Show, Toronto.
Nov. 12th to 16th, Ontario Horticultural Show, Toronto.

[Note.—During the above week, meetings will be held of the Ontario Fruit growers', Vegetable-growers', Beekeepers' and the Horticultural Associations.]

THE ENTOMOLOGICAL SOCIETY OF ONTARIO.

The forty-fourth annual meeting of the Entomological Society of Ontario was held at the Ontario Agricultural College, Guelph, on Thursday, Oct. 31, and Friday, Nov. 1st.

The meetings were opened by Dr. Fletcher, as President, and commenced by a conference on fruit-tree insects, in course of which several points of interest to fruit-growers were brought up. A small dark beetle (*Solytus rugulosus*) has been attacking cherry trees in the Niagara district during the past year, so that large numbers of the growers thought the trees had been blighted. The insect cuts into the bark, and tunnels beneath it. Gummy exudations at the injured points enable it to be readily detected. The branches in which the beetles have tunneled, die, thus severely injuring the tree. The remedies suggested were: (1) Chopping out and burning all dead trees and limbs and affected portions, and (2) applying carbolic washes early in spring. The codling moth (*Carpocapsa pomonella*) has also been exceedingly abundant in the Niagara district during the past year, so that in some cases nearly fifty per cent. of the apple crop was ruined. This is attributed to the lack of care on the part of the fruit-growers in applying the remedies, since, on the Central Experimental Farm, at Ottawa, where spraying and bandaging are systematically persisted in, there have been no attacks of codling moth for ten years, while a short distance away they are very numerous. The oyster-shell bark-louse, although plentiful this season, has been quite reduced in numbers by the cold rains, which came on shortly after the larvae had hatched. The scarcity of bees, for fertilizing the apple and other fruit-tree blossoms, was also attributed to the late cold weather in the early part of the year.

Various other insects were discussed, and the reports of the directors from the various points through the country were read, as follows: Mr. Young, from the Ottawa district; Mr. C. E. Grant, Midland district; Mr. Williams, Toronto; Mr. Nash, Toronto; Mr. Fisher, Burlington, and Mr. Balkwill, from London. The general opinion of these gentlemen appeared to be that, although some insects had appeared abundantly, the great majority of them had been greatly retarded in development by the late cold spring.

In the evening, a very interesting account was given by Prof. Kirkland, of Massachusetts, on the work carried on there in fighting the two important pests, the Gypsy and the Brown-tail moths, which had covered large areas and devastated them, but which have now been very greatly reduced in numbers. This is of great interest to Canadians, as the Brown-tail moth has already appeared in Nova Scotia, and there is no reason why it should not appear here, unless carefully attended to. A charming paper was then given by Dr. Fyles, of Quebec, entitled "Voices of the Night."

On Friday morning, the reports of the council and officers were given, showing a very satisfactory year's work; after which the officers for the previous year

were re-elected, with the exception of the delegate to the Royal Society of Canada, who was replaced by Mr. Gibson, of Ottawa. Rev. Dr. Fyles then read a very interesting and instructive paper, treating of the two-winged flies of Quebec, taking up many interesting and important forms, such as the bot fly, horse fly, cheese maggot and many others.

On Friday afternoon, the meeting opened with a paper by Mr. T. D. Jarvis, on the scale insects of Ontario, which dealt chiefly with the distribution of these insects—a most important group, numbering, as it does, amongst its many forms, such pests as the San Jose scale, the oyster-shell bark-louse and the cottony maple scale. Mr. Jarvis' list for Ontario is the largest by far that has ever been compiled, and affords an excellent working basis for future students of this group. Two technical papers on a rare moth (*Hepialus thule*), by Messrs. Lyman and Denny, were then given; after which, Mr. Gibson, of Ottawa, gave an account of an outbreak of *Halisidota tessalaris* and *Halisidota carya*, two moths, the caterpillars of which are not usually troublesome, but which appear to have caused considerable trouble during the past year. The remedy for these insects is a poisonous arsenical spray like Paris green.

Another insect, which has given considerable trouble during the past year, is the variegated cutworm. Dr. Bethune and Mr. L. Cesar, of the College, gave an account of the ravages of this insect. It appeared in the district around Leamington, Hamilton, and other points, and devoured almost every available food material, even destroying tobacco and climbing peach trees and evergreens. Mr. L. Cesar, who was sent down to the district to investigate the trouble, advised plowing trenches or furrows in front of the advancing caterpillars, and killing them when they had gathered there. This plan proved very satisfactory, and the insect was prevented from doing any more serious damage. After this, however, reports came in from many other sections regarding its attacks on garden and orchard crops, so that a small leaflet was printed by Dr. Bethune and distributed to the newspapers, giving an account of the insect, and a satisfactory method of dealing with it.

This paper having been concluded, Dr. Fletcher gave an address upon the advantages of the Entomological Record, a record of the working entomologists and their specialties, to the investigators, since, by reference to it, one can readily find addresses of those interested in the same lines as is he himself. He then gave his presidential address upon "The Entomological Outlook in Canada," which he considered extremely favorable. He emphasized the value of good grounding in producing specialists in various lines, and the extreme value to the agriculturist of economic entomological work, systematically and thoroughly carried out, and having as its final aim the practical application of scientific methods in subduing and controlling our insect pests.

In the evening, a lecture was given by Dr. E. M. Walker, of Toronto, on the collecting and rearing of dragon flies at the Georgian Bay Biological Station. This lecture was illustrated by lantern views, and proved to be a very instructive account of these insects, their habits, and the manner of studying them, which have been little worked upon in Canada up till this time. With this paper, the meetings were brought to a close. In spite of the fact that the holiday season interfered somewhat with the regular attendance, a very fair number were present at the meetings, and an extremely profitable series of papers and discussions was held.

OFFICERS-ELECTED.

The election of officers resulted as follows: President, Dr. James Fletcher, Ottawa; Vice-President, T. D. Jarvis, O. A. C.; Secretary, L. Cesar, O. A. C.; Treasurer, Prof. S. B. McCready, O. A. C.; Librarian, Prof. C. J. S. Bethune, O. A. C.; Curator, J. Eaton Howitt. Directors—C. H. Young, Ottawa; C. E. Grant, Orillia; J. B. Williams, Toronto; C. W. Nash, Toronto; G. E. Fisher, Freeman; J. A. Balkwill, London. Auditors—M. B. Barlow and J. Crow, O. A. C. Delegate to Royal Society—A. Gibson, Ottawa.

THE PAST SEASON ON P. E. ISLAND.

Editor "The Farmer's Advocate":

The spring with us was late and cold. Seeding was very backward, only a small proportion of the grain being sown in May. June was dry; but, beginning with July, we have had a very wet summer. The hay crop was light, the clover being nearly all winter-killed. Consequently, there was no after-grass to help keep up the milk flow. Cheese and butter have ruled high in price here this year. Beef and pork also command a good price. The grain crop on high ground was good. Wheat was damaged by the joint-worm in some sections. The early oats were good. The late grain was considerably damaged by rust. Grain on low, wet land had to be cut by the scythe, the ground being too soft to carry a binder. Potatoes were a fair crop. Turnips will only be an average crop, as they were damaged by an insect which cut them off above the ground. Turnips as large as an egg were sometimes girdled by the pest. The snowstorm, on the 21st of October, was quite unexpected, a large percentage of the potato crop being still in the ground. Fortunately, it turned mild on the following day, and the remainder of the week being fine enabled the farmers to get the bulk of their potatoes safely housed. Oats are moving at from 50c. to 53c. a bushel. Potatoes are about 25c. a bushel. There is practically no hay being shipped at present. Queen's County, P. E. I. E. R. Y.

QUESTIONS AND ANSWERS.

Miscellaneous.

A BOY'S ACRE PLOT.

My father is giving me one acre on which to raise whatever I wish. I want to get a pneumatic-tired buggy, costing \$150, and a set of rubber-trimmed harness, costing \$25. What would you advise me to raise on that acre?

FARMER'S SON.

Ans.—It looks as though you will need to raise greenbacks. Perhaps some successful strawberry-grower or market gardener will venture suggestions.

RATION FOR DAIRY COWS.

1. Can you give me the names of the officers of the Milk-producers' Association doing business at, or in, Hamilton or Toronto?

2. Considering the prices of different kinds of grain, what would make a good balanced ration, fed with corn silage for buttermaking?

Ans.—1. The secretary of the Toronto Milk-producers' Association is A. J. Reynolds, Scarborough Junction, Ont. Perhaps some reader will advise us whether there is a similar organization at Hamilton, and the name of the secretary, if there is one.

2. Oil meal at \$32 or \$33 per ton (the price quoted by a local feed dealer) is one of the cheapest concentrates to buy, especially where the bulky part of the ration consists of corn silage or fodder and straw. As, however, it will not do to feed too heavily of the strong foods, we would suggest the following as the basis for a ration: Corn silage, 35 pounds; clover or alfalfa hay, 6 pounds; straw, ad libitum (all they want), and one pound each of bran, shorts, corn meal, pea meal and oil meal. If no clover or alfalfa hay is available, omit the corn meal and add half a pound more oil meal, or ground cottonseed. If frozen wheat can be obtained at \$1.25 per cwt., it could be used to advantage in place of the corn meal and shorts. Of

course, the quantity of roughage will depend on the cow's appetite, and the quantity of concentrates should be varied according to the roughage consumed and the cow's response at the pail. Where available, half a bushel of mangels or sugar beets could be used to advantage in addition to the above.

FOUNDING A FLOCK.

I am laying the foundation for a flock of short-wooled sheep. Which do you consider the best for me to buy, Shropshire Downs or Oxford Downs, and what is the difference between them?

SUBSCRIBER.

Ans.—Oxford Downs are larger and heavier, as a rule, than Shropshires, and their wool is not so fine in fibre as that of the latter, but their fleece and carcass are heavier. Shropshires are a medium in size and in fineness of fleece between the Oxford and Southdown. The choice should be governed largely by the available market for each. If one has been found more in demand than the other in your district, or if one has proven more suitable to the soil and pasturage of the district than another, that breed should be chosen. It is often an advantage to raise the class that is looked for in carload lots in the district for breeding purposes, as buyers prefer to go where they can secure a carload or two with the least loss of time and of a uniform class.

VALUE OF DRIED BEET PULP.

Can you give me any information concerning the feeding qualities of beet meal, as advertised in "The Farmer's Advocate"?

G. F.

Ans.—From experiments with dried beet pulp, in comparison with silage, the New Jersey Experiment Station concluded that, for milk production, beet pulp at \$20 per ton would be a fairly-good substitute for corn silage at \$4 per ton. It should be explained, however, that \$4 a ton is almost twice the valuation usually placed on silage, and would be high, even for a season like the present. There

is fair money, under average circumstances, producing corn silage for \$2 per ton. In the above experiments, the beet pulp was saturated with water, at least three hours before feeding. Turning to the results of chemical analyses, we find the following supplied by Frank T. Shutt, of Ottawa, and some other authorities:

DIGESTIBLE NUTRIENTS IN 100 POUNDS.

	Lbs. protein.	Lbs. fat.
Beet-root feed	9.48	1.89
Bran	12.9	3.4
Shorts	12.8	3.8

The percentages of carbohydrates were omitted in the data submitted to us by Prof. Shutt, but basing our estimate on the percentages of digestible protein and fat, the relative values of dried beet and bran would be about as 9 to 12. In other words, beet pulp at \$18 per ton should be approximately as good value as bran at \$24. Let us hear from Canadian farmers who have used dried-beet pulp.

INDIGESTION.

Mare, three years old, stabled, and fed hay and oats all summer, keeps very loose in her bowels; sometimes a slightly offensive smell from manure. She is of a slightly nervous temperament. What can I do to harden manure, as she keeps very loose all the time?

SUBSCRIBER.

Ans.—It may be that her teeth need attention. If she fails to masticate properly, indigestion will result. Have her teeth examined by a veterinarian, and treated, if necessary. Her nervous temperament may, to some extent, cause the looseness mentioned, in which case treat her kindly, and make sure her harness fits easily in every particular. Give crushed oats and dry bran, and the following: Powdered gentian, 2 ounces; ferri sulph., 2 ounces; sodium hyposulphite, 2 ounces. Mix, and divide into twenty-four powders. Give one powder night and morning.

GOSSIP.

H. M. Vanderlip, Cainsville, Ont., writes: "Our herd of Berkshires, which now numbers over 100 head, are going into winter quarters in fine condition. The young stuff, imported in dam, are the right sort, and are growing nicely. We are getting ready for our first annual sale, which will be held at the farm on Wednesday, Jan. 8th. Catalogues will be ready about the first of December, and may be had for the asking. Announcement will be made later."

Mr. Israel Groff, Elmira, Ont., writes: "My Shorthorns have come into winter quarters in fine condition. I have some of the best young things coming on that the Maple Leaf herd ever produced. The matrons have also kept in fine condition, considering that all nursed calves. The imported cow, Bessie Wenlock, has raised a fine roan bull calf, a herd-header that will, no doubt, be heard from in the future. Joy Belle, the Miss Ramsden cow, has also nursed a fine heifer. Rosemary has reared one from Springhurst. The Marr Blythstone raised a very promising red bull calf, from my present stock bull, Chancellor's Model, by Bapton Chancellor, dam Marchioness 22nd, by Wanderer's Heir, he by Old Wanderer. Have several other promising young bulls and heifers from the Crimson Flower, Matchless, Diamond and Lady Fanny families. My motto is a price for every animal within reach of every buyer."

AN IMPORTANT SALE OF LINCOLNS

Mr. A. D. McGugan, of Rodney, Elgin Co., Ont., is reported to have recently sold to John B. Stumpf, of Oregon, U. S., 151 head of pure-bred Lincoln sheep, the price paid being stated as \$3,450. Such sales as these should tempt farmers to start a flock of some of the breeds of sheep that are now so much in demand, and are proving so profitable to their owners.

MARKETS.

TORONTO.

LIVE STOCK.

Receipts of live stock at the City and Junction markets last week were 258 carloads, composed of 3,944 cattle, 4,941 hogs, 5,905 sheep, and 392 calves. The quality of the fat cattle being offered was generally not good. Trade was slow, with market draggy. Prices were lower for all common, unfinished cattle.

Exporters.—Prices last week ranged from \$4 to \$4.80, the bulk selling at \$4.25 to \$4.50; bulls, \$3.50 to \$4.

Butchers.—Prime picked lots sold at \$4.50 to \$4.75; loads of good, \$4.25 to \$4.50; medium, \$3.75 to \$4; common, \$3 to \$3.50; cows, \$2 to \$4; canners, \$1 to \$1.50.

Feeders and Stockers.—Best steers, 1,000 to 1,100 lbs., \$3.25 to \$3.40; steers, 800 to 900 lbs., sold at \$2.75 to \$3.15; stockers, 500 to 700 lbs., sold from \$2 to \$2.50 per cwt.

Milkers and Springers.—Trade was good for choice milkers and forward springers, with promising milking qualities, at \$40 to \$60, the average price for the best being about \$50; but there were lots of common and inferior cows that sold from \$35 down to \$15 each.

Veal Calves.—The general run of calves offered were of poor quality. Prices ranged from \$3 to \$6.50 per cwt., the bulk selling at \$5 to \$5.50 per cwt.

Sheep and lambs.—Deliveries were fairly large, but generally of poor quality. Prices were easier. Export ewes sold at \$4.25 to \$4.40 per cwt.; rams and culls, \$3 to \$3.50; lambs, \$4.25 to \$5.25; with selected ewes and wethers at \$5.60 to \$5.80 per cwt.

Hogs.—Deliveries of hogs were moderate, with far too many of the unfinished, coarse kind that the packers do not want. Prices quoted by the packers were \$6.25 for selects, fed and watered, and unfinished at \$5 to \$5.25.

Horses.—Burns & Sheppard, of the Repository, report few first-class horses of any kind being offered, although there is a little better demand for first-class heavy draft. Farmers are trying to get rid of all horses of common or second-class quality. About 100 horses changed hands last week at following prices: Heavy workers, \$125 to \$175; medium, \$80 to \$100; second-class drivers and saddle horses, \$60 to \$100; expressers, \$100 to \$160; wagon horses, \$100 to \$140.

BREADSTUFFS.

Wheat.—No. 2 white winter, \$1.05; No. 2 red, \$1.04; No. 2 mixed, \$1.04; sellers; No. 2 spring, 98c.; No. 2 Goose, 90c. bid; Manitoba, No. 1 Northern, \$1.12½.

Rye.—No. 2, 87c. bid.
Peas.—No. 2, 55c. bid.
Barley.—No. 3 extra, sellers, at 95c.
Oats.—No. 2 white, 54c.
Buckwheat.—70c., outside.
Bran.—\$25, in bulk, at Toronto.
Shorts.—\$28, at Toronto.

Flour.—Ontario, 90 per cent. patent, \$3.85; Manitoba patent, special brands, \$6.20; second patents, \$5.60; strong bakers', \$5.50.

Corn.—No. 3 yellow, sellers, 72c., at Toronto.

COUNTRY PRODUCE.

Butter.—Supplies light; prices firm. Creamery, pound rolls, 30c. to 31c.; dairy, pound rolls, 28c. to 29c.; creamery, boxes, 28c. to 29c.; tubs, 26c. to 27c.

Eggs.—New-laid, 28c. to 30c.; cold-storage, 25c.

Cheese.—Market firm. Large, 13½c.; twins, 13½c.

Honey.—Receipts light. Extracted, 13c. to 13½c., combs, dozen sections, \$2.75 to \$3.

Poultry.—Last week being Thanksgiving

week, nearly everybody must have shipped poultry, as the market was glutted, as it has not been in many years, which caused prices to slump. Turkeys, 13c. to 15c.; geese, 9c. to 10c.; ducks, 9c. to 10c.; chickens, 9c. to 10c.; fowl, 5c. to 7c. These quotations are for dressed poultry, and live are quoted 2c. per lb. less.

Potatoes.—Prices have remained about steady. Farmers' loads, 75c. to 85c. per bag, by the load. Car lots of Ontario and New Brunswicks, on track, at Toronto, 70c. to 75c. per bag.

Hay.—Baled hay continues firm, and scarce, at \$17.50 to \$18.50, for car lots, on track, at Toronto.

Straw.—Baled straw, market firm at \$9.50 to \$10.50 per ton for car lots, on track, at Toronto.

Beans.—Market steady at \$1.80 to \$1.90 for primes, and \$1.90 to \$2 for hand-picked. These quotations are for broken lots.

HIDES AND TALLOW.

Prices are quoted as follows by E. T. Carter & Co., 85 East Front St., Toronto: Inspected hides, No. 1 cows and steers, 7½c.; inspected hides, No. 2 cows and steers, 6½c.; country hides, 6c. to 7c.; calf skins, No. 1, city, 12c.; calf skins, No. 1, country, 10c. to 11c.; horse hides, No. 1, each, \$2.75 to \$3; horse hair, 30c.; tallow, 5½c. to 6½c.; wool, unwashed, 12c. to 13c.; washed, 22c. to 23c.; rejections, 16c.; lamb skins, 65c. to 75c.

TORONTO SEED MARKET.

The William Rennie Seed Co. report the seed market about steady, as follows: No. 1 alsike, \$8.60 to \$9; alsike, No. 2, \$7.50 to \$8 per bushel.

CHICAGO.

Cattle.—Steers, \$4.50 to \$7; cows, \$2.65 to \$4.60; heifers, \$2.50 to \$5; bulls, \$2.60 to \$5; calves, \$3 to \$7.75.

Hogs.—Choice heavy shipping, \$6.10 to \$6.25; light butchers', \$6.15 to \$6.30; light, mixed, \$5.90 to \$6.10; choice light, \$6.10 to \$6.25; packing, \$5.25 to \$6.25; pigs, \$4.25 to \$5.75; bulk of sales, \$5.60 to \$5.90.

Sheep and Lambs.—Sheep, \$2 to \$6.25; lambs, \$5.75 to \$6.75; yearlings, \$5 to \$5.50.

CHEESE BOARD PRICES.

Victoriaville, Que., 11½c. Brantford, Ont., no sales. Huntingdon, Que.—White cheese, 11 13-16c. to 11½; colored, 11 11-16c.; salted butter, 27c. London, bidding, 11½c. and 12c. Brockville.—White and colored sold on the board at 12½c. Vankleek Hill.—White, 12 3-16c.; colored, 12½c. St. Hyacinthe, Que., 11½c. Picton, highest bid, 12½c. Belleville.—White and colored, sales at 12 1-16c.

BUFFALO.

Cattle.—Prime steers, \$5.65 to \$6.25. Veals.—\$5 to \$9.

Hogs.—Heavy and mixed, \$6.50 to \$6.60; Yorkers, \$6.30 to \$6.50; pigs, \$6.25; roughs, \$5.50 to \$5.80; dairies, \$6 to \$6.04.

Sheep and Lambs.—Lambs, \$5 to \$7; ewes, \$5 to \$5.50; sheep, mixed, \$6.50 to \$6.76.

MONTREAL.

Live Stock.—Shipments of live stock from the port of Montreal for the week ending Oct. 26th amounted to 2,476 cattle and 1,100 sheep, against 3,891 cattle and 386 sheep the previous week. The local cattle market showed an easier tone last week, and prices have declined slightly. Demand was fair, however, and choice cattle sold at 4½c. to 5c.; fine, 4½c. to 4¾c.; good, 4c. to 4½c.; medium, 3½c. to 4c.; common, 2½c. to 3½c.; canners being as low as 1½c. The demand for export sheep was on the dull side, owing to scarcity of ocean freights, but the foreign market was fairly strong, and exporters were paying ½c. per lb. more than the previous week, at 4½c. to 4¾c. per lb. The demand from butchers was also rather light, and prices ranged from 3½c. to 3¾c. per lb. The supply of lambs was moderate, and barley sufficient for the demand. Prices ruled from 6c. to 6½c. per lb. Quite a quantity of calves were

on the market, but prices held firm as demand was proportionately good. Prices range from \$4 each to \$6 for ordinary stock, \$8 to \$11 for good, and \$12 to \$15 for choice. The quantity of hogs offered was fairly large, and the market was strong in sympathy with foreign cables on bacon. Selected lots sold here at 6½c. to 6¾c., weighed off cars.

Horses.—The chances are that inferior and common horses will be rather lower in price this winter. Good horses will probably hold steady. Demand light at present, few animals being needed either for city or out-of-town requirements. Heavy-draft horses, weighing 1,500 to 1,700 lbs., \$250 to \$300 each; light-draft, 1,400 to 1,500 lbs., \$225 to \$275; blocks, 1,300 to 1,400 lbs., \$200 to \$225; express horses, \$150 to \$225; common plugs, \$50 to \$75 each, and choice saddle and carriage horses, \$300 to \$500 each.

Provisions and Dressed Hogs.—Demand active. Fresh-killed, abattoir-dressed hogs are selling at 9½c. to 9¾c. per lb., demand for them being fair. Very few changes are to be found in the market for provisions. There is a fair movement in salt pork in barrels, and prices range from \$22 to \$23.50 per barrel, according to quality. Lard, 12c. to 13½c. for pure, and 9½c. to 11½c. for compound.

Potatoes.—Green Mountains from New Brunswick have practically ceased to arrive, as the price they were realizing was, in many cases, insufficient to pay the freight on the stock. The demand for good Quebec and Ontario potatoes is accordingly better. Quite a little mixed stock is coming in, largely from Eastern Ontario. Reds and whites of the different varieties are all mixed together in one car, and as these are not so desirable as when the colors and varieties are kept separate, they are bringing 5c. to 7c. less. Dealers are paying 55c. per 90 lbs., in car lots, on track, and selling in broken lots, bagged and delivered into store, at 65c. to 70c. Best stock is selling at 62c., on track, and 75c. to 80c., bagged and delivered.

Eggs.—There are practically no new-laid eggs to be had any more, and bids as high as 26c. have failed to bring them out of the country. They would sell here at about 33c. to 35c. for best. No. 1 cold-storage stock has been selling at 24c., selects being 27c., and a few No. 2 being 20c. The market, however, is not very firm.

Butter.—Arrivals of foreign makes of butter on this market, combined with restriction of consumption owing to high prices, have tended to arrest further advances. Irish dairies, 26c. per lb., likewise Siberian butter, an inferior quality of Russian creamery. Very little New Zealand and Australian butters have been seen here yet. These will not arrive in any quantity until about Christmas, but quite a quantity has been purchased for January and February shipments. Choice fresh Canadian creamery is quoted here at 28c. to 28½c., the top quality being as high as 29c. This is for 56-lb. packages in a jobbing way, 30-lb. packages being 1c. more.

Cheese.—Price has declined further. Demand from the other side has fallen off greatly, and cable inquiries are few. Shipments of cheese for the week ending Oct. 26th are 53,000 packages, making 1,780,000 packages to date this season. Exporters seem to think that the falling off in demand is partly due to the financial stringency. Prices are now about 12c. per lb. for Quebec cheese, 12½c. for Townships, and 12¾c. to 12½c. for Ontarios.

Grain.—Quebec and Ontario oats were quoted at 55c. to 58c. per bushel for car-load lots, in store, and Manitobas at 58c. to 60c. The wheat market has been subjected to many and violent fluctuations, principally owing to the money market. Values here range from \$1.15 to \$1.20 for Manitoba No. 1.

Hay.—The market continues very active, and yet further advances have taken place. Dealers are now offering \$17 to \$17.50 for No. 1 timothy, \$16 to \$16.50 for No. 2, and \$15 to \$15.50 for clover and clover mixture. They are receiving as high as \$20 a ton for the best here. There is no export, save to Glasgow. The American market is somewhat firmer, and the outlook here seems to be for continued high prices.

Hides.—Demand from tanners continues fair, and prices are steady. Dealers are

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Life, Literature
and Education.

[Contributions on all subjects of popular interest are always welcome in this Department.]

J. W. L. FORSTER.

(A Noted Portrait Painter.)

Many life-sketches tell facts which, if rightly interpreted, would give a clue to the success or failure of the subject. One of the most important of such facts in connection with the life of Mr. J. W. L. Forster was his natural right to call himself a farmer. He was born on a farm at Norval, in Halton County, near Brampton, and for nearly a score of years he grew up with nature's simple truth around him. Because of this early life, and because of an inherited love of truth, he has been able to paint true pictures.

For years the farm boy unconsciously observed the realities about him, and when, later, his pictures were placed before the public, there was no false note in them to defeat their purpose. He knew nature's colors, forms, lights and shades, masses and outlines; and the fantastic errors which often mar artistic work, were not found in his paintings. He saw truly, and painted what he saw.

When quite a young man, Mr. Forster painted many portraits of local people. His aptitude for this class of work was very evident, and he entered upon a course of study in Europe, which trained him to be the master of the brush that he is. About 1875 he visited Great Britain and the Continent, to see what was being done in art, and to study the methods of teaching. The chief value of this trip was to teach him the need of what he had yet to learn. After some four years, he entered upon his real course of study, but not without having to face great difficulties, chiefly from broken health. There is much of the sturdy Canadian manhood in Mr. Forster, and difficulties were overcome cheerfully in order that he might become proficient in his profession. Sometimes, when the London fog was thick, it was but typical of the clouded prospects of the young artist. Not long ago, in looking over furniture designs issued by a leading Canadian house, he was surprised to find some of his own color washes, which he had made in those early days for a London factory.

Paris, the home of art, was reached at last. Hard work was in plenty here, for, when study was not occupying the time, money had to be earned upon which to live. Spare moments were filled in with kindly words and deeds for those who needed them, and by splendid tramps among the romantic scenery of old France.

Mr. Forster's first French masters were, Boulanger (a painter of strong academic character), and Jules LeFebvre, more renowned and masterful, but perhaps less painstaking and thorough as a teacher.

The artist to whom Mr. Forster owes most as a teacher, was Bouguereau, whose exquisite draughtsman-

ship, charm of color and character won the student's interest. Mr. Forster has recently published a booklet, "A Master of the French School," in which he has set forth the relationship between master and pupil in those student years.

The results of such teaching, coupled with the skillful application of the student, can easily be understood. First the masters and fellow students became interested, and then the critics and the general public. Mr. Forster's portraits were frequently hung in the Salon, and the com-

president, and on all occasions is a strong advocate of the beautification of rural homes and highways. He believes that this will be a splendid method to make young Canadians proud of their home and country.

The accompanying cut of Dr. Goldwin Smith, taken from a painting, is but recently completed. The grand old historian and critic's grave and thoughtful face rests upon his hand in an attitude of reflection and repose. The three-quarter-length figure, in Oxford gown, is seated in an armchair, his elbow resting upon a

glance at the accompanying portrait must testify. This quality in his work has brought Mr. Forster well-deserved popularity, and, as a consequence, he is numbered among Toronto's busiest artists.

[Note.—This artist is preparing for "The Farmer's Advocate" Christmas Number an article on the "Beautification of Rural Homes and Highways."]

HOBBIES FOR FARM FOLK.

Hobbies are occasionally things which are a delight to one's self, but a bore to one's friends. However, if reasonably pursued and not brought into evidence out of season as well as in season, they are usually more to be commended than decried. The possessor of a hobby usually gets enough pleasure out of it to warrant the few odds and ends of time or money which he may spend upon it.

The variety in farm work to some extent precludes the necessity for a hobby—which is often a vent for escape from a rut; nevertheless, the farmer with a hobby will invariably be found to cling to it as something too good and too interesting to give up. I know one farmer whose hobby is to recognize birds and their songs. As a consequence, his walk to and from the fields, especially during the early part of the summer, are a continual pleasure to him—a deeper pleasure, perhaps, than those who know nothing of bird lore can grasp. The other day we heard of a market gardener whose "garden" covers an extent of several farms, who adopted as his hobby the planting of rows of flowers among the vegetables. To his surprise, he soon found that his workmen, from the mere fact of working with so much beauty all around them, became more contented and more satisfactory in every way. The interest which began with the flowers was extended to the vegetables, and more work—and better—was done than ever before. The fame of this garden has spread far and wide, and last summer it was honored by a visit from the renowned Professor Bailey, of Cornell, probably the greatest horticulturist in America. Truly excellence in any line is its own best advertisement.

A useful hobby, which every farmer might adopt with profit, would surely be the study of weeds. There are others which recommend themselves more especially to the winter season, when the long evenings afford a little time—reading or study of any kind; making furniture according to arts and crafts methods, when weariness of the flesh does not say nay to such endeavor; and for the younger members of the family, stencilling, drawing designs conventionalized from leaves and flowers, which may be worked into rugs, etc. A dozen devices for interesting and useful work will suggest themselves.

The quest for happiness is not by any means an empty or frivolous one. Anything, even the smallest detail, which can relieve tension, bring interest or wholesome pleasure, is worth while, and likely to result, later, in better work in the chief business of life. If a hobby can be made a means to this end, is it not worth while?



J. W. L. Forster

ments of the French press at that time must have been very gratifying to the young student.

Had it not been for the patriotic spirit which even then animated the subject of our sketch, Canada would have lost her young artist. The temptation to remain abroad was very strong, because success seemed well assured; art received much greater encouragement in Europe than was possible in Canada.

For a number of years Mr. Forster has been an officer of the County of Peel's Old Boys' Association, as its

table, on which are suggested his LL. D. hood and some books and papers. On his knee is a volume just closed, with his finger still keeping the page for reference. The background is his library at "The Grange." The whole picture breathes the atmosphere of mellow years and ripened thought. Mr. Forster is in his happiest mood with such a subject. He loves to depict character as well as mere likeness of form and feature; and to his ability to do this, to bring out the inner light of soul and mind, the merest

ing very careful not to break the skin. Put in a stew-pan, cover with boiling water, and cook till tender. Cut up; mix with salt and butter, and serve at once.

Boiled Onions in White Sauce.—Peel the onions, dropping into cold water as fast as they are peeled. Drain, and put in a stew-pan, with boiling water to cover. Add a teaspoon of salt for each quart of water. Boil rapidly for ten minutes, with the cover partially off the stew-pan. Drain off the water, and cover the onions with hot milk. Simmer half an hour. Beat together one tablespoon butter and one level tablespoon of flour. Gradually beat in half cup of the milk in which the onions are boiling. When smooth, stir into the onions and milk, season with salt and white pepper; let cook ten minutes longer, and serve.

Stewed Onions.—Cut onions in slices, and boil in salted water ten minutes. Drain well, and return to the sauce-pan. For 1½ quarts onions (measured before boiling), add two tablespoons butter, one teaspoon salt, one-quarter teaspoon pepper. Cover the sauce-pan, and cook over a hot fire five minutes, shaking the pan to prevent the onions from browning.

Squash.—Peel, cut in pieces, and steam until tender. Mash fine; season with salt, pepper, and plenty of butter, and serve very hot.

SOME SIMPLE RECIPES FOR PREPARING ARTICHOKE.

Artichokes (the "Jerusalem" variety) may be dug from the ground any time during late fall, during a thaw in winter, or early in spring before growth begins, and will be found a very pleasing as well as nutritious addition to the bill of fare. The following recipes, contributed by "E. W.," present a variety perhaps surprising to those who are only familiar with the ordinary method of serving them with cream sauce:

Artichoke Soup.—Wash and pare artichokes, and boil until tender, which takes but a short time. Turn the artichokes into the colander, with their own water, and mash them. Return the whole to the pot (which should be a granite-ware one); add milk; when boiling, thicken with flour; butter and salt to taste.

Artichoke Scallop.—Take artichoke soup that has been left over; put a layer in the bottom of a deep dish, and fill up with alternate layers of cracker crumbs, butter and soup. Put a layer of crumbs on top, and sprinkle with bits of butter, and brown in the oven. If the soup is too thick, add milk.

Fried Artichokes.—Wash, pare and slice artichokes, and fry in butter.

Boiled or Steamed Artichokes.—Wash and pare whole artichokes (or the skins may be left on), and cook in granite-ware pot, or steamer; be careful not to overcook them. When done, put the peeled artichokes in a dish, and pour butter sauce over them, not forgetting the butter and salt.

Artichoke Stew.—Boil pared artichokes in water which has milk added to it (milk keeps artichokes white); thicken, when tender, with flour and butter, and salt and pepper to taste.

Artichokes in Salad.—Artichokes may be used in salads, either raw or cooked.

BAD COOKERY AND ITS EFFECTS.

During a debate in the House of Commons, at Ottawa, last March, upon the advisability of passing legislation to prohibit boys from smoking, Mr. Osler, of Toronto, said, "Might I suggest to the ladies who are so interested in this subject that more harm in Canada results from bad cooking than from cigarettes. The greatest education that could be given the wives of some sections would be to teach them how to cook and economize."

With the subject of cigarette-smoking, we have here nothing to do, but we believe firmly that more harm than is usually imagined is done by bad cookery. A continuous diet of heavy bread and biscuits, potatoes fried in grease, rich pastry, and beef cooked to a hard mass from which half the nutriment has gone, is enough to set up digestive disorders in all but the strongest stomachs. Make a dyspeptic, and you have practically made an invalid; often cross, melancholy, querulous, unreasonable, unfitted, to a great extent, for the work that he or she must do. Moreover, when food is

not digested properly, it is neither building up nor keeping up the body, as it should; it is being practically wasted, and often there is a tendency in the victim of stimulants.

Surely every woman who is at the head of a household should make it her business to learn how to cook palatable, nourishing food, food that will entice those who sit down before it to eat enough for their bodily needs, and that will give working and thinking power when eaten, the heat necessary to the comfort of the body, the energy needed as an incentive to effort. And yet how many housekeepers there are who go unthinkingly on, never once making an effort to find out the food-value of the viands they expect their families to live upon, or the added nutrition that may be gained by proper methods of cooking and serving. The best (and by this is by no means meant the most expensive) food is none too good for the boys and girls and men and women of our land, and upon the housewives rests the responsibility of providing it. Everything about cookery cannot be learned in a day, or a month, or a year, but the alert woman will see to it that she is continually improving rather than deteriorating in this which makes up so much of the ethics of her housewifery.

SELECTED RECIPES.

Creamed Chicken in Cases.—Cut cooked chicken into small cubes. For each cup of cubes make a small cup of sauce, as follows: Melt two tablespoons butter; in it, cook two tablespoons flour; add one cup rich milk; season, and cook. Stir the chicken into the sauce. Have some patty-shells freshly made, and hot. Fill these with the chicken mixture, and serve.

Scalloped Potatoes.—Pare and slice enough potatoes to make three pints. Cover with boiling salted water, and heat to the boiling point; let boil about three minutes; then drain; rinse in cold water, and drain again. Butter a baking-dish (earthen or granite); put into it a layer of potatoes; sprinkle lightly with salt; add bits of butter and onion, and a little finely-chopped parsley. Continue the layers until filled. Pour in milk to cover, and bake about an hour.

Prince of Wales Cake.—One cup brown sugar, half a cup butter, 4 tablespoons molasses, half cup buttermilk, one cup seeded raisins, one teaspoon soda, one teaspoon spices, two cups flour. Bake in jelly tins. This will keep well, and is all the better for being a week old at least.

A Good Jelly Cake.—Cream together one cup sugar and three beaten eggs. Add six tablespoons rich sour cream, half a teaspoon soda, and one cup flour. Bake in three tins.

Never-failing Jelly Cake.—Cream together one cup butter and two cups sugar. Beat in three well-beaten eggs, then one cup sweet milk, and, last of all, three cups flour, in which half teaspoon soda and one teaspoon cream tartar have been sifted. Color half the batter with melted chocolate, and bake in two tins. Use any kind of filling you choose, and put icing or whipped cream on top.

Sour-cream Icing.—Take half a pint cream which has turned a little sour, add half pint sugar, and the same quantity of crushed walnuts. Boil for fifteen minutes; remove from fire, and, when two-thirds cool, spread evenly over the tops of the cakes.

Cream Sauce.—Serve with fried chicken, croquettes, fish, etc. Half cup milk, one tablespoon flour, one tablespoon butter, salt and pepper. Heat the butter in a stewpan; add the flour, and cook; stirring all the time until smooth. Do not let brown. Gradually add the milk, and when of a creamy consistence, season and serve. Double the quantities, if necessary.

Egg Sauce.—Make a cream sauce; add the finely-chopped whites of two hard-boiled eggs, then the yolks pressed through a sieve.

Caramel for Coloring Soups, Gravies and Sauces.—Stir a cup of granulated sugar over the fire in a baking-pan (an old one that discoloring will not harm) until it is very near burning. While smoking, put into it a cup of cold water. When the sugar is melted, take off, and, when cool, cork in a bottle, and keep in a cool, dark place.

Grape Marmalade.—Eight pounds of

grapes, four pounds sugar, two oranges (use peel and pulp, sliced), one and one-half pounds raisins (stoned). Pulp grapes, and cook until seeds rise to surface, skim them off, and add skins. Cook fifteen minutes. Add sugar, orange and raisins, and boil until as thick as marmalade.

Pancakes from Porridge.—One and one-half cups cold porridge, one and one-half cups sour milk, flour to make an ordinary pancake batter, one teaspoon soda. Or make with two cups sweet milk, omit the soda, and add two teaspoons baking powder to the flour.

Buckwheat Muffins.—Sift together three times one cup each of wheat flour and buckwheat flour, one-quarter cup sugar, four level teaspoons baking powder, and half a teaspoon salt. Beat one egg. Add to it nearly a cup of sweet milk, and stir into the dry ingredients with three tablespoons melted butter. Bake 25 minutes in hot buttered muffin tins.

Sour-cream Cake.—Sift together two cups flour, half teaspoon soda, half teaspoon salt, half teaspoon mace (nutmeg or other spice may be used), and one cup sugar. Beat one egg. Add one cup thick sour cream, and stir into the dry mixture. Add half a cup Sultana raisins or currants, and beat well. Bake in small tins about twenty-five minutes.

Children's Corner.

CAUTION TO CARELESS COUSINS.

A good many letters have come addressed to Victoria Ave., instead of 52 Victor Ave. This gives the postman a great deal of trouble, and makes the letters late. Don't you make such a mistake.

[All letters for Children's Corner must be addressed "Cousin Dorothy," 52 Victor Ave., Toronto. Otherwise they will not be published.]



Two of Our Letter Writers.
Viola Evans and her sister.

FINGER FOLK.

Ten little fingers in delight,
Welcome the beaming sunbeams bright.

Give them a bath in the soap-sud sea,
Where waves are as pleasant as can be.

The finger people find it fun,
Through the bright water swift to run.

Now we must trim their faces bright,
Else they will be an ugly sight.

Then they may carry bread and tea
To little Miss Mouth so red and wee.

We'll show them the way to yonder box,
When they may build a house of blocks.

To-night by the trundle-bed upstairs,
They'll all bend down to say their prayers.

Bright little stars in East and West,
Shall shine white the ten little fingers rest.

—Lucia B. Cook.

THE GIRLS HAVE SOMETHING TO SAY.

[Have you seen about getting police protection, Eddie? I will spare your

feelings by only printing a few of the letters I have received.—C. D.]

Mr. Eddie Cooke,—When I first read your extremely interesting letter, I felt a consuming desire to pull your hair and box your ears, too, if I only had the opportunity; but, on further consideration, I came to the conclusion that you were to be pitied, for you evidently had been eating some very sour grapes, or else you have been very unfortunate in your acquaintance with Ontario farmers' daughters.

If you wish to meet some girls of an entirely different character to those of whom you spoke, just take a ticket for Hickson, and I will meet you, if you give me a fair notice, and then I will introduce you to girls who can paint, play the piano, sing, do fancywork, and all kinds of housework, and yet can hoe, pitch hay and grain, build loads, drive the horse on the hay-fork and hay rake, harness and unharness horses, milk, and take loads of grain to the mill for chop or flour, and do it cheerfully, too.

As for the selfish and discontented girl, Oxford County has no more room for her than for the complaining boy.

Now, then, Mr. Cooke, I hope that you are convinced that, just because you have seen one or two girls you do not approve of, all girls aren't inferior to boys. I don't know what kind of girls you have at Antrim, but I can assure you that Hickson girls are just O. K.

Although I do not approve of girls making a practice of doing boys' work, or of boys doing girls' work, I think they should know how and be willing to help one another sometimes.

Hoping that you will write again, and that you will soon form a better opinion of Ontario girlhood, I remain,

A HICKSON GIRL.

Hickson, Ont.

Dear Cousin Dorothy,—In one of the recent numbers of "The Farmer's Advocate," I saw a letter from Eddie Cooke, on the subject of "Can Girls be as Useful as Boys?" Now, I would put it the other way, and ask "Can boys be as useful as girls?"

I dare say they can be, but, as a rule, they are not. Look how clumsy a boy is when he does a bit of girls' work. Eddie Cooke seems to think that girls know nothing at all about the hard work that boys have to do, but that is just where he is mistaken. I know lots of girls that know how to harness horses, fork hay, stook grain, hoe turnips, split wood, build sheaves on the wagon, and

do chores, besides doing housework. I have often done it myself. I think girls know a good deal more about boys' work than boys know about girls' work. I venture to say that I could build a load of grain as well as Eddie Cooke himself, and cook a meal far better than he could. I think some boys are so selfish that they think if they have hard work to do, the girls are having an easy time, which shows how much they know about it! I think boys should do the hardest work because they are the strongest, but they often don't think about that. As for boys doing housework, I don't think much of a boy that would not help his mother when she is busy and there are no girls to help her. I think it is just as common to see a useless boy as it is to see a useless girl, perhaps more so. I will close now, hoping to see this in print soon.

ONE OF THE GIRLS.

Greenock, Bruce Co., Ont.

Dear Cousin Dorothy,—I have been one of those silent readers of "The Farmer's Advocate," especially the Children's Corner, for quite a number of years, and I have decided to write you a letter. In a number, not long ago, a boy from Antrim wrote a pretty hard letter for us girls. He mentioned that he thought girls had not as much work to do as the boys, but I'm sure if we girls all went

on a strike, the boys soon would begin to wonder if we weren't soon coming back to get the meals ready, and get their clothes done up, and ever so many other things; and, besides, he talks as though the girls never helped outside a bit. Well, I don't know about that, as most girls, especially "farmers' daughters," have enough farm work to do, such as gathering fruit, and, often, helping to hoe and many other chores about the barn. The boys need not think the girls always have a "snap." If, sometimes their sisters are sick, they have to help in the house, they are sure to have heaps of work other places, even if it is a rainy day. Then he also says that boys' work is much harder. Well, it is, but boys are much stronger than girls, and are able to do it. Well, I'll close, hoping some of the other cousins take up the subject, and give a lecture to the boys. ANNA V. ROSENBERGER. Plattsville, Ont.

Dear Cousin Dorothy,—I read Eddie Cooke's letter about "Can Girls be as Useful as Boys?" I do not think he knows very much about girls. Why! even my brothers laughed heartily to think he was so green. He says girls are selfish. I suppose he thinks they should all work, and let him do nothing. My brothers used to like to milk the cows and churn, because they could take a book and read while they were doing it. My mother would go out to the field and help them in return. My! I think Eddie Cooke has a very poor opinion of his sisters, if he has any, or of his mother either, to talk of the easy time they have. He never thinks of the work they have to do to keep the house decent and mind the children. He says girls never go out in the field. I went out in the field all summer, and I pitched up bundles of peas that my father could hardly lift. My father is good and strong, too, so, Eddie Cooke, you had better watch what you are saying about girls.

I have five brothers and three sisters. I am the third youngest in the family. My youngest sister and I got our pictures taken on horseback after I had been raking. I am sending it to you, and if you think it worth while, you may put it in "The Farmer's Advocate." I wish Eddie Cooke could see how the girls around here work out in the field, then he might get a better opinion of them. VIOLA EVENS. Randolph, Ont.

Dear Cousin Dorothy,—Your last "Advocate" enclosed a letter from one of your correspondents, giving his opinion on the subject of boys and girls as to work.

We do not agree with him as to his opinion of girls as to indoor and outdoor work. We think that girls can do indoor work which they have practiced, better, or as well, as the boys can do outdoor work which they have practiced. We also think a girl can do outdoor work which she is not accustomed to as well as a boy can do indoor work which he is not accustomed to.

And if you set a boy at washing dishes, he will break more dishes in one day than a girl will in a year. But if a girl is taken to the barn to work, she may not be strong enough to lift the bundles of hay, but when it comes to milking cows, she can milk three to his one.

Schoolgirls are not up to so many mischievous tricks as boys, so make better students, and progress more rapidly, but may not be as clever.

TWO KENTUCKY GIRLS.

The girls win by numbers in this debate. I wish we had room to print all their letters, which are very forcible and convincing. C. D.

During a certain battle the colonel of an Irish regiment noticed that one of the men was extremely devoted to him, and followed him everywhere. At length he remarked:

"Well, my man, you have stuck to me well to-day."

"Yes, sorr," replied Pat.

"Shure it was me mother said to me, says she, 'Just you stick to the colonel, Patrick, me bhoys, and you'll be all roight.' Them colonels never gets hurted."

Carmichael.

BY ANISON NORTH.

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CHAPTER IV.

The Raising.

Not long after this the "bids," as we called them, to the raising of Jamieson's barn were sent out. There had been much talk of the immense proportions which this prospective barn was to assume, and every Sunday night for weeks, the spot upon which the foundations were being laid and the timbers gathered had been the rendezvous for all the young men of the neighborhood, who sat about on the logs and lumber piles, gossiped, and made eye-measurements with much sagacity until "meetin'-time" in the little church at the corner (dignified by the name of "Oroway Centre"), had arrived. The passing of our meek little preacher's white horse was usually the signal for a general departure, and, as a rule, the lads, each with a marigold in the button-hole, arrived at the church when the first hymn was given out, sidled bashfully into the back seats, and as bashfully out again, to reappear in brave company in the semicircle which awaited the coming of the lasses from the church door. The courage which the lads displayed in this proceeding was remarkable, yet the waiting semicircle had come to be something of an institution at our church, like the collection or the benediction; and, indeed, among the young people it had

By some the news was hailed with satisfaction; there would be at least plenty of men to do the work, and no danger of hitch for want of the necessary muscle. By the others, the scattering of such far-and-wide invitations was condemned. The men would be running over one another, these averred, and, what with the noise and confusion, Bill Gilliland would have more than his hands full.

But the excitement among the men was nothing to that which prevailed among the women, especially among those who were Mrs. Jamieson's immediate neighbors. Everyone was anxious to help, and while Mrs. Jamieson's cellar was being rapidly transformed into the semblance of a veritable pastry shop, Mrs. Jamieson's kitchen was filled with the whisk of skirts and gabble of voices, while poor meek little Mrs. Jamieson timidly gave way to the onslaught, assenting to everything, and humbly taking unto herself the office of stoker and oven-tender by the hot stove.

"I declare to gracious!" my mother exclaimed, after a solitary visit which came to a hasty termination. "If Mrs. Jamieson ever gets through this raisin' with all her wits it'll be a wonder! 'Such a kitchen!—full o' women, 'n' flies and laughin'—'n' some o' them mad! I'd hardly got in the gate when Maria Hall came up to me grumblin' that Amanda Might was goin' round, as she said, with her head up, like a steer in a corn-patch, orderin' everything, 'jist as if Mrs. Jamieson wasn't there pokin' wood into the stove.' Fer my part, I wouldn't mind comin' under Amanda Might, fer she knows; but it's the confusion that 'ud make

the glad blue and green of the summer. It perhaps detracted nothing from my pleasure that, from time to time, I could hear the silvery notes of a meadow-lark coming up like a thin quaver of liquid music from a neighboring meadow, as though to remind me that, even though I were in the midst of all this life and bustle, not far off were the great solitudes, peopled only with the birds and the shy little beasts and fuzzy creeping things that I loved. I found myself waiting in the intervals for that silvery song, and for a long time not once did I miss it. I doubt much if anyone else heard it even once, but then, perhaps, no one else that day could have understood my Paradise.

Then, presently, Gay Torrance came, in a white frock frilled to the waist, with blue ribbons on her shoulders and on her flaxen curls. She was late in coming, because, as usual, the frills had to be ironed, and then it had taken Mrs. Torrance a very long time to make the bows "set" properly. Mrs. Torrance looked very tired, but very proud, too, whenever she looked at Gay, who began dancing around as she ever did, as light of foot as any fairy.

I did not get down off my lumber pile when Gay came, but I remember watching her and thinking that she laughed a great deal too much, and that she was very silly when she kept running around after Dick Carmichael and Hud Jamieson, tugging at their jacket tails, then running off to be "chased." I was a little disgusted with Dick for chiming in with her foolishness so readily, and thought that he was much more inter-

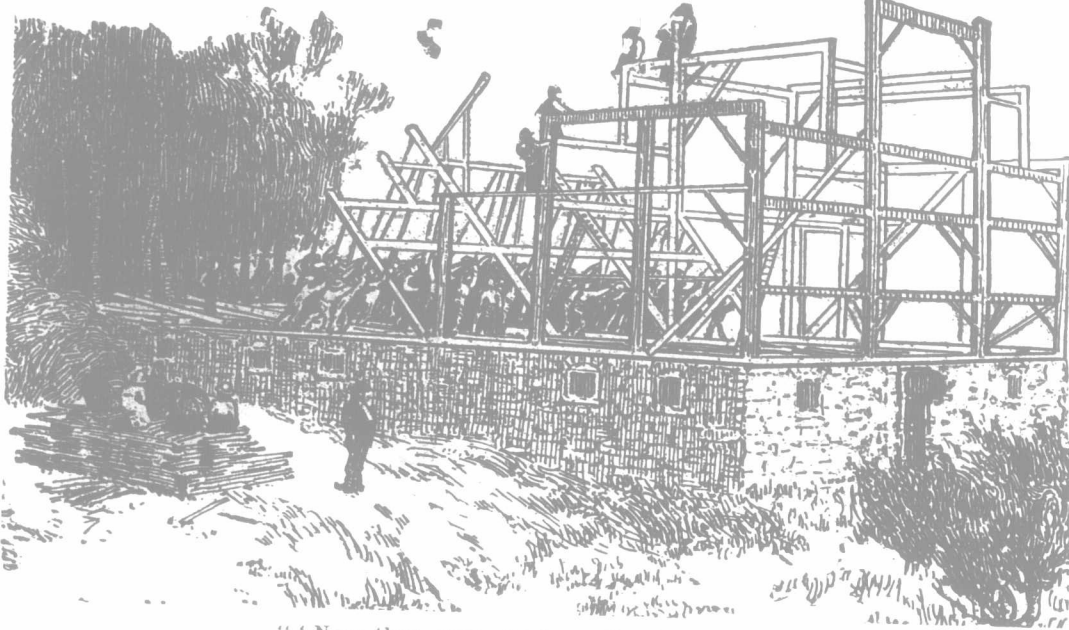
esting when he was walking fences or climbing trees; but I contented myself by thinking that, after all, I must be a rather superior little girl, since I felt so above running around like a baby and tugging at coat-tails.

Nevertheless, I could not help seeing that everyone noticed Gay. The men all had a word for her, and the women all praised her beauty, while scarcely a one seemed to notice me, the little gray-clad figure with the straight, black locks and the elfin black eyes, sitting so quietly on the lumber-pile.

More than once, it is true, I overheard some of the women who kept continually coming out at the gate to see how things were progressing, say to my mother, "What! Is that your little girl? How dark she is! And how straight her hair! Not a bit like you," or some such words. Mrs. Might, too, remarked to my mother within my hearing that she liked to see children dressed "sensible" like me, and not "fol-de-rolled" up to the neck like that Gay Torrance. But such notice as this was very different from the attention Gay was receiving.

I tried to imagine myself in a frilled dress with blue ribbons; but imagination could not endow me with fairy ringlets and dancing blue eyes, and so I presently found myself wishing that I had been pretty like Gay, and wondering if beautiful people were always petted and favored and loved more than homely ones, and if always and always their way would be the happier.

For the first time in my life, there amid the bustle and the laughter and jesting, I began to feel utterly, miserably alone. The feeling was such as sometimes comes to one who has been thrown into a great city alone, uncared for, far from home and friends, and who, wandering along strange streets, looks in through the windows into brilliantly-lighted



"Now then, men, ready. Yeo-heave!"

come to be thought something of a belittlement to a young man if he had not his "girl" and his place in the phalanx at the gate. "Guess he can't get anybody to go with him," was an imputation as much dreaded among our boys as the appellation of thief or pickpocket.

However, all this is neither here nor there, for it is of Jamieson's barn we should be speaking. Many were the tales of it brought by our lads after these Sunday-night visits, and retailed with much gusto, first to the favored lassie on the way home, then to the parents, hers and his, later. Such foundations, such timbers, had never been seen in Oroway Township—such plates, such beams, such rafters! And many were the speculations as to how they would "go up," and whether Bill Gilliland, the "framer" whose contract the building was, would be able to carry the affair through without accident. Should he manage to do so, it was unanimously conceded, the event would be the crowning success of his life.

When the "bids" were at last issued, talk ran wild again, especially when it was learned that the men from Atterill, ten miles away, had been "asked."

me addle-headed! I'm as anxious to help Bell Jamieson as anyone, but I'll do it in my own house in peace 'n' quietness."

So saying, she uncovered a basket which she had brought with her, disclosing a supply of eggs, butter, and all the other necessities for the cake-making which employed her for the rest of the afternoon.

When the momentous day came, we were all in good time at the Jamieson homestead. Just to peep into the cellar, with its shelves laden with cakes, pies, and tartlets, and beautifully trimmed with "valances" of white paper cut into patterns, was to me as good as a glimpse into fairyland; while, to watch the women and girls arriving at the house dressed all in their "best," and the men gathering in dozens about the stone foundations and the lying timbers, while the horses tugged at beams and their owners who'd and haw'd, was certainly better than a fair, and almost as interesting as a circus.

Ever a little shy among many people, however, I climbed up on a lumber-pile by the gate and sat there, seeing and enjoying everything, the animated scene about me, the sun-steeped fields beyond, and everywhere

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The Ingle Nook.

"THE FARMER'S ADVOCATE" FASHIONS.

rooms where pleasant home-scenes, smiling faces and animated gestures but serve to twit him with his loneliness. Perhaps there was a little of jealousy in the gnawing at my heart that beautiful afternoon, but, after all, is not the root of jealousy but the longing to be loved?

I remember yet the great rush of feeling that came to my timid, lonely little heart when an arm stole gently round me, so gently that I knew, before I looked up into the sweet, pale face, that it belonged to Miss Tring.

I have said little as yet of Miss Tring, the gentle teacher who had come to live with us, and who, gliding in and out among our people, quietly as moves the south wind through the groves in spring, was gradually but surely bringing refinement into our homes, and smoothing the roughness out from our speech. Among us children, perhaps, was her influence in this last respect most patent, and yet it was on record that, after each of her visits, even Amanda Might, for three consecutive days, remembered to sound her "ings."

It may, perhaps, be mentioned, as characteristic of Miss Tring, that at her touch, also, as at that of the south wind, flowers seemed to spring up all but spontaneously. The yard about the little brown schoolhouse at the "Centre," which, before her time, had been a desolation consecrated to thistles and burdocks, among which little bare feet did daily penance, not long after her coming began to burst forth into bloom of a different quality, and ere two years had passed, posies might be gathered there at any season of the year, tulips and narcissus in spring, June lilies later, and last of all sweet peas and nasturtiums, asters and petunias, in all the riotous coloring of midsummer and autumn blossoming.

It was noteworthy, also—and even more noteworthy that old Yorkie Dodd, who seldom paid attention to such things, should have noticed it—how the flowers seemed to spread from the school-yard, making their appearance first of all in the gardens of those living nearest it, then in those farther away, with a system and regularity which constrained old Yorkie to say, giving utterance to the one brilliant speech of his life, "Flowers is like measles—ketchin'." But neither Yorkie Dodd, nor, perhaps, anyone else, fully realized how much of this "ketchingness" was due to Miss Tring's personal endeavor and suggestion, a slip here, a few seeds there, a "wouldn't you like to send for a catalogue?" and so on, until in all the district about Oroway Centre there was no home without its garden and its pot of winter bloom. Our people appreciated Miss Tring, and most of all, perhaps, we children who lived with her in the little brown schoolhouse, and so knew her best of all; and none among the circle loved her more than I.

When she put her arm around me that day on the lumber-pile, I could have thrown mine about her, and sobbed aloud for the very relief of her touch; but, instead, I only looked up into her sweet, sympathetic face and whispered, "Oh, Miss Tring, you love me, don't you?"

"I love you? Why, yes, dear, of course I love you," she said, tightening her hold on me. "Why do you ask such a thing?"

But instead of answering her I just let my head drop on her shoulder and began to cry quietly, wiping the tears away with my little red-edged handkerchief. And so I sat, with Miss Tring smoothing my hair, until a big voice that I knew said, "How d'ye do, Miss Tring? Fine day for the raisin', isn't it? Why, what's the matter with the little girl? Sick, is she?"

"Just a little lonely, I think," said Miss Tring, as I hid my face more closely against her.

But a big hand was laid on my head to turn my face about.

(To be continued.)



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The above patterns will be sent to any subscriber at the very low price of ten cents per pattern. Order by number, and be sure to give waist and bust measurement. Allow from one to two weeks in which to fill order.

Address: "Fashion Department," "The Farmer's Advocate," London, Ont. [Note.—Where two numbers appear, ten cents must be sent for each number.]

LADY WARWICK AND HER HOME.

It has been said that "a man may saw off the social branch on which he is comfortably seated—a woman, never," yet this is precisely what has been done by the Countess of Warwick, of whose recent visit to America you have, in all probability, read. Twenty years ago, as the famous Lady Brooke, the Countess was one of the most beautiful and most beautifully-gowned women in court circles; to-day, she is, to a great extent, self-ostracized from her own class, and has become a dress reformer and a Socialist. It would be interesting to know by what mental gradations she reached this last metamorphosis. There are those who look upon it as a "pose," a mere fad, taken up for want of a more novel amusement. There are those, too, who sneer at her penchant for going about to political and labor meetings in her handsome auto car, for espousing a cause for which she has not yet sacrificed her great wealth.

It is to be expected that so unique a lady will not escape scathing tongues, and yet, who knows the whole story? It is not hard to imagine that a woman of character might become tired of idle-handed luxury, nor that becoming first interested in charities—as Lady Warwick assuredly did—she might pass easily on to a full sympathy with the people of a class—one might almost say caste—lower than her own. True, she has not sold her great possessions to divide them among the people according to the most radical Socialism, yet Socialism consists of more theories than this, theories ap-

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It being a necessity to some, a convenience to all, in their holiday gift giving. Our Catalog is free for the asking, and contains exact reproductions with descriptions and prices of Diamonds, Jewelry, Rings, Watches, Silverware, Cut Glass, Novelties, etc. Note these prices:

<p>M60 Fine quadruple plate berry spoon \$2.00</p> <p>M61 Pearl handle butter knife 1.25</p> <p>M68 Fine quadruple plate butter knife75</p> <p>M69 Fine quadruple plate sugar spoon75</p> <p>M65 1 doz. pearl handle fruit knives, in case 1.50</p>	<p>M66 Fine quadruple plate cold meat fork \$2.10</p> <p>M67 8 piece carrying set in case, buckhorn handles with fine steel blades 1.00</p> <p>M67 Teaspoons, finest quadruple plate, small or large size, 1 doz. 2.00</p>
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(REGISTERED), which is in affiliation with Fordham Hospital, Bronx Park, New York City, for surgical nursing, and with the Infirmary for Women and Children, New York City, for obstetrics, offers to women desirous of entering the profession, a three year course in the practice and theory of nursing. It is located on the hill-side at Dansville, N. Y., and overlooks the beautiful Genesee Valley. The Athletic Association, in connection with the school, offers advantages in physical development in the outdoor sports, such as basket ball, tennis and croquet. Application should be made to **A. M. HILLIARD, R. N.**, Supt. Nurses, Dansville, N. Y.

CANARIES Norwich is the Canary Market of the world, and the Aviaries of W. Rudd its marketplace. Every variety of Canary for exhibition, breeding or song at lowest prices for quality. Cages and all bird-room requisites. Illustrated catalogue and breeder's handy diary, with press opinions, testimonials, etc., post free. Export orders made a specialty of. **W. RUDD, Bird Specialist, Norwich, Eng.**

of the world's history so evidently impracticable as to have swamped such men as William Morris, and others as brilliant and as enthusiastic as he. Lady Warwick may, in this matter, get beyond her depth, yet there seems little reason to doubt her present sincerity. She can at least be charged by no means with lack of liberality. For many years her life has been spent in various endeavors for the good of the people. She has served on the Board of Poor-law Guardians; she founded a college for training young women in horticulture, dairying, bee and poultry keeping, and a technical school for boys and girls; and she still maintains, at her own expense, a home for crippled children, which she established some years ago.

Her political activities have, of course, invited the most wholesale calumny, and whether her assistance in the last general election in England, when she toured the country from end to end, speaking at every opportunity for the Labor platform, was of much avail or not, she had the pleasure of seeing the party with which she had allied herself send fifty-three representatives to Parliament—an unprecedented victory for the middle-class element of Great Britain.

When at home, Lady Warwick lives at Warwick Castle with her husband, himself a philanthropist who has come to recognize a very different ideal in life from that of the old fighting earls of the days of chivalry, who once occupied the castle, the famous Guy of Warwick, the great "King-maker," and many others scarcely less illustrious, in whose ears the clash of war was sweet.

To the visitor to Warwick Castle today, the words of Shakespeare must be suggested:

"Duncan.—'This castle hath a pleasant seat; the air

Nimble and sweetly recommends itself Unto our gentle senses.'

Banquo.—'This guest of summer, The temple-haunting market does approve

By his lov'd mansionry that the heaven's breath

Smells woefully here: No jutting, frieze,

Buttress, nor coign of vantage, but this bird

Hath made his pendent bed and precarient cradle:

Where they most breed and haunt, I have observ'd

The air is delicate.'

Although the towers still frown, one hundred and thirty feet above the waters of the Avon, the buttresses still extend massive as of old, the battlements still hold their place pierced with loopholes for the orders, there is "delicate" peacefulness everywhere, from the trees of the great domain that stretches about the castle, to the court-yard that nestles beneath its wall, filled with flowers and shrubs, and enlivened by the splash of fountains and the gleaming plumage of the peacocks which strut about everywhere. Within the castle itself, there are fearsome dungeons, from whose walls the waters trickle, and whose only adornment is to be found in the pitiful records scratched on the stone by men once imprisoned in them. From one of them, the one-time friend of Edward II., the gay and intriguing Piers Gaveston, was taken by order of the Warwick of that day—the "Black Dog" of Gaveston's scornful parlance—to his execution on Blacklow Hill. . . . But there are also dainty boudoirs, resplendent reception rooms and state apartments, great halls along which in a long rest are ranged the suits of armor worn by the knights whose swords and spurs once clanked along these same magnificent old passages; and there are, too, conservatories filled with flowers unknown to the old warlike days. In one compartment is placed the famous "Warwick Vase," dug from the ruins of Hadrian's villa at Tivoli, but still perfect, from the Bacchus heads ranged about its rim, to the graceful grape tendrils carved about its pedestal.

In another place is shown a helmet, once worn by Oliver Cromwell, and a death mask modelled from his stern old countenance, for the owner of the castle at that time was a Parliamentarian, a sufficient reason why the building should remain to-day, as Sir Walter Scott has described it, "the fairest monument of ancient and chivalrous splendor which remains unimpaired by time." Otherwise,

it might not have so well escaped the devastation wrought by the Puritan soldiery.

Lady Warwick is but forty-five years of age, and still very beautiful. With her beauty, her rank, her mental brilliance, her wealth, her possession of a home so ancient and so "splendid," she might claim every pleasure, every recognition which these things can command. That she has relinquished so much, and laid herself open to the criticism and contumely of her natural associates, and for so many years, is surely proof enough that she has acted only because of a principle; fads do not, as a rule, stand the test of time.

[By a mistake, the picture belonging to this article appeared last week. If you want to know what Lady Warwick's dining-room looks like, kindly refer to last week's issue.]

FALLING HAIR.

Dear Dame Durden,—You give such valuable advice to those bringing their difficulties to you, that I am bringing mine, too.

It is this: My hair seems to fall out altogether too much, and if I comb it dry, it will not stay in place. Also there are gray hairs growing in, and I do not like to see them, as I am only twenty.

Will some of the Chatterers please tell me of a tonic or restorer, or give a recipe for one, and tell me how to care for the hair? By giving the information, you will greatly oblige—

WREN OF THE WOODS.

Grey County.

You cannot use anything better than ammoniated mercury ointment for your hair, rubbing a little on the scalp at nights. It will make your hair rather oily, so that it may be necessary to wash it before going out anywhere, but is sure to be effective if used steadily for several months. Carboline applied to the scalp occasionally is also good to remove dandruff and stimulate growth, while many of the hair tonics containing bay rum are also effective. I had my hair treated by a professional hairdresser about a year ago, and noticed that she placed great importance upon rubbing the scalp vigorously with the fingers. She used to rub my head until it tingled, and occasionally would catch the hair near the roots and pull it by jerks all over my head. In washing it, she never rubbed soap directly on the hair, but invariably dissolved it first in the water. In combing, she always began near the ends, and freed the tangles there first, proceeding gradually upwards. She said that massaging the scalp should be done every night, and that the hair should be washed once in from two to six weeks, depending on its natural oiliness. I am afraid you can do nothing to prevent your hair from turning gray; but you need not mind that. Many quite young people, nowadays, have gray hair, which is considered by many to be very becoming.

PICTURE POST CARDS.

A correspondent wishes to exchange picture post cards with members of the Ingle Nook, but, as we have found that a picture-post-card exchange does not work very well, we cannot publish her address. We trust she will understand how impossible it is to open such an exchange in a paper commanding so many subscribers as "The Farmer's Advocate." If she received ten or fifteen dollars' worth of cards, she might find returning them all rather expensive, so it is better not to run the risk.

CHRISTMAS GIFTS.

Dear Dame Durden,—Just having read about Christmas gifts in our "Advocate," may I ask if you do not think it would be helpful for each of the Chatterers to give a suggestion of a Christmas gift—something simple and easy to make? And could any of the readers tell me where I could get a pattern of a Teddy bear, or could the pattern not be given in "The Farmer's Advocate" fashions? Children are so fond of these stuffed animals, that I should think, for Christmas gifts, patterns of that kind would be in great demand.

I enclose the following suggestion for a Christmas gift.

Dusky Maiden Twine-holder.—Procure a coconut, saw in half, and scoop out the

DIAMOND DYES HELP MOTHERS TO KEEP THEIR GIRLS WELL DRESSED.



"I have used Diamond Dyes before I was married, and since I have been in a home of my own I have used several packages every month for the coloring of dresses, skirts, waists, ribbons and children's suits. I have four little girls who are always well dressed, thanks to your Diamond Dyes. When their suits, jackets, hats or stockings become dull or faded, I use some fashionable color of your Diamond Dyes, and at small cost, I produce garments and hats equal to new. Your Cotton and Wool colors are all perfect and so easy to use."

Mrs. J. E. Kellar, Toronto, Ont.

Mothers who would see their girls dressed natively and well at a small cost, should begin to use Diamond Dyes. One ten cent package of Diamond Dye of some fashionable color will save the cost of a dress, suit or hat for the little one. Always be sure to get the real Diamond Dyes; never accept a substitute or the something called JUST AS GOOD as the Diamond.

Another very important thing is to be sure that you get the kind of Diamond Dyes that is adapted to the article you intend to dye. If your materials are Cotton, Linen or Mixed Goods, ask for Diamond Dye for Cotton; if your materials are Wool or Silk, ask for Diamond Dye for Wool.

GUARD AGAINST THEM. Refuse all package dyes that claim to color any material with one dye. Such dyes are deceptive and worthless.

Send us your full address and we will mail you free of cost the famous Diamond Dye Annual, New Teddy-Bear Booklet and Diamond Dye Direction Book.

WELLS & RICHARDSON Co., LIMITED
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LADIES

Send for a FREE Sample of ORANGE LILY.

If you suffer from any disease of the organs that make of you a woman, write me at once for ten days' treatment of ORANGE LILY, which I will send to every lady enclosing 3 cent stamps. This wonderful Applied remedy cures tumors, leucorrhoea, lacerations, painful periods, pains in the back, sides and abdomen, falling, irregularities, etc., like magic.

You can use it and cure yourself in the privacy of your own home for a trifle no physician being necessary. Don't fail to write to day for the FREE TRIAL TREATMENT. This will convince you that you will get well if you continue the treatment a reasonable time. Address **MRS. F. V. CURRAH, Windsor, Ont.**



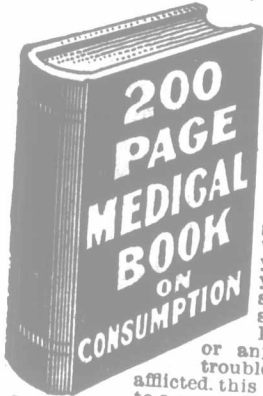
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My "Star Brand" Wood-Ash-Fertilizer is Nature's fertilizer for the Lawn, Garden, Orchard or Farm. They contain plant food in a concentrated form, dry, fine, and guaranteed in first-class condition; no obnoxious odors. Put up in strong bags of 100 lbs. each. We employ no agents, sell at one price to all, direct to customers. Prompt shipment to all points. Prices, in lots of 200 lbs. or more, quoted upon application. Address: CHAS. STEVENS, Napanee, Ont. Drawer 641.

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This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel how others have cured themselves after all remedies they had tried failed, and they believed their case hopeless.

Write at once to the Yonkerman Consumption Remedy Co., 342 Rose Street, Kalamazoo, Mich., and they will send you from their Canadian Depot the book and a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Don't wait—write today. It may mean the saving of your life.

Eastern Dairy School Kingston, Ont.

Regular courses begin immediately after New Year's. School will operate as a creamery during December. TUITION FREE. For calendar giving full particulars regarding the courses write: J.W. Mitchell, Supt., Kingston, Ont.

Land in Alberta

Party having one whole section and another half section of best fall wheat and mixed farming. Also an improved farm, two dwellings and barn, in Saskatchewan. Must have money, and will sell at a sacrifice if sold within 30 days. One-quarter cash required. For full particulars write: Ontario & Alberta Land Co., Room 6, 18 Toronto St., Toronto.

PURE-BRED DORSET SHEEP

My entire flock of 19 young breeding ewes and one stock ram for sale. N. McDowell, Norwich P.O., Ont.

Catch 'em and Hold 'em.

THE NEWHOUSE TRAP

Is absolutely reliable. Never fails to hold the game. Positive in action, easy to set, will not get out of order.

Made in all sizes to catch anything from a rat to a bear.

Send for Catalogue

ONEIDA COMMUNITY, Ltd.
Niagara Falls, Ontario

inside. With a skewer, or nail, made red hot at the point, burn some holes, enabling the two halves to be tied together after putting in a ball of twine, the hole representing the mouth. Paint the eyes black and outlines of a nose; stovetube varnish answers for paint. Make a hood out of gaily-colored cotton, cut in a strip about eight inches wide, turning under two inches on one side, and gathering to make a frill. Gather the other side tightly, and put on the cocoon. Tie a large bow, and put under the chin. Suspend with a ribbon, and a more useful and cunning little maiden one cannot imagine.

Could you tell me, or could any of the readers, how to make the candy called milk chocolate that children are so fond of? BRIAR ROSE, Quebec.

A Teddy Bear pattern appeared last week. Can anyone send directions for the milk chocolate?

[Note.—Some questions and letters are still held over. It is usually impossible to insert these in this department sooner than from two to six weeks after they have been received.]

WHAT WE GIVE OUR SUBSCRIBERS FOR GETTING NEW SUBSCRIBERS FOR US.

- For One New Subscriber:
- Farmer's knife, Rodgers, a first-class article.
 - The choice of any two of the following: Reading-glass, large mouth-organ (harmonica), mariner's compass.

- For Two New Subscribers:
- Bagster's Comprehensive Teacher's Bible.
 - Lady's hand-bag, leather and lined with leather, large enough to carry letters, etc., in.

- Watches:
- Gentleman's nickel watch for three new subscribers.
 - Gentleman's gold-filled Elgin or Waltham watch for thirteen new subscribers.
 - Lady's sterling silver watch for eight new subscribers.
 - Lady's gold-filled watch for eleven new subscribers.

These articles are all good, and may be relied upon.

In addition, we have books bearing on almost every department of farming, for list of which see elsewhere in "The Farmer's Advocate."

Tell your friends about our journal, and let us send you one of these premiums. State definitely which premium you prefer.

Current Events.

The loss of life occasioned at Karatagh, Bokhara, by the recent landslide is now placed at about 5,000.

Foreign medical experts assert that the Emperor of China is on the verge of insanity. He is thirty-six years of age.

A despatch from Tokio states that, although Japan will not consent to a formal agreement regarding restrictions on emigrants to Canada, she is anxious to deal with the Canadian Government in a conciliatory spirit.

It is estimated that 600 were killed and 1,000 injured during the recent earthquakes in Calabria. A terrible explosion of Mt. Vesuvius occurred immediately after the earthquake, and many surrounding towns were damaged by falling mud and ashes.

GOSSIP.

Mr. Henry Mason, Scarborough, Ont., who advertises Berkshire hogs in this paper, writes: "Sales have been very good this fall, considering the shortage of feed in some parts. I have sold to P. W. Boynton, of Dollar, a grand young boar, out of Durham's Ruby Girl (imp.), and by York Lodge Prince; to Wm. Wood, Milliken, a grand brood sow, Fairview Rose, carrying a litter by Lord Dawn III. (imp.), also a brood sow to Jas. Thompson, of Scarborough, and several other young pigs."

SALE DATES CLAIMED.

- Nov. 7th.—R. Moore & Sons, imported Shires, at London.
- Nov. 12th.—Geo. W. Ballow, Middletown, N. Y., Ayrshires.
- Nov. 11th.—W. E. Stevens, Aylmer, Ont., mill properties.
- Nov. 14th.—W. C. Burn, Tillsonburg, Ont., ponies, roadsters, Holstein grades and Shropshires.
- Nov. 26th.—Wm. Meharey, Russell, Ont., imported Clydesdales, at Ottawa.
- Nov. 28th.—Mossom Boyd Co., Bobcaygeon, Ont., Polled Herefords, at Windsor, Ont.
- Jan. 6th, 1908.—Estate of Wm. Hendrie, Hamilton, Ont., Shorthorns.
- Jan. 8th.—H. M. Vanderlip, Cainsville, Ont., Berkshires.

Mr. Ira L. Howlett, Keldon, Ont., who advertises Large English Yorkshires and Berkshires in this paper, writes: "My stock which I offer is strictly high-class, and is bred from choice individual specimens of the leading herds in Canada. In Berkshires, my herd has, for the most of it, a number of choice sows, purchased at the dispersion sale of Mr. John Lahmer (since deceased), and, as Hillcrest has always been synonymous with quality of the highest order, so, also, will it be with stock purchased at East Bank. Besides the above-mentioned stock, may also be found stock from the herds of H. M. Vanderlip, W. H. Durham, Wm. Wilson, Philo L. Mills and others. While in Yorkshires, my stock is from stock bred by D. C. Platt & Son, Chas. Currie and Jas. Wilson & Sons; while my stock boars are choice prize-winning individuals of their respective breeds. Young stock a specialty. I have also a small herd of Shorthorns of first-class quality and scale. Realizing that a satisfied customer is my best advertisement, they can rest assured of a square deal at moderate prices at East Bank."

Mr. Robert Miller, Stouffville, Ont., writes: "Have lately sold to Mr. D. A. Curtis, Addison, Mich., the imported two-year-old bull, Peer (96348) 284683. This is one of the nicest bulls I have imported for some years. He is a Roan Lady, sired by the Duthie Cruickshank Amaranth bull, Sittyton Choice (84822), and from Rosetta 16th, a splendid cow that has won many prizes for her owner, and she was sired by the Princess Royal bull, Scottish Prince (73593). Mr. Curtis also bought the beautiful Lavender heifer, Lady Lavender 2nd, one of the best and best bred heifers I know of. She is in calf, since March last, to the Edwards bull, Flower Champion—51799. Nine years ago Mr. Curtis bought from me the Cruickshank Brawith Bud bull, Prince of Fortune 136635, bred by Mr. Wilson, of Pirrie's Mill, and imported as a yearling. He is still alive, robust and active as ever. He has proved a great sire, and I was more than pleased to have Mr. Curtis as a customer when again wanting a bull. He used to breed the best of Bates cattle. Now he has changed to the Scotch Shorthorns. He will have nothing but the best. On Monday, I shipped to Messrs. W. C. Wilson & Sons, Hawkestone, Ont., the imported bull, Rosewood King—69445. He was sired by Diamond King (83294), practically a full brother to Diamond Mine (83296), that sired, for Mr. Durno, the highest-priced calves that has ever been sold. His dam was Rosewood 84th, a splendid cow, and of one of the best selling Scotch families in Aberdeenshire. This is one of the best bulls that I have ever sold, and he should prove a treasure in Messrs. Wilson's herd. These two bulls have been shown but once each, and both won first prizes."

DR. W. A. McFALL

Special attention given to the treatment of rheumatism. Address: 168 Spadina Avenue, Toronto.

See that Lock

It is the perfect fitting, patented side lock on

EASTLAKE METALLIC SHINGLES

No other shingles have it. This famous device makes Eastlake Shingles the easiest and quickest laid—and also insures the roof being absolutely leak proof. Eastlake Shingles are fire, lightning and rust proof.

OUR GUARANTEE—We guarantee Eastlake Metallic Shingles to be made of best material, more scientifically and accurately constructed, more easily applied and will last longer than any other. Eastlake Shingles have been used since 1850.

Our cheapest grade will last longer and cost less than the best wooden shingles. Our best Metallic Shingles should not be mentioned in the same breath with any other roof covering, shingles, slate or tin. Write us for reasons.

The Metallic Roofing Co., Limited, Manufacturers, Toronto and Winnipeg.

WOOD SHEETING
"AQUAPROOF" PAPER

ASSIGNEE'S SALE!

The following valuable mill properties of the Stephen Pierce Estate will be offered for sale by PUBLIC AUCTION, at the Town of Aylmer, Ontario, on the

11th Day of November,

at the Brown House Hotel, commencing at 2 o'clock p. m., namely: 1st—The well-known first-class brick roller flour and chopping mill, with one acre of land, situate on Talbot street, which is the main street in Aylmer; capacity 50 barrels per day. Also cheese and butter factory therewith—all in first-class running order. This mill has long had an extensive patronage. The buildings are modern and in good state of preservation. A rare opportunity is offered intending purchasers. 2nd—The hoop, stove and cheese-box mill and cooper shop, with four lots on which same is situated on John street, north, in Aylmer, and the machinery therewith. Terms—20 per cent of purchase money on day of sale, balance in thirty days without interest. For further particulars apply to

W. E. STEVENS, Aylmer, Ont., Solicitor for the Vendors

Mr. Ed. Morlock, Crediton, says: "My Beatty Litter Carrier saves me time and labor seven days a week."

We have agents in most localities who will erect them. Write for information.

Beatty Bros., Fergus, Ont.

EAST BANK HERDS
LARGE English Yorkshire and Berkshire Swine, Shorthorn Cattle, Barred Rock Poultry. To make room I will sell suckers of choice, breeding and quality at \$5 each—registered. Also sows in sows bred and ready to breed, and boars fit for service. Prize-winners, the set of prize-winners, and capable of producing prize-winners. Shorthorn cows of good quality; also two choice calves. Everything as represented. Write, call or phone. IRA L. HOWLETT, Keldon P. O. Shelburne Str., C. P. R.
Subscribe for "Farmer's Advocate"

HANDS TERRIBLY CRACKED.

Mrs. Yellen, of Portland, says: "My hands were so sore and cracked that I could not put them near water. I seemed quite unable to get relief from anything I put on them until I tried Zam-Buk. It closed the big cracks; gave me ease, and in a very short time healed my hands completely."

Zam-Buk heals all skin injuries and diseases. Of all stores and druggists at 50c., or from Zam-Buk Co., Toronto, for price. 3 boxes for \$1.25.



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.

FOR SALE—Excellent stock and grain farm. One hundred seventy five acres. Elgin Co., seven miles from St. Thomas two miles from Marquette and Michigan Central Station. Comfortable house. Two bank barns. Complete water system for stock in stables. Young orchard—bearing. Eighteen acres fall wheat. R. D. Fortuon, Port Stanley.

POSITION wanted as Shepherd by Scotchman, aged 25, single; from Old Country sheep farms. Address, Robert Irvine, care of Wilson Smith, Ste. Agathe des Monts, Que.

SCOTCH collie dog, nine months old; bargain. Sire imp. prizewinner, dam a worker. Paul Merritt, Beamsville, Ont.

WANTED—A few good subscription agents for The Farmer's Advocate and Home Magazine. Liberal terms. The William Weld Co., Ltd., London, Ont.

WANTED—An indoor servant. One qualified to take charge Small family. Comfortable home and highest wages. Address: Mrs. E. Gunn, Donrobin Farm, Beaverton, Ont.

WANTED by young married man, inexperienced, position as farm laborer with good practical farmer in Ontario. Mixed farming preferred. Wife willing to assist in domestic duties for board and experience in dairying. Apply: Brigadier Howell 22 Albert St., Toronto

200-ACRE FARM—Soil clay loam. Well watered. Good brick house. Bank barn. Apply: Jno. Underwood, Grafton, Northumberland Co.



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.

ANDERSON & CO., Ainslie Hill Poultry Farm. Pure-bred White Holland turkeys, thoroughbred Buff Orpingtons. For sale: White Holland turkeys, \$7 a pair; toms, \$5; hens, \$4. Buff Orpington pullets, 75c; cockerels, \$1. Miss Anderson, Box 104, Station West, Ontario.

BROWN and White Leghorns, Barred and White Rocks and White Wyandottes. Cockerels, \$3; yearling Brown Leghorn hens at \$1 each. F. W. K. Ouse Guelph.

FOR SALE—Wyandottes, Rocks, Orpingtons, Leghorns, Minorcas, Houdans, Toulouse geese, Pekin ducks E. Laurie, Drumbo.

PURE-BRED White Wyandotte cockerels and pullets for sale. T. Smith, Vigo, Ont.

GOSSIP.

POLLED HEREFORDS AT AUCTION.
Attention is called to an important auction sale of 75 head of Double-standard Polled Hereford cattle, the property of Mossom Boyd Co., Bobcaygeon, Ont., to be held at Windsor, Ont., on Thursday, Nov. 28th. This sale will afford a favorable opportunity for those who have feed enough to secure foundation stock for a herd of a class of beef cattle sure to become popular in the near future; and, as prices are likely to be very moderate, owing to scarcity of feed in some sections, there will probably be bargains going. Catalogues may be had on application to the owners.

A census-taker made his rounds in an isolated village. He gave one of his official papers to a woman that she might fill in the required answers. One of the questions, instead of reading "Married or single," had it "Condition as to marriage." The woman filled in the answer thus: "Awful hard up be-

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 must be enclosed.

Veterinary.

WOUNDED FETLOCK.

Sucking colt got its fetlock torn in front, right over the joint. What shall I apply so as to leave no disfigurement?

L. L.

Ans.—The result of a wound depends greatly upon the early treatment. In most cases it is wise to stitch it. It is very hard to treat a wound on a joint, where every motion of the limb opens and closes it. All that you can do now is to keep the colt as quiet as possible. Keep the wound clean by bathing with warm water, and apply a good antiseptic, as a five-per-cent. solution of carbolic in water, four or five times daily. It is not probable you will be able to prevent a visible scar, and, possibly, some enlargement, which will gradually disappear or nearly so.

Miscellaneous.

MUSHROOM CULTURE.

Will you give me some information regarding growing mushrooms in a cellar?

R. B.

Ans.—Cellars or basement-rooms, where the winter temperature does not go below 55 degrees, or rise above 65 degrees, are suitable places for growing mushrooms. It is not advisable to make them under the living part of a house, since the odor of the manure will fill the house. Prepare the beds on the cellar floor by making rough, box-like enclosures of plank, about 15 inches in depth, and held in place by scantlings. The beds should be three or four feet in width, and the floor of the cellar and the wall at the side may be used to save planks. If success is assured, several tiers of beds may be built one above the other, the floor of each tier being at least one inch in thickness. The cellar should have some ventilation, but there should be no air currents crossing the beds. The best material for the beds has been found to be horse manure without much coarse straw. The manure should be piled in some sheltered place in a pile from three to four feet deep, and should be allowed to heat, but not to burn, a condition which will be shown by its turning white inside. If this whiteness should show signs of appearing, the pile should be turned. In any case, after it has been well heated, it should be turned once in two or three days. If the heating proceeds very rapidly, every day. If it should get too dry, water should be sprinkled on it to keep it moist. In fifteen or eighteen days, it should be ready for the beds, but should not be put into them till the temperature is down to 100 degrees. The manure may now be put into the beds, the more straw material at the bottom. As each layer is put in, it should be thoroughly tramped down. Finally, a layer of about 1 1/2 inches of soil—rotted sod is best—is placed over the top. The spawn must not be planted at once, as the temperature is likely to rise. It should not be placed in the bed until the temperature has fallen again to 70 or 75 degrees. Spawn comes in the form of bricks, each of which is to be broken into ten or twelve pieces, which are planted from eight to ten inches apart in the bed, and about one or two inches below the surface, the manure removed in making the hole for the piece being placed over the top and packed down hard. The beds may now be loosely covered with straw to prevent too rapid evaporation. The mushrooms should begin to appear in from six to seven weeks. A good work on mushroom-growing that may be ordered through this office is "Mushrooms: How to Grow Them," by Falconer, price \$1, plus

**Double Standard
Polled Herefords at Auction
Thursday, November 28th,**

AT WINDSOR, ONT.

78 Head mostly females, half of them polled, the balance being horned cows with polled calves at foot, and bred to p lled bulls. All registered in Am. Hereford Record, and in Canadian Herdbook. Catalogue on application.

Feed being scarce and cattle low, now is the opportunity for those who can to buy. If you want to sell your Herefords readily use a polled bull.

Mossom Boyd Co., Bobcaygeon, Ont.

**Imp. Clydesdale Fillies by Auction
15 TWO AND THREE YEARS OLD,
AT OTTAWA, ONT.**

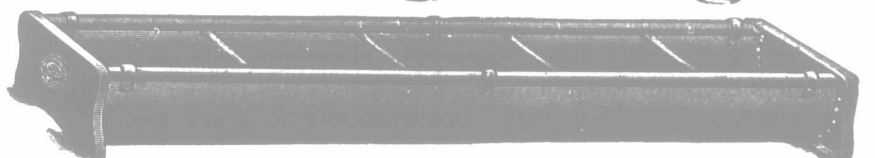
Will offer 15 extra good fillies. Large and smooth, with the best of quality and breeding, in good condition, and all bred to good horses in Scotland. Registered in both books. Sale at one o'clock.

TUESDAY, NOVEMBER 26, 1907.

TERMS—Seven months without interest, on bankable paper; 5 per cent. off for cash.

WM. MEHAREY, RUSSELL, ONT.

Steel Hog Troughs



Our steel hog trough has proved itself a true success. "All right. Just the thing. Would use no other." That's what they who use them say. Send us your order; do it now. Get our free catalogue of tanks, food cookers and troughs. We make the Gordon all-steel cheese vat. Write us.

The Steel Trough and Machine Co., Limited, Tweed, Ontario.

**Ontario Department of Agriculture
DEMONSTRATION FARM.
TENDERS FOR CLEARING LAND.**

Sealed tenders are solicited by the undersigned on or before November 25th next for the clearing of approximately 100 acres of land on the Government Demonstration Farm, on Lot 12, Concession 2, Township of Walker, and Lot 1, Concession 2, Township of Clergue. The work of clearing to include underbrushing, felling, logging and burning off the said 100 acres. All trees of a diameter of ten inches and up at three feet from the ground are to be cut into sawlogs of suitable length, and hauled to the railway right-of-way on the farm. All spruce and balsam trees under that diameter, down to six inches, to be cut into pulpwood bolts, four feet in length, and piled upon the right-of-way. All tops, branches and general debris on the ground are to be piled and burned at such time in the spring of 1908 as may be directed by the Department. Tenders to state a price per acre for doing the work as above indicated. Money will be advanced from time to time during the progress of the work, but not to exceed 60 per cent. of the total value of the work done until it is all completed to the satisfaction of the officer in charge of the farm, or such person as may be appointed by the Minister. Security will be required for the proper fulfillment of the contract. The lowest or any tender not necessarily accepted. Maps and further particulars may be obtained on application.

NELSON MONTEITH,
Minister of Agriculture, Toronto, Ont.

MARKETS—Continued from page 1752. paying 7c., 8c. and 9c. per lb., Montreal, for Nos. 3, 2 and 1, respectively, and 8c. and 10c., respectively, for No. 2 and 1 calf skins. Lamb skins are steady at 80c. and 85c. Horse hides continue at \$1.75 each for No. 2, and \$2.25 each for No. 1. Tallow is 1c. to 3 1/2c. per lb. for rough, and 6c. to 6 1/2c. for refined.

BRITISH CATTLE MARKET.

London.—London cables are firmer at 10c. to 12 1/2c. per lb., dressed weight; refrigerator beef is quoted at 10c. per lb.

AN APT QUOTATION.

Representative John Sharp Williams tells of an old dorky whom he once encountered in a railroad station at Charleston, and whom the Congressman, expecting to remain in town but a few minutes, desired to take a note to a friend in the city.

"Are you sure you know where the house is?" anxiously inquired Mr. Williams. "I want my friend to get the note at once."

"Well, sah," answered the negro, with a roll of his eyes, "I on'y wisht I had as many dollahs as I knows where dat house is, sah!"

"If you please, ma'am," said the servant from Finland, "the cat's had chickens." "Nonsense, Gertrude!" returned the mistress of the house. "You mean kittens. Cats don't have chickens." "Was them chickens or kittens that master brought home last night?" "Chickens, of course." "Well, ma'am, that's what the cat has had."

POOR

COPY

Fistula and Poll Evil



Any person, however inexperienced, can readily cure either disease with Fleming's

Fistula and Poll Evil Cure—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vest-Pocket Veterinary Adviser. Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.

FLEMING BROS., Chemists,
75 Church Street, Toronto, Ontario

Dr. Page's English Spavin Cure.




For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ring worm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: om

J. A. JOHNSTON & CO., Druggists,
171 King St. E., Toronto, Ont.

Free Veterinary Book

Be your own horse doctor. Book enables you to cure all the common ailments, curb, splint, spavin, lameness, etc. Prepared by the makers of

Tuttle's Elixir



The world's greatest horse remedy. \$100 reward for failure to cure above diseases where cure is possible. Write for the book. Postage 2c.

TUTTLE'S ELIXIR CO., 66 Beverly St., Boston, Mass.
Montreal: H. A. Tuttle, Mgr., 32 St. Gabriel St.
Be aware of all imitations; only temporary relief, if any.

C. H. R. Crocker South Farmington, Nova Scotia.

AN INFLAMED TENDON NEEDS COOLING.

ABSORBINE

Will do it and restore the circulation, assist nature to repair strained, ruptured ligaments more successfully than Fling. No blister, no hair gone, and you can use the horse. \$2.00 per bottle, delivered. Book 2-C Free.

ABSORBINE, JR., for mankind, \$1.00 bottle. Cures Strained Torn Ligaments, Varicose Veins, Varicocele, Hydrocele, enlarged Glands and Ulcers. Allays pain quickly.

W-F-YOUNG, P.D-F., 73 Monmouth St., Springfield, Mass.
Canadian Agents: LYMAN BONS & CO., Montreal.


RIVER VALLEY CLYDESDALES AND SHORTHORNS.



For Sale—Two stallions, one imp., the other imp., in dam; 2 imp. mares 3 and 4 yrs. of age—a grand pair, with size and quality; 1 fly foal imp. in dam. Shorthorns all ages, of both sexes; straight milking strain.

A. V. Carefoot, Thornbury Sta., Redwing P. O.

Imported Clydesdales



Just arrived, a choice shipment of stallions and fillies; dark colors; all first-class breeding. Inspection invited. Terms to suit.

Geo. G. Stewart, Howick, Que.

Clydesdales, Shorthorns and Cotswolds—For individuals of above breeds, write me. My new Cotswold and Clydesdale importation will arrive early in the season.

J. C. ROSS, Jarvis P.O. & Sta.

Subscribe for "Farmer's Advocate"

QUESTIONS AND ANSWERS. Miscellaneous.

PEARLY EVERLASTING.

Please describe or name the enclosed plant. Is it considered a hard weed to get rid of? Have found several patches of it in a meadow that has been cut two seasons for hay, and did not see any of the above plant until this fall.

A. G.

Ans.—This is the pearly everlasting (Antennaria margaritacea), and is not likely to prove a bad weed, as it yields easily to cultivation.

PAPER MILK BOTTLES.

Could you let me know if anyone is manufacturing paper milk bottles for sale? I have heard of them, and think they would save a great deal of labor in washing, as they would be used only once.

A SUBSCRIBER.

Ans.—We have brought this inquiry to the attention of two manufacturers of single-service paper milk bottles. One firm is English and one American. Inquiries like these are always welcome, as they indicate to manufacturers the existence of a possible demand and the medium for getting in touch with it.

MANURE FOR ALFALFA FIELD.

Have a nine-acre alfalfa field seeded this year. Would it be well to apply a light coat of manure to keep it alive over winter?

F. A.

Ans.—There is no question but that a light top-dressing with manure this fall or in early winter would help to protect the young alfalfa plants from winter-killing, and, to some extent, from spring heaving. It would also invigorate the growth next year. It is important, however, to avoid the use of manure that is foul with weed seeds, else the injury from these will counterbalance the benefit.

SNUFFLES AND BLOATING IN SHEEP.

A ewe, after lambing, took the snuffles. A kind of slime came from her nostrils, and she bloated, could not rise, and died. Could you give a remedy?

R. C.

Ans.—The snuffles is simple catarrh—an inflamed state of the lining of the nostrils and the cavities of the head, caused generally by exposure to cold rains. Keeping the sheep dry, warm and clean often effects a cure in a few days, without medicine; but if the ailment does not pass off, give the following: Quarter pound each of nitrate of potash (saltpetre), sulphur and ground gentian root. Mix thoroughly, and give a teaspoonful twice daily, on the tongue with a spoon, or in its feed, or as a drench in a little water. Wash off the nose with warm water and soap. Treatment for bloating is to give three tablespoonfuls of raw linseed oil and a teaspoonful spirits turpentine as a drench.

ROUP IN TURKEYS.

My turkeys are sick. A swelling appears under the eye, also a discharge from nostrils and eyes. The swelling gets larger, till it extends over the eye, and the bird becomes blind. I have lost one, and some others are affected; these I am keeping apart from the others.

SUBSCRIBER.

Ans.—Roup. Better kill and burn every affected bird, unless a few of the mildly-affected ones may be kept segregated completely from the healthy flock, in which case it might be worth attempting to treat them, owing to the near approach of marketing time. As for the healthy birds, if possible, remove them to clean quarters. In any case, disinfect all the roosts, nests and houses. Destroy, or, at least, thoroughly cleanse with disinfecting fluid all drinking and feeding utensils. If treatment of affected birds is attempted, give each one of these a heaping teaspoonful of dry Epsom salts in a mash, and bathe the head with a weak solution of any of the reliable proprietary remedies, such as Morgan's Roup Cure, or a five-per-cent. solution of potassium permanganate, or a Seiler's tablet dissolved in a teaspoonful of water.

SAVE YOUR HORSE

BOG SPAVIN BONE SPAVIN RINGBONE **CURB SPLINT POLL EVIL** **LAMENESS SWELLINGS SOFT BUNCHES**

are CURED—leaving the horse sound as a dollar—by

KENDALL'S SPAVIN CURE

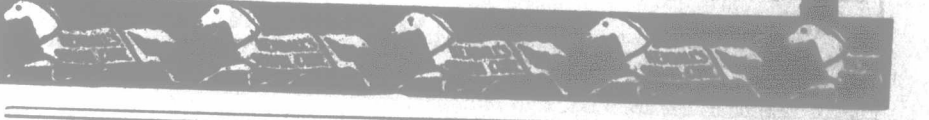
No matter what you have tried—nor how many veterinaries have failed—get KENDALL'S SPAVIN CURE, use it as directed and it will give perfect results.

NOTE: DAME DES BOIS, P.Q., Sept. 20 '06.

"I am treating two horses—one with Spavin—the other with Poll Evil. I am using Kendall's Spavin Cure and must say I find my horses much improved. I have used many remedies but find Kendall's The King Of All." GEO. BRODEUR.

\$1. a bottle—6 for \$5. Our "Treatise On The Horse" will give you many a hint as to how to keep horses free from blemishes and lameness. Write for free copy. \$1

DR. B. J. KENDALL CO., ENOSBURG FALLS, VERMONT, U.S.A.



CLYDESDALES

At Columbus, Ont., the home of the winners, this year's importation just arrived. The pick of Scotland's best. For size, style, conformation, quality and royal breeding, they eclipse any former importation we ever made. Look them up in our barn on Exhibition Grounds. Over 30 head to select from.

SMITH & RICHARDSON, COLUMBUS, ONTARIO.

CRAIGALEE HACKNEYS

In my stables intending purchasers will always find a good selection of high-stepping harness horses, saddlers, etc. Just now I have a number on hand, also a few high-class Hackney mares; some with foal at foot. Noted prizewinners among them, and some rare good youngsters.

H. J. Spencely, Boxgrove P. O. MARKHAM STA. LONG-DISTANCE 'PHONE.

CLYDESDALES

We have imported more Royal, H. A. S., Toronto and Chicago winners than any other Canadian importers. This year's importation has just arrived, and we think are away the best lot we ever imported; leading Scotch winners among them. Look up our stable on Exhibition Grounds.

GRAHAM BROS., CLAREMONT, ONTARIO
Long-distance 'phone. C. P. R.

Graham & Renfrew's CLYDESDALES and HACKNEYS

Our Clydes now on hand are all prizewinners, their breeding is glidedged. Our Hackneys, both stallions and mares, are an exceedingly high-class lot. We also have a few high-steppers and carriage horses. Yonge Street cars pass the door every hour. Phone North 4436.

GRAHAM & RENFREW, BEDFORD PARK, ONT.

Largest Importation of Clydesdales, Hackneys and Percherons of the Year.

My latest importation has just arrived here. I have now on hand for sale: 20 Clydesdale stallions from 1 to 5 years of age; 25 Clydesdale fillies from 1 to 4 years of age; 12 Hackney stallions from 2 to 3 years of age; 12 Hackney fillies, all young; and 4 Percheron stallions 3 and 4 years of age. A total of 75 head, with size, quality and action, and bred in the purple. Largest selection in Canada. Will be sold right, and on terms to suit.

T. H. HASSARD, MILLBROOK, ONT.

Oak Park Stock Farm IMP. HACKNEYS, SHROPSHIRE, AND BERKSHIRES.

A large number of Hackneys (stallions and fillies), imp. and out of imp. stock; all ages; show stock. Shropshires—imp. and from imp. stock; singly or in car lots. About 30 choice young Berkshires, imp. sire and dam. Everything strictly high class. **T. A. COX, Manager, Brantford, Ont.**

Imp. Clydesdales (Stallions and Fillies), Hackneys, Welsh Ponies.

I have now on hand Clydesdale stallions and fillies—Scotland prizewinners and champions; Hackney fillies and Hackney pony; also Welsh ponies. There are no better animals, nor no better bred ones, than I can show. Will be sold cheap and on favorable terms. **A. AITCHISON, GUELPH P. O. AND STATION.**

SIMCOE LODGE CLYDESDALES

Our stable of imported and Canadian-bred Clydesdale stallions and fillies was never so strong in show stuff as now, although we have had some very strong lots. Call and see what we have before buying elsewhere. **HODGKINSON & TISDALE, BEAVERTON, ONT., G. T. & C. N. R. Long-distance 'phone.**

IMPORTED CLYDESDALES! 9 stallions, 1 to 6 years of age; 10 fillies, 1 to 3 years of age, several of them in foal; 1 two-year-old Hackney stallion; 1 two-year-old Shire stallion; 3 Percheron stallions, 3 years old. All are selected animals, bred in the purple. Will be sold cheap and on terms to suit. **T. D. ELLIOTT, BOLTON, ONT. 'Phone.**

Imp. Clydesdale Stallions and Fillies.

Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show-ring stuff. Come and see them. Will sell on terms to suit. **JOHN A. BOAG & SON, RAYENSHOE P. O., BROWN HILL STA.**

IMPORTANT AUCTION SALE.

Matched Ponies, Roadster Mares and Fillies, High-grade Holstein Cows and Heifers, Pure-bred and Grade Shropshire Sheep,

Tillsonburg, Ont., Thursday, November 14, 1907

Horses.

Pair beautiful ponies rising 5 years old. Black, with white tails and legs; 14 bands high. Weight, 1,700 pounds. Perfectly broken. Gentle as kittens. Can not be beaten as a turnout or road team.

Pair of fillies—full sisters—rising 3 years old. Sired by Gillfillian 2.26, he by Gambetta Wilkes; their dam by a Thoroughbred. They are both trotters. A pair of beauties and will trot very fast.

Also the dam of above colts, safe in foal to General Worth, and by Gambetta Wilkes. Certainly a grand brood mare.

Also General-purpose team of mares in foal to Clyde stallion.

T. MERRITT MORE, Auctioneer.
Farm 100 yards from M. C. R. depot.

Cattle.

5 2 year old high-grade Holstein heifers, extra choice.

3 3-year-old grade Holstein heifers, extra choice.

8 choice dairy cows.

All the above coming in good season for cheese factory.

40 choice breeding ewes, Shropshire grades—8 pure-bred Shropshire shearing ewes

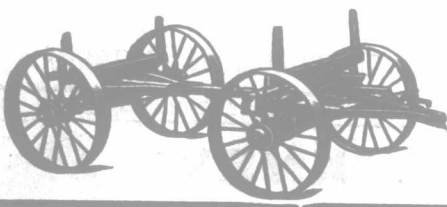
Poultry, implements and other articles too numerous to mention.

Terms of Sale—11 months' credit on approved notes without interest; 6 per cent. discount for cash.

W. C. BURN, Proprietor,
P. O. Box 6, TILLSONBURG, ONT.

THE WHEEL IS THE LIFE OF A WAGON

Our wheels will outwear several wagons; in fact, will last a lifetime with ordinary care. Farmers who have trouble with their wheels should try a set. They are low and strong, cheaper than wooden wheels, and a saving of labor for both man and horse. Made any size and width of tire and to fit any axle. Our guarantee goes with the wheels. Write to-day for catalogue.



DOMINION WROUGHT IRON WHEEL CO., LIMITED,
Orillia, Ontario.



CLYDESDALES AND FRENCH COACHERS, IMP.

Scottish and Canadian winners, stallions, mares and fillies. The Clydes represent the blood of such noted sires as Baron's Pride, Up-to-Time, Royal Favorite, Ethiopia and Acme. They combine size, quality and action. The French Coachers are a big, flashy, high-stepping lot, and are winners in both France and Canada. Our prices are right, and our horses as good as the best. Long-distance telephone.

ROBT. NESS & SON, Howick, Quebec.

25 Imported Clydesdale Stallions and Fillies 25
Two Clyde stallions, 1 Hackney stallion, over 20 Clyde mares and fillies, from 1 to 5 years of age. Many high class show animals among this lot. Many winners in Scotland among them. They have size, quality, style, action and breeding. Come and see them. GEO. A. BRODIE, Bethesda P. O., Steuville and Germley Stations.

Shorthorns! BELMAR PARG.

John Douglas, Manager, Peter White, Pembroke, Ont.

Calves for sale by our grand quartette of breeding and show bulls:
Nonpareil Archer, Imp. Proud Gift, Imp.
Marigold Sailor. Nonpareil Eclipse.
Females, imported and from imported stock in calf to these bulls.
An unsurpassed lot of yearling heifers.

THE SPICE OF LIFE.

FOOLED THE CARPENTER.

A carpenter called at a flat to make some repairs and knocked on the door.

"Who's there?" asked a voice.

"The carpenter," was the reply.

"Come in," was the response.

The carpenter tried the door, but it was locked.

"Open the door," said the carpenter.

"Haw, haw, haw!" came the voice from the inside.

The carpenter was getting very mad. Then the woman who lives in the flat on the opposite side opened her door, and said:

"There is no one at home there except the parrot."

QUESTIONS AND ANSWERS.

Miscellaneous.

PAYMENT OF WAGES TO MINOR.

If I hire a fellow who is under the age of twenty-one years, am I entitled to pay him or his father at the expiration of his term, having no agreement with his father, the fellow himself hiring with me?
J. O. Ontario.

Ans.—Assuming that the employee does not reside with his parent, you will be legally justified in paying the wages to him, the son, direct.



ROOF RIGHT NOW

There is one roof that saves money because it will last 100 years. Guaranteed in writing for 25 years.

"OSHAWA" GALVANIZED STEEL SHINGLES

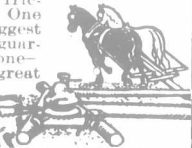
This roof saves you work because it is so easy to put on (do it yourself with a hammer and snips), and save you worry because they fireproof, windproof and weather-proof the building they cover. Write us about it and hear all about our ROOFING RIGHT. Address

The PEDLAR People (Est'd 1861).
Oshawa Montreal Ottawa Toronto London Winnipeg

Prove this Stump Puller Best—Try it FREE

Write me about my free trial offer on this great machine—the only practical stump puller made—built low-down to decrease friction and increase power. One man and one horse pulls biggest stumps. Light—few parts—guaranteed. Doubles work done—cuts your labor in half—great saver. Let me quote prices.

W. SMITH GRUBBER CO.
Dept. C 23 La Crosse, Wis.



GOSSIP.

MAPLE SHADE SHORTHORNS.

For about fifty years the standard of excellence maintained by the Hon. John Dryden, in the noted Maple Shade herd of Shorthorns, at Brooklin, Ont., has made the herd recognized as one of the very best on this continent. Founded on straight Cruickshank breeding, for years strengthened by almost annual importations from the noted Sittytton herd, they have more than done their share towards the improvement of Canadian cattle. Made up, as the herd now is, of many of the best-doing strains of Scotch Shorthorns, and headed by one of the very best bulls in the Dominion, individually, and as a sire of show stuff, this herd has well maintained its reputation in the leading Canadian showings and at the Chicago International, practically against the product of the world's leading herds. Very many prominent herds to-day, both in Canada and the United States, have at their head a bull having the proud distinction of being bred at Maple Shade. Many of these have been bought by correspondence, and, virtually in every case, entire satisfaction has been expressed on arrival of the animal. Just now on hand for sale are nine young bulls, along about a year old, a lot that for uniformity of the up-to-date, thick-fleshed, easy-feeding type has seldom been equalled in this great herd. They are, with one or two exceptions, the get of Prince Gloster =40998=, for several years at the head of the herd, and Bertie's Hero =52673=. Prince Gloster, as his name indicates, belongs to the Cruickshank Duchess of Gloster strain, sired by the Victoria bull, Victoria Prince of Maine Valley, a son of Victoria 87th, by Imp. Craven Knight, dam by the Brawith Bud bull, Gowrie. Prince Gloster is a massive, thick, even-fleshed bull, weighing, now, 2,400 lbs., and one of the most successful sires of show stuff ever used in this country. Bertie's Hero is well known as a very successful show bull, winning second at Toronto as a yearling and first at Chicago, the following year winning first at Toronto and the Dominion Exhibition at Halifax. He was sired by Clipper Hero, who also won first and junior championship at Toronto as a yearling, dam Bertie 4th, by Prince Gloster. Bertie 4th won second at Toronto as a yearling. Among the young bulls for sale is Victor Hero =68709=, a red yearling, by Bertie's Hero, dam Victoria Duchess, a Cruickshank Victoria, by Collynie Archer (imp.), a Marr Missie; Amazon =68700=, another red yearling son of Bertie's Hero, dam Amy, an Amethyst, by the English Lady bred bull, Earl of March, a son of the great Barmpton Hero; Blucher =68701=, another red ten-months-old, by Bertie's Hero, dam Blossom, of the great Lady Eden strain, by Prince Gloster; Hero's Prince =68705=, a roan ten-months-old bull, by Bertie's Hero, dam Princess Beauty, another Lady Eden, by Prince Gloster; Golden Prize =68704=, a red yearling, by Prince Gloster, dam Golden Trophy, an Orange Blossom, by Revenue, a half-brother to the great show bull, Nominee; Scotsman =68708=, red eleven-months-old, by Prince Gloster, dam Aberdeen Rose, a Cruickshank Rose, by Revenue; Prince Rupert =68707=, red eight-months-old, by Prince Gloster, dam Emily, a Lavinia, by the Meadowflower bull, Bolderwood Lad; Attorney, red eight-months-old, by Champion Beauty, a son of Royal Champion (imp.), dam Annette, an Amethyst, by Prince Gloster; Lavender Lorne =68706=, red yearling, by Meader, a son of John Miller & Son's great stock bull, Sirius (imp.), dam Lavender Lady, a straight-bred Lavender, by Prince Gloster. Among this lot are some high-class show bulls, bred on show and quality lines, and every one is in good condition, and having the appearance of an extra good doer. Maple Shade is connected by long-distance phone.

TRADE TOPIC.

Parties interested may do well by enquiring into the value of the mill properties advertised in this paper to be sold by auction at Aslmer, Ont., including brick flooring mill, stave and hoop factory, cheese and butter factory and cheese-box mill, to be sold on easy terms.

THE SPICE OF LIFE.

Brown always was particular to appear to be in a better position than he really was; it was a great failing he had. On one occasion he took his eldest son with him for a walk, and permitted him to play with some other boys while he read his paper. Going home later Brown inquired:
"Well, what did you talk about to those boys in the park?"
"Oh," replied the lad, "I told them you were our footman! I did it to keep up appearances, you know."

"Why," said E. H. Harriman at a dinner in New York, "things have come to such a pass that soon the man who is successful and rich will be looked upon with as much mistrust as the lawyer of the tale.

"This lawyer said, sadly, to his wife on his return home one night:

"People seem very suspicious of me. You know old Jones? Well, I did some work for him last month, and when he asked me for the bill this morning I told him out of friendship that I wouldn't charge him anything. He thanked me cordially, but said he'd like a receipt."

One morning when Rufus Choate was still in England his clerk informed him that a gentleman had called and wanted him to undertake a case. "Ah! and did you collect the regular retaining fee?" "I only collected twenty-five guineas, sir." The regular fee was fifty guineas, and Mr. Choate said: "But that was unprofessional; yes, very unprofessional!" "But, sir," said the clerk, apologetically, and anxious to exonerate himself from the charge, "I got all he had." "Ah!" said Mr. Choate, with a different expression, "that was professional; yes, quite professional."

The motive of these people, said Bishop Doane, discussing married people who quarrel, is like the motive of a Scot who was found weeping one day.

"Eh, Saunders, mon," said a neighbor, peeping in at the open door, attracted by the sounds of woe which came from the fireside.

"What's ailing ye?"
"Oh, dear—oh, dear!" sobbed Saunders. "Donald Mackintosh's wife is dead."

"Aweel," said the neighbor, "what o' that? She's no relation o' you, ye ken."

"I know she's not, but it just seems as if everybody's gettin' a change but me."

WAGES OF LYING.

Mr. Orison Sweet Martin, in his book on "The Optimistic Life," tells this story:

"If I hire you," said a Detroit grocer to a boy, who had applied for work, "I suppose you will do as I tell you?"
"Yes, sir."

"If I told you to say that the sugar was high grade when it was low, what would you say?"

"The boy did not hesitate a moment. 'I'd say it,' he responded promptly.

"If I told you to say the coffee was pure, when you knew that it had beans in it, what would you say?"

"I'd say it."

"If I told you to say that the butter was fresh, when you knew that it had been in the store for a month, what would you say?"

"I'd say it."

The merchant was nonplussed. "How much will you work for?" he inquired, very seriously.

"One hundred dollars a week," answered the boy, in a businesslike tone.

The grocer came near falling from his stool. "One hundred dollars a week?" he repeated, in astonishment.

"With a percentage after the first two weeks," said the boy, coolly. "You see," he went on, "first-class liars come high; and, if you need them in your business you've got to pay them the price. Otherwise I'll work for three dollars a week." So the boy caught the grocer at his own game, and got the job at three dollars a week.

And he never sold a pound of sugar, a pound of coffee, a pound of butter that was not all right; and both grocer and boy prospered in their integrity.

ASKS US TO PRINT IT.

To relieve the worst forms of Rheumatism, take a teaspoonful of the following mixture after each meal and at bedtime:

Fluid Extract Dandelion, one-half ounce; Compound Kargon, one ounce; Compound Syrup Sarsaparilla, three ounces.

These harmless ingredients can be obtained from our home druggists, and are easily mixed by shaking them well in a bottle. Relief is generally felt from the first few doses.

This prescription, states a well-known authority in a Cleveland morning paper, forces the clogged-up, inactive kidneys to filter and strain from the blood the poisonous waste matter and uric acid which causes Rheumatism.

As Rheumatism is not only the most painful and torturous disease, but dangerous to life, this simple recipe will, no doubt, be greatly valued by many sufferers here at home, who should at once prepare the mixture to get this relief.

It is said that a person who would take this prescription regularly, a dose or two daily, or even a few times a week, would never have serious Kidney or Urinary disorders or Rheumatism.

Cut this out and preserve it. Good Rheumatism prescriptions which really relieve are scarce indeed, and when you need it, you want it badly. Our druggists here say they will either supply these ingredients, or make the mixture ready to take, if any of our readers so prefer.

"To convict the defendant of assault and battery," said the woman's counsel, "it must first be proven that the intention was there." "But," interrupted the magistrate, "all the evidence shows that the woman actually hit her husband with a brick." "That very fact proves that she must have aimed at something else!" responded the lawyer. He won the case.



ROCK SAL for horses and cattle, in ton and car lots. TORONTO, SAL WORKS TORONTO

The Ontario Veterinary College, Ltd.
Temperance St., TORONTO, Canada.
Affiliated with the University of Toronto.
Patrons: Governor-General of Canada, and Lieut.-Governor of Ontario. Fee, \$65.00 per session. Apply to ANDREW SMITH, F.R.C.V.S. Principal.

The Sunnyside Herefords.

To make room for my new importation, I will sell four cows with heifer calves by side, two yearling heifers, one yearling bull and two bull calves at a 20% reduction if taken in the next 30 days. The best of breeding and individual merit. Herd is headed by a son of the grand champion, Prime Lad. Address: M. H. O'NEIL, Southgate, Ont.

W. R. BOWMAN, MT. FOREST.
Durham bulls, roans and reds, sired by imported Newton Prince, \$75. Shropshire ram and ewe lambs, \$10 to \$15 each, sired by our stock rams—Prolific (Imp.) a Chicago winner, and Dickius (Imp.). A few choice breeding ewes at \$12 to \$15 each. Yorkshire sows due to farrow in February, sired by an imported boar, weighing over 300 pounds, at \$20 each. One boar ready for service at \$15. A Jersey bull, two years old, a winner at London; quick sale \$50.

Aberdeen - Angus Cattle

FOR SALE!

Young bulls, also females of various ages. Good, growing, quick-feeding animals, of excellent breeding and type. Come and see them or address: WM. ISCOE, P. O. and G. T. R. Stn., Sebringville, Ont.

Aberdeen - Angus Cattle

If you want anything in this line, write or come and see them at Elm Park, Guelph.

James Bowman, Guelph, Ont

ABERDEEN - ANGUS

For sale, 50 head to pick from, males or females, by imported sire. Drumbo station.

WALTER HALL, Washinton, Ontario.

ABERDEEN - ANGUS CATTLE

For sale: young bulls and females. Herd won first prize, and stock bull the championship, at Western Fair, London, 1907, in strong competition. Elora stn., G. T. R. & C. P. R. JOHN LOWE, Elora, Ont.

GOSSIP.

GEO. BRODIE'S CLYDESDALES.

Mr. Geo. A. Brodie, of Bethesda, Ont., whose several past importations have been so favorably received by Canadian buyers, is again home with a consignment of over twenty mares and fillies, from one to five years of age, and one three-year-old Clydesdale and one two-year-old Hackney stallions. In making the selections for this importation, Mr. Brodie spent the greater part of the past summer in the Old Land, travelling all over England and Scotland, visiting practically every Clydesdale breeder of any note in both countries, selecting one here and one there, as he came across animals conforming to his ideas, determined to bring nothing but what would be to the material benefit of the country, and with the ultimate object in view of making a name for himself as one of the leading Canadian importers of high-class Clydesdales. After carefully looking over this lot, we are convinced that a better lot was never brought into the country. Every one shows draftiness of type and Clydesdale character, coupled with an abundance of quality and the very best kind of bone, ankles and feet. Every man, at all interested, that visited the local fairs this fall must have been struck by the vast improvement noticeable in the type and quality of the draft classes as they were brought out for inspection. This very satisfactory state of affairs is due to the vast amount of new blood, particularly in females, that of late years has been brought into the country, and the good work has only begun; there is still room for thousands more. Much credit is due the men who are giving their time and risking their money to import these fillies. Among the lot are a number of Old Country winners, a number of well-matched pairs, a number of big, thick, flashy, show animals. All two years old and over have been bred, some in Scotland, and others since they arrived here. They are particularly well-bred lot; many of them with four, five and six registered dams. Minuet 18006 is a brown four-year-old that carries the blood of Macgregor, Prince of Carruchan, and Darnley. She is a winner, several times, in Scotland. Her last year's colt has this year won first all around the circuit in Scotland, and she is again in foal to Royal Favorite. She is an extra big, thick, smooth mare. Moray Lass 18789 is a bay two-year-old, by Kippendavie Stamp, by Sir Everard, dam by Ringleader. This filly has many winnings to her credit, and is a show filly all over—a rare good one. Brilliantine 18773 is a brown two-year-old, by Brilliant, carrying the blood of Baron's Pride, Sir Everard and Darnley. She is a show filly, and was bred to the great Sir Hugo. May Blossom 11803 is a chestnut three-year-old, by Flashlight, dam by Prince Thomas, grandam by Darnley, a big filly, full of character and quality—a rare good kind. Jean Wilson 11796 (C.) is a bay two-year-old, by the great Royal Chattan, dam by Mains of Aries, breeding unexcelled, and a big, quality filly. Eileen 11799 (C.) is a brown two-year-old, by the champion Everlasting, dam by the great Sirdar. Another rare good one, Lady Kinnear 18775, brown two-year-old, by the great horse, Storm King, dam by Sir Everard, is a big, flash filly. Compton Princess 18787 is a bay yearling, by Sir Hugo, dam by Sir Everard. Others are by Silver Cup, Macgregor's Champion, Jubilee Lord, Scotland's Motto, etc. Rich in the blood of Scotland's greatest Clydesdales, this lot of fillies should be eagerly picked up, for certain it is there are none better. Baron Hugo 5737 (C.) is a brown four-year-old stallion, by Sir Hugo, dam by Prince Albert, grandam by Macgregor. This is certainly one of the most perfect horses we have seen; his make-up is faultless, with the carriage and style of a Hackney. Gay Sprig 7270 (C.) is a bay three-year-old, by Gay Everard, dam by Formakin, grandam by Sir Everard, great-grandam by Prince of Wales. He could not be better bred, and he is quality and style all over, not over-large, but a mighty nifty, flash horse. Brandy 9622 is a chestnut roan two-year-old Hackney stallion, by Polonius, dam by Lord Derwent 2nd. He has beautiful all-around action, and will certainly make a cracker. All these are for sale; make a note of it.

It is reported that the British champion Shorthorn bull, Linksfield Champion, has been sold by Mr. F. Miller, Birkenhead, to a Chilian breeder for £1,575 (\$7,875). Also, that Mr. Murray, Kileoy, Rosshire, has sold, for export to the Argentine, his three-year-old stock bull, Kiblean Stamp, bred, as his name indicates, by Mr. J. B. Manson.

An Irish priest had labored hard with one of his flock to induce him to give up whiskey.

"I tell you, Michael," said the priest, "Whiskey is your worst enemy, and you should keep it as far from you as you can."

"Me enemy, is it, father?" responded Michael. "And it was your riverence's self that was tellin' us in the pulpit only last Sunday to love our enemies."

"So I was, Michael," rejoined the priest, "but I didn't tell you to swallow them."

During a recent election the candidate for a certain county was addressing an audience. Many of the hearers questioned him, among them being an old man of about 60. He was answered in a way that made the audience laugh, while the heckler went white with rage. Standing up, he said to the candidate: "Man, I mind o' yer faither havin' a cart an' a donkey."

"I'm no' very sure about the cart," replied the candidate, "but I see the donkey's aye livin' yet."

A lawyer died in a provincial town, and his fellow-lawyers wrote over his grave, "Here lies a lawyer and an honest man." Not long afterward the governor of the Province visited the town, and among other places inspected the cemetery. When he came to the lawyer's grave he stopped, read the inscription once or twice, and turning to the head inspector, said: "Look here, my friend. We wink at a good many things in this Province, but I do object to your burying two men in one grave." —[Argonaut.

If a man does not follow farming as he is commanded to follow his Maker, "with mind, might and strength," he is a failure, and there is no help for it. Notice, the command is first placed on mind, then on might and, last, on strength. The meaning of "mind" in this case is "intellectual impulse," the use of observation, thought and reasoning power, the close, severe exercise even of the intellect to "know what to do next." The highest attainment of wisdom has been defined as "knowing what to do next." This is essentially true of the farmer, for his is a life of doing.

TRADE TOPIC.

A SEVENTY YEARS' RECORD.

A manufacturing establishment, with an unbroken and successful experience of seventy years behind them, can well face another season with confidence. The fact is strikingly exemplified in a perusal of the annual catalogue for 1908, issued by the Frost & Wood Co., Ltd., Smith's Falls, Ont., a firm that has built its reputation upon merit—a square deal, honest material and prompt service. The new plant in which their machinery is built naturally adds immensely to the efficiency of the establishment. The catalogue itself is attractive in appearance, and gives, in a concise and readable style, a very complete description of the long line of implements for cultivation, seeding, haying, harvesting, and manuring, in addition to wagons and sleighs, which may be inspected by farmers in any of the local warehouses throughout the country. The illustrations of the catalogue afford a good idea of the style and construction of the various implements. Farmers would do well to secure this catalogue from the local warehouses or agents, or by writing direct for it to Smith's Falls. The attention of our readers is also directed to the artistic and businesslike announcements which the firm is running through these columns.

DOES YOUR HEAD

Feel As Though It Was Being Hammered?
As Though It Would Crack Open?
As Though a Million Sparks Were Flying Out of Your Eyes?
Horrible Sickness of Your Stomach?
Then You Have Sick Headache!

BURDOCK BLOOD BITTERS

will afford relief from headaches no matter whether sick, nervous, spasmodic, periodical or bilious. It cures by removing the cause.

Mr. Samuel J. Hibbard, Belleville, Ont., writes: "Last spring I was very poorly, my appetite failed me, I felt weak and nervous, had sick headaches, was tired all the time and not able to work. I saw Burdock Blood Bitters recommended for just such a case as mine and I got two bottles of it, and found it to be an excellent blood medicine. You may use my name as I think that others should know of the wonderful merits of Burdock Blood Bitters."

Glen Gow Shorthorns

Our present offering is 6 bulls, from 6 to 14 months of age, sired by Imp. Ben Loman and Imp. Joy of Morning, and out of Imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance 'phones. Wm. Smith, Columbus P. O.

WILLOW BANK Shorthorns and Leicesters.

ESTABLISHED 52 YEARS. Have a special good lot of either sex to offer in Shorthorns of various ages. Also a few choice Leicester sheep. Write for prices, or, better, come and see. Choice quality and breeding. JAMES DOUGLAS, CALEDONIA, ONT.

Shorthorns, Cotswolds, Berkshires

On hand: two yearling bulls and a number under one year, also females of all ages. In Cotswolds, about 30 lambs. Have also a few young Berkshire boars. CHAS. E. BOWNCASTLE, P. O. and Station, Campbellford, Ont.

Shorthorns & Leicesters

For sale: Young bulls and heifers by Imp. sire, and from grand milking cows. Leicesters—A choice lot of shearing rams and ewes, also ram and ewe lambs of the finest type and breeding. And a few extra good Berkshire boars. All for sale at reasonable prices. W. A. Douglas, Caledonia Station, Tuscarora P. O.

J. WATT & SON

OFFERS FOR SALE
1 two-year-old show bull from Imp. sire and dam.
1 senior show bull calf from Imp. dam.
2 senior show yearling heifers, one from Imp. sire and one from Imp. dam.
The above mentioned are all in show shape, and will be sold worth the money. SALEM P. O., ELORA STA. G. T. R. AND C. P. R.

J. BRYDONE,

Breeder of pure Scotch Shorthorns. Breeding females imported. Headed by the pure Cruickshank (Dunlop-bred) bull, Siltlyton Victor (Imp.)—5008—(8787). Young stock from Imp. dams for sale. Prices reasonable. Telegraph, Telephone, R. R. Sta. and P. O., Milverton.

Maple Leaf Shorthorns

Chancellor's Model now heads the herd, which contains Crimson Flower, Lady Fanny, Miss Hamden, Rosemary, Matchless, Diamond, and Imp. Beattie Wenlock. Now offering a lot of choice calves, both sexes. Israel Grew, Alma, Ont.

High-class Shorthorns Royal Chief, a son of Mildred's Royal, at head of herd. We are offering a few choice heifers of show-ring form. Pure Scotch. Terms reasonable. A. DUNCAN & SONS, Carleton, Ont.

When Writing Advertisers Please Mention this Paper

LIVINGSTON'S OIL CAKE MEAL.
OLD PROCESS
 Nothing is better for fattening steers quickly and putting them on the market in prime condition than Oil Cake Meal. Thousands of Canadian and English stockmen use Livingston's, and would have no other. It is equally good for milk cows. They give more and better milk when fed Livingston's Oil Cake Meal. Also used for horses, sheep and hogs. Write for information regarding prices, etc., etc., to
DOMINION LINSEED OIL CO., LIMITED
 Montreal, Que. Baden, Ont.

Queenston Heights SHORTHORNS

All Scotch. The thick-fleshed, early-maturing sort. Special prices on young stock, either sex. Ask for catalogue with sample pedigrees.
Hudson Usher, Queenston, Ont.
 Farm three miles north of Niagara Falls.

MAPLE HILL STOCK FARM—High-class Scotch Shorthorns. Herd headed by Rose Victor =6485= and Victor of Maple Hill =6480=, both sons of the Dutch-bred bull, Sittytion Victor (imp.) =6008=, and from richly-bred imported cows. **W. R. Elliott & Sons, Box 428 Suelph.**

IMPORTED SHORTHORN BULL. Royal Kitchener =60084=, five years; quiet; active; sure. Will sell or exchange. Also young stock sired by him, and out of imp. and home-bred cows, for sale. **Ira B. Vannatter, Burlington, P.O., Brin, O.P.R.; Georgetown, G.T.R.**

Pure Scotch Shorthorns!

Our herd is headed by Imp. Prime Favorite, grand champion bull at the Canadian National Exhibition, at Toronto, and at the New York State Fair, at Syracuse, for 1907, assisted by Imp. Scottish Pride. If you want a choice young bull do not fail to ask for one of our bull catalogues. A number of females in calf, or with calf at foot, also for sale. Correspondence solicited. Visitors always welcome. Long-distance 'phone.
W. G. PETTIT & SON, Freeman P. O., Ont., Burlington Jct. Sta.

SHORTHORNS AND LINCOLN SHEEP.

Two bulls, 11 and 12 months old—a Miss Ramsden and a Bessie, both by the good breeding bull, Proud Gift =60077= (imp.), also cows and heifers in calf by him. Inspection solicited. Always have some choice Lincoln sheep for sale at reasonable prices.
J. T. GIBSON, DENFIELD, ONTARIO.

Scotch Shorthorns Claretts, Siamfords, English Ladys, Mildreds, Nonpareils. Present offerings by Springhurst 44864 and Mildred's Royal. Prices moderate. **F. W. EWING, Salem P. O., Elora Station.**

Maple Shade

Shorthorns & Shropshires
 One yearling Lavender bull for sale. Younger bulls growing. All shearing rams and ewes sold. Will sell a few good ram lambs.
JOHN DRYDEN & SON, Brooklin, Ont.
 Stations: Brooklin, G. T. R.; Myrtle, C. P. R.
 Long-distance telephone.

SHORTHORNS

One roan Shorthorn bull, 3 years old, highly bred, quiet to handle; a bargain. Cows and heifers all ages. Also a number of **Chester White** sows that will weigh from 100 to 150 lbs each. No fancy prices.
D. ALLAN BLAOK, Kingston, Ont.

Maple Grove Shorthorns

Herd headed by the grand show bull, Starry Morning. Present offerings: Imported and home-bred cows and heifers, also a few young bulls. Terms and prices to suit the times. **C. D. WAGAR, Enterprise Stn. and P.O. Addington Co.**



Special Offering of Scotch SHORTHORN BULLS

3 just past two years old; 15 just over one year old; 7 just under one year old.
 The best lot we ever had to offer in individuality and breeding, and prices are right. Catalogue.

John Gianoy, Manager, H. CARGILL & SON, Cargill, Ont.

FLETCHER'S SHORTHORNS & YORKSHIRES

Present offering: My \$3,000 stock bull, Imp. Joy of Morning =3270=, 8 years old, winner of 1st prize at Dominion Exhibition, Toronto. Quiet, active and sure. Will sell or exchange. Also young stock of either sex. In Yorkshires: choice sows bred, and boars fit for service, from imp. sire and dam, at your own price. **GEO. D. FLETCHER, Binkham P. O., Ont. Erin station, C. P. R.**

When Writing Mention this Paper.

Greengill Herd of High-class SHORTHORNS

We offer for sale choice young bulls from 6 to 12 months old, sired by imp. Lord Roseberry, also cows and heifers, with calf at foot or bred, either imp. or Canadian-bred.
R. MITCHELL & SONS, Nelson P. O., Ont., Burlington Jct. Sta.

Scotch Shorthorns

Our breeding females are very heavy milkers, also good individuals. For sale are a few young bulls and a few choice heifers, all from imported sires, and a number from imported dams. The imported Bruce Mayflower bull, Royal Bruce 55038, heads the herd.
R. J. DOYLE, Box 464, OWEN SOUND, ONT.

GOSSIP.

JOHN A. BOAG & SON'S CLYDESDALES.

As an importer, breeder and judge of Clydesdale horses, no one in the business has a more enviable reputation than John A. Boag, of Ravenshoe, Ont., a man whose honor and word in his dealings with the public are absolutely above reproach. For many years his Clydesdale importations have been among the very best that have landed in the country. Before seeing this year's importation, we were several times told they were an extra good lot, and exceptionally well bred, and, after inspection of the animals and their pedigrees, we have only to say they were not overrated. Ardnahoe 4506 (C.) is a brown three-year-old, by the great Pride of Blacon, dam by Mountain King, grandam by Gold Dust, is a horse of great substance on an ideal bottom, with strong back and stife and good length of rib. This horse was imported last year, and has proven himself an extra good sire. But-tress 13392 (S.) is a roan two-year-old, by the champion Everlasting, the greatest son of Baron's Pride, and whose dam was by Prince of Wales, dam by Gold Mine, by Goldfinder, grandam by Prince of Fortune, a grandson of Prince of Wales. There is no better breeding, and he is a high-class show colt. He has size, style and quality galore, and moves with faultless action. Glensman 13505 is a bay two-year-old, by Flash Sturdy, by Prince Sturdy, by Cedric, dam by Mains of Airies, by Prince of Wales, grandam by Darnley. This colt will make over-a-ton horse, with a smooth, beautiful mold, abundance of character and quality, on a faultless bottom, a great show colt, carrying Scotland's richest blood. Squire 13786 is a brown two-year-old, by Castlemilk, dam by Royal Standard, a grandson of Prince of Wales, grandam by Prince of Airs, a grandson of Darnley. This colt is one of the thick, close-coupled, cart-horse kind, smooth to a turn, on strong, flat bone, ideal ankles and feet, a rare good kind. Timothy 13852 is a bay yearling, by the great champion Benedict, imported to America, and again exported to Scotland, he by Baron's Pride, dam by Prince Robert, by Prince of Wales, grandam by Top Gallant, by Darnley, thus carrying the blood of five of Scotland's greatest horses. He is a colt of great substance and character, and should develop into a cracker. Hannah 18576 is a bay two-year-old filly, by Douglas Chief, dam by Forest Hero, grandam by Topsman. She now weighs 1,550 lbs., a big, thick, smooth, quality filly. Bet of Hallguards 18582 is another bay two-year-old, by Gartly Gold, dam by Prince of Kirtle, grandam by Lord Clyde. This will make a ton mare, and, with it, has smoothness and quality. Rose Campbell 18582 is a bay yearling, by the great Benedict, dam by King of the Roses, breeding gilt-edged enough surely. This filly has few equals, having been pronounced by several the best yearling that has crossed the water. Certainly, she is a show filly from the ground up. Nell of Hukinlaw 18579 is another bay yearling, by Prince Otto, by the great sire, Prince Thomas, dam by Prince of Craigie, grandam by Knight of Lothian. She is a filly of great scale and character, a faultless bottom, and will make a very big mare. Blanch Surprise 8745 (E.) 368 (C.) is a chestnut four-year-old Hackney stallion, by the double-champion Rosador, dam by another double champion, Garton Duke of Connaught, grandam by the great Danegelt. There is certainly no richer breeding, and few better horses. His action is faultless all around, while his form and quality could scarcely be improved. Any or all of these horses are for sale at a living profit. Visitors will not be disappointed in the quality of these horses. Mr. Boag has lately purchased a farm quite near the village of Queensville. The Toronto-Sutton electric road crosses the farm, with an hour service. He expects to get moved the fore part of January next. At present, notify him of intended visit to Ravenshoe P. O.

Bone Spavin
 No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use **Fleming's Spavin and Ringbone Paste**. Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of **Fleming's Vest-Pocket Veterinary Adviser**.
 Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.
FLEMING BROS., Chemists, 75 Church Street, Toronto, Ontario

PLEASANT VALLEY SHORTHORNS

For sale: 3 young bulls by Old Lancaster Imp. from Imp. dams, including Lancaster Victor, first prize sr bull calf at Dom at Sherbrooke, second at C. N. E., Toronto. Correspondence solicited. Inspection invited.
Geo. Amos & Son, Meffra Stn. & P.O. C. P. R. Farm 11 miles east of City of Guelph.

DOMINION SHORTHORN HERDBOOK WANTED.

The Dominion Shorthorn Breeders' Association will pay \$1 each for the following volumes of their herdbooks: Volumes 8, 9, 12, 14, 15, 16, 17 and 19. Parties having these volumes to part with, write for wrappers and mailing instructions to **W. G. Pettit, Sec.-Treas., Freeman, Ont.**

KENWOOD STOCK FARM SHORTHORNS

Offers for sale an 18-month-old Miss Ramsden bull of show quality from Imp. Jilt Victor =45187=, a Toronto winner, and Imp. Pandora =48466=, a Toronto winner and an Old Country junior champion. Four other younger bulls. Also cows and heifers imp. and home bred. Prices easy. Trains met on notice. **HAINING BROS., Highgate, Ont., Kent Co.**

A. EDWARD MEYER, Box 378, Guelph, Ont.,

Breeds **SCOTCH SHORTHORNS** of the following families: Cruickshank Bellonas, Myrica, Brawith Buds, Villages, Broadhooks, Campbell Claretts, Minas, Urrs, Bessies, Bruce Mayflowers, Augustas, Marr Missies and Lovelaces, and others. Herd bulls: Scottish Hero (imp.) =55043= (90065), Sittytion Lad =67814=. Correspondence solicited. Visitors welcome. Long-distance 'phone in house.

JOHN LEE & SONS, Highgate, Ont.

SHORTHORNS & LINCOLNS
 The champion herd of Highgate, Kent and Essex counties.
 For Sale: 6 choice young bulls, 3 roans and 3 heifers, of grand type and quality; also good selection of young cows and heifers. Visitors welcome.

Salem Herd of Shorthorns

The great Jilt Victor in service.
J. A. WATT, Salem P.O. Elora, G.T. & C.P.R.

MAPLE GROVE SHORTHORNS

Scotch and dairy bred; up-to-date in type; prize-winners at the local shows. A number of 1 and year old heifers 1 year old bull, and one 5 mos. old—the last will make a show bull. Flora bred—will be sold easy. **L. B. POWELL, Wallenstein P. O. and Stn. C. P. R.**

Brown Lee Shorthorns!

Nonpareil Victor =63307= at head of herd. Young stock for sale at all times. Prices very reasonable. **Ayr, C. P. R.; Drumbo, G. T. R. DOUGLAS BROWN, Ayr, Ont.**

ELM PARK STOCK FARM

Shorthorns, Clydesdales and Berkshires. Stock for sale at all times. Herd headed by British Flag (50016) (82971). **JOHN M. BECKTON, Glencoe, Ont. G. T. R., C. P. R. and Wabash R.**

Clover Lea Stock Farm SCOTCH SHORTHORNS

Superior breeding and individual excellence. For sale: Bulls and heifers—reds and roans, some from imp. sire and dam. Visitors met at Ripley station, G. T. R.
R. H. REID, PINE RIVER, ONTARIO.

SCOTCH SHORTHORNS!

We now offer four heifer calves 10 and 11 months old. All reds. Bred from imp. sire and dams. Will be sold right. **C. RANKIN & SONS, Wyebridge P. O., Wyevalle Sta.**

Subscribe for "Farmer's Advocate"

The Cream of Cream Separators

The Sharples Dairy Tubular is the cream of cream separators—the pick of the whole bunch. Supply can wait low, you can fill it with one hand. All parts enclosed, dirt free, absolutely self-cleaning—no oil holes, no bother—needs only a spoonful of oil once or twice a week—uses same oil over and over. Has twice the skimming force of any other separator—skims twice as clean. Holds world's record for clean skimming.



Bowl so simple you can wash it in 3 minutes—much lighter than others—easier handled. Bowl hung from a single frictionless ball bearing—runs so light you can sit while turning. Only one Tubular—the Sharples. It's modern. Others are old style. Every exclusive Tubular feature an advantage to you and fully patented. Every Tubular thoroughly tested in factory and sold under unlimited guaranty. Write immediately for catalog 3-108 and ask for free copy of our valuable book, "Business Dairying."

The Sharples Separator Co., West Chester, Pa. Toronto, Can. Chicago, Ill.

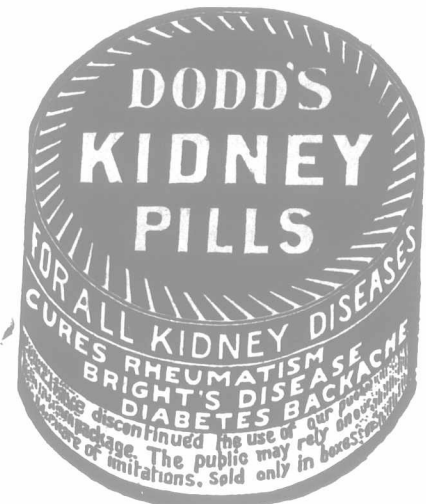
D. M. Watt, St. Louis Station, Quebec, breeder of HIGH-CISS AYRSHIRES Canadian and Scotch-bred. All of deep milking qualities.

AYRSHIRES Young bulls from producing dams and same sire, from 7 months up to 3 years. Rare good ones and will speak for themselves. N. DYMENT, Hickory Hill Stock Farm, Clappison, Ont. Dundas Station and Telegraph.

SHANNON BANK STOCK FARM FOR AYRSHIRES AND YORKSHIRES Young stock of both sexes for sale from imported stock. W. H. TRAN, Cedar Grove, Ont.

A well-known clubman of New York was in camp with a friend from Minnesota. Toward morning the New Yorker awoke shivering with cold. The fire was very low. His companion was fast asleep. It isn't nice to get out of a warm blanket to roll frosty logs to the fire, so the wily New Yorker gave his friend a kick and then pretended to be asleep. There was no response, and presently he tried another kick. At this the Westerner broke into a laugh. "I did the same thing to you twenty minutes ago," he explained, "and that's how you came to be awake." Then, of course, both turned out to build a fire.

A stout man once presented himself to Sir Francis Burdett, and asked him for employment. "I do not know you," said Sir Francis, looking at him. "Why, have you forgotten me?" said the man; "I was formerly a page in your house." "My good man," said the baronet, "since then you have become a volume!"



QUESTIONS AND ANSWERS. Veterinary.

IRREGULAR STRANGLES.

Mare took swelling under the jaw in August. It broke and discharged matter. Another swelling formed from angle of jaw to ear. It is hard and hot.

Ans.—It is probable the swelling contains matter, and, as there are important blood vessels in that region, it would be wise to employ a veterinarian to operate and search for pus. If no pus be present, the swelling can be reduced by rubbing well, once daily, with compound iodine ointment.

SORE NECK—CONDITION POWDER.

1. Horse is subject to a sore neck whenever he is worked to a machine whose tongue causes weight upon the collar. Little boils form, then break, and are hard to heal. I have had a collar made to fit him, and have tried zinc and mostly all kinds of pads to no purpose.

2. Give recipe for good condition powder.

Ans.—1. Some horses are particularly predisposed to this trouble. It is almost impossible to heal the parts without giving rest. During the first stages the application of hot linseed-meal poultices hastens the formation of pus and allays inflammation. After eruptions take place, the parts should be dressed, three times daily, with a lotion composed of one ounce each sulphate of zinc and acetate of lead, half ounce carbolic acid and one pint water. All that can be done to prevent the trouble is to wear a good-fitting collar, with a hard, smooth leather pad, which must be kept clean, and the collar should be taken off whenever the horse is in the stable, even for a short time.

2. Take one pound each of sulphate of iron, gentian, ginger and nuxvomica, and two ounces quinine. Mix. Dose: one tablespoonful, twice daily.

Miscellaneous.

WEIGHT OF SHROPSHIRE.

Please inform me, through your paper, the highest weight attained by Shropshire sheep.

Ans.—We know of no published records of extreme weights. Weight depends very much on condition and age, or stage of maturity. A fully-matured Shropshire ram, in really good condition, should weigh 225 pounds; but the same animal might be fed to weigh 275 pounds, or even to exceed that weight. Big weights in these days do not count for so much as superior type, quality and covering.

MISCELLANEOUS QUERIES.

- 1. How are Polled Herefords bred?
2. How are Rose-comb Brown Leghorns bred?
3. How are Rose-comb White Leghorns bred?
4. What are the dimensions of a ton of ensilage?
5. Is it necessary for a person having pure-bred stock, in case of death, to notify the secretary of the association?
6. What stallion was the winner in the two-year-old class (imported) at the Toronto Industrial, 1905? By whom was he imported? Who is the present owner?
7. What is the law regarding sheep being worried and killed by dogs? Can you shoot the dog? Has the owner of dog to pay damages?
H. C. B.

Ans.—1. We are not aware of a Polled Hereford breed having been established. 2 and 3. The secret does not appear to have been published. 4. Fifty cubic feet, as an average, depending somewhat on depth of silo and weight pressure. 5. No. 6. You do not say what breed. If a Clydesdale, the records say, Leamside [5015], exhibited by Andrew Aitchison, Guelph; imported by John A. Turner, Calgary, Ont. Present owner not known. 7. Too lengthy for publication here. Apply to Hon. Nelson Monteith, Dept. of Agriculture, Toronto, for copy of the Act.

Stoneycroft Ayrshires. SEVENTY-FIVE (75) HEAD. Imported and imported-in-dam, both sexes and all ages. Winners and champions in Scotland and Canada among them. A high-class lot. Anything for sale. Also imported Clydesdales and Imp Yorkshires. Harold Morgan, Ste. Anne de Bellevue, Que. Bell Phone connection.

AYRSHIRES FROM A PRIZEWINNING HERD Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to WM. STEWART & SON, Campbellford Stn. O. Menie P.O., Ont.

STOCK FOR SALE—At Springburn Stock Farm, Williamsburg, Ont. 5 1-year-old Ayrshire bulls. Females any age. 12 Oxford Down ram lambs and a number of young ewes. Prices reasonable.

H. J. WHITTEKER & SONS, Props.

Hillview Herd of Prizewinning AYRSHIRE CATTLE.

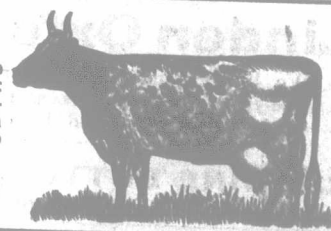
All animals bred and carefully selected for size, constitution, long teats and deep-milking qualities. Select animals of both sexes for sale at reasonable prices. For further information and prices write

A. KENNEDY & SON, Hillview Stock Farm, Vernon, Ont. Winchester Station, C. P. R.

AYRSHIRES.

All being well, we will again be exhibiting quite a large herd of imported and home-bred animals of choicest Dairy Breeding at all the leading shows, Toronto Ottawa and Sherbrooke. Several young bull calves from imported dams and sires. Any of the herd for sale. We will also be booking orders for imported stock for 1908.

ALEX. HUME & CO., MENIE, ONT. Phone Campbellford.



SPRINGHILL AYRSHIRES.

LAST IMPORTATION OF 48 HEAD

Arrived home, and we now have a selection that cannot be excelled of cows and heifers, all ages, fifteen due to freshen in August and September. Bargains in bull and heifer calves, most of them imported or imp. in dam. Oldest bull 19 months (imp.). Everything for sale at reasonable prices.

ROBT. HUNTER & SONS, Maxville, Ont. Long-distance Phone, Maxville 33.



HOLSTEINS



We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime.

time to buy good cattle at bargain prices. The best way to arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls. 100 head to select from. Imported Pontiac Hermes, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented. H. E. GEORGE, Brampton, Ont. Putnam station, near Ingersoll.

STEVENS DAIRY FARM HOLSTEINS

We are just now offering one bull 7 months old, two bulls 11 months old, out of record-of-merit cows and by our stock bull with rich official backing. Heifers all ages. A lot of Tamworths coming on for later delivery.

W. C. STEVENS, Phillipsville P. O., Delta Sta.

Spring Brook Stock Farm

Three choice bulls 11 to 14 months old, including Toronto winners; extra quality and breeding. Four Tamworth bears (Toronto winners) 6 to 9 months old. Three sows in favor to imported Knowle King David. Come at once and secure first choice. Prices right to quick buyers.

A. C. HALLMAN, Breslau, Ont. Waterloo Co.

QUEEN CITY HOLSTEINS.

For sale: seven bulls from twelve months down; good individuals; some have record-of-merit dams; several of them have full sisters in record of merit. R. F. HICKS, Newton Brook P. O.

Annandale Great Dairy Herd

Holsteins and Ayrshires

ONLY BULLS, 4 to 10 months old, for sale at present. Bred from great producing ancestors. Bred right. Fed right.

GEO. RICE, Tillsonburg, Ont.

RECORD OF MERIT HOLSTEINS

Herd 110 strong. Over 40 head now in the Record of Merit. Two of the richest-bred bulls in Canada at head of the herd. For sale: 18 bulls, from 3 months to 1 year of age, all out of Record of Merit cows and sired by the stock bulls.

P. D. EDM. Oxford Centre P.O. Woodstock Station.

"THE MAPLES" HOLSTEIN HERD

is made up of Record of Merit cows and heifers with large records, and headed by Lord Wayne Meenthilde Calamity. Bull calves from one to five months old for sale.

Walburn Rivers, Folden's, Ont.

Beaver Creek Herd of Holsteins

FOR SALE: A few cows and five yearling heifers, and some heifer calves. All bred from good milkers.

Albert Mittlefehldt, Elcho, Ontario.

FAIRVIEW HERD is the place to buy your next bull.

I can furnish you with a bull sired by our great herd bull, PONTIAC KORNDYKE, who has 19 daughters in the last year's report that made official records from 12 pounds at less than two years old to over 311 pounds at four years, and the whole number averaged over 4 1/2% fat. No other bull in the world has ever made such a showing in one year. I have just tested another of his daughters that made 36.40 pounds butter in seven days with second calf. I have over 50 cows and heifers in calf to him. Come and look my herd over before making your selections elsewhere. E. H. Dejar, Heuvelton; St. Law. Co., N. Y., near Prescott

RIVERSIDE HOLSTEINS

For sale: Eight young bulls from 3 to 8 months old, out of Record of Merit cows, sired by Johanna Rue 4th's Lad and Sir Pietertje Posch DeBoer, whose dam and sire's dam average in official test 75.87 lbs. butter in 7 days, and 87.6 lbs. milk 1 day.

J. W. RICHARDSON, Caledonia, Ont.

Cattle and Sheep Labels
If you want to improve your stock, these labels will interest you. Write for circular and sample, free. **F. G. JAMES,** Bowmanville, Ont.

HIGH PROVE A. J. C. G. JERSEYS
Arthur H. Tufts, Tweed, Ont. (Successor to Robt. Tufts & Son.) On account of scarcity of winter feed herd must be reduced. Males and females, all ages, for sale cheap, quality considered.

DON JERSEY HERD

Our Jerseys rank second to none in Canada. Present offering. Choice young bulls and heifers, bred from prizewinners and great producers. Write for what you want. Visitors welcome.
D. DUNCAN, Don, Ont.
Duncan Sta., on Canadian Northern Railroad, near Toronto.

BRAMPTON JERSEYS

CANADA'S PREMIER HERD—Strengthened regularly by importations from United States, England and the Island of Jersey. We have animals of all ages and both sexes for sale, and the largest herd in Canada to choose from. Write for prices and particulars. Long-distance phone at farm.
B. H. BULL & SON, BRAMPTON, ONT.

Linden Oxfords

We have a nice bunch of rams, two-year-olds, yearlings and ram lambs for sale. Sired by choice imp. Royal-winning ram.
R. J. HINE DUTTON, ONT.
P. O. and Telegraph Office.

Farnham Farm Oxford Downs

We are now offering a number of select yearling rams and ram lambs, sired by imported ram, for flock headers; also yearling ewes and ewe lambs. Price reasonable.
Henry Arkell & Son, Arkell, Ontario.
Arkell, C. P. R.; Guelph, G. T. R.

Lelcesters A few choice ram lambs and ewes of various ages. Also **DUROC JERSEY SWINE.**
W. C. CAMPBELL & SONS, Harwich, Ontario.

SHROPSHIRE
Also some fine young White Wyandottes ready to ship.
W. D. MONKMAN, BOND HEAD, ONT.



Having sold the "Woodside Farm," we are offering the entire flock of
SOUTHDOWNS.
The oldest and most renowned prizewinning flock in America, composed of breeding ewes bred to our best rams, also ram and ewe lambs, at very low prices, as they must be sold at once.
John Jackson & Son, Abingdon, Ont.

Shropshires and Cotswolds

I am now offering 35 shearing rams and 50 shearing ewes, also an extra good lot of ram and ewe lambs from imported Minton ewes and Butter ram.
JOHN MILLER,
Brougham P.O. Claremont Stn., C.P.R.
SPRINGBANK OXFORDS.
SPECIAL OFFERING:
20 ram lambs; 3 shearing rams by an imp. Hobbs Royal Winner.
The above are choice, and will be sold worth the money. **WM. BARNET,**
Fergus, G.T.R. & C.P.R. Living Springs P.O.

Southdowns

FOR SALE: 2 imported prizewinning rams, and 60 home-bred and imported ewes. **COLLIES.**—Puppies by champion sire, and out of prizewinning dam.
Robt. McEwen, Byron, Ont.
FAIRVIEW SHROPSHIRE RAMS
Very choice imp. ram lambs. Real good home-bred yearlings. One excellent two-shear (Newton Lord and Fair Star Rose combined in his breeding), and a four-year-old son of Fair Star Rose—a capital and very sure breeder. Splendid values to quick purchasers. **J. & D. J. CAMPBELL, Fairview Farm, Woodville, Ont.**

71 Years WITHOUT CHANGE MEANS

that in 1836 we made an importation of sheep, that Shorthorns followed very soon, that we have been importing and breeding them ever since, and that this year I have made an importation of **Shorthorns, Shropshires, Clydesdales and Welsh Ponies** as good as could be bought. They, with high-class home-bred ones, are for sale, write me. **ROBERT MILLER, STOUFFVILLE, ONTARIO.**

HAMPSHIRE DOWN SHEEP

"Reserve" for Champion in the Short-wool Classes, Smithfield, London, 1904, 1905 and 1906.
SPLENDID MUTTON GOOD WOOL GREAT WEIGHT
This highly valuable English Breed of Sheep is unrivalled in its
Wonderfully Early Maturity.
Hardiness of constitution, adapted to all climates whilst in the quality of mutton and large proportion of lean meat it is unsurpassed, and for crossing purposes with any other breed unequalled. Full information of
JAMES E. RAWLENCE,
Secretary Hampshire Down Sheep Breeders' Association.
Salisbury, England.

Dorset Ram on your **GRADE FLOCK.**

They produce the very choicest butcher's lamb. I have several on hand at very reasonable prices. For particulars apply to:
R. H. HARDING, Mapleview Farm,
Telephone connection. **Thorndale, Ont.**

Sheep Breeders Associations.

American Shropshire Registry Association, the largest live-stock organization in the world. G. Howard Davidson, Pres. Millbrook, N. Y. Address correspondence to **MORTIMER LEVY, BRING, Secretary, Lafayette, Indiana.**

SHROPSHIRE
Can sell about 20 Ram Lambs. Mostly by an Imp. Buttar-bred ram.
Geo. Hindmarsh, Allea Craig, Ont.

LEICESTERS
for sale, different ages; either sex.

JOHN LISHMAN, Hagersville Ont., P.O. & Stn.
SCOTCH COLLIE PUPS
of best strains of breeding. Easily trained and well marked. Now ready for shipping. Price \$5.00 f.o.b. Picks for \$7.00. Write at once
J. K. HUX, Redney, Ont.

DORSET - HORN SHEEP
Registered ram lambs and breeding ewes for sale. Most profitable sheep to breed. Write at once to
FORSTER FARM, OAKVILLE, ONTARIO

If you go HUNTING this season we want to get your

DEERSKINS

They are worth money. Well worth your skinning and shipping to us. Write us.
E. T. CARTER & CO., TORONTO.

QUESTIONS AND ANSWERS. Veterinary.

WORMS—ABORTION.

1. Sucking colt has worms.
2. Mare aborted in the seventh month of gestation last year. How can I prevent a repetition of the accident this year?
W. W. T.
Ans.—1. Take three drams each of sulphate of iron, gentian and tartar emetic. Mix, and make into twelve powders. Give a powder, twice daily, in a little of the mother's milk as a drench, and, after the last has been given, give six ounces raw linseed oil.
2. Feed lightly, and give regular exercise. Between the end of the sixth and the commencement of the eighth month of gestation, keep as quiet as possible, avoid all excitement, etc. Better keep in a large box stall, where she can take exercise, or give her regular exercise in halter, or in harness. If symptoms of abortion appear, give two ounces tincture of opium every three hours until they cease. V.

Miscellaneous.

STRAWBERRY LITERATURE.

In reply to W. C. R., who inquired through our issue of October 24th for strawberry literature, the Dominion offices of the Potash Syndicate, 1102-1105 Temple Building, Bay St., Toronto, Ont., advise us that they have a "Strawberry Handbook," which they are pleased to distribute free on application. From a copy at hand, we have no hesitation in recommending strawberry-growers to apply for it. The same agency have lately issued an attractive and serviceable illustrated pamphlet on "Manuring of Flowers."

AN OLD BOUNDARY FENCE.

Line fence between A and B was built on A's land, through carelessness, forty or more years ago. It was always intended to be rebuilt on line, but was neglected, as B was careless about building fences, and it was B's part to build. Said fence is now rotted down, and B's farm has changed hands. B's successor is going to repair fence. Can A compel him to rebuild fence on the proper line? If so, how shall he proceed? There never were any stones piled in the fence corners on B's side of said fence until now. B's successor is now filling up corners with stones. A has spoken to him about it, but he paid no attention. We think he intends to rebuild the fence on the old grounds. Can we make him move it over on the line, or what is best to do about it?
W. L.

Ans.—We cannot see that A is in a position to legally compel B to do what is proposed.

OYSTER-SHELL BARK-LOUSE.

Am enclosing a small twig of an apple tree which is very nearly dead. We never have had any experience with San Jose scale, and I concluded from what I had read on the subject that our tree had come. Kindly tell me is this the scale. I notice some other trees dying or not doing well, and a great many others have a few of those little scales on them, but are apparently in a perfectly healthy condition. Probably some of the bulletins issued by the Dept. of Agriculture will enlighten me on what course to pursue to stamp out the cause of the death of those trees. There are over two hundred trees, mostly winter varieties, and about twelve years old, in the orchard.
W. D. H.

Ans.—The insect upon the apple twig sent in is indeed one of the scales, but not the much-dreaded San Jose scale. This is the oyster-shell bark-louse, which is far more widespread over the Province than San Jose scale, and in some districts is proving almost as serious a pest. It may not kill the trees outright so quickly as the San Jose scale, but it will eventually so weaken them that they will easily succumb to a severe winter, or at least will not be able to make good growth or give satisfactory returns. The best remedy for this is thorough spraying with the lime-sulphur wash, the same as is used for San Jose scale. Send to the Ontario Agricultural College for bulletin 158, in which you will find both of these

scales described, and also directions for the preparation and application of the lime-sulphur wash.
H. L. HUTT,
O. A. C.

HOW TO CATCH WEASELS?

A correspondent desires some of our readers to describe how to catch or destroy weasels that have been taking young chickens.

SELLING UNUSED RAILWAY TICKET.

I purchase a full-fare return ticket on the railway, but circumstances prevent my returning. Is there anything to prevent my giving or selling the return portion to a friend?

Ans.—Yes; the Passenger Tickets Act, Revised Statutes of Canada, 1906, Chap. 38, Sec. 10, which makes it an offence to do so. The penalty is from \$20 and costs to \$50, or imprisonment for from ten to ninety days, or both penalty and imprisonment, in the discretion of the justice of the peace before whom the conviction takes place. The unused portion of ticket should, within thirty days from the time the ticket was issued, be presented to the railway company for redemption, and upon such presentation the company must repay to the holder of the ticket the cost of same, less the ordinary and regular fare for the distance for which the ticket has been used.

CORN AND COB MEAL, ETC.

1. Is clear corn meal better feed than corn and cob meal together?
2. Does the cob meal cause indigestion or affect digestion in any way?
3. Give the comparative value of the two meals as food for stock.
4. When is the best time to top-dress this spring seeding of alfalfa? Could it be done with safety late in the fall, or during winter months?
5. What kind of cream separator is used at the O. A. C., Guelph?
GREENIE.

Ans.—1. Clear corn meal contains more digestible matter than a mixture of corn and cob meal. At the same time, experiments with these two kinds of foods go to show that there appears to be comparatively little difference in their food value, particularly when fed to cattle. It is difficult to account for this result, except on the basis that the ground cob mixed with the corn meal tends to lighten the mixture, and thus render the meal rather more digestible. Clear corn meal is a very heavy, close-grained meal, and is not easily digested unless mixed with something more bulky. I believe, however, that if the corn meal were mixed with bran or ground oats, the mixture would have a considerably higher feeding value than the corn and cob meal, the bran and oats performing the main function of the ground cob, and, in addition, having considerable food value in themselves.
2. The ground cob does not seem to cause indigestion; in fact, it appears to have rather the opposite effect, as stated in answer to question 1.
3. This question is practically answered under 1. For cattle, we may take the two kinds of food as almost equal in utility. For swine, however, I would regard corn meal as much more satisfactory, owing to the fact that swine cannot handle bulky, fibrous foods to such good advantage as cattle. Even for feeding hogs, however, corn is greatly improved by mixing with some more bulky food, say a few ground oats or wheat middlings.
4. If the ground was reasonably rich at the time it was seeded with alfalfa, it seems to me that it should scarcely be necessary to top-dress the crop the same year that it was sown. If it is top-dressed at all, I would prefer to do it after the ground was hard frozen, because the trampling which the alfalfa would receive, if done earlier in the season, would be rather hard on the young plants.
5. Practically all the better-known types of cream separators are used in the Dairy Department of the College. They all seem to be doing effective work, so far as skimming is concerned, and no one machine seems to possess all the good qualities. One will have an advantage in one respect, and another in some other respect, and different people have different preferences regarding them. Any cream separator made by a reliable firm should give good satisfaction.
O. A. C., Guelph.

G. E. DAY.

ONLY A Common Cold

BUT IT BECOMES A SERIOUS MATTER IF NEGLECTED. PNEUMONIA, BRONCHITIS, ASTHMA, CATARRH or CONSUMPTION IS THE RESULT.

Get rid of it at once by taking

Dr. Wood's Norway Pine Syrup

Obstinate coughs yield to its grateful soothing action, and in the racking, persistent cough, often present in Consumptive cases, it gives prompt and sure relief. In Asthma and Bronchitis it is a successful remedy, rendering breathing easy and natural, enabling the sufferer to enjoy refreshing sleep, and often effecting a permanent cure.

We do not claim that it will cure Consumption in the advanced stages, but if taken in time it will prevent it reaching that stage, and will give the greatest relief to the poor sufferer from this terrible malady.

Be careful when purchasing to see that you get the genuine Dr. Wood's Norway Pine Syrup. Put up in a yellow wrapper, three pine trees the trade mark.

Mr. Wm. O. Jenkins, Spring Lake, Alta., writes: "I had a very bad cold settled on my lungs. I bought two bottles of Dr. Wood's Norway Pine Syrup but it only required one to cure me. I have never met with any other medicine as good."

Price 25 cts., at all dealers.

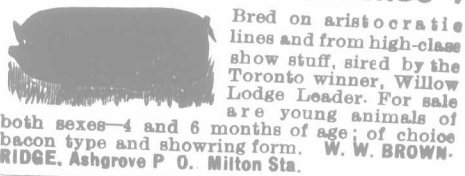
LARGE ENGLISH YORKSHIRES



Pigs of the most improved type of both sexes, for sale at all times. We have imported and bred in our herd than all other breeders in Canada combined. We won more first prizes at the large shows this year than all other breeders combined. We won every first but one and all silver medals and Bacon prizes at Toronto and London, and at St. Louis we furnished all the first-prize hogs in the breeding classes except two; also supplied both champion and grand champions; Prices reasonable.

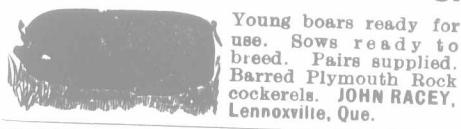
D. O. FLATT & SON, Millgrove, Ont.

PINE GROVE BERKSHIRES!



Bred on aristocratic lines and from high-class show stuff, sired by the Toronto winner, Willow Lodge Leader. For sale both sexes—4 and 6 months of age; of choice bacon type and showing form. W. W. BROWN, RIDGE, Ashgrove P. O., Milton Sta.

ENGLISH BERKSHIRES.



Young boars ready for use. Sows ready to breed. Pairs supplied. Barred Plymouth Rock cockerels. JOHN RACEY, Lennoxville, Que.

NEWCASTLE TAMWORTHS.

Oldest established herd in Canada. For sale 12 young sows sired by Colwell's Choice and Newcastle Warrior, both Toronto champions, and bred to Imp. Cholderton Golden Secret; also younger ones, both sexes, by him, and out of dams by above Cha. sires. Several boars fit for service. Will sell right for quick sales. A. A. COLWILL, NEWCASTLE, ONT.

It was undoubtedly true that the stout man took up more room in the crowded car than is often occupied by one person. The exceedingly thin man next whom he sat heavily down gave a sound of disapproval.

"They ought to charge by weight in these cars," he said to his neighbor on the other side, in so clear a tone that the stout man could not help hearing him.

"Maybe 'twould be a good idea, my friend," he said, turning a calm, dispassionate gaze on the thin man. "but if they did you'd have to walk. The car would never stop for you."

QUESTIONS AND ANSWERS. Miscellaneous.

TREES DYING.

I have an orchard, twenty years old. The bark is peeling off almost all the trees on the south-west side, and the trees are dying. The bark peels right off the trunk, and the wood is bare.

Ans.—It is impossible to say definitely from your description just what may be the trouble with your trees. The injury may be due to the work of flat-headed borers, which usually work upon the south-west side of the tree, and sometimes cause the bark to peel off in the way you have described. Or, it may be the result of sun-scald, which also shows mostly on the south-west side of the tree, and sometimes kills the bark the whole length of the tree. If the injury is due to the work of borers, their burrows may be seen in the wood. If none of these are found, it would be reasonable to suppose that the injury is due to sun-scald. I would advise you to apply to the Ontario Agricultural College for copy of a bulletin on "Apple Culture," in which you will find both of these injuries referred to, and directions given for treating them.

O. A. C. H. L. HUTT. CROPPING OLD SOD PASTURE—CROP FOR GREEN MANURE DRAFT OF DOUBLE-TREE, ETC.

1. I have been thinking of breaking up a field of sod (clay loam), which has been in pasture for over twenty years. Would it be best to do it this fall, or in the spring? What would be the best crop to sow? Would oats or barley be suitable?

2. Have a field which I would like to summer-fallow next year, but have not sufficient barnyard manure to apply to it. Would it answer as well to sow buckwheat and plow under? If so, what time should it be sown? Also, how much seed should be sown per acre, and when should it be plowed under, in order to sow fall wheat in the field next fall?

3. Would like to sow a field of rape, to turn cows into for summer pasture. Please tell me how and when it should be sown, how much seed per acre, etc., etc.?

4. When two horses are drawing on an even doubletree, should one horse be slower than the other, does the slow horse necessarily draw any more than its share of the load by being behind?

5. Is salt, sprinkled over the ground, or any use to stop the working of wireworms? If not, can you tell what is?

YOUNG FARMER.

Ans.—1. Oats might be sown, but corn would be better, sod being the ideal preparation for corn, but not for oats. For oats, it would be preferable to fall-plow. For corn, spring plowing is rather better, although, if time permits, it is better to plow now so as to lighten the spring rush of work.

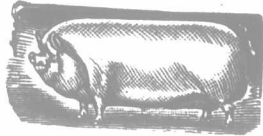
2. Experiments at the Ontario Agricultural College, as well as experience of farmers, is that peas, sown in April or early in May, are decidedly better than buckwheat for plowing under to enrich the land for wheat. Peas, used in this way, gave results not much inferior to manure. If the land were very dirty, buckwheat would be better to smother the weeds. For this purpose, sow three or four pecks per acre.

3. Rape should not be sown as a pasture crop for dairy cows, as it taints the milk.

4. No.

5. No. Early fall plowing tends, in time, to reduce the numbers of wireworms, or, rather, we should say August plowing, followed by a second in September. Follow a short rotation of barley, clover and corn, leaving the land only one, or, at most, two years in sod. Barley, rye and clover are among the crops least affected by wireworms, as a rule. When sod is plowed down, the larvae of the wireworms, during the first year, feed chiefly on the decaying grass and its roots. By planting corn the first year, followed by barley, seeded to clover, a fairly successful fight may be made against this troublesome pest.

YORKSHIRES of Choicest Type and Breeding.



I have on hand 75 brood sows of Princess Fame, Cinderella, Clara, Minnie, Lady Frost and Queen Bess strains. My stock boars are true to type and richest breeding. For sale are a large number of sows bred and ready to breed, boars fit for service, and younger ones of both sexes. Pairs and trios not akin. J. W. BOYLE, P. O. Box 563, Woodstock, Ont.



Large White Yorkshires!

Am offering at the present time a choice lot of boars ready for service, from imported stock; also young pigs of both sexes, not akin. Prices right, and quality of breeding unequalled. Write or call on

H. J. DAVIS, WOODSTOCK, ONT.



MONKLAND Yorkshires

Imported & Canadian-bred We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right.

JAS. WILSON & SONS, FERGUS, ONT.

G. T. R. and C. P. R. Long-Distance Trains



Maple Leaf Berkshires.—Large English breed. Now offering Doctor sows, bred to British Duke (Imp.). Also young boars and sows for sale, 10 and 12 weeks old.

JOSHUA LAWRENCE, OXFORD CENTRE P. O. WOODSTOCK STATION.

FAIRVIEW BERKSHIRES

are second to none. Have now for sale some sows bred, and boars fit for service, also younger ones from two to four months old, bred from show stock. Also Leicester shearing rams, ram and ewe lambs of finest type. JOHN S. COWAN, Donegal P. O. Atwood and Milverton stations.

Glenburn Herd of Yorkshires.

Winner of gold medal three years in succession, 6 young boars from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old.

David Barr, Jr., Box 3, Renfrew, Ont.

Elmhurst Berkshires

Metto: "Goods as Represented."

With our recent importation, personally selected from the best herds in England (some of them prizewinners), we have the most select herd of Berkshires in Canada. A grand group of breeding and show matrons. Our new imported boar, Stall Pitts Middy, won 1st under 1 year at Oxford, 1907, also Compton Duke, Imp., and Compton Swell, Imp., head the herd. Mail orders receive careful attention. Bramford shipping station. H. M. VANDERLIP, Oshawa P. O., Brant Co., Ont.

Yorkshires and Tamworths—Either breed any age, both sexes; sows bred and ready to breed. Yorkshires bred from Imp. sire and dam. Tamworths from Toronto winners. Pairs not akin. As good as the breeds produce. CHAS. CURRIE, Morrilton P. O. Selaw Sta., O. P. R.

Meadowbrook Yorkshires. Young stock of both sexes. A number of sows old enough to breed, all sired by Imp. Dalmeny Topman. Everything guaranteed as represented. J. H. SMELL, Hagerston P. O. & Station.

Elmfield Yorkshires. 60 young pigs of both sexes, from 4 weeks to 4 months. Also some young sows, bred in August to Imp. boar. Prices to suit the times. G. E. MUMA, Ayr, Ont.

For Sale—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; peddle green and safe delivery guaranteed. Address H. D. GEORGE, Putnam, Ont.

DUNROBIN STOCK FARM Clydeedale, YORKSHIRES, Shepherds. We are booking orders for breeding stock from our grandly-bred Yorkshires. Twenty five sows to farrow in the next few weeks. Unrelated pairs a specialty. Write for prices and particulars. DONALD GUNN & SON, Beaverton, Ontario. Inspection invited. G. T. R., C. N. O. R. stations 1 1/2 miles from farm. Customers met on notification.

FAIRVIEW BERKSHIRES

Bred from imported and Canadian-bred sires and dams, and bred on prizewinning lines. My brood sows are large, choice animals. Young stock of both sexes. Some sows bred to Imp. boars. HENRY MASON, SCARBORO P. O. Street cars pass the door.

Willowdale Berkshires

are unsurpassed for quality and breeding. My stock is bred from the best imported and Canadian-bred dams, and imported sires of the richest breeding to be found in England. Young stock all ages for sale reasonable. Young sows bred and ready to breed. Young boars 3 and 4 months old. Satisfaction guaranteed. Long distance telephone in residence J. J. WILSON, Importer and Breeder, Milton P. O. and Station, G. T. R. and C. P. R.

MAPLE GROVE YORKSHIRES

Imported and Canadian-bred boars and sows of the best possible breeding, with lots of size and quality. We are winning at the leading Canadian shows. A fine lot of both sexes and all ages. Everything guaranteed as represented. Prices reasonable. H. S. McDIARMID, Fingal P. O., Shedden Sta.

YORKSHIRES—Boars ready for service; sows ready to breed, and bred; young pigs just weaned and ready to wean. Cotswold and Shropshire rams, yearlings and lambs, registered. GEO. M. SMITH, Haysville, Ont.

SUNNYMOUNT BERKSHIRES!

Boars fit for service. Sows bred and safely in pig. Sows fit to be bred. Young pigs just weaned. JOHN McLEOD, Milton P. O. and Sta., C. P. R. & G. T. R.

DAKDALE BERKSHIRES Largest Berkshire herd in Ontario.

imported. For sale: Sows bred and ready to breed, boars ready for service, and younger ones, all ages, richly bred on prizewinning lines and true to type. Everything guaranteed as represented. Long distance phone. L. E. MORGAN, Milliken P. O., Co. of York.

LARGE ENGLISH YORKSHIRES.—We have a limited number of choice young pigs for sale, bred from our choicest sows and got by the imported boar, Dalmeny Joe 13877 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat Stock Show last March for the best dressed carcasses and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders. JOSEPH FEATHERSTON & SON, STREETSVILLE, ONT.

Mount Pleasant Tamworths and Holsteins.

For Sale: Pigs of either sexes, from 6 weeks to 7 months; pairs not akin; also bull and heifer calves under 5 months. Phone in residence. BERTRAM HOSKIN, The Gully P. O.

CLOSING-OUT SALE.—Orchard Home Tamworths at closing-out prices.

Brood sows in pig; fall pigs; boars fit for service, all ages, including the great Toronto champion, Newcastle Warrior (2396). Guaranteed in every respect. Reg'd pedigrees furnished. GRAN-DALL BROS., Cherry Valley, Ont.

PUTS SEED

JUST WHERE YOU WANT IT

Accurate planting means economy. Don't buy a drill, Friend Farmer, that you can't be sure of. There are a lot of dollars put into the soil that never pay back interest in crops—let alone principal.

Own a drill—a **Champion Disc Drill**—that you can "bank on." Its feed mechanism is positive and accurate. The indexes accurately show how many bushels you are sowing. When you get to the last corner of that 25-acre field you'll find the indexes truthful. No grinding or mashing seeds as they pass through our Fluted, Force-feed Cylinder. Every kernel reaches its soil-bed whole and in condition to germinate. It saves a lot of worry to use a

YOU CAN KNOW HOW MUCH YOU SOW

That's why all our drills—Hoe-drills—Shoe-drills, Disc-drills—are so well liked from Nova Scotia to British Columbia. These drills are all made in a great variety of sizes from 10-row to 20-row. They are all described in our catalog "F," which we gladly send to any Farmer. Remember that we always have an agent in your vicinity. Call on him He'll gladly answer any question.

THE FROST & WOOD COMPANY, Ltd.
Smith's Falls, Canada.



ADVICE TO WEAK MEN!

Don't Drug. Use Electricity.



THE OLD WAY.

Experience is a dear school, but some men and women will learn in no other.

If you would apply the same reasoning faculty to your efforts to regain your health that you do in your other pursuits, you wouldn't make a drug shop out of your stomach.

Ever figure up what it has cost you experimenting with drugs and nostrums to get back your health?

Of all the fool notions that ever got into the human mind is the idea that there is, or ought to be, somewhere in the universe, some mineral or vegetable compound that will cure each and every ill to which human flesh is heir.

That's all bosh, but as long as the idea exists, poor, deluded mortals will continue to dose

their stomachs, and it's this delusion that creates a market for carloads of "dope" in various forms that every year are manufactured and sold throughout the country.

Said one of America's greatest statesmen, who was a signer of the Declaration of Independence: "The best doctor is the one who knows most about the worthlessness of drugs."

Break away from drugs and doctors, and use Electricity for just ten days. Get the Dr. McLaughlin's Electric Belt. Give us a chance for just a few weeks, and we will make a new man out of you.

It's a safe bet that your weakness, your pains and aches can all be traced to lack of vital tone in your system. **Animal vitality—Electricity—Magnetism—these are all one and the same thing.**

Let us give you back this power, and your troubles will all take wings and fly away. **Strengthen your body-guard! Build up your nervous power!** Your body-guard is the ten million nerves and tens of millions of little nerve cells that compose your Nervous System. It's the Electricity in these nerve cells—the little "storage batteries"—that runs the machinery of your body.

Read some of these samples of letters we get every day by the score from people who have used this grand remedy:

Dr. McLaughlin: Kent Bridge, Ont.

Dear Sir,—I have worn your Belt now for about two months and am getting better all the time. Hip is better, so is my back, also my varicocele is about a thing of the past. Your Belt has done me more good than all the drugs that I have taken for the past five years.
JOHN AXFORD.

Dr. McLaughlin: Searchmount Cut, Ont.

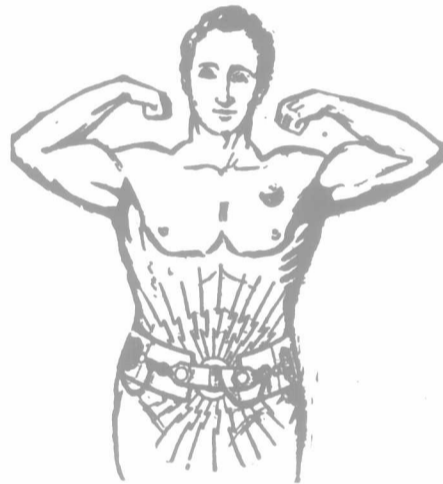
Dear Sir,—The Belt which I purchased from you last October has given me the best of satisfaction; it has completely cured me of Lumbago. I value it very highly, and will recommend it to anyone suffering with the same complaint. Wishing you every success with your Belts.
C. W. McWALTERS.

If you are skeptical, all I ask is reasonable security for the price of the Belt, and

When You are Cured Pay Me.

If your stomach is weak, your bowels irregular, your liver torpid, your kidneys bad, your circulation sluggish, if you suffer from pains or aches, sleepless nights, mental or physical debility, if you are troubled with lame back, weakness, drains, despondency, if you lack **Energy and Vigor**, what you need is more life, more Electricity in the cells of your nervous system, and this you can get from our Electric Belt, if you use it as we recommend, and not from drugs.

Call and have a talk with us, if you can; if you cannot, cut out this coupon, send us your address, and we will mail you our beautifully illustrated 84-page Book, which points out the quickest and surest road to health.



THE NEW WAY.

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Please send me your book, free.

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ADDRESS

Office Hours—9 a. m. to 6 p. m.;
Wednesdays and Saturdays until
8.30 p. m.

GOSSIP.

SHELTER IN THE POULTRY-HOUSE.

Owing to the unusually large attendance at the Ontario Agricultural College this year, and the lack of sufficient dormitory accommodation to house all the students in the College residence, considerable diplomacy had to be employed. The following skit from the O. A. C. Review shows that no effort was spared to make arrangements for as many as possible:

"Quite an interesting scramble for rooms in the dormitory was witnessed on the 18th, and many were the down-cast looks seen on the faces of non-residents (of Ontario) when they were greeted with the words, 'Call later, and we'll see what we can do for you.' But it was evident that our President did his utmost to bring into use every available space, as indicated by the notice which appeared on the bulletin-board, 'Twelve cock pens are now vacant at the poultry department, students desiring the same may have them at \$2.50 per week.'

"N. B.—Use of the boiler free.
"Apply at President's office."

WILLOWDALE BERKSHIRES.

With few equals as a high-class herd of imported Berkshires, the Willowdale herd, the property of Mr. J. J. Wilson, of Milton West, is certainly among the very best in the land. Numbering about 100 head, the selection for prospective buyers is one that few, if any, other herds of the breed in Ontario can duplicate. Selected from the leading herds in England, the breeding stock are ideal in type, combined with a massiveness and strength of bone that guarantee the best possible results. Up to 900 lbs. in weight, some of the brood sows are capable of winning in any company. The stock boar is Imp. Lord Monmouth, of the noted Gillingham strain, sired by Hightide F. B., is bred on prizewinning lines on both sides, is a Toronto winner himself, and is proving a sire of a very high order. Duchess of Springfield 20th (imp.), Willowdale Manor Lady (imp.), Stratton Princess (imp.) are a few of the imported sows, strictly a high-class lot. Other sows in breeding are: Boyne Queen, a 900-lb. sow, by Highclere Crown 3rd; Doctor's Lady, by Imp. Polgate Doctor, dam Imp. Kingston Pansy; Willowdale Supreme, by Royal Masterpiece, dam Imp. Durham's Dawn. These mentioned are only representative of the breeding of the several other brood sows, among which are some carrying the blood of that great champion, Baron Kitchener. For sale are a large number of both sexes, and all ages, pairs and trios not akin, among them being such richly-bred stuff as two ten-months-old sows, by Imp. Polgate Dan, and out of Imp. Polgate Dame; three ten-months-old sows, sired by Imp. Danesfield Liedeg, dam Imp. Polgate Daffield. Here are five show sows, all safe in pig to the stock boar. Then there are eleven sows, five months old, all by the stock boar, and out of Willowdale Manor Lady (imp.), Duchess of Springfield 20th (imp.) and Boyne Queen. These, too, are a mighty nice bunch. Also, out of the latter sow are seven boars, five months old, an exceptionally choice lot. Out of Willowdale Supreme, and by the stock boar, are six sows, four months of age, every one a show pig. Two of the best pigs of the whole lot are a pair of two-months-old sows, out of Doctor's Lady, and by the stock boar—certainly a pair of crackers. Then there are eight boars, five months old, by the stock boar, and out of Imp. Duchess of Springfield 20th, and Imp. Willowdale Manor Lady. The whole are comfortably housed in their new concrete pen, built on modern lines, with abundance of sunlight and water throughout. Mr. Wilson reports the demand and sales the best in his experience.

TRADE TOPIC.

DE LAVAL INVENTIONS.—The de Laval Separator Co. have issued an illustrated pamphlet which shows, in a striking and succinct way, the series of improvements which have been, from time to time, incorporated in their centrifugal machine for cream separation easily, economically and thoroughly. It is a remarkable record of progress which we commend to the perusal of dairy readers who are looking for a really good separator.

PLEASE MENTION THE FARMER'S ADVOCATE.