

48.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED
FOUNDED 1869

Library of Parliament
B65
1894

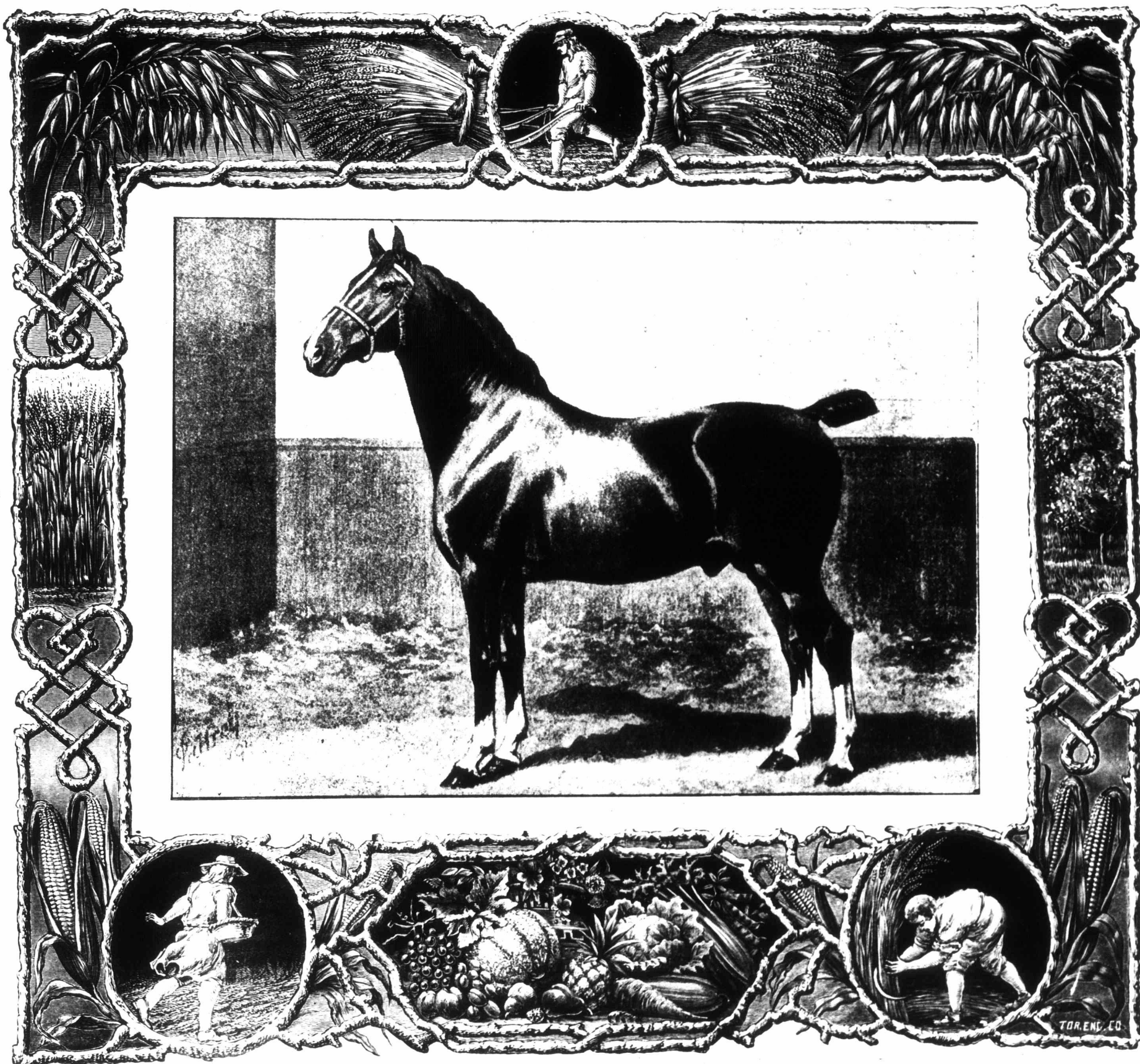
* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE *

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXIX.

LONDON, ONT., AND WINNIPEG, MAN., NOVEMBER 1, 1894.

No. 369.



THE HACKNEY STALLION, GANYMEDE 2076.

WASER OF BEST AND CHAMPION PRIZES AT THE LONDON AND BRISTOL HACKNEY SHOW OF 1891.
PROPERTY OF MR. TOM MITCHELL, THE PARK, ECCLESHILL, BRADFORD.

EDITORIAL.

Publishers' Announcement.

The present is a critical period in Canadian farming. Men realize, as never before, the need for reliable, practical and seasonable information on all branches of agriculture—general farm management, the growing of crops, the rearing of live stock, and the preparation and marketing of farm products. To keep posted, read the FARMER'S ADVOCATE.

Intelligent, wide-awake farmers everywhere appreciate the ADVOCATE because they find reading it pays them. To succeed, men must read about their own business. One dollar (\$1) for the ADVOCATE from now till the end of 1895 is a small but paying investment. Next year it will be made better than ever before.

We thank our readers for their appreciation, and ask them to induce others to give it a trial for one year. By so doing you will benefit them, and help us to improve the paper. Renew promptly and send us the names and post-office addresses of any persons not taking it, and we will mail them a sample copy free. Our circulation may thus be easily doubled.

Those subscribing now will receive the remainder of this year free. Thrifty, enterprising men quickly recognize its merits, and our agents are doing well.

Read the premium page elsewhere, and secure the advantage of an early start.

An Outspoken Reader.

DISCARDS A BATCH OF WORTHLESS PAPERS, BUT RETAINS THE "FARMER'S ADVOCATE."

DEAR SIR,—I have been looking over my list of papers, with a view to economy, and culling out the useless ones, for the majority are worthless for any purpose but waste paper; but I cannot afford to be without yours, for I consider it can stand by the side of any agricultural paper printed on the American continent. Furthermore, I consider myself mean for running behind in my subscription. You will find enclosed \$2 for the balance of this year and next year's subscription.

I remain, yours truly,

W. D. CAVAN, Dunmore.

P. S.—You are at liberty to publish this.—W. D. C.

The annual meeting of the Ontario Agricultural and Experimental Union will be held at Guelph on Dec. 20 and 21.

Even full-grown hogs can be killed by an overfeed of wheat. It is very toothsome to swine, and in their greed they swallow a lot of imperfectly masticated grain, that causes a derangement often fatal. Wheat should be ground or rolled coarsely. If ground finely it forms into a doughy mass (unless made very sloppy) in the animal's stomach, which is very hard indeed to digest, and is very liable to produce colic. Even ground wheat is better to be soaked before feeding. Commence feeding it in conjunction with other food, and in accordance with suggestions thrown out in the last issue of the ADVOCATE.

Generally speaking, the best time to sell winter apples is as soon as they are picked, as it saves the cost and loss in storing, rotting, extra handling, etc. We have no hesitation in saying that the above rule may safely be departed from this season, provided a suitable storing place can be secured. Reports of the world's apple crop look like a shortage, which must, according to the law of supply and demand, raise the present price to a considerably advanced one before long. The price being paid at present in many Ontario sections is from \$1 to \$1.50 per bbl. for first quality winter fruit. This price is not enough, as will be seen before three months have gone round.

Says the English "Chronicle":—"This year British farmers are blessed with a bounteous crop of roots and hay, which they are unable to consume profitably, owing to the high price of store stock, and yet the Ministry of Agriculture still keeps our ports closed to Canadian cattle, which make beef very quickly in England when fed by English graziers. Deputations without end have waited upon Mr. Gardner, from the Scotch farmers, asking him to remove the embargo, but hitherto in vain, and now these, reinforced by the feeders of Lincolnshire and Norfolk, in their demand are becoming very angry. We have 'Free Trade' to compete with, they say, and we are prepared to contend against the world, but surely, while you insist upon Free Trade, you cannot expect us to quietly submit to the total exclusion of one of the most valuable of our raw materials."

Our First Page Portrait.

On the first page in this issue appears a portrait of the champion English Hackney stallion Ganymede 2076, the property of Mr. Tom Mitchell, The Park, Eccleshill, Bradford. This portrait was from the original picture by Mr. Palfrey in the possession of the Hackney Horse Society, and reproduced by permission in the London (Eng.) Live Stock Journal. Ganymede was got by Sir Walter Gilbey's Danegelt 174, his dam having been Patience 491 by Phenomenon 534. He was first and champion at the Hackney Society's London Show this year, and previous to that occasion had won the following prizes:—First Pocklington, 1890; second Hackney Horse Society's Show, and reserve number for champion cup, London, 1891 (182 entries). 1892: Third Hackney Horse Society's Show, London; first Yorkshire Agricultural Society; first Otley; first Bradford; first Doncaster; first Royal Manchester and Liverpool; first Peterborough; first Keighley; first Skipton; first Harrogate; first Halifax; first Bingley. His son Goodmanham Squire was winner of the first prize in the three-year-old class at London, and of the cup as the best young stallion; while other animals got by him are of high promise, and have distinguished themselves.

Agriculture in British Columbia.

Notwithstanding the fact that British Columbia is in some respects a new country, farming has been enabled, by the aid of the Department of Agriculture of that country, to make very rapid strides during the last few years. We are in receipt of the third annual volume issued by that department. Reports from many centres give a general impression that British Columbia is fast becoming an important agricultural province. All sorts of cereals that grow well in Ontario do well there. In some districts drouth calls for irrigation, which is extensively carried on. Summer frosts rarely if ever do any appreciable damage. In most sections roots and potatoes find conditions extremely suitable to their growth and development. The size often obtained under ordinary conditions exceed Ontario's most pampered produce. Ordinary fruits do well in many sections. Apple trees that have been set out a few years are now bearing well, which fact is inducing the planting of many large orchards. Dairying, hog-raising and poultry-keeping are not as yet receiving much attention, but the tendency is a marked increase in those directions in the near future. Unfortunately diseases of both animals and plants are there doing deadly work whenever neglected. Weeds and insect pests require about the same attention as in Ontario. Coyotes or prairie wolves hinder sheep-raising considerably, as they are very destructive on young lambs. The \$2.50 bounty now being paid for their brush is having a decreasing effect on their numbers. There is still a serious lack of good roads, many of them crossing streams without bridges, so that fording is necessary. In times of freshets, which often occur from the mountains, transit is entirely shut off. Much is being done at present to improve these conditions. The exports from British Columbia to countries outside of Canada from June 30, 1892, to the same date in 1893, are:

Horses to the value of.....	\$ 2,955.00
Horned cattle.....	200.00
Swine.....	10.00
Poultry and other animals.....	8,568.00
Meats, etc.....	71,722.00
Grain, seeds, etc., and produce of..	21,880.00
Fruit and vegetables.....	3,502.00
Dairy produce.....	3,210.00
Hay.....	60.00
Trees and bushes.....	112.00

Total.....\$112,219.00

"Half Fat" Hogs.

Reports in the daily papers lately contained a great outcry against the number of "half fat" hogs that were going into the Toronto market. From the excessively fat extreme, feeders have been going to another, stimulated by the demand for "lean" bacon. Packers have asked for what used to be called "half fat" hogs, but we do not think they meant store hogs or poorly fed hogs. To get a good, edible quality of meat, we believe hogs, as well as, for example, beef cattle, must be well fed. What could be less inviting than a piece of roast or steak from a skinny, half-finished beeve. By a proper system of breeding and feeding, pork can be produced which, while not excessively fat, is at the same time toothsome and nutritious. For other reasons as well, it is a great mistake to flood the market with animals that should have a month or two more of good feeding before going there.

A Glance Abroad.

We sometimes flatter ourselves that Canada has devised exceedingly liberal things for the advancement of agriculture. During recent years, it is true, Dominion and Provincial Governments have vied with each other in setting agencies at work for the purpose of increasing the sum total of agricultural knowledge and placing it within access of the people. As the country grows older improved methods and new lines of farming become more and more necessary. Great Britain realized this long ago. Many of us have but a faint idea of the high standard of agriculture very commonly maintained in the motherland. Agricultural education is constantly receiving more and more attention there, but across the channel, in France, technical instruction in this department of human industry is far in advance of what is attempted in Great Britain. In fact, one of our British exchanges frankly states that in comparison with France, what Britain is doing is hardly worth naming.

In Great Britain the Board of Agriculture has the sum of £8,000 placed at its disposal, and when this is added to what county councils and semi-private organizations provide the sum total is really very small. In France £1,047,600 is set aside annually to encourage agriculture, and of this sum £131,320 is devoted exclusively to what we understand by technical education, while no inconsiderable proportion of the balance of £906,281 is in one form or another made subservient to the same end. This very large amount is voted even in the excitable arena of the French Chamber of Deputies without a cavil, all parties being agreed that no money is more profitably expended from the national exchequer.

The whole system is so graduated that every department of agriculture is given due consideration. At the top stands the highly scientific Agronomic Institute, a nursery for professors and men of study and research. Then comes three great national schools of agriculture, in which twenty-six professors and large staffs of demonstrators and lecturers are bending their energies to the training of land-owners and extensive farmers. In connection with these are numerous dairy institutes. There are horse-breeding schools, as well as institutions that give their entire attention to poultry rearing, and others to the teaching of the principles of draining and irrigation. In the same grade are what are called apprentice schools, in which the children of the peasants are taught how to become efficient farm servants; and after all this, the State devotes £4,000 per annum to the subsidizing of private dairy schools, and defrays the expense of a limited number of pupils attending the chief Poultry Rearing Schools. Under this head parties of young people are sent to study the systems of butter-making followed in Holland, Denmark and Switzerland. And for the benefit of those who are too old or too stubborn to attend some of the numerous places of instruction, are sent 90 travelling professors and 114 assistant professors itinerating the country, lecturing, experimenting and advising in countless ways and forms. Last year these gentlemen delivered 3,500 lectures, which were listened to by something like 300,000 persons engaged in the cultivation of the soil. France does even more than this, but enough has been said to indicate the littleness, comparatively, of what Great Britain and our own country are doing to promote technical instruction in agriculture.

It is not surprising to find that the agricultural exports of France are largely increasing.

We have received from Isaac Usher & Son, the cement manufacturers, Thorold, Ont., a vigorous specimen of the Russian thistle, picked up near one of their warehouses, where the seed is supposed to have been brought in a car, the cleanings of which were probably dumped alongside the track. We are under the impression that this pest has secured a lodgment in more places than is generally suspected. The description and illustrations which have appeared in the ADVOCATE will enable our readers to recognize it at once, and then take the necessary precautions to prevent its spread. Too great vigilance cannot be exercised at the outset, otherwise the country will be overrun with it. The Manitoba Government is to be commended for the energetic measures they have taken to root it out of that Province. Municipal councils would do well to issue special instructions to their "thistle" or "weed inspectors" to make a careful inspection, particularly all along all railway lines, in order that the very first encroachments may be checked. Every farmer living along a railway line should watch for it in his own interests.

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY THE WILLIAM WELD COMPANY (LIMITED), LONDON, ONT., and WINNIPEG, MAN. JOHN WELD, Manager. F. W. HODSON, Editor.

- The Farmer's Advocate is published on the first and fifteenth of each month.
- It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada.
- Terms of Subscription—\$1.00 per year in advance: \$1.25 if in arrears; sample copy free. European subscription, 6s. or \$1.50. New subscriptions can commence with any month.
- Advertising Rates—Single insertion, 30 cents per line. Contract rates furnished on application.
- Discontinuances—Remember that the publisher must be notified by letter or post card when a subscriber wishes his paper stopped. All arrears must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given.
- The Law is, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.
- Remittances should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.
- The Advocate is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
- Always give the Name of the Post Office to which your paper is sent. Your name cannot be found on our books unless this is done.
- The Date on your Label shows to what time your subscription is paid.
- Subscribers failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.
- We invite Farmers to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
- Replies to circulars and letters of enquiry sent from this office will not be paid for as provided above.
- No anonymous communications or enquiries will receive attention.

Address—THE FARMER'S ADVOCATE, or THE WILLIAM WELD CO., LONDON, ONTARIO, CANADA.

CONTENTS.

- EDITORIAL:—
429—Illustration. 430—Publishers' Announcement; An Outspoken Reader; Our First Page Portrait; Agriculture in British Columbia; "Half Fat" Hogs; A Glance Abroad. 431—Contributors and Enquirers—A Request; Clubbing Rates for 1895.
- STOCK:—
431—Mr. Duthie's Successful Sale; Clipping and Singeing Horses; Chatty Stock Letter from the States. 432—How to Drench a Horse.
- FARM:—
432—Popular Geology—No. 6; Soiling vs. Pasture; What Shall We Do? 433—Mr. E. D. Tilson's New Barns; Too Much Ventilation; Notes from a Few Agents and Readers of the FARMER'S ADVOCATE; Mission City Fair. 434—The Horse Bean in Manitoba; Sod for Peas.
- DAIRY:—
434—The London Dairy Show; A New Dairy School. 435—Temperature in Milk Production; Western Ontario Dairymen's Association.
- FARMERS' INSTITUTES:—
435—A Superintendent of Institutes Appointed for the Province of Ontario.
- QUESTIONS AND ANSWERS:—
435—Veterinary; Miscellaneous.
- POULTRY:—
436—Gleanings from Poultry Essays.
- GARDEN AND ORCHARD:—
436—Experimental Fruit Stations.
- FAMILY CIRCLE:—437.
- QUIET HOUR:—438.
- MINNIE MAY:—438.
- UNCLE TOM:—439.
- STOCK GOSSIP:—443, 444, 445, 446.
- NOTICES:—441.
- ADVERTISEMENTS:—440 to 448.

Contributors and Enquirers—A Request.
Persons sending enquiries for our "QUESTIONS AND ANSWERS DEPARTMENT," or letters or articles for publication, will oblige us by always giving their Post Office, and Province or State, together with name plainly written, in order that no mistakes may arise. In several letters we have lately received this has been overlooked.

Clubbing Rates for 1895.
Our subscribers may obtain any of the papers mentioned below at the following price:—

FARMER'S ADVOCATE and Home Magazine and Toronto Evening News	\$ 1 50
Toronto Daily Globe, morning edition	6 00
Toronto Daily Globe, second edition	4 00
Toronto Empire, daily	6 00
Toronto Empire, evening edition	3 50
Toronto Weekly Mail or Farm and Fireside	1 30
The two combined	1 60
Toronto Weekly Globe (12 pages)	1 40
Toronto Weekly Empire	1 50
London Free Press, weekly edition	1 75
London Advertiser, weekly	1 70
Montreal Weekly Witness	1 60

STOCK.

Mr. Duthie's Successful Sale.

Mr. Wm. Duthie, of Collynie, Scotland, who now occupies the position of almost unchallenged supremacy in that country as a Shorthorn breeder, offered and sold, on October 9th, a large draft of grandly-bred females, and the whole of his 1894 "crop" of bull calves. The sale took place at the farm of Tillycairn, in the presence of a distinguished and representative company, including many breeders of eminence from England and Ireland, one or two from Canada, and the elite of the "Shorthorn" men of the north. It is not very many years since the appearance of an Englishman at a sale of Shorthorns in Scotland was an almost unheard-of occurrence. Every sale, since Mr. Duthie's first, has had an increased number of Englishmen, who now form quite an important element of discriminating and liberal purchasers. The position which the Collynie herd holds in that country has not come by chance, but by long-continued and persistent effort on the part of the owner, who, to secure some of the best strains of "Cruckshank" blood, has spent what would be considered a fortune by many. By breeding only the best to the best, keeping in view individual excellence, as found in the best of the Scotch tribes of Shorthorns, and by bestowing much attention and care on the production of naturally well-fleshed and sound-constitutioned stock, Mr. Duthie has succeeded in placing Collynie in natural succession to Sittyton, upon which, indeed, his standard has been largely modelled.

The draft, which, as has been stated, included, in addition to the bull calves, a draft of over forty head of cows and heifers, was, to put it briefly, worthy of the reputation of the owner and his magnificent herd, and the response of the breeders was quite in keeping with the high character of the offering. Among the cows there were a number of straight-bred Sittyton cattle, and it goes without saying that breeders appreciated the opportunity that was offered of securing some of the blood upon which Mr. Cruckshank made his world-wide reputation. The bull calves were a "crack" lot, displaying quite as much type, breeding and quality as those generally seen at the Collynie sales. The average of the bull calves just stopped short of the record average of 1883, but, with this exception, it is the highest of the eleven sales which have been held at Collynie. One hundred and ten guineas, which was paid for each of two, was the highest figure reached. One animal, being a roan calf, "Now or Never," got by Scottish Archer, and out of Sittyton Nonpariel, is a low-standing, deep-fleshed, "blocky" animal, with rare middle. He was commenced at 45 guineas, and ultimately knocked down to Mr. Garne at 110 guineas. The other was Bridegroom, also a roan of beautiful symmetry and substance. He was secured by Mr. Gilmore, of Montrave. Another roan calf, Watchward, reached the three figure limit, bringing 100 guineas. He is a roan of remarkable quality, style and symmetry, exhibiting rare top-line, magnificent shoulders, and well-filled quarters. These envied figures, at this age of acknowledged depression in Shorthorns, goes to show that the best will always find moneyed purchasers. To think that this year's sale has only been surpassed in average once in eleven years, and that in 1883, must be to Mr. Duthie a pronounced satisfaction that his able efforts are being appreciated.

SUMMARY.

	Average.	Total.
15 cows	£37 17 4	£ 568 1 0
3 two-year-old heifer	21 0 0	63 0 0
9 yearling heifers	38 5 4	344 8 0
17 heifer calves	33 4 7	564 18 0
30 bull calves	49 10 6	1,485 15 0
74	£40 17 10	£3,926 2 0

The following table gives the averages for the Collynie bull calves since 1883:—

Year.	No.	Average.
1884	30	£49 10 6
1885	21	50 15 0
1886	23	34 19 4
1887	42	36 16 0
1888	28	45 6 9
1889	31	36 15 0
1890	7	24 6 0
1891	13	28 5 4
1892	21	37 7 6
1893	18	38 10 10
1894	12	41 6 3

Clipping and Singeing Horses.

Road horses that naturally grow heavy coats, will do their work much easier and with less risk of catching cold if clipped or singed. If clipped, it should be done no later than Nov. 1st, as they will then have a few weeks to grow at least a protection before winter sets in. Except for the appearance of the horse, singeing is to be preferred, as by it the length of the hair can be controlled at will on the different parts of the body. For example, the flanks, thighs, shoulders and belly should be singed quite closely, while the neck and back may be left fairly well covered. A singed or clipped horse should not be allowed to stand uncovered even ten minutes after a drive, as the danger of congestion from exposure is considerable in such a case. No stable that has road horses is complete without a singer, as by it even a fine coated horse can be improved in appearance by scorching off the long hairs around the jaws, throat, ears, flanks, etc.

Chatty Stock Letter from the States.

FROM OUR CHICAGO CORRESPONDENT.

Top native cattle, \$6.00; being a little lower than two weeks ago; best heavy hogs, \$5.00; being 50c. lower; best sheep, \$3.15; being 50c. lower; best lambs, \$3.75, being 50c. lower than a fortnight since.

The beef cattle market lately has had three depressing influences at work: (1) Liberal receipts; (2) bad foreign outlet; (3) heavy runs of cheap range cattle.

The hog market has continued on the down grade, and good droves of packing hogs, averaging 250 to 300 lbs., have been bought as low as \$1.61. At these prices the demand has seemed to improve, and with \$5.00 for the top, and \$1.75 for the average, buyers seem willing to operate quite freely. The quality of the hogs is getting a little better, but is far from the average winter packing season standard.

One of Armour & Co.'s cattle buyers declares that there will be a scramble to get cattle enough as soon as the Northwestern range season is over. The first big storms on the plains usually wind up the range cattle season.

One of the largest American cattle exporters is said to have dropped over \$100,000 in the past two months.

Distillery cattle feeders are taking in large numbers of western range cattle at \$2.75 to \$3.25, getting good ones around \$3.00.

The marketing of Mexican cattle has commenced under the new ad valorem duty of 20 per cent. Owing to the poor quality of the cattle from the Southern Republic, the tax only amounts to about \$2 to \$4 per head. This rate can be paid and still leave a profit to owners, but the former specific rate of \$10 per head, regardless of quality, was prohibitive on the common cattle—the only kind Mexico has to send. The trial shipment, consisting of 234 steers, averaging 821 lbs., sold at \$2.45, and 50 cows, 762 lbs., at \$2.25. The cattle came from the George L. Cheesman ranch, at Sabinas, Mexico, and were shipped by H. Gonzalez. They crossed the line at Eagle Pass, and the ad valorem duty on the whole lot was \$600, which was about 10 per cent. of their valuation on the market. The freight was \$161.55 per car, and the cattle netted \$10.83 per head.

The Continental Pork Packing Co., headed by T. E. Wells, formerly of the International Packing Co., is the newest venture in the pork packing business. The new concern seems to be well equipped for business.

Pork packing at Chicago, since March 1, shows an increase of 284,000 hogs, compared with the returns for the corresponding time in 1893. The packers seem to have the price of hogs down to a basis they consider safe for business, and they are showing more activity than for some time past. Eleven of them are now operating in the hog market.

Compared with a year ago, present prices for various farm products show the following changes: Cash wheat, 9c. lower; May wheat, 12c. lower; cash corn, 12c. higher; May corn, 9c. higher; cash oats, 1c. higher; May oats, 2c. higher; mess pork, January delivery, \$2.00 lower; lard, cash, \$2.70 lower; January delivery, \$1.35 lower; short rib sides, cash, \$2.00 lower; January, \$1.20 lower; hogs, \$1.85 lower; fat cattle, but little different, and sheep, \$1.00 per 100 lbs. lower.

The forthcoming Chicago Fat Stock show will be held in the heart of the city, at State and Sixteenth streets, and not at the stock yards as was originally planned. A prominent feature of the show this year will be the horse department, which, for a time, has been divorced from these annual exhibits of fat stock.

The sheep market has been flooded with breeding stock. Receipts of ewes lately have been very heavy, and the demand for them very light. Lambs, too, except the choice kinds, have been in very heavy supply, and they have sold as low as \$1.50 per 100 lbs., which isn't much per head on a light lamb. There were three weeks in succession lately when receipts here were 80,225, 95,601 and 93,425 head, making an average of 89,780 head per week. The largest run on record for one week previous was 82,006 head, received during the middle of October, last year. There were four days in succession when the average receipts were 20,000 head. That is "slaughtering the innocents" at a rapid rate.

In the exposition building at the Illinois State Fair on September 28, a number of prominent poultry and pet stock breeders of the State effected the permanent organization of the Illinois State Poultry and Pet Stock Association, by the election of the following officers:—President, Grant M. Curtis, of Quincy; Vice-President, Mrs. R. A. Judy, of Decatur; Secretary, Edward Levings, of Paris; Treasurer, Rainey Miller, of Champaign; Executive Committee—Isaac Root and S. S. Noble, of Bloomington; Daniel Robertson, of Palmyra; S. T. Jones, of Williamsville, and M. W. Summers, of Curran.

How to Drench a Horse.

Much unnecessary cruelty has been borne by horses, simply from the ignorant brutality of attendants. The too common method of drenching a horse by way of his nostrils, merits attention on the part of societies for the prevention of cruelty to animals. Not only is such a practice extremely painful to the patient, but there is great danger of a portion of the fluid entering the windpipe instead of the gullet, thereby reaching the lungs as a foreign substance, causing violent coughing, irritation, and finally, inflammation of the lungs.

In most farmers' stables, drenching bits and such improved appliances are seldom at hand, the ordinary method being with a twitch in the nose, and the use of a long-necked bottle. In this, there is always the attendant danger of the bottle being broken by the teeth, allowing portions of the glass to be swallowed, causing much danger to the horse. To do away with risk of breaking the bottle, an ordinary bridle is recommended, with long reins attached to the upper side of the bit rings, passed through rings in the "sleeper" of the loft, directly over where the horse is to stand. Now, stand on something high enough to bring you within easy reach of his mouth when the head is raised. By means of the loose reins, draw his head high enough so that the medicine cannot run from the corners of the mouth. Allow the tongue perfect freedom, and with the right hand pour the liquid slowly into his mouth at the corner, when he will soon be noticed to swallow. Should he remain without swallowing too long, just confine the nostrils for a moment with the hand, and the medicine will go down. His head should be lowered once or twice during the operation if the dose is large.

FARM.

Popular Geology—No. 6.

BY PROF. J. HOYES PANTON, M. A., F. G. S.

ICE.—The action of ice as a disintegrative agent upon rocks, is best seen in countries where a perpetual snow line exists. The snow keeps increasing, until so much accumulates on the mountain tops that it finally moves down into the valley. If the mountain slope is steep, the body of snow and ice will move down with great rapidity and force, sweeping everything before it.

This is an *avalanche*; they are often heard in the Rocky Mountains. The avenues, apparently cut through forests, up the mountain side, indicate to an observer the pathway of an avalanche.

If the slope is very gradual, the body of ice will move slowly, and form a *glacier*, or river of ice. The movement of this may be very slow, not exceeding 3-15 inches per day, but it will move on, grinding and wearing the rocks beneath it, and bordering its sides until it reaches either the sea or a place in the valley where the temperature is sufficient to melt it; there it melts and becomes the source of a river, and scatters at its terminus the boulders, gravel, sand and clay it has formed and gathered in its course through mountain ravines. The Muir Glacier, of Alaska, is three miles wide, many long, and upwards of 700 feet thick. Some of the glaciers of the Alps are twenty miles long, two miles wide, and 300 feet thick. The Humboldt, of Greenland, is 45 miles wide, and 300 feet thick.

Where the glacier reaches the sea it pushes out for a distance, the end breaks off and gives rise to an *iceberg*. Some are 300 feet high, and sometimes only a seventh is above the water. There is always from four to seven times as much below as above the water. It can readily be understood how ice in all these forms will exert a powerful influence in disintegrating the rocks in mountainous districts. Frost, as it occurs in the small cracks of rocks along the banks of a river, and on mountains, denudates by bursting off pieces of rock.

Sometimes the fragments may be very large. In such cracks you usually observe small stones, which serve as wedges, by sinking deeper as the frost causes the opening to expand, until they finally force the portion off. This accounts for much of the debris (*bolus*) seen at the base of mountains or along a river bank.

LIFE.—All animals that burrow form passages into which air and water get and act upon material near, so as to disintegrate it.

Worms are a great help in this work. It has been estimated by able investigators, that they increase the surface soil at the rate of one-fifth of an inch yearly by the deposition of their castings, or, expressed in other words, add sixteen tons of finely divided rock to an acre each year.

The holes they form also afford passages for rain and air; in fact, they are "nature's ploughmen."

Plants, while living, act upon rocks with acids formed in the minute root cells. This has been shown by growing plants for a time upon marble, when its surface becomes quite corroded and eaten into from the solvent action of the liquids in these cells. When dead, the plant in decaying gives rise to *carbonic acid*, itself a great solvent, and as decay of the roots proceeds, leaves passages suitable for the access of air and water. From the facts referred to on *denudation*, the reader will readily see what an enormous change must be constantly going on where these agencies are at work, and that their combined action tends to the preparation of material important in the formation of soil.

Soiling vs. Pasture.

BY F. J. S.

In answer to the gentleman who doubts the practicability of some of my points in "Which Shall It Be?" I would offer the following:—

1. He asks, "Will it not take more feed than I can raise to stall-feed my cows practically the year round?" No; one acre of a seasonable soiling crop will feed more milch cows than five of pasture during the major portion of a Canadian summer; for instance, the one just experienced. Certainly, less land will keep your cows on a system of partial soiling, such as we have indicated, than on a system of pasturing. It is not too much to say that cows can no longer depend upon pasture alone in Ontario, and give the most satisfactory returns. The cheapest and the best butter cannot be made from dried pasture, such as the average conditions of this country supply. In short, the partial soiling system is a necessity in the dairy herd, and the question is not, Can I raise enough feed? but rather the price of labor? If capable help can be had at reasonable figures, the profit and satisfaction of the system is assured, at least, if the writer may judge from his own practical experience in the matter.

2. "What would you feed them during July, August, September and October?"

In Western Ontario I think the majority of farmers might very profitably seed down an acre of so to lucerne or alfalfa. While a little difficult to establish, it is pretty safe and sure when once in the soil, especially if over a rather dry, open subsoil. This is a splendid soiling crop, as it may be cut, on good soils and with proper management, four or five times a season. It should not be pastured nor allowed to mature. This will make a good, early soiling crop, and will be useful to fill gaps between other crops all through the season. During the early summer the cereals and legumes will give good results. Tares and barley and oats, mixed for first sowing, should be put in as early as possible; then such mixtures as peas and oats, peas and spring wheat, etc., may follow these, to be sown, perhaps, two weeks later. These crops in your section will, we think, see you till early corn is ready; after that your supply of green fodder is assured during the rest of the season and, if you choose to build a silo, till you turn your cows on to your fall rye, or crimson clover, in the following spring. Do not feed any class of green fodder while very young, as it will usually result in disappointment. Remember that the legumes are rather better for milk-producing than the cereals.

3. "I would like your ideas as to daily rations the year round."

As to this matter, it is impossible to do more than outline. When turned to grass in the spring, the grass itself, with all the pure water they care to drink, and all the salt they care to eat (*always* before them), will be sufficient. When grass commences to fail, and heat and flies increase, they should receive in the stable as much green fodder as they will eat at noon, and, as the season advances and pasture decreases, all they will eat cleanly, morning and night, and they will also respond with profit to a light feed, say a pound or two, of bran, ground wheat, ground oats and corn, or some such mixture, which may be increased to, say, five or six pounds, as the season advances, if required. The amount of green feed will depend upon the scarcity of the pasture to which they have access at nights. When feeding good corn fodder, less grain will be required, and what is given should be of an albuminoid and of a fat-forming character—bran, oats, peas, oil-cake, *e. g.*

The basis of the cheapest winter rations for milch cows is undoubtedly ensilage. Forty to fifty lbs. ensilage, five to ten lbs. of hay (clover preferred) and straw mixed and cut, and eight or nine lbs. of grain, may be considered a fair daily ration for an average sized cow. Of course, it is only the competent feeder, who has charge of the animals, who can say exactly how much a cow should have. The grain ration may consist of oats, wheat and bran, in equal parts by weight, or corn (the grain) may be substituted for the wheat, if desired. Peas, corn and bran might also be fed in similar proportions. If the "15 acres of (dent) corn" is to be matured, and you desire to feed more corn, you might offset the one-sidedness of the ration by the addition of a pound or two of oil-cake. It is always advantageous to remember that milch cows give best results on rations that incline to an albuminoid character: that is, those having a narrow nutritive ratio. But space forbids further comment, except to say that grain is best ground and fed dry. If you desire to feed some of your mangels to your milch cows, feed a little less silage and give a small feed of the roots at noon, cutting them and sprinkling them with grain, and you may mix the whole with cut feed (hay and straw). Remember that variety is a spice to the food of milch cows, as well as to higher animals.

I think your proposed cropping for '95 is better than for '94, in more ways than one. Less wheat, less hay and pasture, and more oats and corn will, we think, suit your purpose better. You might possibly increase your ensilage corn with advantage, as milch cows are not the only class of stock that will utilize fodder corn to advantage.

What Shall We Do?

BY "PLOWMAN."

At the present time, when the scarcity of money is felt on every hand, not only among farmers, but among men in every line of business, the above is a question that is engaging the serious consideration of every wide-awake man. The solution of such a question requires the most careful and intelligent study, not alone of the present situation, but of the future prospects. It would not be hard to decide what has been the most profitable line of farming during the past year. I believe it is an almost undisputed fact that dairymen feel the present stringency perhaps lighter than any other class of the agricultural community. But having decided this, we are confronted with the question, "How long is this likely to last?" "Oh!" says some enthusiastic dairyman, "There will always be a demand for good butter and cheese; they are staple commodities." Granted, but then wheat is a staple commodity, too, and yet it no longer pays. The time is fresh within the memory of us all when a man could make more money out of a good, roomy brood mare, than you could from half-a-dozen cows, and, yet, contrary to the expectation of not a few of us, this state of affairs has been exactly reversed, and as the past is always a fair index of the future, there is just reason to fear that by the time we get ourselves properly equipped for the carrying on of a rushing business in butter and cheese, these staple commodities may take a drop, and we feel a little "left," while some other branch of agriculture will be in the ascendancy. So it would be very unsafe, as well as unwise, to advocate the general adoption of any one branch of agriculture as a safe and sure remedy for that gaunt feeling from which the farmer's pocketbook is suffering. It becomes us to be very cautious in making a change from any one branch of agriculture to another. I think it safer and better to stick to that one about which we are best informed, and for which we have gotten our farms and our buildings specially equipped, and although times are a little hard just now, let us not be discouraged, for—"The tide will turn if ye bide a wee." But while waiting for the tide to turn, let us examine ourselves. Are we practicing the greatest possible economy in the carrying on of our business? Are we allowing anything to go to waste which could be turned to a useful purpose? Are we making every acre do its share? Is any of our stock sponging its board, living, as it were, on the profit yielded by the others? And are we keeping ourselves informed on the latest and most approved methods, studying carefully the most reliable literature, treating of the subjects in which we are most interested, and keeping a sharp eye on our neighbor, steering clear of the rocks against which he has struck, and ever ready to take advantage of any new plan which he may have found profitable?

We need to exert ourselves in order to keep well abreast of the procession in the onward quick march in which our calling is advancing.

There was a time when "book farming," as it is called, was at a discount, and perhaps justly so, when an axe, a chain and a plow constituted the principal part of a farmer's outfit, and muscular exertion, even though coupled with comparative ignorance, was what made the mare go. But now, with our completely altered circumstances, must come altered management: theory and practice must go hand in hand, in order to attain paying results.

If ever there was a time when good stock should be at a premium it is now. When it takes the skillful feeder all his time to make ends meet with the best of stock, what is going to become of the poor feeder and the scrub?

Now is the time to cull over our herds and flocks, even though we cannot afford to replace them at present, and gradually, as our means will permit, let us fill our stables with the very best. It is surely better to keep three or four cows yielding a profit on the feed consumed than to keep seven or eight, which, if we had to buy our feed, would run us in debt at the end of the year.

By economy, I do not wish to be understood to mean the niggardly saving of every dollar, but rather the judicious expenditure of not only money, but time and labor as well. For instance, it is poor economy to work away with an old worn-out plow-share, in order to save the price of a new one. Nor is it economy to sow poor, dirty seed, because it is cheap, or to sow it on poorly-prepared land, in order to save a little time and labor.

It is poor economy to starve young and growing stock to save the feed. In fact, when we properly understand the term economy in its application to every detail of our business, we have the key to the whole situation—economical cultivation, economical harvesting, economical feeding to economical stock.

Duck culture, among other branches of the poultry industry, is receiving a good deal of interest on some American farms near New York and other large cities. One duck farmer reports that he has hatched about 10,000 ducklings during the season just past. They are marketed at about ten weeks old, when they weigh from six to seven pounds. The mortality of large flocks is very light when properly cared for, seldom reaching two per cent.

Mr. E. D. Tilson's New Barns.

One of our staff recently had the pleasure of inspecting the fine buildings and commodious stables erected by Mr. E. D. Tilson, of Tilsonburg. Mr. Tilson has spent a vast amount of thought and labor in planning the arrangement of the stables, having written to all the experimental stations both in Canada and the United States for plans and suggestions. In addition to this, he has personally inspected all the most conveniently arranged stables in Ontario. The results of all this labor is seen in the almost perfect internal arrangement of the buildings. In the erection of these stables no expense was spared; the walls are built entirely of white brick, while the ceiling is ceiled with plained and matched lumber, the walls plastered and then covered with a coat of hard finish.

THE DIMENSIONS

of the main building are 125 by 60 feet. There is a wing attached, the walls of which are of the same height as those of the main building, of which it really forms a part. The size of this building is 46 by 48 feet. The stalls in this stable are three feet nine inches in width, the feed passages eight feet wide, and the passage behind the cows of sufficient width to allow of a team and sleigh being driven through for the purpose of cleaning out. As will be seen by the diagram, there is a gutter seven inches deep and fourteen inches wide behind the cows and protected on the side next the cows by a piece of timber to which one end of the plank flooring is attached. The Portland cement floor is of the best quality, being made from first-class material, and laid by city tradesmen in the winter season while pavements could not be worked upon. First-class labor was thus obtained at a low rate. The stalls are formed by plank set up at an angle and held in place at the lower end by the two-inch flooring, the upper end fits into a groove in the upright post. The manger is on a level with the floor and is six inches high on the inside, sixteen inches wide at the bottom and slants out into the feed passage ten inches, at a height above the floor of thirty inches; thus leaving an opening fifteen inches wide through which to pass the feed. In fig. 1 our artist failed to show the manger as it really appears. The feed board extending from the bottom of the manger to the passage should have been extended much higher than is shown in cut.

The system of fastening in use is the common cattle chain which slides upon an iron bar extending from the floor to the ceiling.

THE WATER SUPPLY

is collected from several springs at the upper end of the farm, and brought 150 rods in cast iron pipes to the barns, stables, yards, etc., having sufficient gravitation head to raise it sixteen feet at the barn and house. The supply is always sufficient to keep a four-inch pipe running full. There are three lines of two-inch pipe running the length of the stable, just back of the manger, partly underneath it, with fresh water continually running through the pipes from the west to the east end of the barn. There is an upright overflow at the east end to each one of the pipes, just sufficient height to keep the water

boxes within one and a-half inches of being full. The pipes leading from the main to the iron buckets are one and one-quarter inches, entering the buckets at the bottom. They run at an angle of 45 degrees to within four inches of the box and then plumb up into the box, so that when the cows drink, the water will immediately rise, keeping the boxes full. It is so arranged that by turning a stop-cock at the lower end of the mains or by opening three stop-cocks, one in each main, it will drain all the boxes and pipes in the stable in one minute, and by closing the stop-cock all the boxes in the stable, 82 in number, will fill in five minutes, and as this is done each day a constant supply of fresh water is obtained. Some of the boxes are covered with lids hung with hinges, so that the cows will lift the lids and drink when they desire. The lid falls back in its place as soon as the cow removes her head. The water, coming as it does so far underground, is almost as warm in winter as in summer, a very important feature at both seasons.

There is a passage running through the centre of the wing. On the one side are the siloes, four in number, 12 by 20 feet in surface measurement and 45 feet deep; the divisions are of brick and the walls cemented on the inside.

The varieties of corn which Mr. Tilson prefers are the Leaming and Mammoth Southern Sweet.

On the opposite side of the passage are the calf pens. Here there is no crowding at feeding time, for a row of stalls front the passage, each just wide enough to admit a calf. There is also a very convenient sliding door which is operated from the passageway by means of a pulley and cord.

VENTILATION.

One of the hardest problems for the farmer to solve has been the providing of an ample supply of pure air, both in winter and summer, and at the

same time preventing all draughts. Mr. Tilson appears to have effectually solved this question, and we must admit that the system of ventilation is the most complete which we have seen anywhere. The escape of foul air is provided for by chimneys in the wall, which open behind the cattle. The fresh air is drawn through an underground pipe which warms the air to the temperature of the earth in winter, and cools it to the same point in summer. The air is forced into the pipes by means of upright blowers, similar to those on steamers, with the exception that there is a vane on top which keeps the opening always against the wind. The air is brought into the stable by means of ventilation pipes which occupy the triangular space made by boarding up the space below the extension of the manger into the passageway. Air holes are cut into this pipe at regular intervals, and the fresh air is thus delivered where it is wanted—at the head of the animal.

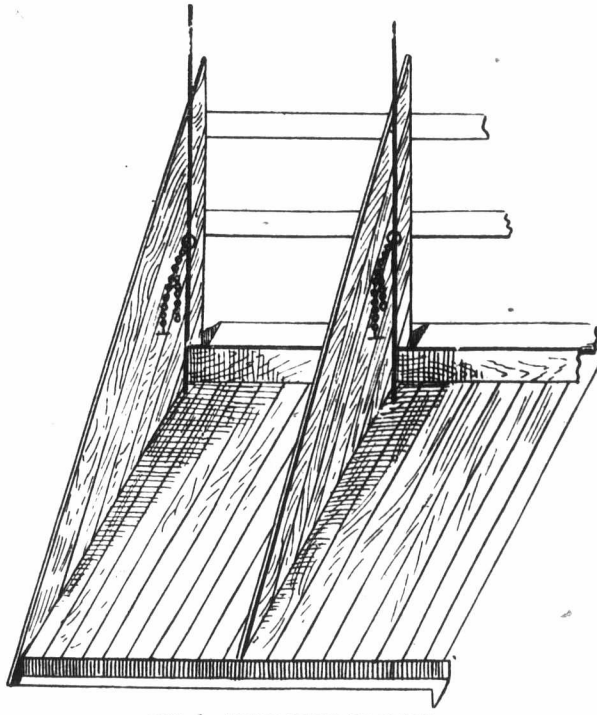


FIG. 1.—REAR VIEW OF STALL.

The milk from the herd is all made into butter in a perfect model of a creamery. This butter is sold at high prices to private customers.

Mr. Tilson believes he has the best lighted, best ventilated, best watered, most comfortable for man and beast, the purest air, with the least bad odor, of any stable in Canada. Cool in summer and warm in winter, and when the ground ventilation, which is to be completed before winter, is put in order there will be nothing to equal it for ventilation in America.

We would strongly advise any person who is thinking of putting up new stables to pay a visit to those of Mr. Tilson, and though he may not be able to invest the same amount of money, still he will fish up ideas which can be worked out in cheaper material, and which will be of lasting benefit to him.

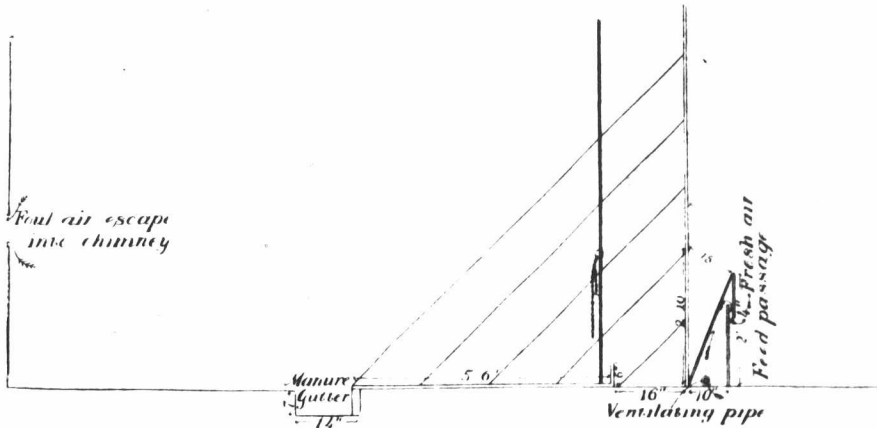


FIG. 2.—SIDE VIEW OF STALL.

Too Much Ventilation.

The Poultry Keeper reminds us of a truth that we had almost forgotten concerning the poultry-house. When a fowl-house is of medium size the greatest trouble in this country is to keep it warm enough during the winter season. Ventilators mean draughts, and draughts mean roup and no eggs. Some resort to putting in a glass front to obtain heat, and so long as the sun strikes directly upon it the end is obtained, but within one hour after sunset the temperature will have reached too near that of outdoors. A medium amount of window doubled in the winter season is all right, but don't allow the heat that has been accumulating all day to pass out through ventilators in the roof. Better to throw the door and a window open for an hour about noon, when the sun is unclouded, if it is thought a change of air is necessary.

Notes from a Few Agents and Readers of the Farmer's Advocate.

GEO. L. HASLAM, Springfield, P. E. I.:—"Your paper is much appreciated, especially on the cheese and dairy questions."

WM. C. WILSON, East Oro, Ont.:—"The watch which you sent me for getting subscribers for the ADVOCATE has given entire satisfaction, being an excellent time-keeper. I will try to get you some more subscribers."

ERNEST WELCH, Burgessville, Ont.:—"I received the ring all right, and presented it to my sister, who says the more she wears it the better she likes it."

JACOB STOLTS, New Dundee, Ont.:—"I received the premium watch, and it has given entire satisfaction in every way. I will always endeavor to further the interests of your paper by sending a few names now and then."

D. KYTE, Richwood, Ont.:—"I have been a reader of the FARMER'S ADVOCATE, London, for a good number of years, and heartily recommend it to the farming community as an able journal—fearless and open in its advocacy of all questions. I have received many valuable suggestions on many important questions, and wish it increasing success. I hope my friends will give it hearty support."

S. HARRIS, Verschoyle, Ont.:—"I have been a subscriber to the FARMER'S ADVOCATE for the past five years, and have found it the best agricultural journal that I can read. Since it comes twice a month it is far more valuable than ever before."

GEN. ALLAN, North Nation Mills, Ont.:—"Please accept thanks for your premium, 'Canada's Columbian Victors,' which I have received. It is a very handsome premium, and more than I could reasonably expect."

R. P. MCGINNIS, Iberville, P. Q.:—"Canada's Columbian Victors' came to hand. I have to thank you for same, as well as for another copy of 'Canada's Pride.' The Ayrshires are splendid."

WM. STEWART, JR., Menie, Ont.:—"I find the ADVOCATE a first-class advertising medium, and a welcome friend at the Seymore Stock Farm, old and young looking for its arrival."

JOHN MCKERLIK & SON, Fergus:—"We consider the ADVOCATE the best agricultural journal in America."

Mission City Fair.

BY T. WADDLE

The first annual exhibition of the Mission City (B. C.) Fair Association was held on October 4th, in the new Cannery building, which is one of the largest and most substantial frame buildings erected in the Province, being 300 feet long by 100 wide, and two stories high, it being admirably adapted for the purpose, as the entire exhibit was made under one roof. In the north end of this building were exhibited the fruits, vegetables, roots, domestic manufactures, etc., while in the section next to the river were shown a fine display of live stock. The President of the Association, Mr. J. R. Wren, an able and energetic officer, occupied the chair of honor at the head of the banquet table, having as his guests the judges and a number of visitors from a distance, among those from Vancouver being J. W. Horn, ex-M. P. P.; J. C. McLagan, A. H. B. MacGowan, F. S. Timberlake, L. W. Paisley, R. Hickinbotham, V. S., and Harry Arkell. The inner man having been refreshed, and

before the work of judging had been entered upon, President Wren delivered an opening address, which was followed by remarks from some of the other gentlemen present.

The live stock, though limited, was considered very good; the principal exhibitors in this department were G. Gibbard, Geo. Wharton, J. T. Wilband, J. R. Wren, Geo. Monroe and A. York, who exhibited imported pedigree stock or grades raised at home from such, some of them being very fine. These gentlemen were all prize takers.

On the tables along the east, north and west sides of the building, were displayed the fruits, roots and vegetables, as well as the product of the dairy and domestic manufactures. In these classes the exhibits were really excellent, and were in every respect equal to the best seen this year anywhere. A portion of this exhibit, shown as a "collection," consisting of potatoes, peas, beans, cabbage, etc., was raised since the flood in the Fraser Valley, some of which were really prodigious in size. Fruits were also exhibited which had been raised in Mission City, the products of trees not yet four years old, and of excellent flavor. The displays made by Messrs. Wren, Gibbard, Murray, York, McRae, Henry, and others in this class, were extremely creditable, and we wish particularly to call attention to the exhibit of preserved fruits, which were simply put up in pure water; the flavor and a perfectly natural color had been retained, no acid or saccharine matter being used.

Take it all in all, the first show of the Mission City Agricultural Fair was a perfect success. To the President, J. R. Wren, and his able and zealous Secretary, H. B. French, aided by F. C. Potts, and an energetic board of directors, are due the credit for the success of the enterprise, and they have a perfect right to be proud of their labors. In Novem-

ber the Association will hold an agricultural dinner, at which will be discussed the best interests, farms in general, and fruit growing.

The Horse Bean in Manitoba.

Editor FARMER'S ADVOCATE, Winnipeg:

DEAR SIR, - I have pleasure in replying to your enquiry re the common Scotch or horse bean. It is true that I sowed half an acre of these along side of some English tares (both imported by me) in the spring of 1889, which, you may recollect, was our year of drouth. The tares never appeared, but a half crop of beans made fair growth, commencing to flower at about a foot high. They never got further, however, as at same time there appeared a small black beetle which, in numbers, literally covered each plant and made quick havoc with leaves and blossom, even the stalk showing deep traces of this destructive pest.

The following season I imported eight cents' worth, at a cost of two shillings for postage, and this small parcel of beans I dibbled in, in an experimental garden plot. Eighteen hundred and ninety was a moist spring and the plants started well, coming though one of our light May frosts unharmed. Again, at the period of flowering, my old enemy appeared, but this time I met him with air-slacked lime, when a few heavy dustings with this sent his beetle ship elsewhere and enabled me to harvest a couple of pounds of very nice beans. The following season I had a similar experience, but the patch fell to the lot of Jack Frost sometime in September, who claimed them for his own.

From my somewhat limited experience of horse bean growing in Manitoba, I arrived at the conclusion that, experimentally, and in small and carefully tended patches, this bean can be successfully raised, but, in face of the raids of the beetle pest, the price of lime, and the high winds which sweep the prairie throughout the season, not to mention early autumn frosts, I very much doubt if a field crop of this most valuable legume could be raised with any certainty, much less to pay, in this part of the world. This, however, is not a matter of wonder, as even in Scotland the bean is by no means a reliable crop, and frequently proves a failure there.

I do not know if the common Scotch or horse bean is the variety referred to by your correspondent, W. D. J., Middlesex, in your issue of 20th of September, as he speaks of "English horse beans." Perhaps he has been trying a variety called the "tick bean," which is shorter in the straw, more prolific than the Scotch, and is more largely grown in England than the northern variety. If so, W. D. J. might better his "luck" and reap a more fortunate experience with the Scotch variety, unless, as he indicates, he is totally averse to further "experimental" work. Yours faithfully,

C. H. MACWATT, Glenlea, Man.

Sod for Peas.

Many and important are the advantages of fall plowing land for spring crops, but there are exceptions. In sections where peas are extensively grown, sod is the preferred land on which to grow them. The advantages of fall plowing do not appear in such a case. Spring plowed sod almost invariably gives better crops of peas than from any other method of cultivation. It also leaves the ground cleaner, and in better condition upon which to sow fall wheat than any other method, except summer-fallowing. The time lost by leaving the sod land till spring will not be serious, as there is nothing better on which to start the teams than a nice piece of sod, which may be commenced before "black land" is ready to be worked.

DAIRY.

The London Dairy Show.

The nineteenth annual Dairy Show of the British Dairy Farmers' Association was opened in the Royal Agricultural Hall, London, England, on Oct. 9, lasting till the 12th inst. It was well up among the largest exhibitions of its kind ever held. The cows competing in the milking trials and butter tests were more numerous than before. The entries of butter showed a large increase, as did also those of cheese and the table poultry. The following statement is given of entries in the competitive classes, compared with the previous three years:—

ENTRIES.	1891.	1892.	1893.	1894.
Cattle	81	215	129	112
Milking and butter tests	—	62	86	87
Goats	61	49	25	68
Poultry	2,152	2,125	2,169	2,488
Pigeons	2,300	2,353	2,236	2,211
British cheese	227	200	218	272
Bacon and hams	40	80	47	47
Butter	286	337	317	468
Cream	54	55	56	64
Egg packages	—	—	19	26
Skim milk bread	57	45	59	57
Honey	125	73	76	81
Buttermaking contests	42	74	259	293
New inventions	19	26	21	29
Vehicles for conveying milk	28	25	19	26
Boots	11	28	2	21
Total	5,486	5,657	5,732	6,363

There were sections for cattle judged by appearance and sections judged by actual milking trials. The latter is yearly growing, while the former is falling off, which fact indicates that the up-to-date dairy show test must be one of practical utility.

As matters stand, competition was so small in sections judged from appearance that outside the Channel Islands section there is no longer any reasonable basis for prize-money distribution other than for performance at the pail.

The Shorthorn cows were nine in number, and as they all entered for the butter tests, they may be taken as good representative performers. Their milk yields ran from 38 lbs. 2 ozs. to 62 lbs. 2 ozs. daily, with an average of 55 lbs. 4 ozs., and of butter, from 1 lb. 1 oz. to 2 lbs 10 ozs., averaging 1 lb. 15 ozs. The first prize of a silver medal and £5 was awarded to C. Birdsley's Florence, who gave in one day 2 lbs. 10 ozs. butter from 54 lbs. 6 ozs. of milk. The second prize of a bronze medal and £2 was won by Sweet Briar, same owner, giving 2 lbs. 6 ozs. butter, from 45 lbs. 2 ozs. milk. The general quality of Shorthorn butter was poor, soft and pale, with two or three good samples.

The Jerseys were more numerous than any others, and most of the entries were of a very high order of merit as regards their dairy points, as may be gathered from the fact that 20 of the 26 entries forming the cow class were also entered in the butter test, a most unusual occurrence, and a very great proportion of those were of a very good, serviceable type of the breed. The 20 tested cows gave of milk in one day from 18 lbs. 8 ozs. to 41 lbs. 13 ozs., averaging 29 lbs. 7 ozs., and of butter from 5 1/2 ozs. to 2 lbs. 2 1/2 ozs., averaging 1 lb. 8 ozs. daily. The general color and quality was rich and good, with a few pale and poor samples. The first prize of gold medal and £3 was awarded to Mrs. E. R. Blackwell's Flandrine II., whose yield was 2 lbs. 2 1/2 ozs. butter from 35 lbs. 13 ozs. milk in one day. The second prize of silver medal and £3 was awarded to Miss Standish's Beauty, giving 1 lb. 11 ozs. butter from 41 lbs. 10 ozs. milk in one day.

The Guernsey exhibit was very meagre, comprising two cows, two bulls and 10 heifers. The two cows gave good accounts of themselves in the tests.

In other breeds there were four Red Poles, two Ayrshires and two crossbreds.

The goat exhibit compared favorably with the cattle in point of numbers, there being 68, against 25 last year.

CHEESE.

The cheese exhibit was a credit to British dairy farmers. The old Cheshire variety seems to be giving way to the more modern Cheddar and to the insinuating Stilton. Cheddar is the king of cheese, not in ubiquity only, but in character and in gigantic dimensions. Says the English Live Stock Journal:—

"The great Cheddar (Canadian), which was one of the wonders of the World's Fair at Chicago last year, was made from one week's milk of more than 22,000 cows, and weighed ten tons. This cheese ultimately found its way, as most great things seem to do, to this country, and in the hands of Mr. Jubal Webb, of Kensington, its fame has been greatly extended. The great wrought-iron vat and the massive lorry by whose means it was moved about, were in the Dairy Show, to be seen of everybody, and also a considerable remnant of the great cheese itself, being placed on exhibition by Mr. Jubal Webb. It is now more than two years since the cheese was made, and it has kept good in an extraordinary manner, considering that it passed through those months of tropical heat in the Chicago Fair, and ran the gauntlet of Arctic cold in a Canadian winter. The cheese is sharp to the tongue, but it is sound and of good quality, while in its youth the flavor must have been of a high order of merit."

The Cheddar classes were the great feature of the show, each entry consisting of 20 cheeses, and these, with half a hundred entries, aggregated nearly 40 tons.

The Stiltons were represented by only five entries. Cheshires had less than a dozen entries, but most of them were of very high merit. Double Gloucester, Wilts and Derby were represented by small exhibits. Forty entries of cream cheese made an important class. British soft cheese without extra cream made a small showing. The soft cheese industry in England does not seem to be making much headway; and, indeed, before it can do so, the taste of the British people in cheese must undergo some considerable modification. The moral for Canada is still obvious.

BUTTER.

The butter display was well worthy of commendation, due largely, no doubt, to the efforts of the British Dairy Farmers' Association. There was this year a marked increase in exhibits of an average high quality. If the current energy in dairy circles continues, it will not be long till poor butter is not made in England. In the class for butter made in the ordinary way and under ordinary popular conditions, there were 75 entries, all of which were excellent. For fresh butter made from sour cream, the entries also numbered 75, which, too, were of excellent quality. In the class for slightly salted butter there were 93 entries, which proves that English tastes are calling for the delicately flavored butter. In similar butter from sour cream there were 150 entries. For similar butter again, but from scalded cream, the entries fell to 30, which shows that scalding cream is not a very prevalent custom. There were two classes for fancy or ornamental designs in butter, in which were several superb exhibits beautifully executed, and artificially colored, to represent, for instance, different colored dahlias, a practice which we Canadians are not likely to follow.

There was a good show of bacon and hams. Skim-milk bread, too, had a place among the exhibits, and attracted a good deal of attention. Egg packages, honey, roots, dairy implements, vehicles, utensils, etc. were well shown and numerous. Buttermaking competitions formed an extensive feature of the show, and throughout the week a constant succession of trials took place, the entries being numerous and the proceedings watched by large crowds of spectators.

POULTRY.

The table poultry section, as far as practical purposes are concerned, was quite an outstanding feature. It was, in fact, a great increase upon anything that has previously been displayed in England, which is due largely to liberal prizes and low entry fees. The various kinds of Dorkings, Games, Langshans, Plymouth Rocks, Malays and Wyandottes, were the principal pure-bred varieties competing. The sections for cross-breeds were also well filled. Ducks and geese were well shown on the tables. The live poultry exhibit was large, and with very few exceptions, choice.

A New Dairy School.

Eastern Ontario is to have the benefit of a dairy school, to be opened at Kingston on Thursday, Dec. 13th, at 9 o'clock a. m. It is a department of the School of Agriculture and Mining, which has received from the Government of Ontario an annual grant of \$1,000 a year for two years, and \$1,500 last year, for the equipment of a new dairy building, now being completed. The School is under an incorporated Board of Governors, who have raised a considerable sum in subscriptions for its support. The City of Kingston has also given them property valued at \$20,000.

The school will be under the direction of Prof. Jas. W. Robertson, Dairy Commissioner, and the Dominion Government are providing the resident superintendent and instructor, Mr. J. A. Ruddick, who has become well and favorably known as a writer on dairy topics to the readers of the FARMER'S ADVOCATE, being chosen for that important position. Mr. Ruddick's experimental work in connection with the Perth Dairy Station, his management of the Woodstock Winter Creamery, and of the Manitoba Travelling Dairy last summer, his success in the manufacture of Canada's big cheese, which created such a sensation at the World's Fair, and his gifts as a clear, plain, practical and fair-minded speaker, are among the points that might be mentioned as indicating his worthiness for the duty now devolving upon him. He is, moreover, an Oxford County boy, and a graduate from the ranks of everyday working dairymen. He will have the assistance of other competent teachers. The governors will expect farmers to deliver to the school daily 4,000 lbs. of milk, for which would be paid \$1.25 per hundred weight. The skimmed milk will be sold back at 15 cents per hundred weight. The sale of the products will be ample to pay the expenses of the school. A certain standard to govern the quality of the milk will be fixed, and a higher price will be paid for a better quality.

There will be a series of eight regular courses, specially for cheesemakers and buttermakers, who have had the experience of working for one season at one of these branches. Each course will include practical instruction for two weeks, in either cheesemaking and the testing of milk or buttermaking and the testing of milk. Any student may take both courses. In addition to the practical demonstrations and illustrations in the school, a course of lectures will be given on the following subjects:—Dairy Farming, Utilization of By-products of the Dairy, Cheesemaking, Buttermaking, Milk Testing, and the Chemistry and Botany of the Farm. Each lecture will be followed by a discussion for one hour on the subject of the lecture or on the practical work of the day.

The First Course will begin Thursday, December 13th.

The Second Course will begin Thursday, December 27th.

The Third Course will begin Thursday, January 10th.

The Fourth Course will begin Thursday, January 24th.

The Fifth Course will begin Thursday, February 7th.

The Sixth Course will begin Thursday, February 21st.

The Seventh Course will begin Thursday, March 7th.

The Eighth Course will begin Thursday, March 21st.

For admission to the school, the applicant must be at least 16 years of age, and be a member of the Dairymen's Association of Eastern Ontario or of the Ontario Creameries Association. Anyone may become a member of one of these Associations by enclosing an annual fee of \$1.00 to the Bursar, Mr. Wm. Mason, School of Mining and Agriculture, Kingston, Ont.

It is to be hoped that the dairymen and would-be dairymen of Eastern Ontario will rally round this new seat of instruction, and that it will prove as beneficial to that section of the Province as does the Guelph Dairy School for the great dairy country lying further west.

Temperature in Milk Production.

To embark in winter dairying without making provision for the proper housing of the cows will prove an unprofitable piece of business. Some are making a mistake at this very point. Disappointment naturally follows. As a usual thing the blame is laid either at the door of the cow or winter dairying itself. The real responsibility is with the man. Possibly he may not have the best cow for the business, but the chances are that he has not so adjusted her conditions that she can render him profitable service in yielding a liberal supply of milk for buttermaking in the winter season. If the untempered blast and snow beat through the cracks of the old "lean to" against her, and a zero atmosphere chills her blood, the "chop stuff" that is poured into her manger, instead of re-appearing in the milk pail, will be used up in keeping herself warm. Nature is not to be cheated. Like the Arkansas jury that Hoard used to tell about, the cow will "find for herself" first, and if the man will persist in running his head against that inexorable fact so much the worse for the head. Though seemingly obvious, many are slow to realize how important the question of temperature in the stable really is.

In the Scottish Farmer, Mr. Alexander Pottie, M. R. C. V. S., contributed conclusive evidence on this point. A dairy farmer by degrees became unable to pay his rent, and the landlord was about to force him out. The cows, though getting plenty of food, were thin and giving very little milk. Mr. Pottie was called in to settle the dispute if possible, and undertook in one month to effect a marked improvement, the tenant acting under his instructions. What was the result? In the time specified the cows had begun to appear in fair condition, and were giving nearly double the quantity of milk. The stable prior to that had been extremely cold, and this condition of things was aggravated by the feeding of too watery food. Mr. Pottie gave very little extra feed, but took particular pains to bring the temperature of the byre up to 63 degrees, and keep it as near that as possible. In another instance a dairy farmer found that his cows were not milking as they should, though healthy and in fair condition. Mr. Pottie, on investigating, concluded that the temperature of the byre was too low. It was brought up to 63 and kept thereabouts for ten days instead of at about 52 degrees. What was the result? Instead of a loss of £2 per week, there was a net profit realized of £2 19s. 4d., and the following week £3 4s. The profits continued to vary from £2 18s. 2d. to £35s. 9d. thereafter from the herd weekly. The farmer had attempted by heavier feeding to correct his losses, but failed, and it was not till the air space of the stable was reduced (there being an open loft above the cows), and the place made comfortable, that the desired result was secured. This was done at practically no expenditure to speak of. No stove or other artificial heating was introduced, the air of the stable being warmed by the heat of the cows' bodies once the great loft was closed.

What is true in the Old Country is just as true in Canada; in fact more care must be taken here because of the severe frosty weather. Let no one, however, be alarmed that he must necessarily erect a costly bank barn. Not at all. For temporary purposes the old stable can be made warm by careful "battening" outside and the use of building paper carefully put on and made secure by strips of lath. See that there are no draughts from beneath the floors, as is usually the bane of stables hoisted up on posts. And having made the stable warm, see that it is well lighted, for a dark stable is usually a dirty one. Cows should have pure air to breathe also. Filth in the stable will find its way into the milk and butter.

Western Ontario Dairymen's Association.

The work of cheese factory visitation and milk inspection, so efficiently carried on by Mr. T. B. Millar, under the direction of the above Association, will be continued next season, commencing on April 1st, the Executive having recently re-engaged his services. During January, February and March, Mr. Millar will have charge of the milk testing department at the Ontario Agricultural College Dairy School, Guelph.

The Association also retains the services of Mr. J. W. Wheaton, as secretary. The wonderfully increased membership, the great success of the annual and local conventions, and general helpfulness of the Association to the dairy industry, speak volumes for his energy and executive ability.

At the annual convention to be held in Stratford on January 15, 16 and 17, the following are expected to give addresses: Hon. John Dryden, Minister of Agriculture; Hon. Thos. Ballantyne; Mr. John Gould, Ohio; Mr. C. H. Everett, president of the Wisconsin Dairymen's Association; Mr. F. M. Davis, Potsdam, N. Y.; Prof. Robertson, Dominion Dairy Commissioner; Prof. Fletcher, Experimental Farm, Ottawa; Prof. Dean, and Messrs. A. T. Bell and Wm. Rennie, Ontario Agricultural College, Guelph, and other practical dairymen.

When a dairyman has mastered the two points of cleanliness and temperature in the dairy, he is a long way on the road to success in producing dairy products of a uniformly high quality, and quality is what money is searching for.

FARMERS' INSTITUTES.

A Superintendent of Institutes Appointed for the Province of Ontario.

For some time past it has been clear to those who have given thought to the subject that the time has arrived when the work of arranging and providing for the successful carrying out of the annual series of Ontario Farmers' Institutes, and directing the system generally throughout the Province, should be in the hands of a superintendent, whose time and energies would be mainly given to the work. This course has been pursued with great success in several of the States to the South and West. The increasing interest manifested by the farmers of Ontario in availing themselves of this additional means of gaining information, and hearing experienced and successful men discuss questions with which they are familiar, has encouraged the Provincial Minister of Agriculture to extend the work, and to place it more directly in the hands of a capable and efficient officer. The present is an important juncture in Canadian farming. Never was knowledge more needed; but beyond this function the Institute has an inspiring and unifying value as an agency in bringing farmers into closer confidence and sympathy with each other.

The choice of the Minister of Agriculture has fallen upon Mr. F. W. Hodson for this important post. A general awakening in Institute work may be looked for. His success of recent years of developing organizations of breeders is especially a good guarantee for the future. We bespeak for him the hearty co-operation of local institute workers, and predict an era of extended and increasing usefulness in the Institute system under his supervision.

SKETCH OF THE NEW SUPERINTENDENT.

The announcement that Mr. F. W. Hodson, of the FARMER'S ADVOCATE, London, Ont., has been appointed to the above position will be received with favor by all who know the man, his antecedents, his fitness for the work and the whole-souled energy which he throws into any task he undertakes. For the information of those who do not know him so well, the following brief sketch of his life and career is presented:—

Mr. Hodson was born in 1836, in Whitley Township, Ontario. His early education was received at the Public school, the graded school in the village of Brooklin, and the Whitley Collegiate Institute, in all of which he distinguished himself by his energy, perseverance and ability. Of a practical turn of mind, he sought useful knowledge by reading the best books he could secure, and by close observation of his surroundings. In the spring of 1880, the late William Weld, Esq., of the FARMER'S ADVOCATE, whose custom was to visit successful farmers and stock raisers, to study their methods and to learn the secret of their progress, discovered in Mr. Hodson the promise of a valuable associate, and chose him as assistant editor. On receiving this appointment, he left the farm, and for two years resided in London, throwing all his energy into the work. In 1882, finding the confinement incident to editorial work injurious to his health, he resigned and resumed farming. In April, 1887, he returned to the ADVOCATE, where he has since remained, giving his best energies to the extension of its influence.

As an organizer, Mr. Hodson has done his best work. In 1889, aided by prominent breeders, he founded the Dominion Sheep Breeders' Association, and the next year the Dominion Swine Breeders' Association. He has since been joint secretary and executive head for these two bodies, which have done so much in forwarding the interests of the breeders, in the wider diffusion of information, and in promoting the spread of improved stock. Carefully conducted sheep and swine records of the best standard have been established for registering the pedigrees of pure-bred animals. Valuable reports of the proceedings of these Associations, containing papers by practical breeders and feeders of stock, have been freely circulated and published in the agricultural papers. Delegates from these associations have been accorded a place on the committees of the leading Fair Boards of the Dominion, to watch the interests of exhibitors and breeders. A list of competent judges have been nominated each year, from which Fair Boards have made their selections with good results. A very successful winter fair has been held in connection with the Provincial Fat Stock Show, and liberal prizes paid by the Breeders' Associations. This show has been instrumental in showing what splendid results can be attained by good breeding and liberal feeding combined. In 1891-2 he acted as associate judge of Ontario farms entered in competition for medals given by the Agricultural and Arts Association.

As a money making farmer, he succeeded under circumstances not the most favorable, but such as would have discouraged and daunted a less determined and less hopeful soul. His ancestors were prominent breeders of live stock, and at an early age his inclinations in that direction manifested themselves. He is best known as a breeder and importer of Cotswold sheep and as importer of Shropshires. Though attending school part of the time from 1873 to 1876, yet, by working evenings and mornings and holidays, and by directing and assisting others, he turned out several show flocks of a high standard of quality. In 1876, in connection with his father, he fitted a flock of Cotswolds, which were among Canada's most worthy exhibits at the Centennial Exposition. In 1877-8 and 9, he exhibited sheep at many of the leading American shows, capturing a majority of the prizes for which he competed, and selling animals at very remunerative prices. In 1881, through the late H. H. Spencer, he made his first importations of Shropshires, and in partnership with Mr. Spencer he imported a large number of Shropshires and southdowns in 1882. This also proved profitable. From this time until the spring of 1887, when he resumed his journalistic work, Mr. Hodson devoted his time to the breeding of Cotswold sheep and Berkshire swine, and to feeding cattle for the British market, and for the Christmas and Easter trade. If earnestness of purpose, faithfulness and perseverance, together with an intelligent understanding of the importance of the work, and of the needs of those it is intended to benefit, are qualifications for the position, I feel safe in saying that the Hon. Minister of Agriculture has made a wise selection, and has placed the "right man in the right place."

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Veterinary.

ECZEMA.

THOS. IREDALE, JR., Gartmore:—"I have a horse eight years old; came in two weeks ago with a chill, went off his feed, had a stoppage in his water for two days and a night. After I had got his kidneys to act freely, pimples came out all over the lower part of his body and neck—the pimples were about the size of a five cent piece—and broke and ran enough to form scabs, then dried up. His appetite has since then improved. Three days ago his sheath swelled up, and since then his belly has swollen up to the front legs; when pressed with the fingers, the impression remains for a short time. His eyelids also were so swollen that he could hardly see for twenty-four hours; they ran a little matter and then the swelling went away."

[Your horse's ailment is a form of eczema, and is probably due to faulty assimilation of the nutritive properties of the food, or to an inactive condition of the excretory glands of the skin, causing retention of effete material in the system. Feed the animal exclusively on bran mashes for twenty-four hours, and then give the following in the form of a ball:—Barbadoes aloes, six drachms; calomel, one drachm; ground ginger, two drachms; syrup or soap, a sufficient quantity. Continue the bran mash diet until the physic has ceased to operate. After this, give morning and evening in food, for one week: Hyposulphite of soda, three drachms; nitrate of potass. and gentian (pulverized), of each two drachms. If the skin remains sore, apply to it twice daily: Acetate of lead, one ounce; tinct. of opium, four ounces; add water to make one quart. W. A. DUNBAR, V. S., Winnipeg.]

UNTHRIFTY CONDITION OF MARE AND SPINAL AFFECTION.

H. DELF, Indian Ford, Man.:—" (1) Could you inform me what is the matter with my mare. She is eight years old, and in poor condition. When standing in the stable all night her legs stock up, her eyes are dull, skin loose, and she is troubled with a few pin-worms. I cannot get her fat. I feed her flax seed and boiled oats at night, and two gallons of oats every day, and lots of good hay. She works every day and has a good appetite. (2) I also have another horse ten years old, and in good condition. He works every day, but towards night gets played out; he seems to have no use in his hind part; when we back him up or turn him short he falls down. He sweats across the hind part, at night. He eats well, he gets three gallons of oats a day, and lots of good hay."

[(1) There are several causes that would be productive of the condition you have mentioned, but, from your description of the case, I am unable to decide as to which of them is operating. I would, however, advise you to treat as follows:—Feed on small rations of bran mash for twenty-four hours, and then give in bolus: Barbadoes aloes, five drachms; arca nut, three drachms; fluid extract of male-fern, four drachms; santolin, twenty-five grains. Forty-eight hours after giving the above, commence and give morning and evening in food, for ten days: Sulphate of iron, nitrate of potassium, and gentian, of each one drachm. (2) The horse is suffering from an affection of the spine, and being up in years, he probably will never recover. You may try the following treatment: Give morning and evening in food, for two weeks: nux vomica, pulv., bicarbonate of potassium, and gentian, of each one drachm. Rest is absolutely necessary. W. A. DUNBAR, V. S.]

BONE SPAVIN.

F. N., Wawanesa, Man.:—"I have a mare that about a year ago became very lame in nigh hind leg, and subsequently a swelling came on the inside of hock joint on that leg. It is now quite large, and the mare very lame. I have shown it to local vets., who pronounce it bone spavin, and, under their direction, I have fired it once and blistered it repeatedly, but without any apparent benefit. Can you recommend anything likely to prove effectual?"

[I would advise you to repeat the firing, and see that the application is properly performed. Superficial firing is of very little value in most cases of bone spavin, and to be of benefit it should be done deeply with the budding or pointed iron. The parts, after firing, should be kept open by the judicious application of blisters for at least five weeks. Absolute rest is essential. W. A. DUNBAR, V. S.]

Miscellaneous.

RAPE CULTURE AND SHEEP FEEDING.

WM. HUNTER, Underwood:—"1st. Will rape sown this fall stand the winter, and grow up for pasture next summer. I sowed a field on the 3rd of August, but it did not come up until September, on account of dry weather? 2nd. How is the best way to feed sheep to fatten them through the winter? 3rd. What is the best ration for winter feeding without turnips? 4th. Should sheep run out in a yard when fattening, or will they do as well in a roomy house?"

[1st. The rape plant is a biennial, producing seed the second year when allowed to make full growth the first year, but when so young as in the above-

mentioned field, we would not recommend depending upon its producing pasture next spring. Very much will depend upon the severity of the winter and exposure of the field.

2nd. It is very important that fattening sheep, like all other stock, have comfortable quarters. A roomy frame building set on the ground, having a tight roof and dry floor, is all that is necessary, provided it is not draughty. It should be cleaned out once weekly, and be comfortably bedded. It should be so ventilated as to keep the sheep without sweating. Sheep unequal in size and vigor should not occupy the same pen. A good ration consists in as much well-cured clover fed morning and evening as will be eaten up cleanly. A forkful of bright pea straw makes a nice noon-picking, as it gives variety, an important feature in a sheep's bill-of-fare. Either turnips, mangles or ensilage are important adjuncts, fed twice daily at the rate of one bushel for fifteen sheep. Turnips preferred, cut in strips. The grain part of the ration may consist in one-half oats, one-quarter oil cake, one-quarter wheat or peas, fed twice daily, half a pint each at first, increased to one pint as the finishing period approaches. Fresh water and salt should always be within easy reach of the sheep.

3rd. When ensilage or mangles cannot be obtained, the above ration answers well with an increase of oil cake to keep the bowels laxative.

4th. A well-ventilated, roomy house is all that is necessary for rapid fattening.]

SCALE OF POINTS FOR AYRSHIRE BULL.

T. C.:—"Please publish a scale of points required in a perfect Ayrshire bull, and oblige."

[The points desirable in the female are generally so in the male, but must, of course, be attended with that masculine character which is inseparable from a strong and vigorous constitution; even a certain degree of coarseness is admissible; but then it must be so exclusively of masculine description as never to be discovered in a female of his get. The following is a scale of points adopted by the American Ayrshire Breeders' Association:—

- (1) The head of the bull may be shorter than that of the cow, but the frontal bone should be broad, and muzzle good size, throat nearly free from hanging folds, eyes full. The horns should have an upward turn, with sufficient size at the base to indicate strength of constitution. 10
- (2) Neck of medium length, somewhat arched, and large in those muscles which indicate power and strength. 10
- (3) Fore-quarters—Shoulders close to the body, without any hollow space behind; chest broad, brisket deep and well developed, but not too large. 7
- (4) Back short and straight; spine sufficiently defined, but not in the same degree as in the cow; ribs well sprung, and body deep in the flanks. . . . 10
- (5) Hind-quarters—Long, broad and straight; hip bones well apart, pelvis long, broad and straight; tail set on a level with the back; thighs deep and broad. 10
- (6) Scrotum large, with well-developed teats in front. 10
- (7) Legs short in proportion to size, joints firm. Hind legs well apart, and not too close in walking. 5
- (8) Skin yellow, soft, elastic, and of medium thickness. 10
- (9) Color, red of any shade, brown or white, or a mixture of these, each color being distinctly defined. 3
- (10) Average live weight at maturity, about 1,500 10
- (11) General appearance indicating style and movement. 15
- (12) Escutcheon, large and fine development. . . . 3
- Perfection. 100

POULTRY.

Gleanings from Poultry Essays.

Some time ago a large number of contributions were received in connection with one of our prize essay competitions. Lack of space prevented the publication of any except the three placed first, but we give our readers the benefit of selections from some of the others.

Mr. W. E. Harding, of Amherst, Nova Scotia, mentions several things which will interfere with successful poultry raising on the farm:—

1st. A dog, if he is anything of a thief, and most dogs are. He will manage to get all the meat scraps and bones to pick, which are very essential to the well-being of the hens. He will often frighten them and thus keep them wild.

2nd. On a small farm pigs and poultry may pull against one another, and the dinner scraps are apt to find their way into the pig swill. The pigs also will get what skim milk the calves don't want. The chickens get little or no milk. Maybe a few chickens will get drowned in the swill barrel.

3rd. See that your cat is trained not to kill chickens.

4th. Never let a hen with young chickens go where she pleases to find a sleeping place, but let her go where you please to have her.

5th. There is no profit in a surplus of roosters.

For farmers where poultry is not a specialty, my experience has been that in our climate the best time to have chickens come out is about the first of June.

It leaves more hens to lay in March and

April, and gives you more eggs to market while they are a better price than they will be in May and June.

2nd. A larger per cent. of the eggs will hatch, and a hen will cover more to better advantage.

3rd. The weather is warmer and the chickens can run out-doors almost immediately and will not need so much care as if confined.

4th. If the hen is cooped, the chickens, being small, can have their freedom and will not damage the newly made gardens where early chickens, if running at large, would be quite destructive.

5th. The chickens, if well cared for until after the grain is cut, will be easily fattened while running through the fields.

6th. If you have Leghorns they can be made to lay in December, when eggs are scarce and high, almost as soon as early hatched chickens.

[NOTE.—In the ADVOCATE for Sept. 15th, under the heading, "Early Chick—Winter Egg," by Mrs. Tilson, to which our readers would do well again to refer in considering the points advanced by Mr. Harding.—Editor.]

Supply the hens with some dry earth under the window, for they like to have the sun shine on them while they take their dust bath. If you have more than twenty hens they will be better divided into two lots. During the short days they should be fed as soon as they are off the roosts.

In speaking of ducks, he says neither is it necessary for every farmer to winter ducks. He can buy a setting from his neighbor and put them under a hen and have a nice lot of ducks to market in the fall without much trouble, as they are easily raised after the first week or two. One thing you should not neglect to do, though, is to sprinkle the eggs with water once or twice a week.

B. H. Garner, Maxville, Ont., in writing of the advantages of poultry raising on the farm, has the following:—The poultry raising department on the farm should be tended in a more business-like way, for we must all admit that there is plenty of room for improvement. Poultry and their produce can be turned into cash quicker than any other farm stock, but to realize profitable sums we must raise large flocks and get them on the market at the right time.

In regard to marketing, he says:—Late in the fall most of the farmers crowd their summer flocks on the market, thus bring the price so low as not to cover the expense of production. This is where many farmers get "roped in."

Mrs. L. H. Hogarth, of Exeter, speaks of the luxury and convenience to the farmer's household of having on hand an abundant supply of both eggs and poultry of undoubted freshness at all seasons of the year as a consideration of great importance, and also an item of more than a little interest from the standpoint of economy, by reducing in a large degree the butcher's account. In regard to the house, there should be a covered annex into which the hens may run and be fed in fine weather during winter, as the more exercise the better. She believes the consensus of opinion to be in favor of Plymouth Rocks. Use pure-bred cocks upon your present flock and you will soon have your flock well bred enough for all practical purposes. Do not attempt to keep too many. Experience has proved that small flocks are more profitable accordingly than over-large ones. When hatching early chicks do not give the hen too many eggs to cover, else you may lose the whole setting, especially if each egg gets its turn at getting chilled. Sell off all the young cockerels from the early broods that are not wanted at home. About the first and on through July, before the markets are glutted, will be a good time for this, as a much higher price will be realized than if they were kept till everybody else is ready. During the winter I would say briefly: comply as nearly as possible with summer conditions. Mrs. Hogarth is the only essayist who emphasizes the keeping of an accurate account of all receipts and expenditures; and advises that a cheap poultry book should be kept in a convenient place with a pencil attached with a string, and a daily record of eggs gathered, sales made and other matters of interest made daily.

Henry Reeves, Highland Creek, gives as his opinion that among the various enterprises which come under the head of farming there is none that will give more profit for the money invested and the time spent than poultry raising, if properly managed. He considers that the chief essential to make poultry raising profitable is cleanliness, for with cleanliness the greatest enemy of poultry, viz., vermin, is successfully dealt with. In marketing every care should be taken in dressing the poultry, as a well-dressed pair of chickens will often bring ten or fifteen cents a pair more than those poorly dressed, and the same can be said of turkeys and geese. The attractive appearance of the fowls count for a great deal in selling poultry. He says: I would not advise any farmer to go into the breeding of the "fancy" for profit. I have tried it and found that "all is not gold that glitters." Neither is it well to have a lot of fowls commonly known as "dunghills." What is required is a good every-day kind of fowl, one that has no occasion to be ashamed of its looks, and can boast of some pure blood in its veins. Poultry requires new blood, the same as any other farm stock, and too close breeding is sure to cause degeneration. He is an admirer of the Wyandottes, for the reason that they lay good-sized eggs and a large number. They make early broilers of good size, besides looking attractive when dressed. The Plymouth Rock, he considers, run them very close as a general purpose fowl.

Mr. R. E. White, Perth, Ont., says it has now become quite evident that the farmers of Ontario have not fully availed themselves of the profits to be obtained from poultry raising. It seems that the great majority of farmers have just kept fowls because they furnish excellent food supplies for home consumption, and have not studied the subject from a business standpoint, and therefore are not accustomed to look upon it as a profitable branch of agriculture. He advises the use of tar paper as a lining for the poultry house, for the reason that it is very obnoxious to vermin. As spring advances, the best bred and the strongest should be picked out and placed by themselves in as roomy a place as possible, for the breeding stock requires plenty of exercise. A young cock should be mated with old hens, and a two-year-old cock with pullets. About a week after being mated, the eggs may be saved for setting, and if possible set two or three hens together. Feed, water and the dust bath should be within easy reach of the setting hen at all times. Chickens should be pushed from the start, in order to have the pullets laying when the old hens are moulting, and the cockerels ready for the early market. The poultry raiser who has his chickens hatched early and pushes them from the start has another advantage, for he can then watch the market and thus get them off his hands when choice poultry is scarce and high priced. Never allow your fowls to in-breed from year to year, or they will decrease in size and vigor, but purchase a pure-bred cock from time to time, and by breeding from him, the size, usefulness and appearance of your flock will be greatly improved. Keep only one breed unless you are prepared to give the necessary attention and have sufficient room for other breeds. Save all the droppings, as they are very valuable and will go a long way towards paying for the feed.

GARDEN AND ORCHARD.

Experimental Fruit Stations.

Owing to the variation of soil and climate in the different parts of the Province of Ontario, it has been thought well to establish experimental fruit stations at different points in order to ascertain so far as possible the varieties of fruit most suitable for all parts of the Province.

The magnificent display of Ontario fruits at the World's Fair gave to the world a truer idea of our capabilities along the lines of fruit production than was ever known before. It also gave to us a knowledge that we have a possible important revenue from a source which has hitherto been neglected, and which, if cultivated and fostered, will prove a salvation to our standing among the prosperous fruit countries of the world.

The Fruit Growers' Association of the Province have had the importance and need of such stations in view for several years. Three years ago a standing committee was appointed, whose duty it was to push the experiment station scheme to a successful completion. By their enterprising management, together with the Columbian results, the Provincial Government has been so impressed with the importance of instituting such stations that at the present time four stations have been located and put in operation—one at Leamington, devoted to peaches and strawberries, under the control of W. W. Hillborn; one at Winona, devoted to grapes, under the control of Mr. M. Pettit; one at Craighurst, devoted to apples, under the control of Mr. G. C. Caston, and one at Trenton, devoted to apples and pears, under the control of Mr. W. H. Dempsey. These stations are under the control of the Fruit Growers' Association of Ontario, and of the Ontario Agricultural College. The Board of Control is made up of Jas. Mills, M. A., Guelph, President; Prof. H. T. Hutt, B. S. A., Guelph, Official Visitor for the Dept. of Agriculture; T. Wolverton, M. A., Grimsby, Secretary; A. M. Smith, St. Catharines, and A. H. Pettit, Grimsby.

Mr. Wolverton, together with Prof. Hutt, who have the executive part of this matter in hand, have not only made a careful visit to each of these stations to see that the work is going on properly, but they have also visited several points where it has been thought that stations ought to be established. One of these localities is the Beaver Valley, situated in Grey County, leading from Georgian Bay southward, where fruit of nearly every kind grows to perfection almost as well as in the famous Niagara peninsula. It has proved itself peculiarly adapted to plum culture. The farm of Mr. John Mitchell, of Clarksburg, seems to be very favorably adapted to the growth of plums, and Mr. Mitchell seems well fitted to carry on experimental work with that fruit. It is decided by these gentlemen to recommend to the Board of Control that the fifth station be established in this valley, and be devoted to experiments in the cultivation of plums.

It is the intention to establish five other stations in other parts of Ontario as soon as proper places for their location and suitable men for their conduct can be found.

Prepared forms are used by the experimenters, from which, when properly filled out, as a result of careful work and observation throughout the season, a pretty thorough knowledge is given of the comparative values and modes of treatment of the different fruits tested. These reports are to be sent in to the Board of Control by each experimenter before the 15th November, the results of which will be made public.



A DARK TRANSACTION.

BY MARIANNE KENT.

If I had described myself when I first started in life, it would simply have been as John Blount, commercial traveller. I was employed by a firm of merchants of very high standing, who only did business with large houses. My negotiations took me to all parts of the United Kingdom, and I enjoyed the life, which was full of change and activity. At least I enjoyed it in my early bachelor days, but while I was still quite young—not more than five-and-twenty—I fell in love and married; and then I found that my roving existence was certainly a drawback to domestic happiness. My wife, Mary, was a bright little creature, always ready to make the best of things, but even she would declare pathetically that she might as well have married a sailor as a landsman who was so seldom at home! Still, as I said, she was one to put a bright face on things, and she and my sister made their home together. It was in the second year after my marriage, when I had been away on my travels for some weeks, that I heard from my sister that a fever had broken out in the neighborhood of our home, and that Mary was down with it. Kitty wrote hopefully, saying it was a mild attack, and she trusted by the time I was home her patient would be quite convalescent. I had unbounded faith in Kitty, so that I accepted her cheerful view of things. But a few evenings later, after a long, tiring day, I returned to the hotel where I was then staying, and found a telegram awaiting me. My heart stood still as I saw the ominous yellow envelope, for I knew my sister would not have sent for me without urgent cause. The message was to say that, although Kitty still hoped for the best, a serious change had taken place, and I should return at once. "Don't delay an hour; come off immediately," she said. I was not likely to delay. I paid up my reckoning at the hotel, directed that my baggage should be sent on next day, and in less than half an hour from the time I had opened the telegram I rushed, heated and breathless, into the primitive little railway station—the only one which that part of the country boasted for miles around. I gained the platform in time to see the red light on the end of the departing train as it disappeared into the mouth of the tunnel a few hundred yards down the line. For a moment I was unable to realize my ill fortune. I stood gazing stupidly before me in a bewildered way. Then the station-master, who knew me by sight, came up, saying sympathetically:—"Just missed her, sir, by two seconds!" "Yes," I answered briefly, beginning to understand it all now, and exclaiming irritably at the enforced delay. "When is the next train?" "Six five in the morning, sir. Nothing more to-night." "Nothing more to-night!" I almost shouted. "There must be! At any rate, there is the evening express from the junction; I have been by it scores of times!" "Very likely, sir; but that's a through train; it don't touch here—never stops till it reaches the junction." The man's quiet tone carried conviction with it. I was silent for a moment, and then asked when the express left the junction. "Nine fifteen," was the answer. "How far is the junction from this by road; could I do it in time?" "Out of the question, sir. It would take one who knew the road the best part of three hours to drive." I looked away to my left, where the green hill-side rose up steep and clear against the evening sky. It was one of the most mountainous quarters of England, and the tunnel that pierced the hill was a triumph of engineering skill, even in these days when science sticks at nothing. Pointing to the brick archway, I said, musingly:—"And yet, once through the tunnel, how close at hand the junction station seems." "That's true enough, sir; the other side the tunnel it is not half a mile down the line." "What length is it?" "The tunnel, sir? Close upon three miles, and straight as a dart." There was another pause, then I said, slowly:—"Nothing more goes down the line until the express has passed?" "Nothing more, sir." "Anything on the up line?" was my next inquiry. "No, sir, not for some hours, except, maybe, some trucks of goods, but I have had no notice of them yet." As the station-master made this last answer he looked at me curiously, no doubt wondering what the object of all these questions could be; but he certainly had no notion of what was passing in my mind, or he would not have turned into his office as he did, and left me there alone upon the platform. I was young and impetuous, and my sudden wild determination had taken possession of me. In my intense anxiety to get back to my sick wife, the delay of so many hours seemed unendurable, and my whole desire was to catch the express at the junction; but how was that to be accomplished? One way alone presented itself to me, and that was through the tunnel. At another time I should have put the notion from me as a mad impossibility, but now I clung to it as a last resource, reasoning myself out of all my fears. Where was the danger, since nothing was to come up or down the line for hours? A good level road, too, of little more than three miles, and a full hour and a half to do it in. And what would the darkness matter? There was no fear of missing the way; nothing to be done but to walk briskly forward. Yes, it could be, and I was resolved that it should be done. I gave myself no more time for reflection. I walked to the end of the platform and stepped down upon the line, not very far from the mouth of the tunnel. As I entered the gloomy archway I wished devoutly that I had a lantern to bear me company, but it was out of the question for me to get anything of the kind at the station; and, in fact, it was, I was fearful each moment that my intention would be discovered, when I knew for a certainty that my project would be knocked on the head, and, for this reason, I was glad to leave daylight behind me and to know that I was unseen. I walked on, at a smart pace, for fully ten minutes, trying not to think, but feeling painfully conscious that my courage was ebbing fast. Then I paused for breath. Ugh! how foul the air-smell! I told myself that it was worse even than the impenetrable darkness, and that was bad enough. I recalled to mind how I had gone through tunnels—this very one among others—in a comfortable lighted carriage, and had drawn up the window, sharply and suddenly, to keep out the stale, poisonous air; and this was the atmosphere I was to breathe for the next hour! I shuddered at the prospect. But it was not long before I forced to acknowledge that it was the darkness quite as much as the stifling air which was affecting me. I had never been fond of the dark in my earliest days, and now it seemed as if the strange, wild fancies of my childhood were forcing themselves upon me, and I felt that, if only for an instant, I must have light of some sort; so, standing still, I took from my pocket a box of matches, and struck one, holding the little match carefully, cherishing it with my hand. I gazed about me. How horrible it all looked! Worse, if possible, in reality than in imagination. The outline of the damp, midwey wall was just visible in the feeble flickering light. On the brickwork close to me I could see a coarse kind of fungus growing, and there was the silver, slimy trace of

slugs in all directions; I could fancy, too, the hundred other creeping things that were about. As the match died out, a noise among the stones near the wall caused me hastily to strike another, just in time to see a large rat whisk into its hole. A miner, a plater-layer—in fact, anyone whose avocations took them underground—would have laughed to scorn these child-like fears; but the situation was new to me, and also I must confess that I am naturally of a nervous, imaginative turn of mind. Still, I was vexed with myself for my cowardly feelings, and started on my walk again, trying not to think of these gloomy surroundings, but drew a picture of my home, wondering how Mary was, if she was well enough to be told of my coming, and was looking out for me. Then I dwelt upon the satisfaction with which I should enter the express, at the junction, feeling that the troubles of the evening had not been in vain. After a while, when these thoughts were somewhat exhausted, and I felt my mind returning to the horrors of the present moment, I tried to look at it all from a different point of view, telling myself that it was an adventure which I should live to pride myself upon. Then I recalled to mind things I had read of subterranean passages, and naturally stories of the Catacombs presented themselves to me, and I thought how the early Christians had guided themselves through these dim corridors by means of a line or string; the fantastic notion came to me that I was in a like predicament, and the line I was to follow was the steel rail at my feet. For a while this thought gave me courage, making me realize how straight the way was, and that I had only to go on and on until the goal was reached. I walked for, perhaps, twenty minutes or half an hour, sometimes passing a small grating for ventilation; but they were so choked by weeds and rubbish that they gave little light and less air. Walking quickly through a dark place, one has the feeling that unseen objects are close at hand, and that at any moment you may come in sharp contact with them. It was this feeling, at least, which made me, as I went along, continually put out my hand as if to ward off a blow, and, suddenly, while my right foot still rested on the smooth steel rail, my left hand struck against the wall of the tunnel. As my fingers grated on the rough brick a new terror took possession of me—or at least, if not a new terror, one of the fears which had haunted me at the outset rushed upon me with redoubled force. I had faced the possibility of the station-master having been mistaken, and of a train passing through the tunnel while I was still there, but I told myself I had only to stand close to the wall, until the train had gone on its way. Now, however, I felt, with a sinking horror at my heart, that there was little room to spare. Again and again I tested it, standing with my foot well planted on the rail and my arm outstretched until my fingers touched the bricks. There was a fascination in it much as in the case of a timid swimmer who cannot bear to think he is out of depth and must keep putting down his foot to try for the bottom, knowing all the while he is only rendering himself more nervous. During the next ten minutes I know I worked myself into a perfect agony of mind, imagining the very worst that could happen. Suppose that the up and the down trains should cross in the tunnel, what chance should I then have? The mere thought was appalling! Retreat was impossible, for I must have come more than half way by this time, and turning back would only be going to meet the express. But surely in the thickness of the wall there must be here and there recesses? I was sure I had seen one, some little bare, when I had struck a light. There was a gleam of hope. Out came the matches once more, but my hands were so shaky that I had scarcely opened the box when it slipped from my fingers and its precious contents were scattered on the ground. This was a new trouble. I was down upon my knees at once, groping about to find them. It was a hopeless task in the dark, and, after wasting much time, I was forced to light the first one I found to look for the others, and, when that died out, I had only four in my hand, and had to leave the rest and go on my way, for the time was getting short and my great desire was to find a recess which should afford me shelter in case of need. But, although I grudgingly lit one match after another, and walked for some distance with my hands rubbing against the wall, I could find nothing of the kind. At length, I don't know what time it was, or how far I had walked, I saw before me, a long, long way off, a dim speck of light. At first I thought, with a sudden rush of gladness, that it was daylight, and that the end of the tunnel was in sight; then I remembered that it was now evening and the sun had long set, and I dashed, right in front of the goods train; the yellow light of the engine shone full upon me; death was at hand, and it was at that instant that the whole ground beneath me seemed to be shaken. The rail upon which one of my feet was resting thrilled as if with an electric shock, sending a strange vibration through me, while a sudden rush of wind swept down the tunnel, and I knew that the express was upon me. I shall never forget the feeling that took possession of me: it seemed as if, into that one moment, the experiences of years were crowded—recollections of my childhood—tender thoughts of my wife—dreams of the future, in which I had meant to do so much, all thronged in, thick and fast upon me. Could this be death? I gave a wild, despairing cry for help. I prayed aloud that God would not let me die. I had lost all presence of mind; no thought of standing back against the wall came to me. I rushed madly forward in a frenzy of despair. The sound of my voice, as it echoed through that dismal place, was drowned in an instant by the sharp, discordant scream of the express, as it dashed, right in front of the goods train; the yellow light of the engine shone full upon me; death was at hand. It seemed that nothing short of a miracle could save me, and, to my thinking, it was a miracle that happened. Only a few yards from the engine, and as I struggled blindly on, a strong hand seized me with a grasp of iron, and I was dragged on one side. Even in my bewilderment I knew that I was not against the wall, but in one of those very recesses I had searched for in vain. I sank upon the ground, only half conscious, yet I saw the indistinct blurr of light as the train swept by. I am not given to swooning, so that, after the first moment, I was quite alive to my exact situation. I knew that I was crouching on one side, and that that iron-like grasp was still on my collar. Presently the hand relaxed its hold and a gruff, but not unkindly voice said:—"Well, mate, how are you?" This inquiry unlocked my tongue, and I poured forth my gratitude. I hardly know what I said; I only know I was very much in earnest. I told him who I was and how I came to be there, and in return asked him his name. "That does not signify," was the answer; "you can think of me as a friend." "That I shall," I returned, gratefully; "for God knows you have been a friend in need to me!" "Ah," he said, musingly, "your life must be very sweet, for you seemed loath enough to part with it!" I admitted the truth of this—in deed, I had felt it more than once during the last hour. I had been one of those who, in fits of depression, are wont to say that life is not worth living; that we shall be well out of it, and the rest, yet, when it seemed really slipping from my grasp, I had clung to it with a tenacity which I prized myself. And now, with the future once more before me, in which so much seemed possible, I was filled with gratitude to God and to my unknown friend, by whose means I had been saved. There was a short silence; then I asked, rather doubtfully, if there were not some way in which I could prove my gratitude. "You speak as if you were sincere," my strange companion said, in his gruff, dry way; "so I will tell you frankly that you can do me a good turn if you have a mind to. I don't want your money, understand; but I want you to do me a favor." "What is it?" I asked, eagerly; "believe me, if it is in my power it shall be done!" "I would rather you passed your word before I explain more," he said coolly. "Say my request shall be granted. I take it you are not a man to break your promise."

Here was a predicament! Asked to pledge my word for I knew not what! To be in the dark in more sense than one; for I could not even see my mysterious deliverer's face, to judge what manner of a man he was. And yet how could I refuse his request? At last I said slowly:—"If what you ask is honest and above board, you have my word that it shall be done, no matter what it may cost me." He gave a short laugh. "You are cautious," he said, "but you are right. No, there is nothing dishonest in my request; it will wrong no one, though it may cause you some personal inconvenience." "That is enough," I said, hastily, ashamed of the half-hearted way in which I had given my promise. "The instant we are out of this place I will take steps to grant your request, whatever it may be." "But that won't do," he put in, quickly; "what I want must be done here and now!" I was bewildered, as well I might be, and remained silent while he went on:—"There is no need to say much about myself; but this you must know. I am in great trouble. I am accused of that which makes me amenable to the law. I am innocent, but I cannot prove my innocence, and my only chance of safety is in flight. That is the reason of my being here. I am hiding from my pursuers." The poor creature paused, with a deep drawn sigh, as if he at least had not found his life worth the struggle. I was greatly shocked by his story, and warmly expressed my sympathy; then, on his telling me he had been for two days and nights in the tunnel, with scarcely a bit of food, I remembered a package of sandwiches that had been provided for my journey, and offered them to him. It made me shudder to hear the ravenous manner in which they were consumed. When this was done there was another silence, broken by his saying, with evident hesitation, that the one hope he had was in disguising himself in some way, and thus eluding those who were watching for him. He concluded with:—"The favor I have to ask is that you will help me in this by allowing me to have your clothes in exchange for mine!" There was such an odd mixture of tragedy and comedy in the whole thing that for a moment I hardly knew how to answer him. The poor fellow must have taken my silence for anything but consent, for he said, bitterly:—"You object? I felt you would, and it is my only chance!" "Not in this case. I was last seen in a costume not common in these parts. A coarse, tweed shooting-dress, short coat, knee-breeches, and rough worsted stockings—so that an everyday suit is all I want." "After that there was nothing more to be said, and the change was effected without more ado. It seemed to me that my invisible companion had the advantage over me as far as seeing went, for whereas I was sensible of nothing but touch and sound, his hands invariably met and aided mine whenever they were at fault. He confessed to this, saying that he had been so long in the dark that his eyes were growing accustomed to it. I never felt anything like the coarseness of those stockings as I drew them on. The shoes, too, were of the clumsiest make; they were large for me, which perhaps accounted for their extreme heaviness. I was a bit of a dandy; always priding myself upon my spick and span get-up. No doubt this made me critical, but certainly the tweed of which the clothes were made was the roughest thing of its kind I had ever handled. I got into them, however, without any comment, only remarking, when my toilet was finished, that I could find no pockets." My companion gave another of those short laughs. "No," he said, "that suit was made for use, not comfort!" From his tone and manner of expressing himself, I had taken him to be a man fairly educated, and when he had declared that he did not require my money, I naturally fancied he was not in want of funds; but the style of his clothes made me think differently, and I decided that he should have my watch—the most valuable thing I had about me. It had no particular associations, and a few pounds would get me another. He seemed pleased, almost touched, by the proposal, and also by my suggesting that the money in my pockets should be divided between us. It was not a large sum, but half of it would take me to my journey's end, I knew. He seemed full of resource, for when I was wondering what to do with my loose change, in my pocketless costume, he spread out my handkerchief, and putting my money and the small things from my pockets into it, knotted it securely up and thrust it into my breast. Then, as we stood facing each other, he took my hand in farewell. I proposed our going on together, but this he would not hear of. "No," he said, with his grim laugh, "the sooner I and that suit of clothes part company, the better!" So we wished each other God-speed, and turned on our different ways—he going back through the tunnel, and I keeping on. The experience of the last few hours had made a great impression on me, and, although I felt awed and somewhat shaken, my heart was light with the gladness of one who rejoices in a reprieve. The express that I had been so anxious to catch had long since gone on its way; still, in my present hopeful frame of mind, that did not trouble me. I felt a conviction that Mary was mending, that I should find her better, and comforted by this belief, I walked briskly on; at least, as briskly as my clumsy shoes would allow me; but even in spite of this hindrance, it was not long before I reached the end of the tunnel. The moonlight streaming down upon the rails was a pleasant sight, and showed me, some time before I reached it, that my goal was at hand. When I left the last shadow behind me, and stood out under the clear sky, I drew a sigh of intense thankfulness, drinking in the sweet fresh air. I walked down the country road, thinking that I would rest for a few hours at the station hotel and be ready for the first train in the morning. But my adventures were not yet over. As I glanced at my clothes, thinking how unlike myself I looked and felt, something on the sleeve of my coat attracted my attention; it must be tar, which I for the former wearer of the clothes must have rubbed off in the tunnel. But, no, I looked again—my eyes seemed riveted to it—it was unmistakable. There, on the coarse grey material of the coat, was a large broad-arrow. In an instant the whole truth had flashed upon me. No need to examine those worsted stockings and heavy shoes. No need to take off the coat and find upon the collar the name of one of Her Majesty's prisons, and the poor convict's number. As my eyes rested on the broad arrow I understood it all. At first I was very indignant at the position I was in. I felt that a trick had been practised upon me, and I naturally resented it. I sat down by the road side and tried to think. The cool air blew in my face and refreshed me. I had no hat; the convict I was beginning to think of him by that name—had given me none, saying he had lost his cap in the tunnel. After a while, when my anger had somewhat subsided, I thought more pitifully of the man whose clothes I wore. Poor wretch, without doubt he had had a hard time of it; what wonder that he had seized upon the first opportunity of escape! He had said that the favor he required would entail personal inconvenience on myself, and that was exactly what it did. I looked at the matter from all sides; I saw the dilemma I was in. It would not do to be seen in this braided garb—the police would lay hands on me at once; nothing would persuade them that I was not the convict. Indeed, who was likely to believe the improbable story I had to tell? I felt that I could prove my identity, for I remembered now that my pocketbook and letters were in my coat; I had never given them a thought when making the exchange of clothes. So, as things were, it might take some days for me to establish my real personality,

and even when that was done I should still be held responsible for conniving at the prisoner's escape.

All things considered, therefore, I resolved not to get into the hands of the police. But this was no easy matter. There was nothing for it but to walk. I could not face the publicity of railway travelling or of any other conveyance; indeed, it was impossible for me to buy food for myself.

I had many narrow escapes from detection, but by dint of hiding through the day and walking at night, and now and then bribing a small child to buy me something to eat, I contrived to get slowly on my way. It was on the evening of the third day that I reached home. I often thought, somewhat bitterly, of my short cut through the tunnel and all the delay it had caused!

When I actually stood outside the little cottage which I called home, and looked up at the windows, the hope that had buoyed me up for so long deserted me, and I dreaded to enter. At last, however, I opened the gate and walked up the garden. There was a light in the small sitting-room; the curtains were not drawn, and I could see my sister, Kitty, seated at the table. She had evidently been weeping bitterly, and as she raised her face, there was an expression of such hopeless sorrow in her eyes that my heart seemed to stop beating as I looked at her. Mary must be very ill. Perhaps—but no, I could not finish the sentence even in thought. I turned hastily, lifted the latch and went in.

"Kitty!" I said, with my hand on the room door; "it's I, Jack! don't be frightened."

She gave a little scream, and, it seemed to me, shrank back from me, as if I had been a ghost; but the next instant she sprang into my arms with a glad cry of, "Jack, Jack! is it really you?"

"Yes, Kitty, who else should it be?" I said, reassuringly. "But tell me—how is she? How is Mary? Let me hear the truth."

Kitty looked up brightly: "Mary! oh, she is better, much better, and now that you are here, Jack, she will soon be well!" I drew a breath of intense relief. Then, touching my little sister's pale, tear-stained face, I asked what had so troubled her.

"Oh! Jack," she whispered, "it was you! I thought you were dead!" She handed me an evening paper, and pointed out a paragraph which stated that a fatal accident had occurred in the Blank Tunnel. A man named John Blout, a commercial traveller, had been killed; it was believed while attempting to walk through the tunnel to the next junction station. The body had been found, early the previous morning, by some platelayers at work on the line. The deceased was only identified by a letter found upon him.

And so, poor fellow, he had met his fate in the very death from which he had saved me! In the midst of my own happiness my heart grew very sorrowful as I thought of him, my unknown friend, whose face I had never seen!—[The Strand Magazine.]

Bishop of Oxford's Riddles.

The following physical puns, called the Bishop Wilberforce's Riddles, have furnished much entertainment:

I have a trunk—my body: has two lids—eyelids: and two caps—knee caps: two musical instruments—drums: two established measures—feet: a great number of articles carpenters can't do without—nails. I have always too good fish—soles: a great number of small shell fish—muscles: two lofty trees—palms. Some fine flowers—tulips: two playful domestic animals—calves: a great number of small wild animals—hairs: a fine stag—heart: a number of whips without handles—lashes. Some weapons of warfare—arms: a number of weather-cocks—veins: an entrance to an hotel—instep. At a political meeting on the verge of a division—eyes and nose: two students—pupils: a number of Spanish grandees—tendons: a big wooden box—a chest: two fine buildings—temples: product of camphor-trees—gums: a piece of English money—crown: an article used by artists—palette: one used in racing—skull. What is used in crossing a river—bridge (of nose): pair of blades without handles—shoulders: twelfth letter of alphabet finished with bows—elbows: instruments used in church music—organs.

John Ruskin's Advice to Girls.

See that no day passes in which you do not make yourself a somewhat better creature, and in order to do that, find out first what you are now. Do not think vaguely about it; take a pen and paper and write down as minute a description of yourself as you can, with the date to it. If you dare not do so, find out why you dare not, and get strength of heart enough to look yourself fairly in the face, in mind as well as body.

I do not doubt that the mind is less pleasant to look at than the face, and for that very reason it needs more looking at; so always have two mirrors on your toilet table, and see that with proper care you dress your body and mind before them daily.

Write down then frankly what you are, or, at least, what you think of yourself, not dwelling upon those inevitable faults which are of little consequence and which the action of a right life will shake or smooth away, but then you may determine to the best of your intelligence what you are good for, and can be made into.

Girls should be like daisies—nice and white, with an edge of red if you look close; making the ground bright wherever they are, knowing simply and quietly that they do it and are meant to do it, and that it would be wrong if they didn't do it.

Evil Speaking.

1. I will speak no unkind or harsh word of any one.
2. I will repeat no unkind remarks I hear of any one, and discourage others, as much as possible, from saying unkind things.
3. I will judge my neighbors leniently, remembering that my own faults are probably far greater.
4. I will never say one thing to others, and yet think quite differently: this is hypocrisy. "Deceive not with thy lips."
5. I will make no injurious remarks on the failings of others, remembering these words: "Consider thyself, lest thou also be tempted."
6. I will put the best construction on the motives and actions of all my neighbors.
7. I will act unselfishly, peaceably, and forgivingly, obeying my Master's command: "Love one another."

THE QUIET HOUR.

"Bear Thy Brother's Burden."

Is thy cruse of comfort wasting?
Rise and share it with another.
And through all the years of famine
It shall serve thee and thy brother:
Love Divine will fill thy storehouse,
Or thy handful still renew;
Scanty fare for one will often
Make a royal feast for two.
For the heart grows rich in giving:
All its wealth is living grain;
Seeds, which mildew in the garner,
Scattered, fill with gold the plain.
Is thy burden hard and heavy?
Do thy steps drag wearily?
Help to bear thy brother's burden;
God will bear both it and thee.

Corn.

"Thou preparest them corn, when Thou hast so provided for it."

The harvest time is the most delightful of all the seasons of the year. It is the time of fulfilled hopes and realized expectations, when the ruddy gleam of the ripened fruit succeeds the lavish wealth of blossoms, and he who went forth weeping, bearing precious seed, returns rejoicing, bringing his sheaves with him. . . . The earth looks like a table spread for the precious food which God's own hand has furnished. A hungry world, whose staff of life the corn forms, waits impatiently for the feast; and Nature, like a handmaid, seems to pause in her varied operations and to concentrate all her energies upon the one task of bringing it to perfection. Familiar as it is to us, we greet it season after season with the same fresh enthusiasm. . . . The meanest and homeliest scene is redeemed and hallowed by the presence of cornfields in it. It is holy ground; God has there made the place of His feet glorious. The old miracle of the multiplication of the loaves has been there performed anew, in a more gradual and less startling manner indeed, but not the less wonderful on that account. In the one case, the processes of germination and development were suspended, and in a single moment a mere morsel became a sufficiency for thousands; in the other case, the processes of nature were allowed to go on over weeks and months, until the single grains deposited in the earth became a waving harvest. The miracle of the loaves was a sudden putting forth of God's bountiful hand from behind the veil of His ordinary providence; the miracle of the harvest is the working of the same bountiful Hand, only unseen, giving power to the tiny grains to drink the dew and imbibe the sun's shine, and appropriate the nourishment of the soil during the long bright days of summer. I understand the one miracle in the light of the other. That marvellous scene in the wilderness of Capernaum comes to me as a revelation of a real but invisible world which is working silently day after day. It serves to open my eyes to wonders more vast and awful than its own outward phenomena. Paradoxical as it may seem, it teaches me to look with more reverence upon the ordinary ways of God's providence, and to receive with even more of deep thankfulness the bread that comes to me by what are called the common processes of Nature, than if it had been given to me directly by the hand of Jesus, with no toil or trust of my own.

No one can gaze upon the golden cornfields without being influenced by the pleasing associations with which they are connected. They strike their roots deep down into the soil of time; they are as old as the human race. The sun in heaven has ripened more than six thousand of them. Progress is the law of Nature, and everything else obeys it, but the harvest-field exhibits little or no change. It presents nearly the same picture in this Western clime, and in these modern days, as it did under the glowing skies of the East, in the time of the Patriarchs. We see the same old familiar scene now enacted under our eyes, in every walk we take, which Ruth saw when she gleaned after her kinsman's reapers in one of the quiet valleys of Bethlehem, or which our blessed Saviour so frequently gazed upon when wandering with His disciples around the shores of Gennesaret. The harvest-fields are the golden links that connect the ages and the zones, and associate together the most distant times and the remotest nations in one common bond of sympathy and dependence. They make of the earth one great home; of the human race, one great family; and of God, the universal Parent, to whom day after day we are encouraged to go with filial faith and love—not in selfishness and isolation, but in a fraternal spirit which embraces the whole world, asking not for ourselves only, but for all our brothers as well—"Our Father, which art in heaven, give us this day our daily bread." . . . God entered into a new covenant with the human family after the Flood, and consecrated the rainbow, the offspring of the storm which had destroyed the world, as the emblem and attestation of this covenant to all generations. It was a beautiful superstition which maintained that wherever the glittering feet of the rainbow rested, there a hidden treasure would be discovered. This fable contained more of reality than we are apt to suppose. . . . Where the magic hues lay, there the dull soil brightened into fruitfulness, and golden harvests, the only true riches in the world, spring up and reward him who seeks wealth, not in idle superstitious wanderings, but by steady, trustful industry in those spots where the feet of the bow of promise touch the earth.

(To be continued.)

WINNIE MAY'S DEPARTMENT.

PRIZE ESSAY.

Economy in Dress.

BY MISS WINIFRED HOLLAND, NORQUAY, MAN.

Economy—does the word need explanation? I fancy not. Most of us have a pretty good idea of its meaning—*management; system; frugality; to make the most of*; these are a few of the dictionary interpretations. My own definition is: to make one dollar accomplish what two would do comfortably.

Economy looks simple enough on paper, but when it has to be put into practice it is a different matter, and it is often only after bitter experiences that we learn to see the difference between economy and waste. The particular branch of economy that claims our attention just now is dress. How to dress economically? The first thing, and the most puzzling, is to find out what really is necessary, just how little we can do with, and the decision must of course depend on how and where we are placed in life. However, we all need something in the shape of: 1st, underclothing; 2nd, house-wear; 3rd, outdoor wear; and it is our aim to provide for each set as inexpensively as possible; at the same time we want everything of good quality, and moreover, we wish to present a goodly appearance. I think that ordinary mortals will find four pieces of everything in the first department ample for their needs. Let everything be of as good quality as possible.

Now for house-wear! I remember reading or hearing somewhere of a thrifty housewife who always made a point of keeping three dresses going, each named respectively, "Hightum," "Tightum" and "Scrub."—"Hightum" for "best," "Tightum," "second-best," and "Scrub" was "maid-of-all-work." Nowadays one can wear different blouses with one skirt, so "Hightum" and "Tightum" can share the same skirt. But "Scrub" must have a separate individuality, and must be composed of washing material, for it has (very often) to witness much scrubbing, stove-blackening, and so forth, and though these sights are unavoidable and necessary, they do not improve the complexion of a dress, and so, while one "scrub" is undergoing a cleansing process, it is advisable to provide another to wear in change. A generous apron will of course protect "Scrub" very much, and for the roughest and dirtiest work (of which there is quite a lot in a farm house) an apron made of coarse sack-cloth—in fact, an ordinary coarse sack cut open—will be found invaluable; it washes easily and stands a great deal of rough usage. When "Scrub's" duty is done for the day it is "Tightum's" turn, and let this be something neat and as dainty as possible. A plain skirt and pretty blouse are as economical, and at the same time as pretty, as anything, if both are well made. The blouse will almost always repay lining; it gives a far more stylish appearance and is more comfortable, and lasts longer than one without lining. And here let me advise all dress economists to make their dresses as nicely and neatly finished off as they can. If one is not good at fitting, she can get a professional dressmaker to cut her a pattern lining to measure for about 15c., and it should prove a saving of money, time and labor, for a garment that fits one, wears better and is in every way more satisfactory than one that is badly put together, and uncomfortable to the wearer. There are so many good materials to choose from that it is very puzzling to make a selection; but a good serge is always satisfactory and very serviceable. The frugal one takes care to purchase double-width stuff that is reversible, so that when she has worn off the freshness of one side, she takes the dress to pieces, turns it and makes it up again, if possible with a different trimming or vest, and it will look and feel almost like a new dress. For blouses there is an endless variety of pretty fabrics; but let the economist be wary—many of them look well enough at first, but after a few weeks wear are practically useless. It is much safer before purchasing any washing material to obtain a sample and test it in soap and water. Any one who has tried native Indian Fussore silk will never regret it; it is very comfortable and cool, "washes like a rag," and the natural shade is becoming to most faces—a pretty soft yellow. The Eton and Zouave styles of dress are most useful, and certainly economical, as nearly everyone has found, judging from their universal adoption; but one is apt to tire of such general favorites. I have been told by a pattern dress economist that whenever she has occasion to purchase anything new, she always make a point of choosing something that will harmonize or contrast well with what her wardrobe already contains, taking into consideration the coloring of dress and trimming, hat, gloves, etc.; consequently she always looks well dressed, and never resembles a lost piece of crazy patchwork, like some others I know do. Of course she always keeps to her pet color and harmonizing shades. And this last is an important point in the economical system. She gave another good hint by confiding to me that as soon as her dress shows a sign of wearing thin anywhere, she sets to work, takes it to pieces, and remodels it, and so makes it wear more evenly; besides, by this plan people don't get so tired of seeing the same old dress come out again and again. A little variety in dress is pleasing, and need not add to expenses. I shall take this opportunity to air a pet theory of mine. I have tried to impress some careless dressers to practice it. It is this: We

should all try to make our personal appearance as pleasing as we possibly can to our friends and the community at large, but especially to the home circle. So many think: "O, any old things will do for home wear." They cannot realize what a depressing effect their appearance may have on those with whom they live. It is false economy to neglect the personal appearance. Dress has a great influence on most people—on both those who wear it and their spectators. Therefore, let us strive to dress economically and tastefully.

MINNIE MAY offers a prize of \$5.00 for the best original New Year's story, to appear in the January 15th ADVOCATE. All MSS. to be in our office January 2nd.

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES:—

The bleak November winds leaden the skies, and cold rains have come again; and the prospect out-of-doors is so uninviting that we welcome the evening, when we may gather around the cheerful fire, where all recollections of dreariness vanish beneath its gladdening rays.

One harvest is entirely over—that which supplies our bodily needs—but now the harvest of mental nourishment has just nicely opened, or, perhaps, I should call this the seeding-time, the harvest will come in the future. Put in as large a crop as possible, boys and girls—the yield will come sooner or later, and unlike the product of the other harvest, the demand for this never fluctuates. But one point I wish you to look after, is this: be very careful in selecting your seed, for this is even more important than the preparation of the soil.

Let us take an example of a farmer, who prepares his land with great care, makes a perfect seed-bed, but buys his seed from some unscrupulous person, and when it is grown he finds his fine farm ruined with noxious weeds that it will take him a long time to get rid of. In like manner, let the mental soil be ever so pure, evil seeds dropped into it will hastily disfigure it, so that it is even more necessary to use great care in this case, for very often the bad seeds are very hard to detect.

Of course I do not expect the little ones to settle down to heavy, dry reading—very far from it, for that would rob them of their greatest charm, childishness. In their case their reading is generally chosen by parents or elders, and will, of course, be suitable for them. But for those who are naturally fond of reading, there comes a time (say when they are from fourteen to eighteen years of age) when they think themselves quite capable of making their own choice, and, unfortunately, that choice is too often detective stories, sensational novels, etc. Nor is there much difference between boys and girls in this respect. Another style of book, not quite as injurious, but far from beneficial, is that in which is upheld as a hero one whose strongest traits are dishonesty and ability to get out of the scrapes he has gotten into. Now, do take the advice of one who is deeply interested in all the young readers of the ADVOCATE, whether puzzlers or not, and if you must read books of this sort, let them form but a very small part of your reading, for they are literary trash—nay, even worse, evil weeds—Russian thistles, and, like them, practically ineradicable once they have taken root.

Let such books alone, then, and read instead the deeds of real heroes, and books in which the principal characters possess noble qualities, and unconsciously you will feel yourselves impelled to emulate their examples—ennobled, as it were, by the mere reading of their beautiful lives; and, believe me, they will interest you quite as much and leave pleasanter memories than those I first described. Natural history, in a simple form, is very attractive reading to most young people, and it possesses the merit of being instructive as well.

There is another point on which I wish to speak while yet the glowing firelight throws its ruddy tints on your bright faces gathered around it, but really this applies rather to your parents than to you. And here I wonder if many of them bother reading Uncle Tom's letter, when there is so much that is better? I know of some who do; so, thinking there may be others like them, I will venture a few remarks on the too-often-ignored subject of "Small Courtesies." Who has not met those who are so unaccustomed to courtesy, or even common civility at home, that they are positively awkward and ashamed to use it when they are abroad? And perhaps some of you have even felt a touch of this sad malady. Not that I blame you, boys and girls, for it is not really your fault, but that of those who had the care of you in childhood! When parents are polite and courteous to one another and to their children, the habit forms itself unconsciously, and when those children are among strangers, they will not find it difficult to act and speak as ladies and gentlemen should. But when children never hear "Please," or "Thank you," at home, except when strangers are there, it is little wonder they use the words shamefacedly and as if they were to be "handled with care," like their Sunday clothes. In regard to the careful training of children in this respect, I think the English take the lead; and

certainly the best mannered children I ever met were a little boy and girl from London, England, and it was a pleasure to be in their company.

A sailor once helped one of the Royal Family off a boat and said, "There, my little lady!" The child said haughtily, "I'm not a little lady, I'm a princess;" whereupon Queen Victoria rebuked her, saying, "Tell the good sailor that you are not a little lady yet, but that you hope to be one some day."

Perhaps I have become rather "preachy" in this letter, but you understand the feeling that has prompted me, and so will excuse—

UNCLE TOM.

Watford Fair, Sept. 25th and 26th, 1894.

PRIZE WON BY NORA B. DRADER, WATFORD.

The Watford Park or Fair Ground is a field of between fifteen and twenty acres, situated north-east of Watford, the palace where the fine arts are exhibited being west and facing the High School, while the ground is north of both the palace and school grounds. The exhibits required the greater part of the first day for preparation, so Tuesday was the best day to see the sports. The races were very interesting, although some of the riders were so cruel as to whip their poor horses with all their might, simply because they could not keep up with the other horses. Once in a while a horse would take a notion to cut across the corner of the course, and this seemed to give great amusement.

The base ball match between the Watford Club and the Ojibway Indian Base Ball Club, of Kettle Point, was very exciting, as both teams were composed of excellent players, but the Watford boys left the Indians in the shade by 36 to 31.

On Wednesday such crowds came from all the country round to see the sights as Watford seldom sees.

At 1 o'clock the pupils of the educational institutions of the town (High and Public schools) were formed, near Taylor's Hotel, into a line of march. Each pupil was furnished with a badge showing which school he represented. There were about two hundred pupils, besides the Indian Band, the Watford Silver Band, and the Highlanders, with their bag-pipes, helped to furnish music during the march from the hotel to the Fair Ground.

At 2 o'clock fourteen little girls of the Public School gave an entertainment in the shape of calisthenics on a platform on the ground. After this the Highlanders danced, and then the prettiest baby was chosen from a group of competitors by a committee of ladies. Next the lightest married woman, who weighed eighty-one pounds, was presented with an eight-dollar clock by T. B. Taylor.

The palace was truly honored by its exhibits. The artificial flower wreaths, some of wax, some of feathers and others of Berlin wool, were beautiful. Other fancy work was plentiful. An odd but pretty ornament was a whisk-holder. It seemed to be made on a foundation of a shawl-strap, the handle, with a row of clothes-pins fastened on and gilded, turned out to hold the whisk. Another idea was a footstool. It was made of a box about one by one and a-half feet, and half a foot deep. The top was padded and covered with red velvet. The sides were covered with common spools split in half and glued flat side to the box and then gilded. Four clothes-hooks, gilded, served as feet.

The prize map of Lambton and the prize perspective drawing were both worthy of praise, any those which did not succeed in getting a prize were certainly not to be despised.

The centre aisle was devoted to eatables and the fruit, pies and cake, and especially the home-made bread and golden butter looked delicious.

In the third aisle, quilts, blankets, mats, etc., were shown, some of which were beautiful. The farmers' wives and daughters were well represented in this line.

The poultry and live stock exhibits were very good, although there were not a great many horses. The cattle, swine and sheep were well represented.

The candy and lemonade stalls had great attraction for the children, and—some others. But the merry-go-round was the attraction, for it gave as much pleasure to the older people watching as the children, riding those wonderful horses, could possibly have.

Altogether, even if there were not the wonderful sights of the Toronto or Western Fairs to see, the Watford Fair was a great success, and by night the sightseers felt a very wholesome tiredness, and were glad to reach home, a good supper and a comfortable bed once more.

She Might be Right.

A priest the other day, who was examining a confirmation class in the south of Ireland, asked the question: "What is the sacrament of matrimony?" A little girl at the head of the class answered: "'Tis a state of torment into which souls enter to prepare them for another and better world." "Good," said the priest, "the answer for purgatory." "Put her down," says the curate, "Put her down to the foot of the class." "Leave her alone," said the priest, "for anything you or I know to the contrary, she may be perfectly right."

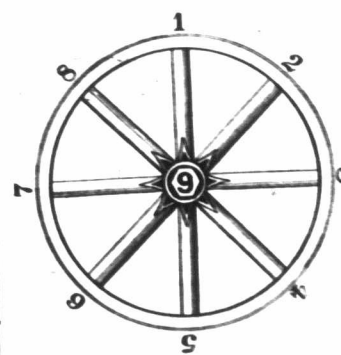
Did Not Know in Time.

An Irishman, finding his cash at a low ebb, resolved to adopt "the road" as a professional means of replenishing his exchequer; and having provided himself with a huge horse-pistol, proceeded forthwith to the conventional "lonely common," and lay in wait. The no less conventional "farmer returning from market with a bag of money" of course soon appeared, to whom enter Pat with the regulation highway-man offer of choice, "Your money or your life!" a remark fortified by the simultaneous exhibition of the firearm in the usual way. The farmer, who was a Quaker, essayed to temporize. "I would not have thee stain thy soul with sin, friend; and didst thou rob me of my gold, it would be theft; and didst thou kill me, it would be murder. But hold! A bargain is no sin, but a commerce between two honest men. I will give thee this bag of gold for the pistol which thou holdest at my ear." The unsuspecting amateur Macheath, yielding perhaps to the Quaker's logic and solicitude for his spiritual welfare, made the exchange, without a moment's hesitation. "Now, friend," cried the wily Ephraim, leveling the weapon, "Give me back my gold, or I'll blow thy brains out!" "Blaze away thin, darlint!" said Pat. "Sure, there's niver a dhrop of powther in it." The result was a sold Quaker.

Puzzles.

PRIZE PUZZLE.

1—WHEEL.



Rim—8 letters, name of well-known paper.
Hub—8 letters, to bring to peril.
Spokes—words 5 letters.
1 to 2—to humble.
2 to 3—to condescend.
3 to 4—good in law.
4 to 9—dramatic composition set to music.
5 to 9—part of a ship.
6 to 9—mingled with.
7 to 9—elegant.
8 to 9—to come in.

By IRENE M. CRAIG.

2—BEHEADINGS.

I simply mean "developing."
And if you then behead,
You'll find me then "impelling."
Or "transporting" instead.
Behead again and I will be
"Imputable" or "due."
Again, and the "side of a building
Or ship" comes to your view.

MORLEY SMITHSON.

Answers to Oct. 1st Puzzles.

1—Being somewhat of a naturalist myself, I shall endeavor to tell you about a tripp that we took last May, and how I became a champion and succeed in diverting a catastrophe alright, if you will have patience with me.

I was stopping with a nice French family at the time, and pleasant society they were, too, especially the three sisters, Charlotte, Florence and Isabel. One day Flo and I planned a lark, which promised to be a grand affair. I donned a black tuxed suit with a red rosette for a bouquet, a pair of gold eyeglasses, etc., while she put on a red jacket trimmed with white, a green cashmere dress and a pearl necklace with a silver cross in the middle.

We took a race horse apiece and had a ridout around the hayfield, then we went down a long, steep hill, past some pine woods and into a cedar swamp, after some evergreen boughs, when a thunder storm came up and we fell into the mud and mire; there being a den near by, where we could look out, we entered, and as we did not encounter any lions, bear, or buffalo, and had no desire to try our fortune in a new sport we concluded to wait for fairer weather, and here I'll say farewell.

2—
Master
Stream
Tamers
Remast
3
T A M E N A V E
A G E D A D E N
M E R E V E N D
E D E N A P E N D S
A W A Y
P A C E
C A N E Y E S U R E
A R E A U P O N
N E A R R O A D
E A R N E N D S

A Palpable Mistake.

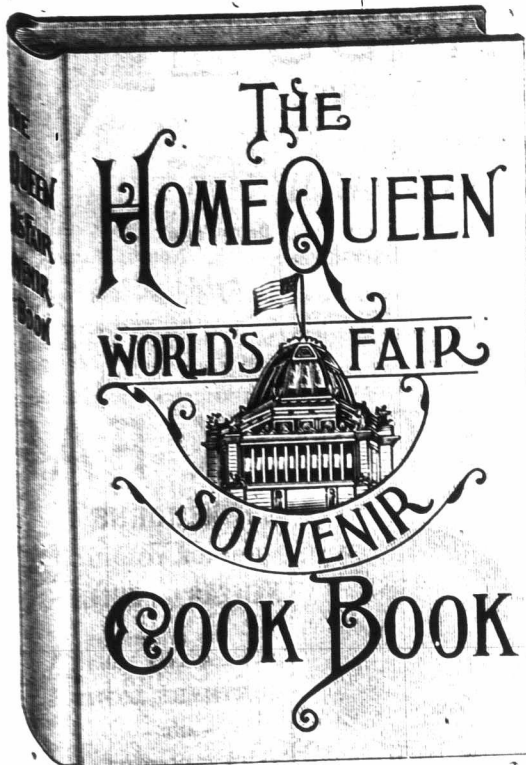
"Beloved brethren," remarked a country minister at the close of his sermon, "among the pennies and two-cent pieces of last Sabbath's collection I was surprised to find a gold coin of considerable value. As there were no strangers in the congregation, it was evidently put there by mistake. By applying to the treasurer and proving property, the owner can recover his money. Let us unite in prayer."

A lawyer recently went into the surf to bathe, and encountered a huge shark. Their eyes met for an instant, when the shark blushed and swam off.

A VALUABLE SUBSCRIPTION PREMIUM.

THE HOME QUEEN WORLD'S FAIR COOK BOOK

We would draw our readers attention to the very best cook book that the combined skill and industry of 200 of America's foremost women could devise. It contains 2,000 choice recipes, and almost every recipe is signed the autograph signature of about 100 ladies whose photographs are portrait appears. The book contains over 500 large square pages, handsomely printed and bound in white cloth. In it are included almost every conceivable dish for the table, besides useful hints upon various things, such as Setting the Table, Table Etiquette, Party Suppers, How to Carve, etc. etc. The price of this book is \$2.50. We will send it to any of our old subscribers who send us three New Subscribers to the Farmer's Advocate at \$1 each. This excellent cook book can only be obtained in Canada from us, as we have bought the sole right for the sale of it.



OUR PREMIUM PICTURES.

"CANADA'S PRIDE."

This picture is considered by critical judges to be one of the very finest wood engravings of Heavy Draught Horses ever gotten up in America.

PRICE 25 Cts. OR ONE NEW SUBSCRIBER.

"CANADA'S COLUMBIAN VICTORS,"

Is a very handsome engraving of Ayrshire Cattle. All of the animals were prize-winners at World's Fair, Chicago, in 1893.

PRICE 25 Cts. OR ONE NEW SUBSCRIBER.

THE INTERNATIONAL OFFICE AND FAMILY ATLAS OF THE WORLD

For Four New Subscribers. 1. This work contains maps of all foreign countries and divisions of the world. 2. Elegantly engraved maps of all the States and Territories. 3. Many miscellaneous maps and charts of an interesting character. 4. Voluminous reference tables of History, Finance, Politics, Agriculture, Commerce, Education, Manufacturing, and general information, and a book that will be constantly referred to in any intelligent household. Price, \$1.50. This fine Atlas will be sent postage paid to any one sending us in the names of four New paid subscribers. If any person wishes to purchase either of these books, we will sell the Cook Book for \$2.50, and the Atlas \$4.50.

TAMWORTHS AND POLAND-CHINAS

Young hogs fit for service. Sows bred to farrow in February and March. Pairs of weaning pigs of each breed not taken for sale. FRANK BOW, Avon, Ont. 21-a-om

FOR SALE

Seven Berkshire hogs, six to nine months old, registered and bred from first prize stock. Prices to suit the times. ROBERT VANCE, Ida P. O. Ont. 21-a-om

THE BRONZE MEDAL HERD OF IMPROVED CHESTER WHITE SWINE

Headed by Cleveland Imp. 329, and Washington, a three-prize winner at the Columbian Exposition, Chicago, 1893. Imported Horn sheep, imported and home-bred. R. H. HARDING, Thorndale, Ont. 20-y-om

BEAM - HOUSE - SHROPSHIRE

This is the Name of the Blue Bloods.

WM. THOMAS offers for sale Rams and Ewes from his famous flock, which has sent so many winners to our leading shows, and here also was bred Mr. A. O. Fox's noted ram "Blue Blood Yet," which so ably piloted Mr. Fox's flock of Shropshires at the World's Fair. Wm. Thomas will have several grand shearing rams for sale this next season, sired by his grand old sheep "Blue Blood," and also a grand lot of shearing rams by other noted sires; also about 150 splendid shearing ewes to select from. Foreign buyers always welcome. If not able to come and select for yourselves, write and obtain prices from WM. THOMAS, The Beam House, Montford Bridge, Salop. Railway Station: Baschurch, G. W. R. 22-y-om

IT PAYS TO ADVERTISE

FARMER'S ADVOCATE

HOME MAGAZINE.

Leading Agricultural Journal

of the Dominion.

The William Weld Company

LONDON ONTARIO

SHROPSHIRE. ARTHUR JOHNSTON, Greenwood, Ont.

Foreign buyers are invited to visit the Wolf's Head Flock, as there is always a good selection of ewes and rams for sale, and we handle none but the best, and can supply select specimens for breeding or exhibition purposes, and residing in the centre of the Shropshire Sheep Breeding District buyers are assisted in selecting from other flocks. Write for prices or visit us before going elsewhere. Visitors met by appointment at Baschurch Station, G. W. R. Address: J. & T. THONGER, Wolf's Head Farm, Nesscliff, Baschurch, Shropshire, Eng. Telegram: Thonger Nesscliff. 22-y-om

SHROPSHIRE'S

A choice lot of Shearing Rams and Ewes, and this season's lambs from imported dams, and sired by a Beny ram, to choose from. JAMES COOPER & SON, Kippen, Ont. 14-2-y-om

HORACE N. CROSSLEY, PROPRIETOR OF THE SANDY BAY STOCK FARM.

Importer and breeder of SHIRES, HACKNEYS, AND COLLIE DOGS.

The above stud, though only commenced in 1890, has achieved unparalleled success at all the leading Canadian shows, such as Montreal, Toronto and London. Shires and Hackneys always on hand for sale. For further particulars apply to the Proprietor, ROSSKAT, Muskoka. 10-5-y-om

FOR SALE

Two imported Shire mares, in foal, coming four years old. Superb quality and breeding. For particulars and price address WM. DAVIES, Toronto. 21-a-om

FOUR IMPORTED GLYDESDALE STALLIONS.

All four years off. Fresh horses of fine quality and the best breeding. Prices according to the times. NEIL SMITH, Brampton. 11-1-f-om

THOROUGHBRED BARRIED PLYMOUTH ROCK COCKEREL FOR SALE.

Apply to Mrs. G. H. GILBERT, Moultonville, Ont. 21-b-om

SHORTHORNS.

I have FOR SALE two Shorthorn heifers and two bull calves of fine breeding, fine colors, fine form and carriage, in fine condition, at one cent prices. Also one or two cows. D. ALEXANDER, BRIGDEN, Lambton Co., Ont. 23-y-om



GRAND YOUNG BULLS.

Offers for sale at very moderate prices, a number of exceedingly good young bulls fit for immediate service, and a number of excellent young cows and heifers, all fit to show at leading exhibitions. Send for Catalogue, Greenwood P. O. and Telegraph Office, Claremont Station on the C. P. R., or Pickering Station on the G. T. R. Parties met at either station on shortest notice. Come and see my cattle. 14-2-y-om

IF YOU WANT A WELL-BRED SHORTHORN BULL

for use on grade cows, or a heifer to start a herd with, or some Improved Yorkshire pigs from imported sow Lady Lindsay [12], write to C. G. DAVIS, Woodland's Terrace Farm, Freeman P. O. 13-y-om

SHORTHORNS, SHROPSHIRE'S AND BERKSHIRES

10 choice Shropshire yearling rams, 15 yearling ewes, 20 ram lambs, and 20 ewe lambs, all from the (imp.) Bradburne ram, for sale at prices to suit the times. Inspection invited. W. G. PETTIT, 13-y-om Freeman P. O., Burlington Stn., G. T. R.

CARGILL HERD OF SHORTHORNS.

Stock from imp. bulls and imp. and home-bred cows. Catalogue now in printer's hands. Sent for one. H. CARGILL & SON, CARGILL, Ont. 11-y-om

DEEP MILKING SHORTHORNS.

For sale, young cows and heifers. Fair Maid of Hullet, which produced 3,320 pounds milk and 150 pounds butter in the 90 days' test at Chicago, is a specimen of what this herd can do. WM. GRAINGER & SON, Lonsdale, Ont. 13-y-om

IMPORTED SHORTHORNS.

D. D. WILSON, Ingleside Farm, SEAFORTH, Ont. IMPORTER AND BREEDER OF SCOTCH SHORTHORNS.

Imported stock from the herds of Wm. Duthie and W. S. Marr for sale; also Canadian bred from imported bulls and out of imported dams. Farm one mile from G. T. R. station. 13-1-om

H. I. ELLIOTT, Scotch Shorthorns and Southdown Sheep.

RIVERVIEW FARM, Danville, P. Q. "Imp. King James," at head of herd 18219. 14-1-om

FOR SALE ...

A Young Shorthorn Bull, 12 months old, from prize-winning stock, also a few choice Young Berkshire Pigs. 17-1-y-om JOHN RACEY, JR., LENNOXVILLE, QUE.

ADVERTISE IN ADVOCATE

We now have FOR SALE Four Superior Shorthorn Bulls of different ages, sired by such noted bulls as imported Baron Lenton and imported Reporter and Cavalier, also some extra good Cows and Heifers. J. & A. SOMMERVILLE, ELDER'S MILLS, Ont. 31-y-om

SUNNYSIDE HOLLSTEIN-FRIESIANS

Choice animals, either sex, all ages, for sale at any time. Correspondence solicited. Address: McDUFFEE & BUTTERS, Stanstead, P. Q. 16-y-om

HOLSTEINS AND YORKSHIRES.

None but the best are kept at BROCKHOLME FARM, ANCASTER, ONT. R. S. STEVENSON, Proprietor. Write me for prices if you want first-class stock at moderate figures. Holsteins in the advanced registry. Yorkshires all recorded. 13-1-y-om

MAPLE HILL HOLSTEIN-FRIESIANS.

The fine yearling bull Netherland Consul, a son of the silver medal bull Netherland Statesman's Cornelius, and the great cow Polianthus imp., that gave 13160 lbs. milk in a year at two years old, now for sale. He should go to head a herd. G. OLEMONS, ST. GEORGE, ONT. 12-y-om

HOLSTEIN-FRIESIAN CATTLE AND TAMWORTH PIGS.

A Two-Year-old Prize-Winner For Sale. Netherland Argyle Ede, second prize at Toronto in 1891. Large, handsome good quality, rare breeding. Six, our incomparable Neth. Statesman at one-hog, and Princess Margaret, better record 20 lbs. 11 1/2 oz. in a week as a 4 year old. Other stock of all ages for sale. A choice lot of Tamworths on hand. A. C. HALLMAN & CO., New Dundee, Waterloo Co., Ont. Shipping Station: Petersburg, G. T. R. and Asp. C. P. R. 21-1-om

HOLSTEIN-FRIESIANS.

MAPLE GROVE STOCK FARM

H. BOLLEET, CASSEL, ONT. Several very choice young cows and heifers due to calve in Nov. and Dec., are now for sale at very reasonable prices. If you want the best, come and see them, or write for full description and prices. Maple Grove Holsteins lead in production. Every animal in the herd priced. Visitors always welcome. 13-1-y-om

LARGE IMP. YORKSHIRE PIGS


HOLSTEIN CATTLE.

We breed nothing but the best and sell cheap and guarantee satisfaction, or ask no pay. Come and see us, or write for prices and be convinced. FLETCHER BROS., Oxford Mills P. O., Ont., Kempsville Station, G. T. R. 5-1-y-om

\$312.00 and SILVER MEDAL

won by BROOK BANK HOLSTEINS, at TORONTO, 1891. Including 1st & 2nd in Milk Test, and prizes on females in every section, from Cow to Calf. We keep the best to be procured. All ages. For sale right sort and right prices. Correspondence cheerfully answered. Also a few choice young Poland China Boars for sale. A. A. G. BEE, CURRIE, P. O., Oxford Co., Ont. 19-1-y-om

W. C. EDWARDS AND COY
IMPORTERS AND BREEDERS.




PINE GROVE STOCK FARM,
Rockland, Ont.
SCOTCH SHORTHORNS.
The imported Cruickshank bull Grandeur is at the head of this herd of Imported and Home-bred Cows and Heifers of the most approved Scotch families.
ALEX. NORRIE, Manager.

ELMHUR ST STOCK AND DAIRY FARM
CLARENCE, ONT.
Shorthorns, Shropshires and Berkshires
Our stock is from the choicest English flocks, headed by the ram sent out by Mr. Thos. Dyke, also milking Shorthorns, with imported bull Pioneer at the head of the herd.
HENRY SMITH, Manager.

Laurentian Stock and Dairy Farm
NORTH NATION MILLS, P. Q.
Ayrshires, Jerseys and Berkshires.
Imported Emperor at the head of a grand lot of Imported and Canadian-bred Ayrshires; also St. Lambert Jerseys and Imported Berkshires.
7-1-y

THORNCLIFFE STOCK FARM!



I have on hand the best young **EVESDALE** Horses and Mares on this continent. Bred from the well-known sires, Prince of Wales, Darnley, Macgregor, Energy, Lord Montrose, The Ruler, Carrohan Stamp, Knight Errant and other celebrities.
My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere or Terms reasonable.
19-1-y-om

SHROPSHIRE.
Orders can now be booked for Shearing Rams, Ram Lambs and Ewes, sired by the celebrated prize-winning English ram, Bar None. Also Rams and Ewes of this year's importation.

SHORTHORNS!
CHOICE YOUNG **HEIFERS and BULLS**
by the celebrated Cruickshank bulls
NORTHERN LIGHT
—AND—
VICE CONSUL

ROBERT DAVIES, Proprietor. P. O., Toronto.

JERSEYS FOR SALE.
Three choice bulls of rare breeding, solid colors, bred for butter qualities. Sire, Canada's Hero, whose dam gave 19 lbs. 5 ozs. in 7 days, and granddam 16 lbs. in a week. "For description see Stock Gossip." Come and see, or write for prices to
W. C. SEARER,
19-1-y-om BRIGHT, ONT.

HIGH-BRED JERSEYS.
John Bull's Eclipse, dropped Aug. 12, 1889. A magnificent son of Canada's John Bull, dam Whip-Poor-Will—one of Fuller's best cows. A splendid animal to head Jersey herd, or for crossing purposes. See special stock reviews, "Canadian Live Stock Journal for October." Also promising grandson of the above, nine months old, dam Goldie's Mary Anne, having 37 per cent. of "100 Per Cent." blood through his sire and dam, with Welcome, Jersey Boy, Buffer, Albert, Dandelion, Mercury, Polonius, Stoke Pogis 3rd, Victor Hugo, etc., for foundation. Registered A. J. C. C. Reasonable prices. Tabulated pedigrees to purchaser.
J. D. STEWART,
21-om Russeldale, Ont.

Ste. Annes Herd Jerseys
Consignment from this herd to the Quebec and Ottawa Fairs was awarded two Gold and Silver Medals and Diploma on herd; Diploma for best bull, thirteen firsts, eleven seconds and four third prizes. Our crop of calves for 1894 has been a "bully" one, so we have decided to quote very low prices on them. Remember they are all pure St. Lamberts, and bred from the very best. Also a few yearling bulls, prize-winners. Apply to
WM. A. REBURN,
20-y-om Ste. Anne de Bellevue, P. Q.

JERSEYS FOR SALE
At the head of the herd is the grand young St. Lambert bull, Nabob, son of Nell's John Bull. Stock of both sexes and different ages, and of choice breeding, now on hand.
JONATHAN CARPENTER,
13-1-y-om WINONA, ONT.

FOR SALE. JERSEY BULL.
About six months old, solid silver gray (A. J. C. C.), 1st prize at Fair. Also 1 Heifer Calf, about 3 months old, solid light fawn (A. J. C. C.) and a beauty. Price, \$100.00 for the pair.
Write H. E. WILLIAMS, for particulars,
17-1-f-om Knowlton, P. Q.

FIRST PRIZE JERSEY HERD.
Two young bulls from first prize cows and first prize bull at Toronto. Several heifers to calve shortly, suitable for family cows.
3-1-y-om J. H. SMITH, Highfield, Ont.

JERSEY-CATTLE
Of the heaviest milking strains. One of the largest herds in Canada; bred closely to the great dairy cow at Chicago, also the famous two-year-old. Sires of both were sold from this herd. Also Welsh Blood Ponies for ladies' and children's driving. Stock for sale always on hand. GEO. SMITH & SON, Grimsby, Ontario.
3-y-om

LIVE STOCK AUCTION SALES
Conducted in all parts of the country. Pedigree stock a specialty. Write for terms. Refer to J. C. Sudd, Edmonton; Hon. M. H. Cochran, Compton, P. Q., or this office. JOHN SMITH, Brampton. 9-1-y-om

GUERNSEY BULLS.
We are offering for sale, at very reasonable figures, the yearling bull Isaleigh Choice, winner of first prize at Toronto, Belleville and Sherbrooke this year, and third at the World's Fair last year, also two excellent bull calves, one five and one seven months old. Buy the silver medal bull Adventurer, winner of twenty-nine prizes in England and Germany. Write for particulars.
IN YORKSHIRES.—We have some of the best young pigs we have ever had. Send in your order right away. Address
J. Y. ORMSBY, Manager Isaleigh Grange Farm, Danville, Que.
9-y-om

The Most Celebrated Stud of Clydesdales and Hackneys in Canada is owned by
GRAHAM BROS., CLAREMONT, ONT.,
The choicest animals that money and experience can buy, and well qualified to maintain the reputation of our stud for importing. More first prize and sweepstakes winners at the leading shows in Canada and the United States than all other establishments of its kind in the Dominion. The Clydesdales have immense size, large flat bone, with style, quality and choice breeding combined. The Hackneys have fine colors, style, quality, high knee action and choicest breeding. The home of the Champion Clydesdale Stallion, Queen's Own, and the Champion Hackney Stallion, Firefly. Parties wishing the best animals at reasonable prices are cordially invited to examine our stock. Catalogues free.
GRAHAM BROS., CLAREMONT, ONT.
25 miles east of Toronto, on C. P. R. 7-b-om

SPECIAL OFFERINGS AT REDUCED RATES
—TO THOSE WHO WISH TO—
'DOUBLE THE BUTTER YIELD OF THEIR HERDS.
6 Jersey bull calves, 2 to 4 months old, bred entirely for **GREAT BUTTER YIELD.**
Sired by bulls whose dams make
17 1-2 to 26 3-4 lbs. Butter a Week.
As my fall cows gave an unusual number of bull calves, I have decided to place them within reach of all who want an extra bull for next summer, viz.: \$60 to \$90 each, registered, and express prepaid by me to their destination. **MRS. E. M. JONES, 90x 324, Brockville, Ont., Can.** Mrs. Jones' great book, *Dairying for Profit*, 30c. by mail. Address, **ROBT. Y. BROWN, Agent, Box 324, Brockville, Ontario, Canada.** 8-y-om

CASEY DIAMOND GRIP,
Also Double Lock
Farm, Garden and Boulevard
FENCING.
Agents wanted (farmers preferred) in every township.
Must be had—men of push and energy. If you are a man of push, write us for terms. Our agents write they are more than pleased, and the farmers highly delighted, and say the Casey Diamond Grip is far superior to all others. Our fence is built on the premises, thus following hill and valley without lapping. Best post turned to order. See our exhibit at Toronto Industrial, also Western Fair, London, Ont. Address
CANADA FENCE COMPANY, Cor. Bathurst and Clarence Streets, Between G. T. R. & M. C. R. Stn., London. 17-om

GLEN ROUGE JERSEYS
WILLIAM ROLPH, Markham, Ont., offers Twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right. 21-y-om

JERSEYS, STANDARD BRED HORSES.
Choicely bred Stoke-Pogus and St. Lambert Jerseys.
Standard bred and Road Horses for sale.
DR. E. P. BALL,
13-1-y-om Rock Island, Que.

C. C. & G. F. CLEVELAND
(J. L. Goodhue & Co., Mfgs. Leather Belting)
BREEDERS AND IMPORTERS OF
Durham Cattle, Standard Bred Horses, Chester White Swine. Young Stock for Sale.
Address—C. C. & G. F. CLEVELAND,
Greenlands Stock Farm, Danville, Que.
17-1-y-om
FOR HEREFORDS
—WRITE TO—
F. A. FLEMING, 5-y-om Weston, Ont.

INGLESIDE HEREFORDS!
Anxiety 4th and Grove 3rd Strains.
Choice Young Bulls of the above breeding for sale, registered, and prices to suit the times. Improved Large Yorkshire and Tamworth Swine. All stock registered. Address
H. D. SMITH,
INGLESIDE FARM, COMPTON, QUE.
G. T. R. Station, 2 1/2 miles. 17-1-y-om

GUERNSEYS AND LARGE YORKSHIRES
FOR SALE—A choice bull calf, two months' old, bred from heavy-milking, high-testing stock. Also ten grand young pigs ready to ship.
W. H. & C. H. McNish,
20-y-om LYN, ONT.

GUERNSEYS
This is the Dairy breed for ordinary farmers. Large, vigorous and hardy, giving plenty of rich milk. Imported Bull Benefit, son of Vice-Pres. Morton's famous butter cow Bienfaitrice 4th, heads the herd.
Address: **SYDNEY FISHER, Aiva Farm, Knowlton, P. Q.** 17-1-y-om
J. YULL & SONS,
Meadowside Farm, Carleton Place, Ontario.
Our herd is composed of seventy-five head. Leonard Meadowside—1423—first prize at World's Fair, heads the herd. Cows of the deepest milking strain, having won several medals at provincial tests. Shropshire sheep and Berkshire pigs. Young stock of both sexes for sale. Visitors welcome met at train. Give us a call. 7-y-om

Ayrshires. - Ayrshires.
IMPORTED IN 1893 AND 1894, AND Will be Exhibited at TORONTO, LONDON, AND OTTAWA.
Largest and most expensive importation combined with Milk, Butter and prize record Ayrshires procurable in Scotland.
Make it your special business to see them and their first calves, 7 months old, imported in dam.
Maple Grove Ayrshire Stock Farm,
LYN, ONTARIO. Line G. T. R. R.
R. G. STEACY,
7-1-y-om Importer & Breeder.

THE GLEN STOCK FARM
AYRSHIRES
—AND—
BERKSHIRES.
A few good Ayrshire bull calves and heifers, Berkshire boars and sows. For particulars write
Whiteside Bros.,
7-y-om INNERKIP, ONT.

A. M'CALLUM & SON,
Sprucehill Farm, Danville, Que.
PURE-BRED AYRSHIRES and BERKSHIRE PIGS.
13-1-f-om
FOR SALE.
SHROPSHIRE RAMS (Registered)
—AND—
SHORTHORN BULLS (Registered)
Also a few females. Apply to
C. HARLESTON IRVING,
"Bonshaw Farm," NEWMARKET, P. O. Box 288 9-1-y-om
PETER ARKELL, Teeswater, Breeder & Imp. of Registered Oxford-Down Sheep. 22-y-om

IMPORTED SHROPSHIRE EWES
 And their lambs for sale by car lots; also a very choice Short-horn Bull calf, ten months old.
W. S. HAWKSHAW,
 Glanworth P.O., Ont.
 7 miles south of London. 7-11-om



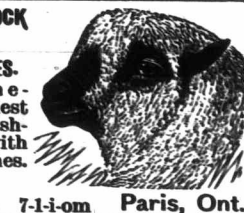
FOR SALE.

35 Reserved Shropshire Yearling Rams
 Of finest type and superior breeding, averaging 170 lbs. each on July 1st. Will be sold in one lot, at HARD TIMES PRICES.
 Also a few Selected Lambs of Both Sexes, and a limited number of Choice Yearling Ewes. These may be seen at
Maple Shade Farm.
 Call or address—

HON. JOHN DRYDEN,
 BROOKLIN, ONT.
 3-1-y-om

BOULDER CRANCE FLOCK

REGISTERED SHROPSHIRE. Imported and home-bred stock of the finest quality and most fashionable breeding, with prices to suit the times. Inspection invited.
C. W. GURNEY, 7-1-1-om Paris, Ont.



Choice Shropshires, Shearings and Lambs
 Of both sexes, from imported stock, for sale at prices to suit the times.
CHAS. CALDER,
 17-1-om BROOKLIN, ONTARIO.

Imported and Home-bred LINCOLNS

The first Royal winner, Royal Chester, at the head of the flock. Ewes from the best English flocks, such as those of Dudding, Bailes, Wright and Clark. Rams to head flocks a specialty.
R. W. STEVENS,
 LAMBETH, ONT.
 5-y-om London Station.

Imported Cotswold Ewes

In lamb to an English royal winner that has proved himself a great stock sire. Ram lambs and ewe lambs from imported stock, which will make good show sheep, for sale at hard times prices.
W. M. THOMPSON,
 MT. PLEASANT, Uxbridge Station, G. T. R. 13-1-y-om

JOHN A. MCGILLIVRAY,
 Jerseydale Farm, Uxbridge, Ont., Midland Div.
 G. T. R., importer and breeder of **Dorset Horned Sheep** 19-1-y-om

IMPORTED OXFORD AND SUFFOLK SHEEP

Consisting of 190 ewes and rams selected with great care to combine size, quality and pedigree. From the best English flocks. Prices reasonable. Write and come and see my flock.
W. B. COCKBURN,
 17-y-om Greenhouse Farm, ABERFOYLE, ONT.

OXFORD-DOWN RAMS FOR SALE.

Young Rams for 1894 season, registered; also a few improved Yorkshire Boars, with pedigree. Address—**LANCELOT TASKER,** 19-c-om HARLOCK, ONT.

YOU CAN'T AFFORD IT!
 To let a valuable animal become sick
MAUD'S CONDITION POWDER AND LOSE FLESH.
 HAS A WONDERFULLY GOOD EFFECT
IN BRINGING HORSES & CATTLE BACK TO CONDITION
 PRICE, 25c. AND 35c. PER PACKAGE.
 We offer to mail for 10c. a regular 25c. package to anyone who wishes to try them before purchasing a supply.
DAVIS & LAWRENCE CO. (Ltd.), - MONTREAL.

HENRY ARKELL,
 Arkell P. O., Ont.
 Importer and breeder of Oxford Down sheep, winner of nine prizes out of ten entries at World's Fair. Fifty rams and ewes for sale, both imported and Canadian-bred; 100 ram and ewe lambs for 1894, from Royal and World's Fair winning rams. Prices reasonable. Guelph, G. T. R.; Arkell, Telephone, Arkell. 7-1-y-om

AMPLE SHADE STOCK FARM. Leicesters For Sale.

(BOTH SEXES)
 From our prize-winning flock.
E. GAUNT & SONS, St. Helens, Ont.
 Lucknow Station, G.T.R. 13-1-y-om

LEICESTERS FOR SALE
 15 Ram Lambs, \$8 each; 1 Shearling Ram, \$15; also a few good ewes. Rams are a very superior lot, well woolled and good quality. Average weight on 1st Sept., 112 lbs. Can ship either by G. T. R. or M. C. R. M. C. R. direct connection with C.P.R. Registered letters at my risk. **MUNGO MOWATT, COWAL P. O.** 11-om

To Stockmen & Breeders. LITTLE'S PATENT: FLUID NON-POISONOUS SHEEP DIP AND CATTLE WASH.

For the destruction of Ticks, Lice, Mange and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc.
 Removes Scurf, Roughness and Irritation of the Skin, making the coat soft, glossy and healthy.
 The following letter from the Hon. John Dryden, Minister of Agriculture, should be read and carefully noted by all persons interested in Live Stock:
"MAPLE SHADE" HERDS AND FLOCKS.
 BROOKLIN, ONT., Sept. 4th, 1894.
 DEAR SIR,—I cannot afford to be without your "Little's Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested. I have ever tried; it is also an effectual remedy for foul in the feet of Cattle. I can heartily recommend it to all farmers and breeders.
 JOHN DRYDEN.
 Seventeen Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world. Sold in large tins at \$1.00. Special terms to Breeders, Ranchmen and others requiring large quantities. Ask your nearest druggist to obtain it for you; or write for it, with pamphlets, etc., to **ROBERT WIGHTMAN, DRUGGIST, OWEN SOUND, Ont.**
 Sole Agent for the Dominion. 7-1-y-om

Large (White) Improved **YORKSHIRES AND ENGLISH BERKSHIRES**
 The undersigned offers for sale this fall an exceptionally fine lot of Young Pigs, also a few Sows ready to breed, also a few Sows in farrow. Pairs supplied not akin. Prices to suit the times. Correspondence solicited.
 Apply to **W. M. GOODGER & SON,** 11-y-o Box 160, Woodstock, Ont.

BREEDERS OF Large Improved Yorkshire Pigs.
 Northern Bred, the sweepstakes Burrew over all breeds at the Guelph Fat Stock Show of Pigs on hand. Only first-class stock shipped to order. **Bartham Farm, at Locust Hill, Shelburne, 13-y-om JNO. FIFE & SONS.**

GOLD MEDAL BERKSHIRES.
 Young boars fit for service; young sows fit for breeding; fall pigs at six to eight weeks old. All bred straight from imported stock. Three imported boars in use. Can supply pairs not akin. We ship to order and guarantee satisfaction.
J. O. SHELL, 8-y-om EDMONTON, ONTARIO.

LARGE ENGLISH BERKSHIRES
 My herd are imported or bred from imported stock, and have carried winnings at leading shows for years, including sweepstakes over all breeds at last Guelph Fat Stock Show. Pigs of all ages for sale, pairs supplied not akin.
GEO. GREEN, Fairview, Ont. 9-y-om

BREEDERS OF Large Improved Yorkshire Pigs.
 A choice lot of young pigs just fit to ship. Pairs supplied, not akin, bred by my three grand sweepstakes "High Class Prizes," "King Lee" and "Champion Duke." Also a few choice sows of Oct. litters. Write for prices or come and see my stock. 8-y-om

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.
 Mr. Robert Johnston, son of Arthur Johnston, of Greenwood, Ont., who has been visiting in Manitoba for some little time, returned home recently, taking with him that handsome Shorthorn bull, Royal Don, whom he re-purchased from Mr. Speers, of Oak Lake, to use in their celebrated herd at Greenwood. It is regretted that Manitoba should lose such a bull.
 We wish to call the attention of our readers to the advertisement of Mr. Frank Row, Avon, Ont., which appears in this issue. Mr. Row has a fine lot of young pigs of both the Tamworth and Poland-China breeds, and is prepared to supply pairs or trios not akin at reasonable rates.

M. J. DAVIS, Woodstock, Ont. Breeder of High-class Large Berkshire and Imp. Large White Yorkshire Swine, Short-horn Cattle. — A grand lot of young pigs ready for shipment of both breeds; also boars fit for service from prize-winning stock. Stock shipped to order. Satisfaction guaranteed. Young Bulls generally on hand. 8-y-om

ISRAEL GRESSMAN, New Dundee, Ont. — IMPORTER OF — **Large - English - Berkshires** 4-y-om

THE HOME OF THE BERKSHIRES. J. G. SHELL & BRO., Edmonton, Ontario. Now is a good time to order pigs from litters farrowed this year. We never had so many fine sows to breed from as at present. Can supply a few pigs from litters farrowed in January and February. These will be right for the fall exhibitions where prizes are given for pigs of this year. We have also for sale some young boars fit for service. Write for descriptions and prices. 8-y-om

D. A. GRAHAM PARKHILL, ONT. BREEDER OF **Pure-Bred Berkshire Pigs**
 Breeding stock of all ages supplied, not akin. Also a few choice B. P. Rocks, S. L. Wyandottes and Evans Turkey, 17-1-y-om Parkhill Station, G. T. R.

FOR SALE.
 A very choice litter of BERKSHIRES, true marks and model pigs; sire and dam from imp. stock on both sides. Prices very moderate.
R. RIVERS & SON, 13-1-y-om Spring Hill Farm, Walkerton, Ont.

O. J. GILROY & SON
 Glen Buell, Ont., BREEDERS OF **HOLSTEIN-FRIESIAN CATTLE**
 — ALSO — **Large English Berkshires & Imp. Yorkshire Swine**
 Bred from imported stock. Personal inspection solicited. 7-y-o

PINE GROVE HERD OF BURG JERSEY SWINE.
 A few choice young boars left ready for shipment, also a few choice sows fit for service. Address **CHAS. ANSTICE,** 21-b-om Springford, Ont.

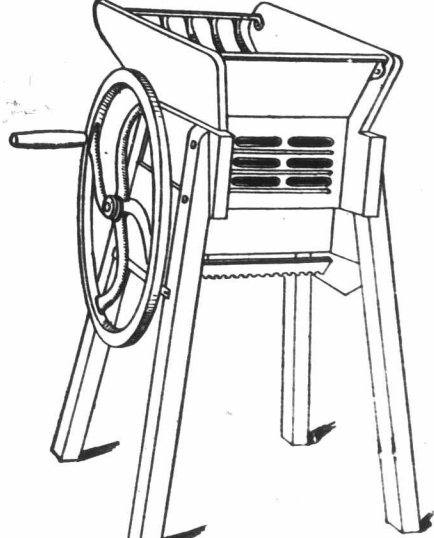
W. H. ODELL, BELMONT, ONT. — BREEDER OF — **REGISTERED: TAMWORTH: SWINE.**
 50 Pigs, also some yearling sows to farrow soon, and one yearling boar, for sale. Registered Pigs, 8 weeks old, \$10 each. 15-1-y-om

THE OXFORD HERD OF REGISTERED POLAND CHINAS
 Our herd of Improved Poland-Chinas won 35 first, 15 second and 5 third prizes in 1893, including the Herd prize at Montreal and Toronto, the best boar and two sows any age. Stock, both sexes and all ages. Pairs and trios not akin for sale at all times. Correspondence solicited or inspection of herd invited.
 15-y-om **W. & H. JONES, Mount Elgin, Ont.**

1500 lbs. of Honey
 Extracted, and in sections, for sale, cheap; also Cocks and Cockerels of the following breeds:—J. A. Brahmas, Br. Leghorns, G. Dorkings, Bl. Spanish.
 Correspondence solicited. Descriptive catalogue free.
 17-y-om **CAPT. A. W. YOUNG, Tupperville, Ont.**

E. D. GEORGE
 PUTNAM, ONT.
 Importer and Breeder of **Ohio Improved Chester White Swine**
 The largest and oldest established registered herd in Canada. I make this breed a specialty, and furnish a good pig at a fair price. Write for prices. 15-1-y-om

STOCK RAISERS!
 WE MANUFACTURE A FULL LINE OF
Root Pulpers & Slicers
 (Single or Combined, and for Hand or Power.)
 --- SEND FOR DESCRIPTION. ---
DAVID MAXWELL & SONS,
 St. Marys, Ontario.
 Mention FARMER'S ADVOCATE.



NOTICES.

In writing to advertisers please mention the Farmer's Advocate.

Ontario Veterinary College, Toronto, Canada.—This prosperous Veterinary Institution commenced the session of 1894-95 on Wednesday, Oct. 17th, with a large attendance of students, who come from all parts of this continent, the West Indian Islands, and some from Great Britain. The introductory lecture was delivered by the Principal, Prof. A. Smith, F. R. C. V. S. Students can still enter.

TOM, DICK AND HARRY.

So far as we can learn, Tom has never distinguished himself, and Harry's name is not a synonym for industry, but among stock owners Dick's Blood Purifier has brought him into high esteem. For horses and cattle it is invaluable. It strengthens the digestion, gives a good appetite, and turns a rough coat into a smooth and glossy one. Dick's Blister cures Spavins, Curbs, Ringbones, etc.

LOOK OUT FOR COLD WEATHER.

but ride inside of the Electric Lighted and Steam Heated Vestibule Apartment trains of the Chicago, Milwaukee & St. Paul Railway, and you will be as warm, comfortable and cheerful as in your own library or boudoir. To travel between Chicago, St. Paul and Minneapolis, or between Chicago, Omaha and Sioux City, in these luxuriously appointed trains, is a supreme satisfaction; and, as the somewhat ancient advertisement used to read, "for further particulars, see small bills." Small bills (and large ones, too) will be accepted for passage and sleeping car tickets. For detailed information, address A. J. Taylor, Canadian Passenger Agent, Toronto, Ont.

OUR BOOK TABLE.

A copy of J. H. Davis' latest poultry book, known as the A B C of Poultry-keeping, has been received. On careful perusal of its pages, we are impressed by the common sense of its contents. The author is a practical poultry breeder, who is endeavoring by this little work to correct many of the current evils and mistakes going on in many fowl yards. Being especially designed for beginners, it can be understood by everybody. It is a forty-page pamphlet, published by the Fancier's Review, Chatham, N. Y. We have also proposed another little poultry work, called "Five Hundred Questions and Answers," and one on "Low Cost Poultry Houses."

We have received a valuable acquisition to our library under the name of "The Forester"—a practical treatise on the planting and tending of forest trees, and with the forestry of woodland estates, by James Brown, LL. D. It is made up of two beautifully bound volumes of about 600 pages each. It is published by William Blackwood & Sons, Edinburgh and London. The introductory 83 pages of Vol. I. treats of various matters connected both with forestry in general, and with the forestry of Great Britain in particular. Then the broad-leaved species of trees, followed by the coniferous or members of the pine family, are taken up species by species, and ably discussed as to their specific character, distribution, description, economic uses as lumber, soil and situation, propagation and culture. Considerable space is given to purely arboricultural operations, or the cultivation of trees chiefly for ornamental and aesthetic purposes, also the distribution of timber crops on large estates, soil preparation, the formation of timber crops, natural regeneration, sowing and planting. Volume II, commencing with Chapter VIII., deals with the enclosure of plantations, hedging, fencing, etc.; the formation and management of nurseries; the tending of timber crops, the utilization of forest produce, the transport of timber, the pathology of forest trees, including information on diseases and insects; the rate of increment in crops of growing timber, and the best means of measuring or estimating it, the preparation of working plans, and a system of book-keeping adapted to forest operations. The work, besides being extremely comprehensive, deals with forestry and arboriculture in a decidedly masterly way. It is entirely up to date, and a first-class manual. The last forty pages deal with forests and foresting in other countries than the United Kingdom of Great Britain and Ireland. The whole work is peculiarly practical and readable.

STOCK GOSSIP.

Note change of advertisement, W. C. Shearer, Bright, Ont.

Jas. H. Shaw, Simcoe, Ont., writes:—"My stock are doing well; pigs never were healthier, young ones of the fall litters coming good and strong, growing like weeds these sunny days. Was quite successful at the County show here."

Mr. D. A. Campbell, Mayfair P. O., Appin Station, G. T. R., has been very successful with his Lincoln sheep at the fall exhibitions. At Wallacetown, he showed twelve head, and practically swept the boards. He won first on his aged ram, which had also won first at Strathroy, Napier and Glencoe. He also won first on a very superior yearling, got by the imported Lord Raglan, a prize winner at Chicago, besides the pen prizes, and a number for individual animals.

A. & G. Rice, of Brookbank Farm, Currie's, have their herd of Holsteins home again safe and sound, after an absence of twenty-five days at the big fall fairs. They have been most successful in the face of keen competition. There were in competition in the Holstein class, seven herds at Toronto, three herds at London, and four herds at Ottawa. Besides winning both 1st and 2nd in the test for milk product (total solids) at Toronto, open to all breeds, they won first honors in every section before one or more judges at different places, as the following summary of first prizes show: Bull, 3 years and up, 1st prize and diploma, best bull any age, Ottawa; cow, 4 years and up, 1st prize; 1st in milk test and silver medal, best female any age, Toronto; cow, 3 years old, 1st prize, London; heifer, 2 years old, 1st prize, Ottawa; heifer 1 year old, 1st prize, London and Ottawa; heifer calf, 1st prize, Toronto, London and Ottawa; 1st prize and diploma for best herd, Ottawa. The herd has experienced the ups and downs of the show yard before the different judges, and has won many second and third prizes. A plate was taken by all the judges, and the high character of the herd is thus attested by two different judges, and silver medal, and first prize in the milk test.

FAMOUS BASEBURNER

The Handsomest and Best-Working Stove of this Class in America.



From the construction of the flues of this stove, it will throw one-third more heat from the same amount of fuel than any stove of its kind. Entire base radiates heat. Made in two sizes, with and without oven. Oven is made with three flues, same as a cooking stove. Double heater attachment by which heat can be carried to upper rooms. Flat and Duplex Grates.

A Triumph of Art and Utility.

The McCLARY MANUFACTURING CO.

LONDON, TORONTO, MONTREAL, WINNIPEG AND VANCOUVER.

If your local dealer does not handle our goods, write our nearest house.

FINE VIEW HERD OF CHESTER WHITES & BERKSHIRES.

At present I have on hand a fine lot of young boars of each breed, 3 months old. Any one wanting a young boar could not do better than give one of these a trial. Also young pigs fit to ship. In fact, pigs all ages and sizes on hand. Every pig shipped guaranteed as described or no sale. For further particulars write

JAS. H. SHAW,

21-1-y-om Simcoe, Ont.

TAMWORTHS & IMPROVED CHESTER WHITE SWINE

Our herds of Tamworths and Chesters are selected from the choicest herds in England and United States; 80 choice full pigs of the above breeds for sale, also 8 grand Tamworth boars fit for fall service, and 10 choice sows bred for spring farrow. Pairs furnished not skin. Reduced rates by express. Postage free. Send for prices before buying elsewhere. H. GEORGE & SONS, Crampton, Middlesex Co., Ont.

Of the best strains, not connected from a number of grand sows; and three different boars. Fifty-eight prizes won last season. All ages for sale, including sows in farrow. Wm. McALLISTER, Varra, Ont. 3-1-y-om

POULTRY FOR SALE.

Black Javas, cockerel and 3 pullets, per \$4; three Langshan hens, lot \$3, singly \$1.50. Will sell Buff Cochins, hen, cockerel and pullet, not related, trio, \$2.50. These are not culled, but American standard-bred fowls; must be sold to make room for other stock. Cash with order. First come gets pick. Order today. A. J. GEORGE, 52 Clarence St., London, Ont. 21-a-om

SELLING OUT.

On account of other business taking my entire time, I am compelled to sell my entire flock of Plymouth Rocks this month. Choice Large-bodied Cockerels and Pullets. Grand Yearling Birds, all of fine shape and markings, at \$1.25 each. This is a chance of a lifetime. Order early, and get the cream. Send money, stating your wants. C. W. ECKARDT, Hamilton Fruit and Poultry Farm, 3-y-om RIDGEVILLE, ONT.

MUNGER'S AMERICAN SWINE

Swine, Turkey, Duck and White Plymouth Rocks, White and Black Leghorns, Piled and Indian and R. B. Game Fowl, Toulouse Geese, Bronze Turkeys and Pekin Ducks. Pen-fowls for sale; price of eggs, \$1.00 per 11. 7-1-y-om

INCUBATORS

We warrant The Reliable... Reliable Incubator and Breeder Co., Quincy, Ill. 15-L-o

2000 lbs. FEATHERS

WANTED AT ONCE.

We pay as high as 50c a lb. for prime live Geese; 25c. for Duck. We also buy Chicken and Turkey Feathers. Write us what you have. First come, first served. It means money to you, for we pay cash.

Alaska Feather & Down Co., Ltd.

10 ST. SACRAMENT STREET, Montreal.

The Improved KNITTER

Will knit 15 pairs of sock a day. Will do all Knitting required in a family, homespun or factory yarn. SIMPLEST KNITTER on the Market. This is the one to use. A child can operate it. We guarantee every machine to do good work. We can furnish ribbing attachments. Agents wanted. Write for particulars. Price, \$8.00. Dundas Knitting Machine Co., Dundas, Ont. 17-y-om

\$3 A DAY SURE

Send us your address and we will show you how to make \$3 a day, absolutely sure, in the locality where you live. Send us your address and we will explain the business fully; remember we guarantee a return of \$3 for every day's work, absolutely sure, than I fail to write. IMPERIAL SILVERWARE CO., Box 4 Windsor, Ont. 21-L-om

Advertisement for 'YOU HAVE STOCK TO FEED Your Profits' featuring an illustration of a man in a top hat pointing towards the text. The text promises increased profits and includes details about 'Waterous Burr Stone Chopper' and 'Waterous' machinery in Brantford, Canada.

GREENER'S RENOWNED CLOSE SHOOTING GUNS FOR GAME AND PIGEONS

May be obtained through MESSRS. HINGSTON SMITH ARMS CO., WINNIPEG, or any gun dealer or storekeeper in Canada. PRICES RANGING FROM \$60. These guns are specially noted for their fine shooting qualities and strong breech action, and have won more valuable prizes and made higher scores than any guns in the world. Before ordering a new gun, read Greener's latest book; 3rd edition now ready; price, 5s.; 270 pages; copiously illustrated. It may be obtained from Messrs. B. & S. H. Thompson, Merchants, Montreal, or from the author, W. W. GREENER, ST. MARY'S SQUARE BIRMINGHAM, and 68 HAYMARKET, LONDON. 15-1-om

TO THOSE WHO FEED STOCK YOU NEED SOME OUR IMPLEMENTS

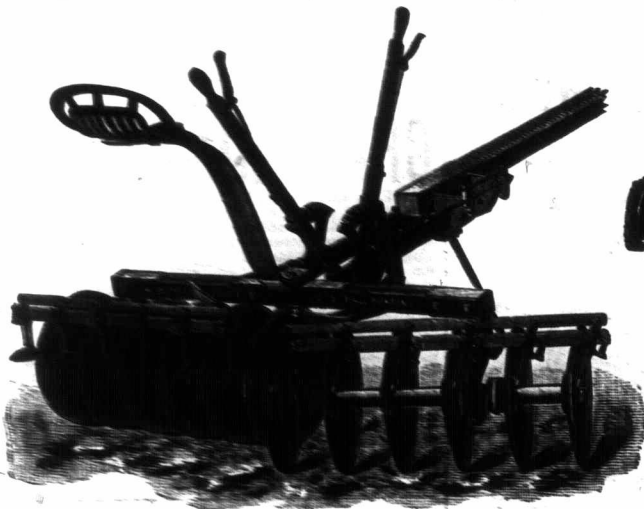
Advertisement for 'FLEURY GRAIN CRUSHER' featuring an illustration of a large mechanical grain mill. The text describes the machine's efficiency and provides contact information for J. Fleury's Sons in Aurora, Ontario.

THE - PEDLAR - PATENT - STEEL - SHINGLE
WILL LAST A LIFETIME.



FIRE-PROOF, LIGHTNING-PROOF, WATER-PROOF. Nearly as Cheap as Wooden Shingles. Send for Illustrated Catalogue. Reliable Agents wanted in every vicinity. ADDRESS—THE PEDLAR METAL ROOFING CO., OSKAWA, ONT.

DETROIT DISC

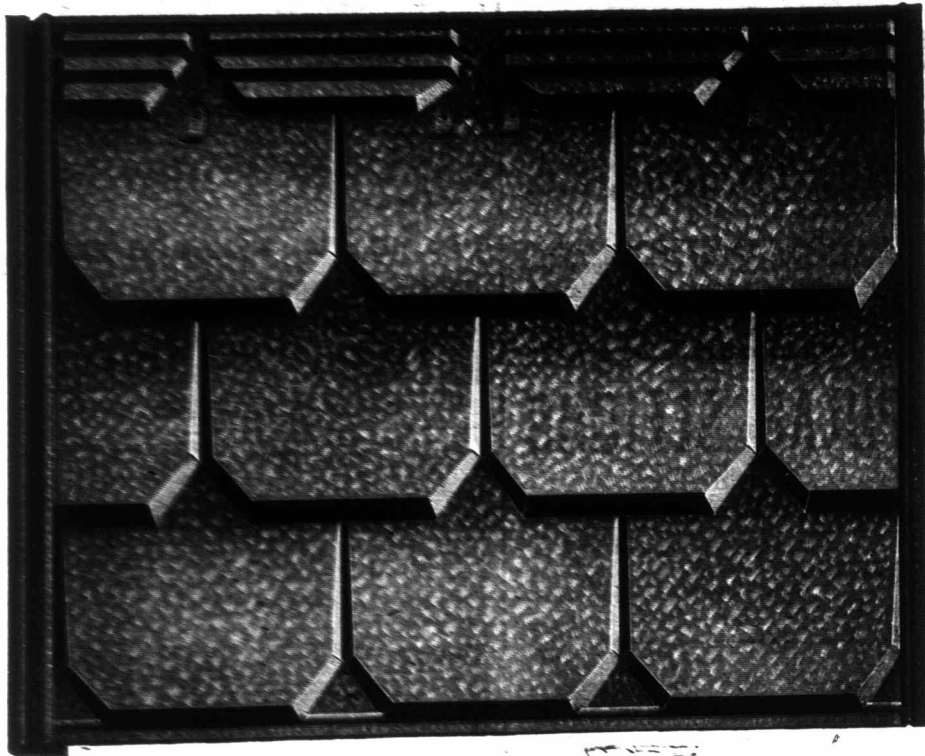


Steel frame, Ball Bearings (dust proof), Double Levers, Adjustable Scrapers, cut seven depth, sections run level at any angle, tongue changed quickly for two or three

horses, no weight on horse's neck. Most complete, and perfect Disc Harrow made. Highest awards Columbian Exposition. Send for circulars to

AMERICAN HARROW CO., Detroit, Mich., U. S. A.

"EASTLAKE" STEEL SHINGLES



GALVANIZED OR PAINTED. THE SHINGLE OTHERS TRY TO IMITATE. HAS NO EQUAL. CAN BE LAID BY ANYONE. FULLY GUARANTEED. FIRE-PROOF, DURABLE, ORNAMENTAL AND CHEAP.

Sole Manufacturers

METALLIC ROOFING COMPANY (Ltd.), 10-y-o 82, 84, 86, 88 and 90 YONGE ST., TORONTO, ONT.

ADVERTISE IN THE FARMER'S ADVOCATE.

CONSUMPTION



SO PRONOUNCED
By the Physicians
SEVERE
COUGH
At Night
Spitting Blood

Given Over by the Doctors!

LIFE SAVED BY
AYER'S CHERRY PECTORAL

"Seven years ago, my wife had a severe attack of lung trouble which the physicians pronounced consumption. The cough was extremely distressing, especially at night, and was frequently attended with the spitting of blood. The doctors being unable to help her, I induced her to try Ayer's Cherry Pectoral, and was surprised at the great relief it gave. Before using one whole bottle, she was cured, so that now she is quite strong and healthy. That this medicine saved my wife's life, I have not the least doubt."—K. MORRIS, Memphis, Tenn.

Ayer's Cherry Pectoral

Received Highest Awards
AT THE WORLD'S FAIR

VIOLINS GUITARS
ACCORDEONS

FLUTES, FIFES, PICCOLOS,
AND OTHER MUSICAL INSTRUMENTS

We send them everywhere. We guarantee prices lower than any local dealer can give—(Violins from \$1.00 each up). We ship them with privilege of examination before paying for them. Send your name and address on a postal card, and we will send FREE our wholesale price list of Musical Instruments. Address

THE SUPPLY CO., NIAGARA FALLS, ONTARIO

JAPANESE
CATARRH CURE

For Cold in the Head, Drooping in the Throat, Hay Fever, Aching above the Eyes, Earache, and discharges from the Ears and Nose, affecting Children and Adults, also for all Cuts, Wounds or Old Sores. It is a perfect specific. Price by mail, post paid, 50 cents. Samples free.

T. R. MORROW, CHEMIST,
426 Cordova St., & Mt. Pleasant,
VANCOUVER, B. C. 21-y-om

World's Highest Award
THE KEYSTONE
Dehorning Clipper,
The most humane, rapid and durable knife made. Fully warranted.
CIRCULARS SENT FREE.
A. C. BROSIUS, COCHRANVILLE, Pennsylvania.
21-l-om

SASKATCHEWAN BUFFALO ROBES

MANUFACTURED BY

NEWLANDS & CO.,

Galt, Ont.,



Are the warmest and most durable robe in the market, and are equal in every respect to the original Buffalo skin. Are handsomely lined with a superior quality of lining, also have an inter-lining of rubber, making them absolutely wind and water proof. Have stood hard usage for five years by Farmers, Livermen, Doctors and others, and have given entire satisfaction. Patented in Canada and United States. Agents in every town in Canada. 21-h-o

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.

The Ottawa Fair prize list, which appeared in the ADVOCATE for October 15th, credited Mr. J. N. Greenshields with securing all the Aberdeen Angus awards, instead of Dr. Craik. The list was furnished us by the exhibition authorities, and the error was apparently made by a copying clerk in the Secretary's office.

At River Bow Farm, on the River Thames, two miles from Byron and eight from the city of London, Messrs. Kains Bros. are breeding Ayrshires. This herd is headed by the stock bull, Castle Douglas, imported in dam, by the late Thos. Braun, Petite Cote. He was sired by the noted bull, Traveler, dam Fairy Queen. This is a very superior animal, and is proving himself a sure stock-getter. He won first prize at the Western Exhibition this fall. The latest addition to this herd is a very promising bull calf from the herd of Thos. Ballantyne & Son. This bull is out of one of his best imported cows, and got by Beauty's Style of Auchenbrain, imported from Mr. Robert Wallace, Auchenbrain, Scotland. The cows and heifers are an exceedingly choice lot, and show the owner's skill in selection and breeding.

SPRUCEDALE DAIRY FARM.
At Bright, a station on the Buffalo and Goderich Branch of the G. T. R., which makes direct connection with the C. P. R. at Drumbo, and G. T. R. at Paris, is located the stock and dairy farm of W. C. Shearer. We found the owner busily engaged in filling his silo. He is a great upholder of ensilage as a food for dairy cows, and has the honor of having built the first silo in this part of the country. It is built of stone and cemented on the inside and will hold eighty tons. Not finding this sufficient for his stock two years ago, he built another of wood, double boarded with tar paper between, of similar capacity. Both silos were built inside the barn. Mr. Shearer cannot detect any difference in the keeping qualities of the ensilage from the two silos. Mr. Shearer has been dairying in the old way for years, but found that it was too slow, and that it cost too much time and labor to pay. He then looked around to see what improvement he could make in his business. The first idea that struck him was that he must improve his cows. About five years ago he decided that Jerseys were the most profitable breed for his purpose, so he purchased a number of cows and a registered bull, which, with their progeny, give him a very nice herd. He then fitted up an old stone cheese-house, which was on the farm, into a model dairy, the first in the neighborhood. He again added to his equipment a large barrel-churn, a No. 7 Alexandra Separator, and a tread-power, which is usually worked by his bull, though if so desired, he can be done by his horses. Mr. Shearer believes in making his bull earn his own living, and thinks that if all bulls work on a tread-power, that we would hear but little about accidents from vicious bulls. Another step in the right direction was when he decided that the custom of sending his choice Jersey butter to the store to be mixed up with all sorts and conditions of butter was all wrong. He was fortunate in securing private customers in Hamilton and Toronto, to which he sends weekly about a hundred pounds of butter, neatly put up in pound packages, wrapped in parchment paper and stamped with his name. As an evidence of the steady improvement which has been made, we will give the records of 1891 and 1894, and allow our readers to judge for themselves. In 1891 they kept fourteen cows, which averaged 294 pounds of butter, and brought \$55. This, after adding \$16 obtained for skim-milk for the hogs, makes a total of \$71 for the year. In the year ending Sept., 1894, the cows increased from a total of \$84 in 1891 to \$105, an increase of \$21 over 1891. This was made up by an average of 331 pounds of butter per cow, which sold for \$25—an increase of \$17 over 1891; \$10 worth of skim-milk fed to hogs, and \$10 was counted as the value of the calves. The same number of cows were kept, but a number of them were two-year-old heifers. This large return was obtained in spite of the dry summer, for Mr. Shearer, like all true dairymen, having been prepared for all emergencies with a large field of corn and green feed, his cows scarcely knew that the grass had dried up. He has had his separator only a short time, but feels that it has paid for itself already, for he considers that he gains a pound a week per cow, by means of its use, besides the great saving in labor. Another large item towards the price, was the prize money, \$40, which he won for his butter at both Drumbo and London. His first investment in the stock line was of a cow and three calves, which has proved a very profitable venture, as they have all turned out wonderfully well. At the head of the herd is the pure St. Lambert bull, Canada's Hero, a grandson of the famous bull, Canada's John Bull, dam Nettie of Grimsby, who had a seven days' test of nineteen pounds five ounces, and her dam a test of sixteen pounds in the same time. He was bred by Geo. Smith & Sons, Grimsby, and if the butter records of his ancestors go for anything, he should produce some choice milking stock. The cow, Bessie Scarlet, now eight years old, has from March 1st to June 15th made 250 pounds of butter, and averaged 45 pounds of milk per day, testing 5.15 per cent. of butter-fat. Another of the same breed is her four-year-old daughter, Scarlet Flower, by an imported Jersey bull, Prince of Oak Lawn. This is a fine cow, of a handsome solid fawn color, and tests 6 per cent. Scarlet Blossom is another three-year-old daughter; she tests 5 per cent., and made an average of a pound a day for four months, as a two-year-old last winter. Roselle, one of the calves already mentioned, is now four years old, and has a test of 6.50 per cent. butter-fat, with a yield of 30 pounds of milk per day. This is a beautiful cow, with skin of exceedingly rich butter color, and of good dairy shape. She has an extremely large muzzle, and as Mr. Shearer says, is a good feeder and is never sick. Violet is another of the first purchase, and is a good cow, testing 5.75 per cent., with a yield of 26 pounds of milk per day. She has a fine two-year-old heifer, Diana, a perfect picture of the old cow, and due to calve in a few days. Another daughter, Olive, is a very promising one-year-old heifer, a perfect beauty, and one of the prettiest of the whole herd. There are a number of fine heifer calves now ready for sale, and also three yearling bulls, all of which are from the stock bull, Canada's Hero, and they should give good satisfaction to customers. Mention must also be made of a small but choice flock of Oxford-Down sheep.

HOW TO PAY OFF MORTGAGE

The Manufacturers' Life Insurance Company issues a plan of insurance by which, at a cost of about 2 per cent. of the amount, any man may pay off his mortgage and leave his farm in whatever way he mortgaged free and clear to his family, either during his lifetime or at his death.

GET PARTICULARS FROM ANY AGENT OF THE COMPANY, OR FROM HEAD OFFICE:
COR. YONGE AND COLBORNE STS.,
Toronto.
13-1-y-om



ALMA
The leading Canadian College for Young Women.
ST. THOMAS, ONTARIO.
Graduating Courses in Literature, Music, Fine Art, Commercial Science and Education. The efficiency of Canadian Colleges is conceded by all. 20 professors and teachers. 200 students from all parts of America. Health and home. LOW RATES. Only 3 hours from Detroit. 60 pp. illustrated announcement. President AUSTIN, A. B.

W. & F. P. CURRIE & Co.
Wholesale General Merchants,
100 GREY NUN ST., MONTREAL
IMPORTERS OF
Scotch Glazed Drain Pipes, Chimney Tops,
Vent Linings, Flue Covers, Fire Bricks,
Fire Clay, Portland Cement, Roman
Cement, Canada Cement, Water
Lime, Whiting, Plaster of Paris,
Borax, China Clay, etc., etc.
MANUFACTURERS OF BESSEMER STEEL
SOFA, - CHAIR - AND - BED - SPRINGS
A LARGE STOCK ALWAYS ON HAND.
WM. CURRIE. 7-y-o F. P. CURRIE.

USE
RAMSAY'S
CELEBRATED
MIXED
PAINTS!
HARNESSES

We have just got out our new Catalogue of harness and everything required by a farmer in this line. It will pay you to send for one and examine it closely. We will guarantee to save you money and give you a No. 1 article, or no sale. ALL HAND SEWED. Deal with us and save middleman's profit. Send for Catalogue.
Farmers' Harness Supply Co.,
104 Front St. East,
TORONTO, 7-y-o ONT.

THE NEW Chatham and Chautauqua Giant Wagon

With Unbreakable Axles and Unbreakable Arms.
THE BEST MADE ON EARTH. So said the Judges on Vehicles at the **WORLD'S FAIR,** Who awarded us a **GOLD MEDAL AND DIPLOMA** Over the heads of numerous old and extensive builders in the United States and Canada. The axles are unbreakable, because **Van Allen's Patent Giant Arms** Throw all the load directly on the arms, and the arms are also unbreakable, because they are the best refined **MALLEABLE IRON,** Warranted as strong, more durable and lighter running than Steel Skeins. These Giant Arms completely revolutionize the building of wagons. Our 3-inch Malleable Giant Arm Wagon is **WARRANTED STRONGER,** Though less in price, than any ordinary 3 1/2 to 4-inch cast-iron arm wagon, and our 2 1/2-inch Malleable Giant Arm Wagon is warranted stronger than any ordinary 3-inch cast iron arm wagon, and less in price.

THE DEMAND for these wagons is so great that though we are turning out 12 per day, we are taxed to the utmost to supply it. Send in your orders early.
TERMS AND PRICES LIBERAL.
CHATHAM MANFG. CO. (LTD.)
CHATHAM, Feb. 9th, 1894.

HAVE YOU CONSIDERED THIS MATTER
... FROM THE ...
Grange Wholesale Supply Co.
(LIMITED),

YOU CAN ORDER BY MAIL:
Clothing, Boots and Shoes, Groceries, Harness, Sewing Machines, Patent Medicines,
... AND ...

ALMOST ANYTHING YOU MAY NEED.

The quality of Everything is guaranteed to be right, and at Wholesale Prices. Get our Catalogue of prices and terms and co-operate with us, the only farmers' chartered co-operative store in Canada.
The GRANGE WHOLESALE SUPPLY CO.
(LIMITED),
126 King St. E., TORONTO.
7-om G. W. HAMBLY, Manager.

ROOFING

FREEMAN'S 3-ply Ready Roofing.
Send for samples and get our low prices, and compare the quality of goods and prices with others.
The Cheapest Roof on the market for the money.
Address, **THE W. A. FREEMAN CO.,**
15-y-o HAMILTON, ONT.

BOYS FOR FARM HELP

The managers of Dr. Barnardo's Homes will be glad to receive applications from farmers or others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to MR. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 214 Farley Ave., Toronto. 1-y-o

THE Very Best

EDUCATION FOR FARMERS' SONS

Is a practical business training, such as may be obtained at the CENTRAL BUSINESS COLLEGE Toronto, or CENTRAL BUSINESS COLLEGE, Stratford, Canada's Greatest Business Schools.

Hundreds of young men from the farm have attended our schools, and many of them are out in the great world of business, earning large salaries. Our Colleges are the only commercial schools in Canada that guarantee to satisfy the patrons or refund the money. Write for new catalogue and mention "Advocate."
17-o SHAW & ELLIOTT, Principals.

NORTHERN Business College
IS THE PLACE TO ATTEND, if you want either a Business Education or a course in Shorthand. **The Best in Canada.** Handsome Annual Announcement free. Address, C. A. FLEMING, Prin., Owen Sound, Ont. 17-o

CANADA BUSINESS COLLEGE
HAMILTON, ONTARIO.
The oldest established and most popular Business College in the Dominion. Excellent Shorthand Department in connection. Send for handsomely illustrated prospectus to
R. E. GALLAGHER,
Principal,
17-f-o HAMILTON, ONT.

BARGAIN SALE STILL GOING ON.

We have decided to continue our Bargain Sale of
GUNS AND BICYCLES
for two weeks longer.

Intending purchasers would do well to place their orders at once. Write for Gun and Bicycle Catalogue. Mailed free to any address.

The Bowman Hardware & Sporting Goods Co.
(LIMITED),
17-om HAMILTON, ONT.

GODERICH ORGAN
High grade, fine tone. Send for Catalogue. Made at Goderich, Ontario. 1-y-om

400—Helderleigh Fruit Farms Nurseries—400
(Four Hundred Acres in Extent.)
Established 1882.

There is no place in Canada where the season is longer than here. Hence we get trees brought to the fullest maturity, capable of withstanding the severest cold. Having one hundred acres in fruit, from which cuttings, buds, scions, etc., are taken. I can safely guarantee the purity of my stock to be equal, if not superior, to any other nursery. The soil is specially adapted to produce vigorous, hardy trees, a grand lot of which are now growing and for sale. All the leading sorts of both old and new varieties deemed worthy of propagation. Catalogues free on application. Agents wanted in every township.
13-1f-om E. D. SMITH, Winona, Ontario.

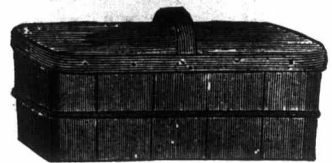
For Fall Planting.

FRUIT TREES, NEW KINDS and OLD; ORNAMENTAL ROSES, ETC., ETC.
Clean and handsome. None better. They will please you. Be your own agent and save nearly one-half cost. Compare our prices and stock before placing your order; you will come again.
A. G. HULL & SON,
CENTRAL NURSERIES,
2-y-o St. Catharines, Ont.

APPLES FOR ENGLISH MARKETS

Consignments solicited. Advances made and full information given by
Alfred W. Otis,
92 Commercial St., BOSTON, MASS., 43 St. Francois Xavier St., MONTREAL, CAN.
19-1-c-o Agents for reliable English houses.

ALL KINDS OF FRUIT PACKAGES AND BASKETS.



— APPLY TO —
OAKVILLE BASKET CO., Oakville, Ont. 11-L-o

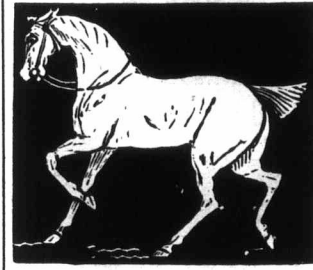
WINNIPEG DISTRICT FARM LANDS FOR SALE.

A few good Farms, improved and unimproved, from 7 to 20 miles from the city. Easy Terms. Prices to suit the times. Now is your time to secure a good Farm near the best market in the Province. Farmers are realizing that mixed farming is the only farming that will pay. Buy land where you can sell all you can produce for cash. Apply to
G. J. MAULSON,
195 Lombard St., WINNIPEG, MAN. 13-f-om



The Belt with the above trade mark is the only successful one made. Used all over the world. Ten years in the market. Not any experiment. Real manufacturer in NIAGARA FALLS, ONT., CANADA; SUSPENSION BRIDGE, N. Y., U.S.A., and DURSLEY, ENGLAND. For Catalogue, etc., apply to
10-y-om **ANTHON CHRISTENSEN & CO.**

To Exhibitors



of Stock at the Fall Fairs

If you would secure first prize you must have your animal in the finest condition, his coat must be smooth and glossy, and he must be in good spirits so as to "show off" well. **DICK'S BLOOD PURIFIER** is the best Condition Powder known for horses and cattle. It tones up the whole system, regulates the bowels and kidneys, strengthens the digestion, turns a rough coat into a smooth and glossy one. It gives horses "good life," making them appear to the best possible advantage. Get DICK'S from your druggist or grocer, or address
DICK & CO., P. O. Box 482, Montreal.

A PLEASANT TONIC
Which will strengthen unnerved tired people and invalids, and quickly restore their appetites, is
CAMPBELL'S QUININE WINE.
Prepared only by K. CAMPBELL & Co., Montreal.
21-1-y-om

FARMER'S FRIEND AND ACCOUNT BOOK.

Presenting separate accounts for all farm transactions, with miscellaneous rules, recipes, etc. PRICE, \$2. Will last for years. If no agent in your territory, send direct. Agents wanted.
William Briggs,
17-f-om Publisher, TORONTO
ADVERTISE IN THE ADVOCATE