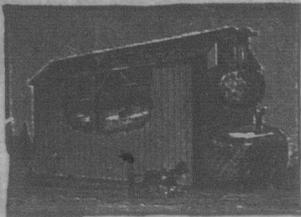
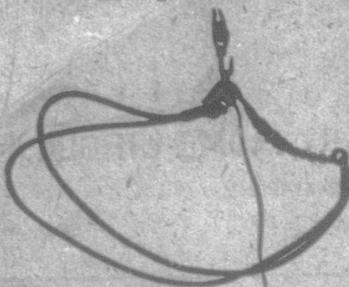


BUCHANAN'S
(Malleable Improved)
PITCHING MACHINE

For unloading hay and all kinds of loose grain.



Unloads on either side of barn floor without changing car. No climbing necessary. Malleable Iron Cars. Steel Forks. Knot Passing Pulleys. Will work on stacks as well as in barns. Satisfaction guaranteed.



The Common-Sense Sheaf-Lifter

Works in connection with Pitching Machine, and is the most complete apparatus ever offered to the public for pitching sheaves. Sheaves left in the mow just as they come from the load.

RESPONSIBLE AGENTS WANTED

Circulars, Prices and Terms on application to
M. T. BUCHANAN & CO., Ingersoll, Can.

The New Century
American Cream Separator



Never fails to give increased profits to users.
It is absolutely clean.
Combines best methods with lowest cost.
Thousands are using them and are satisfied.
Investigate their advantages.

Write for our catalogue.

C. RICHARDSON & CO.,

P. O. Box 1048. ST. MARY'S, ONT.

WHY RUPTURED?

You can be Cured at Home, Without Pain, Danger and No Loss of Time from Work. No Case too Bad or of too Long Standing.



MR. JOHN MORRIS, Niagara St., St. Catharines, Ont., is cured of a dangerous rupture and lost no time from work. A Valuable Book, telling how all ruptures can be cured and a **Free Trial Method** sent sealed post-paid, free of all cost to all sufferers. Write at once; correspondence confidential. DR. W. S. RICE, 2 Queen St. East, Dept. (271), Toronto, Ont.

FARMING PAYS
IN NEW ONTARIO.

Write for descriptive pamphlet and maps

ALGOMA, THUNDER BAY,
RAINY RIVER,
NIPISSING, TEMISKAMING,

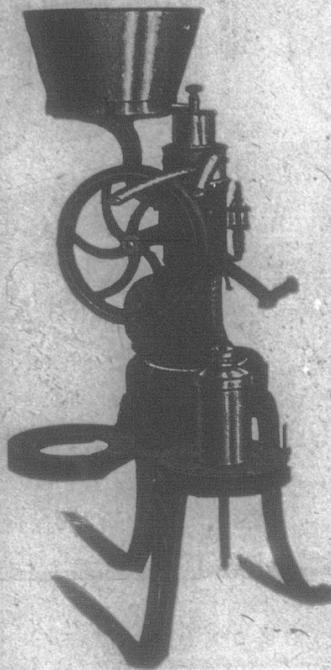
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HON. E. J. DAVIS,

Commissioner of Crown Lands, TORONTO

The National

Stands First.



This is no vain boast. Others may claim this place, but the National Cream Separator soon proves its superiority when brought into competition with them.

The National is as represented. The closeness of its skimming has not to be sacrificed to keep up its advertised capacity.

It makes smooth cream, which is easy to churn.

It turns easily, is quickly cleaned, having so few parts, and these easily adjusted.

Its milk tank is conveniently low, and its gearing enclosed. Send for terms to

The Creamery Supply Co., Guelph, Ont.,
The T. O. Rogers Co., Guelph, Ont.,
Jos. A. Merrick, Winnipeg, Man.,
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CAPACITY:
Style B—250 lbs. per hour.
Style No. 1—330 to 350 lbs. per hour.
Style No. 1 A—450 to 500 lbs. per hour.

or to the manufacturers,

The Raymond Mfg. Co. of Guelph
GUELPH, ONTARIO. Limited.

Binder Twine

BLUE RIBBON,	650 feet per pound
RED CAP,	600 " " "
TIGER,	550 " " "
GOLDEN CROWN,	500 " " "
STANDARD,	500 " " "
SISAL,	500 " " "

Blue Ribbon is no doubt the Queen of Binder Twine. It runs six hundred and fifty feet to the pound, and is manufactured from most select Manila Fibre. Six hundred and fifty foot Twine is the only Twine manufactured entirely from Manila Fibre. Dealers should beware of so-called "Manila" Twines which are advertised to measure less than 650 feet to the pound. They are mixed Twines. Write for Samples.

CONSUMERS' CORDAGE COMPANY, LIMITED

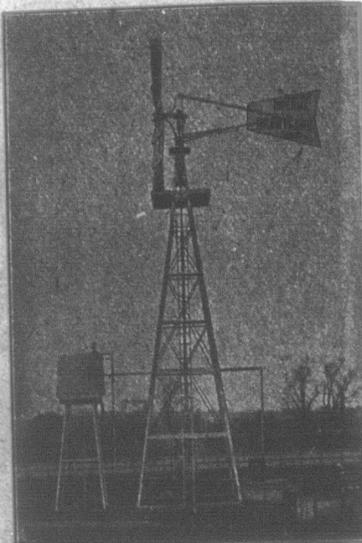
HALIFAX, N. S.

MONTREAL, QUE.



20 H.-P.
Total
Weight
3,200 lbs.

Patented and Pending. Our **Gasoline Threshing Engine.** Write for prices, etc., to
The McLachlan Gasoline Engine Co., Ltd., 201 Queen St. E., Toronto,
or to **W. C. WILCOX & CO.,** Winnipeg, agents for Manitoba and Northwest.



CUT OF
"IMPERIAL" PUMPING WINDMILL
Outfit which won the CHAMPIONSHIP OF THE WORLD against 21 American, British and Canadian manufacturers, after a two months' thorough trial. Made by
GOULD, SHAPLEY & HUIR CO., Limited,
Brantford, Canada.

Keep in the Front.

To do it you must have the best, and the BEST WINDMILLS are the

Woodstock Steel Mills

when fitted with GRAPHITE BEARINGS. They run without oil, no more CLIMBING TOWERS TO OIL BEARINGS.

Grinders, Pumps, Tanks and Saw Benches.

WOODSTOCK WIND-MOTOR CO'Y,
LIMITED,
WOODSTOCK, ONT.

WHEN YOU BUILD OR REPAIR

We can help you to do it cheaply and permanently with our Sheet Metal building materials. They are ornamental, durable, lightning and fire proof. Write us about your plans and ask for our free catalogue.

The Metal Shingle & Siding Co., Limited
PILTON, ONT.

EXCELSIOR LIFE INSURANCE COMPANY.

HEAD OFFICE, - TORONTO.
ASSETS, ONE MILLION DOLLARS
Insurance in force over - \$6,000,000

A Company with an unparalleled low death rate, low expense rate, and earning over 6 per cent. on assets, is a desirable Company to insure in and a good Company to represent. Agents wanted. Liberal contracts offered good producers.

E. MARSHALL, Sec. D. FASKEN, Pres.



BUCK SALT for horses and cattle, in ten and one ton lots. Toronto Salt Works, Toronto.

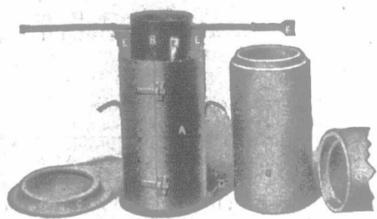
Ten Days Free Trial

allowed on all our bicycles. We SHIP ON APPROVAL without a cent deposit; any wheel not satisfactory returned at our expense.
Highest grade \$8.75 to \$17
1904 Models
Coaster Brakes, Hedgerthorne Puncture proof Tires and best equipment.
1903 & 1902 Models, best makes \$7 to \$12
500 Second-hand Wheels
All makes & Models \$3 to \$8
good as new
Great Factory Clearing Sale at half Factory Cost.

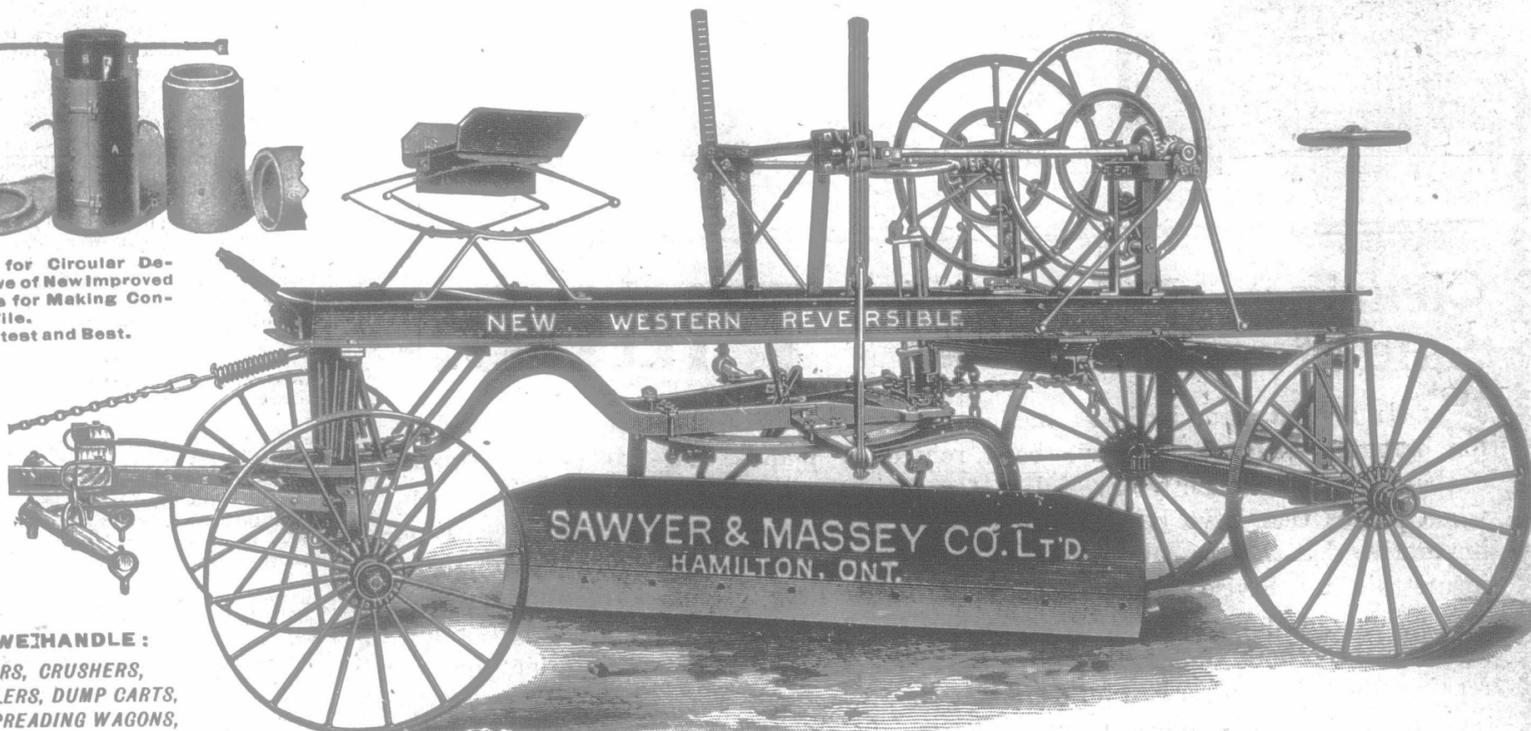
RIDER AGENTS WANTED
in each town to take orders from sample wheel furnished by us. Our agents make big profits. Write at once for catalogue and our Special Offer.
AUTOMOBILES, TIRES, Sewing Machines, Sundries, etc., half usual prices.
MEAD CYCLE CO., Dept. 254D Chicago

THE LARGEST ROAD MACHINERY PLANT IN CANADA

SAWYER & MASSEY CO., Limited, HAMILTON, ONT.



Send for Circular Descriptive of New Improved Moulds for Making Concrete Tile. Latest and Best.



WE HANDLE:
GRADERS, CRUSHERS,
ROLLERS, DUMP CARTS,
SPREADING WAGONS,
WHEEL SCRAPER,
DRAG SCRAPER,
RAILROAD PLOWS,
ROOTER PLOWS,
PICK PLOWS,
MOULDS FOR CONCRETE
TILE, Etc., Etc.

We warrant our
**All-Steel New Western
Reversible Road
Machine to**

- 1 MAKE NEW ROADS in gumbo, hard clay or prairie sod without the use of a plow
- 2 Cut and bring into the center, high, hard and grassy shoulders WITHOUT THE USE OF A PLOW
- 3 Work right or left, going in either direction, as required
- 4 Handle earth EASILY and RAPIDLY, and to discharge the plowed ground from the blade when working in a deep ditch
- 5 Make a ditch 24 inches deep in any soil in fit condition for plowing
- 6 Plow down banks and shoulders outside of the wheels
- 7 Cut with point of bar 24 inches outside of front wheel at an angle of 51 degrees with line of draft
- 8 Cut with point of bar 17 inches inside of front wheel
- 9 Be a perfect success as a leveller, and to SUCCESSFULLY SCRAPE BLOCK PAVING OR MACADAM STREETS
- 10 To save 75 per cent. of the cost of making roads in the old way.

DESCRIPTIVE CATALOGUE SENT ON APPLICATION.

SEED CORN OF QUALITY

The past season has been a very hard one on corn, and it is most difficult to get pure, well-saved and thoroughly-dried seed corn. We have a large stock of tested corn, grown especially for us for seed, from our own stocks, and shall esteem your orders. IT PAYS TO BUY THE BEST. We offer as follows for early orders, subject to being unsold:

SEED GRAINS, ETC.		SEED GRAINS, ETC.	
	Per bush.		Per bush.
Beans, white, hand-picked	\$1 90	Potatoes, Sir Walter Raleigh	1 20
" Marrowfat, hand-picked	2 25	Flax Seed, screened	\$3 00
Buckwheat, common	70	" Meal, pure	3 50
" Silverhull	75	Oil Cake, fine ground	1 50
Corn, Compton's Early	1 35	Rape, Dwarf Essex	5 01
" Angel of Midnight	1 25	Sugar Cane, Amber	5 00
" Canada Yellow	1 25		
" White Flint, North Dakota	1 35		
" Longfellow	1 25		
" King Philip	1 25		
" Evergreen Ensilage—40 lbs.	2 20		
" Improved Leaming	1 10		
" Cloud's Dent	1 10		
" Mastodon	1 10		
" White Cap Dent	1 10		
" Selected Red Cob	90		
" Mammoth White	85		
" Yellow Dent	80		
Cow Peas, Whip-poor-will	2 10		
" mixed	1 90		
Peas, Blue Prussian	1 25		
" Golden Vine	1 00		
" Grass, bug proof	1 00		
" Potter	1 25		
" Marrowfats	1 50		
Tares, black	1 70		
Vetch, hairy	5 00		

Remit 20 Cents Each for Two-bushel Cotton Bags.

Our Beautifully Illustrated Catalogue of Seeds and Supplies—88 pages—mailed free to all applicants.
LITTLE GIANT GEARED HAND SEED-SOWER—The best seeder offered; gives universal satisfaction; \$1.75 each; smaller size, \$1.50 each.

JOHN A. BRUCE & CO. Seed Merchants, HAMILTON, CANADA.
ESTABLISHED OVER HALF A CENTURY.

Ramsay's Paints

For Painting Homes.



Ramsay's Paints cost little enough to be economical—and cost enough to be good. Any practical painter will tell you that Ramsay's Paints are cheapest in the end.

They hold their fresh, bright colors—won't fade, crack, peel or "blister." They are scientific mixtures—blended in such proportions as 62 years' experience in paint making has proved best.

No matter what shade or color scheme you have planned for your home, you'll find just the right paint in Ramsay's Paints.

Our booklet will help you. We send it free, on request.

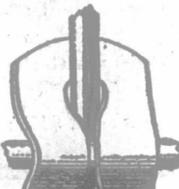
A. RAMSAY & SON, - MONTREAL.
Paint Makers since 1842.

STRONG DURABLE Ideal Woven Wire Fencing

Made of heavy (No. 9) hard steel galvanized wire and with a lock that cannot slip, it is the strongest and most durable woven wire fence manufactured. A style for every purpose.
Write to-day for Catalogue of Fencing and Gates—Free.

The McGregor-Banwell Fence Company, Limited,
WALKERVILLE, ONTARIO.

New Samson Lock.

Does not slip. Will not kink the wires.

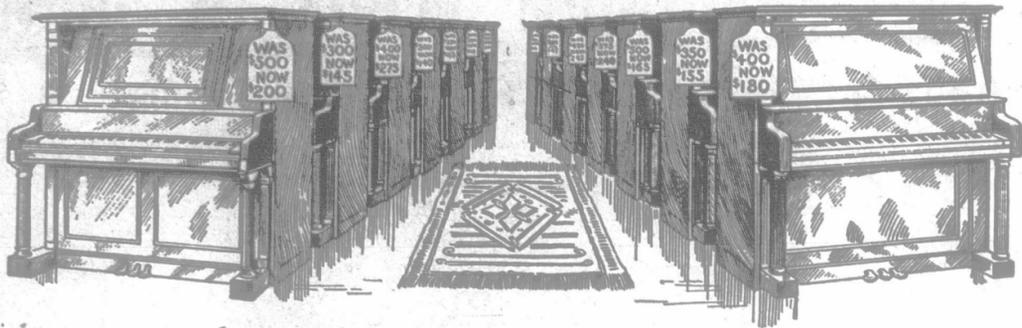
SAMSON LOCK FENCE

Strong, durable, substantial; positively the cheapest in the end.
Its construction: Laterals all No. 9 Hard Coiled Spring Wire; stays, No. 7 and No. 9 HARD STEEL wire. Stays immovably united to lateral wires with the NEW SAMSON Lock—the lock that will not slip up, down or sideways. Samson Lock Fences are "far and away the best." It's the Lock that does it.
We also make a splendid line of ORNAMENTAL FENCES and GATES.
Send for catalogue.
Agents wanted.

The LOCKED WIRE FENCE CO.,
London, Ont. Ltd.

ADVERTISE IN THE ADVOCATE.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



Clearing Sale of Used Pianos

In a great piano business, such as has centered here, there are many chances for bargains—pianos that have been rented or pianos that we have taken in exchange. We frequently have sales of such instruments, but just at this season, when pianos that have been on hire during the winter are returned to us, it is imperative that they be sold quickly. We have marked the prices low enough to insure this, and advise an immediate reply to secure the instrument of your choice.

Some of the pianos were new when hired, and have been used but a few months; the others, though they have been more used, are in perfect order, for our repair experts have after careful examination pronounced them so, and we endorse their verdict with our fullest guarantee—the same that accompanies any new piano.

Terms of Sale.

1. We guarantee every piano, and agree to pay return freight if not satisfactory.
2. A discount of 10 per cent. off these prices for cash.
3. A handsome stool accompanies each piano.
4. Every instrument safely packed without extra charge.

Terms of Payment.

Pianos under \$150—\$10.00 cash and \$4.00 per month, without interest.
Pianos over \$150—\$15.00 cash and \$6.00 per month, without interest.
Pianos over \$250—\$15.00 cash and \$7.00 per month, without interest.

If monthly payments are not convenient, please state what method you prefer—quarterly, half-yearly, or at certain fixed dates. We wish to know what terms will suit you.

Broadwood—7-octave Broadwood & Co. square piano, case handsomely finished in rosewood, with carved legs and lyre, serpentine mouldings, etc.; a fine piano, thoroughly re-made. Price when new, \$350; now.....\$107

Weber & Co.—7-octave square piano by Weber & Co., Kingston; handsome rosewood case, with carved legs and lyre, mouldings, etc.; a reliable piano, with full overstrung scale and iron frame. Price when new, \$375; now.....\$113

Dominion—7½-octave square Grand piano by The Dominion Co., Bowmanville; handsome rosewood case, with fine carved legs and lyre, serpentine and plinth mouldings, iron frame, and overstrung scale; a modern square piano. Price when new, \$450; now.....\$135

Thomas—7½-octave upright piano by C. L. Thomas, Hamilton; dark case, with polished panels carved in relief; tri-chord overstrung scale; has been completely re-made, with new hammers and parts of best quality; height, 4 feet 3 inches. Price when new, \$350; now.....\$168

Dominion—7½-octave upright piano by The Dominion Co., Bowmanville; ebonized case, with polished panels carved in relief; tri-chord overstrung scale; in as good order as when new; height, 4 feet 3 inches. Price when new, \$350; now.....\$175

Wormwith—7½-octave upright piano by Wormwith Co., Kingston; walnut case, with full-length music desk, polished panels hand-carved in relief; a nice-toned instrument, like new; height, 4 feet 6 inches. Price when new, \$325; now.....\$192

Karn—7½-octave piano by D. W. Karn & Co., Woodstock; rosewood case, nicely figured and double veneered throughout; has heavily-flanged iron frame, three unisons, overstrung scale, Wessell, Nickel & Gross action; a fine piano; height, 4 feet 4 inches. Price when new, \$350; now.....\$225

Mendelssohn—7½-octave upright piano by the Mendelssohn Co.; handsome walnut case, full-length music desk, polished panel with border of hand-carving, three pedals, muffler, etc., latest design, used less than ten months. Regularly \$340; now.....\$243

Karn—7½-octave cabinet grand upright piano by D. W. Karn & Co., Woodstock; handsome walnut case, double veneered throughout, polished panels, colonial carving in relief, best Wessell, Nickel & Gross action; a splendid piano; height, 4 feet 8 inches. Price when new, \$450; now.....\$245

Gerhard Heintzman—7½-octave boudoir Grand Gerhard Heintzman piano, beautiful mahogany case of simple and artistic design, with full-length music desk, has all the Gerhard Heintzman improvement, and the less than nine months' use it has had but makes it the more delightful to play on. Regularly \$400; now.....\$295

Gerhard Heintzman—7½-octave Gerhard Heintzman piano, cabinet grand scale, very handsome walnut case with beautiful hand-carving in relief. We seldom have a used piano of this style, for it's a more costly style than we care to rent, but this has had a little use as an auxiliary concert piano. Price when new, \$450; now.....\$322

Gourlay, Winter & Leeming

188 YONGE STREET, TORONTO.

In answering the advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP.

A young Scotch advocate was sent over the Forth as junior in a licensing club case. He had to cross-examine the certifying justice, who was very diffuse and rather evasive in his answers. "Speak a little more simply, and to the point, please," said counsel, mildly—"you are a little ambiguous, you know." "I am not, sir," replied the witness, indignantly. "I have been strict testotal for a year!"

"I'm worried about that young man," said Colonel Stilwell, confidentially, to the hostess, who had introduced him to a rising young astronomer.

"Why?"

"He looked up at the sky and commenced talking about seeing dragons and great bears, and a lot of things, till I took the liberty of telling him that people who can't use things in moderation ought to let 'em alone."

According to information received from Austria, chemists have succeeded in creating a new substance from skimmed milk, the invention being known as galalith or milk stone, which is nothing more than petrified milk.

By a chemical process the casein is precipitated as a yellowish-brown powder, which is mixed with formalin. Thereby a hornlike product is formed called milk-stone. This substance, with various admixtures, forms a substitute for horn, turtle-shell, ivory, celluloid, marble, amber, and hard rubber. Handles for knives and forks, paper cutters, crayons, pipes, cigar-holders, seals, marble, stone ornaments, and billiard balls are now made of skimmed milk. The insolubility of galalith, its easy-working, elasticity, and proof against fire, make it very desirable. Already 20,000 quarts of skimmed milk are daily used for this purpose in Austria.

A story is told of an old family servant on a Louisiana plantation whose devotion to his mistress was exceeded only by his inability to tell the truth. "Jim" would never tell the truth when he could possibly conjure up a lie that would go pretty nearly as well.

One day his mistress lost her temper, and, summoning the aged retainer, she rated him soundly. "Jim," she said, "you have been on this place ever since before I can remember, and ever since I can remember you've been the most unmitigated liar I have ever known. To my own knowledge, you've been promising these forty years past that you'd learn to tell the truth, but you never learn. Now, I want to know, once for all, will you or will you not, in one single instance, tell me the truth?" "Deed, Miss Lizzie," Jim answered, his head hung in shame, "I'll try; but yoo mus' member I was bo'n in dis famby, and I 'spect I'se 'herited some of de famby traits."

Old Gorgon Graham, of the Union Stock Yards, in his letters to his son, Pierrepoint, published in the Philadelphia Post, tells of a horse dealer, named Bill Harkness, who had a theory that the ten commandments were suspended while a horse trade was going on, so he did most of his business with strangers. Caught a Northerner nosing round his barn one day, and inside of ten minutes the fellow was driving off behind what Bill described as "the pearstest piece of ginger and cayenne in Pike County." Bill just made a free gift of it to the Yankee, he said, but to keep the transaction from being a piece of pure charity he accepted fifty dollars from him.

The stranger drove all over town bragging of his bargain, until some one casually called his attention to the fact that the mare was stone-blind. Then he hiked back to Bill's and went for him in broken Bostonese, winding up with:

"Didn't you know the horse was blind? Why didn't you tell me?"

"Yep," Bill bit off from his piece of store plug; "I reckon I knew the hoss was blind, but you see the feller I bought her of"—and he paused to settle his chaw—"asked me not to mention it. You wouldn't have me violate a confidence as affected the repertashun of a pore dumb critter, and her of the opposite sect?" And the gallant Bill turned scornfully away from the stranger.

The Farmer's Advocate

and Home Magazine.

"PERSEVERE AND SUCCEED."

ESTABLISHED 1866.

VOL. XXXIX.

LONDON, ONT., AND WINNIPEG, MAN., JUNE 9, 1904.

No. 611

EDITORIAL.

The Western Outlook.

West of Lake Superior, Canada's prospects are bright for the greatest industrial and commercial year in her history. Like all other parts of the continent, spring weather was late in appearing, but when it did come it came in earnest, and the heavy snowbanks that were piled up in March caused many rivers and streams to reach the high-water mark, and low-lying lands were flooded. Seeding operations began quickly, however, as they always do on Canada's prairies, and little time elapsed until reports were coming from various districts that the seed was in the ground under very favorable conditions. Quickly as did spring weather arrive, the growth of plants even appeared to come quicker, until to-day everyone in Manitoba and Assiniboia is agreed that crops are farther advanced than at the same date one year ago. In Alberta, particularly its southern part, the prospects in this respect appear even more bright. With a late fall and a very mild winter came an early spring in the land over which the "Chinook" blows, and as early as March considerable seed found a resting place in the soil. In the same country, too, and further north, where fall wheat is grown, the reports of its having wintered well are most encouraging, and lend the assurance that this crop is to be a mainstay of the farmer in the immediate future.

All that will be required, therefore, for the production of another "bumper" crop is a reasonable amount of rainfall during the next five weeks, but the soil at present contains much more moisture than in an average season at this date.

The acreage of wheat and other cereals sown this year, as might be expected in a country so rapidly becoming populated, is a considerable increase over 1903. In Alberta, Assiniboia and Northern Manitoba the increase is quite noticeable, owing to the vast stretches of virgin prairie which were broken one year ago.

IMMIGRATION.

Train-load after train-load of immigrants continue to arrive almost daily, and the casual observer who visits the depots at Winnipeg, or perchance sees the travellers from the south by the "Soo line" at Moose Jaw, might conclude that soon the vacant lands would all be taken, but not so. The West is vast in its expanse of territory, as well as rich in its productiveness of soil.

Generally speaking, the class of new settlers who are arriving shows a high degree of intelligence. The American invasion continues, and from Old England the increase is very considerable. Scotland, too, sends her brawny boys, but the sons of Erin's Isle are sadly in the minority. From the continent of Europe large numbers continue to arrive, particularly from Galicia, Austria and Germany.

RAILWAY BUILDING.

In railway construction and improvement the year 1904 will be the greatest in the history of the West. The C. P. R. are extending the Kirkella branch into Last Mountain Valley, constructing a branch eastward from Wetaskiwin, Alta., and making very extensive improvements in their main line. The C. N. R. will make a great effort to reach Edmonton, via Prince Albert, to which town they are now nearing, before next winter, but it is doubtful if they will be able to accomplish it. One contractor has the grading, leveling and ironing of five hundred miles. In addition to this line, the C. N. R. will finish or con-

struct several shorter branches throughout Manitoba and extending into the Territories.

WINNIPEG'S DOMINION FAIR.

Any reference to the progress of events in the West would be incomplete at the present time without mention of the preparation which is being made for the Dominion of Canada Exhibition, which will be held in Winnipeg, July 25th to August 6th. The changes which have been already made in the buildings in Exhibition Park are such that those who have visited it in the past would fail to recognize it as the old show ground. Neither energy nor money is being spared in an effort to make the exhibition a gigantic success. The grounds have been enlarged, the old buildings moved or torn down and reconstructed, and many new structures are rising to accommodate the long list of exhibitors who have signified their intention of being present.

Seed-grain Growing.

Pure seed grain, free from weed seeds, and of highly-developed quality, is one of the needs of Canadian agriculture at the present time. A lamentable indifference still exists in many quarters on the subject. Many farmers who realize the need and the great advantage of using pure-bred live stock are very slow to be seized of the reality of the improvement that would result from the use of better seed grain properly produced under good cultivation. The grain plots of the Experimental Farms and the annual distribution of seed packages have been an object lesson and a stimulus in good grain-growing, especially along the line of improved varieties. Another move in that direction was instituted by the Agricultural Commissioner, Dr. Jas. W. Robertson, in the distribution of prizes for the growing of grain from specially selected seed. From this was evolved the idea of a Canadian Seed-growers' Association, and the growing of what might be styled pedigree seed. A "Seed Division" was also inaugurated in connection with the Department of Agriculture, Ottawa, presided over by a practical enthusiast on that subject, Mr. G. H. Clark, whose work at the seed fairs, and in the clover and grass seed investigations, has been most commendable. Hon. Mr. Fisher, the Minister of Agriculture, has reintroduced his bill governing the sale of seeds, at the present session of the Canadian Parliament. As a still further step in extending the work of seed-growing, Dr. Robertson has now decided to call a meeting of a number of leaders in agriculture from different parts of the Dominion at Ottawa, to consider the constitution for a Seed-growers' Association, and perfect plans for carrying on its work in such a way as to be productive of the most practical and immediate good to the cause of Canadian farming. From its initial issue, some forty years ago, the "Farmer's Advocate" has steadily practiced the gospel of good cultivation, constant fertilizing, and the use of new and improved varieties of grain, not a few of which it was, in days gone by, the means of introducing, and it therefore cordially commends the objects of the gathering, which is to be held in the Imperial Building, Queen Street, Ottawa, on June 15th and 16th. In addition to the subjects above outlined, the meeting would do well to give some attention to checking the endless advent of alleged new varieties of plants of various kinds, for which fabulous claims are made by those who are exploiting them at fancy prices, but the growing of which, in nine times out of ten, results in disappointment and waste of money.

Sugar Consumed in Canada.

In your last issue I briefly discussed the comparative merits of cane sugar and beet sugar. In this article I wish to present a few facts concerning the amounts of these two sugars consumed in Canada.

In reply to a letter addressed to the Commissioner of Customs, Ottawa, asking for information regarding the quantity and value of sugar imported into Canada, the following statement was received: The quantity and value of sugar imported for consumption into Canada during the fiscal year ended June 30th, 1903, was as follows:

Article.	Country.	Lbs.	Value.
SUGAR,	G. Britain	4,097,077	\$ 75,659
above No. 16	B. Guiana	100,487	1,856
D. S. in	B. W. Indies	99,285	1,900
color, and all	Hong Kong	725,766	17,825
refined	Austria-Hungary	2,051,757	44,220
sugars of	Belgium	280,290	6,842
whatever	China	11,793	266
kinds, grades	Germany	13,286,374	456,528
or standards.	Holland	1,740,362	36,046
	Japan	218	4
	Norway & S.	290	8
	Porto Rico	1,173	29
	United States	4,277,215	123,299
	Total	26,672,033	\$768,912

Article.	Country.	Lbs.	Value.
SUGAR, N.	B. E. Indies	2,797,200	\$ 58,740
E. S., not	B. Guiana	28,981,753	588,809
above No. 16	B. W. Indies	69,661,881	1,092,716
D. S. in color,	Fiji Islands	2,097,900	45,718
sugar drain-	Hong Kong	11,292	201
ings, or pump-	Belgium	38,868,725	592,908
ings drained	China	3,776	81
in transit,	Danish W. Indies	600	12
melado or con-	Dutch E. Indies	25,718,375	488,425
centrated	France	19,418,819	305,689
melado, tank	Germany	173,946,097	2,985,716
bottoms and	Peru	4,684,671	80,808
sugar con-	Porto Rico	1,945	56
crete.	United States	508,265	11,597
	Total	361,698,799	\$6,150,926

If we add to these totals the fifteen million pounds of home-manufactured sugar on which the Ontario Government paid bounty, we have a total of 403,370,832 pounds of sugar imported and manufactured from June, 1902, to June, 1903, or a little over 70 pounds for every man, woman and child in Canada.

Of the total amount of sugar imported that year, only 26,672,033 was refined. Assuming that all the refined sugar brought from European countries was made from beets, only 20 per cent. of this total was cane sugar. If we include that received from the United States as beet sugar, less than five per cent. was cane sugar.

In the case of the unrefined sugars, a little over 62 per cent. was imported from the beet-sugar producing countries of Belgium, France, and Germany. A comparatively small amount was got from the United States, and that would undoubtedly be cane sugar. Germany alone supplies us with just about one-half of our refined and unrefined sugar.

From these figures it is evident that NEARLY TWO-THIRDS OF THE SUGAR USED IN CANADA IS MADE FROM BEETS. As the sugar from beets and cane are chemically the same, and, when properly refined, hardly distinguishable, even by experts, it must follow that the ordinary person does not know the source of the sugar being used, and that any prejudice there may exist against beet sugar is not warranted.

R. HARCOURT, Chemist.

Ontario Agricultural College.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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Echoes.

A. G. Dickson, Northumberland, N. B.—I have taken the "Advocate" since 1889, and appreciate it very highly. The weekly issue is a great improvement indeed.

Albert Fuller, Middlesex, Ont.—I do not want to drop the "Farmer's Advocate." It is too good a thing to lose. I am sure the weekly paper is a great improvement.

E. Humphreys, Elgin, Ont.—We like the new form of the "Advocate" extremely well, and would not be without it for five dollars.

W. S. Rutherford, Peterboro, Ont.—Enclosed find \$1.50 for the renewal of the "Advocate," as we would not think of doing without it for twice the money.

Willie J. Moak, Stormont, Ont.—Since the "Advocate" has become a weekly it is an up-to-date paper, meeting the requirements of the farmer in every respect.

Siftings.

More pure-bred bulls should be converted into steers. It would help the steer classes at the shows, and also help the pure-bred business.—[Live-stock World.]

In truth, an aged boar should be buried with all the honors, and turn, like "Imperial Cæsar," to clay, and not to bacon.—[The Druid.]

The spectacle has been seen of an eminent botanist wasting his time and abilities over an insignificant weed like the "Shepherd's purse," and neglecting the much more important food plants; a great anatomist engrossed in the study of the bones of the frog, and passing by the domestic animals; and a great geologist investigating the composition of the unimportant mineral "camptonite," while the mineralogy of the soil was reckoned of no account. If these and many others in like positions would take up matters of use to the human race, we might progress in farming and many other branches a good deal faster.—[Primrose McConnell, B. Sc.]

HORSES.

Hernia or Rupture in Foals.

HERNIA OR RUPTURE is a tumor formed by the displacement or escape of a portion of an internal organ from its natural cavity through an opening in the walls of the cavity. It projects externally, as a more or less soft, fluctuating tumor, enclosed by the skin. Abdominal herniæ are divided into reducible, irreducible and strangulated, according to their condition; and into umbilical, scrotal, inguinal, ventral and diaphragmatic, according to their situation.

A hernia is reducible when it can readily be returned into the abdomen. It consists of a soft, fluctuating swelling, unattended with heat, pain, or uneasiness. Its size and consistence varies somewhat, according to the stage of digestion after each meal. When the animal coughs, it becomes tense, larger, and communicates a sudden impulse to the hand of the examiner.

A hernia is irreducible when it is not strangulated, but yet cannot be returned into the abdomen. The causes that prevent reduction are: 1st, the bulk of the protruded organ is out of proportion to the opening through which it would have to return; 2nd, adhesions of the protruded parts to the walls of the sac, through the medium of organizable lymph.

A hernia is said to be strangulated when the contents of the sac, by virtue of ingesta that has passed into them, experience such a degree of pressure as not only to cause them to be irreducible, but also, by compressing their blood vessels, to disturb, impede or suspend the circulation within them. This condition speedily causes serious inflammation in the protruded parts, which extends and involves others within the abdomen.

A hernia is called umbilical when the protrusion of any portion of the bowel takes place through the navel opening; scrotal when into the scrotum; inguinal when the intestine reaches the inguinal canal, but does not pass to the scrotum (this form is not easily recognized); it is called ventral when the protrusion occurs through an artificial opening in any part of the abdomen; diaphragmatic when the diaphragm (the partition between the lungs and the stomach) is ruptured, and a portion of the stomach protrudes into the lung cavity. A hernia is said to be congenital when it exists at birth, and the protrusion is through one of the natural fetal openings which under normal conditions become closed at birth.

UMBILICAL HERNIA.—We wish in this article to discuss umbilical hernia in foals. During fetal life the blood vessels and urachus of the fetus pass out of the body through an opening, called the umbilical or navel opening. This aperture, under normal conditions, closes at birth, when the functions of the vessels mentioned cease, but in some cases this closure does not take place, and hernia is noticed at once, or appears in a few days. In some cases the closure of the opening, while it may be complete, may be lax and weak, and rupture may take place from violent efforts at any time, until the animal is two or three years old.

The symptoms of umbilical hernia are evident. There is a soft, fluctuating tumor, of greater or less volume, from the size of a marble to that of a goose egg, or even larger, on the floor of the abdomen, at the navel. This tumor can be readily returned by pressure into the abdominal cavity, but usually reappears quickly when pressure is relieved. In the majority of cases the animal appears to suffer no inconvenience. When such a condition exists, there is seldom cause for alarm, and it is seldom necessary to treat; at the same time it should be closely watched, and if it is noticed that the bulk of the tumor is gradually increasing, treatment must be resorted to. In young animals, the omentum and mesentery (those portions of the membrane lining the abdominal cavity, in which the intestines are suspended) are looser and longer than in the adult, and gradually shorten, and thereby draw the protruded intestine into the cavity, thereby effecting a spontaneous cure. Of course, where the hernia is either irreducible or strangulated, this cannot take place, and an operation by a veterinarian is necessary. If the tumor is noticed to be gradually decreasing in bulk, or even remaining about the same, it is better to leave it alone, and allow nature to effect a cure, but if its volume be gradually increasing, or if after a few months it is not decreasing, treatment is indicated.

TREATMENT.—There are many modes of treatment, some of which can be given only by an expert, viz., cutting through the skin, exposing the intestine, returning it into the cavity, scarifying the margin of the opening, and stitching with carbolized catgut or silk, and then stitching the skin; second, placing the patient upon its back, carefully returning the intestine, gathering up the loose skin, and enclosing firmly in a clam, or pass-

ing skewers through it and tying with a cord in the form of the figure 8, so tightly as to shut off the circulation. Whichever method is adopted, care must be taken to not enclose any portion of the intestine. The animal is then allowed to rise, and no further treatment is necessary until the enclosed tissues drop off, which usually occurs in 10 to 14 days; then the raw surface should be dressed daily with an antiseptic, as a 5 per cent. solution of carbolic acid. Either of these operations, if properly performed, is successful in removing the hernia, but the results are not always favorable, as it is not uncommon for lockjaw to result after any operation for this purpose that causes a raw surface.

Another and safer, though often a more tedious mode of treatment, is the application of a truss. This does not produce a sore, hence the danger of lockjaw is avoided. A truss of leather, or strong sacking, about four inches wide, with a protuberance about the size of half a large orange on its surface, is placed around the abdomen, the protuberance being placed over the navel after the hernia has been forced into the cavity; straps and buckles, or strings, are needed to adjust the truss. The tendency is for the truss to slip backwards, and this must be avoided by attaching to the anterior border of the truss, either straps or strings, which come forward between the fore legs and from the sides, and attach to a strap around the colt's neck. A man has an opportunity of exercising his ingenuity in adjusting a truss for this purpose. Care must be taken to not cause sufficient friction to scarify the skin, and close watch should be given, and the truss readjusted if it becomes displaced. In the majority of cases this will effect a cure in from two to three weeks, and in the meantime the colt is allowed to run with its dam. If the abdominal opening be quite large, the truss may fail to effect a cure, and one of the operations mentioned becomes necessary, notwithstanding the risks mentioned. "WHIP."

Favors Licensing Stallions.

To the Editor "Farmer's Advocate":

Having noticed in your issue of May 5th an article from J. J. A. regarding licensing stallions, I agree with every word he says, and I fully believe that many farmers who are no judge of a horse are imposed upon by owners of inferior stallions. I know of more than a dozen farmers who bred to a stallion because the owner had a good cut of a horse on his bills; they thought it was the horse's picture. I know of another party who has a registered Clyde stallion, and insures a foal for \$5.00, and his veterinary says the horse has two thoroughpins. Now, I believe if farmers knew this they would not use this horse at any price. I would suggest that the "Farmer's Advocate" take this matter up, in whatever way they think best, for their past record has convinced me that they can accomplish anything they undertake, and they will be doing a twofold good by protecting the farmer who is a poor judge of a horse, and by encouraging the men who are not afraid to invest a good price for a good pure-bred stallion. Prescott Co., Ont. G. A. R.

Drafters Show.

Reports current indicate that the champions of the different draft breeds of horses intend to make one of the strongest exhibits of draft geldings yet seen at the St. Louis Fair, and afterwards at the 1904 International. Rumors are circulating to the effect that the best Britain and the continent can produce will be in competition with the choice of the States and Canadian-bred drafters. A story is going the rounds that a specially selected lot from Scotland is now being prepared near Montreal for these two great shows. Whatever of truth there may be in these rumors, one thing is certain, and that is a few of the largest interests in the States are collecting the best that country can breed, and are prepared to give all comers a struggle for the honors. When the best of the two best horse-producing continents meet there should be something doing.

Examples for Boys.

Christopher Columbus was the son of a weaver and also a weaver himself.
Claude Lorraine was bred a pastry-cook.
Cervantes was a common soldier.
Homer was the son of a farmer.
Demosthenes was the son of a cutler.
Oliver Cromwell was the son of a brewer.
Howard was an apprentice to a grocer.
Franklin was a journeyman printer and son of a tallow-chandler and soap-boiler.
Daniel Defoe was a hosier and son of a butcher.
Cardinal Wolsey was the son of a butcher.
Lucian was the son of a maker of statuary.
Virgil was the son of a porter.
Horace was the son of a shop-keeper.
Shakespeare was the son of a wool-stapler.
Milton was the son of a money scrivener.
Robert Burns was the son of a plowman in Ayrshire.—[Exchange.]

STOCK.

Pigs Profitable.

Pigs are kept in smaller or larger numbers on nearly every farm. They are considered a necessity for consuming and utilizing kitchen swill, portions of vegetables and other scraps, as well as skimmed milk and buttermilk, much of which would be wasted and a nuisance but for this outlet. With a plot of clover, alfalfa, vetches or rape, for pasture, in addition to the above foods, they require but little in the way of expensive feeding for the first five months of their life, and at six to eight months may be made ready for the market at a moderate cost of production. The prices that have prevailed in this country in the last few years for pigs of the best type and quality for the export trade, have made the raising of pigs one of the most profitable branches of farming; and much progress has been made in the improvement of the quality of the swine, not only in the herds of the breeders of pure-bred stock, but also of those raised by the farmers generally. The importation and distribution of the large, lengthy English breeds has been a principal factor in bringing about this improvement. This class has proven to be prolific, producing large litters of pigs of the lengthy sort, not given to becoming too fat in the first weeks of their life, predisposing to thumps and apoplexy, while sucking the sow, as is often the case with short, thick sorts; hence a much larger percentage of the pigs born are raised and continue to grow vigorously from the first, and make the most desirable class for the export trade, bringing the highest price in the market, and helping to swell the cash returns from the operations of the farm. It makes a wide difference to the farmer whether he is keeping sows capable of producing and raising only a half dozen pigs or one that can successfully mother a dozen, and if a larger proportion of the litter in the latter case live to meet the market it is so much the better.

The price at which a pure-bred boar or sow, or both, can be purchased in these times need not hinder any farmer from securing the most profitable class, and so rapidly do pigs increase, they very soon repay the first cost, and go on to make money for their owner. Breeders of pure-bred hogs in this country have shown commendable enterprise in undertaking the expense and risk of importing stock of the best class and selling the produce at moderate prices, and they are worthy of the liberal patronage of the farmers who are not in a position to import, and could not possibly obtain the advantages of improved stock at nearly as little cost but for the progressive spirit of the importers and breeders. The breeders who advertise in the "Farmer's Advocate" are prepared to supply such stock at prices which should cause no complaint, and the stock advertised to be sold at auction may be bought at the buyers' own price. Even a good imported boar may in this case be bought for a sum that his first season's services will more than repay, or a sow carrying a litter, may in this case be bought for a price that her first litter may easily repay. If prices for hogs have been somewhat lower for the last few months than for a year or two previously, they are yet bringing a good price, with every prospect of being higher in the near future. The British market will take all we can raise in the line of bacon and dairy products, if we furnish the right quality, and Canadian farmers, as a rule, can do better by keeping cows and raising pigs than by any other line of farming.

Value of a Brood Sow.

No animal kept on the farm exhibits greater possibilities than the brood sow. Her value as a producer is almost without limit, and certainly beyond the credit that is usually accorded her.

As an illustration of what a good brood sow may yield her owner, under proper management, we cite the very excellent record of a sow owned by J. E. Smith, of Blackhawk County, Iowa. This sow started four years ago this spring, and has produced her owner one of the finest herds of the State, says Nebraska Farmer. The sow in question is the mother of seventy-two swine, that have either passed into the hands of the packer, or have acquired age and size for the slaughterer.

During the past year this sow gave birth to two litters of pigs, one containing 12 and the other 10 pigs. Of six litters of pigs, each has averaged 12, making a total of 72. The sow has practically stocked the farm, as six of her litter of a year ago were females, which this year produced 52 healthy pigs.

A Tribute from the U. S.

I enjoy reading the "Farmer's Advocate" very much, and think the high moral tone of the paper one of the best I know of in existence.

T. J. WORNALL, Sec. and Treas.,
American Royal Live-stock Show,
Liberty, Mo., U.S.A.

Peculiar Breed of Goats.

In his records of his visit to Britain in the years 55 and 54, B. C. (Bellum Britannicum), Cæsar has told of curious animals which he there saw, animals somewhat resembling antelopes, but which possessed the peculiarity of having no joints in their legs, and which, being thus unable to lie down, were compelled to sleep leaning against trees. It has been said that history repeats itself, and verily in this case would it seem to be so. In an article sent to us by Doctors White and Plaskett, of the Nashville Veterinary Hospital, Tenn., we are told of a species of goats

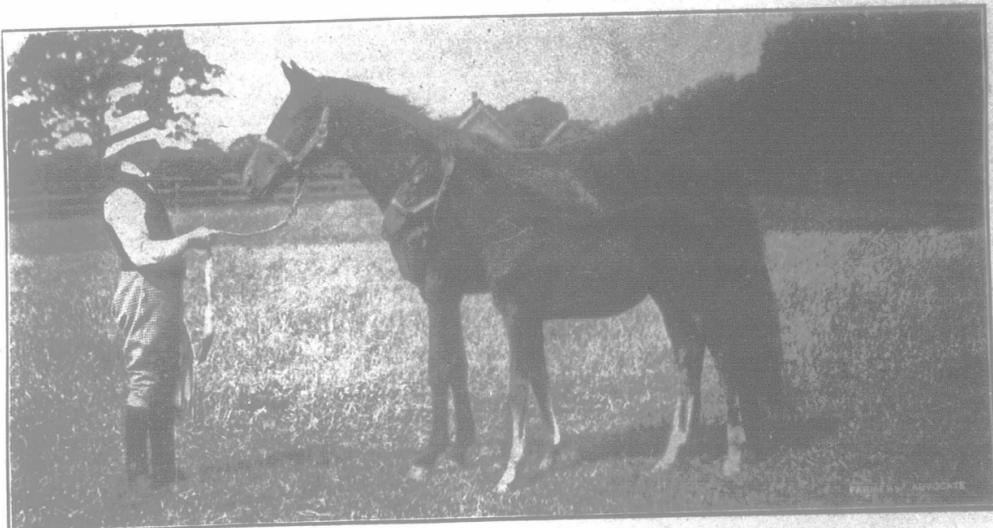


C. P. R. Bridge at Saskatoon.

It was the washing away of a span of this bridge that delayed traffic on the Prince Albert branch for many weeks.

which, in this twentieth century, if lacking the constitutional rigidity of the animals described by Cæsar, yet possess the power of attaining to it. These goats are to be found at Ewell Stock Farm, Maury Co., Tenn., and are known as "nervous," "stiff-legged," or "fainting" goats. In the words of Doctors White and Plaskett: "They are easily frightened, and to simply 'Boo' at them will cause them to fall helplessly to the ground, and remain there until the spell leaves them. The mere effect of jumping over a fence or bar, over 15 or 18 inches from the ground, is sufficient to cause them to become stiff and 'faint.' When under these spells, they can be dragged about as if they were dead. They become so rigid that they can be lifted bodily without bending." These convulsions last from ten to twenty seconds, the animals meanwhile seeming to be in full possession of their faculties, though in apparent agony. After the paroxysms subside, they walk off stiffly, their gait then resembling that of a horse suffering from tetanus. The young kids exhibit all the characteristic fainting symptoms of their parents. "The reasons for such a peculiarly high-developed, nervo-muscular system," say the doctors, "we shall not attempt to explain. Suffice it to say that this trait has become so well marked, and so thoroughly established, that we are justified in classing this animal as a new, separate and distinct breed."

What practical men require most to learn is to judiciously blend the feeding materials which lie to their hands. Cattle feeding is the practical man's lifework.—[George Brown, Caithness.



An English Thoroughbred Mare, Lady Disdain, by Bend Or-Maid Marian, with Foal by Mimic.

The produce of Bend Or's mares were remarkably successful on the English turf last year.

A Tribute to Grass.

"Next in importance to the divine profusion of water, light and air, those three physical facts which render existence possible, may be reckoned the universal beneficence of grass. Lying in the sunshine among the buttercups and dandelions of May, scarcely higher in intelligence than those minute tenants of that mimic wilderness, our earliest recollections are of grass; and when the fitful fever is ended, and the foolish wrangle of the market and the forum is closed, grass heals over the scar which our descent into the bosom of the earth has made, and the carpet of the infant becomes the blanket of the dead.

"Grass is the forgiveness of nature—her constant benediction. Fields trampled with battle, saturated with blood, torn with the ruts of cannon, grow green again with grass, and carnage is forgotten. Streets abandoned by traffic become grass-grown, like rural lanes, and are obliterated. Forests decay, harvests perish, flowers vanish, but grass is immortal. Beleaguered by the sullen hosts of winter, it withdraws into the impregnable fortress of its subterranean vitality, and emerges upon the solicitation of spring. Sown by the winds, by wandering birds, propagated by the subtle horticulture of the elements which are its ministers and servants, it softens the rude outlines of the world. It evades the solitude of deserts, climbs the inaccessible slopes and pinnacles of mountains, and modifies the history, character and destiny of nations. Unobtrusive and patient, it has immortal vigor and aggression. Banished from the thoroughfare and fields, it bides its time to return, and when vigilance is relaxed, or the dynasty has perished, it silently resumes the throne from which it has been expelled, but which it never abdicates. It bears no blazonry of bloom to charm the senses with fragrance or splendor, but its homely hue is more enchanting than the lily or the rose. It yields no fruit in earth or air, yet should its harvest fail for a single year, famine would depopulate the world."—[Ingalls.

Rape for Sheep and Hogs.

No forage crop of the farm will supply so much flesh-forming food at so little cost as rape. Sown any time in June or early in July, on well-prepared ground, broadcast, at the rate of five pounds to the acre, or preferably in drills 26 to 30 inches apart, sowing two or three pounds to the acre, and cultivating between the rows, it will in six to eight weeks produce a large amount of palatable and nutritious stock food, on which sheep and lambs, young cattle or hogs, will rapidly lay on flesh, and keep in the best of health. When eaten down it will, if stock be taken off it for a few weeks, grow up vigorously again, making good pasture right up to winter. It is well to have a small field, or a portion of a field, near the hogpen, sown to rape, and have some movable hurdles to fence off a small portion at a time, so that the pigs may not roam over and soil or tramp down more than they eat. Hogs will require a light grain ration in addition, but sheep and cattle need no other feed when once accustomed to eating it. These should not be turned into rape at first when it is wet from dew or rain, as bloating may occur, and it is well at first to give them the run of a pasture field as well, but when used to it there is seldom any loss from bloating or scouring.

Oxford County Show, England.

The annual show of this Society took place May 10th and 11th, and its entry was fully up to the average. This has the advantage of being the first of the more important County shows, and we find the classes strongly supported, and many of the leading animals of the coming season competing.

Shorthorns were an excellent class. Mr. R. P. Cooper won first in the older bull section with Rose Victor, by Lord Victor, bred by Mr. Ercroft. To this bull the championship for the best Shorthorn was also awarded. The reserve number for the latter honor went to Mr. H. S. Leon for the beautiful roan yearling bull, Challenger, bred by W. S. Marr, and sired by Baron Beaufort. Amongst the other Shorthorn winners in the bull classes, we may mention Mr. E. M. Denny, first in two-year-old section with Ascot Constellation; Mr. J. T. Hobbs, with Royal Monarch; Mr. J. Deane Willis, with Bampton Matador; and Mr. G. Freeman, with Donald of Cluny. The female classes were specially strong, particularly the grand pair of yearling heifers, Lady Broadhooks, by Franciscan, and Red Rose of Stratton 21st, by the same sire. These were exhibited by Viscount Baring, and they took, in addition to first and second prizes in their class, the champion prize and the R. N. for the best female. Captain W. O. Duncombe, with Meadow Queen 7th, by Prince of Sanquhar, won first for aged cow; Mr. L. de Rothschild, with May Blossom, coming second. A very typical heifer, Hawthorn Flower, by Calro, won first for Mr. J. Colman in the three-year-old class. Buscot Favorite, by Wanderer's Prince, from Sir A. Henderson's herd, was a good second. In two-year-old heifers, Mr. H. S. Leon's Roseleaf, by Silver Mint, was first, and that typical heifer, Henrietta, by Silver Plate, from Mr. J. Deane Willis, came in for second honors.

Herefords were in small numbers, but of excellent quality. Mr. Peter Coats, with Holmer, won first for bulls, and the Earl of Coventry, with Hogarth, second. Mr. G. D. Faber, M. P., won in the cow class with Ivy Lass, bred by Mr. Richard Green.

The Aberdeen-Angus were a small entry of notable quality. Mr. R. W. Hudson took first and second for bulls, and second and third for females, the winner in the latter class being Mr. W. D. Greenfield.

Jerseys made a very large entry indeed, Mrs. McIntosh taking champion both for bulls and cows, the former with Brompton, and the latter with Linda. Lord Rothschild won the "Blythwood Bowl" with Oxford Pride. The Marquis of Winchester was a leading winner, amongst the awards he won being the R. N. for champion bulls with Compion, and the R. N. for the "Blythwood Bowl," with Guarantee 6th.

THE HORSE SECTION

contained many useful animals, mostly of the Shire breed, Captain W. H. O. Duncombe, with Duke Albert of Waresley, winning the Shire Horse Society's medal. The classes, however, were not limited to Shires, but open to general agricultural horses, and these, will therefore be dealt with better at later shows where the classes are reserved for the several distinct breeds.

SHEEP.

Oxford Downs.—This year's entry was not up to the average either in merit or number. The yearling rams were headed by one from Mr. Albert Brassey, a meritorious sheep, but not so good a one as we have seen in former years win champion honors. Mr. H. W. Stilgoe was second and fourth, and Mr. J. T. Hobbs third and fifth in this class.

The ram lambs and ewe lambs were somewhat uneven, but the lambs from Mr. Albert Brassey won first prize in each case, and those from Mr. J. T. Hobbs the second prize. Mr. Brassey also won the special prize for the best ram lamb. Two pens from Maisey Hampton won first and second prize in the yearling ewe class. Mr. J. T. Hobbs also won the champion prize for the best pen of ewes, and the first prize for ewe tegs in full fleece.

Hampshire Downs made a grand entry, and probably at no former show has Mr. James Flower been represented by better or more typical lots of yearling ewes, ram lambs and ewe lambs. They were simply superb. Taking the classification in order, we find Mr. H. L. Cripps winning first for yearling rams, closely followed by that of Mr. Flower. Third prize went to a real good ram from H. C. Stephen. Mr. James Flower won hands down for ram lambs, to which the champion prize for best pen of lambs was awarded, the R. N. for this honor going to the same owner's ewe lambs. Mr. H. C. Stephen took second honors for three ram lambs; one of these was a notable lamb, perfect in type, symmetry and wool. To this lamb the judge awarded the special prize for the best ram lamb, the R. N. for this honor being taken by one of Mr. Flower's. The last named competitor was first and second for yearling ewes, which also were made champion females, and a grand lot they were. In ewe lambs, one of the finest pens we have seen for many a day won first for Mr. Flower. A useful pen from Mr. R. L. Ovey were second. Sir W. G. Pearce came in for third honors, and a pen of rare good merit from Mr. H. C. Stephens were reserve number.

Southdowns were an average entry of fair merit. Mr. C. R. W. Adeane won champion, first and third for yearling rams, which were of very high merit and

most typical quality. Col. A. F. Walter took second honors. Mr. Adeane again won for ram lambs, and Mr. Ellis, with a pen of most typical lambs, won second honors. These lambs looked like growing into first-class sheep. Col. Walter won for yearling ewes, Mr. H. L. T. Brassey being second, with Mr. Ellis R. N. Had the order been reversed, it would probably have been more in accord with the actual merit of the sheep exhibited.

Cotswolds found at last only one representative at the County show, where in former years they numbered almost scores; Mr. Russell Swanwick, the only exhibitor, sending three sheep of excellent merit and quality.

SWINE.

Berkshires.—An entry of 72 represented this breed, and it is many years since we have seen in this show ground so good an entry, both in respect to number and merit. Mr. J. Jefferson with Peel Champion, scored a notable triumph. He won first for old boars, champion for best Berkshire, and champion for best boar in the yard. This is a particularly fine pig, and one whose merit and quality is seldom equalled. McKinley, from the same herd, was third, and Manor Grand Duke, from Lord Calthorp, was second. The Middlesex County Asylum won first for young boars, and Mr. J. A. Fricker second. In the brood-sow class; Mr. Jefferson, with Peel Elsie, won first with ease, and she also won a special prize for best Berkshire sow, and the R. N. for the champion prize for the best pig in the yard. Polegate Devonian won second prize for the Duchess of Devonshire, and was also R. N. for the best Berkshire sow—a very fine and typical animal. Messrs. R. W. Hudson, W. H. Tyser, J. Jefferson, J. A. Fricker, and the Duchess of Devonshire were the leading winners in the young pig classes.

Any Other Breed.—First and third honors for boars and R. N. for sows were won by Mr. Sanders Spencer. A magnificent young boar, Walton Topper, won second prize for Sir Gilbert Greenall, and the same owner's sow, Walton Rose 14th, took the same position in the sow class—a pair of very fine pigs. Mr. Richard Ayre won first and third with two splendid sows of very high merit, both by Borrofield Topman.

W. W. C.

A Stockman's Opinion re the Extended Pedigree.

Surely there is no one who will dispute the superiority of the extended pedigree over the system in use in books of record. The one possible objection to the extended pedigree is its length, but that is prohibitive. I doubt if the nineteen volumes of the Dominion Herdbook would hold one of the long pedigrees recorded in it if it were extended its full length. Of course your proposal to discard four-fifths of the length of such pedigrees simplifies that a good deal, but it would be a good deal like cutting off a man's head to cure a toothache—it is a sure cure, but neither the head nor the tooth is worth much afterwards.

It is quite true, as you say, our registrations do not show the animal's breeding—they are only an index to the breeding—and if a man had all the records at hand and a few years to spare for the purpose, he could trace one pedigree back a good way, but the animal would probably be dead long before he had the pedigree traced.

For my own part, I would prefer a pedigree of even four crosses, if I knew every animal represented in that pedigree was a good one, to one with twenty-five crosses that I knew nothing about, but the extended pedigree doesn't show anything more in that way than the present system.

If you can devise some system of registration that will give this information, without the appalling length of the extended pedigree, you will do breeding of all kinds a service not easily over-estimated.

WALTER LYNCH.

The Toronto Globe, in commenting on the proposition to include nature study in the curriculum of subjects for High and Public Schools, says: "Cruelty to animals is worse for the human beings who inflict it than for the animals who suffer it. The practice of cruelty is its own punishment. It hardens the heart, deadens the sensibilities, and lessens the amount of enjoyment obtainable through the activity of the emotional nature. To watch the phenomena of animal life is more than interesting, it is fascinating. It is its own reward as cruelty is its own punishment. Animals under continuous observation rise to companionship and appeal to the observer as comrades. No one who has spent time in watching their antics and devices could take pleasure in the thought of destroying them in the spirit of mere wantonness." May this crusade against cruelty keep on. This is the twentieth century, and high time that men should become men, not barbarians.

Some learned men have so many kinks in their grey matter that any practical ideas are lost on the way out.—[Nomad.]

Pedigree has come to be regarded as the object of breeding, instead of what it really is, a means to the end of producing good cattle.—[Hon. Hy. J. Scott.]

FARM.

Bindweed and Black Bindweed.

To the Editor "Farmer's Advocate":

On page 674, May 12th issue, under the heading, "Spraying for Mustard" (and again in the issue of May 26th), appears the information that this operation also destroys bindweed. Such a much-to-be-desired fact led me to read further in the quest for fuller particulars, when I learned that it was not bindweed, but black bindweed, to which reference was intended. If I may be permitted, I might explain that these names belong to two distinct weeds. Black bindweed is the weed which is, perhaps, more commonly known in Ontario as wild buckwheat, and while an extremely common weed, is an annual, and, consequently, yields readily to timely cultivation.

Bindweed, or wild morning glory (*Convolvulus arvensis*), is a perennial, with long, slender roots, reaching deeply into the subsoil, thus giving it a remarkably tenacious hold on life. This is the weed which is becoming such a notorious pest in many localities of Ontario.

The mistake noted above was doubtless one of names; and yet anyone not well acquainted with both weeds, might possibly confuse the plants. They both have twining stems, which encircle and entangle the plants among which they grow. There is a marked similarity also between their leaves; but when they are in blossom they are easily distinguishable by their flowers—those of wild buckwheat being small and inconspicuous, while bindweed has a flower like that of the cultivated morning glory, whitish, and about an inch across.

While it would, of course, be extreme to say that bindweed cannot be killed, it is doubtful whether it can be completely eradicated where it has overrun a farm, particularly if it has reached the fence ground and uncultivated land. My personal experience with it is limited to an area of about one square rod. After four years of extreme measures with it, I had the satisfaction last summer of knowing that it had been a successful experience. The wonderful vitality and tenacity of this weed is attested by the fact that not until it had been for four years almost continuously prevented from reaching sunlight, did it entirely disappear. Though it has been eradicated in this case, it must be borne in mind that this was accomplished by an amount of attention which would be impracticable and forbiddingly expensive on a much larger area. The average farmer needs his land and labor for growing crops. The cultivation which could be given in a root or corn crop would not usually be thorough enough to be reliable.

My own experience and observation have convinced me that bindweed is by all odds the most objectionable of our weeds. The Canada thistle used to be considered the chief of persistent weeds; but the Canada thistle can be eradicated, if one will energetically use the cultivator and the hoe for a season or two, and then smother out the surviving weaklings with a thick crop of clover or some other plant. But that is child's play, compared with tackling bindweed with grim and resolute intent to kill.

Whether or not it would be advisable to undertake its destruction where it has gained an extensive foothold, it would be difficult to say. Where the infested area is limited, so as to be manageable, I would say, exterminate it, at whatever cost, and thus avoid the future vexation of a farm hopelessly overrun. The plants must be prevented from reaching sunlight, by whatever means. Continual hoeing is one method, and covering with building paper, salt, lime, etc., are others which have come under my notice, but these latter I would hardly recommend in preference to hoeing. If implements are used, care must be taken to guard against carrying pieces of the roots to clean ground, for they are capable of growing, and thus spreading the evil.

I do not wish by showing the difficulty of destroying this weed, to discourage the work of fighting it. Even when there is little hope of getting rid of it, cultivation would be advisable. The more it can be weakened or prevented from growing, the better opportunity will the crop have. My purpose is rather to show the pernicious nature of bindweed, so that such farmers as are free of it may realize the need of exercising due vigilance to guard against its introduction, and those who have it in sufficiently limited amount may endeavor to confine it, or destroy it if possible.

The advent of a thoroughly effective and inexpensive means of destroying bindweed (*Convolvulus arvensis*) will be hailed with delight by hundreds of farmers; and there is good reason to believe that the "Farmer's Advocate" will be foremost in spreading the desired information. Perhaps even now, some other reader could give more valuable experience than I have been able to offer.

H. GROH.

Waterloo Co., Ont.

A Demonstration in Caring for Manure.

Ohio produces about ten million tons of manure each winter. Most of this manure goes into the barnyard, where it remains for from three to nine months. This fact led the State Experiment Station to investigate different methods of handling manure. The experiment consisted in treating different plots with manure from the yard and with that from the stalls. Then to each class of manure was added, at the rate of forty pounds per ton, different reinforcing materials—kainit, gypsum, floats (crude rock phosphate), and acid phosphate. For seven years the land to which these different manures were applied was cropped with corn, wheat and hay, and the value of the crops computed. In every case the stall manure, whether treated or untreated, gave a larger return in money value than the yard manure, and in the case of the plot manured with stall manure and floats, the increased value of the crop per acre over the plot without the floats, but with stall manure, was nine dollars and twelve cents for the seven years, or an added value to the manure of \$1.15 per ton; the cost of the floats being \$1.50 per acre.

The experimenter points out that the test does not really show the extent to which the barnyard manure has depreciated, as much of its weight had been lost before it was weighed and applied to the land. Canadian experimenters have found this first loss in barnyard manure to amount to about one-third of its original weight. The Ohio Station estimates that if all the manure in the State received the best care, it would amount to a saving of more than fifteen million dollars annually.

Opinions.

Nicholas Smith, Norfolk, Ont.—I appreciate the change in the "Advocate," and although not a farmer, I would not like to do without it.

J. N. Sutherland, St. John, N. B.—I must congratulate you on the way the "Farmer's Advocate" is kept up. It is full of interesting and useful information, not only to those actively engaged in agricultural pursuits, but also to all classes of business men.

S. G. Weeks, Huron, Ont.—I must truthfully say, I am more than pleased with the weekly edition of your ever helpful paper, and would be entirely lost without it. Wishing you the success that you truly merit.

Apropos of the approaching season of fall fairs, the following from *Prairie Farmer* is in order: "We know of many fairs that have failed because allowed to degenerate into an exhibition of questionable attractions. Progressive citizens find nothing attractive in such an exhibition, and do not wish to subject their children to its degrading influence. The purely agricultural fair is not a myth, neither is it an experiment. Such fairs are in successful operation in various parts of the country, and are the most successful fairs to be found." This is talk along the right line. Cheap "shows" and "side attractions" should have no place at our agricultural fairs, and our farmers should be above patronizing them.

Vitality of Weed Seeds.

In March some straw containing a considerable amount of scutch, twitch or quack grass (*Agropyrum repens*) was used for bedding the steers in the box stalls, and it was decided to heat or rot half the manure to note the effect upon the vitality of the objectionable seeds likely to be found among the straw. The manure produced weighed 42,876 pounds. Half of this was hauled out upon the field and put in small piles, and the other half was piled in a low, flat-topped pile, to induce rotting or heating. The manure weighed when piled 21,438 pounds, and when drawn to the field weighed 18,650 pounds. The rotted manure was put on a plot of land adjoining the plot upon which the green manure had been placed. A careful watch was kept to note the comparative weediness of the two plots. Both plots showed a considerable growth of scutch grass, but the rotted manure plot seemed quite as badly infested as the green manure plot.—[J. H. Grisdale, Agriculturist, Central Experimental Farm.

Agricultural College Course.

To the Editor "Farmer's Advocate":

Sir,—In the last "Advocate" I see there is a notice regarding the proposed changes in the agricultural course at the college. Evidently the clumsily-worded report in a Toronto newspaper has given a wrong impression as to the nature of the change, as I am not giving up the superintendence of the farm. The change in question has been made at my suggestion, for the purpose of having the different subjects taught in those departments which are especially equipped for doing the work. Thus, Mr. Zavitz will take over the teaching of the subject of farm crops, because that is his specialty. On the other hand, the subjects of soil tillage and drainage, which are based upon soil physics, will be taught in the physical laboratory, where they have a specially-equipped laboratory for the purpose. These two subjects, therefore, will be under the supervision of Prof. Reynolds. Under this arrangement, there will still be left to my department all the work in animal husbandry, including the live-stock experiments, and, in addition to this, there will be the superintendence of the farm and a course of lectures upon farm management. G. E. DAY.
Ontario Agricultural College, Guelph.

Care of Machinery.

A farmer often has hundreds of dollars invested in machinery, and to leave this exposed to sun and rain any more than is necessary is one of the worst mistakes. It may cost something to build a shed, but this cost will be saved many times over in the longer life of the machinery. Even in a shed the machinery will rust considerably. To prevent this, take a pail of common machine oil and paint with an ordinary paint brush. When treated in this way it never rusts, and is in as good running order when taken out as when put in.—[C. V. Gregory, in *Practical Farmer*.

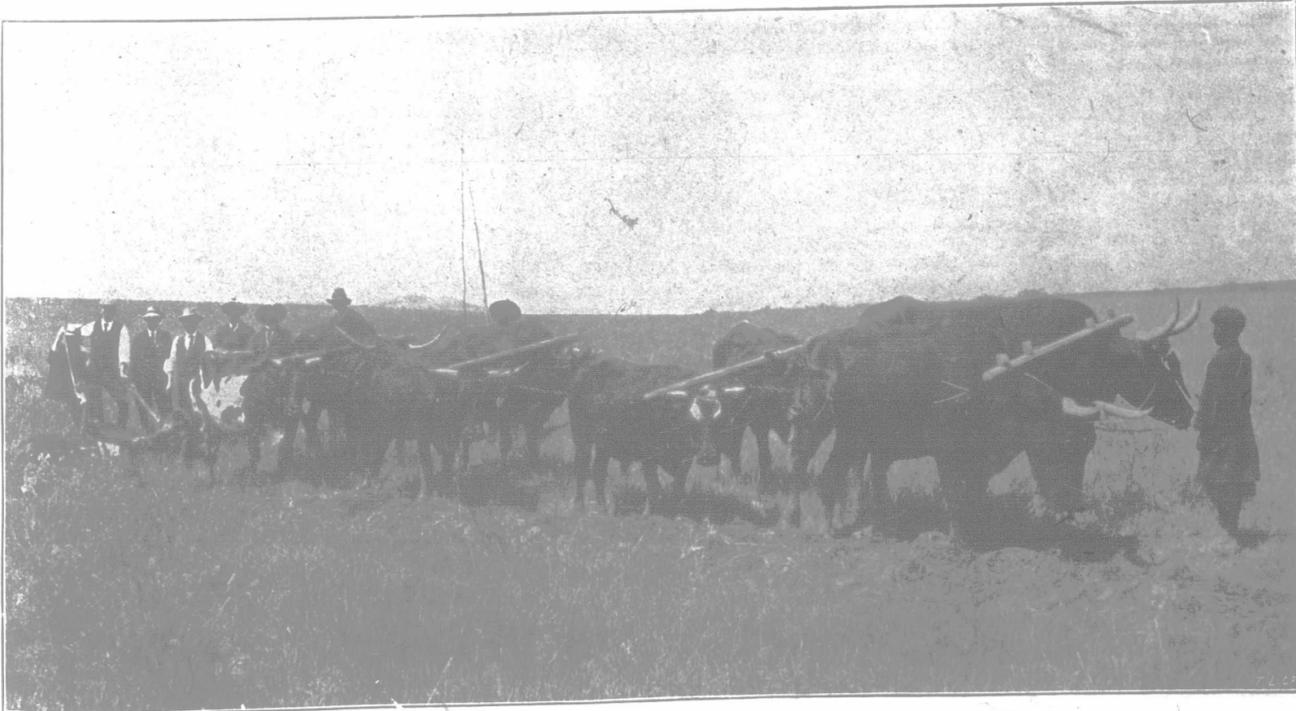
Green Manuring.

Green manuring is the name given to the practice of growing on the land a crop which is produced for the purpose of improving its condition. Such a crop may be either left on the surface or worked into the soil with a harrow or plow. Very much has been said and written in recent years concerning the possible benefits to be derived from green manuring. Enthusiasts advocate depending upon it almost exclusively for the maintenance of fertility. Such individuals claim too much for it. It is under some conditions a useful practice. It often takes the place in modern times of the bare fallow which was so common in earlier times. During such time as the field is kept bare, especially if the soil is worked with the plow or harrow, those agencies of nature whose actions render the constituents of the soil available are at work, and the store of plant food placed in such condition that the crop can make use of it. But the bare fallow is now condemned, because it is believed that the benefit is obtained at too great a cost. The labor performed upon the field during such a fallow brings no immediate return. Even more important than this, a very considerable share of the most valuable constituents of plant food rendered available during the bare fallow period are lost. The decomposition of the humus, and the action of the nitric acid ferments at this time convert no inconsiderable proportion of the nitrogen of the soil into nitrates, and these, if the soil is bare, are washed out of the soil.

It is for this reason chiefly that it is recommended, rather to keep the field covered with a crop whose hungry rootlets will fix nitrates as they are produced. The plants take all the mineral elements of plant food from the soil. It is evident, therefore, that green manuring does not make it possible to increase the amount of any of the important mineral elements in the soil, such as phosphoric acid, potash, or lime; nevertheless, it does not follow that green manuring may not be beneficial. Roots of plants excrete an acid which dissolves constituents which are not directly soluble in water. Green manuring fills the soil with roots. The action of these roots on the mineral particles which make up the soil helps to dissolve food elements, and then when the green manure crop decays, these food elements are more accessible to the succeeding crop than they would have been if still a part of the mineral constituents of the soil. Green manuring, therefore, increases the availability of the phosphoric acid, potash and lime of the soil.

Further, green manuring is an important means of increasing the stock of humus in the soil. Where humus is present in considerable amounts, a soil is more moist; as it decays carbonic acid is produced, and the temperature of the soil may be raised. With more moisture, and a higher temperature, conditions are more favorable for the dissolution of the soil constituents. Still further, many of the most valuable green manure crops are very deep rooted. Sending rootlets into the subsoil, they take up soluble elements of food which may have been leached downward, and make them a part of the above-ground portions of the green manure crop. This crop, therefore, may play an important part in bringing up from the subsoil, where it might be useless to the ordinary crop, soluble food, and placing it at the disposal of the crop which follows:

The season when loss of soluble plant food is most likely to take place is late autumn; hence to prevent this loss, those crops are most valuable which are not affected by the autumn frosts. Green manuring, for the purpose of conserving fertility, is evidently most important upon the soils which are light and porous, and which have open subsoils. In hard subsoils deep-rooting green manure crops have an important influence in mellowing and opening up the subsoil to the action of the air, water and carbonic acid. As the roots of these crops rot, channels through which air and water may more freely pass are left behind. It has been found that as a result of this effect



Breaking the South African Sod.

A Wilkinson double-disc plough at work on the farm of Mr. Luitz, near Paris, in the valley of the Vaal, S. A., at the point where General French crossed into the Transvaal on May 4th, 1900.

upon the subsoil, the following crop sends its roots to much greater depth than usual; that the roots of the potato, for instance, which ordinarily develop almost entirely near the surface, penetrate deeply into the ground after a crop of lupines, following the furrows left by the decay of the roots of that crop. Under these conditions, the potato proved far less liable to injury from drouth than when more shallow rooted; and the roots, coming in contact with a much larger portion of the soil, were able to gather from it an unusually large amount of food.

Green manuring may be made of much assistance in clearing a field from weeds. This result is a consequence of the fact that it may be made to cover and shade the ground. At many seasons of the year our fields are particularly liable to damage from surface washing, which eats out gullies in the hillsides, carrying the finer and better parts of the soil to lower levels. Such injury is most frequent in late fall, winter, and early spring. Not infrequently during the late spring or summer, and sometimes during the winter, violent winds sweeping over the surface do enormous damage, through carrying away the finest and best soil particles. These injuries may be largely prevented by keeping the ground covered with a green manuring crop. At these seasons green manuring, then, may be beneficial in the following ways:

It may increase the availability of the mineral elements of plant food.

It may increase the store of humus, and thus warm the soil.

It may save nitrogen, which would otherwise be lost.

It may increase the stock of nitrogen in the soil.

It may bring soluble food from the subsoil to the surface, where later crops may feed upon it.

It opens and mellows the subsoil.

It makes the following crops deeper rooted, and so more certain and less liable to injury from drouth.

It may help to free the field from weeds.

It may prevent washing or drifting.

Perth Co., Ont.

FARMER.

This Weed a Heart-breaker.

Here is a warning to many other persons who may be all too careless of the headway some weeds are making on their farms. A reader writes:

"Is there any way of getting rid of twitch grass by spraying, or any other way? I put the field in corn last year, hoping to get rid of it, but it smothered the corn out. This year I have tried it again. It is a disheartening job to have anything to do with it. If the corn proves a failure, would you advise trying rape?"

One comforting thought in connection with this weed is, that there is scarcely another as hard to eradicate, or as persistent a grower in ordinarily mellow soils. If in this case the land was well cultivated last year, the vigor of the weed will be considerably lessened, and there should be a reasonable hope of the corn being able to secure a good stand. We once learned a good lesson on the use of corn for killing weeds. We had a small plot near the barn on which we wanted to raise as much fodder as possible, so planted it to corn, using the grain drill with every hoe sowing. The land was rich; the corn got a good start, and by the time it was ready to cut it stood so thick upon the ground, and provided so much shade, that not a weed could be found. The principle of this practice might be made use of quite often with noxious weeds, but of course the fodder would be good only for summer and fall feeding. With our correspondent, cultivation seems to be the only remedy for his field infested with twitch grass. Spraying has never been known to kill it. If a crop of corn is grown this year the land should be plowed up as soon as the corn is off, and the roots of the grass dragged to the surface, where they may be gathered together and burned. The land should then be ribbed up, exposing as much as possible to the frosts. The next spring we would advise vigorous cultivation and gathering the roots to be burned, and if the weed still persisted in maintaining a healthy growth, would summer-fallow, making use of green crops, and follow this with a crop of roots, corn or rape. There is a common practice in our farming that should be avoided, for without doubt it is largely responsible for the hold weeds have got upon our land, and that is the leaving of stubble lying bare during autumn, to be plowed up before winter, and then sown to another grain crop. If weeds are ever to be successfully held in check, the land must be kept well cultivated during part of the growing season, and the crops intelligently rotated. Can anyone imagine weeds getting a stand on a rotation like this: First year, grain (wheat, oats or barley), seeded thickly with red clover alsike and timothy, oat grass, or any of the other heavy-yielding grasses; second year, meadow; third year, hay or pasture, broken up in summer; fourth year, roots, corn, rape, peas, or wheat seeded to clover; fifth year, grain again? In such a system the conditions are so varied that weeds have no chance to become established.

Twitch grass is one of the weeds one cannot afford to trifle with. It should not be mistaken for June grass, and when we speak of twitch grass we do not

mean the common red-top so often called twitch grass. Twitch grass has a zigzag pointed flower stalk, the spikelets alternate at each joint, and are turned sideways to the stalk. The roots are quite large, and have nodes from which spring new plants. Eternal vigilance is the price of a clean farm, but there is no better investment. If twitch grass eats the corn again this year, a rape crop may be sown in drills by cultivating between the rows and hand-hoeing close to the plants.

A Bunch of Forestry Notes.

Horse-chestnuts do well as shade trees in cool places, but not in hot ones.

The wild black cherry (*Cerasus Serotina*) is highly prized for its hardiness, as it will grow in the extreme Northwest where few other timber trees will grow. The timber is highly prized.

White pine timber is so scarce that on any farm it would be a profitable investment to set out groves of this tree. There will be money in acres of useful timber trees before a great while.

The one who goes into the raising of trees must expect to meet their enemies and overcome them. There are the tent worm, the bag worm, the tussock moth, the May beetle, the measuring worm, the green flies, and many other pests. Spraying is the remedy.

How greatly it adds to the good appearance of a place to have in sight a few evergreens in winter.

The ladybird family are friends and not enemies of the fruit-grower. They feed on scale and other insects which are pests to the fruit-grower.

Statistics show the shellbark hickory to lead all other trees in value for fuel. Being hard to transplant, quite small seedlings should be set out. It is not common that a valuable tree for fuel is also in demand for its nuts or fruits.

Shade and shelter are within the power of anyone to have. A row of evergreens, pine, cedar or spruce, and a few shade trees add to the comfort and beauty of a place. If more attention were given to having the home surroundings pleasant, there would be less desire on the part of sons and daughters to leave the farm.

The San Jose Scale can't be poisoned; it must be choked. It cannot be too well known that anything greasy, that closes up the pores of an insect's body, will kill it. The San Jose is the most difficult scale insect to destroy; but thick soapsuds will kill many scale insects if applied at the time in June when the young are hatched.

Because of their larger size, the Japanese and Spanish sorts of sweet chestnuts are being boomed by the nurserymen. They are hardly worth eating. The native sweet chestnut is the best, and it is a mistake that more attention is not paid to the improvement in size of this nut.

Omitting evergreens, which are better sown in spring, there is hardly a seed that may be as well or better sown in the fall than at any other time. If proper care be taken of the seeds during winter, the spring is almost equally as good, the only advantage in fall-sowing being that the seedlings come up earlier.

Evergreen seeds do not require to be kept moist during winter, but others should be kept in a cool, dark cellar, or, lacking this, place the seeds in boxes mixed with slightly damp earth. When so fixed any cool building will do for them.

There are two varieties of the Catalpa: the Catalpa Speciosa, an erect, quick-growing, valuable timber tree; and the Catalpa Bignonioides, a low, spreading sort, of no use for forestry purposes whatever. The seed of the Catalpa Speciosa should be sown in spring. It is said that the wood is as good as chestnut, and is lasting inside or out. It is one of the first to reach profitable size of any tree good for timber.

The yellow locust is a valuable tree, but its destruction by borers is so widespread that the planting of it for timber is not to be advised, unless in regions free from the pest.

The smaller trees are when transplanted, the more readily they adapt themselves to the situation. Pines and other evergreens for forestry purposes are best set early in spring. Be careful that the roots are kept moist from the time of lifting to resetting. They are exceedingly tender in this respect, and a good watering to solidify the soil about the roots is of great advantage. Deciduous trees are not so tender, and may be set out when 5 to 8 feet tall.

Evergreens for windbreaks may be set 6 feet apart and cultivated. Thin out every other one when they begin to crowd.

Do not sow forest seeds broadcast. Plant in small beds no wider than can be reached to the center from either side, and keep the young seedlings clean. Evergreen seedlings will be an inch or two in height by fall, and should not be disturbed until two years' growth has been obtained, when they may be set out, four feet apart each way, and cultivated a season or two to give them a start.

The larger growing deciduous trees, such as the Catalpa Speciosa, may be set out to 6 feet apart each way. Force a clean straight growth at the start, and then thin out every other one.

Puddle the roots of all trees before setting them out. Make a large hole in the ground, pour in half a barrel of water, and stir the loose soil and water into a creamy mixture. This adheres to the roots of the trees, keeping the rootlets moist and attracting the adjacent soil when set out in the field. A little trouble of this kind at the start pays an hundredfold. Lincoln County, Ont. J.

Problems of the Soil.—VIII.: Cultivation of the Hoed Crop.

The hoed crop, whether it be corn for silage, or roots, has become a necessity where stock-raising is as it ought to be—the chief branch of farming. The fact that this class of crops require, for success, a great deal of cultivation, and that this cultivation may be used effectively to kill weeds as well as to benefit the crop, has substituted in many parts the hoed crop for the summer-fallow as a means of keeping the farm clean, and it is probable that the summer-fallow will continue to give place to the hoed crop as the merits of this class of crop become more widely known. The hoed crop has very many advantages over the summer-fallow. It cleans the land just as effectively, and at very little more cost. It is just about out of hand when the busiest of the harvest is on, a time when a fallow requires a good deal of attention. It produces one of the most valuable crops we can grow, and the effect on the general fertility of the farm is much better than the summer-fallow.

The hoed crops, as a class, are plants that require and will stand forcing. If we attempt to force a grain crop, we run the risk of lodging and rust. If we force a clover crop by the application of special manures, beyond a certain point, it will lie on the ground and must, and the quality of our hay will be spoiled. But with the common hoed crops, forcing, by means of liberal manuring and good cultivation, is not only advantageous, but absolutely necessary. A crop of roots or corn grown on unmanured land, without special cultivation, would be a very poor affair. We need never be afraid of injuring these crops by over-richness, and, as a general rule, the richer our land, and the more thorough and persistent the cultivation, the better the results.

In preparing the land the first thing to be seen to is the manure. We make a practice of applying farm-yard manure at the rate of about twenty loads per acre. We prefer to apply manure on land intended for turnips or mangels the previous fall, plowing it in then, and leaving it to become incorporated with the land in some degree before the crop is planted. In this way much of the inconvenience in cultivating, caused by loose manure in the soil, is avoided. We would not, however, recommend this practice on light land, where the manure would be subject to loss by leaching. For corn, manure applied during the winter or spring is best, as the fresh manure has considerable effect in opening up and warming the soil, an effect which is of great benefit to corn. The early cultivation aims at the preparation of a suitable seed-bed, deep and mellow, that will give favorable conditions of germination to the corn, and will allow the land to be thrown up into fine, smooth drills for the turnips or mangels. We prefer drills to planting on the level, because of greater ease in cultivation afterward. The corn should be planted in squares at least 36 inches apart each way, so as to allow cultivation with a horse-hoe in two directions, and the roots should be sown in drills about 30 inches wide, made with a double-mouldboard plow, which has a much better effect than a common plow in covering up any lumps there may be, and shoving the finest soil to the top of the drill.

And then the real cultivation of the hoed crop begins. The corn should be well harrowed as soon as it is seen coming through the ground, and a second harrowing may be given a little later with good results. As soon as the rows can be well seen, the horse-hoe should be started, and kept going at every opportunity until the corn becomes too big. Turnips and mangels should be horse-hoed as soon as they are well up, taking a round to the row, and carrying the hoe on its side so as to cut close to the row of plants. After the horse-hoeing, the roots should be thinned with a hand hoe. Here we would say that, while experiments have shown that thinning to the distance of 12 or 13 inches gives the largest whole crops, in practice we have found it advisable to thin to a much greater distance—18 or 20 inches—the roots grown at this distance being much larger, and easier to handle in harvesting, a matter of some importance. After thinning, we aim to horse hoe at every opportunity, and also, if possible, to run through the crop again with the hand hoe, to cut any weeds there may be in the row. The horse-hoeing, in the case of turnips and mangels, is continued until the leaves entirely cover the land.

The cultivation of these crops has a very important part in keeping them abundantly supplied with food and water. In the first place, cultivation acts here as in a summer-fallow, to set free plant food, which, however, does not run the risk of being lost in the fallow, but is immediately seized by the growing crop and started up in the plants. A second, and far more important use of cultivation is to keep the plants abundantly supplied with water. By constantly stirring the soil between the rows, a surface mulch is formed, which prevents the escape of moisture by evaporation, and insures an abundant supply to the plants. For this reason it is well to cultivate the land as soon as possible after rain, to restore the surface mulch and prevent the escape of moisture. The great secret of successful hoed crops is rich and well-manured land, and constant cultivation. Given these two conditions these crops are most satisfactory and most useful in cleaning the land of weeds, as well as providing a large quantity of excellent cattle food. D.

The Weeds: What Shall be Done?

From an observant traveller who crosses our country at the present time, there is no disguising the fact that one of the most serious problems that farmers have to face is how to keep weeds in check. It is unnecessary to go into a detailed discussion of the various causes which have led to thousands of acres of farming land having been depreciated in value through their occupation by noxious weeds. They have found an entrance to many fertile districts by means of railways, rivers overflowing, and strong winds, but more particularly through the sowing of dirty seed. At any rate, the fact remains that they are with us in enormous quantities, robbing grain crops of their much-needed moisture, the soil of its virgin fertility, and even crowding more useful plants so that a profitable crop cannot be secured. And so the question arises—what is to be done to stem the tide of destruction led on by these intruders? Is a wholesale and in many cases a haphazard system of cultivation to be continued, the only object being to produce wheat for market? Is the careless and indifferent farmer to be allowed to go on with his unrestricted system of seeding his community with specimens that make the land less productive, harder to work, and incidentally less valuable? Or will it be possible to enforce the laws which are now on the statute books for the extermination of weeds? All these are phases of the situation demanding consideration. Our weed laws are not easy to enforce, largely because the difficulties which they are intended to correct are very general. We need a universal desire on the part of the farmers to wipe out noxious weeds. It will be very necessary, too, that those who will have to do the real work of extermination become better acquainted with the characteristics and habits of growth of our worst weeds. To fight anything well, you must know it: and to fight weeds well, their life history, showing when and how they seed, the length of time they take to mature, etc., must be known. There is no weed known which cannot be eradicated by constant attention, if only the nature of its growth be understood. In the meantime, it will be well for those who are battling with weeds to remember that there are two periods in their life history when they are more easily destroyed than at others. One of these is just when the seed germinates, and the other is just when it has attained its growth and is about to blossom. In considering methods of cultivation for killing weeds, the summer-fallow, when properly handled, is undoubtedly a safe and certain one, but it is expensive. On the other hand, nothing will give better results in cleaning up weedy land than seeding to grass. Brome and rye grass, especially the former, have an undisputed reputation for crowding out weeds, and timothy is not far behind them. It is now, of course, too late to seed to grass, but the method is worth the deliberate consideration and endorsement of all who are interested in the great problem of weed eradication.

Let in the Light.

In the construction of buildings for the housing of farm stock, the importance of having plenty of light inside should not be overlooked. There is no great disinfectant so cheap as sunlight, and apart from cleanliness and good ventilation, nothing contributes so largely to the health of animals. Bacteriologists have found that twenty minutes' exposure to the direct rays of the sun will destroy the bacillus of tuberculosis and other less virulent bacteria in less time.

The south side of the building should have windows freely distributed, and they should not be small either. The objection may be raised that windows let in the cold at night, and that the benefits to be derived from sunshine are more than overcome in that way. If they are well made, however, i. e., the frame closely joined to the body of the wall, the sash neatly put in and the glass properly puttied, these disadvantages referred to will be largely overcome. Rather than be without abundant sunlight it would pay to put in double windows for winter use. The cost, after all, will not be regarded as enormous when it is remembered that, if properly protected, no repairs will be necessary for many years.

The Turnip Fly.

A writer in the Agricultural Gazette (British) makes the following very pertinent remarks on the turnip fly:

The "fly" costs tens of thousands a year, and perhaps millions. The best means of checking his ravages may be directed in two systems. First, there is evasion, and, secondly, direct attack, and both may be successfully adopted. Among the best measures for evading the turnip fly are, good cultivation, a fine tilth, a moist seed-bed, and plenty of seed. The beetle prefers turnips to swedes, and hence a small plot may be sown with white turnips, to be plowed under later when the fly is on. Every means whereby the plant can be hastened through the critical first-leaf stage is useful. These evasive measures are often successful, and to them may be added plenty of seed, and where the ridge system is used, and the two-row drill, some farmers sow the ridges twice, with the cutters set half an inch deeper the first time. This plan produces a double growth, the deeper-sown seed coming up later and filling up the gaps. As to direct attacks upon the fly, probably the best is a wide cloth, sacks or old carpet kept saturated with paraffin. This is either suspended behind a drill, or arranged in the form of a chain harrow, and drawn over the affected plants. It renders the leaves of the young turnips distasteful, and the fly wings his way to pastures new, or remains stupefied and unable to eat. The dusting mix-

tures for powdering the young plants usually contain quicklime, sulphur and soot. They are as follows:

- For two acres,—
- 1 bushel of fresh white gas ashes.
- 1 bushel of fresh lime (slaked).
- 6 pounds of sulphur.
- 10 pounds of soot.
- Another mixture found efficacious is:—
- 14 pounds of sulphur.
- 1 bushel of fresh slaked lime.
- 2 bushels of dry road dust.

This treatment in its several forms should be followed early in the morning, before the dew is off the leaves.

G. D. Ferguson, Elgin, Ont.—The watch I received gives entire satisfaction. Wishing you success with your paper.

DAIRY.

Dairy Barn Rules.

The dairy demonstration, to be held in connection with the Universal Exposition at St. Louis, is attracting unusual attention, and the dairymen of this and foreign countries are especially interested in all that pertains thereto. The rules relating to the feeding, milking and caring for the seventy cows taking part in the test, and recently promulgated by Colonel Charles F. Mills, the Secretary of the Live-stock Department of the World's Fair, contain many suggestions that could be adopted to advantage by every farmer having few or many cows in the dairy.

The dairy barn rules of the Universal Exposition are as follows:

BARNs.—The barns will be open to visitors from 9 o'clock a.m. to 6 o'clock p.m. The barns to be well cleaned each morning, not later than 9 o'clock, and to be in readiness for morning inspection at 10.30 o'clock a.m. All manure must be promptly removed from the barns as voided, between the hours of 9 o'clock a.m. and 6 o'clock p.m.

Cows.—The cows to be properly groomed not later than 10 o'clock a.m., and be kept scrupulously clean between the hours of 9 o'clock a.m. and 6 o'clock p.m. The cows are not to be disturbed for the inspection of visitors or otherwise at any time.

Milking.—The three daily periods for commencing to milk are 4 o'clock a.m., 12 o'clock m., and 7 o'clock p.m.

The two daily periods for commencing to milk are 6 o'clock a.m., and 6 o'clock p.m. The milking will be done under the supervision of the representative of the Committee of the Agricultural Experiment Stations.

The milk to be weighed and sampled by the representative of the Committee of the Agricultural Experiment Stations, and by him made a matter of record.

Feeding.—The three daily periods for commencing to feed are 4 o'clock a.m., 12 o'clock m., and 7 o'clock p.m.

All feed to be weighed by the representative of the Committee of the Agricultural Experiment Stations, and by him made a matter of record. Said representative will see that the feed weighed for each cow daily is fed to the respective animals, as specified by the barn superintendent.

Attendants.—Only the attendants are to be admitted within the railing enclosing the cows without passes.

The milkers to be neatly attired in clean white suits, and the other attendants to have clean suits of blue denim. The white suits should be freshly ironed for the noon milking.

The milkers will care only for the cows placed in the especial charge of each by the barn superintendent, to whom they will look for all orders.

Visitors.—Visitors desiring information will make application to the barn superintendents, and not interfere by question or otherwise with the attendants in the discharge of their duties.

All applications of visitors for admission with-



Fourth-year Class, Ontario Agricultural College.

Standing: 1st row—Messrs. Guy, Johnson, Pano, Peltzer, Galbraith, and Fansher; 2nd row—Baker, Barber, Readey, Arkell, Bray, Thom, Rivett, Sittling; 1st row—Avila, Pickett, MacRae, Hamilton (President), Bustamante, Gunn, and Cutting; 2nd row—Buchanan, Dewar, Henderson, Fulmer, Everest, and Carpenter.

in the railing enclosing the cows must be made to the respective barn superintendents.
No loud talking or noise tending in the least to disturb the cows will be permitted.

Woman's Relationship to Dairy Work.

By Laura Rose.

I suppose so long as women become farmers' wives, they will have, to a more or less extent, to look after the cows, see to the milk, and make the butter. While in very many districts women attend to the cows, feed the calves, and do the milking, still I am glad to note it is a practice that is gradually dying out, and men are beginning to see that such labor hardly belongs to women's sphere, and are relieving them of this part of the farm work.

The majority of farmers' wives and daughters have usually enough household duties to demand their time and attention without going to the barn just at the hours when the morning and evening meals require their presence in the kitchen.

That women, as a rule, can obtain better results than the men from the cows should not mean their continuance in the work, but should be ground for investigation. When women milk they do it at more regular hours—of course I am speaking of general mixed farming, not of special dairy farming. A man milks when he gets through with his other chores, or finishes a certain piece of work—it may be at six, or it may be at eight o'clock. Cows like regularity, and keep up their flow of milk much better when milked at the same time each day. They also like to be milked in the same place. It is much the better plan to have the cows brought to the barn to be milked than to walk all over the pasture for them. This should be considered a necessity, if the women have to do the milking, as it is vastly nicer for them to sit in a clean, dry, cool stable than in the wet grass, or dusty, dirty barnyard. If a pound or two of meal is fed each cow night and morning, there will not be much difficulty in getting the cows to and from the pasture. It is too heavy work for a woman to carry heavy pails of milk from the pasture field. To have a pasture field near the barn, in which to turn the cows for the night, greatly lessens the labor of bringing them in.

That a woman can usually get more milk from a cow than a man, is chiefly due to the fact that she studies the cow's nature, makes more of a pet of her, and treats her in every way with consideration and kindness.

Did any of you ever see a woman take a stool or a boot to a cow? I hope not; I never did. Apart from the humane side of it, it doesn't pay to be harsh with your cows. Cows will give more milk on less food if properly treated, and are very much easier to handle. How I wish some men would remember this!

Arrange to have the milk warm for the calves about the time the men leave for the barn, and do not hesitate to ask them to carry it. Many a woman says, "I'd rather do it myself than trouble them." And such women may keep on doing it. But these same women grow prematurely old, hard lines appear on their faces, and their backs so often bent with heavy loads, forget to straighten. Depend upon it, while men like their wives to be industrious, they also like them to keep young and good looking, but if a woman constantly works beyond her strength, she fades before her time.

I almost feel as though I were being a little hard on the men. I have met many, very many, kind, considerate men. The wife, when she does more than her share, is usually to blame—she didn't start in properly.

One of the chief reasons why I advocate the use of cream separators is that they usually lessen women's work in connection with the dairy. The shallow-pan system of obtaining the cream, though not hard, makes a lot of extra work, and takes considerable time. The deep cans, when set in a tank, mean heavy lifting. The stationary creamers do away with this objectionable feature, but are harder to keep sweet and clean. A separator quickly takes the cream from the milk, and as the majority of the machines are hard for a woman to turn, the men run them. The woman's part is to attend to the cream and wash the separator bowl, which should be brought to the house in the milk receiver of the separator.

The making of butter seems particularly woman's work, and it is nice work too. There is only one thing about it which really taxes the strength, and that is the purely mechanical work of making the churn go around. I have used a great many different kinds of churns, and have yet to see one which makes churning easy work. I like the one with the handle bar extending from side to side, then two can churn at the same time, which makes it very much easier. Two half-grown children can manage the churn nicely, and it is a great saving of the mother's time and strength.

If instead of the ladle and butter-bowl, a lever butter-worker was bought or made—and any man

at all handy with tools can easily make one—the dressing of the butter would be much more quickly done, with only half the expenditure of strength. It is a woman's duty, so far as possible, to provide herself with proper utensils to work with, and especially so for her dairy. Having a good equipment should mean a better article obtained with less labor.

My plea has been the lightening of woman's work in connection with the dairy. I do think, though, that a farmer's wife should know how to do all parts of the work, so that in case of sickness or absence she could look after things.

There are cases where boy help is scarce and girl help is plenty; then it is quite the proper thing for the girls of the family to assist with the dairy work. Let them do it with skill and knowledge, taking a pride and pleasure in their work, and much of the drudgery shall be removed.

Factory Water Supply.

A cheese or butter factory well cannot be kept uncontaminated so long as the drainage and whey disposal system of the factory is not carefully looked after. The first essential for a pure water supply from the ordinary well is good drainage. Next is the proper construction of the well, including its covering, so as not to permit surface washings flowing in. As Prof. F. T. Shutt has pointed out, this drainage matter, apart from its actually poisonous character, is the very material upon which microbes and germs live, and water polluted from the barnyard, privy, etc., is always loaded with countless millions of bacteria. It is impossible to turn out first-class dairy products where such water is used, so even from the dollars-and-cents standpoint, improvement in this respect is imperative. It is not the smell or appearance of water that denotes its condition. Many samples of water which to the sense of smell or sight or taste are perfect, yet simply reek with filth. The bacteria which we cannot detect by our senses are far more dangerous than those which we can detect.

New Zealand Butter Dry.

In his annual report to the Dept. of Agriculture, J. A. Kinsella, Commissioner of Dairying for New Zealand, points out that the butter made in that colony is comparatively low in its content of water. He says:

"It will be interesting indeed for the purchasers of New Zealand butter in Great Britain to note the comparatively low percentage of water, and consequently the high percentage of fat, contained in New Zealand butter. It only requires a glimpse over the records of the analyses to become convinced that uniformity exists in the process of manufacture in the various butter-factories in the colony. This uniformity has been largely brought about by the building of better factories, by the installing of more up-to-date machinery in them, by the introduction of more approved methods of manufacture as advocated by this division, and by the better application of refrigerating-power throughout the whole process of manufacture. The almost absolute control which every factory of any importance has over both the cream and butter is where the secret lies in New Zealand being able to make such a uniformly dry honest butter."

Mr. Kinsella suggests that as an advertisement for New Zealand butter in Great Britain, a circular giving analyses of the low percentage of water be printed and circulated.

POULTRY.

Scratchings.

Change the poultry from the old yard fouled by droppings, to a piece of fresh grass.

Keep the water vessel scrupulously clean, and keep it in a shady place—fowls like cold water.

Do not forget the supply of grit and shell-forming material.

Whitewash properly applied to the poultry-house is poison to fleas or lice.

Put the old hens in the fattening coop, and rush along to market before the spring-hatched birds come into competition as food.

Skim milk is a good poultry food, and is a great flesh former.

Ground oats make a splendid poultry-fattening food.

Thin chickens are slow sale.

If you have a good plan of a poultry-house send it along, and good photo of the same, with a clear description of it. Now is the time to think of planning and building a good poultry-house, so as to ensure a supply of eggs in winter.

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Weaning the Chicks.

It is not advisable to wean chickens until the hen deserts them and drives them from her of her own accord. She does not do this until she is about to resume laying, as a general rule, but frequently a hen will stay with her chicks for two or three weeks after she has re-commenced laying. It is quite impossible to say at what age chickens are weaned, for the reason that they are weaned at all ages, and the occurrence depends on the temperament of the mother hen. They may be young enough to still remain in the coops when the mother has forsaken them, or they may be old enough to require a change to larger quarters or to a roost. One thing certain is that chickens require a great deal of special care when they are weaned, and if this care is not extended to them many will be lost. If they are fit to go into a small colony house, two or three broods may be put together, but they should be as nearly as possible of one age and one size. The practice of putting too many together is not commendable, but twenty-five or thirty chicks make a flock of convenient size, neither too large nor too small for economical handling. They should not be allowed to roost on perches until about three months old, and even this is too soon for Asiatics. A good plan is to keep the floor of the house well bedded with dry straw, and let the chicks rest on it until they are old enough to go on perches without injuring their breast-bones.—[Farm Poultry.]

Chickens Need Water.

Chickens cannot be grown until they are five or six weeks old without being supplied with water. Expert poultrymen in general agree that even from the very start they ought to have water supplied liberally. If by any means, however, they have been allowed to become very thirsty, they should not have full access to very cold water; if so, cramps or chills are likely to be caused by drinking too freely. When there is danger in this respect the chill should always be taken off the water, but it should never be forgotten that to obtain rapid growth they should always have plenty of pure water.

APIARY.

The Swarming Problem.

By Morley Pettit.

June brings the part of bee management requiring the most labor and attention. That is the swarming problem. In the first place, every effort must be made to retard swarming. Extracting supers are put on all except weak colonies during fruit-bloom. When white honey begins coming in freely, every bit of dark honey is extracted from both super and brood chamber, and the brood is evened up by taking sealed brood from strong and giving to weak colonies. Comb honey supers are put on, or extracting supers enough to contain the full amount of white honey expected per colony. Entrances are enlarged to their fullest extent—about 1½ inches deep, and the full width of the hive—and ventilation is given at the top of the super so that a current of fresh air will pass fully through the hive. Now, if hives can be partly shaded, and the brood chambers are large enough to give full scope to the queen, swarming will be greatly retarded.

From this on, each brood-chamber is carefully examined every seven to ten days for queen cells, which are an indication of swarming. There may be few or many, and situated everywhere in the brood-chamber, so a careful search must be made. If only empty cells are found, and the brood-chamber is nearly full of brood, a frame of brood is removed, and replaced by foundation; and cells containing eggs are broken down. The brood removed is used for strengthening weak colonies, or forming nuclei.

If any cell contains a queen larva, it is proof that the swarming impulse is far enough advanced to take action. We shall describe next week a method by which practically all natural swarming is prevented, and just as much increase can be made if desired, at a much smaller cost of attention and labor.

The Agricultural Graduates.

On another page is illustrated the fourth-year class at the Ontario Agricultural College. Those who have completed their work and passed the final examination will receive the degree of Bachelor of the Science of Agriculture (B. S. A., Toronto University) on the 10th inst. The successful ones: H. S. Arkell, Arkell, Ont.; T. C. Barber, Yorkton, Assa.; C. I. Bray, Kleinburg, Ont.; D. Buchanan, Florence, Ont.; G. H. Carpenter, Fruitland, Ont.; A. B. Cutting, Guelph, Ont.; W. R. Dewar, Fruitland, Ont.; B. W. Fansher, Florence, Ont.; H. L. Fulmer, Ruthven, Ont.; S. Galbraith, Ellesmere, Ont.; W. Hamilton, Ravenshoe, Ont.; J. P. Johnston, Fingal, Ont.; C. M. McRae, Cumberland, Ont.; J. Peltzer, Argentine; B. S. Pickett, Vittoria, Ont.; J. C. Ready, Rosetta, Ont.; C. C. Thom, Elma, Ont.; *T. B. Rivett, Jamaica.

*Supplemental in English.

GARDEN AND ORCHARD.

Should Apples be Thinned?

Extracts from Bulletin No. 239, New York Exp. Station:

The practice of thinning fruit rests on simple and well-understood principles; but its profitable application in the apple orchard calls for careful study, and the exercise of good judgment.

The healthy tree, under good climatic conditions during its growing season, takes from soil and air large quantities of inorganic materials, transforms these into organic compounds, and uses the latter, partly to ripen a crop of seeds for the perpetuation of its kind, partly to produce new wood for its own growth, and to form new buds for the development of future crops. In the ideal tree, these two methods of disposal of the new compounds formed in any season would be so balanced that each fruit produced would receive material enough to make it perfect in size, shape, flavor and color; while the store remaining would be ample to build up the new wood necessary for continuous, symmetrical growth, and to form the buds required for the leaves and fruit of the next season.

Should too much of the material elaborated be turned to the growth of wood, the fruit could but suffer. Then, judicious trimming, with proper adjustment of the food supply and control of other conditions tending to rank growth, will restore the balance and promote fruitfulness.

On the other hand, for a young or weak tree to mature the largest number of fruits possible would divert too much food from new wood and buds, and might thus cause serious weakening of the tree. Also, mature trees frequently lose larger branches through inability to stand the strain imposed by the burden of an overcrop. Thinning out part of the little fruits on such trees would lessen the draft upon the vegetative organs and the strain upon the wood, and so avert weakening and accident.

With trees in a state of nature, large size of fruit, fine flavor and high color are not essential, except as they indicate perfect seed development, since it is upon viable seed only that reproduction depends. Therefore, nature need not thin heavily to secure perfection of fruit, but is satisfied with small size. The "June drop," and removal of fruits by insect injury or by disease, by the beating of storms, or by other accidents, provide against overcropping and consequent weakening of the tree.

Man, however, wants fruit, not seed, hence strives in every way to secure the maximum quantity of the most perfect specimens possible. Placed as they are in the best orchards, under most favorable environment, relieved from injurious competition, well fed, protected from enemies and stimulated to productiveness, trees often set and carry through the season much more fruit than they can bring to such perfection as man desires. In such cases removal of part of the setting will give more of the food supply to those fruits that are left, and thus increase their size and improve their quality, at the same time lessening the demand upon the growing parts of the tree.

On this principle, then, of using the energy of the tree where it will do the most good, rests the practice of thinning; but so many factors enter into the problem, especially in applying the practice to commercial apple orchards, that to formulate a rule for thinning is one of the most difficult tasks of the experimenter.

First, the set of fruit, even on a regular-bearing tree, varies from nothing to a burden heavy enough to break down branches. It would be unwise, when the latter condition threatens, to omit thinning; yet the same tree might, in most years, carry to perfection every fruit that the natural thinning agencies leave upon it. Next, different trees, though of the same variety and same age, and standing side by side in what are, to all appearances, uniform conditions, habitually bear different loads of fruit. This is clearly shown by the records, for 10 years, of six Greening trees in the Station orchard. Two of these trees in that time yielded about 125 bushels each, two about 85 bushels each, one 72 bushels, and the sixth 65 bushels; and the yearly yields of the same trees generally ranked about the same as the total yields. It is evident that thinning might be called for upon some of these trees in certain years, while the others, unthinned, could easily ripen their full crops. In some years probably none of the trees would bear enough fruit to promise any improvement through thinning.

Again, apples sold from commercial orchards for shipment are usually marketed at a price which varies but little for differences in quality within the grade. That is, No. 1 Baldwins would be likely to go upon the market at the same price, whether grading just above the minimum size and poorly colored, or 10 per cent. larger and highly colored. Such improvement is often secured by thinning, but it is usually at the ex-

pense of lessened quantity; and if better quality brings no better price, the thinning would be a losing operation.

If by thinning, however, a considerable percentage of the fruit can be raised from second grade to first grade, the operation may be profitable, even though fewer bushels are marketed. Some light has been shed upon these points by experiments conducted by the Station.

It was estimated by an apple expert, that the thinned fruit from a crop, if it could be placed on the market in quantity, would bring from 10 per cent. to 15 per cent. more than the unthinned fruit. But unless arrangements could be made for placing the thinned fruit advantageously, thinning, unless necessary for the protection of the tree, would not be financially profitable, since the yields are usually reduced.

As to the effect of thinning upon subsequent fruit production, the tests give no positive evidence. The yields in subsequent seasons were not increased by thinning; but unthinned trees were not heavily enough loaded during any year of the test to cause a severe draft upon these mature trees. The contrast between thinned and unthinned trees in such cases could be only slight.

The date of thinning in these tests varied from June 27th to July 25th. The best results seemed to be obtained by early thinning, the fruits being removed within three or four weeks after setting, without waiting for the second drop to be completed. The fruits should be removed by hand, as no method of shaking or whipping can be depended on to remove inferior specimens or to leave the fruit evenly distributed.

The operation took from one-half to five hours labor to a tree, usually about the time needed in

full, so that the chance for small fruit is very great and widespread over the country, I think it would pay to thin to such an extent as to insure good-sized fruit. Aside from this I do not think it would pay, only for the protection of the tree."

Fruit in Simcoe County.

The winter of 1904 will be likely to be remembered by fruit-growers as one of the worst and most disastrous in the history of fruit growing in Canada, and the same may be said of the Northern and Eastern States. Previous to this year the worst injury was probably in '85, which was a very severe winter. In the northern counties of Ontario a large percentage of apple trees were killed that year. This year, however, there is scarcely any apple trees killed by the severe cold. The loss is confined to the tender varieties of plums and cherries; the fruit buds on most all varieties of plums and cherries are destroyed, but the trees are, with the exception of a few of the most tender, alive and growing. The fruit buds of apples are apparently all right, for the trees are blooming nicely, and the blossoms seem to be vigorous and healthy. Pears suffered slightly. It is wonderful to see the work nature is doing this spring in the way of repairing the injury caused by the winter; many trees that appeared to be too severely injured to recover are now regaining their normal condition. This I attribute to the protection of the roots and a good part of the trunks by the great depth of snow. There was little or no frost in the ground, and the snow lay very late. This goes to show that where the roots and lower part of the tree is well protected, and comes through the winter healthy and vigorous, it will take a great deal of dry cold to seriously injure the upper part, and that if injured its chances of recovery are greatly increased by the healthy condition of root and trunk, that has been protected by deep snow.

Another illustration of this fact is shown in the case of top-grafting. Where scions were put on good, sound, healthy, vigorous stock, and made a very rapid growth, the wood of these growths is, of course, immature and pithy, owing to the abnormal growth. Many of these appeared to be thoroughly killed and past recovery, and yet when the sap from the healthy trunk and roots underneath began to force its way up into the grafts, it was surprising to see how they would come back to their normal condition, and go on growing as if nothing had happened. In my opinion, it is a difficult matter for anyone to determine whether the top of a tree is injured past recovery when there is an uninjured, healthy root system under it and most of the trunk has been protected. So in the north we have some advantages after all in climatic conditions. Our losses are mainly in the fruit buds of cherries and plums, and the canes of raspberries and blackberries, where exposed above the snow, were injured more than usual, but enough of live bearing wood is left for a fair crop.

But when we read of the extensive damage in Southern Ontario and the Eastern States, we may congratulate ourselves that we came out with so little loss after a winter that breaks the record for cold in a period of over sixty years. The weather so far has been very favorable for all kinds of fruits that have been injured—frequent showers and moderate temperatures. Had the weather been dry and warm, with bright sunshine, it would not be nearly so favorable for recovery from the effects of the winter. There has been very little damage from mice in this section.

G. C. CASTON.



Crab Tree in Bloom, Brandon Exp. Farm.

picking the fruit on the same tree. Thinning reduces to some extent the time and labor of picking and handling, since it lessens the number of culls and low-grade apples to be handled.

The fair conclusions from these tests were about as follows:

The operation of thinning apples will cost less than 50 cents a tree, and may to a slight degree reduce the expense of harvesting the fruit.

It will, if crops are heavy, add from 10 to 15 per cent. to the intrinsic value of the fruit, by increasing the size, by improving the quality, and by brightening the colors.

It will probably decrease the total amount of salable apples, this decrease coming principally in the amount of second-grade fruit.

It will not, on mature, well-established trees, materially influence the regularity of production, or the amount of fruit setting for subsequent crops. The profit, if there be any, must come from the crop thinned.

It will, if judiciously applied, protect young trees from weakness through over-bearing; and will lessen the loss from broken branches and splitting of mature trees.

Whether or not it will be a paying operation will depend on market possibilities. Where near a market that will respond with extra prices for extra quality, the grower of apples could probably thin with good financial results, either directly or by establishing a reputation for fine fruit. The whole question as it relates to commercial orchards is well summed up in the words of Mr. T. B. Wilson, President of the New York State Fruit-growers' Association, in whose orchards these tests were made: "When there is a general crop of apples, and the crop, or set, is very

Orchard Cultivation and Fertility.

In the "Farmer's Advocate" of May the 12th, there are two interesting articles, one by G. F. Marsh, on the "Fertility of Orchards," and the other an extract from an address by Prof. Craig, on "Sod Versus Cultivated Orchard." In Mr. Marsh's letter there is more truth than poetry, and he makes some good points. One of them is, don't sow the cover crop too early, and this is good logic and sound sense, for if the cover crop is sown too early, it will take the moisture that the trees require to mature their fruit. Many writers advise sowing the cover crop quite early to ensure a catch, and they say the growth of wood is complete and the moisture absorbed by the cover crop will cause the tree to ripen its new wood well. But they seem to overlook the fact that if the tree is bearing a crop of fruit, it is then at a stage when it requires all the moisture it can get, as it is now putting forth its greatest effort in maturing its crop of fruit; anything that will rob it of moisture or fertility at this stage will lessen the quantity and deteriorate the quality of the fruit. His remarks on manuring are well worthy of notice and perusal by fruit-growers. We need more of potash and phosphoric acid in our orchards, and the material that is now being exported, in the form of bones and ashes, is needed in our own orchards, and could be profitably used at home.

Mr. Craig's theory that a thrifty, cultivated orchard will cause the apples to grow faster, mature earlier, and, consequently, spoil their keeping qualities, seems rather far-fetched. Let us see how this theory works in the case of a turnip, if we may be allowed to compare a field root with an apple for the purpose of illustration. Every farmer knows that if turnips are sown too early they have too long a season of growth, and the result will be a lot of dry, woody roots, with too much dry, hard fibre in them, that no beast will relish

or care to eat, and if they do eat them they will do little good; while if sown later, in their proper season, we will have crisp, juicy, well-flavored roots, easily digestible, and that will keep in that crisp, juicy state until grass comes.

In a long experience of growing and handling apples, the writer has always found that a well-nourished and well-grown apple was one of good quality and flavor, and a good keeper as well. If a tree is pruned and sprayed, and then well nourished—in fact, fed a balanced ration—nature will perform her part, and will not in so doing transform a winter apple into a summer variety. Take two orchards on the same sort of soil—one in sod, the other cultivated, other conditions being equal, and it will be noticed that there is a great difference in the hue of the foliage; that on the cultivated one being of a dark-green color, a true index to healthy condition, while that of the other is pale, and lacks that rich green tint; and if there is a difference in favor of the latter in keeping quality of the fruit, it is because of less moisture in the apple and more dry fiber, and if you have this it will be at the expense of flavor and quality.

The cardinal points in orchard work are prune, spray, cultivate, and feed; and the most important are the two last. There is abundant evidence that often, when the first two are neglected, but the trees are well fed and cultivated, it does much to overcome the effects of neglect of the first two.

There is good sense and truth in the phrase, that "the best crop to grow in an orchard is cultivators."

Growing Cucumbers.

June 15th is not too late to plant cucumbers in this country. In dealing with their growth, "Vegetable Gardening" says:

"It is quite customary to furrow out the land six feet apart one way, mark crossways of the furrows with a six-foot marker, and put a shovelful of well-rotted manure or compost in each intersection. Cover this manure with soil, and plant the cucumber seed. Of course, when the land is in the best condition, it is not necessary to put manure in the hills; in such cases, all that is necessary is to mark out both ways and plant at the intersections. About ten or a dozen seeds should be put in each hill, and covered about one inch deep, and the soil packed over the seeds. As soon as the plants are up, and after each rain, they should have the soil loosened around them. They should also be kept dusted, until well established, with Paris green, land plaster, or some other dust, to keep off the striped beetles, which are often very troublesome, and may destroy the plants when they are small, unless preventive measures are used. The land should be cultivated both ways, until the vines prevent it, so that very little work will have to be done by hand. About three good plants are enough for each hill, and the rest should be removed after the danger from serious insect injuries has passed."

Nitrate of Soda.

Probably there is no commercial manure that will give better results for the money invested in many cases than nitrate of soda. Its use will be indicated especially this year on plantations of any kind of fruit that has been injured to any extent by the severe winter, and especially on soils that are deficient in nitrogen. An old strawberry patch, or raspberry or blackberry plantation, will be rapidly revived by the use of 150 or 200 pounds to the acre. It is a quick stimulant, a plant food that is immediately available. It acts at once. Probably the best way to apply it is to pulverize it finely, and sift it through a fine meshed sieve, and dilute it by mixing with dry road dust, plaster or ashes, which should also be sifted. It should be sown when the weather is dry, right on the rows of plants. It must not be applied when the plants are damp or wet, or it will adhere to the leaves and burn the foliage. It can be applied with benefit right up to the time of fruiting. For tree fruits it should be scattered under the trees as far as the roots extend, and lightly mixed with the surface soil.

Going to Wisconsin.

A despatch from Dresden, Ont., recounts the many importunate obstacles that have militated against the success of the beet-sugar factory in that town. It includes as follows: "Misunderstandings with the town council, depression in the market, expensive fuel, attractive inducements from other places, and difficulties in getting the required amount of raw material, all, no doubt, combined to bring about a decision in the minds of the company to move the plant. This is now being accomplished, and the immense structure is being moved to Janesville, Wisconsin. The debentures are returned to the municipality of Dresden, and the enthusiasts among our beet growers are giving their contracts to Wallaceburg, which has a well-equipped factory, with a hustling management, twelve miles to the west of us." A great blunder was made in locating the Dresden enterprise so close to Wallaceburg.

EVENTS OF THE WORLD.

The Japanese authorities have closed the Yalu river to general commerce, none but Japanese craft now being permitted to ascend it.

On May 25th the British steamer Tweed Dale, with 1,055 coolies on board, sailed from Hong Kong for Durban. This is the first set of coolies sent to South Africa to work in the Transvaal mines.

A French officer is under arrest on the charge of having spent large sums of money in order to secure the conviction of Dreyfus. He is at present held in close confinement in the fortress of Mount Valerian.

The United States armored cruisers Brooklyn and Atlanta have arrived at Tangier, Morocco, and other vessels of the U. S. squadron are following, the object of the demonstration being to effect the release of the American citizen, Mr. Perdicario, and his stepson, Mr. Varley, who are held by the brigand Raisuli.

On May 26th, an engagement which lasted for 11 hours, took place between the British and Tibetans at the village of Palla, near Gyantse. The British lost one officer and three Sepoys killed, and three officers and nine men wounded. Thirty-seven of the Tibetans were captured.

China has demanded the extradition of Chinese fugitives who have taken shelter on the Macao Island, near the mouth of the Canton river, and has sent four gunboats and two destroyers to enforce the demand. The Portuguese are preparing to resist the landing of the Chinese.

On May 26th, a serious anti-Semitic outbreak occurred at Chotyn, Bessarabia, where a mob of Russians, Greeks and Armenians attacked the Ghetto, demolishing the interior of the principal synagogue, wrecking and plundering homes and shops. As a result, one hundred Jews were injured, and many left homeless and destitute.

A daring ride, destined to have place in the annals of cavalry ventures, was recently made by a division of 5,000 Cossacks under the leadership of General Madritoff. Filled with the desire of capturing Seoul, the capital of Korea, this force, covering a distance of 400 miles in a fortnight, advanced to within a day's march of the city. At this point, however, it was checked by orders to return immediately to Wiju, and reluctantly the soldiers retraced their way. The division is now east of Feng Wang Cheng awaiting further orders.

The Russians are exercising the greatest care to prevent the outbreak of epidemics among the troops in Manchuria, men specially trained in disinfecting having been despatched to all the big camps by the Red Cross Society, and extreme care is taken to provide good sanitary conditions in the camps and towns. The Society has also established 10,000 beds in Manchuria. In addition to the hospital trains, 189 barges have been provided for the transportation of the sick and wounded, and flying detachments, each consisting of one surgeon, four medicals and eight men, organized to give the first aid to the wounded, and operate under fire.

Since the occupation of Dalny by the Japanese, on May 26th, the usual supply of unconfirmed rumor has emanated from the Far East. It has been asserted that severe fighting has taken place on the Liaoting peninsula; that the Japanese are now in possession of the outer line of fortifications at Port Arthur, and that Gen. Kouropatkin, with the object of relieving the strain upon the town, has dispatched a large force southward to harass the Japanese occupying the peninsula. The only official news, however, concerns two engagements, the first of which took place on May 30th at Vagenfuchu, between a body of Cossacks and a detachment of Japanese, who were routed with a loss of 200 men killed and a number of horses. In this engagement the Cossacks, for the first time, made use of lances. The second encounter took place the same day at Lichiaton, near Polantien, where a body of Russian cavalry, artillery and infantry were defeated by a company of Japanese. Further than this but little is known. The main body of Gen. Kouropatkin's army still remains at Liao-Yang, evidently awaiting strong reinforcement from the soldiery who are now pouring into Manchuria, at the rate of 2,500 per day. Harbin is being strongly fortified, heavy siege guns having been dispatched from Cronstadt for that purpose. The plans of General Oku and Kuroki, following the usual policy adopted by the Japanese in this campaign, are kept with the greatest secrecy. It has been asserted, however, that their forces have been strengthened recently by an army landed at Takushan, so that General Oku's force now totals 120,000 men, and General Kuroki's 140,000. Details of the fight at Nanshan Hill on May 26th, now place the total Japanese loss at 4,304. The daring dash made by the Japanese on that occasion has excited the long-delayed regard of Kouropatkin himself. He has at last declared that "recent operations prove the Japanese to be among the greatest strategists in the world." He has also expressed the greatest admiration for their daring, and capacity for work.

NOTES AND NEWS.

The Canadian Pacific Railway Company has decided to make its new Winnipeg station and hotel fireproof.

In consequence of labor troubles at Sydney, C. B., the Dominion Company's steel plant is practically idle.

Ten members of the Northwest Mounted Police have been dispatched to Hudson's Bay, to strengthen the police contingent sent there last year.

The Hon. Thomas Ferguson, one of the most prominent members of the judiciary in Ontario, died on May 31st at his residence, Sherbourne St., Toronto.

The Hon. Edward Blake has decided to discontinue his law practice, in order that he may remain in Parliament as the representative of Longford, Ireland.

A terrific windstorm, which struck Brandon on May 28th, wrecked the fair buildings and other structures. The loss will be about \$15,000.

The Department of Trade and Commerce of the Dominion is calling for tenders for a monthly steamship service between Canada and Mexico. There will be both an Atlantic and a Pacific service.

The Royal Commission, appointed in London, Eng., in August, 1901, to inquire into the relation between human and bovine tuberculosis, have reached the conclusion that the disease is practically identical.

The question of taking steps for keeping out undesirable immigrants and affording more assistance to desirable ones has been made a matter of attention in the House at Ottawa.

Floods have done great damage to buildings and crops in many parts of Kansas. The Kaw river rose eighteen feet above low water mark, fields were flooded, houses carried down stream, and passenger trains blocked.

A party of fifteen travellers, proceeding from the Far East to England, via Canada, has been detained near North Bay by the Ontario Board of Health. It was shown that two cases of smallpox had occurred on the vessel which brought them over.

On May 27th, one of the biggest land deals of the year was closed. By it 40,000 acres of land in Eastern Assiniboia passed into the hands of Chicago capitalists, who will proceed to farm it on a scale never before attempted in Canada. The whole area will be put under cultivation this year.

According to statistics recently made public regarding the immigration to Canada since January 1st of this year, 24,000 of the immigrants were English, 8,000 Galicians, 3,200 Scandinavians, 1,100 Italians, and 3,500 Russians, Germans, Jews, and others; the total number thus aggregating 39,800.

Mr. T. D. Schreyner, of Auckland, N. Z., the representative of the Canadian Manufacturers' Association at the Antipodes, arrived in Montreal on May 25th. His mission to Canada is the important one of interviewing the Dominion Government regarding the establishment of a direct line of steamships between New Zealand and Canada.

Mr. S. T. Bastedo, Ontario Commissioner of Fisheries, has received an interesting specimen of the paddle-fish, or spoon-bill cat, which was caught in the Spanish River, Algoma. It measures 5 feet 1 inch over all, and is a dangerous-looking creature. It has never previously been seen in Canadian waters. The fish belongs to the sturgeon species, its roe being available for caviare.

Money orders from all over the U. S., aggregating so far \$30,000, are pouring into the general post office at New York, for a concern known as the "Eastern Trade Company." A month ago the postal authorities became suspicious, and ordered a mail sent to this address to be held, examined, and sent back to the senders. One clerk is kept busy re-mailing the letters at the rate of 1,000 a day. It would seem that the multitude never learns the lesson of paying no attention to fake advertisements wherein much is offered for little.

Successful Students.

Each year the student standing highest in a group of subjects under a general head, at the Ontario Agricultural College, receives a scholarship, and the student taking first in general proficiency first and second year's work, is presented with a silver medal by the Governor-General of Canada. This year the honors were distributed as follows:

SCHOLARSHIPS.

First Year:

1. English and Mathematics.—J. W. Kennedy, Apple Hill, Glengarry, Ont.
2. Physical Science.—T. G. Bunting, St. Catharines, Ont.
3. Agriculture.—R. M. Winslow, London, Middlesex, Ont.

Second Year:

- First in general proficiency, first and second year work, theory, and practice, medal.—J. Bracken, Seely's Bay, Grenville, Ont.

Essay—"Macaulay as an essayist and a writer of English prose."—D. H. Jones, Bedford Park, York, Ont.

The Bath and West of England Show.

After an absence of twelve years, this Society held its annual show in the town of Swansea, and so far as entries are concerned, there was little to be desired for the average of the merit all through the classes, which was very good indeed.

In Shire horses, H. M. the King won, in addition to several minor awards, the Shire Horse Society's gold medal for the best mare or filly with Dunsmore Nightingale, a very typical yearling filly bred by Sir A. Muntz. Sir A. Henderson won in the yearling colt class with Buscot Talisman, a youngster with merit and good type, and he also won in the mare and foal class with Rickford Dorothy, to which was given the R. N. for the gold medal. H. H. Smith, Carrington, B. Wall and P. Coates were amongst the other leading winners in these classes, which, taken in the aggregate, were of the very first-class merit. The classes for agricultural horses and for colliery horses were only of local interest.

The Hackney classes were not so large as we have seen them in some former years, but the quality of most of the entries was capital. Ms. A. A. Haley's Mandora that won 1st prize in the two-year-old filly and gelding class, was also the winner of the Hackney Society's medal for the best mare or filly. Her quality was undeniable, and the grand all-round action shown by this filly was much admired. Mr. Haley's stud was more strongly represented than any other, and the success he secured was fully deserved. Sir W. Gilbey's noted stud sent forward a grand three-year-old, which won easily first in the class. By name, Gallant Earl.

CATTLE.

Shorthorns made an entry of considerable merit, but the bulls have been better at some former shows. The champion bull was found in Alastair, by Royal Star, shown by the Earl of Powis, and bred by Lord Lovat. This bull won first in the older classes. Mr. E. M. Denny, whose bull, Ascot Constellation, by the noted Silver Mint, won first in the two-year-olds, was R. N. for champion honors. Mr. C. Morgan-Richardson won with Meteor (a white), by Moonlight, in the yearling class, but here some questioned whether or not the award should have gone to Pride of Roses, by Pride of Collynie, that won second honors for H. M. the King, whose herd also secured several minor honors in the other classes.

The females were stronger than the males in merit, and, without question, one of the best animals in the whole section was the grand young yearling heifer, Lady Amy 7th, by Cornish Knight, sent by the Earl of Powis. Seldom have we seen a more symmetrical or even heifer. Lady Sybil, from the same herd, that won first in the cow class, is a daughter of Mandarin. Mr. J. Colman, won in the heifer-in-milk class with Hawthorn Flower. Mr. J. D. Willis, with Henrietta, won in the two-year-old class with a fine daughter of Silver Plate, but between her and Mr. Colman's Alice Hawthorn, also by Cairo, the difference is a small one.

The Herefords made a fine display, with good numbers present. H. M. the King's herd took a prominent position, winning first for old bulls with Fire King, first for two-year-old heifers with Empress, and second for yearling heifers with Sophia, all of which were very superior. The Earl of Coventry's two-year-old, and Mr. A. E. Hughes' yearling bulls, Hogarth and Peer, were likewise of great merit and most typical of their breed; these were first in their respective classes. The leading animal in the female classes was Mr. J. Tudge's three-year-old heifer, suckling her first bull calf. A grand pair these were, and we understand a very high price was refused for both. Mr. A. E. Hughes won in yearling heifers, and Sir C. R. Boughton in the cow class.

The Aberdeen-Angus breed continues to increase its sphere of influence at home, and the entry made at this show will gain it more adherents. The type and character were satisfactory all through, and the leading winners were Messrs. R. W. Hudson, who secured the champion honors; J. J. Cridlain and F. A. Macpherson.

The Jerseys were largely to the fore, and the exhibits of very superior merit, particularly those that won the leading honors, which went mainly to Lord Rothschild, the Marquis of Winchester, Mrs. C. Kelntosh, and Messrs. J. Miller-Hallett and J. Brutton.

SHEEP.

Cotswolds were well represented, and the winning pens of all three ages exhibited—yearling rams, yearling ewes, and ram lambs—all came from Mr. W. T. Garne's noted flock, and were well worthy of the high reputation his flock holds. Mr. R. Swanswick secured R. N., and a pen of ewes from Mr. W. Holton were well deserving of notice.

Southdowns were good all through. Mr. C. Adeane winning for yearling ram with a deep-fleshed fine sheep, to which went also champion honors. Mr. E. Ellis was second and third in this class, and first for ram lambs with a very fine pair of blocky, well-wooled lambs. H. M.

the King won in the yearling ewe class with a well-matched pen of considerable merit, and these were made champions. The next pen came from Mr. J. Colman, which, viewed as breeding sheep, were to be preferred on account of their fine type.

Hampshire Downs made a good showing, and in the winning yearling ram Mr. Carey Coles owns a stud ram of great merit and fine character; next came another good sheep from Mr. H. L. Gripps, and then two with rare good quality of flesh from Mr. J. Flower, which were third and R. N. Mr. Flower again led in the ram lamb class with a very superior pair; next being Mr. H. L. Gripps'. The yearling ewe class was another victory for Mr. Flower with a pen of very fine type.

Shropshires had the largest entry of the sheep section, and the average merit ran high all through. Mr. H. B. Mander won in the shearing rams with a very even sheep. The second winner, from Mr. Williams, was noticeable on account of the merit of his fleece. The winning pens of lambs and also of yearling ewes came from the flock of Sir W. O. Corbett. Mr. R. P. Cooper took second and third honors for the yearling ewes, and the pens sent by Mr. T. Penn had hard luck in not being put a bit more forward.

In Oxford Downs, Mr. J. T. Hobbs was the only exhibitor present, and his fine sheep were awarded the prizes all through.

Dorset Horns were well represented, the winning sheep in all three classes being those sent from that grand flock owned by Mr. E. A. Hambro. Messrs. Culverwell, Merson and Attrill were also winners. Mr. W. R. Flower was not represented at the show.

SWINE.

The winning owners in the large entry of Berkshires were Mr. N. Benjafield, who secured the breed champion honor with his boar, Commander-in-Chief; Mr. Jefferson, Duchess of Devonshire, and Messrs. A. Hiscock J. A. Fricker and R. W. Hudson were also winners.

Large Blacks.—This increasingly popular breed made a notable entry, both for merit and number. Breeders in foreign and colonial countries would do well to test this breed, which for bacon purposes is being more and more preferred. Messrs. J. Grose & Sons, T. Warne, J. Warne and C. F. Mariner were the leading breeders and winners.

Large Whites.—A very typical entry represented this breed, the Earl of Ellesmere, Sir Gilbert Greenall and S. Spencer taking the leading honors.

Tanworths made one of the best entries we shall see during the whole season, and in the several classes we were pleased to notice high quality, particularly in the sow classes, headed by that excellent specimen sent from Mr. H. C. Stephens' herd, to which went the breed championship and gold medal. The last named herd also won for pairs of sows; Mr. R. Ibbotson for boars, singles as well as pairs; and Mr. D. W. Phillips was the winner of a good proportion of the second and minor honors. W. W. C.

Open-air Horse Show.

Toronto has an organization known as the Open-air Horse Parade Association. Its object is to hold a horse parade through Queen's Park and adjacent streets on Dominion Day or other such public holiday the Association shall decide upon. This parade is intended to induce owners and drivers to take greater pride in the appearance of their horses, and to stimulate public interest in the horse. A show of hunter, saddle and carriage horses is also held at the same time. Entries are open to all Canada, and are not restricted by any fee. No horse sick, lame, out of condition, or otherwise fit for work, is allowed in the parade. The scheme is a laudable one, and Toronto's example might well be imitated by other cities. It is not the worst reputation a city can have, that its horses are a superior lot of animals.

Duplicate St. Louis Prize Money.

On June 2nd, in Parliament, in considering the estimates for exhibitions, Hon. Mr. Fisher, Minister of Agriculture, announced that in order to encourage the exhibition of Canadian live stock and poultry at the St. Louis Exposition, the Government was prepared to duplicate the prize-money awarded them.

In a letter to the Dominion Live-stock Commission, dated June 3rd, Mr. Fisher writes: "I have decided to make the following arrangement: That wherever any Canadian wishes to exhibit horses, cattle, sheep, swine or poultry, I will, over and above the ordinary services which we grant to any exhibitor, pay to each such exhibitor, a sum equal to the prize money which he secures in the competitions for which he enters. In these competitions, the St. Louis Exhibition authorities have asked that our Commissioner shall counter-sign or endorse the certificates of registration of pure-bred stock. We will there undertake to receive the entries or applications for space for live stock, addressed to Mr. Hutchison at the Canadian building in the St. Louis Exhibition, will examine the certificates of registration, and endorse such as we feel we can recommend to the

Exhibition authorities; and we will see that these entries and applications are properly attended to, and the intending exhibitor duly notified as to the conditions of the Exhibition in regard to their particular classes,

Agricultural News from Canada's Capital.

(Special correspondence.)

THE SEED BILL.

Hon. Sydney Fisher will introduce a bill in Parliament this session to restrict the sale of seeds. It will contain many modifications of the act of last year. One of the changes in the new measure will be provision for defining a maximum and a minimum grade of seed, instead of undertaking to define different grades. The Minister is altering the law in compliance with the requests of seed merchants and Farmers' Institutes. The maximum grade corresponds with No. 1 variety, and the minimum grade the lowest quality of seed permitted to be sold. The recommendations came to Mr. Fisher in response to the 29,000 copies of the act of last year distributed throughout the Dominion. The intention of the Government is to maintain a seed inspection bureau or laboratory in Ottawa, to which seed samples will be sent. The report of the officers will be held as evidence as to the quality of the seeds. The dealers will make the first grading. Mr. Fisher intends that the act shall come into force on July 1st, 1905.

THE IMPERIAL INSTITUTE.

The provincial authorities have gradually ceased to do anything for the Imperial Institute exhibits in London, Eng., and the Dominion Government have practically assumed control of the exhibit. For this purpose, \$8,000 has just been voted by Parliament. An arrangement has been made between the Canadian High Commissioner and the Board of Trade in London, whereby Canada will pay £600 sterling a year towards carrying on the work of the Institute. An additional £200 will be devoted to the city office of the Institute, and £400 to cover certain salaries. This makes \$6,000, and the other \$2,000 will be expended on material for the exhibit. The arrangement is subject to approval of Parliament every year. Harrison Watson, a Canadian, who was appointed curator, eight years ago, still retains that office. Mr. Fisher has requested Lord Strathcona, the Canadian High Commissioner, to ask the provinces to supplement the exhibit made by the Dominion. Lord Strathcona has been a governor of the Institute since its inception. He has always urged that Canada make a creditable display there. Mr. Fisher believes that much effective work can be done in the way of advertising Canadian products under the new organization of the Institute. It has a strong staff of technical officers, who are at the disposal of the colonies for the purpose of investigating into the value of different products. As an instance of the advertising value of the Institute, the Minister of Agriculture states that some time ago he sent the plant known as sweet clover, very common in parts of Canada, and has received a report, showing it to be valuable in rope manufacture. Some of the exhibits now in St. Louis will be sent to the Institute next autumn. At present the exhibits consist of manufactured articles, minerals, agricultural products, and timber. Articles from the Wolverhampton Court Exhibition were sent there.

POULTRY INVESTIGATIONS.

In his evidence before the Agricultural Committee of the House of Commons last week, Mr. A. G. Gilbert, poultry manager of the Central Experimental Farm, gave an account of a feeding test, which showed that flesh had been put on chickens at 4.7 cents a pound. The chickens were two months six days old when the fattening began. At that time they weighed two pounds six ounces. They were fed to the weight of four pounds twelve ounces. Some members of the committee commented on the fact that no turkeys and geese were kept on the Central Experimental Farm. Mr. Gilbert said the present quarters were not large enough to include all the kinds of poultry, and the birds mentioned required much space. Mr. Uriah Wilson, Lennox, and Mr. Richard Blain, Pea, expressed the opinion that space should be provided for these two classes of poultry. Mr. Gilbert said that hens over two years old should not be kept for winter laying. Concerning best breeds for laying, he said selection of types of birds were just as important.

SANFOIN AND CLOVER.

Mr. John Fixter, Apiarist of the Central Experimental Farm, gave evidence before the Agricultural Committee of the House of Commons on June 1st. Of the flowering plants that supply food to bees, Mr. Fixter said the plant sanfoin, popularly known as Bokhara clover, was at the head of the list. This plant possesses valuable qualities as a fodder, as well as being a honey yielder. It also serves as a weed killer. Mr. Fixter said it was too early in the development of the honey industry in Canada to talk of export of the product. The country produces about half enough for home consumption. He gave the value of the honey now produced in the Dominion at \$356,816, compared with \$6,664,904 in the United States.

Galt Horse Show.

The fourth annual open-air horse show held in Galt, on June 2nd, 3rd and 4th, marked another stage in the development of the success which has characterized the work of Waterloo County horse fanciers. This show, the largest of open-air shows in Canada, and easily comparable with similar indoor events in larger cities, has been increasing continually in popularity since its inception. This year the entries were 497, as compared with 308 last year, and in the attendance and interest there was a corresponding increase. Waterloo County is peculiarly suited for an open-air show. The country is well supplied with all classes of good horses, and the town of Galt is conveniently located for the horsemen of several neighboring towns. Among those exhibiting this year from a distance were Mrs. Adam Beck, London; Mrs. McCoy, Toronto Junction; Al. Yeager, Simcoe; Crow & Murray, Toronto; Kidd Bros., Listowel; and others from almost all the neighboring towns, including Berlin, Waterloo, Guelph, Preston, Hespeler, Paris, Brantford, Milton, Hamilton, Stratford, etc.

The judging in every case was not above question. Those officiating in the different classes were: Roadsters, Geo. McCormick, London; heavy drafts, agricultural and general-purpose, Albert Ness, Howick, P.Q.; saddlers and jumpers, Lieut.-Col. Lessard, Montreal; harness pairs and singles, D. Hughes-Charles, Peterboro.

The first-named class had many strong entries, the best being owned by Miss K. L. Wilks, of Galt. In addition to Lady Cresceus, the champion roadster mare of Canada, the Galt string also had a new pair, Rhea W. and Easter Bell, nine and seven years old respectively, sired by Woodford Wilkes. This team was purchased in New York for a little better than four thousand dollars.

Drafters, general-purpose and agricultural horses of good quality are fairly plentiful about Galt. A. A. Aitchison, Guelph, had honors both for single drafters and teams. The agricultural classes were simply light drafters, and the general-purpose horse, according to Mr. Ness and the Galt horsemen, is a large-sized carriage horse, of doubtful origin, certainly not of draft breeding.

The championship for best combination horse went to Crow & Murray's Othello, a veteran show horse, being closely crowded by Mrs. Adam Beck's Falkirk. For the high jump, Crow & Murray showed three, Thistle-down clearing the bars at six feet ten inches, by no means his limit. Lightweight green hunters was a clean sweep for Kidd Bros., who won the first three places in a very large field.

Harness horses had plenty of competition, and judging was no easy task, but there was no justification in placing Mrs. Beck's Sparkle, a nice trappy mare, winner in the class under 15.3, over Yeager's Derby King, head of the class over 15.3, and reserve for championship at Toronto. Sparkle is a Standard-bred mare, and very showy, but her action is short. Derby King is one of the Hillhurst Sensation colts, an exceptionally strong horse, with plenty of substance and a good stride, as well as showy. Harness pairs, 15.3 and under, was Crow & Murray's victory with Sporting Duchess and Watch Me; A. Yeager's Gay Lady and Gay Lassie were second, and Mrs. Beck's Lady Elgin and Lady Norfolk third. In the class for harness pairs over 15.3, Yeager's Derby King and Economy won. The tandem class was won by the same pair.

The success and usefulness of the Galt show during the past four seasons is sufficient assurance of its continuance. Every detail of the show is carefully attended to by the masterful secretary, Mr. C. R. H. Warnock, while the president, Mr. R. O. McCulloch, makes everyone welcome with his genial hospitality.

Room for Immigration.

The opening months of 1904 have witnessed a continuation of the immigration movement, which last year brought us 129,000 new citizens. The Anglo-Saxon race is always expanding. It has spilled over into America until the United States is comfortably filled; it is now overflowing into Canada. We have six millions of people to-day. Mr. Lightall estimates that we have room for nine hundred millions. The number required is therefore 894,000,000. If they come at the same rate as in 1903, six thousand years will be required to secure them. Even if we received a million a year, it would be nearly nine centuries before the country is filled up. In view of these figures, the labor unions and trade councils need have no worry about the country filling up too rapidly.—[June Canadian Magazine.]

Forthcoming Sales of Pure-bred Stock.

June 14th.—Hackneys, saddle horses, etc., Watter Harland Smith's Repository, Toronto.

June 15th.—At Hamilton, Ont., D. C. Flatt & Sons' sale of 80 imported Yorkshire sows and boars.

June 22nd.—Dispersion sale of Shorthorns, property of H. Parzer, Durham, Ont.

June 23rd.—Fifty imported Clydesdale mares and fillies, at Grand's Repository, Toronto, property of Graham Bros., Clarendon.

June 28th.—At Hamilton, Ont., 60 Shorthorns, contributed by W. C. Edwards & Co., Rockland, and others.

One Night in the Schoolroom.

From Young People.

One night in the schoolroom
The books on the shelves
Determined to hold
A convention themselves.
Down came a fierce Grammar
And rapped on the floor,
And of spellers and lexicons
Up leaped a score.

Then an Atlas demanded
What meant such a row
And a French Reader answered,
First making a bow,
"It is time we should know
What the young people think
Their school books are for,
When they blot us with ink."

"And tear out our titles,
And loosen our leaves,
Or pile us in heaps like
Disorderly sheaves.
We are worth better treatment,"
The Reader averred,
"And I," he said firmly,
"Resolve to be heard."

Then eight ranks of figures
Came marching along,
The tide of their plaint
Swelling out like a song.
"We are hated and scorned,"
Said a six and a five,
"Tis a wonder," chimed ten,
"That we're even alive."

A History next
Arose, solemn and grand,
With the air of a conqueror
Viewing the land.
"I confess," said the tome,
"To a certain contempt;
From troubles like yours
I am always exempt."

"If you interest the young,"
The big volume went on,
"They will haste to your tasks
And obligingly con
Whatever you wish;
But a history, no doubt,
Is different from figures
That put a child out."

What might have been done
Had not morning appeared
I cannot conceive
Of the strange and the weird.
When nine o'clock came,
With the children themselves,
The books were all safe
In their nooks on the shelves.

Our Modern Public Schools.

Ram it in, cram it in,
Children's heads are hollow;
Slam it in, jam it in,
Still there's more to follow;
Hygiene and history,
Astronomy, mystery,
Algebra, histology,
Latin, etymology,
Botany, geometry;
Greek and trigonometry;
Ram it in, cram it in,
Children's heads are hollow.

Rap it in, tap it in;
What are teachers paid for?
Bang it in, slam it in,
What are children made for?
Ancient archeology,
Aryan philology,
Prosody, zoology,
Physics, climatology,
Calculus and mathematics,
Rhetoric and hydrostatics;
Hoax it in, coax it in,
Children's heads are hollow.

Scold it in, mould it in,
All that they can swallow;
Fold it in, hold it in,
Still there's more to follow.
Faces pinched, sad and pale,
Tell the same unvarying tale;
Tell of the moments robbed from sleep,
Meals untasted, studies deep;
Those who've passed the furnace through
With aching brow will tell to you

How the teacher crammed it in,
Rammed it in, jammed it in,
Crunched it in, punched it in,
Rubbed it in, clubbed it in,
Pressed it in and caressed it in,
Rapped it in and slapped it in,
When their heads were hollow.

Scientific Cooking.

A new duty of the scientific housewife, according to Mary Moulton Smith, is to see that the members of her family receive the various elements of food in their proper proportions. "Before the breakfast has been prepared," she says, "or after it has been served and eaten, the housewife should add up the different amounts of proteid, fat and carbohydrates found in the foods. In the evening you can find out whether you have taken too much of one kind of food or not enough of another." A writer in the Chicago Tribune comments on this in verse in the following fashion:

Mother's slow at figures, but she always has to count
The proteids to see that we secure the right amount.
She keeps a pad of paper and a pencil near the sink,
And estimates our victuals—all the things we eat or drink.
She lists our carbohydrates and she scribbles down the fat,
And our specific gravity—she always watches that.

Mother's slow at figures, but she wants to do her best.
She's listening to the lectures until she is possessed
Of scientific demons and a regulating-card—
And while she chews her pencil all the eggs are boiling hard.
She gets bewildered with it, and she has to balance up,
And the coffee is so sturdy that it almost cracks the cup.

Mother's slow at figures—so our breakfast's always late;
The proteids and the hydrates make the task for her too great
We never get a luncheon, for she figures until noon,
And finds we've overdone it, and that almost makes her swoon.
Mother's tabulating every pennyweight we eat—
Except the meals we smuggle from the restaurant down the street.

MARKETS.

The heaviest run of live stock of the year was made at the Western Cattle Market, Toronto, on Friday last. Four thousand hogs and nearly fourteen hundred cattle were on hand. This pressure was quite a strain on prices, but all classes remained up except hogs. Friday has come to be the great market day in Toronto for hogs, and perhaps these large rushes on one day are responsible for fluctuating prices. Whatever the cause, dealers had no trouble securing supplies on Saturday last at a reduction of 12c., 5.12½ ruling for best, and lights and fats at 25c. lower. In Montreal, however, the market kept up to \$5.25 and \$5.50. Dealing in cattle of all kinds has been quite brisk. Exporters take all they can get, although the average quality of late has not improved. Butchers pick up their cattle with a snap, and farmers are buying feeders quite freely.

Dairymen are quite optimistic of trade conditions, claiming, and rightly so, that 8c. is a pretty good price for first makes of cheese, but of course the cost of production must be considered when comparing this price with those ruling four or five years ago.

Quotations are:

LIVE STOCK.

Toronto Live-stock Markets.

Exporters—Choice, well-finished, heavy exporters, \$5 to \$5.35 per cwt.; medium, \$4.80 to \$5.

Export bulls—Choice, \$3.75 to \$4.25; medium, \$3.50 to \$3.60.

Export cows—From \$3.75 to \$4.25 per cwt.

Butchers—Choice picked lots of butchers', equal in quality to best exporters, 1,100 to 1,200 pounds each, \$4.60 to \$4.75; good, \$4.50 to \$4.60; medium, \$4.25 to \$4.40; common, \$3.50 to \$4; rough and inferior, \$4 to \$4.25 per cwt.

Feeders—Short-keep feeders, 1,100 to 1,200 pounds each, \$4.50 to \$4.90; those weighing from 950 to 1,050 pounds of good quality, \$4 to \$4.25 per cwt.

Stockers—Choice yearling calves, \$3.75 to \$4; poorer grades and off colors, \$3 to \$3.50, according to quality.

Milch Cows—Milch cows and springers, \$25 to \$62 each.

Veal calves—From \$2.50 to \$8 each, and \$3.50 to \$5 per cwt.

Sheep—Export ewes, \$4 to \$4.25; export bucks, \$3 to \$3.50.

Lambs—Yearling grain-fed lambs, \$5.00 to \$5.25.

Spring lambs—Prices range from \$2.50 to \$4.50 each.

Hogs—Straight loads, fed and watered, \$5.12½ per cwt.; and \$4.87½ for lights and fats.

GRAIN AND PRODUCE.

Toronto Wholesale Prices.

Wheat—93c. to 94c., No. 2 red and white, west and east; goose, 83c., No. 2 east; spring, 88c., No. 2 east; Manitoba wheat, 93½c. for No. 1 hard, 92½c. for No. 1 northern, 89½c. for No. 2 northern, and 87½c. for No. 3 northern at Georgian Bay ports, and 6c. more grinding in transit.

Millfeed—\$17 for cars of shorts, and \$15.50 for bran, in bulk west or east. Manitoba millfeed is steady at

\$20 for cars of shorts and \$18 for bran, sacks included, Toronto freights.

Barley—There is some inquiry for export. The market is steady at 42c. for No. 2, 40c. for No. 3 extra, and 38c. for No. 3 west or east.

Buckwheat—46c. for No. 3.

Rye—57c. to 58c. for No. 2.

Corn—45c. for Canada west; American, 59½c. for No. 2 yellow, 58½c. for No. 3 yellow, and 57½c. for No. 3 mixed, in car lots, on the track, Toronto.

Oats—No. 1 white, 38c. east; No. 2 white, 33½c. east, 32c. west.

Peas—62c. to 63c.

Beans—\$1.55 to \$1.60 per bushel for hand-picked, \$1.40 to \$1.45 for prime, and \$1 to \$1.25 for under grades.

Baled Hay—\$9 per ton for car lots on track here.

Baled Straw—\$5.50 per ton for car lots.

Potatoes—Cars on the track here, 85c. to 87c. for choice; potatoes out of store, 95c. to \$1.

Butter—For good, fresh grass butter the demand is active; in other lines it is about normal. Creamery prints, 17c. to 18c.; dairy pound rolls, good to choice, 11c. to 13c.

Cheese—9c. for new large, and 9½c. for new twins. Old large is steady at 10c. per pound for job lots here.

Eggs—The market is steady in tone, but holders in the country are firm in their ideas. The price quoted here is steady at 15c.

Retail Prices, Toronto Street Market.

Wheat	96
Wheat, goose	80 to \$ 80½
Wheat, spring	94
Oats	37 to 38½
Barley	45
Peas	66
Hay, timothy	11 00 to 12 00
Hay, mixed or clover	7 00 to 9 00
Dressed hogs	7 00 to 7 50
Butter	15 to 18
Eggs, new laid	15 to 16
Fall chickens, pair	75 to 1 50
Spring chickens, per pound	40
Old hens	10 to 12
Apples, per barrel	1 00 to 3 00
Potatoes, per bag	1 10 to 1 20

Montreal Wholesale Prices.

Montreal, June 3.—Oats are offering at all sorts of prices, and it really looks as though they were not wanted at any figure. Peterboro's are offered at 35c. on track, but without inducing trade of any consequence.

Peas—About steady at 71c. afloat Montreal; No. 2 barley, 50c.; No. 3 extra, 49c.; No. 2 rye, 62c.

Flour—Manitoba patents, \$4.90 to \$4.95; strong bakers', \$4.60 to \$4.65; winter wheat patents, \$4.80 to \$5; straight rollers, \$4.50 to \$4.65; straight rollers in bags, \$2.15 to \$2.25.

Feed—Manitoba bran in bags, \$19; shorts, \$21 per ton; Ontario bran in bulk, \$18.50 to \$19; shorts, \$19.50 to \$20; mouille, \$26 to \$28 per ton, as to quality.

Hay—No. 1, \$10.50 to \$11.50; No. 2, \$8.50 to \$9.50; clover mixed, \$8 to \$8.50; clover, \$8 per ton in car lots.

Beans—Choice primes, \$1.40 per bushel; \$1.35 in car lots.

Fresh killed abattoir hogs, \$7.50; live hogs, \$5.40 to \$5.75.

Eggs—New laid, 15c. to 15½c.

Butter—Full grass, 15½c. to 16½c.; western dairy, 13c. to 14c.

Cheese—Ontario, 8½c. to 8½c.; best Quebec, 8½c.

Cheese Markets.

Brockville, June 2.—Cheese was dull to-day, offerings large. Eight and one-eighth was offered, but not accepted on the board, though five thousand boxes were sold on the curb at this price. Dr. Stark, Vice-President of the South Finch Board, was present, and urged that the board send representatives before the railway commission to protest against increased freight rates.

Madoc, June 2.—1,055 boxes cheese boarded; 60 boxes sold at 8c.; balance unsold.

Kingston, June 2.—1,345 were boarded, 1,092 colored and 250 white; 8c. bid; none sold.

Pictou, June 2.—1,755 boxes, all colored, highest bid, 8 1-16c.; no sales.

Tweed, June 2.—540 white cheese boarded, all sold at 8c.

Winchester, June 2.—255 colored and 928 white were registered; 8c. was offered; none sold on board.

Vankleek Hill, June 2.—1,266 white and 161 colored boarded; all sold at 8c., except 123 boxes withdrawn as being too green.

Perth, June 3.—1,600 white, 500 colored; all sold at 8c.

Iroquois, June 3.—1,134 cheese were boarded; 8c. bid; none sold.

Ottawa, June 3.—1,856 boxes boarded; 760 white and 145 colored sold at 7½c.

Brantford, June 3.—At the market 918 boxes were offered. All sold at 8c. to 8½c.

Napanee, June 3.—2,197 boxes were boarded, 1,115 colored and 1,042 white; 8c. bid; 1,767 boxes sold.

South Finch, June 3.—1,811 boarded; price offered 7½c.; none sold on board.

London, June 4.—15 factories offered 1,975 boxes; sales, 135 at 8c., 522 at 8 1-16c., 110 at 8½c.

Cornwall, June 4.—854 white and 1,388 colored cheese boarded to-day. All sold at 8c., except 226 colored, which brought 1-16c. more, and 215 held over.

Armours May Come.

A press report says the Armours, of Chicago, contemplate establishing a branch of their business in Toronto, with the intention of carrying on all the various branches of their immense meat industry, so that they will not have to import any of the Chicago products.

Chicago Markets.

Chicago.—Good to prime steers, \$5.50 to \$6.25; poor to medium, \$4.50 to \$5.50; stockers and feeders, \$3.25 to \$4.75.

Hogs—Mixed and butchers', \$4 to \$4.82½; good to choice, heavy, \$4.75 to \$4.85; light, \$4.55 to \$4.75.

Sheep and Lambs—Good to choice wethers, \$5.25 to \$5.50; mixed, \$3.75 to \$5; native lambs, \$5.00 to \$6.50.

Hog Prices Keep Up.

Peculiarly anxious are some of the live-stock journals in the States to have the farmer market his hogs immediately, under the threat that the month of June will see the markets swamped. The subterfuge adopted by the packer in rigging the pork futures on the Chicago Exchange and these predictions of the wisecracks do not coalesce. If there is going to be a slump in hogs at an early date, the packers are displaying an entire disregard of common sense in quietly picking up moderately heavy shipments in advance. It is not unlikely that the trusts are more thoroughly posted of the future of the markets than the supposed paper friends of the farmer, and might be doing a little buying in anticipation with their own ideas. Canadian hog markets are firm, and another small advance had to be made again this week. Higher prices still are talked of by those close to the situation; but without venturing on predictions, the fact that the demand is fully equal to the supply, and actually produces a harder tone to quotations, indicates that there is no immediate danger of a soft spot developing. At Woodstock on Friday, Brantford buyers paid \$5.15 per cwt., and the Toronto buyers have had to advance the price to \$5.25 to get supplies.—[Toronto World.]

Horse Prices.

During the progress of the Galt horse show last week an auction sale of horses was held. The animals sold were of all classes and degrees of usefulness. The sale was remarkable for its "snappy" bidding and fat prices. If one were to judge of the horse market by the prices realized for some of the individuals sold at Galt, he would have a very exaggerated idea of horse values. Evidently the open-air horse show attracts a large number of the right kind of buyers.

Wools.

Toronto receipts of new clip wools are rather light on account of the wet weather, but the expectation is that the clip should now begin to come forward fairly freely. Quotations are unchanged at 17c. for washed, 13c. for rejections, and 10c. to 11c. for unwashed.

Montreal Live Stock.

Montreal.—Prime heaves, \$5.40 to \$5.50; mediums, \$4.50 to \$5. Milch cows are declining in price, selling at \$25 to \$55; export calves, \$2 to \$10 each, or 8c. to 5c. per pound; shippers pay 4c. per pound for good large sheep, and the butchers pay from 3½c. to 4c. per pound for the others. Lambs, \$2.50 to \$4 each. Good lots of fat hogs, \$5.25 to \$5.50.

Buffalo Markets.

Fast Buffalo.—Cattle—Prime steers, \$5.35 to \$5.60; shipping, \$5 to \$5.35; butchers', \$4.00 to \$5.25; stockers and feeders, \$3.50 to \$4.65.

Veals—\$4.50 to \$5.75.

Hogs—Heavy, \$4.50 to \$4.85; pigs, \$4.60 to \$4.65.

British Cattle Market.

London.—Canadian cattle are steady at 11c. to 12½c. per pound; refrigerator beef, 8½c. to 9c. per lb. Sheep, steady, 12c. to 14c. per lb.; yearlings, 15c.

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At Mr. J. E. Doane's Jersey sale, at Thompson, Conn., May 25th, the average price for 97 head sold was \$81 each. The highest price, \$420, was realized for the six year-old cow, Hood's Farm Torona. Three other females sold for \$300 to \$335 each. At Worcester, Mass., May 26th, in a combination sale, 67 head sold for an average of \$91. The highest price was \$285, and five others sold for \$205 to \$260 each.

At Grand's Repository, Toronto, on June 14th, there will be offered a splendid opportunity of securing any kind of a horse one may desire. A consignment of Hackneys from E. C. Attrill, Goderich, Ont., should draw a good number of admirers of fancy leathers, while from other sources all classes and weights of work horses will be drawn. The opportunity for breeders, farmers and contractors to fill their needs is a rare one, and no doubt will be well improved. All the horses offered are in natural condition, they are not horse-hospital patients that have recuperated sufficiently to make their way to the sale-ring, but are stock that have been collected from different sources, and put on sale to bring just what the market considers them worth. From our own observations at the Repository sales and at auctions in other places, we are satisfied that anyone within reasonable distance of Toronto can get, by long odds, better value for his money at the Repository than at the majority of sales where horses are sold. Notice the special offering for June 14; it affords a wide selection, so that anyone can be supplied.



"A little bit of patience often makes the sunshine come,
And a little bit of love makes a very happy home;
A little bit of hope makes a rainy day look gay,
And a little bit of charity makes glad a weary way."

Miss Vivian's Legacy.

"They say in the Highlands that 'the open hand shall be filled the fullest,' but I don't think the proverb has come quite true in our case, Carrie."

The speaker was a young man who was leaning rather dejectedly against the window sill, with his face turned away from the young woman who was working at the table. It was plain that the pair were husband and wife, and the newness of the furniture and the brightness of the girl's wedding-ring betrayed that they had not been very long married. In point of fact only six months had elapsed since Robert Vincent had brought his bride home, only to a humble abode, but one of which Carrie at least could cry "My house, my house, although thou'rt small, thou art to me Escorial."

Carrie Ainslie had been left an orphan in early childhood, and brought up by the rather grudging charity of a friend of her mother's; to whom in consequence the girl felt herself bound by ties of gratitude, so that when the old lady was selfish enough to bid her "wait till I am gone, child, don't leave me alone in my old age," Carrie agreed to postpone her marriage with the young bank clerk who could have given her a happy, if a humble home; and "waited" patiently—more patiently than did Robert—for five weary years; during which the girl was a patient drudge and souffre douleur to a peevish invalid; worked and worried by old Miss Vivian, and looked upon with no little jealousy by the old lady's relatives, who, although they would have been very reluctant to have filled the "companion's" situation themselves, were constantly hoping that "that girl, artful of course, as all these quiet people are, will not influence Aunt Deborah to make a will in her favor, and cut out her own flesh and blood."

Indeed, as Miss Vivian grew older and more failing in health, the increased attentions of her relatives attracted the notice of the old lady, who, with the cynical frankness of the rich member of the family who knows that her expectant legatees dare not quarrel with her, would say brusquely, "Now, why are you all hanging about me in this way; I'm not in a dying condition yet. Oh, yes, I know what you are going to say, you 'hope I'll outlive you all'—well, perhaps I may," and the old lady would sink back in her easy-chair with a spiteful chuckle.

For, to tell the truth, Miss Vivian was not a very amiable individual: selfish, suspicious, miserly; yet, after her fashion, she had been kind to Carrie, and the girl's strong sense of duty now forbid her to leave the lonely and aging woman who had benefited her when a child. "Staying for what she expects to get, of course," sneered Miss Vivian's relatives, but this was far from the truth. No hope of a legacy would have tempted Carrie to delay her marriage—Robert was able to give her all the comforts her simple tastes required.

"But Miss Vivian, who was a school-fellow of my mother's, was very good to me when all our troubles came." Carrie would plead to her lover. "You know all the story; how father lost all his money by the dishonesty of his partner, and how, when he and mother were travelling up to London, they were in that dread-

ful railway collision at X., and both were killed. Then Miss Vivian said she would pay for my education until I was sixteen, when she would take me as her companion."

"And now you have been her white slave for nearly ten years, doing three servants' work for a kitchenmaid's wages," said Robert, rather indignantly, for he was longing to take his love away from the trials of her present life.

The two had met and become engaged during the one brief holiday which Carrie had known since she came to Miss Vivian; a happy month during which the old lady had been persuaded to travel with some of her relatives, and Carrie had been sent to stay with some friends of her parents. Here Robert Vincent was also spending his holidays, being a cousin of Carrie's hostess. He had heard the girl's story, was greatly attracted by her gentleness and sweetness, and before the month was over the two were troth-plighted, and would have been married almost immediately had it not been for Miss Vivian's protests. But the old lady so wept, and lamented, and implored Carrie to "wait awhile," that the girl was persuaded to do so, and five years sped away—years of patient unselfishness on the part of the young couple—of persistent exaction on the part of the elder woman.

"But I feel I am doing right, dear," Carrie would urge; and Robert sighed and assented.

After all, the delay would enable him to lay by more for his "little woman's" comfort when they did marry.

The waiting time ended at last; Miss Vivian failed greatly. She grew very tender to Carrie during the last weeks of her life; so tender that her relatives became visibly alarmed, and made things so unpleasant for the poor girl, by their hints and sneers, that only a sense of duty kept her to her post in the sick room.

"Working on poor Aunt Deborah's weak mind," the greedy cousins, and nephews, and nieces sighed to each other—and hinted pretty plainly to poor Carrie.

"Child, you'll find I've not forgotten you at last," said Miss Vivian suddenly one day to Carrie, in the presence of her expectant legatees.

"You have many members of your own family who love you dearly, darling auntie," cried one of the nieces, "relatives who would willingly come and wait upon you—if they were permitted," and the group glanced significantly at the unhappy "companion."

Miss Vivian grunted sardonically; she often took a malicious pleasure in thus tormenting the relatives whom she did not love.

"Give me the satin cloak that hangs in the wardrobe," she said to Carrie. "Put it on, child, and remember that I give it to you for your own. Hester, Sarah, Maria, you are all witness that the cloak is Caroline's. Remember, Doctor Martin," as the doctor entered, "I give this cloak to my young companion, my devoted young companion, and no one else has any claim to it."

"Nobody wishes to interfere with your generosity to Miss Ainslie, dearest auntie," cried the relatives in chorus, with forced smiles on their lips and hatred in their hearts.

That evening Miss Vivian was taken with a "stroke" which left her mind clear, but deprived her of the power of speech. Hastily summoned, her relatives gathered round the dying woman, but it was to Carrie that she clung to the last, Carrie's arms in which she passed away. A little before her death Miss Vivian had pointed to the cloak, still

hanging on its peg, and made some signs and gestures, but the power of voice was gone.

"Yes, dear; I will keep the cloak and wear it for your sake," whispered the girl, yet the dying woman still seemed unsatisfied—but the end came on apace, and before morning Carrie's work was ended.

Much to everyone's surprise no will was to be found, and there was no evidence that Miss Vivian had ever made one. Among the old lady's many eccentricities was a rooted distrust of lawyers, also a dislike to investing money. Her income, a very comfortable one, was regularly paid over by her trustee, and what Miss Vivian did not expend she hoarded by her in the house.

Large sums of money were discovered in notes and gold secreted in various places among her possessions; and in a strong box, parcels and bank-notes addressed to each of the servants, for whom the old lady thus provided instead of bequeathing them legacies. But not a line, not a thought for Carrie. All Miss Vivian's possessions were, of course, now divided among the "next-of-kin," and both the doctor and the lawyer hinted that these might very properly make some recognition of Carrie's long and devoted services to the old lady, but the relatives unanimously scouted such an idea.

"We may be sure that the girl got plenty out of Aunt Deborah in her lifetime," was the cry; and Carrie took away nothing from the house, save the old satin cloak.

"I am sure she meant to do something, and I thank her for the kind thought," said Carrie gently to her lover; and Robert answered:

"Well, little woman, we have each other, and want no one's money now."

But, unluckily, some months after their wedding (which took place as soon as possible after Miss Vivian's death) the young couple did want money very badly. A commercial "crash" occurred in which Robert's bank was involved, and he lost his situation. The young couple were brave and patient, but—now, too, that fresh expenses were in prospect—the outlook seemed gloomy enough, and Carrie sighed as she sat at table beginning to alter and rearrange the last—indeed, the only gift—she had ever received from her patroness.

"It is a handsome cloak, only a little old-fashioned," said the girl, as she ripped away part of the lining. Why did she suddenly drop the work, with a wild scream?

"Robert!—look—oh look!"

Between the wadding and the satin was a crisp £20 note, not a solitary one. With careful, trembling fingers Carrie removed the lining, to find, simply quilted underneath, notes of varying value, from £20 to £50—the whole cloak was full of them, and, when all were removed and counted, £3,000 to £4,000 lay on the table.

Carrie burst into a flood of thankful tears.

"That was what she wanted to tell me, to explain where she had hidden the legacy she meant for me! Oh, Robert, things have turned out well after all, you see."

In truth the eccentric old lady had taken this odd method of rewarding her companion—and saving legacy duty.

Brighter days soon dawned on the young couple. Robert speedily obtained another appointment, and the "cloak lining" made them in their views rich.

Mrs. Vincent still cherishes, laid up among her special treasures, the black satin which once covered so rich a gift.

FORGET-ME-NOT.

Travelling Notes.

What I have to tell must be sandwiched in, as space permits, between what Nell has written and Eleanor promises to write of our joint experiences in sunny Italy.

Our stay there of nearly eight weeks is about finished; three weeks we spent in Florence and three in Rome. It has all been most delightful; the weather generally fine and sunshiny and not at all cold, so that we have been able to go out sight-seeing every day. We are told that this we might continue to do for the next three years and still not have exhausted Rome, so much is there to see and study in this wonderful ancient city. But we are travelling for health and pleasure, and not for the study of archaeology, etc., as so many come here to do. We three are quite content to read, mark and learn, hoping that we may manage to digest and assimilate at least some of the mental pabulum which daily falls to our share. We cannot fail to learn something from visiting such historic scenes as the Colosseum, the Forum, Obelisks, Aqueducts, Architecture, Columbarium, Appian Way, Catacombs, tombs, fortifications, and Walls of Rome. My cousins may be more clear-headed than I, but I must confess to being terribly mixed up, for once, when asked if I had seen such and such a place, I positively replied "yes" and "no" in the same breath, much as one would after an hour spent in gazing at a canvas on which appear and fade away swiftly a series of dissolving views.

The Colosseum, the one thing every visitor is certain to see, no matter how limited his stay, covers seven acres of ground, and must have been one of the most magnificent buildings ever erected. Two-thirds of the original building have disappeared. After the ruin had been converted into a fortress in the middle ages, it supplied the Roman Princes for nearly two hundred years with materials for their palaces. It was built of the finest and strongest stone, then faced with marble, the corridors and seats of the amphitheatre being also of marble. It was four stories high, and was capable of holding a hundred thousand people. The gladiatorial spectacles of which it was the scene for nearly four hundred years are matters of history. We read that at the dedication of the building by Titus, 5,000 wild beasts were slaughtered in the arena, and the games in honor of the event lasted nearly one hundred days. In later times, during the persecutions of the Christians, the Amphitheatre was the scene of fearful human barbarities. The traditions of the church are filled with the names of martyrs who were purposely thrown into the arena to be devoured by wild beasts.

To visit the Colosseum by moonlight being the "correct thing," Eleanor and I, under the escort of a Harvard College graduate, made the usual excursion. It certainly was a fine sight, and one which we might more thoroughly have appreciated had our eyes been less sleepy or our limbs less weary.

Out of the four hundred churches of Rome, I will only make mention of two or three. The Cappucini

built by Cardinal Barberina, a member of the Capuchin Order, contains a celebrated picture of the Archangel Michael, by Guido Rene, but the most curious thing to me was to see the cemetery of the Friars under the church, consisting of four chambers. The earth was originally brought from Jerusalem. The walls are covered with bones and skulls of some four thousand monks, fantastically arranged; several skeletons are standing erect in the robes of the order. Whenever one of the Friars dies, he is buried in the oldest of the graves, from which the bones of the last occupant are removed to this gruesome cemetery.

THE SCALA SANTA.

Upon entering this church one is confronted by three flights of steps. The center stairs, called Scala Santa, consist of twenty-eight marble steps, stated by tradition to have belonged to Pilate's house, and to have been identical with those which our Saviour descended when He left the judgment seat. These stairs are only allowed to be ascended by penitents on their knees, and the multitude of these have been so great, that it was found necessary to protect the original steps by planks of wood. Twice have I watched with astonishment large numbers of old men, women and children, high and low, rich and poor, upon their knees, praying, and even kissing the steps as they moved slowly upwards. At the top is a handsome gothic chapel, which contains a large collection of relics. No woman is allowed to enter it. There are parallel flights of stairs, down which the penitents may return on foot.

THE AQUEDUCTS.

No monuments of Ancient Rome are more picturesque and stupendous than its Aqueducts. The oldest of these was constructed by Appius Claudius, 311 B. C., after the completion of his Appian Way. Aqua Claudia pursued a course of more than forty miles in length. For about thirty miles it was subterranean; for the remaining ten miles it was carried over arches. Of this magnificent work, a line of arches no

less than six miles in length still bestride the country, forming the grandest ruin outside the walls of Rome. It is difficult to form a true conception of the skill to conceive and the labor and patience to carry out a work which once provided ten or eleven such aqueducts to convey to Rome its water supply from the distant mountains, and which to-day still exists to continue the same beneficent office for the Roman people. Truly there are many lessons we may learn from those days of old.

THE CATACOMBS.

We only once managed a visit to the Catacombs of Rome. They have been too frequently described for me to enter into details. We will try to explain their effect on our minds. The Catacombs number about sixty, and cover several miles. They consist of an immense network of subterranean passages, which once served as places of refuge and of worship to the earliest followers of our faith during the persecutions they had to suffer under the predecessors of Constantine, and of repose after death to many thousands from the earliest period of Christianity to the sixth century of our era. The bones and dust of these departed thousands are still to be seen down in the Catacombs of Rome.

Lack of space forbids my telling you of the men, women, children, markets, shops, costumes, the way we had to drive bargains for our conveyances, and the thousand and one comical situations in which, from time to time, we found ourselves.

We have still Pisa and the Riviera to visit, and one of us may have something to relate of both. Both Naples and Pompeii were rich treats to us all, and it is probably of these that Eleanor may write when next the "Home Magazine" can spare us a corner.

MOLLIE.

We become heavenly minded by living to make others happy. If it is the aim and work of your life to be a blessing to others, you are living already the heavenly life.—E. H. Sears.

"The Last Load."

The home-going with the last load is a charming little picture, needing perhaps the coloring of the original painting to bring out all its beauties. Of the six girls walking in the forefront, with hand linked in hand, the painter has probably given to one a crimson skirt, to another a dark-blue blouse, to another a bright-spotted kerchief, to relieve the gray homespun of the petticoats and the somewhat sombre surroundings of rock and heather. In the faces of the two sisters on the left there is just a touch of sadness, a far-away look, marking them as somewhat out of touch with the merry chatter of their comrades. It is the older workers who are apparently joining in the hip! hip! hurrah! started by the man waving his cap in the background, whilst at the back of the load walks "His Reverence," who, on his evening stroll, has overtaken the heavily-laden wagon, and will have a word of congratulation and greeting for his people presently. Substituting prairie for hill, might not our picture, with slight alteration of costume, be as true a representation of a scene in the wide harvest-field of our own Northwest as of any upon the other side of the Atlantic, for is not the bringing in of "The last load" an hour of merriment and rejoicing all the wide world over? H. A. B.

Kings of the World.

When the boys and girls were asked to write an essay on "Kings," a quick-witted one handed in the following little gem:

The most powerful king on earth is Wor-king; the laziest, Shir-king; a very doubtful king, Smo-king; the wittiest, Jo-king; the leanest, Thin-king; the thirstiest, Drin-king; the slyest, Win-king; the most garrulous, Tal-king; the most inquisitive, As-king; the most useful, Ma-king; the most unstable, Sha-king; the most destructive, Brea-king; the most dissolute, Ra-king; the meanest, Snea-king; the most corrupt, Fa-king.

If I Can Live.

If I can live
To make some pale face brighter, and to give
A second lustre to some tear-dimmed eye,
Or e'en impart
One throb of comfort to an aching heart,
Or cheer some wayworn soul in passing by!

If I can lend
A strong hand to the fallen, or defend
The right against a single envious strain,
My life, though bare,
Perhaps, of much that seemeth dear and fair
To us on earth, will not have been in vain.

The purest joy,
Most near to heaven, far from earth's alloy
In bidding clouds give way to sun and shine,
And 'twill be well
If on that day of days the angels tell
Of me: "She did her best for one of thine."

—Helen Hunt Jackson.

If I Knew.

If I knew the box where the smiles were kept,
No matter how large the key
Or strong the bolt, I would try so hard
'Twould open, I know, for me.
Then over the land and sea broadcast,
I'd scatter the smiles to play,
That the children's faces might hold them fast
For many and many a day.

If I knew the box that was large enough
To hold all the frowns I meet,
I would like to gather them, every one,
From the nursery, school and street;
Then folding and holding, I'd pack them in,
And, turning the monster key,
I'd hire a giant to drop the box
To the depths of the deep, deep sea.

"If the dog's prayer were heard, there would be a shower of bones from heaven."



The Last Load.

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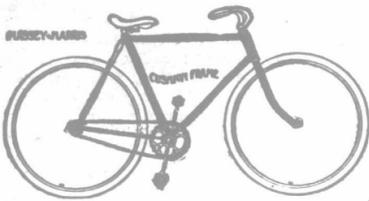


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God's Messenger.

I chanced one lovely day in spring,
To walk through a woodland glade:
New life was showing all around
In tender bud and blade.
Majestically, above my head,
Towered the grand old forest trees,
From which the songs of happy birds
Were borne upon the breeze.

In the soft glow of the setting sun
All nature seemed to smile,
I paused to drink its glories in,
And well 'twas worth the while.
Yet even while I gazed, a sigh
Went up to nature's God,
For all that day my troubled heart
Had borne a weary load.

The cares of life were pressing hard,
My sky was overcast;
And still around, perplexing clouds
Seemed gathering thick and fast.
To the chaos reigning in my heart,
Of anxious fear and doubt,
This contrast, peaceful and serene,
Had nature spread without.

As I turned to leave the lonely spot,
In heaviness I sighed:
When just before me, as I walked,
A sweet wild flower I spied.
A tiny flower, so fresh and bright,
Above its mossy bed,
Fanned by the gentle evening breeze,
It reared its lovely head.

As, stooping with a tender hand,
I plucked it from the sward,
Like a flash light came to my mind
The word of Christ our Lord.
"If God so clothe the fading grass,
Doomed to an early death,
Will He not much more care for you,
Oh ye of little faith."

Sweet, silent messenger of God;
By it I stood condemned,
Yet felt, the while, a thrill of joy
Which I could not comprehend.
New hope sprang up within my heart,
And to my eyes the tears;
"Oh Father dear," I humbly cried,
"Forgive my doubts and fears."

"And, oh! When dark clouds dim life's sky,
When Thy hand I cannot see;
Help me to ever feel that still
That hand is leading me.
Help me to learn the lesson well,
Taught by this little flower:
And in this life, through good or ill,
To trust Thee evermore."
M. CARRIE HAYWARD.
Corinth, Ont.

This little sermon in verse was written by one of our readers—"A farmer's wife"—and I have great pleasure in giving it a corner of the Quiet Hour, as it not only shows true poetic insight, but is also a proof that the "lilies of the field" are still preaching to burdened souls, still pointing silently to Him who only can give rest to the "weary and heavy-laden." HOPE.

A quiet home; vines of our own planting; a few books full of the inspiration of genius; a few friends worthy of being loved, and able to love us in turn; a hundred innocent pleasures that bring no pain or remorse; a devotion to the right that will never swerve; a simple religion, empty of all bigotry, full of trust and hope and love—and to such a philosophy this world will give up all the empty joy it has.—David Swing.

Find your purpose and fling your life out to it, and the loftier your purpose is, the more sure you will be to make the world richer with every enrichment of yourself.—Phillips Brooks.

"Be Strong and of a Good Courage."

"I do not pray for peace,
Nor ask that on my path
The sounds of war shall shrill no more,
The way be clear of wrath.
But this I beg thee, Lord:
Steel thou my will with might,
And in the ring of battling
Grant me the strength to fight."

"I do not pray for arms,
Nor shield to cover me;
What though I stand with empty hand,
So be it valiantly?
Spare me the coward's fear,
Questioning wrong or right;
Lord, among these mine enemies
Grant me the strength to fight."

Three times in one chapter does Moses give this charge to Joshua and all Israel: "Be strong and of a good courage," and we all have good reason to take that charge to heart. Life is not an easy thing, and we are all cowards sometimes. I wonder if there is any special meaning in the expression "good" courage. Certainly there is a kind of brute courage possessed by a very low type of man, and there is also a courage which might well be called "good," often startlingly displayed by very timid women: a courage which can endure pain with a smile, or face awful peril without a thought of personal danger.

A man who possessed plenty of rough, brute courage once said to a young officer who was in the thick of his first battle, "Why, you are afraid!" The shells and bullets were falling like hail as the young fellow answered, "That's true, and if you were only half as much afraid as I am you would run away." He was brave enough to own that he was afraid—and it must have taken some pluck to do that—and he was also brave enough to stick to his post in spite of fear. "Good" courage is surely not the kind of daring that takes pleasure in foolhardy exhibitions of bravado, risking one's life without sufficient reason; but rather the quiet, steady, sticking to one's duty all the year round. It may be monotonous sometimes, and again it may be almost too exciting and grand to be pleasant, but the people we have good reason to admire for dauntless courage are not trying to establish a reputation for heroism, but simply doing what they consider their duty. A little more than a year ago a mine in B. C. was filled with deadly gas. A miner named McLeod went down six times at the risk of his life to rescue his comrades. When all were saved he collapsed, and another man then ventured down, to make sure that there were no more men in the mine. He failed to come up, so McLeod again descended, and brought him out in safety. Such a call to "be strong and of a good courage" nearly always comes suddenly, and until a man is tried, neither he nor anyone else can be sure whether he can stand the test. Perhaps such an opportunity may never come to you, and yet everybody is called to "be strong and of a good courage," to-day, and every day. When volunteers were wanted for South Africa, they eagerly responded to the call to the post of danger. Were all those would-be heroes really filled with "good" courage?

"Any common man may face a cannon, but how many men dare face the sneers and calumny of their brethren?" so says a modern writer, and he adds: "Those of us who consort much with people in humble life often see bold men submitted to trials that test their essential courage to the last degree. Does anyone

ever give a thought to the sufferings of a workman in a rough shop when he leaves off drinking and takes to religion? Life is often made bitter for him, and it is the more bitter in that he is almost always accused of hypocrisy. Daily he is told that the feelings and beliefs which are the breath of life to him are shams and worse; he may even be obliged to brook violence, which his principles will not suffer him to return. It is cruel work, and yet how many fine fellows go through the ordeal proudly and gravely! These obscure and modest folk are the true heroes." The world may heap honors on the soldiers who have killed or wounded their fellow men; but if we look with God's eyes, perhaps we may give higher praise to the men and women who stay at home and go cheerily on with "the trivial round, the common task"—plowing, sowing and threshing, cooking, washing and sewing, year after year. Some people may admire the dashing courage of a general who forces his way to victory, utterly careless of the lives sacrificed that he may win success—"an excellent general at ten thousand men a day"—but I think General Gordon showed far greater courage in his open, unabashed loyalty to his God. It is said that in the journey through the Soudan a handkerchief was spread before his tent for half an hour every morning. This was a warning to the whole camp that he was having his daily meeting with his Captain, and must not be interrupted. No man, white or colored, heathen or atheist, dared to enter the tent while that token lay outside. A frank and fearless loyalty to Christ, like this, is sure to win the respect of all; for God always makes good His own words: "Them that honor Me I will honor, and they that despise Me shall be lightly esteemed." Then there is another kind of courage deserving the name of "good"—the patient, cheerful endurance of long-continued pain. The "noble army of martyrs" still praises God in the furnace of affliction.

"For earth hath martyrs now, a saintly throng,
Each day unnoticed do we pass them by;
'Mid busy crowds they calmly move along,
Bearing a hidden cross, how patiently!
Not theirs the sudden anguish, swift and keen,
Their hearts are worn and wasted with small cares,
With daily griefs and thrusts from foes unseen,
Troubles and trials that take them unawares;
Theirs is a lingering, silent martyrdom,
They weep through weary years, and long for rest to come.
They weep, but murmur not; it is God's will,
And they have learned to bind their own to His,
Simply enduring, knowing that each ill is but the herald of some future bliss;
Striving and suffering, yet so silently
They know it least who seem to know them best,
Faithful and true through long adversity,
They work and wait until God gives them rest;
These surely share with those of by-gone days,
The palm-branch and the crown, and swell their song of praise."

Dr. Arnold says that his sister, who was the victim of hopeless disease, "suffered a daily martyrdom for twenty years, during which she adhered to her early-formed resolution of never talking of herself; thoughtful about the very pins and ribbons of my wife's dress, or about the making of a doll's cap for a child; but of herself, save only as regarded her ripening in all goodness, wholly thoughtless; enjoying with the keenest relish everything lovely, graceful, beautiful, high-minded, whether in God's work or man's; inheriting the earth to the very fulness of the

promise, though never leaving her crib, nor changing her posture; and preserved through the very valley of the shadow of death from all fear or impatience, or from every cloud of impaired reason, which might mar the beauty of Christ's Spirit's glorious work." What faith outside Christianity can show such a record as this! Surely the age of miracles is not past yet, nor will be as long as the very life of Christ flows full and strong through weak human souls, filling them with divine power and beauty. We may not be called on to endure such a martyrdom as that, but I am very sure that when God calls us, as He does constantly, to "be strong and of a good courage," He will give us something to endure, even though our courage may only be needed to meet little daily vexations and difficulties with a smile. We are sure to fail if we try to fight alone, but we can do all that is required of us with God to help us. Let us look to Him constantly, as Gordon did, and ask Him daily for strength to fight.

"I do not pray that Thou
Keep me from any wound,
Though I fall low from thrust and blow,
Forced, fighting, to the ground;
But give me wit to hide
My hurt from all men's sight,
And for my need the while I bleed,
Lord, grant me strength to fight.

"I do not pray that Thou
Should grant me victory;
Enough to know that from my foe
I had no will to flee.
Beaten and bruised and banned,
Flung like a broken sword,
Grant me this thing, for conquering—
Let me die fighting, Lord."

HOPE.

Domestic Economy.

To destroy beetles, sprinkle powdered borax plentifully in their haunts.

Straw matting may be kept a good color by washing it occasionally with salt and water.

Fine sand-paper is as good as a pen-knife for scratching out ink marks.

TO PREVENT THE WHITE OF POACHED EGGS SPREADING.

Put a teaspoonful of vinegar into the water before beginning to poach the eggs.

TO PREVENT JUICE RUNNING OUT OF PIES.

The juice or gravy may be prevented running out of meat or fruit pies by putting a small piece of rolled paper in a hole in the top of the pie to form a little chimney. This lets the steam out and prevents the juice from running out and making the dishes sticky.

TO REMOVE STAINS.

Troublesome stains on cotton or linen fabrics, such as iron-rust, mildew, ink and stubborn fruit-stains, which have resisted other methods, disappear in five minutes before the following treatment, and absolutely without injury to the fabric: Soak the stained part for a few minutes in a solution of chloride of lime, in the proportion of twelve parts of water to one of lime. Wring out, then dip in a solution of oxalic acid of about the same proportion, and the stains will almost instantly disappear.

ANOTHER SUGGESTION TO THE FARMER'S WIFE.

That most-dreaded duty of mending grain sacks, which always falls to the lot of the farmer's wife, may be reduced to a minimum by covering one side of the patch with flour-paste. The paste is made by mixing the flour with cold water. Place the patch with the paste side downward upon the hole, having first turned the sack wrong side out. Iron down for a few seconds with a very hot flat-iron. Throw the sacks over a line or clothes-bars until thoroughly dried. From my own experience, I know that patches put on in this way will last for years.—[Woman's Home Companion.



Baby's Rainbow.

The lightning flashed, the thunder rolled
Across the darkening sky;
A summer storm came swiftly on,
Then passed as swiftly by.

Again in the clear and glowing west,
The sun shone warm and bright,
All nature smiled to meet his rays,
While birds sang with delight.

Far in the east receding clouds
Were piled, as dark as night,
When, lo! across the sombre mass
Appeared a rainbow bright.

A wee, sweet maid of summers three,
Who had watched the storm go by,
Now, for the first time in her life,
Saw the rainbow span the sky.

Her tiny hands a moment clasped,
While eyes grew wonder bright,
Then quickly to her mother ran,
Exclaiming, with delight:

"Oh mamma, dear, come quick and see,
For way up in the sky
Is God's stair-carpet, wet, and He
Has hung it out to dry."

M. CARRIE HAYWARD.

Corinth.

PRIZE COMPETITION.

I must congratulate Mrs. Hayward on her very pretty verses, given above. She calls herself "a farmer's wife," and I am sure many other farmers' wives will enjoy reading her poetry.

How would you children like to try your hand at verse-making? Prizes will be given for the best original poetry written by children under sixteen years of age. Each MS. must be accompanied by the name, age, and address of the writer, and should reach me not later than July 15th. Choose any subject you like, and address as usual.

COUSIN DOROTHY.

Box 92, Newcastle, Ont.

Look out for results of our "Empire Day" competition next week.

An Imaginary Story.

A DAY ON A CANADIAN FARM.

I lived with my uncle and aunt in the country, in a pleasant little cottage on the side of a beautiful river, whose waters were as clear as crystal, and which babbled over its stony bed all day in the warm sunshine.

My city friend, with whom I had been corresponding for the last few months, had been speaking of how beautiful the country must look at that time of the year (which was midsummer), and how she wished papa and mamma would permit her to spend a few weeks with me in the country. One evening as her father and mother, her brother Willie and herself were seated around the cozy fireside in the spacious drawing-room, she ventured to ask permission from her parents to let her spend a few weeks of her holidays with me, which to her delight, after a little coaxing, she was given permission to do. This was on Friday. So on Monday I got a letter telling me she would be along the following month, which would be July. So on the 5th of July my cousin and I started in the democrat to the station. We got to the station about fifteen minutes before the train arrived, so had to wait for awhile. By and bye the train pulled in, and people began to descend from the cars, and among them was our cousin, Ida Hastings, our visitor. Oh, how glad she was to see us, and we to see her! We drove home, and arrived there just at dusk. We got out of the buggy, got Ida's trunks out, and went into the house. After all had exchanged

greetings we went into the dining-room, where a heavily-laden table was spread with cakes, pies, fruit, cheese, etc., and you may depend on it, our appetites did not forsake us at the sight, for we felt rather hungry after our drive. After tea, Ida and I went into the drawing-room. After talking and playing games until we were tired out and sleepy, we went to bed. In the morning, which was a beautiful, fine July morning, the birds singing so sweetly and the bees humming, and last, not least, the beautiful refreshing atmosphere which the wind wafted from the surrounding country. After breakfast we started our rambles. We picked flowers, and waded with bare feet in the river till near noon. Then we went back to the meadows to see the young colt, and from there to the harvest field to tell the men to come to dinner. The men had the teams back there with them, so we coaxed them to put us on the horses' backs. They put Ida on old Rock's back, and me on Gip's back. We arrived at the house in safety, and after watching the men water their horses and feed them, we all went in to dinner. After dinner we helped Jenny do the dishes, and then we went up to our room to get ready for another ramble through the woods. We picked flowers, chased the birds and squirrels until we were tired, and then we went home to help Will water the cows, which were very thirsty.

Days wore on like this until August 3rd, when our school was to have a picnic, and of course everybody was welcome, so of course Ida went too. And oh, the day we did put in that day! In the morning we helped Auntie and Jennie bake, and, oh say! such cakes and pies you never tasted! All sorts, shapes and sizes. Of course, everybody for miles around says Auntie is the best cook in the neighborhood, and I believe she is. And so Ida thought too. About one o'clock the big democrat was driven up to the door; basket after basket was placed in the democrat, and then in climbed Auntie, Uncle, Will, Ida, Jenny and I. And, oh, the fun we children did have! There was a store on the ground, besides three swings and a lemonade and ice-cream stand. And, oh, say! if anybody ate ice-cream and drank lemonade, and ate oranges, candies and peanuts, 'twas Ida and I. We got on the swing and started and swung for a long time, until Ida began to feel dizzy, so we got off. It was about half-past nine or ten o'clock when we went home that night, and it is many years since then, but I do not forget that memorable day and I don't think Ida has forgotten it either. E. C. LUCK. Crown Hill. (Aged 15).

A Day on a Canadian Farm.

It was a warm, sunny day in August. Gladys and Walter had just finished their breakfast, and were standing at the window watching the people go by. Presently a carriage stopped at the door. "Oh! here's Uncle George!" both the children cried out. Mrs. Norton went to the door. "May I take Gladys and Walter back home with me for the day?" said Uncle George. Mrs. Norton said they could go. They were filled with delight at the prospect before them, and got ready in a few minutes; then jumped into the wagon beside their uncle. They were soon out of the city, and then had to go along the smooth country road about ten miles before they reached their uncle's house. The children's tongues were never still the whole way. They had never been in the country before, and had a great many questions to ask. After

about an hour they stopped in front of a large white house. Their aunt and cousin were standing in the doorway watching for them. When they got in the house, their young cousins, Ralph, Helen and Isabel, would not let them rest, but took them down a path to the orchard. After eating all the apples they wanted, they all went to the fields where the men were loading hay. There were stacks of hay here and there all over the field. The children jumped on these till the load of hay was ready to go to the barn. They were then lifted on top and had a merry ride. When they reached the barn, they went to see the cows, horses, hens, chickens, and many other things, which were a great delight to them, unaccustomed as they were to the many things of interest to be seen on a Canadian farm. They had just finished a hunt for hen's nests when they were called to dinner, which they ate with great relish; their appetites had never seemed so good before. After dinner they went out into the garden to look at the flowers. Then they all got pitchers and cups and went to a field about half a mile away. This field was covered with raspberry bushes. In a short time they all had their dishes filled, and returned to the house. After going to the orchard for more apples, and playing pleasant games on the green grass, they were called to tea, where the nice raspberries, sweet cream and other good things were thoroughly enjoyed. After tea, Uncle George harnessed the horse, and they drove home; but not with empty hands; each one had a pretty bunch of flowers. And their nether was not forgotten either, their kind aunt having given them a basket of nice apples for her. It was just dark when they got home. After telling their mother what a nice day they had spent, they went to bed, tired, but well satisfied with their day on a Canadian farm.

AMY C. PURDY (age 10 years).
Wentworth Station, Cumberland Co., N. S.

Humorous.

Nervous Lady (to aeronaut)—"It must be very dangerous to go up in a balloon?" Distinguished Balloonist—"Not at all, madam. There's sometimes danger in the way you come down from one."

Art Dealer—"Yes, that was painted by one of the old masters. But, I beg your pardon, sir, you must not touch it with your umbrella." Old Mr. Hardplayer—"What's the matter—isn't it dry yet?"

Two farmers were having a "crack" about the recent S— agricultural show, when one of them asked if the laird was an exhibitor. "Weel," replied the other, "he wis, in a sense, for he made an ass o' himself as usual, for he was roarin' fu'."

A young physician commencing practice had among his first patients an uncommonly unclean infant brought to his office in the arms of a mother whose face showed the same abhorrence of soap. Looking down upon the child a moment, he solemnly remarked:

"It seems to be suffering with hydrophobic hydrophobia."
"Och, docther, dear, is it as bad as that?" cried the mother. "That's a big sickness for such a mite. Whatever shall I do for the creathur?"
"Wash its face, madam; the disease will go off with the dirt."
"Wash its face—wash its face, indade!" exclaimed the matron, losing her temper. "What next, I'd like to know?"
"Wash your own, madam—wash your own."

"I've got a complaint to make," said an office boy to his employer. "What is it?" "The bookkeeper kicked me, sir. I don't want no bookkeeper to kick me." "Of course he kicked you. You don't expect me to attend to everything, do you? I can't look after all the little details of the business myself."

Fashion Notes.

Among "the pictures that hang on Memory's wall," is that of a Twenty-fourth of May crowd assembled on the docks of a port town awaiting the incoming of a steamer. The day was damp and murky, and the streets were quite wet after a rain in the night. As the steamer approached, and the black lines along its deck became metamorphosed into individual figures with faces, and dresses and hats, the people on the docks watched and—criticised. Likewise the crowds on the steamer watched the people on the docks, and—criticised. It's the way of the world. . . . "Do look at that girl on the dock!" said one woman on the deck to another—"the one with the pale green silk dress and white shoes!" . . . "Horrors!" was the reply. "Wherever did she come from?" . . . A few paces away a young man whistled, "Whew! There's a girl got up to kill!" and his companion laughed.

Just then the girl in question turned round and looked up. She had a sweet, modest face, gentle blue eyes, and pretty fair hair, and yet, through not knowing what to wear, she had drawn upon herself general attention—and ridicule. One saw amused smiles following her everywhere, smiles which, later in the day became broader as she passed with bedraggled tresses, the white shoes stained with mud, the dress limp after a casual shower.

APPROPRIATENESS IN DRESS.

The morale of this story in a fashion department is, perhaps, evident. Does it not spell the edict that to be well dressed, a woman must see to it that she is appropriately dressed; that if she would be thought so, as she values her life, she will not appear at a picnic, nor at any outing excursion decked in a chiffon hat with plumes, and a gown of voile or crepe-de-chine which would collapse at the sight of a washtub. At the same time she would consider it quite as alarming a faux-pas to appear at a party in a black shirt-waist suit, with a linen collar and clerical bow. She never appears in a bright red waist on a scorching day in June, nor in white organdy and valenciennes when the skies are gray and the winds chill. No: Above all things, the well-dressed woman will be suitably and sensibly clad at all times.

A FEW IDEAS.

To be appropriately dressed upon "occasions," for the ordinary mortal, entails no great expenditure on one's wardrobe. The society woman in the city may require a great variety. For the dame or demoiselle who lives in the country, the problem is much simplified. A suit, jacket and skirt, prettily made, for cool weather; a few "tub" waists and a skirt that will "go with them," with a dainty muslin, pongee or foulard for dressy wear, are usually sufficient for all the calls that may be made upon one's wardrobe in the summer. White waists and dresses are always pretty, and are also economical, since white, like black, may be worn indefinitely without danger of one's growing tired of it. Shirtwaists trimmed with detachable medallions, or with embroidered fronts, collars and cuffs, are much worn this season. If one is "handy" one can do the embroidering oneself; otherwise the fronts, collars and cuffs may be bought all ready for incorporation into the waist. The plain organdy, dimity, India linen or India silk waists are, however, quite as dainty and almost as pretty if trimmed simply with fine tucking and insertion. It should be remembered that all wash dresses are, in view of the laundering, made quite simply, the stiffer materials being almost invariably made into the trim and convenient shirtwaist suits, while muslins and organdies are, of course, given fluffiness by frills arranged as simply as possible. Skirts made of serge, siciliana, and such materials, are quite fashionable when made in stitched kilt plaits reaching almost to the knee, with a panel in the front. Sometimes the plaits are just stitched to such a depth as will simulate a hip yoke; again they are graduated so as to disappear towards the top, the object in either case being to provide the close effect about the upper portion of the skirt, and the requisite flare about the bottom. Next time some individual dresses will be described.



Dear Friends,—Possibly now that your house-cleaning is all over, there is something about the general "effect" that does not exactly suit you. You go through the rooms wondering what is the matter. They are all beautifully clean, and they smell so sweet and fresh. You know there is no dust anywhere in the crevices or under the carpets, and you feel glad to know that everything is so nicely ready for the summer—and yet, and yet—you are not wholly satisfied. You think of someone else's house, which looks more artistic somehow, and you wonder how it is that you can't make things look as well. Women are sometimes heard to say: "Oh, I never can make things look nice; I don't know how to." Now, then, don't you think that the very fact of your knowing that things do not look just right, proves that you do know what is artistic, and that you are capable of making them look so, if you will just set about it. You know no one is hopeless save the one who has nothing to learn, in this as in other and deeper things. Sometimes just moving the furniture about a bit, and getting it into just those positions which are most pleasing to the eye, makes such a difference. Of course, "the men" will laugh at you for changing things, but let them laugh. After all, where is the man who doesn't admire a cozy room, and who is not secretly proud of the clever little woman who is able to make it so?

So if your house doesn't suit you, and you feel a little disappointed after all your work of house-cleaning, I would say, "go at it" again. Rearrange things until they suit you. It will take a little time, to be sure, but you will be better satisfied in the end. Of course you will want a whole "heap" of new things—that goes without saying—but, well, don't worry about them until you can afford to get them. You will have all the more time for planning and deciding upon what will look prettiest. Last of all—and this brings me to the real point of what I started out to say—I ok to your pictures, so much depends upon your choice of them, the arrangement of them, and the light in which they are hung.

I remember visiting once at a very fine house, whose whole appearance was utterly ruined by the pictures that had place on its walls. I recollect the parlors particularly. They were large rooms, carpeted with the best of Brussels carpet, in a pleasing green tint; the furniture was good, and well enough chosen. But—and here comes the skeleton, alas, not in a closet—upon the walls were the tawdriest of so-called oil-paintings, glaring crude affairs that would have rendered any room "common." Worst of all, at the very spot where the light was best, hung a hideous carbon print of the grave of Lincoln! Of course this was an "American" house, and hero-worship of Lincoln runs high in the United States, as it well may; yet it did seem like carrying hero-worship to a fine point, to have a great print of any hero's tomb placed in the most conspicuous part of one's parlor. At first it seemed inexplicable that such monstrosities should be permitted in rooms otherwise tasteful. Then it suddenly dawned upon one that these were very old pictures (not masterpieces) which had been in the house so long that the inmates had simply become used to them, and so failed to see their incongruity. After all, it is such an easy matter to be used to things, and to forget that occasionally it may even be commendable to make a bonfire of things which may

have become too passe. And just here mightn't one philosophize a bit, and say how desirable a thing it is too, sometimes, to get rid of other old things as well as old pictures and fancywork—old notions, old ideas about things which should give place to the keener, fresher ripple of thought that glints ever brighter and clearer as the century grows? But, no,—for to-day, no philosophy. Beginning on that strain, one would be tempted to "go on and on forever," like Tennyson's brook, and then where would the picture be?

I believe it is not now considered artistic to have very many pictures on the walls, although, personally, I am so very fond of good ones, that I could stand a great many of them. Walls papered or painted in soft shades of solid color, or at least without pronounced patterns in either figure or tint, suit pictures best, olive green, soft gray, dull buff and rich "cigar" being usually to be depended upon as safe background tints.

In the disposal of pictures, these points should be remembered. Water-color paintings or delicate prints should never be placed close to oil paintings in rich or deep tints. If so, the delicate pictures will appear faded, and the paintings coarse, by contrast. As a rule, delicately-colored pictures should be placed in the best lighted part of the room, unless relegated to a dark corner for the express purpose of brightening it up. Small pictures are often most effective when arranged in groups. Heavy gilt frames are not now considered indispensable, the natural wood being really prettier and more easily kept clean. Family portraits should always be placed in the dining-room, or in the library, if there is one, never in parlors.

Last of all, as to the pictures themselves, it really seems a pity, in these days of good cheap engravings, that poor or tawdry ones should ever have a place on our walls. If you have never heard of the Perry, Cosmos or Brown pictures, I am glad to tell you of them. These firms issue prints of the great masters, at prices ranging from 2 cents to 25 cents each—higher than that, I suppose, if you want. All you have to do is to cut off the white rim from the prints, mount them on cardboard of some soft tint (plain wall paper in the right shade will do nicely), then frame them as you choose; narrow wood frames are quite pretty, and are not expensive. Many mount these prints, then frame them in passe-partout, by placing glass over the mounts, then pasting all around the edge the passe-partout binding, which may be got already coated with mucilage for that purpose. Small hooks and rings are fastened at the back for suspending the pictures. As may be imagined, these passe-partout prints are very inexpensive, yet they are seen everywhere in the best houses. Photographs or pictures from magazines may be treated in the same way.

DAME BURDEN.

"Farmer's Advocate" office, London, Ont.

PRACTICAL HINTS FROM ANNIE LAURIE.

Dear Dame Burden, and girls of the Ingle Nook, did you ever try to press wild flowers, and suffer the mortification of seeing them shrivel up into mere shadows of themselves?

This spring I am using absorbent cotton, and it works like a charm; in fact, better than some charms I know of.

New Ontario Boy.—Some time when you are out of preserves, and don't want to bake a dessert, try boiling two cups of sugar and four cups water into a

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syrup. It is nicer than bought syrup, and much cheaper. It will be of the color and consistency of honey, and, with bread and butter, rather relieves the diet of potatoes and pork for breakfast, potatoes and pork for dinner, and the peelings and rinds warmed up for supper, which grows rather monotonous after a while, even if one be too busy to bake something nice.

Dame Durden, what do you think of a girl who said: "Fancy having one's maiden name on one's tombstone; I never could survive the disgrace?"

Truly yours,
ANNIE LAURIE.

I should say she'd better "make hay while the sun shines," Annie Laurie. No, I shouldn't either—that isn't the way to manage it at all. Speaking of old m—bachelor girls, I mean, did you ever read Tennyson's "Spinster's Sweet-arts," about the spinster who named her four cats after her four old sweet-hearts? It's delightful,—the poem, I mean. Poor old spinster!—and still she said:

"Sweet-arts! thanks to the Lord that I never not listen'd to noan!
So I sits in my oan armchair wi' my oan kettle there o' the hob,
An' Tommy the fust, an' Tommy the second, an' Steevie, an' Rob."

You see, as one of my ten-year-old Sunday School boys remarked not long ago, when I ventured to dispute him on a point of ethics, "It all depends on the light you look at it in."

A SUGGESTION.

Dear Dame Durden,—I am one of the readers of the Ingle Nook Chats, and I assure you I enjoy them very much. Was much interested in the North Ontario Boy, but haven't seen anything from him lately. I see there are some Ingle Nookers from Mud Bay; are there any from the Thunder Bay district? Was delighted with the beautiful pieces of poetry, "Cuddle Doon," and its companion pieces. Have them all pasted in my scrapbook. Would it not be nice if someone would send in a nice piece of poetry every week to the Ingle Nook? Would willingly take my turn at it, as I have some very nice pieces. From

AUNT AGNES.

We are always pleased to receive clippings of really good poems.

FROM NEW ONTARIO BOY.

And now, as if in direct answer to Annie Laurie and Aunt Agnes, here comes "New Ontario Boy" himself:

Dear Dame Durden,—I think at the present time I need an older head than mine to express my many thanks to you. I have received more knowledge than ever I expected to receive. A few months ago I was short of knowledge that I needed, but I am thankful that I asked at the right place and the right time. I think I was not aware that I had so many kind friends; but I thank them all. We have been able to get along very nicely with our cooking, and our other little house duties after the instructions that we have received. I think the worst thing we have to put up with is that time is so short. The house duties do not seem very hard work, but I think our clock must run wheel within wheel; for when we go into the house to our dinner, and make on the fire and get dinner ready, the hour seems to be gone. Before we get our dinner, father will say: "Look at that clock! It is time we were out at work!" I sometimes think he forgets we had our dinner to get ready; but I think with all the little pull-backs, we are getting along very nicely. I am sure the Ingle Nook Chats are very interesting, and am glad to see others have been benefited by them, as well as myself. NEW ONTARIO BOY.

Many letters are still held over for lack of space, but all will appear in good time. D. D.

Contributor—I have brought you a poem of four stanzas, sir.
Editor (examining it)—I count five.
Contributor (mystified)—Sir?
Editor—Yes; in addition to the four. You see, I notice it stanza chance of going into the waste-basket.



By this time the annuals will all be nicely up, and the beds beginning to give some hint of the brave show which they intend to present later on in the season. From now henceforth it must not be forgotten that the price of the greatest success with this class of plants (as, indeed, of most others) is frequent cultivation. If one is supplied with the proper tools, however, the work of cultivating becomes a pleasure rather than a task, especially if "indulged" in late in the evening when the hot sun of the day has gone, and the cool air and the softened light make it a pleasure to be outdoors. A suitable "outfit," moreover, consists of but few pieces, and entails but little expense: a narrow-pointed hoe, a claw weeder, and a pair of garden gloves which will protect the hands from being roughened by the clay, usually being sufficient for all purposes in the flower garden. Of course, one must not forget the watering-pot, which should be provided with a good rose. The task of watering is likely to be the least pleasant of all the work among the flowers. A little water, which does not reach the roots, is worse than none at all; and as on most farms there is neither hose or force-pump, there seems nothing for it but to drag along with pail after pail of water, in order that the plants may not suffer for want of drink. A barrel of water drawn by horses to the edge of the garden will be found a great lessener of work when watering time comes. It is worthy of notice, however, that the constant stirring of the soil referred to above, renders much less water necessary, or more properly speaking, permits of the watering being done much less frequently, for whenever plants are watered the ground should be thoroughly soaked.

You may have heard people say: "A good stirring up is as good as a shower," and you may depend upon it that in this there is much more sense than nonsense. A very simple experiment will illustrate the principle. Take a lump of sugar; hold the lower end of it in water, and watch what occurs. You will see the water rising gradually until the whole lump is moistened. Now, the water rises in the sugar by reason of a principle called capillary attraction, and this process is exactly what goes on in the soil, the moisture from below continually moving upward to the surface, where, if it is not caught and held, it passes off into the air instead of entering into the plants through their roots. Now, the fine dust mulch which you make on the surface by cultivation acts as this trap. The moisture from below cannot pass through it readily, hence is compelled to stay about the roots of the plants, where it is most needed. In cultivation, however, care must be taken not to injure the roots. It is not necessary to work the soil deeply.

Now, just a word in regard to transplanting. Do this, if possible, in the evening. Make the holes for your plants, and pour some water in them. Now put in the plants very gently, taking care that all the clay possible adheres to the roots. Pack the soil in firmly, but not roughly so as to break any of the rootlets, and do not build it up around the stems; it is better, in fact, in view of future watering operations, to have saucer-like depressions about each plant. Last of all, spread dry pulverized clay all over the wet surface, thus providing a mulch which will keep the roots cool and the moisture where it should be. If this mulch be given, this first watering should be enough for some days,

then more water should be given, and another dust mulch. Some people invariably keep something to shelter over transplanted plants for the first two or three days. If this seems advisable, care should be taken that free ventilation is not interfered with. FLORA FERNLEAF.
"Farmer's Advocate" office, London, Ont.

Woman's Greatest Lack.

"I'm heartily tired of all this talk about woman suffrage, and this thing and the other that women lack," said a bright little woman at a club meeting the other day. "Not one of these reformers seems to see that the only thing we women really need, the lack of which keeps us down (if indeed we are down, which I'm not inclined to admit), is a very simple one and one which it would not seem difficult to supply. It's nothing more nor less than pockets!"

Roars of laughter followed this climax, but as soon as she could be heard, the enthusiastic little woman began again. "Now you think I'm only joking, but I assure you I was never more in earnest in my life. If you want to know what makes the difference between the condition of men and women to-day, I can tell you that it is simply a lack of pockets. Just look around the room and see every woman with her pocketbook either in her hand, or on her lap or the table. If this room were full of men, would you see a single pocketbook? No, indeed. A man would scorn to blazon the fact that he had money by displaying his pocketbook to the envious eyes of the beggar or villain on the street.

"Then look at the watches pinned conspicuously on the gowns, and the handkerchiefs tucked into belt or buttonhole. Men are sensible enough to have pockets for these various indispensable articles, but because women lack the pockets and so must make a display of them, they consider handsome purses, beautiful watches and elegant handkerchiefs a necessity, and thus are tempted to extravagance, vanity and envy.

"But this isn't the worst of it, by any means, as I will soon show you. When my husband finds himself obliged to wait ten or fifteen minutes in a place barren of entertainment, he pulls a book out of his pocket and forgets his surroundings. In this way he has read the best of German literature. If he is going for a day's outing in the country, and happens to be interested in birds, he puts his Chapman's Handbook and field-glass into his pocket and comes home in delight at having been able to identify several new varieties. If he is botanically inclined, it is the same thing, only then he takes his Gray and a microscope; and when he's had a geological craze, I've known him to start off with a stone hammer sticking out of his pocket and come back with a dozen specimens.

"How different is my condition! But I shall have to stop talking because I'm getting too excited: for when I think of the birds that I can't tell apart, and the plants that I shall never be able to distinguish as ericaceæ or leguminosæ, and of the stories and brilliant articles that I haven't written, and of the languages that I don't know, and all for the lack of a few paltry pockets. I can't keep my temper, so I'm going to sit down and say no more!"

Such a chatter as followed this outburst was never known in a club meeting before; and, even after the meeting was adjourned, the ladies started off talking so excitedly that a reporter rushed up to know if an election of officers had been held that day. You may be sure that no one gave him an inkling of the real cause of the excitement, but such a discussion surely ought to yield results, and we are watching for a costume which shall have at least four pockets.—[The Ladies' World.]

The Old Attic Trunk.

By W. D. Nesbit.

Up in the attic where mother goes
Is a trunk in a shadowed nook—
A trunk—and its lid she will oft unclose
As if 'twere a precious book.
She kneels at its side on the attic boards,
And tenderly, softly, and slow,
She counts all the treasures she fondly hoards—
The thing of the long ago.

A yellowish dress, once the sheerest white,
That shimmered in joyous pride—
She looks at it now with the girl's delight
That was hers when she stood a bride.
There is a ribbon of faded blue
She keeps with the satin gown;
Buckles and lace—and a little shoe;
Sadly she lays that down.

One lock of hair that is golden still
With the gold of the morning sun;
Yes, and a dollie with frock and frill—
She lifts them all, one by one.
She lifts them all to her gentle lips,
Up there in the afternoon.
Sometimes the rain from the eavetrough drips
Tears with her quavered croon.

Up in the attic where mothers goes
Is a trunk in a shadowed place—
A trunk—with the scent of a withered rose
On the satin and shoe and lace.
None of us touches its battered lid,
But safe in its niche it stays,
Sacred to all that her heart has hid—
Gold of the other days.
—Chicago Tribune.

Courage.

Talk happiness. The world is sad enough
Without your woes. No path is wholly rough.
Look for the places that are smooth and clear,
And speak of those to rest the weary ear
Of earth, so hurt by one continuous strain
Of human discontent and grief and pain.

Talk faith. The world is better off without
Your uttered ignorance and morbid doubt,
If you have faith in God or man, or self,
Say so; if not, push back upon the shelf
Of silence all your thoughts till faith shall come.
No one will grieve because your lips are dumb.

Talk health. The dreary never-ending tale
Of mortal maladies is worn and stale.
You cannot charm, nor interest, nor please,
By harping on that minor chord, disease.
Say you are well, or all is well with you,
And God shall hear your words and make them true.

Some Famous Stout Women.

Queen Elizabeth and her sister, Mary Tudor, were both tall and stout. So was the great Russian Empress, Catherine. Both the Empress Josephine and her predecessor on the French throne, Marie Antoinette, became stout as they grew old. Mme. de Stael, the great wit of her time, has been called "pudgy." George Sand, although she had a beautiful head, was unusually stout, and George Eliot was unusually large.

All the women of the Bourbon blood have a tendency to fatness. The grandmother of Spain's young King weighed 300 pounds a few years ago, although she was then very graceful. Queen Marguerite, Dowager of Italy, tried to overcome her stoutness, but after a severe course of Alpine climbing and vinegar drinking, had to give up the struggle.

Cleopatra, who by her fascination and beauty charmed so many of the men of her time, was short and stout.

Many of the women of the middle age were also large. Among them are Lucretia Borgia, sometimes called the most wicked woman in the world; Laura, whom Petriarch made famous in his poems; Marguerite of Angouleme, Queen of Navarre, and Marie de Medici, wife of the French King, Henry IV.



Turn your apples into dollars.

J. E. Johnson, of Simcoe, with a **SPRAMOTOR**, turned the product of 300 trees into \$1,500 last year.

While his neighbor, Mr. Fick, who did not spray, from 1,500 trees, got no perfect fruit.

You can do the same.

But should remember that to get **Spramotor** results you must use a **Spramotor**, and not any Spray Pump.

It is just as important to use a **Spramotor** as it is to use good chemicals. Full particulars free.

SPRAMOTOR CO.,

68-70 King Street, - LONDON, ONT.

GOSSIP.

Note the advertisement of Mr. H. Golding, of Thamesford, Ont., who has three capital young Shorthorn bulls for sale.

The death is reported in our English exchanges of Joseph Culshaw, of Castle Hill, Towneley, near Burnley, Yorkshire, at the age of 92 years, formerly herdsman for the late Col. Towneley, a noted breeder and exhibitor of Shorthorns in his day.

A negro and an Irishman once on a time agreed to engage in a boxing bout. According to the terms of the agreement, the one who first desired an end to be put to the match was to cry out "Sufficient," and then the two were to shake hands over "the bloody chasm."

After fully fifteen minutes of fast and furious work on the part of each, the Irishman finally exclaimed, "Sufficient!" "Gee," said the colored man, as he grasped the Irishman's hand; "gee, I's been tryin' to think er dat word fer de las' ten minutes."

A GREAT SALE OF IMPORTED CLYDESDALE FILLIES.

The auction sale, at Grand's Repository, Toronto, June 23, of 50 registered Clydesdale mares and fillies, selected and imported by Graham Bros., of Claremont, Ont., should attract buyers from far and near, as there is no greater want felt in any line of live stock in Canada to-day than that of good heavy draft mares for breeding purposes, to produce stock to supply the great demand for dray horses, both at home and abroad, which is becoming more urgent every year. These mares and fillies are the progeny of many of the most noted sires in Scotland, and the judgment of Graham Bros. may be trusted to select none but the right sort. The fact that the two-year-olds and the three-year-olds have been served by the very best sires before leaving Scotland adds greatly to their attractiveness. This will certainly be a rare opportunity for farmers to secure a breeding mare or two, of the very best breeding and quality. There is no better paying investment in these times than a good Clydesdale breeding mare. Horses are in more active demand than any other stock at present. The opening up and settlement of new territory will create a demand for more and more heavy horses and mares for farm work and for breeding, and there is every prospect of high prices ruling for this class for many years to come. Everyone interested should read the advertisement; make a note of the date, and attend this great sale.

EXTENSIVE CLYDESDALE SHIPMENT.

Messrs. Graham Bros., Claremont, Ontario, have purchased fifty highly-bred Clydesdale fillies through Messrs. A. & W. Montgomery, Kirkcudbright. These were shipped May 28th, and range from one to three years of age. They are got by noted breeding stallions, quite a number of them being granddaughters of Baron's Pride, and from their pure-bred pedigrees and individual merits, they should develop into first-rate brood mares, says the Scottish Farmer.

These fillies will be sold by auction, at the Repository, Toronto, on Thursday, June 23rd, as advertised in this issue.



SHIRT WAIST SUITS \$2.95

Made from muslin any shade consists of waist and skirt, waist has large tucks in front and in back, nice full sleeves, band cuff. Skirt is flare cut trimmed with straps of itself. Same suit, any color, Linen or White Figure \$3.75. The waist may be had separate in muslin 95 cents. Linen \$1.00. Lustré any shade \$1.50. Japan Taffeta Silk any shade \$2.25. Best Tulle \$3.25. Any suit or waist may be returned if not made according to measure and money refunded. Send bust and waist measure, sleeve length, also length front, side and back of skirt and around hips. Satisfaction guaranteed. Send this add.

Southcott Suit Co.,
LONDON, CANADA.

BUFF Orpington eggs, \$1 per 15. My own importation. Grand layers. C. E. Brown, Haysville, Ont.

The grand young Shorthorn bull, Whitehall Marshall, sold at Mr. E. S. Kelly's sale, at Chicago, last week for \$1,205, goes to head the noted herd of Mr. F. W. Harding, of Waukesha, Wisconsin, and will make a worthy successor in that position to Ceremonious Archer, winner of the male championship of the breed at the Chicago International Exhibition last year, and since sold for a sensational price. Whitehall Marshall is a roan; calved Oct. 5th, 1902; sired by Whitehall Sultan (imp.), who was bred by Mr. J. Deane Willis, got by Bapton Sultan, and out of Mr. Willis' Royal winner, Bapton Pearl. The dam of Whitehall Marshall is Missie 167th, bred by W. S. Marr, Uppermill, and sired by Lord of Fame, bred by Mr. Durno.

Colonel Charles F. Mills, who has been appointed Chief of the Department of Live Stock of the Universal Exposition at St. Louis, to succeed Mr. F. D. Coburn, whose ill health made necessary his resignation, has been associated with Mr. Coburn as Secretary of the Department of Live Stock since its organization, and assumes charge of the Department with the most intimate knowledge of the classification and all the preparations and plans so far completed for the Live Stock Show of the Exposition. The arrangement of the distribution of the \$280,000 in Exposition live-stock prize money, and the numberless and complicated matters daily growing out of the provisions for shows of more than double the magnitude of any ever before planned, are entirely familiar to Colonel Mills. Added to this he has, undoubtedly, a more extended experience in live-stock exposition matters and personal acquaintance with breeders and exhibitors than any other person. He had the active charge of the live-stock show at the Columbian Exposition, in 1893, which has stood unrivalled up to this time as the best managed and greatest of all the live-stock exhibitions. Mr. Mills is fully equipped with the ripe experience gained from thirty years of active and successful work as secretary of some of the most prominent live-stock shows and State fairs held in the United States. His official connection with a number of the leading live-stock breeders' associations has kept him fully informed regarding the advancement made in live-stock husbandry in the last quarter-century.

Chief Mills is now vigorously forwarding all matters pertaining to the live-stock show of the Universal Exposition, and much can be expected from his deep interest in the work and his superior executive ability.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1 must be enclosed.

Veterinary.

ECZEMA.

Mare rubs and bites her legs; legs swell; urine is scanty and high colored.

A. R.

Ans.—Purge with eight drams aloes and two drams ginger; feed on bran only for twenty-four hours after administering purgative; follow up with four drams nitrate of potash every night for four doses, after which give one ounce Fowler's solution of arsenic night and morning every alternate week, as long as necessary. Clip the legs, and rub well twice daily with corrosive sublimate, twenty grains to a pint of water, until itchiness ceases. V.

ECZEMA.

I have a calf that does not thrive. It seems itchy, and the hair comes off in patches.

W. R. F.

Ans.—The calf has eczema. Clip it, and apply Little's sheep dip, as per directions on the package. Give him two drams Fowler's solution of arsenic in the milk night and morning for a week, and continue with the external application as long as necessary. V.

FEEDING FLOUR.

I wrote you re aged mare. You advised having her teeth dressed. I had this done, but it did her no good. I fed a cupful of flour in her oats for three doses, and she is much better. L. H. B.

Ans.—The mare's teeth may be so bad, they cannot be dressed so as to allow her to masticate properly. As you have had such good results from the flour, it would be well to continue its use in reasonable doses, say half a cupful two or three times weekly. Tonics, as one dram each sulphate of iron and gentian twice daily in damp rolled oats (if she will eat it), will also give good results. V.

Miscellaneous.

RIGHT STAMP REGISTERED.—Is a horse named Right Stamp 2245 registered in the Canadian Clydesdale Stud-book? HORSE BREEDER.

Ans.—Yes.

AUCTION SALES.



Corner Simcoe and Nelson Sts., Toronto. Auction sales of horses, carriages, harness, etc., every Tuesday and Friday at 11 o'clock. Private sales every day.

On **TUESDAY, JUNE 14th**, at 10.30 sharp, by instructions from

MR. E. C. ATTRILL,

RIDGEWOOD PARK STOCK FARM, Goderich, we will sell, without reserve, a valuable consignment of

Registered Hackneys.

Catalogues are now ready for distribution.

ALSO ON THE SAME DATE, by instructions from MR. JAS. McMILLAN, SELTON, a special consignment of **HIGH-CLASS PAIRS—Single High Steppers, Saddle Horses and Fast Roadsters, including Matched Pair Roadsters.**

Catalogues on application.

A large number of other horses, including several carloads of all classes, will also be sold on the above date.

WALTER HARLAND SMITH,

Auctioneer and Proprietor, "The Repository," Toronto.

For Sale: 3 SHORTHORN BULLS

from 12 to 20 months old, from Scottish Baron = 40121.

H. GOLDING & SONS, Thamesford, Ont.

GOSSIP.

With all stock it is one thing to feed for vigor, and another to feed for fat.

Keep in tune with nature and you won't have to keep in touch with the medicine men.

It isn't the way of life to have things turn out just as planned. If you are not ready to make the most of changes in the programme, you can be in trouble most all the time.

At a combination sale of Aberdeen-Angus cattle at Groggsville, Ill., on May 17th, 52 head sold for an average of \$107. The highest price was \$400 for the bull, Wallace of Hayti, eighteen months old, sold to F. Austin, Pittsfield.

The sale, on May 26th, of 48 head of Shorthorns from the herd of W. I. Wood, Williamsport, Ohio, resulted in an average price of \$183.50. The highest price, \$530, was paid for the two-year-old bull, Lord Russell, by Imp. First in the Ring. The yearling bull, Marquis, by Marquis of Zenda, made \$300. Three females sold for \$405, \$495, and \$515, respectively.

Fitzgerald Bros., breeders of Shorthorn cattle, Mt. St. Louis, Ont., Elmvale Station, G. T. R., too late for this issue, write ordering a change in their advertisement, listing for sale 4 bulls, 14 yearling heifers, 3 two-year-old heifers, 10 cows with calves at side, and this year's crop of calves. The imported Scotch bull, Diamond Jubilee, heads the herd.

GREAT SALE OF JERSEYS.

A wire from Coopersburg, Pa., to the Jersey Bulletin re T. S. Cooper's sale of imported Jersey cattle on May 30th, reads:

"Cooper's sale, greatest of all recent importations; made greatest record for the past twenty years. Ninety Jerseys averaged approximately \$500. Blue Belle brought \$3,600, going to Mr. Willetts; Flying Fox's Proclamation, three-year-old cow, \$2,300, to Dr. Still, of Missouri. "Foxes" made new record in prices." Further particulars next week.

TRADE TOPICS.

A NEW STANCHION.—Those who read a number of letters that appeared in these columns some time ago on the subject of tying cattle will be interested in a new stanchion that is made by the Loudon Machinery Co., of Guelph—Loudon's Tubular Stanchion? It is made of the best steel tubing, with the ends nicely curved, and securely fitted with malleable iron couplings, so that there are no pieces to get loose and no sharp corners to injure the cow's neck. They can be opened or shut with one hand, and without taking off a mitten. The chains allow them to turn freely in any direction, and the cow can turn her head clear around to either side, and is not cramped in any respect.

SAVING MONEY IS MAKING MONEY, and here is the way to save: Every home demands a piano, and new pianos are expensive, but one that fulfills all the requirements of a first-class instrument, except for a few months age, can be secured from Gourlay, Winter & Leming, 188 Yonge St., Toronto. Their line of pianos advertised at greatly reduced rates are not old, cast-off "rattle-pans"—such instruments are burned by the carload—but are pianos that have been forced upon their hands by the exigencies of business, and now are offered at prices below their first cost. Read the advertisement, including the easy terms, and provide the family with one of these useful and valuable instruments.

MUNICIPAL OFFICERS, READ: Road-making is the order for the month of June, and people now will not tolerate poor workmanship on the highways. It is now not sufficient to simply gouge out a ditch and dump the earth on the center of the road: grades must be made, and the road surface kept level. To accomplish this work, there is one machine that stands out above all others and that is the Sawyer-Massey road-grader. Nor does this company confine itself to the manufacturing of graders: every machine that can possibly be used in the making of good roads is sold by them. The reputation of their machines is most enviable. In purchasing, take only the Sawyer-Massey.

GOSSIP.

Don't forget that rape may be sown at almost any time during the summer and be ready to turn in in six or seven weeks, except in a very dry time. It is wonderful help to your pigs, sheep, calves and other stock, except milch cows, and these may be allowed to feed on it an hour or two in the morning and evening. It gives the milk a turnipy flavor if they are allowed to run on it all the time.

LAST CALL FOR THE GREAT YORKSHIRE SALE.

Wednesday, June 15th, the date of D. G. Flatt & Son's great sale, at Hamilton, Ont., of 80 imported Large English Yorkshire sows and boars, selected from eight of Britain's best herds, should witness a large gathering of farmers and breeders in the Ambitious City. The stock has been well selected, the object being to secure the best, regardless of cost. It fills the bill for ideal quality and type to meet the requirements of the best paying market, and is at the same time a profitable-feeding sort for the farmer. No expense has been spared in securing a desirable class, and the added expense of importation and quarantine are no small items. It is hardly expected to prove a money-making venture, and if the importers come out even in the transaction, they will be satisfied, as they feel that the stock is needed in the country, and are confident that, like good seed, it will have a potent influence in improving the general stock of the hogs wherever it is distributed. The same liberal and honorable conduct that characterized their sale of last year will be followed in this disposal, and whether the result spells gain or loss to the vendors, the public will get the stock at their own price. The market prices for hogs are looking up, and are now such as should be satisfactory. There is no question but the demand for Canadian bacon in Great Britain of the best brand will continue to grow, and there is no valid reason why we may not capture the best of it. The stock in this sale is of the sort that has created that demand and the more widely it is disseminated in the Dominion, the more uniform in

Do You Want a Free Homestead?

There are some good ones left in the

Last Mountain Valley

The way to get a cheap farm is to take up a homestead and BUY THE ADJOINING QUARTER SECTION. BUT YOU'LL HAVE TO HURRY.

PRICE **\$9.10** PER ACRE. EASY TERMS.

WRITE FOR MAP AND DESCRIPTIVE PAMPHLET.

WM. PEARSON & CO.
383 Main Street, WINNIPEG.

quality will be the product. Over 40 young sows of grand type in this dispersion are carrying litters to the service of the best stock boars in the herds from which they were selected, and securing one or two of these will found a herd in a single season, combining all the elements needed to constitute a high-class breeding establishment, and to meet the ever-increasing demand for this class of stock. Reference was made in the last issue of the "Advocate" to the large number of grand yearling sows and younger ones in the sale. The boars, though less in number, are of excellent type and quality, distinctly better on the average than those in the last sale—smooth, straight and well-fleshed, standing well on their feet, and well-fitted to improve the character of the herds they may go into; some of them strong show timber, suitable to enter the competition in the big shows, and nearly all good enough to win in provincial company. Space limit forbids mention of many of these, but prominent among them is, No. 1 in the catalogue, Cotgrave Duke of York 3rd, a year old in October last, bred by Mr. Armitage, from the same dam as the grand sow which brought the highest price at last year's sale. He is a model to go by, with handsome head and ear, smooth shoulders, strong, well-packed back, good legs, and active as a kitten. He is a royal good one, and will doubtless be keenly competed for. Borrowfield Eclipse 7th, a year old in January last, bred by the Earl of Elles-

mere, and sired by the great stock boar and champion, Borrowfield Eclipse, recently sold for \$525, is a hog of great size and splendid conformation, with long, level quarters and standing on the best of timber. Dalmeny Clipper, fourteen months old, bred by the Earl of Rosebery, and sired by Dalmeny Turk, the sire of many winners at the Highland and Smithfield, two of which at eleven months old weighed 1,066 lbs., is a boar of fine quality, straight, smooth and standing on capital legs, a strong show hog in any company. These are but sample numbers, some of the younger boars being of equally fine character. A day spent in attending this, the great swine sale of the year, will be a day profitably spent, whether one is a buyer or not, and breeders should make it a point to be there.

"Horse races are heroic, hence the fascination," said Bourke Cockran. "The fact is sometimes ignored by persons who condemn the sport. Recently I played rather a sorry trick upon one of them, a clergyman. As an eyewitness I described the running of the Metropolitan Handicap, and to make it more interesting colored it a bit by depicting how Irish Lad was challenged repeatedly from the start, and how the race was in doubt up to the last moment. I left the field a few jumps from the finish. Then I said:

"A famous horseman declared once that a racehorse, pure and simple, is of interest to only three persons: The kid that rides him, the lobster that bets on him and the thief that owns him."
"Yes, yes," replied the clergyman impatiently, "but which of those horses won on that day you spoke of?"

It is better that we do not indulge in any vain regrets. They take strength and time, and worse than that, sow the seed for a larger crop of the same kind.

There are a good many patent churns which are recommended to farmers because they will bring the butter in a few minutes. Don't buy them. Good butter is not made in this whirlwind style.

Important Auction Sale at the Repository, Toronto

THURSDAY, JUNE 23, 1904,

50 Imported Registered Clydesdale Fillies

PROPERTY OF GRAHAM BROS., CLAREMONT, ONT.

Personally selected by one of the above firm from the best Clydesdale establishments in Scotland. Sired by such noted stallions as Baron's Pride, King of the Roses, Prince Thomas, Up-to-Time, etc.

LARGEST AND MOST VALUABLE CONSIGNMENT OF CLYDESDALE FILLIES EVER BROUGHT INTO AMERICA.

These fillies are one, two and three years old, and the two-year-olds and three-year olds have been served by the very best sires before leaving Scotland. A most important opportunity for farmers to secure first class, young, imported breeding mares

Apply for catalogues, which will be ready in a few days, to

Graham Bros., Proprietors.

Walter Harland Smith,
AUCTIONEER, THE REPOSITORY, TORONTO.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

MELOTTE CREAM SEPARATORS

Increase the quantity of cream 20 per cent, improve the quality of butter, save ice, save time in washing a multitude of pans, and provide sweet and still warm separated milk which, with a little corn meal added, makes a far more valuable, though less expensive, food for young stock than stale skimmed milk. These are facts which any user or any dairy expert will confirm. No charge for trial.



WRITE FOR BOOKLET No. 10 F.

Sizes A, B, C, with detachable bowl casing.

R. ALISTER & CO. LTD.
675 & 501 ST. PAUL STREET
MONTREAL.

POULTRY AND EGGS

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

DUFF Orpington eggs from imported Ontario and B Industrial winners, \$2 per 13. Write for free catalogue describing them. J. W. Clark, Cainsville, Ont.

POULTRY, cat, dog and bird supplies. Large catalogue free. Morgan's Incubator Works, London, Ont.

CANADIAN Poultry Review, Toronto, Canada's leading poultry journal. Fifty cents a year; three years, one dollar. Sample free.

BARRED ROCKS Eggs for hatching from a pen headed by a cock bred by E. B. Thompson, N. Y., \$1.00 per setting; also from a pen of Thompson's pullets, \$1.50 per 15. Write to **O. & J. CARRUTHERS**, Cobourg, Ont.

A. E. SHERRINGTON
WALKERTON, ONT.
Importer and breeder of **BARRED P. ROCKS** exclusively. Eggs, \$1.00 and \$1.50 per setting of 13.



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

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

WANTED—Salesmen for Auto-spray—best compressed-air hand sprayer made. Splendid seller. Liberal terms. Covers Bros., Galt, Ont.

Farms Wanted.

We have daily enquiries from parties wanting to buy Ontario farms. We can find you a buyer for your property. Send us particulars of what you have to sell and get our terms and plans. Write to-day. Agents wanted everywhere.

THE INTERCOLONIAL REALTY CO'Y, LIMITED,
London, Canada.

TRADE TOPICS.

HOW TO RAISE CALVES cheaply and successfully with little or no milk is explained in a pamphlet supplied free to applicants, by G. Carter & Son, St. Mary's, Ont., Canadian agents for Blatchford's calf meal. See the advertisement and send for particulars.

THE MATRON ball-bearing sewing machines, in oval and library-cabinet designs, advertised by The Windsor Supply Co., Windsor, Ont., represent the most improved and up-to-date machine of the kind on the market, combining utility and durability with elegance of construction and appearance. Look up their advertisement, and write them for price and particulars.

NOT WORK BUT WORRY HARMS.
It was not work, but care, that killed the cat of the adage, and it is yet to be clearly proved that hard work regularly done has ever hurt any one, or that congenial, profitable employment is not a pleasure and a physical and mental advantage. When the vocation is uncongial and without fair compensation, the element of worry and fret intrudes, and it is that, rather than the hard work, which breaks down the victim's health and spirits. Work regularly, intelligently, no matter how energetically done, is rather more likely to promote health than to impair it, or to prolong life rather than to shorten it. The idle man, who lacks employment of body and mind, is more likely to suffer from nervous depression or to discover, as Carlyle says, that he has within him that "infernal machine, a liver," than is the man who has serious work to think about, and who by doing it keeps his physical organs in normal condition. Indeed, the secret of healthful living seems to be a plenty of work cheerfully done—the maximum of inspiring labor and the minimum of dull care.

GOSSIP.

The dates for live-stock shows at the St. Louis Exposition are now settled as follows:

Horses, asses and mules, Aug. 22 to Sept. 3; cattle, Sept. 12 to 24; sheep, goats and swine, Oct. 3 to 15; poultry, Oct. 24 to Nov. 5; dogs and cats, Nov. 8 to 11.

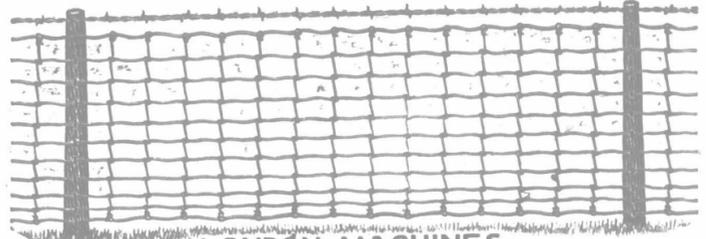
Entries close:
Horses, asses and mules, July 16; cattle, July 30; sheep, goats and swine, Aug. 20; poultry, dogs and cats, Sept. 10.

Mr. W. R. Bowman, of Cresthill, Mount Forest, Ont., is already well known to readers of the "Farmer's Advocate" as a breeder of Shropshire sheep, Yorkshire hogs, Shorthorn and Aberdeen-Angus cattle. Mr. Bowman's specialty at present is Shropshires, of which he has quite a flock now on hand of good quality. Several of the ewes were purchased from Abram Rudell, Hespeler, carrying the blood of noted flocks, such as Hamners and Phins. They are mostly from imported sires, and are a well-covered, low-down lot, that should satisfy intending purchasers. Mr. Bowman has an Angus bull that is for sale at a reasonable figure, considering quality.

The regular prizes offered by the Louisiana Purchase Exposition at St. Louis in the class for Berkshire swine is \$5,100, and in addition the American Berkshire Association offers special cash premiums amounting to \$2,000, making a grand total of \$7,100 for which Berkshire breeders may compete. The regular prizes in the ten sections, by ages, run from \$60 for first to \$25 for fifth. The champion prizes are \$100; the grand champions, \$150; the herd prizes, \$100 for first, for boar and three sows, to \$30 for fifth, and the prize for best herd, boar and three sows, bred by exhibitor, \$200. There is a splendid list for fat hogs in two classes, pure-bred and grade.

\$30 to Colorado and Return.
Via Chicago, Union Pacific & North-Western Line. Chicago to Denver, Colorado Springs and Pueblo, daily throughout the summer. Correspondingly low rates from all points east. Only one night to Denver from Chicago. Two fast trains daily. Tourist sleeping cars to Denver daily. B. H. Bennett, 2 East King St., Toronto, Ont.

BUY YOUR OWN COILED STEEL SPRING FENCE



LONDON MACHINES

The strongest and most durable frost-proof fence known. Save agents' and factory profits. Build it yourself with the

LONDON FENCE MACHINE

The fastest and most improved machine in the world. Anyone can operate it and weave from 100 to 150 rods 7-bar fence per day. Every man who owns a farm should have one. Don't fail to get a catalogue and price. Price furnished on high-grade material for any length, weight or height of fence desired, either f. o. b. Winnipeg or delivered at your station. Write for price of material, machine and outfit.

London Fence Machine Co., Ltd.,
LONDON, CANADA.

Plymouth Binder Twine

IS THE

Longest, Strongest, Most Even and Best.



Our celebrated brands are **Plymouth Special, Green Sheaf, Silver Sheaf, Golden Sheaf and Gold Medal.**

They bind the **maximum** number of sheaves with the **minimum** amount of trouble and expense. We invite farmers to prove this advertisement by counting the sheaves they bind with **Plymouth Twines.**



Dunlop "Ideal" Horseshoe Pad

affords. Drop a post card, and the booklet will be sent free.

THE DUNLOP TIRE CO., LIMITED,
TORONTO, CANADA.

"PERKINS'" AMERICAN HERBS

THE GREAT BLOOD PURIFIER,



Dr. J. H. Perkins, Herb Co., Limited, 173 Spadina Ave., Toronto, Ont.

OILS. We sell Cylinder Oils, 650 fire test, made from Pennsylvania stock dark or amber color, as follows: 4-gallon jacketed can, \$2.50; 8-gallon jacketed can, \$4.00; half-barrel (25 gallons), \$10.50; barrel (50 gallons), \$18.00. We guarantee satisfaction. Anyone not pleased may return oil at our expense and we will return pay for unused portion. Our catalogue on application.

Windsor Supply Co., Windsor, Ont.

ADVERTISE IN THE ADVOCATE.

GOSSIP

No one can afford to be merely an average farmer. The average farm crop of this country does not pay for the raising. It is the man who is above the average who makes money.

A few miles from Mount Forest Station, G. T. R. and C. P. R., lies Woodland Stock Farm, the property of Mr. W. H. Wallace, where is kept a nice herd of Shorthorns, numbering at present about 20 head. Roan Robin = 29575, a Watt-bred bull, of excellent character, quality and breeding, a grandson of Imp. Royal Sailor, from English Lady 2nd, by Barmpton Hero 324, heads the herd, assisted by Prince Charlie 50412, bred by J. & W. Russell, sire Stephen Fitz-Forester (imp.) = 36030, dam Rose of Autumn 12th. The female section is composed of thick-fleshed, good breeding cows, and heifers of the right type, the former sired by Lord Lansdowne (imp.), and County Member, by Royal Member (imp.), used so successfully in the Car-gill herd, and the younger things by Roan Robin. The above mentioned females form the nucleus of a herd, which, with the blood of Roan Robin united, has produced some really useful young stock, which, being crossed upon by Prince Charlie, should continue to improve the herd. Mr. Wallace wishes to replace Roan Robin with one of fresh blood. Although this bull is six years old, he is of too good quality to be sent to the shambles. Anyone wishing to get such a well-bred sire, and one that has proven a good breeder, would do well to write Mr. Wallace, to Mount Forest, Ont., for particulars.

In answering any advertisement on this page, kindly mention the **FARMER'S ADVOCATE**.

GRAND COMBINATION SALE

IN SALE PAVILION, STOCK-YARDS, HAMILTON, ONT., ON TUESDAY, JUNE 28.

**62 HEAD
IMPORTED
AND
CANADIAN-
BRED
SHORTHORNS**



**56 FEMALES,
6 BULIS.**

CONTRIBUTORS:

- W. C. Edwards & Co.,
Rockland.
- A. D. McGugan, Rodney.
- Chas. Rankin, Wyebridge.
- D. Milne, Ethel.
- T. E. Robson, Ilderton.
- Hudson Usher, Queenston.

A choice collection of high-class individuals in type and breeding. For catalogues and all information, address

Auctioneers: CAPT. T. E. ROBSON, THOS. INGRAM.

on
HUDSON USHER, Queenston, Ont.

**QUESTIONS AND ANSWERS.
Miscellaneous.**

PLANTING PINES.—Please let me know, through your valuable paper, the time of year native pines should be transplanted?
A. C.

Ans.—There is no better time than the latter part of May and the first part of June. With pines, be careful to secure as much of the roots as possible, and to set in warm, rich, mellow soil.

HANDLING CLOVER.—I have a field of clover in which I intend sowing fall wheat, and I would like to know which would leave said field in the better shape, to plow down clover when it comes in full bloom or to pasture it off for a while, and then plow about the latter part of July? Which is the most valuable part of clover, its top or its root, for fertilizer? Would this field need any other manure?
G. S.

Ans.—There might be one condition in which it would be best to plow the crop down just before it blooms, and that would be when the soil is in need of a very large amount of humus, and in need of cultivation to germinate weed seeds, otherwise we should prefer to cut the crop for hay, and plow down the second growth about the end of July, rolling and giving good surface cultivation afterwards, especially after rains. This would be a more economical plan than to pasture or to plow earlier. Of course, if pasture were needed more than winter feed, it would pay to pasture. The part of clover that is of particular value as a fertilizer for grain or root crops is the roots, or rather the root nodules. In these nodules the nitrifying bacteria are engaged fixing the nitrogen of the soil atmosphere, which is eventually used for plant food. These bacteria require warm summer weather to reach their best development; hence, the longer the crop of clover can practically be left growing, the more fertility will be added to the soil. On the other hand, considerable plant food is liberated when the green parts of plants decay in the ground, so that if the crop is plowed down earlier, the extra amount of humus added may help to make up the loss

IMPORTANT AUCTION SALE

OF 80 HEAD OF IMPORTED LARGE ENGLISH

YORKSHIRES

To take place at the STOCK-YARDS SALE PAVILION, HAMILTON, ONTARIO, on



WEDNESDAY, JUNE 15TH.

This lot has been selected with great care from the leading herds of England and Scotland. Parties desiring to secure show stock for St. Louis or Canadian fairs will find in this offering what they require. We promise to show those attending the sale the best lot ever put together in America. Sale to commence at one o'clock sharp. Catalogues mailed on application to

D. C. FLATT & SON, Millgrove, Ont.
Auctioneers: Thos. Ingram, Guelph; S. Frank Smith, Clappison's.

caused by interfering with the work of the bacteria. With good cultivation on soil in fairly good heart, no other manure should be required.

FLIES TROUBLESOME.—Every summer my team becomes scarred by the flies, and when free bite themselves or rub against anything that is handy. They are in good condition, and in harness nearly every day, but turned out on warm nights. How should I treat them?
J. H. C.

Ans.—Yours is probably an unusually thin-skinned team. Use fly nets, and apply to their legs, chest, necks and bellies some preparation to keep the flies off, such as crude petroleum and fish oil, or some of the prepared fly exterminators, or sheep dips.

CONCRETE WATER TANK.—I would like to know how much water a tank would hold if it was 24 feet long by 3 feet wide by 3 feet high (inside measurement), and how thick would cement walls have to be to make it absolutely safe and strong? Would the walls have to be bound with iron cross-bars? And how thick would the foundation have to be to make it safe? Would it be better plastered inside? What would be the proportion of cement to use? I would like to put a tap near the bottom.
J. H.

Ans.—A tank this size would hold about 130 barrels. The foundation would need to be on solid ground. The part under the walls of the tank should be built as for a building foundation. Above the ground, up to the height of the tank bottom, could be filled in with field stone and gravel; concrete for the tank being laid right on this. About three or four inches thick would be sufficient for walls and bottom. In building, imbed strands of heavy wire (many use old barb wire) around the walls about every two feet or less in height. No iron bars are needed. Nothing but Portland cement should be used, and that about one to eight of good sharp gravel for the main body of the walls and floor. A second coat, about one-half inch thick, should be put on the inside, of one of cement to two of building sand. Get a large tap from a plumber, and imbed it when building.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP.

"When I was selling books out in the Mormon country," related the hustling agent, "I met an old man leading several dozen children down the road. I thought perhaps I could sell him a book if I kissed all the children. After I had osculated until my lips were numb, another drove of youngsters arrived and lined up.
 "You have a big family for even a Mormon," I ventured.
 "I'm not a Mormon," he drawled. "I'm just taking an orphan asylum out to see the circus parade."

H. J. Whitteker & Sons, North Williamsburg, Ont., breeders of Ayrshire cattle, Oxford sheep, etc., ordering a change of advertisement, write: "We have sold all the bulls that we had advertised, and still the orders are coming in—thanks to the 'Advocate.' We have some fine young calves of both sex for sale. Our Oxford Downs are in fine condition, and we have some fine shearling and ram lambs for sale, also fine Berkshire pigs of both sexes. Our Buff Orpington hens have been working overtime, and still could not fill the orders for eggs as fast as they came in. We are now booking orders for young stock for fall delivery."

At the sale, at Chicago, May 24th, of a draft of Shorthorns from the herd of Mr. E. S. Kelly, Yellow Springs, Ohio, 42 head were sold for \$18,350, an average of \$317 each. The top price was \$1,205, for the light roan, eighteen-months-old Missie bull, Whitehall Marshall, by Whitehall Sultan, dam the Married Missie 167th, by Lord of Fame. The yearling bull, Whitehall Count, brought \$400. The highest price for a female was \$700, for the Cruickshank cow, Faith. Imp Cornelia sold for \$625; Imp. Fancy Flower for \$610; Imp. Avalanche 2nd for \$500, and four others from \$405 to \$460.

Speaking in June, 1903, at Syracuse, N. Y., Prof. Dean, of the Ontario Agricultural College, said: "Another strong point of the Holsteins is that they give a large flow of milk. Now, with us where the production of bacon and the raising of young stock is such an important point, the by-products of the dairy farm are a very valuable part of our dairy industry. We exported last year in round numbers thirty million dollars' worth of cheese and butter from Canada, and fifteen million dollars' worth of bacon. Now, any man who has had experience in the production of bacon knows that the skim milk is almost a necessity for the raising of young pigs and the production of bacon economically, and hence cows giving a large flow of milk are valuable from the standpoint of the farmer, in that it gives him a large amount of by-product for the raising of bacon or stock of any kind upon the farm.

"Then, another strong point of the Holsteins is that they breed true to color and form. We have made some experiments in crossing the different breeds. I, myself, think that is a mistake. I do not believe that it is a good plan to cross the different breeds; but Holsteins are so strong of blood that it does not make any difference whether you have male or female, and cross them with a different breed, the Holstein will come out prominent. The strong blood is seen in their calves, and that I think is one of the advantages of this breed for the average dairyman. You will notice that I am laying particular stress upon the average dairyman, because, I think, that the man on the farm, the average man, is the man who is at the bottom of the dairy business, and, hence, these cattle make excellent what I call graders. We have some grade animals in our herd of the Holstein blood that are equal to or better than a great many of our pure-breds, and I do not think that a farmer, who has common stock, what is called scrub stock by some, can use animals of any breed with which he can improve his herd so rapidly as he can by using Holstein blood, because of this characteristic of theirs of impressing themselves—not only their color, but their characteristics—upon whatever blood they come in contact with, and that, I think, is a very strong point for Holsteins for the average farmer."—G. W. Clemons, Secretary.



MANUFACTURERS OF

Farm Wagons and Trucks

COMBINATION RACKS, ETC.

Strictly First-class. Fully Warranted.

ASK YOUR DEALER FOR THEM, OR WRITE TO US DIRECT IF NO AGENT NEAR.

Credit Auction Sale

of REGISTERED SHORTHORN CATTLE on

Wednesday, June 22nd, '04

at RIVER FARM, (DURHAM, ONT.)

Stock bull, bred in Scotland, included in sale. Catalogues mailed on application.

H. PARKER, Durham, Ont. Capt. T. E. Robson, Auctioneer.

ADVERTISE IN THE ADVOCATE.

Bargains for Threshermen.

Here are some sample prices: Barnes or Myers Tank Pumps, \$7 each; best 2-inch wire-lined suction hose, 35c. per foot.; 3-inch four-tone chime whistle, \$6.50; Ham head-light, \$9.50; boiler tubes, 2-inch, 14c. per foot, and 2 1/2-inch size, 15c. per foot; cylinder oil, made from Pennsylvania stock, guaranteed 650 fire test, 4-gallon jacketed can, \$2.50; 8-gallon jacketed can, \$4.50; half-barrel (25 gallons), \$10.50; barrel (50 gallons), \$18.00. Books (postpaid): Young Engineer's Guide, \$1.00; Rough and Tumble Engineering, \$1.00; Farm Engines and How to Run Them, \$1.00; Power Catechism, \$2.00. Our catalogue, giving net prices on all kinds of engineer supplies, will be sent on application.

Windsor Supply Co., Windsor, Ont.

The sale of the McCutchen herd of Shorthorns at Holstein, Iowa, resulted in averages of \$172.80 for eighty-three females, and \$269.50 for ten bulls.

QUESTIONS AND ANSWERS. Miscellaneous.

SOLEMNIZATION OF MARRIAGE.—Is a marriage ceremony performed by an elder of a religious sect known as the Latter Day Saints valid in Canada.

Ans.—Yes.

TEXTBOOK ON ENGINES.

Where can I get a small practical textbook on steam engines? I would like to be able, by study and observation, to run a threshing engine this fall.

Ans.—"The Traction Engine," a concise little book that would suit your case can be had through this office for \$1.

SUFFOLK PUNCH HORSE.

Can you inform me who raised Ontario, a Suffolk Punch horse? How old is he, and who was his last owner? C. J.

Ans.—There is no studbook for Suffolk Punch horses in Canada, and we have no means of tracing this horse. If any of our readers can supply it, we shall be pleased to hear from them.

SOW THICK WINDED.

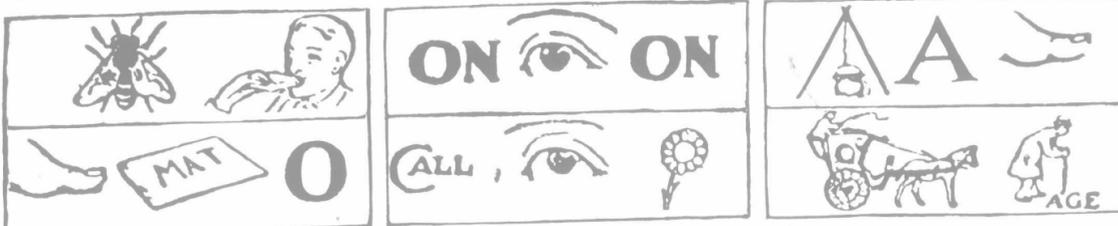
I have a pure-bred Berkshire sow, seven months old, which seems to be thriving well; but when she was about two months old, she began making a noise like snoring every time she drew a breath, and continues to do so still. What is the cause of it? Would it be wise to keep her for a brood sow? Kindly answer through the "Advocate" and oblige.

Ans.—Sow has probably been well fed, and had little exercise. We should expect her to improve, and possibly get quite over this trouble, if kept out on grass, with a shed to lie in. If, with this treatment, she does not improve, it would not be wise to keep her for breeding.

\$200.00 GIVEN AWAY

FOR CORRECT ANSWERS TO THIS SEED PUZZLE.

We are spending thousands of dollars to advertise our business. Each of these six small pictures represents a well-known Garden Vegetable. Can you think out the names of three of them? If so, the money is surely worth trying for. Three correct answers win. If you cannot make it out yourself, get some friend to help you.

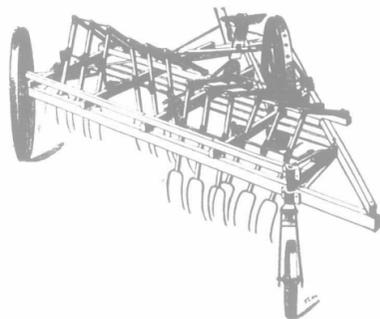


Each of the Six Pictures Represents a Garden Vegetable. Can You Name Three of Them?

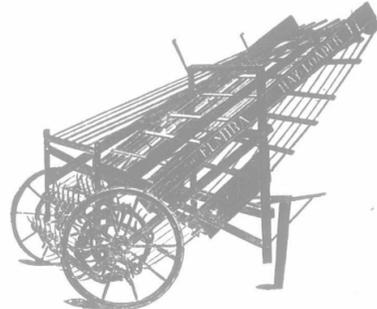
It does not cost you one cent to try and solve this puzzle, and if you are correct you may win a large amount of Cash. We do not ask any money from you, and a contest like this is very interesting. It does not matter where you live; we do not care one bit who gets the money; if you can make out the names of three of these Garden Vegetables, mail your answer to us, with your name and address plainly written, and if your answer is correct we will notify you. We are giving away \$200.00 for correct answers, and a few minutes of your time. Send in your guess at once, with your full name and address, to

THE MARVEL BLUING COMPANY, Dept. 1400, TORONTO, ONT.

ELMIRA HAY-MAKING MACHINERY.



THE SIDE-DELIVERY HAY RAKE and HAY LOADER are the Greatest Time and Labor-saving Implements of the day. They will repay for their cost in a short time by curing and saving the hay properly, and in saving of extra labor.



Substantially built. Will last a lifetime. Write for circulars, prices and terms.

THE ELMIRA AGRICULTURAL WORKS CO., LTD., ELMIRA, ONTARIO.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE

QUESTIONS AND ANSWERS. Veterinary.

SEROUS ABSCESS ON KNEE.

Cow has a soft lump, as large as my fist, on the front of her knee. M. S.

Ans.—This is a serous abscess, caused by the cow lying on her knee on hard floors. A plentiful supply of bedding will remove the cause. As it does no harm, treatment is seldom given. Treatment consists in removing the cause, lancing the abscess and allowing the serum to escape, and injecting the cavity twice daily until healed with a three-per-cent. solution of carbolic acid. A well-bedded box stall is the better place to keep her. V.

BRONCHOCELE.

When born, my foal had a lump the size of a small hen's egg on each side of its throat, close to the jaw. The lumps seem hard, but are movable. H. M.

Ans.—These are enlarged thyroid glands. The condition is called bronchocele, or goitre. In foetal life, these glands are large, and in some cases they do not become reduced in size for some time after birth. It is seldom they interfere with the colt's thriftiness, and they gradually become reduced in size. Reduction can be hastened by the daily application of compound iodine ointment. V.

PARTIAL DISLOCATION OF PATELLA.

Yearling colt went wrong two weeks ago. The stifle bone slips in and out with a snap. T. H.

Ans.—The patella or stifle bone becomes partially dislocated. Blister the front and inside of the joint with one and a half drams each biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off; tie so that he cannot bite the parts; rub the blister well in. In twenty-four hours rub well again, and in twenty-four hours longer wash off, and apply sweet oil. Let him loose in a nice box stall now, and oil every day. When the scale has all fallen off, tie up, and blister again, and repeat the blistering once every month afterwards as long as necessary. He should be kept as quiet as possible in the stall for months. If you attend to him properly, you will probably effect a perfect cure, and, at all events, render him a useful animal; but if not properly attended to it is not probable he will ever be of much use. V.

ABSCESSSES.

Mare foaled April 18th. The foal was all right, except one hind leg was crooked. At about ten days, this leg swelled at the hock, and the swelling extended to and involved the mammary gland. It broke, and discharged pus in different places. There is still a discharge at the hock; but in the region of the mammary pus has ceased to flow; but there is a hard lump about the size of a kidney. T. P.

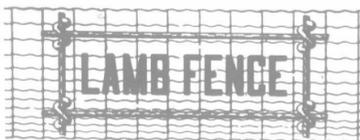
Ans.—The original swelling resulted from a bruise received in some way, pus formed, became absorbed and involved the rest of the limb. Bathe with warm water; inject a little of a four-per-cent. solution of carbolic acid into the cavities that are discharging pus, until healed. If, when the foal is weaned, there is still a thickening of the parts, you will have to blister. It is possible the lump mentioned may suppurate, burst, run pus, and disappear; if not, it will have to be dissected out in the fall. V.

For a Time

Constipation and indigestion may give rise to nothing more serious than a distressed feeling or discomfort due to an overworked or impoverished condition of the Digestive Organs. A dose or two of

Beecham's Pills

will easily put this right, but if neglected what a burden of illness may be the consequence. Sold Everywhere. In boxes 25 cents.



No. 9 High Carbon Steel Wire has an average tensile strength of over 2,400 lbs. A ten-wire fence with a tensile strength of over 12 tons.

All the lateral wires in Lamb Fence are made of High Carbon Steel Wire.

The H. R. Lamb Fence Co., Ltd. LONDON, ONTARIO. WINNIPEG, MANITOBA.

WOOL E. T. CARTER & CO., TORONTO, ONT. HIDES AND SKINS

COOPER SHEEP DIP
Standard of the World
for 60 years. Used on 250 millions annually. One dipping kills Ticks, Lice and Nits. No smell. Keeps flock clean a long time. Increases growth of wool. Dipping Tanks at cost. Send for Pamphlet to Chicago. If local druggist cannot supply send \$1.75 for \$2 (100 gal.) pkt. to EVANS & SONS, Ltd., Montreal and Toronto. WM. COOPER & NEPHEWS, Chicago, Ill. o

BAWDEN & McDONELL
Exeter, Ont.

IMPORTERS OF
Clydesdale, Shire and Hackney Horses
Our new importation has arrived, and we have now about 20 stallions for sale, ages from 2 to 7 years; the best that could be purchased in Scotland and England. om

QUESTIONS AND ANSWERS. Miscellaneous.

OLD COUNTRY DOMESTICS.

To whom should I write to secure one of the domestic servants being brought to Canada by Mrs. Stanford, as noted in your columns? E. W. H.

Ans.—Write to Mr. Thos. Southworth, Parliament Buildings, Toronto, and to Hon. Clifford Sifton, Department of the Interior, Ottawa. The former is in charge of the placing of farm servants for Ontario; but the latter may have the names of domestics who would just suit your case.

CHICKEN FOODS.—I would like to ask a few questions about the article in the "Farmer's Advocate" of May 19th, "Feeding the Chicks": Speaking about making this bread, it was not stated whether it should be made with yeast or soda? Are the infertile eggs boiled as soon as taken from the incubator, or will they keep to be boiled as needed? Where do you get the beef scraps? And in what shape do you feed the charcoal, grind it, or put it in a lump? J. W. C.

Ans.—Would make the bread as light as possible. It does not make much difference when the eggs are boiled; an infertile egg will keep a long time. Beef scraps are got from slaughter-houses—heads, lights, etc. Bones are also got from such places and from butchers, and ground up at the yards. Grind the charcoal fine also.

RAISING COLT BY HAND.—What is the best way to raise a colt (of little value), whose mother I need to drive? I could leave the colt on for a short time. The mother is a small broncho. N. M. C.

Ans.—Your best plan would be to gradually wean him. Let someone teach him to drink a little cow's milk, offering it to him after the dam has been away for a few hours, say in the middle of the forenoon and afternoon. Give him always the same cow's milk (a fresh milker, if possible), and increase the amount of milk, about one quarter, by the addition of boiling water. After he has learned to drink, teach him to eat a little oatmeal out of the hand. Do not give him a lot simply because he is hungry. Feed little and often. If he shows no disposition to learn to feed, it may be necessary to keep him from the mare altogether. See item on this subject in May 19th issue, page 728. It is the whole thing in a nutshell.

SWINE AILMENTS.

1. Valuable hog, eight months old, is troubled with a cough, sometimes as often as ten or a dozen times a day; is in good condition, and pen is kept dry and clean. 2. Sow farrowed this spring, two dead pigs and five alive. Three weeks after sow died. On examination found three pigs that she had never farrowed. What was the reason? Would you consider that was cause of death? 3. Young pigs kept dry and clean, hair shows an inclination to curl, it is also thick and fine. Their barometer shows health to be good, as their tails curl. 4. Some time ago, I purchased a pure-bred sow from a breeder at a distance. The sow described was to be imported. She was sent C.O.D., and after I paid for her, found that she was a number of crosses from imported blood. Said sow was bred, and I have written for certificate of service and also transfer, but party does not pay any attention to my letters. What would you advise me to do as I wish to register stock? FELIX.

Ans.—1. The best treatment is to give laxative food, and let him have a run on grass; with this and warm weather, he will probably recover from the cough. 2. It sometimes happens where pregnant sows have had insufficient exercise and little variety of food, the pigs come large and flabby, and the sow has difficulty in farrowing. Some breeders have forceps for use in taking away the pigs when the sow cannot give them birth. No doubt, the dead pigs in her were the cause of sow's death. 3. These pigs need open-air treatment. A run on grass, with moderate feeding in addition, will probably improve them in all respects. 4. The breeder who treats his customers so, is unworthy the name, and deserves to be publicly exposed. Have your solicitor demand certificates, and if not forthcoming, take action for damages. Let us know his name and address.

Spavin and Ring-bone
Once hard to cure—easy now. A 45-minute treatment does it. No other method so easy, quick and painless. No other method sure.
Fleming's Spavin and Ringbone Paste
cures even the very worst cases—none too old or bad. Money back if it ever fails. Lots of information if you write. Book about Spavin, Ringbone, Curb, Splint, Bog Spavin and other horse troubles sent free.
FLEMING BROS., Chemists, 45 Front Street, West, Toronto, Can.

Dr. Page's English Spavin Cure
For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hoof, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blister. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 and 9 YORK STREET, LONDON, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: J. A. JOHNSTON & CO., DRUGGISTS, 171 King Street East, - Toronto, Ont.

"THE REPOSITORY"
WALTER HARLAND SMITH, Prop.
Cor. Simcoe and Nelson Sts., TORONTO.

Auction Sales of Horses, Carriages, Buggies, Harness, etc. every Tuesday and Friday at 11 o'clock.
Special Sales of Thoroughbred Stock conducted. Consignments solicited. Correspondence will receive prompt attention.
This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

A GOOD LINIMENT FOR 800 A GALLON.
Can be made as follows:
Absorbine, - - - 4 ozs.
Vinegar, - - - 1 qt.
Water, - - - 3 qts.
Saltpetre (powdered) 1 oz.
This combination will prove satisfactory and successful for curing BRUISES, SPRAINS, COLLAR GALLS, to toughen the SHOULDERS for work horses; will reduce SWOLLEN ANKLES, BAD THROATS, and all kinds of troubles where a liniment would be generally used.
Buy the **ABSORBINE** at the store, or send to **LYMAN, SONS & CO., Montreal**, agents for Canada, who will send it prepaid on receipt of \$2.00 for a bottle. One bottle ABSORBINE will make three gallons of liniment or wash as above formula. Write for a bottle and the free booklet giving formulas of Veterinary Remedies. om

FONTHILL STOCK FARM
50 SHIRE HORSES AND MARES to choose from.
MORRIS & WELLINGTON,
FRONTHILL, ONTARIO.

Imp. Clydesdales and Shorthorns
MESSRS. SMITH & RICHARDSON, COLUMBUS, ONT.
Importers of Clydesdale horses and Shorthorn cattle, are now offering 10 imported stallions, including some of the renowned Baron's Pride, Prince Thomas, Royal Garrick and Mountain Sentinel; also 10 mares, 6 of them imported, and the balance from imported stock. Shorthorns, imported and home-bred, all ages. Stations: Oshawa & Brooklin, G.T.R.; Myrtle, C.P.R. 40 miles east of Toronto. Long-distance Telephone at residence, near Columbus. Telegraph, Brooklin. o

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP.

Mr. D. Leitch, Cornwall, Ont., breeder of Ayrshire cattle, writes: "The dams of the two bulls I am offering are extra good producers. They are now giving 45 lbs. of 4 per cent. milk on grass alone. I am forced to sell them, as I am short of pasture for them. The calves are a fine, growthy lot, mostly white in color, and are all bargains at the price asked."

Mr. J. K. Hux, Rodney, Ont., writes: "Having sold nearly all the seed corn I have, through advertising in the 'Farmer's Advocate,' I will have to ask for a change of advertisement. I find it is a good way to do business." Mr. Hux's present offerings are Shorthorns and Scotch collie pups. See the advertisement, and write him for prices and particulars.

A clergyman in a Hudson River town united a German couple in marriage. When the knot was tied, the bridegroom said:

"Domino, I've got no monish, but I'll send you von leetle pig."

Two years afterwards the clergyman met the German for the first time after the marriage ceremony was performed.

"Domino," said the German, "you remember you married me, and I gave you von leetle pig?"

"Yes."

"Vell, if you'll unmarry me I'll give you two leetle pigs."

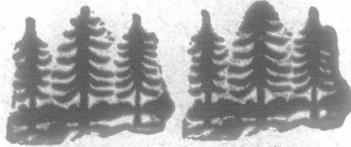
One of Major McClellan's favorite stories is of a young Irish lad who came to America to seek fame and fortune. He had an uncle engaged in a small business, who, taking advantage of his nephew's ignorance, offered him employment on terms highly advantageous to his employer.

The boy soon discovered the situation, and at the end of the year informed his uncle that he had obtained more lucrative employment, and intended to leave.

"You are making a great mistake," protested the uncle, "in leaving a steady job for a little more money. You should remember that a rolling stone gathers no moss."

"Moss," queried the lad; "and where is there a market for moss?"

Dr. Wood's



Norway Pine Syrup

Cures Coughs, Colds, Bronchitis, Hoarseness, Croup, Asthma, Pain or Tightness in the Chest, Etc.

It stops that tickling in the throat, is pleasant to take and soothing and healing to the lungs. Mr. E. Bishop Brand, the well-known Galt gardener, writes:— I had a very severe attack of sore throat and tightness in the chest. Some times when I wanted to cough and could not I would almost choke to death. My wife got me a bottle of DR. WOOD'S NORWAY PINE SYRUP, and to my surprise I found speedy relief. I would not be without it if it cost \$1.00 a bottle, and I can recommend it to everyone bothered with a cough or cold. Price 25 Cents.

All About Stock-raising!

Some of the greatest experts in America on this subject are members of our teaching staff. THEY TEACH STOCK-RAISING BY MAIL. The course includes the principles of breeding, the judging of cattle, sheep and swine, characteristics of the principal breeds, foods, feeding and relation of food to animal requirements, management and marketing.

The cost of the course is small. Write for information about our stock-raising course.

Canadian Correspondence College, Limited
TORONTO, CANADA.
WALTER BROWN, B. S. A., PRINCIPAL.

T. F. B. Sotham, the Hereford enthusiast, on leaving Chillicothe, Mo., to reside at Chicago, was given a farewell banquet by the Elks of that town.

GOSSIP.

The Woman's Companion tells of a lady whose new kitchen maid slept in an unheated room. "Hulda," she said, "it is cold to-night. You had better take a flatiron to bed with you." "Yes, ma'am," said Hulda, obediently. In the morning the lady asked, "Well, Hulda, how did you get along with the flatiron?" Hulda breathed deeply, and said, "Vell, ma'am, I got it most varm before mornin'."

"I wasn't always in this condition," said the ossified man in the dime museum.

"How did it happen?" asked the obese lady.

"A girl once gave me the marble heart and it spread," explained the hardened freak.

A working man who was in the habit of taking too much drink came down to breakfast one morning, and told his family that he did not rest at all well on the previous night, owing to his having had a horrible dream. He dreamed that there were three rats sitting on his chest all night. One was a fat rat, the second was a lean rat, and the third was a blind rat. "I can tell you what that means, father," said a youthful scion of the household. "The fat rat is the publican, who gets all your money; the lean rat is mother and me, who often have to go without food, and the blind rat is you, father, who cannot see that you are spending your money foolishly."

At the Bath and West of England Show at Swansea, May 19th, the entries in horses were 283; cattle, 475; sheep, 131; pigs, 158. In the Shorthorn class, judged by Mr. J. T. Hobbs, Maisey Hampton, the first prize for aged bulls and the male championship went to Earl Powis for Alistair, a big roan, weighing 2,700 lbs., bred by Lord Lovat, and sired Royal Star. In two-year-old bulls first honors fell to Mr. E. M. Denny with Ascot Constellation, by Silver Mint; second to Mr. Sanders Spencer for the Bapton-bred Silver Cup, by Silver Plate, and third to the King's roan, Traveller, by Wanderer's Prince.

In sheep, Mr. W. T. Garne was the principal winner in Cotswolds; Mr. Adeane in Southdowns; Mr. Cole and Mr. Flower in Hampshires; Messrs. Mander, Williams, Nock and Sir W. O. Corbet in Shropshires, and Mr. J. T. Hobbs in Oxfords.

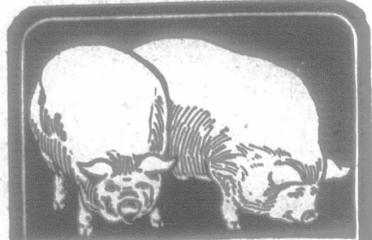
Swine.—In Yorkshires, the principal winners were Earl of Ellesmere, Sir Gilbert Greenall, Mr. R. M. Knowles and Mr. Sanders Spencer. In Berkshires, Mr. N. Benjafield, won first prize and the championship of the breed, and the Berkshire Society's special for boar or sow, with Commander-in-Chief; Mr. Jefferson's sow, Peel Elsie, being the reserve number; other winners were the Duchess of Devonshire, Mr. R. W. Hudson, Mr. A. Hiscox and Mr. J. A. Fricker. In Tamworths, the principal prizes went to Messrs. R. Ibbotson, D. W. Phillip, H. C. Stephens, and E. de Hamel. Mr. Stephens won the gold medal and the challenge cup for best pig of the breed, with the sow, Knowle Redmane 2nd.

The Shire Horse Society's gold medal for the best Shire mare or filly went to the King's yearling filly, Dunsmore Nightingale.

THE SOUTHWEST LIMITED, CHICAGO TO KANSAS CITY Via The St. Paul Road.

The Southwest Limited via the new Short Line of the Chicago, Milwaukee & St. Paul Railway, Chicago to Kansas City, has taken its place with The Pioneer Limited, Chicago to St. Paul and Minneapolis, and The Overland Limited, Chicago to Omaha and San Francisco, among the famous trains of America.

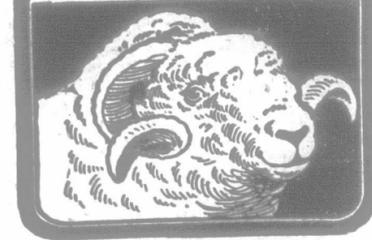
These trains offer excellence of service and equipment not obtainable elsewhere. There are many reasons for this, one of which is the fact that this railway owns and operates its sleeping, dining, library, parlor and other cars, thereby securing an excellence of service not obtainable elsewhere. If you are going West it is worth while to write for descriptive folder.



Myers' Royal Spice

Good for little pigs and big hogs—for lambs and sturdy sheep. Nothing like it to keep them fat and well. Used all over the continent by successful farmers. Write for free literature and testimonials.

MYERS ROYAL SPICE CO. NIAGARA FALLS, ONT. & N.Y.



FERRO NERVO A positive cure for all Nervous Disorders, Irrespective of Cause, Duration or Condition, such as Nervous Prostration, Palpitation of the Heart, Sleeplessness, Mental Despondency, Impoverished Blood and all diseases arising from a Depleted or Exhausted Condition of the Vital Forces. Price \$1 per box, or 6 boxes \$5. From your druggist or by mail. The Royal Chemical Co., Windsor, Ontario, Dept. F. A.

ABERDEEN-ANGUS.

No bulls for sale at present. Will sell some females bred to Imp. Klondyke of the Burn. Drumbo Station. om WALTER HALL, Washington, Ont.

HIGH-CLASS HEREFORDS

We have for sale the following choice young stock, which have been bred from imported stock. Intending buyers will do well to inspect the following: 18 young bulls, 26 young heifers, and 15 cows; also Barred Plymouth Rock egg; from choice matings at \$1 per 15. Correspondence invited. om A. S. HUNTER, Durham, Ont.

THE MAPLES FARM HEREFORDS

Near Orangeville, Ont., on C. P. R. (Owen Sound branch). Imported and pure-bred bulls and heifers for sale, from imported and pure-bred dams, and sired by imp. Spartacus, No. 10829, —1716—, winner of sweepstakes and silver medals, Toronto, 1902 and 1903. Young bulls a specialty. Prizewinners wherever shown. Inspection invited. Popular prices. W. H. HUNTER, om Near Orangeville, Ont. THE MAPLES P. O.

INGLESIDE HEREFORDS 100 Head.

Calves to 6-year-olds. If you want to start a small herd, write for particulars. The quality and breeding is of the best. A good foundation means success, and here is where you can get it at prices and terms to suit your purse. om H. D. SMITH, COMPTON, QUE.

REGISTERED HEREFORDS.

For sale: 5 young bulls, 16 and 17 months old; also some young heifers, 15 to 17 months; all from my stock bull, Prince of Wales 1267. E. S. LEE, Williamsford P. O., Ont. Holland Centre Station, C. P. R.

THE SUNNYSIDE HEREFORDS

headed by imp. Onward, by March On, for sale. 10 choice bulls, imported and home-bred, from 1 to 2 years old; also 1 bull 13 months old, a high-class herd-head. All bulls are of the heavy, low-down, blocky type. We can yet spare a few choice cows and heifers. Inspection invited. om O'NEIL BROS., Southgate, Ont., Lucan Station, G.T.R.; Ilderton or Denfield on L.H. & B.

Shorthorns, Leicesters and Berkshires.

FOR SALE—1-yearling bull, bull and heifer calves; Berkshire boars and sows, ready for service, and suckers ready to wean. Write for wants, or come and see E. Jeff's & Son, Bond Head P. O., Bradford and Beeton Stns, G.T.R. o

MANITOULIN SHORTHORNS

Edwin Beck, Gore Bay, Manitoulin Island. Breeder of SCOTCH and SCOTCH-TOPPED SHORT-HORN CATTLE. A few choice animals.

SAVE YOUR HAY & SAVE EXTRA LABOR

SPECIAL LABOR SAVING TOOLS

MAXWELL TEDDER SIDE DELIVERY RAKE & LOADER.

MAXWELL

ST. MARY'S, ONT. CANADA

IS THERE AN AGENT IN YOUR DISTRICT IF NOT ADDRESS THE FIRM DIRECTLY

DAVID MAXWELL & SONS, ST. MARY'S, ONTARIO, CANADA.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

Stock Farm For Sale:

About 667 acres; 10 miles from Hamilton; 557 acres cleared, 110 uncleared; soil, clay and clay loam, with clay subsoil; watered by creek. Two sets of buildings. This farm is admirably adapted for stock. For prices and terms apply

THE Toronto General Trusts Corporation, 59 YONGE STREET, TORONTO.

WHEN YOU BUILD A NEW BARN

Roof it with Corrugated Galvanized Steel Sheets, in 8 ft. lengths. They are applied over sheathing or direct to rafters, making a light strong covering. Very lasting; lightning and fire proof. Ask for our free catalogue and send rafter and ridge lengths. For estimates

The Metal Shingle & Siding Co., Limited PRESTON, ONT.

HIGH-CLASS Shorthorn Cattle AND OXFORD CLASS DOWN SHEEP Present offerings: Young stock, either sex. For prices and particulars write to JAS. TOLTON & SON, Walkerton, Ont.

SHORTHORN BULLS FOR SALE.

We have three choice young Shorthorn bulls now on offer, one Cruickshank Mysie, and one Scotch Jessamine, each 12 months old and sired by Spicy Robin; and one Cruickshank Orange Blossom, from imported sire and dam; also females of all ages. Herd headed by imp. Joy of Morning (7622), winner of 1st prize at Toronto Exhibition, 1903; also S.-C. White Leghorn eggs for sale at \$1 per 13.

GEORGE D. FLETCHER, Binkham, Ont.

FOR SALE:

Shorthorn Bulls

Two imported—a "Cruickshank Laverdor" and "Marr Emma"—bred in the purple, and individually as good as the breeding would suggest. Also two grand young bulls about ready for service. Yorkshire boars and sows from imported stock. Prices right. Come and see me.

RICHARD GIBSON, DELAWARE, ONT.

GREEN GROVE STOCK FARM. Scotch Shorthorns Herd headed by Abbottsford = 19446 =. Choice lot of young cows and heifers for sale, of such families as Claret, Villages, Fairy Queens, Isabelle, Ury, Rose of Autumn, and other good families. Apply to W. G. WILSON, Goring P. O., Markdale Sta., Ont.

JUNE 28

A. D. MCGUGAN, Rodney, Ont., will sell at the Great Combination Sale at Hamilton

fifteen imported and home-bred females grand individuals and richly bred, of the Marr, Roan Lady, Missie, Miss Ramsden, Mina, Ury, and Claret families.

W. G. PETTIT & SONS

FREEMAN, ONT. Importers and Breeders of

Scotch Shorthorns

110 head in the herd, 40 imported and 20 pure Scotch breeding cows. Present offering: 3 imported and 6 pure Scotch from imported sire; also imported and home-bred cows and heifers of the most popular type and breeding. A few choice show animals will be offered.

Burlington Jct. Sta. Telegraph & Telephone

IMPORTED

SHORTHORNS AND GLYDESDALES

15 imported Scotch Shorthorn heifers, all in calf or calves at foot; 2 imp. bulls; both in pedigree and individually these animals are gilt-edged. Four three year-old imported Clydesdale fillies, very large and A1 quality.

ALEX. ISAAC, Cobourg P. O. and Station

First-class Shorthorns—Young cows and heifers of fashionable breeding. Also Shropshires of different ages. Write for prices, etc., to T. J. T. COLE, Bowmanville Stn., G. T. R. o Tyrone P. O.

High-class Shorthorns—Two bulls ready for service. Also young cows and heifers of different ages, of the Lavinia and Louisa families. For prices and particulars apply to BROWN BROS., Lakeview Farm, Orono P. O. Newcastle Station, G. T. R.

ABORTION RETENTION OF PLACENTA and Failure to Breed

Kellogg's Condition Powder is a positive cure for these diseases. Prevents scours in calves and garlic in milk. Indorsed by the Iowa Agricultural College, Ames, Ia., and hundreds of the most prominent breeders. Write for booklet giving full information, price list and testimonials. Address H. W. Kellogg Company, Dept. Y, St. Paul, Minn.

THOROLD CEMENT AND PORTLAND CEMENT

FOR BARN WALLS AND FLOORS, HOUSES, SILOS, PIGPENS, HENHOUSES; AND SEWERS, TILE, ABUTMENTS AND PIERS, FOR BRIDGES, GRANOLITHIC SIDEWALKS; IN FACT, FOR ALL WORK THAT CAN BE DONE WITH CEMENT.

Estate of John Battle THOROLD, ONT. WHOLESALE IN CAR LOTS ONLY.

RAISE YOUR CALVES cheaply and successfully on

Blatchford's Calf Meal AND SELL THE MILK. Free Pamphlet - - How to do it. ADDRESS CHAS. COWAN, LONDON, ONT.

PROSPECT High-class SHORTHORNS WILL FARM FOR SALE: 4 bulls, from 7 to 12 months old; 2 sired by Aberdeen Hero (imp.), 2 by Royal Duke, he by Royal Sallor (imp.). Also some heifers bred to Wandering Count. J. E. McALLUM & SON, Iona Sta., Ont.

HIGH-CLASS SHORTHORNS. 8 heifers, in calf to an imported Scotch bull; 6 bulls ready for service; about 15 heifer and bull calves, from 3 to 12 months old. Prices very reasonable, considering quality. Inspection invited. FRANK W. SMITH, Walnut Farm, Scotland, Ont.

HILHURST FARM (ESTABLISHED FORTY YEARS.)

SHORTHORN herd numbers 30, with Imp. Scottish Hero (Missie) and Broad Scotch (Sittyon Butterfly) in service. Some choice young bulls and heifers for sale, by Joy of Morning, Scottish Beau, and Lord Mountstephen, from imported and Canadian-bred dams of Hampshire flock 80 ewes; milk strains. US lamball sold

Jas. A. Cochran HILHURST P. O. o COMPTON CO., P. Q.

SHORTHORNS. 8 young bulls, 11 heifer calves, yearlings, two-year-olds and young cows for sale. Several Miss Ramsdens and the very best families represented. Prices moderate. G. A. BRADIE, Bethesda, Ont. Stouffville Station.

SHORTHORNS AND SHROPSHIRE. FOR SALE: Young bulls and heifers from best blood. Shearings and lambs bred from imp. stock on side of sire and dam. Prices reasonable. E. E. PUGH, Claremont P. O. and O. P. R. Sta.

Scotch Shorthorns & Berkshire Swine AT VALLEY HOME STOCK FARM.

For Sale—Stock of all ages, of both sexes. Our Shorthorns are the thick-fleshed sort, of choice breeding and quality. Also young Berkshires of A1 breeding. Stations: Meadowvale or Streetsville Junction, C. P. R., and Brampton, G. T. R. Visitors welcomed. E. J. FRASER, SON & CO., Meadowvale P. O. and Telegraph.

Rose Cottage Stock Farm SHORTHORNS Royal Prince = 31241 = at the head, assisted by Sir Tatton Sykes = 49402 =, Royal Prince, the sire of Fair Queen, winner over all beef breeds at Chicago International Fat-stock Show, 1903. We have 6 heifers and 4 bulls for sale. H. K. FAIRBAIRN, Theford, Ont.

SOOTCH SHORTHORNS. 7 bulls, 9 to 16 months; cows and heifers in calf. Also, Berkshire pigs, 11 months old. Prices right, and terms easy. DAVID MILNE, Ethel, Ont.

Shorthorns, Berkshires and Leicester. FOR SALE: Choice two-year-old heifers, well gone in calf; also yearling heifers, bull calves. Boars and sows fit for breeding, and young pigs. ISRAEL GROFF, ALMA, ONTARIO.

SHORTHORNS FOR SALE

One grand young bull, 18 months, a dark, rich red-roan, and a show animal; also some good cows and heifers. Come and see them. Hugh Thomson Box 556. ST. MARY'S, ONT

7 Shorthorn Bulls

of serviceable age and of present-day type. 1 imp. in dam, 3 from imp. sire and dam, 3 from imp. sire, and from Scotch dams of such noted families as Rosebud, Claret, Missie, Stamford, Augusta and Strawberry, mostly sired by imp. Greengill Victor, a Princess Royal, bred by W. S. Marr, and one of greatest bull-getters living. Also can sell a number of choice Scotch heifers, in calf. If you want a herd header, or cows that will produce them, write us. Herd numbers 75. Bull catalogue on application.

R. MITCHELL & SONS, Nelson Ont., Burlington Jct. Sta.

QUESTIONS AND ANSWERS. Veterinary.

SIDEBONE OR RINGBONE.—I received some salve last October to apply to a lump which looks like a sidebone or ringbone on two-year-old colt. I have applied it three times during April and May; the fourth application will be tomorrow. I see no change in the lump. Should I exercise him during treatment? J. W. W.

Ans.—The application will not make any difference in the appearance of the lump, whether it be sidebone or ringbone. If the colt is not lame, you had better leave it alone. If it is lame, and the four applications have not improved the condition, you had better employ a veterinarian to fire and blister him. V.

PERIODIC OR SPECIFIC OPHTHALMIA.—1. Three-year-old mare gets sore eyes; first one and then the other is affected without apparent cause. 2. Same mare has little lumps like bee stings on shoulders and sides. S. A. D.

Ans.—1. This is a constitutional disease called specific ophthalmia. The attacks cannot be prevented, and, in all probability, will terminate in cataract in one or both eyes. When affected, place in comfortable, partially-darkened box stall; give a laxative of six drams aloes and two drams ginger; feed lightly; bathe eyes well three times daily with warm water, and put a few drops of the following lotion into each eye, viz.: sulphate of atropia, fifteen grains; distilled water, two ounces. Treat as long as necessary. 2. Purge with eight drams aloes and two drams ginger; follow up with one ounce Fowler's solution of arsenic twice daily every alternate week. Wash the body once daily with Little's sheep dip, as per directions which accompany it. V.

MISCELLANEOUS.—1. I have an old mare (I do not know how old), the appearance of whose mammary gland indicates that she has reared foals. I bred her last year without results. What symptoms indicate that a mare is too old to breed? The periods of oestrus appear regularly in my mare. 2. How would you treat a mare that had aborted, and you thought would do so again? 3. Cow calved three weeks ago, and apparently expelled the afterbirth, but she discharges large quantities of yellowish matter daily. We cannot use the milk, so we are drying her, and intend to fit her for the butcher. G. L. L.

Ans.—1. The age at which mares cease to breed is variable, and influenced greatly by circumstances. Mares that are bred regularly will sometimes reproduce at thirty to thirty-five years of age; but old mares that have not bred for several years often become barren while yet in the teens, even though oestrus appears at regular intervals. All that you can do is have your veterinarian examine her, and if the neck of the womb be closed, open it, then breed her to a young, vigorous sire that is not being overworked in the stud. 2. Mares readily acquire the habit of aborting at certain periods of gestation. When the period at which she previously aborted approaches, place her in a comfortable box stall, removed from all noises, or other exciting causes; feed lightly on good hay, bran and a few carrots; keep as quiet as possible, and watch closely. If symptoms of abortion are shown, give two ounces laudanum every three hours, until the symptoms disappear. In the meantime, it is good practice to apply hot cloths to the abdomen, and pet her in order to get her as tranquil as possible. It is probable she will not show symptoms of abortion if she is used as advised. Keep quiet, as described, until one month after the period of previous abortion has passed, and it is probable she will carry her foal to full term. 3. There is uterine irritation, possibly from retention of a portion of the afterbirth. Flush the womb out once daily with two gallons of a two-per-cent. solution of Zenoleum or phenyle, heated to 100 degrees, and give twenty-five drops carbolic acid three times daily, until the discharge ceases; after which commence to feed her for the block. V.

Neuralgia of the Heart.

An Ailment Which Terrifies its Victims—Indicated by Pains About the Heart and Quick, Loud Breathing—Cured by

Dr. Chase's Nerve Food.

It is quite natural to be alarmed when the heart becomes affected, but there is no reason to despair of being cured.

The great majority of heart derangements are due to exhaustion of the nerves and a watery condition of the blood. By overcoming these causes of trouble with the use of Dr. Chase's Nerve Food, the heart will be restored to health and its action again become normal.

Mr. James G. Clark, Fosterville, York County, N. B., writes: "I have been a great sufferer from what the doctors said was neuralgia of the heart. The pain started in the back of the neck and worked down into the region of the heart. Though I had taken a lot of medicine of one kind and another, I could not get anything to help me until I used Dr. Chase's Nerve Food.

"When I began this treatment I could not rest in bed, except by sitting upright, on account of the dreadful pains about the heart and the quick, loud beating. The change which Dr. Chase's Nerve Food has made in my condition is wonderful. It has entirely overcome these symptoms, and is making me strong and well. If this statement will help to relieve the suffering of others, you are at liberty to use it."

Dr. Chase's Nerve Food, 50 cents a box, six boxes for \$2.50, at all dealers, or Edmanson, Bates & Co., Toronto. To protect you against imitations, the portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.

T. DOUGLAS & SONS, STRATHROY STATION & P. O.

SHORTHORNS and GLYDESDALES 85 Shorthorns to select from. Present offering: 14 young bulls of splendid quality and serviceable age, and cows and heifers of all ages. Also one (imp.) stallion and two brood mares. Farm 1 mile north of town.

The Ontario Veterinary College, Limited.

Temperance Street, Toronto, Canada. Affiliated with the University of Toronto. Patrons: Governor-General of Canada, and Lieutenant-Governor of Ontario. Fee \$25.00 per session. Apply to ANASTAS SURVEY, F.R.C.V.S., Principal. 12-2-7-02

SHORTHORNS and GLYDESDALES

Present offerings: Spicy Count (imp.), Dittie; 15 bulls and heifers of his get, from 10 to 18 months old; also a few cows in calf to S. C. Pair heavy draft, rising three years old.

J. S. McARTHUR Pine Grove Stock Farm. GOBLE'S, ONT.

J. WATT & SON,

Scotch Shorthorns for sale. Royal Archer (imp.), 14 mos. old, sired by Golden Prince = 23809 = (a son of Golden Fame), dam Lady Lintz, by Bellairum (74051). Royal Wonder 2nd, 15 months old, by Royal Wonder, dam English Lady 12th by Royal Sallor (imp.), next dam by Barmpton Hero. These bulls are good workers and very sure. Also heifers and cows in calf and calves at foot to imported bulls.

P. O., Salem, Ont. Elora Station, G. T. R. & C. P. R.

FOR SALE: STOCK BULL

Captain Bruce, quiet, active and sure. Also four young bulls, three roans and one red, from 10 to 16 months, of the low-down, thick-fleshed sort. Anyone wanting a first-class animal should come and see them, or write for prices.

WM. McDERMOTT, Living Springs, Ont., Ferguson Station.

SHORTHORNS for sale, either sex; Also Scotch collie pups now ready for shipment; color sable and white, well bred and well marked. Write for particulars. J. E. HUX, Rodney, Ont., F. Q. & Sta.

SHORTHORNS Present offerings: Roan Robin 29575, a Watt bull; Prince Charlie 5' 412, a Russell bull. Also a few good females. For price and particulars write to W. S. WALLACE, Mount Forest, Ont.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP.

Mr. John Ross, Melkie Tarrel, has purchased from Mr. Robert Bruce, Heatherwick, the fine Shorthorn stock bull, Prince of Archers. Bred at Collynie, Prince of Archers is by Scottish Archer, out of Primrose III., by Norseman, and during his term at Heatherwick has done excellent service. He is the sire of Mr. W. D. Flatt's Imp. Prince Sunbeam, first-prize two-year-old bull at Toronto last year.

A movement has been inaugurated by leading breeders of pure-bred stock in England having in view the presentation of a painting of himself to Mr. John Thornton, of London, the great livestock auctioneer. In order to make the list of contributions to the fund as open and comprehensible as possible, it has been decided to limit the subscriptions to £1 ls. each, and Mr. C. W. Tindall, of Wainfleet, Lincolnshire, has been asked to undertake the duties of secretary-treasurer, to whom subscriptions may be sent. Mr. Thornton has done good work for the dissemination of improved stock, and his efforts are well worth this recognition.

Senator Stewart, of Nevada, in making a speech before a committee, once used the word "intrinsic."

"Here," interrupted another member of the committee, "you didn't use that word right?"

"What word?" asked Stewart.

"Why, 'intrinsic.'"

"Yes, I did."

"Webster doesn't say so."

"Webster? What Webster?"

"Webster's dictionary."

"Now, see here," growled Senator Stewart, "I am tired of having that book quoted at me. Every schoolboy knows that it is a mere jumble of words."

ROYAL JERSEY BUTTER TEST.

Ninety-three cows, out of 94 entries, competed in the show ground at St. Helier's, Island of Jersey, on June 10th, for the medals offered by the English Jersey Cattle Society, this being the largest number ever tested in a single day at a show in England or the Channel Islands. The cows were milked out on Tuesday, May 10th, at 6 p. m., the milk of the next 24 hours being taken for the trials. Separation took place on Wednesday evening, and churning commenced Thursday morning at 6.30 a. m., and the awards were published at 7.15 p. m. The first prize and gold medal went to Mr. Syvret's five-year-old cow, Sand-girl, whose milk yield, 135 days after calving, was 36 lbs., and butter yield 3 lbs. 2½ oz.; butter ratio, viz., lbs. of milk to 1 lb. of butter, 11.34. The second prize and silver medal cow, Mr. Mourant's Cora 4th, seven years old, gave, 65 days after calving, 42 lbs. 12 oz. milk, and 3 lbs. 3¼ oz. butter; ratio, 13.21. The third-prize cow gave, 94 days after calving, 45 lbs. 12 oz. milk, and 2 lbs. 15¼ oz. butter; ratio, 15.49. Fifty-six cows winning certificates of merit, averaged 141 days after calving, 33 lbs. milk, yielding an average of 2 lbs. ¼ oz. butter; ratio average, 16.18. The average for the whole 93 cows, 136 days in milk, was 31 lbs. 6¼ oz. milk; 1 lb. 11¼ oz. butter; ratio, 18.36.

PINE GROVE SHORTHORNS

High-class CRUICKSHANK, MARR and CAMPBELL SHORTHORNS, and SHROPSHIRE SHEEP.

Herd won 1st prize, open to all ages, and 1st for herd under 2 years, at Dominion Exhibition, Toronto, '03, headed by imported "Marquis of Zenda," bred by Marr, assisted by imported "Village Champion," bred by Duthie; also "Missie Champion," son of imp. "Missie 153rd," and "Clipper King," a superior young bull, full of the blood of the Cruickshank Clipper family. One imported and four superior young home-bred bulls, ready for service, fit for herd headers, for sale.

On JUNE 28th next, we sell at PUBLIC AUCTION, in conjunction with other Canadian breeders, at the Sale Pavilion, Hamilton, Ont., 15 of our imported and home-bred cows and heifers.

W. C. EDWARDS & Co., Limited, Proprietors.
JOS. W. BARNETT, Mgr., Rockland, Ont., Can.

W. B. Watt's Sons
BREEDERS OF SHORTHORNS and CLYDESDALES

Don't miss the chance to get a grand cow or heifer, in calf to the \$1,200 Scottish Beau (imp.), from the herd that has produced more champions and won more herd prizes than any other herd in Canada. A fine blocky pair of bull calves and a yearling stallion for sale at once. Write for particulars.

Elora Sta., G.T.R. & C.P.R. Salem Post and Tel. Office. Phone connection

THE MOST NUTRITIOUS.

EPPS'S COCOA

An admirable food, with all its natural qualities intact, fitted to build up and maintain robust health, and to resist winter's extreme cold. Sold in ¼ lb. tins, labelled JAMES EPPS & Co., Ltd., Homeopathic Chemists, London, England.

EPPS'S COCOA
GIVING STRENGTH & VIGOUR.

Sunnyside Stock Farm. JAMES GIBB, Brookside, Ontario.
Breeder of high-class SHORTHORN OAT-FLIE (imp.) "Brave Ythan" at head of herd. Stock for sale.

MAPLE LODGE STOCK FARM, 1854

An offering of a very superior lot of Shorthorn Bulls and Heifers as well as something VERY attractive in Leicesters.

Choice ewes got by imported "Stanley" and bred to imported "Winchester." Excellent type and quality. om
A. W. SMITH, MAPLE LODGE, ONT.

SHORTHORNS

Some extra good young bulls for sale. Catalogue.

JOHN CLANON, Manager. om

H. CARGILL & SON, OARILL, ONTARIO.

Shorthorns, Clydesdales, Yorkshires

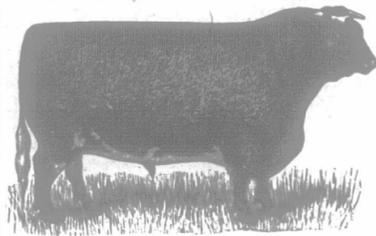
Special offering at present: Young Yorkshire pigs, either sex; pairs not akin, and of right type.

A. E. HOSKIN, Cobourg, Ont., P. O. and Station.

SHORTHORNS.

Importer and breeder of choice Shorthorns. Scottish Hero 15726 at the head of herd. om
JAS. A. CREER, Shakespeare, Ont.

BELL BROS., Cedar Stock Farm, Bradford, Ont. Breeders of Shorthorns, Clydesdales, and Shropshire sheep. Present offering: Two bulls, 9 and 14 months. Stock always for sale. om



9

High-class Shorthorn Bulls For Sale

3 imported bulls.
4 bulls from imp. cows and by imp. bulls.
The others from Scotch cows and by imp. bulls.
21 Scotch cows and heifers, including 9 imp. animals.

ARTHUR JOHNSTON, Greenwood, Ontario.

GOSSIP.

THE HAMILTON SHORTHORN SALE.

It is pleasing to note that a very general interest is being shown in the combination sale to be held at Hamilton on June 28th. The cattle offered are a really fine lot, and it will be an excellent opportunity to secure good animals of the very best Shorthorn families in the world. With the high price ruling in the Old Land, the grand lot of imported females offered in this sale should be eagerly sought for, and it will be regrettable if Canadians allow these animals to go out of their own country at prices less than they can be bought for in Scotland at the present time.

There are also a number of heifers from imported sires and dams offered in the sale that those who are looking for foundation stock, or for animals to increase and improve their herds, should carefully inspect. The fifteen females contributed by A. D. Mc. Guban, of Rodney, are an exceptionally good lot in breeding and individuality. There are six of the Uppermill Roan Lady tribe, two grand imported cows and four of their daughters, two Missies, two Kinellar Minas, two Clarets, two Urys, and one Ramsden. They are an even bunch, of good size, and are in good breeding condition. The four cows are under six years of age, and have proved to be very regular breeders, and their heifers, which are included in the sale, will show the quality of their produce. The imported cow, Rosetta 8th, is of the Marr Roan Lady family, probably the most popular family in Scotland to-day. Her sire, Alan Gwynne, is by the great Star of Morning. She is a splendid type of the modern Shorthorn, deep-bodied, massive and even-fleshed, covered with a mossy coat and a soft mellow skin. Rosetta 8th is not only a high-class individual, but is an exceptional producer. She is just in her seventh year, and has produced five calves, and is due to calve again in August to Aberdeen Hero (imp.). Three of her heifers are in the sale, and these will convince anyone that she is a breeder of unusual merit, and a sure money-maker for her owner. Scottish Red Lady (imp.), also a Marr Roan Lady, bred by J. Young, Tilbouries, is a stylish red four-year-old cow of great scale, and of the smooth, sweet kind that will always attract attention. She has been a winner wherever exhibited, and has two capital young daughters, by Aberdeen Hero (imp.), which are included in the sale. The smooth, white cow, Missie's Pride, of the great Missie family, members of which have brought such sensational figures during recent years, is a very regular breeder and a good milker; that she has few equals as a breeder of high-class stock can be seen from her fifteen-months-old daughter, Missie's Maid, a beautiful roan, by Lord Lavender 26055, a show heifer in any land. Lady Ramsden, by the old champion, Abbotsford, is a remarkable heifer, carrying a wealth of even flesh of the best quality. She is a dark red, and heavy with calf to Aberdeen Hero (imp.). Canadian Roan Lady, also by Abbotsford, is a three-year-old heifer of immense scale, is smooth and attractive, and has a beautiful head. Her full sister, Canadian Roan Lady 2nd, is also a very large heifer of good quality. Both of these heifers are in calf to Aberdeen Hero (imp.). Canadian Red Lady is of the same family, and a splendid, strong heifer, also in calf. Canadian Red Lady 2nd is a sweet, six-months-old heifer, a full sister to Canadian Red Lady. There are also two beautiful Ury heifers: a three-year-old, due to calve before the sale, and a four-year-old, due in September. A very useful and attractive animal is the three-year-old red Claret heifer, carrying her second calf. Gipsy Maid is a six-year-old Kinellar Mina, due to calve before the sale. She is a smooth cow, of immense scale, a great milker, and an excellent breeder. Her daughter, Gipsy Girl, by Abbotsford, is a show animal, and is only a fair sample of what the cow produces. Gipsy Girl is due to calve in November.

"Tell me what people read, and I will tell you what they are," said the self-confessed philosopher. "Well, there's my wife," rejoined the dyspeptic party. "She's for ever reading cookbooks. Now, what is she?" "Why, a cook, of course," replied the philosophy dispenser. "That's where spokes rattle in your wheels," said the other. "She only thinks she is."

Sharple's Tubular SEPARATORS

Just as They Are



The cut shows them—catalog I-100 tells all about them. Notice the low supply can bottom feed, wholly enclosed gears, absence of oil cups or bores. No other separator has these advantages.

Canadian Transfer Points: Winnipeg, Toronto, Quebec, St. John, N. B., Calgary, Alberta. Address
The Sharple's Co., Chicago, Ill. P. M. Sharples West Chester, Pa.

Day's Aromatic Stock Food



Saves feed by assisting stock to digest their food. A small dose in the usual food twice each day. It contains no drugs; purely aromatic.

3 LBS. 30c. 36 LBS. \$3.10.
Ask your dealer or write us.

The Day's Stock Food Co., STATION C, TORONTO.

Shorthorn Cattle and Lincoln Sheep

Scotch Heifers for sale: Clippers, Miss Ramsdens, Maids, bred to imported Governor-General = 28865-, and imported Proud Gift (84421). They have both breeding and individual merit. om

J. T. GIBSON, Denfield, Ontario.

JOHN GARDHOUSE & SONS
Highfield P. O., Ont., Breeders of

Scotch and Scotch-topped Shorthorns, Shire Horses, Lincoln and Leicester Sheep.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 49, at head of herd. Royal Albert (imp.) 20367, at head of stud. Farms 3¼ miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto. om

We are offering 18 BULLS from 4 to 10 months old, sired by imported Diamond Jubilee = 28861-. Also a few females, all ages, of good Scotch breeding. om

FITZGERALD BROS., Mount St. Louis, Ont. Elmvale Station, G. T. R.; Hillsdale Telegraph Office.

JERSEYS For quick buyers, we are going to sell 15 bulls and 25 females. Owing to the natural increase of our herd and so many heifers coming into milk, we make the above offer. Stock of all ages. State what you want and write to-day to B. H. BULL & SON, om C. P. R. and G. T. R., Brampton, Ont.

4 HOLSTEIN BULLS 4 For Sale: From 4 to 7 months old, having sires in their pedigrees from such strains as Inks, Netherland, Royal Aaggie, and Tritonia Prince, and out of imported females that have proven their worth at the fall. THOS. B. CARLAW & SON, Warkworth. om

Riverside Holsteins

80 head to select from. Young bulls whose dams have official weekly records of from 17 to 21 lbs. of butter, sired by Victor De Kol Pietertje and Johanna Rus 4th Lad. Write for prices.

Matt Richardson & Son, Caledonia P. O. and Station.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

Holstein Bull Calves

Sired by Beryl Wayne Paul Concordia, whose sire's dam has an official record of 27 lbs. 14 ozs. in 7 days. His sire's sire, De Kol 2nd's Paul De Kol, is sire of 32 cows with official records averaging over 20 lbs. each. Bull calves for sale.

BROWN BROS., Lyndale Stock Farm, LYN, ONT.

Brookbank Holsteins

16 to 25 lbs. of butter in 7 days' official test are the records of this herd of Holstein cows. Heifers of equivalent records. Bulls for sale whose sires and dams are in the Advanced Registry, with large official butter records.

GEORGE RICE, TILSONBURG, ONT.

If You Want a Bull (under 1 year) to show and win with this fall, bred from officially tested stock, write H. BOLLERT, Cassel, Ont.

Ridgedale Farm Holsteins Bull and heifer calves, bred from rich milking strains, on hand for sale. Prices right. Write for what you want.

R. W. WALKER, Utica P. O., Ontario. Shipping stations: Port Perry, G. T. R., and Myrtle, C. P. R. Ontario County.

FOR SALE—35 HOLSTEIN SPRING CALVES of the famous De Kol and Abbecker breeding, from deep-milking dams, for March, April and May delivery; also cows and heifers. H. GEORGE & SONS, Crampton, Ont. o

BARREN COW CURE

makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from L. F. SELLECK, Morrisburg, Ont.

SPRING BURNSTOCK FARM—North Williamsburg.

E. J. WHITTEKER & SON, PROPS. Breeders of Ayrshire cattle, Oxford Down sheep, Berkshire pigs, Toulouse geese and Buff Orpington fowls. Prices reasonable.

AYRSHIRES FOR SALE

If taken within the next 20 days: 2 yearling bulls, \$30 each. 3 bull calves, \$12 each. 5 heifer calves, \$15 each.

All thrifty and of good dairy type, from high-producing dams.

DAVID LEITCH, CORNWALL, ONT.

AYRSHIRES AND YORKSHIRES

YORKSHIRE Boars and sows, four to eight weeks old, \$5.00 each at farm, \$1.00 extra crated and shipped.

YEARLING AYRSHIRE BULL, fit for service, \$65.00.

SEND FOR CATALOGUE.

J. G. CLARK,

Woodroffe D. and S. Farm, Ottawa. IMPORTED AND HOME-BRED

AYRSHIRES

The average butter-fat test of this herd is 4.8. A few young bulls and females, all ages, FOR SALE.

Robt. Hunter & Sons, Maxville, Ont. Farm one mile from Maxville station on C.A.R.

AYRSHIRES for sale, all ages. Some extra fine bulls, coming one year old, and heifers of all ages. Also my stock bull, Sir Donald of Elm Shade, just 3 years old.

DONALD CUMMING, Lancaster, Ont.

For Sale—Ayrshires, all ages, and eggs for hatching from Leghorns, Hamburgs, Dorkings, ducks and Bronze turkeys. Also five Collie pups. For further particulars write to W.M. STEWART & SON, Meville, Ont.

SPECIAL OFFER—BULL CALVES out of such dams as Cherry of Hairlock and Majorie, one of the best Silver King cows in Ont. These calves will be sold at very low prices, quality considered.

ISALEIGH GRANGE FARM, J. N. Greenshields, Prop. Danville, P. Q.

Empire Cream Separator advertisement with decorative border. Text: There are more than a hundred reasons why folks who try it like the Empire Cream Separator better than any other, but the reasons may all be summed up in this: The Empire does better work, gives less trouble and makes more money for the farmer. Our books about the Empire Way of dairying are free for the asking. Send for them. Empire Cream Separator Co. 28-30 Wellington St., West, Toronto, Ontario.

AYRSHIRES

From winners in the dairy test five years in succession. Dairyman of Glenora, bred from Imp. sire and dam, at head of herd. Young bulls fit for service and bull calves and females for sale.

N. DYMENT, CLAPPISON, ONT.

BARGAINS IN FASHIONABLE AYRSHIRES.

Three 2-year heifers, in calf, at \$40 each; three 1-year heifers, from \$25 to \$40, one 1-year bull, a Cherub, at \$45; one 10-month bull calf, full brother, \$30. The above stock is well grown, and would be in the game in any competition, and from stock of heavy milkers, with grand udders and quarters. O. H. SNIDER, Attercliffe P. O. Can ship via M. C.R. or G.T.R. at Dunnville, or C.P.R. Smithville. o

3 Ayrshire Bulls one year old, fit for service, all prizewinners last fall at Ottawa Exhibition. Females any age. Shropshire sheep, Berkshire pigs; a fine lot of young ones, both sexes, and E. P. Rocks. Eggs for hatching.

J. YULL & SONS, o Carleton Place, Ont.

SUNNYSIDE AYRSHIRES.

Are prizewinners as well as enormous producers. I have for sale 4 young bulls, sired by the Pan-American winner, Leader of Meadowbank; females all ages, of true dairy type. JOHN W. LOGAN, Allan's Corners P.O., Que. Howick Sta., G.T.R. o

AYRSHIRE HERD-HEADER.

I offer the grand imported bull, Royal Peter of St. Annes, an A No. 1 bull, both individually and as a sire. Also three yearlings and a number of calves, including three last August bulls. o

W. W. BALLANTYNE, STRATFORD. "Neldpath Farm" adjoins city.

Homecroft Farm. High-class Ayrshire Cattle, Chester White Swine, Barred Rock Eggs

for sale at reasonable prices. For particulars write to J. F. PARSONS & SONS, Barnston Que. o

STOCKWOOD AYRSHIRES are bred for size, beauty and profit, from imp. and home-bred stock with high milk records and extra high test. Young stock always on hand. Prices right. DAVID M. WATT, Allan's Corners, Que. Brysons, G.T.R., 4 miles; St. Louis Sta., C. A. R., 2 miles. o

TREDINNOCK PRIZEWINNING AYRSHIRES

4 imported bulls from the best milking strains in Scotland head the herd of 75 head. Winnings for 1903 at Toronto and Ottawa: The gold medal and 4 first prize herds; 38 prizes in all—18 firsts, 6 seconds, 5 thirds, 9 fourths. In the Pan-American milk test, the 2 first Ayrshires were from this herd. Quality, size, milk and tests is our aim. Young bulls and heifers for sale. Price and particulars, apply to JAS. BODES, Manager, St. Anne de Bellevue, P. Q.

G. T. R. and C. P. R. stations on the farm. 22 miles west of Montreal.

"Nether Lea" Ayrshires. Deep-milking Strains.

Three choice bulls, fit for service; 6 bull calves, from 2 to 10 months old; also choice heifer calves, from 2 months up. Napoleon of Auchenbrain (imp.) at head of herd, whose dam has a record of 73 lbs. per day. Write T. D. McCALLUM, DANVILLE, QUE. o

TRADE TOPICS.

An old bachelor, who was very bald, fell in love with a pretty widow, whose late husband's name was Robin. One evening the bachelor dropped in to have a cup of tea with the widow. After tea was over she commenced to sing "Robin Adair." The bachelor picked up his hat, and said: "Madam, even if your husband did have hair, it's no fault of mine that I haven't." Then he fled.

MAKE HAYING AND HARVEST EASY

by securing one of the Milner Petrolia Farm Trucks, with combination rack. The wagons, trucks and racks manufactured by this company have a world-wide reputation. The materials used are the best that can be found in Canada, and the workmanship is unexcelled. In buying anything in the line of farm implements, it always pays to get the best, and this accounts for the large business that has been built up by the Milner Petrolia Wagon Company, at Petrolia, Ont.

"HOW TO MAKE THE DAIRY PAY."

This is the title of the latest of the clever booklets issued by the Vermont Farm Machine Company, as helps to farmers and dairymen, and, incidentally, to advertise the U. S. Cream Separator. The subject of suitable buildings, treatment of stock, selection of herd, care of milk, and how to make the dairy pay the most, are each handled in a terse, convincing way. The arguments in favor of having a separator on the farm are without number, and to-day the cream separator is recognized as being as indispensable as is the plow or the reaper. Those of our readers who are unfamiliar with the U. S. Cream Separator, should write for a copy of this booklet, which will be sent free to any address by the Vermont Farm Machine Company, Bellows Falls, Vermont, U. S. A.

"GETTING RICH EASY."

According to the story told to United States Postal Inspector Mehary, by Charles Lester Murphy, the only requisite to the successful operation of a swindling game is to write letters at random from a readymade mailing list, and then sit down and wait the arrival of letters containing money.

Inspector Mehary found Murphy sitting on a rail fence at his home at Berkeley Heights, N. J. The Inspector at first was unable to believe the alleged swindler he sought was the barefooted, gawky and altogether uncouth country lad who responded to his inquiry for Murphy by saying: "That's me. What do you want?"

The U. S. postal authorities have for some time been looking for an alleged swindler, who was sending letters to farmers in various parts of this country and Canada. These letters informed the recipients that the sender, "James B. Murphy," was in possession of valuable stock, which he was ready to sell at ridiculously low prices. To some his stock was Western Union Telegraph, to others he offered Marconi Wireless, but to most he offered "Lunar Oil Company" stock.

P. J. Robb, of Lima, O., sent \$75 for \$1,000 worth of Lunar Oil stock. When Robb failed to receive his money's worth he complained to the post office authorities, and it was through his complaint that Murphy was arrested.

"You've got me all right," said this youth to Mehary. Then he told the inspector that he had just taken a notion to send the letter after he had got possession of a "mailing list," which had been sent to him by a publishing house, and for which he had paid 25c.

"I didn't think so many answers would come," said Murphy. "But they came in fast. Some had money in them in amounts of \$50 and \$75. I made about \$500 clear on the scheme in a few weeks. I did not send the stocks I promised, because I didn't have any. I just made up the Lunar Oil Company in my own mind. Gee, but ain't some men easy marks?" Murphy was taken before United States Commissioner Whitehead, and pleaded guilty. He said he did not want no examination, nor nothin', and was committed. He is 21 years old.

MAKES MEN SOUND AND STRONG

Detroit Specialist Discovers Something Entirely New for the Cure of Men's Diseases in Their Own Homes.

YOU PAY ONLY IF CURED.

Expects No Money Unless He Cures You—Method and Full Particulars Sent Free—Write for It This Very Day.

A Detroit specialist who has 14 certificates and diplomas from medical colleges and state boards of medical examiners, has perfected a startling method of curing the diseases of men in their own homes; so that there may be no doubt in the mind of any man that he has both the



DR. S. GOLDBERG, The Possessor of 14 Diplomas and Certificates, Who Wants No Money That He Does Not Earn.

method and the ability to do as he says. Dr. Goldberg, the discoverer, will send the method entirely free to all men who send him their name and address. He wants to hear from men who have ailments that they have been unable to get cured, prostatic trouble, sexual weakness, varicocele, lost manhood, blood poison, hydrocele, excitation of parts, impotency, etc. His wonderful method not only cures the condition itself, but likewise all the complications, such as rheumatism, bladder or kidney trouble, heart disease, nervous debility, etc. The doctor realizes that it is one thing to make claims and another thing to back them up, so he has made it a rule not to ask for money unless he cures you, and when you are cured he feels sure that you will willingly pay him a small fee. It would seem, therefore, that it is to the best interests of every man who suffers in this way to write the doctor confidentially and lay your case before him, and if he accepts your case for treatment it is equivalent to a cure, as he does not under any consideration accept incurable cases for treatment and, remember, if he does accept your case you may pay when you are cured. He sends the method, as well as his booklet on the subject, containing the 14 diplomas and certificates, entirely free. Address him simply Dr. S. Goldberg, 205 Woodward Ave., Room 145 Detroit, Mich., and it will all immediately be yours free.

YOUR PLASTER CEILING is Tumbling Down

And lets the heat out and the cold in and looks unsightly. Why not cover with one of our handsome Metal Ceilings which goes right over the plaster? Their cost is small. Send careful size and diagram of room for free estimate and design catalogue.

The Metal Shingle & Siding Co., Limited PRESTON, ONT.

BARREN COWS CURED Write For Pamphlet MOORE BROS. V. S. ALBANY NEW YORK

FARNHAM OXFORDS

We had the champion flock of Oxfords in 1903. Importations annually. Animals of all ages and sexes, both imported and Canadian-bred, for sale at all times at reasonable prices.

HENRY ARKELL & SON ARKELL, ONTARIO.

Dorset Sheep and Lambs, also Large Yorkshire pigs from imp. boars, for sale. Prices reasonable. For particulars write to ELMER DYMENT, Copetown P. O.

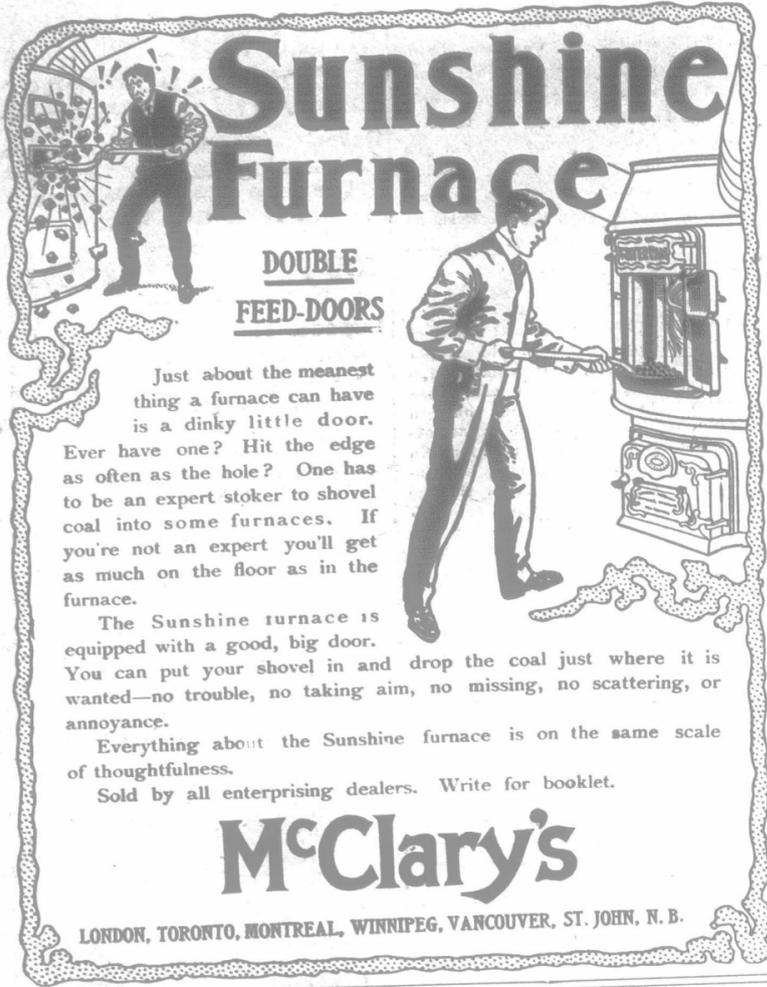
Pennabank SHROPSHIRE and SHORTHORNS A number of extra good and well-covered yearlings of both sexes, sired by imp. Rudyard ram. Also two extra nice young bulls. Prices reasonable. HUGH PUGH, WHITEVALE, ONT.

Shropshire Sheep and Lambs. Also an Aberdeen-Angus Bull. For particulars write to W. R. BOWMAN, Mount Forest, O. t.

Advertisement for Varicocele and Hydrocele cure. Includes a portrait of a man and text: Cured to Stay Cured in 5 Days No Ointing or Pain. Guaranteed Cure. Money Refunded. VARICOCELE Under my treatment this insidious disease rapidly disappears. Pain ceases almost instantly. The stagnant blood is driven from the dilated veins and all soreness vanishes and in its stead comes the pleasure of perfect health. I cure to stay cured, Contagious Blood Poison, Kidney and Bladder Troubles, Nervous Debility, and allied troubles. My methods of treatment and cure are original with me and cannot be obtained elsewhere. I make no experiments. All cases I take cure. Certainty of Cure is what you want. I give a Legal Guarantee to cure you or refund your money. If what I have done for others I can do for you. My charge for a permanent cure will be reasonable and no more than you will be willing to pay for benefits conferred. I CAN CURE YOU at Home. Correspondence Confidential Write me your condition fully and you will receive in plain envelope a scientific and honest opinion of you. My books and lectures mailed FREE upon application. FREE of Charge. My home treatment is guaranteed. 255 Tiltons Building 42 Dearborn Street, CHICAGO.

Sunshine Furnace

DOUBLE FEED-DOORS



Just about the meanest thing a furnace can have is a dinky little door. Ever have one? Hit the edge as often as the hole? One has to be an expert stoker to shovel coal into some furnaces. If you're not an expert you'll get as much on the floor as in the furnace.

The Sunshine furnace is equipped with a good, big door. You can put your shovel in and drop the coal just where it is wanted—no trouble, no taking aim, no missing, no scattering, or annoyance.

Everything about the Sunshine furnace is on the same scale of thoughtfulness.

Sold by all enterprising dealers. Write for booklet.

McClary's

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N. B.

GOSSIP.

Bruce County, Ont., has a goodly number of breeders, among them being Wm. McIntosh, of Burgoyne, a few miles from Port Elgin, Ont., who, though not a large breeder, believes in keeping the best. Golden Count (imp.) heads the herd, and a very creditable head he is, a smooth, thick, massive, mellow handling bull. The females are imported and Watt-bred, of choice quality, and, judging from the appearance of the young stuff, they are nicking well with Golden Count. As with the Shorthorns, so with the Leicesters, Mr. McIntosh considers the best none too good, and has been using sires selected from the most noted flocks in Canada. He, therefore, has a select stock of Leicesters. Clydesdales are also receiving attention here. There are two fillies on hand now from imported sire and dam that are to be bred, and the expectation is that something choice may be produced from them later, as they are from such noted stock as McNeillage and Crystal City.

Among the oldest established breeders of pure-bred stock in Bruce County, Ont., must be classed Messrs. Jas. Tolton & Son, of Walkerton. This firm has at present upwards of 45 head of Shorthorns, of the Miss Ramsden, Sittytton, Secret, Duchess, and other fashionable strains. Prince Homer (imp.), bred by S. Campbell, Kinellar, Scotland, sire Knight of Strathbogie, dam by Scotland's Fame, a handsome, thick-fleshed, roan bull, heads the herd, and is proving a getter of good ones. Among the females of breeding age, we noticed Lady May (imp.), a fine roan cow, sired by the Princess Royal bull, Bounding Willow, also Miss Howie 6th (imp.), by Abbotsford 2nd, with a bull calf at foot, by Prince Homer, that ought to make a choice one. He is about four months old now, a beautiful roan. Nellie 17th, a red, by Earl Warwick, is another that has given her owner excellent results. There is at present a pair of nice young heifers in stock from her. Fancy Girl is another fine, large, roomy cow, a heavy milker, with a bull calf at foot. She has been a producer of good ones, among them twins (heifer and bull) that were both producers. From a show-yard point of view, Sybella 5th (imp.), of the Cruickshank Secret tribe, outstrips the lot. She is thick, straight and smooth, has been shown several times, never being beaten, and also has a pair of good twin heifers to her credit, sired by Heir of Hope, a Blue Ribbon and Cleopatra-bred bull. The Oxford Down flock numbers nearly 100 head of high-bred ones, mostly got by imported rams. The last ram used is a son of that noted stock ram Imp. Bryan, and his lambs are turning out so good that an American breeder has already made a selection from among them.

AYRSHIRES FOR CANADA.

Messrs. R. & A. Montgomery, Lessnessock, Ochiltree, Scotland, recently shipped to Messrs. R. Hunter & Sons, Maxville, Ont., a consignment of Ayrshires, comprising three two-year-old heifers, a three-year-old, a four-year-old cow, and a yearling bull. The two-year-old heifers are all due to calve in August. They are very big-sized animals, showing great substance and fine big teats. The three-year-old heifer is an animal of great promise. She is due to calve in July, and she is a full sister to the three-year-old heifer which stood first at the Union Show at Stewarston in 1902. From Messrs. Lindsay, Carsegowan, the Messrs. Montgomery purchased the four-year-old cow, which should also calve in July. This animal last year stood first at Stranraer as an uncalved three-year-old, and first at Wigton as a three-year-old in milk, while she was reserve for the championship there. The yearling bull was purchased last year from Mr. Baird, Garclaugh. He is out of a heavy-milking dam, and promises to make a good sire. Messrs. Hunter are plucky buyers and their aim is to secure the choicest dairy animals. Mr. Hunter writes that the cow, three years old, and two two-year-old heifers in this importation are for the Ogilvie herd at Lachine Rapids; the young bull and heifer go to the Maxville herd of Robt. Hunter & Sons.

—A—
BRECHE A MANON LADY

TELLS OF HER EXPERIENCE WITH

DOAN'S KIDNEY PILLS
The Great and Well-Known Kidney Specific for the Cure of all Kidney and Bladder Troubles.

Mrs. P. Bertrand, Breche A Manon, Que., writes:—I think it nothing but right for me to let you know what DOAN'S KIDNEY PILLS have done for me. For five months I was badly troubled with a sore back, and such severe pains in my kidneys that I could scarcely walk at times. I got a box of DOAN'S KIDNEY PILLS, and before I had them half taken I was greatly relieved, and with another box I was completely cured. I cannot help but give them all the praise I can, and will never fail to recommend them to all kidney sufferers.

DOAN'S KIDNEY PILLS.
are 50c. box, or 3 for \$1.25; all dealers or The Doan Kidney Pill Co., Toronto, Ont.



If you were sure you could buy for 60c. per foot a satisfactory hog trough good for 10 years' hard usage, you would buy quick, wouldn't you? Leal's Patent Steel Trough will fill this bill easy. Honestly made, heavy and strong, nice rounded edges. It's a winner. Money back if not as represented. Every foot guaranteed.

Get catalogue from
WILBER S. GORDON, TWEED, ONT.



One hundred Tamworth and Improved Chester White Spring Pigs of a true bacon type, our herd having won the best prizes offered at the leading exhibitions throughout Ontario and Quebec for the past ten years. Stock for exhibition purposes a specialty. We pay express charges between stations, and guarantee safe arrival of all stock shipped. Pairs furnished not akin. Write for prices.

H. GEORGE & SONS, Crampton P.O., Ont.

ENGLISH BERKSHIRES.

For Sale: Young boars of Bacon-type. Choice young pigs; pairs not akin supplied. Short-horn bulls, also calves of both sexes.

JOHN RACEY, Jr., - Lennoxville, Que.

RIVER VIEW FARM

ROBERT CLARKE,
Importer and Breeder of
Chester White Swine
Pigs shipped not akin to each other. For price and particulars, write

41 COOPER STREET, OTTAWA, ONT.

YORKSHIRES. Six sows to farrow this month to imported boars. Orders booked for pigs at weaning. **EGGS**—M. B. and W. H. turkey, \$2.50 per setting. B. and W. Rock, B. Orpington, B. Wyandotte, and Rouen duck eggs, \$1.

T. J. COLE, Box 188, Bowmanville, Ontario.

YORKSHIRES

SPRING OFFERING: Show pigs of March farrow from imported sows. Boars and sows of breeding age, of great length and quality. Also some good imported sows bred to show boars. Write to show boars. **H. J. DAVIS, Woodstock, Ont.,** Importer and Breeder of Shorthorns and Yorkshires.

MAPLE LODGE BERKSHIRES.

Having left Snelgrove and secured Maple Lodge Farm, Brampton, I am prepared to supply pigs of the best bacon type and breeding, with fresh blood added, and in as large numbers as ever. Have a few good young boars ready for service and fine sows ready to breed. Spring pigs have come strong, and we can supply pairs not akin. Address: **WILLIAM WILSON, Box 191, Brampton, Ont.**

HILLOREST LARGE ENGLISH BERKSHIRES HERD OF

Founded upon imported stock and Canadian show animals. Various strains represented and new blood introduced at intervals. Each purchaser gets registered certificate of pedigree, and any animal failing to prove a breeder is replaced. **JNO. LAHMER, VINE, ONT.,** Vine Sta., G.T.R., near Barrie.

Dorset Horn Sheep

The largest flock in America. The most celebrated prize-winners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 300. Stock for sale always on hand.

John A. McGillivray, Uxbridge, Ontario.

I Will Import:

Show or breeding rams or ewes, bulls or heifers, horses or pigs, of the improved breeds. Send orders soon to me:

ROBERT MILLER,
Care of **ALFRED MANSELL & CO.,**
Live-stock Exporters, Shrewsbury, Eng.

"MODEL FARM" SHROPSHIRE

Do you want an imported ram or a home-bred one to improve your flock? Our offerings will please you. 10 imported rams and many home-bred ones (from imported stock) to choose from—massive fellows, all wool and mutton and the type that pleases. Stock of all ages for sale. Prices consistent with quality. Long-distance phone No. 94.

W. S. CARPENTER, Prop., SIMCOE, ONT.

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to **MORTIMER LEVERING, Secretary, Lafayette, Indiana, am**

Hampshire Down Sheep.

GREAT ENGLISH PEDIGREE SALES,
July, August & Sept., 1904

Waters & Rawlence, Salisbury, Eng., will sell by public auction, during the season, upwards of

50,000 Pure-bred Ewes, Lambs, Rams,

including both rams and ewes from the best registered prize-winning flocks in the country. Commissions extra fully executed. Address **Waters & Rawlence, Salisbury, England.**

NOW READY!

Several young Tamworth sows of prize-winning strains. Orders are now being booked for future delivery. **JAMES DICKSON, Newcastle Station, Orono, Ont.**

TAMWORTHS AND HOLSTEINS

One bull calf sired by an imported bull. Boars fit for service. Sows bred and ready to breed. 50 boars and sows from 2 to 5 months old. Pairs not akin.

BERTHAM HOSKIN,
Grafton Sta., G. T. R. The Gully P. O.

GLENHOLM HERD OF TAMWORTHS

We are now booking orders for spring litters. Have 5 boars and 5 sows, 6 months old, left, and a fine lot of younger ones.

F. O. SARGENT, Eddystone, Grafton Sta., G.T.R.

Newcastle Herd of Tamworths & Shorthorns

We have for quick sale a lot of choice Boars and Sows, Oct. and Nov. litters, the produce of our Toronto Sweepstakes Stock and the undefeated Boar, "Colwill's Choice" 1343. We are also booking orders for March and April Pigs, the choicest of breeding. We also offer for quick sale 2 or 3 choice Shorthorn Heifers, 12 to 15 months old; also one 2-year-old in calf; all first-class stock, got by bull weighing 2,500 lbs. Write quick if you want something good at moderate prices.

COLWILL BROS., NEWARTLE, ONT.

LARGE ENGLISH YORKSHIRE

Sows safe in pig, direct from imported stock, bred to imported boars; boars fit for service, same breeding as sows; boars and sows three a d four months old, from imported stock, pairs not akin. Write

JAS. A. RUSSELL, PRECIOUS CORNERS, ONT.

FOR SALE—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigrees and safe delivery guaranteed. Address **E. D. GEORGE, Putnam, Ont.**

YORKSHIRES FOR SALE

From the pioneer herd of the Province of Quebec. Both sexes and all ages. Satisfaction guaranteed on all mail orders. All-o Pekin Duck Eggs for sale. \$1.00 a setting, or \$1.75 for two settings. Address

A. GILMORE & SONS, Athelstan, Que.

Railroad stations:
Athelstan, N. Y. C.; Huntingdon, G. T. R.

YORKSHIRES FOR SALE

Boars fit for service, at reduced prices. Sows in farrow and ready to breed, and young stock on hand. Write for prices.

WM. HOWE, North Bruce, Ont.

LARGE YORKSHIRES

GLENBURN HERD—upwards of 100 fine spring pigs, sired by imported Holywell Hewson. Also a few 6 month s'boars. Prices reasonable. Address **DAVID BARR, Jr., BENEFREW, ONT.**

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



No Trace of Disease

any one of the three years, 1901, 1902 or 1903 at or following the International Live Stock Exposition at Chicago. Is it remarkable? If you saw the shows you know the countless thousands in value assembled. There was anxiety among breeders. They had to be assured against the spread of contagious diseases. The management met the demand each year by disinfecting with famous

ZENOLEUM

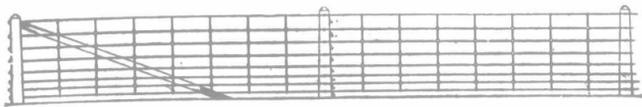
Zenoleum exclusively. That's high, reliable testimony. Do you use Zenoleum? It destroys disease germs, avoids contagion, cures scab, cholera and skin diseases, kills lice, removes stomach and intestinal worms, establishes and maintains for live stock ideal sanitary conditions.

"The Great Coal Tar Carbolic Disinfectant Dip."

Sample gallon of Zenoleum \$1.50, express prepaid. 5 gallons \$6.25, freight prepaid. If you breed live stock you should learn what Zenoleum will do for you. Ask for free Zenoleum handbooks, "Veterinary Adviser" and "Piggle's Troubles." A postal will bring them.

Zenner Disinfectant Co., 113 Bates St., Detroit, Mich.

THE ANCHOR WIRE FENCE



For Farm and Ornamental Fence and Gates, and all Kinds of Fencing Wire, write

**ESPLEN, FRAME & CO.,
STRATFORD, ONT.**

Agents Wanted.
Send for Catalogue.

MEN! WAKE UP!



**Is Your Back Weak?
Have You Dragging Pains?
Are You Easily Tired?
Have You Varicocele?**

Have you lost the fire and strength of youth? Have you "come and go" pains in your back and shoulders? Are you growing old too soon?

If you have these symptoms or any other sign of breaking down of your nerves and vitality, you will find new life in Electricity as applied while you sleep.

Dr. McLaughlin's Electric Belt

Is made for you. It is the best way to use Electricity. It pours a gentle stream of life into the weak parts continually for hours every night. It refreshes the nerves, expands the vital powers, enriches the circulation and makes you feel bright,

and vigorous in one night's use. You get stronger each day, and in a few weeks you are a new man, stronger and younger in the fire of youth. It is grand, this method of mine, and every man who has ever used it is praising it.

DR. McLAUGHLIN:

Dear Sir—I am 53 years old, and for the past four years I have hardly been free from rheumatic pains, sometimes in my arms and shoulders, and other times in my hips and legs, going down to my heels. I could hardly get around. I have worn your Belt for five weeks, and have not had any trouble with rheumatism after I had worn the Belt for three days. I could realize it was helping me after I had it on for one hour. **JOHN KAAR, Brownville, Ont.**

I don't ask you to take any chances. I am willing to do that, because I know my Belt will cure any case I undertake if given a fair chance. All I ask is that you secure me while you are using it. Remember,

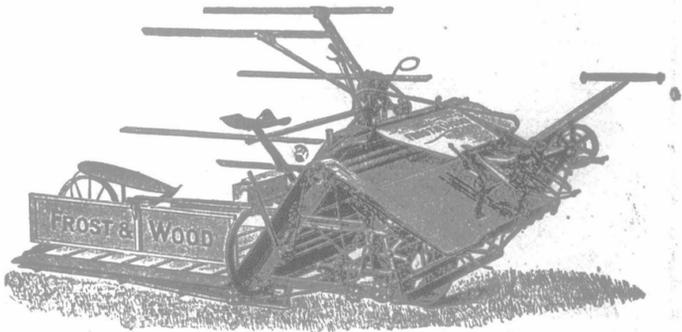
It Doesn't Cost You a Cent Till Cured.

Don't delay trying it. Your future happiness depends on your checking this drain upon your vitality, so stop it now and you can be sure of a long and vigorous life, full of the joys of a healthy vigor.

Don't drug. Drugs can't cure you, as you know, if you have tried them. My Belt cures because it increases your nerve power and vitality. Electricity renews the youthful strength that cures. If you will call I will give you a free test of what I can do. If you can't call send for my beautiful illustrated book, telling about my method. I send it sealed, free. I have 50,000 cures. Call or write to-day.

Office Hours—
8 a.m. to 6 p.m., Wed.
and Sat. till 8.30 p.m. **DR. M. S. McLAUGHLIN,** 130 YONGE STREET,
TORONTO, ONT.

**You get full value for your money
in the F. & W. No. 3 Binder.**



Farmers in every part of Canada find it a most serviceable machine.

The No. 3 is light running, strong, durable, and easily cared for.

Capable of cutting any grain in any condition.

We still have some memo. books left for those farmers who have not yet asked for them.

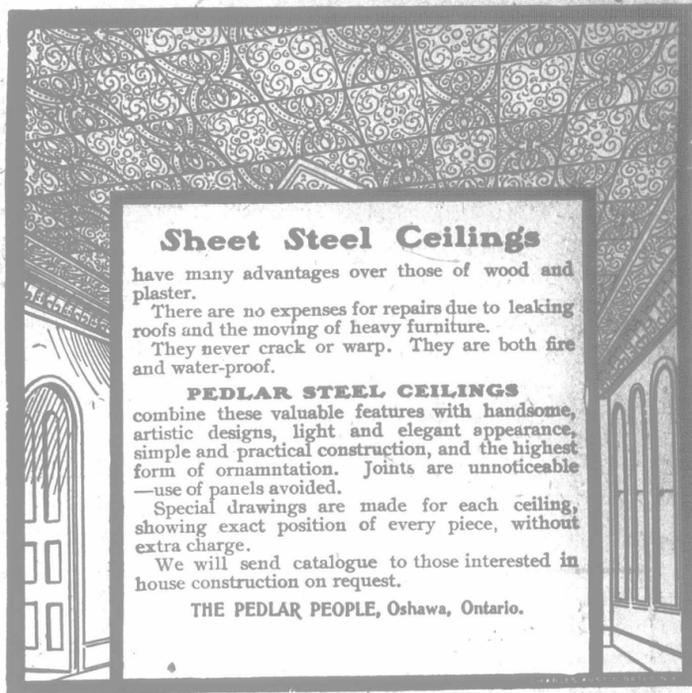
BRANCHES:

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HEAD OFFICE AND WORKS: SMITH'S FALLS, ONT.



Sheet Steel Ceilings

have many advantages over those of wood and plaster.

There are no expenses for repairs due to leaking roofs and the moving of heavy furniture.

They never crack or warp. They are both fire and water-proof.

PEDLAR STEEL CEILINGS combine these valuable features with handsome, artistic designs, light and elegant appearance, simple and practical construction, and the highest form of ornamentation. Joints are unnoticeable—use of panels avoided.

Special drawings are made for each ceiling, showing exact position of every piece, without extra charge.

We will send catalogue to those interested in house construction on request.

THE PEDLAR PEOPLE, Oshawa, Ontario.

WHITMAN'S "WORLD'S"
LARGEST & MOST PERFECT
GUARANTEED TO
ALSO LARGE LINE FIRST CLASS
SEND FOR
WHITMAN AGRIC. CO.

VICTORIOUS
IN USE
THE
WORLD
OVER

**STANDARD "BALING
PRESSES**
LINE IN AMERICA.
HAVE NO EQUAL
AGRICULTURAL MACHINERY
CATALOGUE.
ST. LOUIS, MO.

o We have a large exhibit at the World's Fair in Agricultural Division No. 1, Block 12. Visitors invited.

ADVERTISE IN THE ADVOCATE.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

ARE YOU HUNTING



for health? Have you been BEATING ABOUT THE BUSH, first trying one course and then another, following the lead of others no wiser than you, only to find that the game will not come within your range.

THE PLACE TO HUNT FOR rabbits is where rabbits are known to exist, the place to HUNT for health is where HEALTH HAS BEEN KNOWN TO BE FOUND!

It is beating up the woods where NO QUARRY LURES to hunt for health in a bottle of alcohol and sarsaparilla, or a package of senna and straw; it is only following the track and trail of hundreds of disappointed, tired and discontented hunters, many of whom have fallen by the wayside.

Let their experience **AS WELL AS THE EXPERIENCE OF SUCCESSFUL HUNTERS GUIDE YOU!** Those who have hunted for health AND FOUND IT, are competent to tell WHERE IT CAN BE FOUND. Thousands of satisfied hunters say the ROAD LEADS TO VITA-ORE, that the hunter for health, searching amid its subtle curative, healing and restorative properties, will not be disappointed.

If you have been using other treatments without results that were promised and that you anticipated, **THROW THEM AWAY** and begin with the natural medicinal **ORE!** It will not fail you!

YOU ARE TO BE THE JUDGE!

SENT ON 30 DAYS' TRIAL BY MAIL, POSTPAID.

READ THIS SPECIAL OFFER!

WE WILL SEND to every sick and ailing person who writes us, mentioning **THE FARMER'S ADVOCATE**, a full-sized **One Dollar** package of **VITA-ORE** by mail, **postpaid**, sufficient for one month's treatment, to be paid for within one month's time after receipt, if the receiver can truthfully say that its use has done him or her more good than all the drugs and dopes of quacks or good doctors or patent medicines he or she has ever used. **Read this over again carefully, and understand that we ask you to pay only when it has done you good and not before.** We take all the risk; you have nothing to lose. If it does not benefit you, you pay us nothing. **VITA-ORE** is a natural, hard, adamantine rock-like substance—mineral—Ore—mined from the ground like gold and silver, and requires about twenty years for oxidation. It contains free iron, free sulphur and magnesium, and one package will equal in medicinal strength and curative value 800 gallons of the most powerful, efficacious mineral water drunk fresh at the springs. It is a geological discovery to which there is nothing added or taken from. It is the marvel of the century for curing such diseases as **Rheumatism, Bright's Disease, Blood Poisoning, Heart Trouble, Dropsy, Catarrh and Throat Affections, Liver, Kidney and Bladder Ailments, Stomach and Female Disorders, La Grippe, Malarial Fever, Nervous Prostration and General Debility**, as thousands testify, and as no one, answering this, writing for a package, will deny after using. **VITA-ORE** has cured more chronic, obstinate, pronounced incurable cases than any other known medicine, and will reach cases with a more rapid and powerful curative action than any medicine, combination of medicines, or doctor's prescriptions which it is possible to procure.

VITA-ORE will do the same for you as it has for hundreds of readers of **THE FARMER'S ADVOCATE**, if you will give it a trial. **Send for a \$1 package at our risk.** You have nothing to lose but the stamp to answer this announcement. **We want no one's money whom Vita-Ore cannot benefit.** You are to be the judge. Can anything be more fair? What sensible person, no matter how prejudiced he or she may be, who desires a cure and is willing to pay for it, would hesitate to try **VITA-ORE** on this liberal offer? One package is usually sufficient to cure ordinary cases; two or three for chronic, obstinate cases. **We mean just what we say** in this announcement, and will do just as we agree. Write to-day for a package at our risk and expense, giving your age and ailments, and mention **THE FARMER'S ADVOCATE**, so that we may know that you are entitled to this liberal offer.

WRITE FOR IT.

THIS announcement won't cure you! The reading of it won't ease your aches and pains. The medicine advertised will, but if you need it, if you want it, you must write for it.

We have it and are willing to send it to you on trial, at our risk, you to be the judge, but we cannot know that you need it, that you want it, unless you write to us and tell us to send it to you.

How many times have you seen our trial offer in this paper? How many times have you thought you would answer it and send for a package on trial, at our risk? Now suit the action to the thought, and write for it to-day. Thousands have done what we ask you to do and are not sorry for having done it. You do it now! YOU ARE TO BE THE JUDGE!

GOOD EXTERNALLY ALSO.—Although **Vita-Ore** is intended primarily to be taken into the system through the Stomach and thereafter by natural process absorbed into the blood, the vehicle which conveys its curative properties to all parts of the body, it possesses qualities characteristic of it exclusively which render it wonderfully effective as an external application, direct to the seat of the affliction in certain disorders. In Throat Troubles, when it is used externally as a spray, gargle or swab, according to the printed directions which accompany the Ore, the Elixir comes into direct contact with the diseased and inflamed membrane, right to the base of the trouble, and need not be first assimilated with the blood, as is the case in organic disorders. It is this peculiar property which has made it such a powerful specific for Diphtheria, that worst of all throat troubles, and explains how a remedy which will cure Rheumatism can also vanquish this dread disorder, as has been frequently asked. In cases of Piles, the V.O. Elixir, applied full strength to the affected parts, exerts a natural astringent effect, which in co-operation with the remedial action secured by its internal use at the same time, brings about a cure in short order and we have no hesitation in matching it against any remedy or combination of remedies advertised exclusively for the cure of this trouble.

Particularly in Eczema, Salt Rheum, Acne, and all Skin Disorders, as well as Sores and Ulcers, its value used externally as well as internally is speedily demonstrated, and more quickly than any other lotion or preparation that can be used. A complete and permanent cure in these cases is of course dependent upon a thorough and radical cleansing of the blood, for which purpose there is nothing equal to **Vita-Ore** internally, but a few applications of the Elixir, externally, full strength, have been known in thousands of cases to accomplish what weeks of other treatments could not, and followed by its intelligent use internally, so purified and enriched the blood as to make a return of the condition impossible. No person suffering from Eczematous affections or skin disease should hesitate for one moment in giving **Vita-Ore** a trial, and all will find that its merit has in no wise been exaggerated. **Vita-Ore**, internally and externally, in cases where the trouble is externally manifested, forms an irresistible combination and acknowledged specific that need only be used by such sufferers to be immediately appreciated.

Entirely Well.

To the public in general I wish to say a few words in behalf of **Vita-Ore**. I was a great sufferer from stomach and heart trouble when I first heard of **Vita-Ore**, and I determined immediately to give it a trial; the result all who know me know. I had not used it for more than a week before I could see a decided change for the better in my condition, and before I took two packages I was entirely well.

Stewarton, N. B.

GEO. H. SOMERVILLE.

NOT A PENNY UNLESS BENEFITED.

This offer will challenge the attention and consideration, and afterwards the gratitude, of every living person who desires better health or who suffers from pains, ills and diseases which have defied the medical world and grown worse with age. We care not for your skepticism, but ask only your investigation, and at our expense, regardless of what ills you have, by sending to us for a package. ADDRESS

THEO. NOEL, Geologist, F. A. DEPT., YONGE STREET, Toronto, Ont.

In answering the advertisement on this page, kindly mention the **FARMER'S ADVOCATE**.

Most Remarkable Cures.

No One Can Deny Its Merits or Refuse to Give It a Trial, in the Face of the Wonderfully Prompt Results It Has Accomplished in These Cases.

READ WHAT THEY SAY.

Vita-Ore has cured me completely of stomach trouble, from which I was a great sufferer for a long time, and it only took one package, the trial package, to bring about this remarkable change. I think **Vita-Ore** is the grandest medicine ever offered to the public, and I will always praise it and never be able to speak too highly of it for what it has done for me.

THOMAS RICHARDSON.
North Lancaster, Ontario.

Vita-Ore has done wonders for me. I was a great sufferer from kidney trouble and doctored with several of the best doctors in Ontario and used five different kinds of kidney medicine without the least benefit. At last I decided to give **Vita-Ore** a trial according to the terms of the trial offer, and am glad I did so, for my kidney trouble has now entirely disappeared and the lame back, resulting from it, is completely a thing of the past.

MRS. ANDREW MORPHY.
Oshawa, Ontario.

I had catarrh and liver trouble, but since taking **Vita-Ore** I am entirely cured. I recommend **V.O.** to all I meet.

ANNIE PADGET.
Kinmount, Ont., Canada.