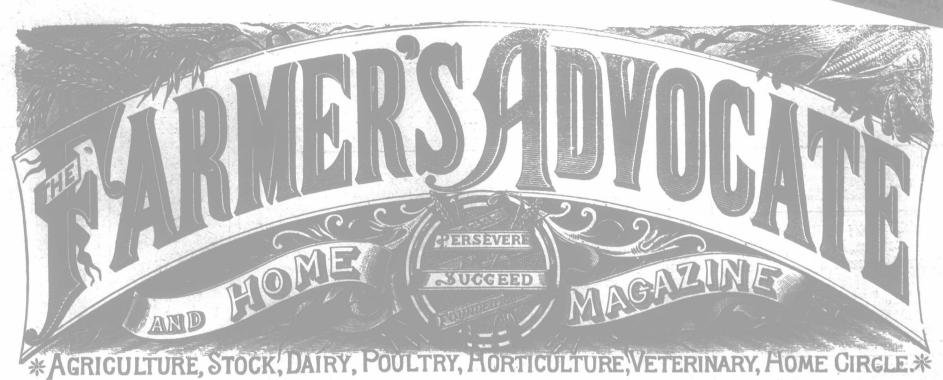
PAGES MISSING



PUBLISHED AT

PUBLISHED AT

VOL. XXXVII.

NOVEMBER 15, 1902. WINNIPEG, MANITOBA. LONDON, ONTARIO.

LAST LONGEST AND YIELD BEST RESULTS BECAUSE THEY ARE MADE FROM BEST MA-TERIALS, IN THE MOST CAREFUL MANNER. . .

> THE NEW ORGAN FOR HOME USE

ANYONE CAN PLAY IT WITHOUT STUDYING MUSIC.

Bell Organ & Piano Co. (LIMITED).

GUELPH, ONTARIO CATALOGUE No. 40 FREE ON REQUEST.

Gives its possessor a feeling of security and relieves him from anxiety about the future, and more especially if the money is on deposit with a SOUND CANADIAN OHARTERED BANK, whence it can readily be withdrawn without trouble, delay or "red tape." A SPECIAL SAVINGS DEPARTMENT is open at every branch of

The Sovereign Bank of Canada

where interest is allowed on deposits of \$1 and upwards.

HEAD OFFICE: TORONTO.

OHIEF EXECUTIVE OFFICE:

MONTREAL.

Branches at: Toronto, Ont.; Montreal Que.; Amherstburg, Ont; Clinton. Ont.; Exeter, Ont.; Milverton, Ont.; Mount Albert, Ont.; Newmarket. Ont.; Ottawa, Ont.; Perth. Ont.; St. Oatharinee. Ont.: Stirling, Ont.; Stouffville, Ont.; Stutton Que.; Union-ville, Ont.; Waterloo, Que.

DR. PINGEL

Having placed in his office the most complete X-Ray outfit obtainable, is devoting his time to the treatment of CANCER, LUPOID and TUBERCULAR affections. OFFICE: 444 WELLINGTON STREET, LONDON, ONT.

CONTENTO OI MILLO MITTERDED

CONTENTS OF THIS NUMBER	0	
* /	PAGE	£.
EDITORIALPOINTERS; THE WINTER FAIR	825	
PUBLIC SALE MANAGEMENT	825	
An American's Advice		
HORSES.—RELATIONSHIP OF THE SHOW-RING TO HORSE BREEDING ANOTHER HORSE SHOW; HIGHLY APPRECIATED	827	
DEATH OF A NOTED HORSEMAN	827	
MOSSTROOPER CHAMPION [3346] (ILLUSTRATION)	827	
LAVENDER 11394, IMP. (ILLUSTRATION)	828	
STOOK THE CAMERA AS AN EDUCATOR IN ANIMAL FORM	827	
ANOTHER WARNING	828	
HOG CHOLERA GERM; HOG CHOLERA TREATMENT	828	
DAYOTHO PICO LIVE STYCK INTERIORS PHELPED	060	
SHEPHERDS DOG TRIALS; ANOTHER CHARGE AGAINST DOGS. WINTER FATTENING LAMBS; SHEEP AND DOGS AGAIN	0.639	
SOUTHDOWN SHEARLING EWE (ILLUSTRATION)	829	
DEFORMING OF CATTLE: THE WESTERN FAIR	020	
SHEEP BREEDING	836	
SITHMER HILL DALMENY SUNFLOWER (ILLUSTRATION)	837	1
FENEMERA (ILLUSTRATION)	838	
FARM.—Two and Four Cuttings of Alfalfa	830	
CARREGIE'S ADDRESS; WANTED: HPLP ON THE FARM) 831	
HOME OF ALEX. MCVICAR, OTTERBURNE, MAN. (ILLUSTRATION WHAT WE SHOULD EAT; RIDING PLOW COMMENDED.	831	
THE MOVICAR FLARM, OTTERBURNE IMPURITIES IN GRASS AND CLOVER SEED; DISEASE IN THE WI	LL 832	
CANADIAN-MADE BEET SUGAR	832	
SNAP-SHOTS AT ILDERTON (ILLUSTRATION)	833	
CARRON COMPARATIVE DIGESTIBILITY OF MILE	832	
OTTESTIONS ASSED AND ANSWERED RE PASTEURIZATION	833	
RE PASTEURIZING	833	
METHODS OF MILKING	834	
APIARY -BERKEEPERS' ANNUAL MEETING	834	
METHODS OF MILEING METHODS OF MILEING APIARY — BERKEEPERS ANNUAL MEETING. THE FUTURE OF BEEKEEPING; NOVEMBER IN THE APIARY GARDEN APD ORCHARD — FRUIT GROWERS MEETING (MILLING)	. 834	
TION) PROFITS IN ONIONS; THE FRUIT MARKS ACT	834	
WW LOCHERAD R.A. M.S. (PORTRAIT)	835	5
WM. LOCHEAD, B.A., M.S. (PORTRAIT) WHEN TO PRUNE GRAPES; BURN THE RUBBISH	835	
PROTECT STRAWBERRIES POULTRY.—AROUND THE SCRATCHING PENS INTRODUCE NEW BLOOD; THE TURKEY CLUB.	836	
POULTRY.—AROUND THE SCRATCHING PENS	836	3
WHITE WYANDOTTE CLUB; EXCLUDE THE MAIE	836	
WHITE WYANDOTTE CLUB; EXCLUDE THE MAIE SUPPLY GRIT; BUFF LEGHORNS WANTED	836)
OUESTIONS AND ANSWERS.		
VETERINARY: MARE WITH SWOLLEN LEG; NON-DELIVERY FETUS; SEROUS ABSCESS ON COW'S ENICE; BREWERY GRA	OF	
FOR COLTS-WART ON CULT, FAIALITI IN SOW, HOME TEAT; LUMP ON STIFLE. MISCELLANROUS; BUILD AN ICE-HOUSE; ROOT GRAFTS; WHE MISCELLANROUS; BUILD AN ICE-HOUSE; ROOT GRAFTS; WHE	836, 837	
MISCELLANEOUS; BUILD AN ICE-HOUSE; ROOT GRAFTS; WHE	A F	
MISCELLANEOUS; BUILD AN ICE-HOUSE, ACCI, WHY FEED CHI	PRI.	

FARM GOSSIP.

MARKETS.
BUFFALO MARKETS.
TORONTO MARKETS.
MONTREAL MARKETS.
CHICAGO MARKETS.
BRITISH CATTLE MARKETS HOME MAGAZINE. THE FAMILY CIRCLE
DIOGENES IN SEARCH OT AN HONEST MAN (ILLUSTRATION)
INGLE NOOK CHATS
ANCIENT STOCKS AT PAINSWICK (ILLUSTRATION)

THE CHILDREN'S CORNER
PUZZLED (ILLUSTRATION). 846, 853 NOTICES -

ADVERTISEMENTS - - PUBLISHED TWIGE A MONTH AT LONDON AND WINNIPEG, CAN.

821 to 824, 847 to 860

Free grants of Government Lands. Cheap Railway Lands for Sale on Easy Terms.

600D SOIL. PURE WATER. AMPLE FUEL. Take your choice in

Alberta, Assinibola, Saskatchewan or Manitoba.

Most desirable land can be obtained in Southern Alberta in close proximity to the Calgary and Edmonton Railway and the Grow's Nest Pass Railway, suitable for Mixed Farming and Ranching on both a large and small scale.

Nost desirable land can be obtained in the Olda District, along the line of the Calgary and Edmonton Ra'lway, about fifty miles north of Calgary.

In the Prince Albert, Duck Lake and Rosthern Districts, on the line of the Qu'Appelle, Long Late and Saskatchewan Railway.

In the Heaver Pill District and along the line of the Manitoba and Northwestern Railway.

For tall information concerning these Districts, Maps, Pamphiets, etc., FREEE, apply to

Osler, Hammond & Nanton, LAND OFFICE.

440 Main St.

WINNIPES, MAN.

To Recognize Purity.

Adulteration has grown to such a fine art, that it is almost impossible for a woman now-a-days to detect the false from the true; but a chemical analysis will always detect adulteration. Prof. W. Hodgson Ellis, Official Analyst to the Dominion Government, after a number of analyses, reports that "Sunlight Soap is a pure and well-made soap." Try Sunlight Soap-Octagon Barnext wash day, and you will see that Prof. Ellis is right. No one should know better than he.

Better Get Best Shingles and Know They Will Last.

Are long since proved the best for all farm buildings.

They are lightning proof, prevent fire, never rust, and can't leak because of their patent side lock.

Either galvanized or painted, and any handy man can quickly put them on. om

Metallic Roofing Co., Ltd.

TORONTO MONTREAL WINNIPEG.

.......

STRATHROY.

Maintained by the Ontario Government.

Courses in— Dairying, Dairy Engineering, and Mechanics and Domestic Science.

Special Greamery course, Dec. 2 to 26. Regular courses, Jan. 2 to March 26. Course in Domestic Science, Jan. 14 to March 14.

The school is splendidly equipped, and in a better position than ever to offer students a thorough and practical training in every branch of dairying. Send for circular and application of dairying. Send It form to the auperint

ARCH'D SMITH, Strathroy, Ont.



THE DANIELS INCUBATOR

The standard hatcher of the Dominion. Our Storm King Brooder will raise 35 per cent, of chicks after our incubator has hatched them out. We are handerstanted to were reheadquartersfor every-thing in the poultry ing coops, cramming ma-

line. Shipping crates, fattening chines, and our catalogue is free, C. J. DANIELS, 196 to 200 River St., Toronto.

Messrs. Edward Jacobs & Son,

LONDON, ENG. HAMBURG, GER. Solicit consignments of best quality Canadian apples.
The home crop being short, good prices are assured.
Send trial shipment and be convinced. Full particulars may be had of

E. P. BLACKFORD, NURSERYMAN. TORONTO, ONT. Bor Send only red fruit to Hamburg.

British Golumbia Mild climate, the best dairying country in North America. No bizzarda, No cyclemes. No droughts. No cyclemes. No droughts. No cyclemes. No droughts. No cyclemes. No cycle

THE SETTLERS' ASSOCIATION. BOX 540 VANCOUVER, B. C. of Please refer to this paper.

Standard Scales For railroad, hay, live stock, dairy, coal and plat-

For prices and particulars write or call on o

GEO. M. FOX,

K STREET, LONDON, An energetic man can earn from \$15 to \$18 a week selling our goods. Large demand. Write for particulars. C. R. FEGAN, FENWICK, ONT.

For Camp, Cottage or Summer Home:

Perfection Wickless Blue Flame

Burns ordinary coal oil safely, economically and WITHOUT ODOR, Ask dealers.

Queen City Oil Company, Limited WHOLESALE. -0

MalKerville Wagon (o WALKERVILLÉ, ONT

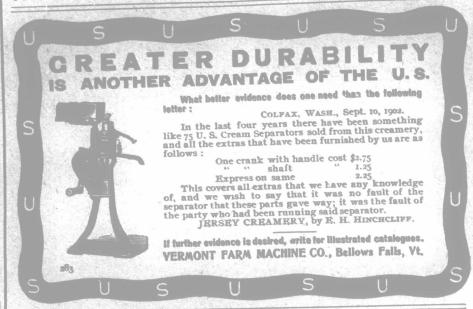
STOCK OF SECOND-HAND

Of nearly all makes, including REMINGTONS, JEWETTS, FRANKLINS, UN-DERWOODS, CALIGRAPHS, HAMMONDS, BAR-LOCKS, FOXES, OLIVERS and BLICKENSDERFERS, which we are selling at from \$15,00 up. We are

sole dealers for the -TYPEWEITER SMITH PREMIER

Which is the business and professional man's typewriter. All the largest railroads, insurance and commercial companies use the Smith Premier almost exclusively, and are satisfied that it is the BEST. Write for illustrated on alogue.

NEWSOME & GILBERT, SOLE DEALERS. TORONTO, ONTARIO. 68-72 VICTORIA STREET,



MANUFACTURED IN CANADA

The best selling because the most satisfactory.

"American" Field Fences

For horses, cattle, sheep, and hogs. All styles and heights—20 inches to 58 inches high, with stays 12 inches or 6 inches apart.

"Ellwood" Field, Farm and Lawn Fences. Six styles. Heights, 18 inches to 58 inches.

If you can't get the celebrated AMERICAN and ELLWOOD fences from your dealer write to us and we will help you.

The CANADIAN STEEL & WIRE CO. (LIMITED),

HAMILTON, CANADA.



"ELLWOOD" FENCE.



as a picture. You will fall in love with her the minute you see her. Golden ringlets, laughing blue eyes, rosy cheeks, stylishly dressed in silk and satin, with velvet and lace trimmings. Lovely trimmed hat, dainty little slippers, real stockings, lace-trimmed underwear. She can be dressed and undressed like any live baby. Her head, arms and legs are movable. She can stand alone or sit in a chair or on the floor. When you get her you will say she is the prettiest doll you have ever seen. We give her free for selling at 15c, each, 6 handsome pieces of Jewelry, Lockets, Stick Pins, Cuff Links, hat Pins, etc., and helping us to get a few more agents. Every piece of our jewelry looks worth fee. At 15c. you can sell the 6 pieces in a few minutes. Write to-day and we will send the Jewelry postpaid. We trust you to sell it and return the money. Don't miss this grand chance. THE CANADIAN PREMIUM SYNDICATE, DEPT. 553, TORONTO, ONTARIO.

OWEN SOUND, ONT.,

manufacture the best metal gate on the market. Low times and fullest guarantee of satisfaction. If they do not suit you, we not all expenses. Write for part

LIMITED, SHEWING HINGE MOVEMENT OF STAYS UNDER PRESSURE STAYS CANNOT BEND WILL SPRING BACK TO HAT CE WHEN PRESSURE IS

Save Your Fuel.



Winnipeg Heater Co. of Toronto, Ltd. TORONTO, CAN

WOODSTOCK

Galvanized Painted.

For Power Pumping. The

with Graphite Bearings, runs easy and controls itself in the storm. GRINDERS, PUMPS, WATER TANKS,

DRINKING BASINS AHD SAW BENCHES.

CO., WOODSTOCK WIND-MOTOR WOODSTOCK, ONT. (LAd.



Fur Scarf **\$2.49** worth \$5.00. Send me menety, just just name, address and near express office and we will forward for examination this soft, warm, prown liver mink scarf. A feet long the state of the full black talk. A Perfect imitation of the Mink. Looks worth 45.00. When iterritant the express office call and express office call and first stated that we are offering you a scart well worth \$5.00. pay theer press agent our special hargain price; \$5.61. and express charges and his yours. The contrast between the warm brown to is yours. Tre contrast be tween the warm brown fur of the scarf and the jet black tails makes this a

most attractive addition to the winter dress. It is handsome and styli-h fur. We know it will please you, cash is sent with order we will forward the scart by most add. Johnston & Co., Box 545, Toronto.



ROCK SALT for horres and cattle, in ton and car Toronto Salt Works, Toronto.

DEPERIAL SILVERWARE CO., Box 203, WIPDSOR, OFF.

Fruit Your



and dry it with **Champion Fruit**

Evaporator. Dries all kinds of fruit and vegetables, producing a superior quality of clean white truit. It is made of galvan-ized iron, is lined throughout with ab-bestos, is fireproof and portable. If a d e in five sizes.

Catalogue for the asking.

THE GRIMM MFG. CO., 84 WELLINGTON STREET, MONTREAL.

PLEASE MENTION FARMER'S ADVOCATE

INTERNATIONAL STOCK FOOD

EDS FOR ONE CENT

English Stockmen Like It

WESTON COYNEY HALL, Nr. Longton,

International Stock Food Co., Minneapolis, Minn.

STAFFORDSHIRE, ENGLAND.

Dear Sirs:-I have pleasure in handing you remittance to cover your invoice for "International Stock Food." I have given it a thorough trial on my horses, both drivers and draft, and I find it justifies all you claim for it in every way. All my stock are in exceptional condition this year and this I attribute to the use of "International Stock Food." I tender you my sympathy for the loss you have sustained by the death of Online 2:04, a loss which will be felt by the whole of your district. I had great success in my experiment of crossing the French Coach Horse with the American Trotter, the result being Yours faithfully, a fine heavy harness horse. I am, sirs,

F. J. RIDGWAY.

We will Pay you \$1,000 CASH to Prove that our Testimonials are not Genuine.

ed from Roots, Herbs, Seeds and Barks and we paid \$40,000 in "war tax" because it was a high class medicinal claimed to the Government that they did not use any medicinal ingredients and did not claim any medicinal r Prevents Disease. It is a great aid in Growing or Fattening stock because it increases the appetite and aids from the grain eaten. We positively guarantee that its use will make you extra money over the usual plan of wit is fed in small amounts as an addition to the regular feed. "International Stock Feed" can be fed in perfect absolutely harmless even if taken into the human system. It won the Highest Medal at the Paris Exposition ed in small amounts as an addition to the regular reed. "International stock reed can taken have taken have the human system. It won the Highest field at the cusands of Testimonials on application. We employ 107 people for our office work all. We pay these people for this kind of work and your letter will be answered promptly reagnest the World. [27] Your money will be promptly refunded in any case of failurings of the testing of the state of the world of the state of the world. It was the same that we need the state of the world and the state was need to the world and the state was need to have need to be a much be an increase. th Class Farm Paper. We will furnish Thousands of Testimonials on ay social information be sure and write us. We pay these people for this a Genrantee" by Forty Thousand Bealers throughout the World. [27] ask anything fairer? It will make your Pige or Hogs grow Annahagly a mist can separate all the different powdered Boots, Borks and Seed

The cover is a Beautiful Live Stock Picture 637 Printed in Six Brilliant Colors. It cest us \$3000 to have our Artists and Engravers make these Engravings. This International Stock Book contains a Finely Illustrated Veterinary Department that will Save you Hundreds of Bellars. It describes all common Diseases, etc., and tells how to treat them. This Illustrated Stock Book also gives Description, History and Illustrations of the Different Exceeds of Horses, Cattle, Sheep, Goats, Hogs and Poultry. It also contains Life Engravings of many very noted Horses, Cattle, Sheep and Hogs.

The Editor Of This Paper Will Tell You That You Ought To Have Our Stock Book In Your Library For Reference.

WE WILL GIVE YOU \$14.00 IN "INTERNATIONAL STOCK FOOD" IF BOOK IS NOT AS STATED. This Book Mailed Free, Postage Prepaid, If You Write Us (letter or postal) and Answer These 3 Questions:

40-ist—Hame this paper. 24—Eow much stock have you? 24—Did you ever use "INTERNATIONAL STOCK FOOD!"

International Stock Food Co., MINNEAPOLIS. MINN., U. S. A.

Else No Money Is Wanted,

After 2,000 experiments, I have learned how to cure Rheumatism. Not to turn bony joints into flesh again; that is impossible. But I can cure the disease always, at any stage, and forever

that is impossible. But I can cure the disease always, at any stage, and forever.

I ask for no money. Simply write me a postal, and I will send you an order on your nearest druggist for six bottles. Dr. Shoop's Rheumatic Cure, for every druggist keeps it. Use it for a month and, if it succeeds, the cost is only \$5.50. If it fails, I will pay your druggist myself.

I have no samples, because any medicine that can affect Rheumatism quickly must be drugged to the verge of danger. I use no such drugs, and it is folly to take them. You must get the disease out of the blood.

My remedy does that, even in the most difficult, obstinate cases. No matter how impossible this seems to you, I know it and I take the risk.

I have cured tens of thousands of cases in this way, and my records show that 39 out of 40 who get those six bottles pay gladly.

that 39 out of 40 who get those six bottles pay gladly.

I have learned that people in general are ho st with a physician who cures them. That is all I ask. If I fail I don' expect a penny from you.

Simply write me a postal card or letter. I will send you my book about Rheumatism, and an order for the medicine. Take it for a month, as it won't harm you anyway.

If it fails, it is free, and I leave the decision with you. Address Dr. Shoop, Box 52, Racine, Wis.

Mild cases, not chronic, are often, cured by one or two bottles. At all druggists.—Advt.

For Information

as to Fruit and Trucking Lands, Grazing Lands, soil and climate in Virginia, North and South Car line, Georgia, Alabama and Florida, along the ATLANTIC COAST LINE RAILROAD, write to WILBUR McCOY,

Agricultural and Immigration Agent, Jacksonville, Fla.



"IT PAYS TO USE DEERING MACHINES."

So say thousands of Canadian farmers. The

Ideal Line

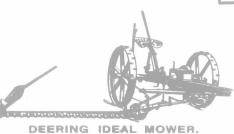
lightens labor on the farm.

The name "DEERING signifies harvester excel-lence. It appears on the following "Ideals":

BINDERS. MOWERS, REAPERS, RAKES, TWINE, CORN BINDERS.



DEERING IDEAL HAY RAKE.



Corn Shockers, Huskers and

Shredders, Oil, Knife and Tool Grinders.

Deering Ideals garner every cent of profit in a crop, be it grass, grain or

Investigate Deering machinery before Write for a beautifully-illustrated cata-

Deering Division International Harvester Co. of America

MAIN OFFICES: Chicago, U.S. A. FACTORIES: Chicago, and

Hamilton, Ont. CANADIAN BRANCHES: Toronto, London. Montreal, Winnipeg.



DEERING IDEAL CORN BINDER.

SHEFFIELD, ENGLAND.

Please see that this \mathbf{EXACT} MARK is on each blade.

JAMES HUTTON & CO., MONTREAL, SOLE AGENTS



FACE TO FACE WITH THE MAN IN THE MOON. LARGE POWERFUL TELESCOP ALMOST GIVEN AWAY

Needed by Farmers, Ranchmen. Sailors, Hunters, Tourists, etc. Of use to everybody. A great source of Amusement and Instruction.

Inde by the largest Telescope Manufacturer in the World. Measures nearly S.R., when open. 'Fitted with powerful lennes, carefully ground and adjusted with scientific exactness. Brass bound tubes, both ends protected by brass dust caps, it brings objects miles distant so close that you feel as if you could put out your hand and touch them. We sold over 1.700 Telescopes last year and all our customers were well pleased with the manufactor of the special property of the sent of the special pleased with the manufactor of the special pleased with the one 1 got, and some friends of mine want one like it." Alva Froom, Reckston, Ont., says: "I received the 90c. Telescopes all right. It is a dandy. I would not take three times what I paid for it if I could not get another one like it." Beattle Gibson, Chilliwack, B.C., writtes: "Your 90c. Telescope brings objects miles away very near to me." Telescopes of this size have for merry sold at from \$5.00 to \$10.00. Our Special Introductory Price only 90c. postpaid. A Grand Bargain. Don't miss it. Hall Order Supply Co., Dept. F.A. Terone.

The Livingston Linseed Oil Co., Ltd.,

BADEN, ONTARIO,

Manufacturers of strictly pure

Old Process Linseed Oil Cake and Meal, also Ground Flax Seed.

Write for prices. ELECTRIC BATTERY THE CREAT HOME GURER. NOT ONE



Send us your name, address, and express office, and we will send you this Ricetric Machine for examination. When it arrives, test it thoroughly, and if found perfectly satisfactory, and in every way equal to batteries regularly sold at from \$5.00 to \$10, pay the express agent our special barrain price, \$2.35 and express charges, and you will have one of the finest batteries ever made. This is a genuine Magneto-Electric Generator with permanently magnetized field, armature wound with over 100 feet of silk insulated wire, German Silver Current Regulator, hardwood base and niekel-plated electrodes with insulated conductor cords. It is well constructed, all parts being perfectly made and handsomely finished. It is easy to operate and Never wears out. A child cam use it. You simply hold the electrodes in the hands or apply them to any part of the body, turn the crant and strong current of Electricity is generated, which can be suited to the most delicate organism or made powerful enough to overcome the strongest man. A Homeo transport of the construction of the price of Apoplexy, Meningitis, Paralysis, Neuralgia, and all other nervous affections, Dyspepsia, Rheumatism, etc., etc. Cure yourself and save big Doctor's Bills. Our Rattery is also a great entertainer. You can have no end of fun giving shocks to your friends, as dozen at a time if you like, and performing other amusing instructive experiments. Pull instructions sent with each Battery. Remember, you don't pay one cent till you see it. Order to-day. NATIONAL TRADING: CO., BOX 3327, Toronto-

PLEASE MENTION FARMER'S ADVOCATE,

Farmer's Mavocate and Home Magazine.

"PERSEVERE AND SUCCEED."

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

ESTABLISHED 1866.

Vol. XXXVII.

LONDON, ONT., AND WINNIPEG, MAN., NOVEMBER 15, 1902.

No. 562

EDITORIAL.

Pointers.

Have you sampled the "first rum" of 20th century Canadian beet sugar?

The president of the Board of Agriculture, on Nov. 3rd, announced to the British Parliament that he has no intention of proposing a repeal of the Act of 1896, prohibiting the importation of live cattle.

If Scottish feeders, on high-priced lands, could import stockers and a good deal of the feed, and yet make money fattening cattle, surely Canadians, with all advantages at hand, can find good profits in the business.

0 0 0

Now that it is finally understood that the British embargo against Canadian cattle for feeding in the Old Country is to remain on, we had better set about raising more good beef cattle, and finishing them in Canada, thus enriching our farms.

Are you preparing an exhibit for the winter fair? If not as an exhibitor, lay your plans early to pay the show a visit.

Sir Wm. Mulock, Postmaster General of Canada, announces a surplus of \$5,000 in his department for the current year, in place of the perennial deficits of the past. The time would seem opportune to inaugurate free rural mail delivery, and thus extend the advantages of better service to the agricultural community.

Mr. G. H. Hale, of Orillia, Ont., writes, congratulating the "Farmer's Advocate" upon the stand it has taken in favor of reducing postage on newspapers between the different portions of the British Empire. He urges that the agitation be kept up, and in this view we believe he has the hearty sympathy of every loyal Canadian, and lover of the British Empire.

In several issues, the "Farmer's Advocate" has warned the people against the perils of gambling in stocks or market quotations, "dealing in futures," as it is called. This and high living was the cause of the recent downfall of the treasurer of Kent County, Ont., whose defalcations reached at least \$12,000.

* * *

The disastrous results of the spread of the pea weevil are forcibly brought out in our report of the annual meeting of the Entomological Society, published elsewhere. Peas are too valuable a crop to be lost by inaction. Summed up, the entomologists advise early sowing, harvesting just as soon as ripe, immediate threshing and treating the peas with carbon bisulphide.

Late reports from Liverpool show that Danish butter still tops the British markets, at 118s.; "finest Irish creamery" next, at 110s., and choice Canadian creamery in third place, at 104s.

0.0.0 Evidence accumulates in favor of much lower temperatures than have heretofore been employed in ripening cheddar cheese. The favorable demonstrations at the Dominion curing station, this year, will be followed by two large experiments by the U.S. Department of Agriculture, one east and the other west. Cold curing is giving good results in Wisconsin.

The Winter Fair.

Of the past, with their thrill of victory to the painstaking exhibitor and pleasant memories to the enquiring visitor, are the summer shows and exhibitions of 1902. They are gone, but the best has yet to come, for before the end of the year, the Winter Fair, with its invaluable lessons, alike to breeder, feeder, and student, will be with us. Dec. 8th will see the opening at Guelph of the 19th annual Provincial Winter Show, when the cattle, sheep and swine best calculated to win glory at that great final tribunal—the block—will be open to inspection. There, too, the dairy cow will compete for supremacy at the milk pail or according to the Babcock test, while breeders of high-class poultry will contest for honors with birds alive, and dressed. One week later, a similar event will begin at Amherst, N. S., the second of its kind in the Maritime Provinces. That these shows of fat stock have been and are potent factors in the improvement of our live-stock industry, no one can deny. Year by year, Canada is becoming more and more a meat-producing country, and hence any institution calculated to direct breeders as to the correct ideals and feeders of the proper fitting for market is deserving of every encouragement. Indeed, the Guelph show has long ago passed the experimental stage, and the splendid start made at Amherst last year gives assurance of success and usefulness in years to come. 'The different Breeders' Associations and the Provincial Governments are to be commended for the efforts which are being put forth in this

direction. While the summer exhibitions have a great mission to fill in creating a more widespread interest in pure-bred stock, the winter shows have a still greater work to do in emphasizing the fact that hand in hand in reaching the summit of perfection must go the twin-sister arts-breeding and feeding. They alone illustrate that desirable combination, the best breeding with the best feeding. Nowhere during the year can the young stockman obtain so much valuable information that will direct him on the road to success, or the older enthusiast an inspiration to higher ideals. It is, first and last, an educational institution, and while honor is done to the man who shows the greatest skill in preparing an animal for slaughter, who is there more worthy?

In aiming to improve the dressed-meat trade of this country, these shows are worthy the cooperation of all. Breeders, feeders and dealers alike should lend their assistance to aid in this, a movement destined to be the main channel through which our export cattle and bacon trade

must improve. No farmer in any way interested in live stockand where is there a successful one who is not?can afford to deprive himself or his sons of the advantages to be obtained by paying a visit to the Winter Fair. Cheap railway rates are to be had on all lines, and the season is one when there should be time for an outing. If you live in Ontario, go to Guelph show to see the fat of the land; make up your mind to carefully inspect the dairy cows, considering their conformation and power to produce; interest yourself in the poultry show, which promises to be an exceptionally good one; attend the best lectures on the various subjects to be delivered by specialists; and go in time to pay a visit to the experimental union, which meets the same week at the Ontario Agricultural College. If your home is in the Maritime Provinces, by all means extend your

patronage to the Amherst show. You will learn lessons entirely new. Living pictures of animal perfection will be presented, never to be forgotten. Every farmer needs the enthusiasm to be gained by such an outing. The Breeders' Associations are deserving of your interest, and Canada needs more good stockmen to swell the ranks of that progressive class. By all means go.

Public Sale Management.

While we are firmly of the opinion that, as a rule, breeders of pure-bred stock realize better prices by private treaty than at auction, there are times when it becomes expedient to call a public sale in order to dispose of a herd or a considerable number at one time. In that case, the best manner of procedure in order to make the venture a success is worth considering, for in all cases a public sale is a venture, the result of which cannot be foreseen, since it depends upon such uncertain contingencies as the weather, the character of the stock and the composition of the company secured by the announcement. If possible, it is best to take several months to prepare for a sale, since it pays well to have the stock in really good condition, and it is safer and better for seller and buyer that the animals be brought. into that condition gradually, than forced by heavier feeding in a short time. Where the offering is all in good condition an appearance of uniformity of character is secured, which makes a favorable impression, and it goes without saying that animals of any class in good condition and well groomed are more attractive and will sell for more money than lean ones with staring coats and unthrifty appearance. The arrangement of the animals in the stables, well bedded, placing them in matchy pairs, or the larger ones at the far end of the stable and grading them down in size to the entrance door, gives an appearance of uniformity and has a pleasing effect, and where young things are shown loose in hox stalls, having them near a uniform size and age in each lot helps to harmonize their appearance. Halter breaking and training to lead and stand in good position greatly improves the appearance and pays well for the time devoted to such preparation. An unruly or untrained animal may upset the even tenor of a sale, causing loss of time and interest, and consequently financial loss to the

A well-considered order of sale is important, and this should be prepared and posted in the stable before commencing the sale, so that intending bidders may know at what stage their favorites will be offered. As a rule, we believe it is wise to sell in the order in which it is supposed the animals will bring the best prices, as the setting of a high standard of prices at the beginning helps to maintain good prices throughout the disposal. The best in this case does not necessarily mean the best individually, as pedigree counts for much in the estimation of discriminating breeders, and should be taken into account in arranging the order of sale. There is apt to be a certain amount of timidity on the part of the owner to put up his best first, fearing that they may not sell as well as later, when the spirit of the sale is worked up, but is the spirit not likely to be more quickly reached and more steadily maintained by a start with the best. If the most desirable are kept back, many may be waiting for them and neglecting to bid on others on which they might bid if the best go beyond their reach. Patience on the part of the seller is a

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

> PUBLISHED SEMI-MONTHLY BY THE WILLIAM WELD COMPANY (LIMITED).

Two Distinct Publications-Eastern and Western,

EASTERN OFFICE: CARLING STREET, LONDON, ONT. WESTERN OFFICE: Imperial Bank Block, Corner Bannatyne Ave. and Main St., Winnipeg, Manitoba.

LONDON (ENGLAND) OFFICE: W. W. CHAPMAN, Agent, Fitzalan House, Strand, London, W. C., England.

IOHN WELD, MANAGER.

s. THE FARMER'S ADVOCATE is published on the first and

fifteenth of each month.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.

a. TERMS OF SUBSCRIPTION—\$1.00 per year in advance; \$1.50 if in arrears; sample copy free. European subscriptions, 6s. 2d., or \$1.50. New subcriptions can commence with any month. 3. ADVERTISING RATES—Single insertion, so cents per line, agate. Contract rates furnished on application.

4. THE ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearages just be paid as required by law.

5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrearages are paid and their paper ordered 6. REMITTANCES should be made direct to this office, either Money Order or Registered Letter, which will be at our risk.
When made otherwise we will not be responsible.

7. THE DATE ON YOUR LABEL shows to what time your sub-

8. ANONYMOUS communications will receive no attention. 9. LETTERS intended for publication should be written on one side

of the paper only.

No. WE INVITE FARMERS to write us on any agricultural topic.

We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage. ed on receipt of postage

11. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

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

virtue, and providing he has a fairly sympathetic company, he will do well to exercise that virtue, as although some of the animals at the commencement may bring less than he expects, others may bring more, and thus make a satisfactory average, which is by no means an uncommon experience. It is important to have plenty of help and plenty of halters in order that the animals be brought out promptly, so that immediately one leaves the ring, another steps in, no time being lost nor the interest suffered to flag. Enthusiasm is necessary to the best success of a sale, and to this end the seller should support the auctioneer by having everything in order and the order promptly executed. If the interest of the crowd be not kept steadily on the stock to be sold, they will think and talk of other things, and are liable to become ditorderly, which is the bane of a sale. The capable salesman will use tact and judgment in preserving order, and if necessary, will firmly demand it and insist upon it as a right in the interest of the exposer, for no man has a right to fill a place at the ringside and engage in a conversation which distracts the attention of men who mean business and are there for that purpose.

The choice of an auctioneer depends largely upon the circumstances. If the stock is firstclass and in first-class condition, and such as is likely to attract buyers from a long distance, the sale having been extensively advertised, it is well to engage an auctioneer of widespread reputation as a disposer of pure-bred stock, having a knowledge of pedigrees and of the value of highclass animals; who knows the principal breeders and may have influence in bringing together the best class of buyers. Such a salesman may easily make a difference in the sale of one animal sufficient to more than meet the whole expense of securing his services. If, on the other hand, the stock to be sold is not likely to draw breeders or buyers from a distance, the local auctioneer, if a capable salesman, may do better work than one farfetched, since he knows the people and they know him and Great Britain.

his mainner of conducting a sale and waste no time in studying the style of the imported article.

A word as to advertising. In no case does a liberal and judicious use of printer's ink pay better than in the announcement of an auction sale. Use the papers most likely to reach the class of buyers you want, and if the stock is good enough to warrant the bringing of people from long distances, a quarter, a half or a whole page of space may be profitably used, according as the circumstances justify, the announcement being prominently displayed. The more bidders that are brought together, the more competition and the better prices will be realized. If the character of the stock to be sold is not such as to justify extensive advertising in papers having a provincial or national circulation, advertise freely in local papers, taking liberal space, and get out an attractive poster, which should be widely circulated. There is inspiration in a crowd, and it engenders interest and enthusiasm.

The best interests of both seller and buyer are conserved by a frank and fair statement as to any animal concerning which there is a doubt regarding its condition of soundness or fruitfulness. This is another case where the golden rule of doing as one would be done by should prevail. It is better to exclude all doubtful cases from the offering, but if by any chance one is included, let the real facts be known. Fair and honorable treatment is the due of those who incur the expense of attending a sale with the understanding that the stock will be sold on the highest legitimate bid, which is the established rule at disposals by auction, and which should prevail unless the right to a reserve bid is stated in the announcement, or the consent of the company present to withdrawal is secured, which under special circumstances may be deemed necessary in order to avoid an unreasonable sacrifice.

A word to those who attend the sale. Don't go with the object of legally stealing the vendor's stock, should a favorable opportunity present itself. Put yourself in his place; think of the expense he has incurred in making the sale, and his right to a fair price for his property; and act accordingly. If you cannot speak well of the offering, say nothing disparaging of it, and remember when the sale is in progress, that this is not the time, nor the place, for talking politics or other gossip. Business is business-that is what people are supposed to be here for, and if you cannot help, do not hinder it. In the case of sales of pure-bred stock, breeders of the class being sold do well to show their interest in a practical way by bidding to somewhere near their value on any animals that they can safely handle should they fall to their bid, as they are interested in keeping up the standard of prices for that class of stock. It is especially desirable that starting bids, if only half the value, be promptly given, which is an important economy of time. saving a sale from lagging and the appearance of a lack of interest. A spirited and successful sale leaves every one attending it in good humor, and is cause for general congratulation.

An American's Advice.

At a large convention, recently held in Toronto, one of the speakers of the day, an American, Mr. C. N. Howard, of Rochester, N. Y., gave Canadians some wholesome advice. Having had good opportunities to contrast the conditions and achievements of Canada with Yankeedom, he unhesitatingly advised Canadians to pursue their course independently of the United States. Having clearly in his vision the moral and economic perils of that trust-ridden Republic, he declared: 'You will make the biggest mistake you ever made in your lives if you ever become one of us. You ought to go it alone and work out the glorious destiny made possible for you to attain. God has made it possible for this great Dominion to be a beacon light for the nations, but don't mix up with the jobs we have to clean up on the other side." (Applause.)

The Masschusetts Ploughman declares that free trade with Canada would be ruinous to thousands of northern and eastern U.S. farmers. Well, the agitation for reciprocity is not on the Canada side of the lines. The Canadian farmer has found a better market for his products in

HORSES.

Relationship of the Show-ring to Horse Breeding.

That horse-breeding as an industry is influenced by the show-ring none will deny. 'There is, probably, no way in which a person who is breeding horses for the market can advertise so well and so cheaply as by exhibiting his stock in the ring. The main object in giving prizes for the different classes of horses is, or should be, to encourage the production of good animals of each class. The make-up of the prize list indicates the ideas held by the exhibition board, or the committee of the board whose special duty it is, year after year, to revise the horse list, as to what classes or breeds are of the most importance. It goes without saying that the larger the prizes are the more likelihood there will be for breeders to endeavor to produce animals good enough to win. While many exhibitors say that they do not care for the prizes, that all they want is the glory in winning and the advertising that they gain, it will be noticed that few forget to call upon the treasurer for their winnings, and, also, that where the prizes are large there is usually a larger and better field of entries than where they are small. The prizes should be given for classes that the market demands, and in stallion classes, for horses that by their individuality and breeding are likely to produce marketable animals. The personal prejudices of members of the revising committee should be laid aside when the prize list is being arranged. Prominence should be given to the classes that command the highest prices in the public market and that can be raised with profit by the producer. Care should be taken that the wording be such that no ambiguity as to the class intended may exist. For instance, in some prize lists we notice a class for road or carriage horses; in others, a class for carriage horses, Standard-brods and others; again, carriage horses, all preeds of light horses eligible, etc. Now, where the wording is such, neither the exhibitors nor judges (and, I think I may include the committee itself) can have any clear idea as to what kind of a horse is wanted or should win. The road horse and the carriage horse are essentially different animals, and cannot be judged by comparison. I have seen a large field of horses competing in such classes where there were stallions, geldings and mares, including all classes of light horses, as the Standard-bred, Thoroughbred, Hackney, French Coach, German Coach, Cleveland Bay, etc.

Such conditions as this cause a great deal of confusion and, in most cases, a great deal of dissatisfaction. While the class in the prize list calls for carriage horses, it also states that all breeus and classes are eligible, which implies that the judging may be done from any standpoint, and the awarding of the prizes will depend to a great extent upon the individual prejudices of the judge. If he should judge from a Standard-bred standpoint no reasonable objection any other standard with equal justice. Again, stallions should not compete with mares and geldings, but where the conditions do not state this, the man who chooses to exhibit his stallion can justly claim that he is eligible. In order to avoid dissatisfaction and confusion, the wording should be such that there can be no doubt about the breed or class that is wanted. Even in the prize lists of our largest exhibitions the wording of the classes for ponies is usually not sufficiently definite. The conditions generally read " Pony in harness, not over 141." Now, this should be considered definite, but the question arises, "What is a pony?" Exhibitors will claim that any animal not over the specified height is a pony, and hence, eligible to compete. This certainly is wrong. An undersized horse is not a pony, but a little horse, a misfit, a freak of nature. Some of these little fellows are very handsome, smart, attractive and speedy, with good action very desirable animals for certain purposes. They have, in many cases, better style and action than real ponies, and, we notice, they generally win the prizes over ponies that may compete with them. I have no fault to find if a society choose to give a class for these little horses, but I object to allowing them to carry off the awards that are advertised for ponies. In order that an animal may be truly eligible to compete in the pony class, he should be a pure-bred of some of the recognized classes of ponies, or a cross between pure-breds of two breeds where breed is not mentioned. Where it is desirable to make a class for the little horses, the class should read, horses under a certain height, and, of course. ponies would not be eligible, as if we insist that a small horse is not a pony, we must also

Death of a Noted Horseman.

On Nov. 3rd, 1902, at Columbus, Whithy Township, Ontario, died Joseph Thompson, in his 84th year, a noted piomeer importer of Clydesdale horses to Canada. Born July 29th, 1820, at Duggleby, near Malton, Yorkshire, England, he emigrated when eight years old, with his parents, to Waddington, N. Y., and at twenty years of age came to Canada, where during all the intervening years, up to the time of his death, he made his home in the counties of York and Ontario, acquiring a wide reputation as a groom and a judge, and later as an importer of highclass Clydesdale stallions. He commenced his remarkable career as a horseman by travelling for four seasons the Thoroughbred stallion, Blacklock, imported by Mr. Geo. Simpson, of Newmarket, Ont. His second engagement was for the travelling of Grey Clyde [170], imported from Cumberland, by Archibald Ward, of Markham, in 1842, at about five years old, probably the first importation of a Clydesdale horse to this country, a horse that was the wonder and admiration of his day, and left a lasting impression on the horse stock of this country. Later, he, Thompson, travelled the counties of York and Peel with the imported English Coach horse, Grand Exhibition, a prizewinner at the International Exhibition at Paris in 1855. After this he struck out for himself in the importation of horses, with very disSTOCK.

The Camera as an Educator in Animal Form.

BY J. M'CAIG.

In the study of live stock, lessons are given in the judging of animals, and stock-judging contests are an attractive feature of agricultural exhibitions. The practice is one that might be profitably adopted more generally.

There is no greater aid in late times to the making of ideas, objective and real, than the camera, and the advances made in the art in late years have been wonderfully rapid and telling. This is manifest, above all, by a comparison of the lifelike pictures of animals in modern journals and stock-books with those in books and papers of twenty-five or thirty years ago. The atter, of course, are from plates that have been made from drawings, and cannot be as true as actual photographs. But it appears as though the artist had not been allowed to do his work freely and truly, for the pictures are mere caricatures. The lines are stiff and the figures are full of exaggerations, which have been probably prompted by the wishes of the owners of the ani-

There are many features of photography which make it a valuable supplemental means of instruction in live stock. It is especially so if the student of stock himself manipulates the camera. It is the study of the photographer of his own stock to place the subject in an advanta-

geous position with respect to his strong features. A strong front may be well brought out by placing the animal in a good position to this emphasize Similarly, point. a good side or rear effect may be studied in the same way. The heightening of effect with respect to any of these properties involves concentrated attention to the excellencies presented, and so brings the observer to a realization of the particular excellencies. good general effect is likewise sometimes sought with the same profit to the eye. In short, the study of the best presentation of an animal to the camera means an instruction in both general and analytic judgment, and both methods must be combined to incorporate in the mind a hody of complete and accurate knowledge and appreci ation of correct ani-

mal form. The presentation of figures on a flat surface, such as a leaf of paper, has some advantages over the study of an actual animal, for it brings out general lines which are lost sight of in the attention one pays to individual features when one is right beside an animal. It cannot be said, on the other hand, that turns and curves of the body are lost sight of, for in a good picture these are brought out by light and shade.

Though a photographer may seek to bring out good features, there is no fraud in the work, for the camera presents exactly what is before it. There is nothing in the picture that is not in the reality. By the camera, the instruction to be got from the study of exhibition animals is made the common property of agricultural readers, and is handed down to posterity to suggest either imitation or improvement in the ideal of the observer and breeder.

Another Warning.

Alfred McDougal, a trusted employee of the Ontario Government, being solicitor in the treasury department, was arrested on Nov. 6th, charged with embezzlement of money received for succession duties. His stealings are said to have gone on since 1892, and to have amounted to at least \$35,000. Speculating in the Toronto and New York stock markets is believed to have led to his ruin. It is another shocking example of the results of the mad race for money.

the heavy classes this is seldom done now. Some years ago prizes were given for generalpurpose and agricultural stallions, but these have been cut out of most, if not all, prize lists. In light horses this is not the case. There is usually a class for "carriage stallions" where breed is not mentioned. In this class we see the produce of the several breeds, viz., Thoroughbred, Standard-bred, road horse, Hackney, and the various breeds of coach horses. The dams of these horses are, in most cases, of impure breeding. We admit that sires of all breeds mentioned are capable of producing high-class carriage horses if intelligently mated, and the fact is patent that all our horses of this class are sired by these stallions, but at the same time we claim that a horse bred in this way, while he may be a typical carriage horse himself, has not the purity of breeding that is desirable in a sire. He, being of impure breeding, when mated with a mare of mixed blood will probably produce a

maintain that a pony is a pony and not a small

1 do not consider it wise for any society to make

classes for stallions that are not pure-bred. In

Another point that I would like to refer to is,

the produce of one of these carriage stallions a winner in good company. Hence, I think it would be wise for exhibitions to exclude from the prize list all stallions of cross or mixed breed-The work of the judge or judges in the ring also has more or less influence upon the breeder. In order that justice may be done to exhibitors,

nondescript. This is not a fancy, observation

proves it to be a fact. It is seldom that we see

and instruction given to the public, it is necessary that those who are judging be men of ability. They should be thoroughly conversant with the desirable characteristics of the different breeds and classes, and their work should be consistent in order that exhibitors and spectators may see what the market requires in horses of specific classes. If a breeder or prospective breeder has a definite idea of what he wants to produce, he has learned the first lesson of a successful breeder, and if he be not already informed on this point, the show-ring should be the place for him to acquire the knowledge. When the prize list is properly prepared the competent judge is in a position to do consistent work, but where such

classes as have been cited exist, his work must, of necessity, be confusing.

Another Horse Show.

At a meeting of the directors of the Camadian Horse Breeders' Association, held in the Palmer House, Toronto, on Nov. 3rd, the question of holding a stallion show early in February was taken up and discussed in the presence of representatives from the Hackney, Shire and Clydesdale Associations. It was pointed out that the spring show annually held in Toronto, came too late in the season for purchasers to secure stallions for the spring season. If the best interests of breeders and importers in this country was to be furthered, a show must be held much earlier. Prospective buyers from the Northwest would come down, if reduced railway rates could be arranged, and there was no reason why a successful exhibition might not be carried on. It was finally agreed to take definite steps, and a definite date early in the month mentioned will see the first winter stallion show One thousand dollars was forthwith set apart by the Canadian Association, and at a subsequent meeting of the Clydesdale directors five

hundred more was added. It was decided that nothing but stallions be shown, and these only of the heavy draft classes. There is, hence, no reason why it should in any way injure the annual spring event. The place for holding the show has not yet been decided, but some have suggested Grand's Repository as a suitable place. However, this will be settled later. The main thing to horsemen is that there is going to be a show, and the Canadian Association mean to make it a success. A fuller report of the meeting will be found on another page in

Highly Appreciated.

To the Editor "Farmer's Advocate"

I wish to say that I have been very much interested in your issue of October 15th. That number was certainly a very creditable one. The "Scottish Letter," "The Doddie at Home," "If You Knew," "If Mother Would Listen," "What is it All?" "Travelling Notes," etc., were notable road articles. I was a supposed to the constant of bly good articles. I wish to express appreciation of your periodical, which is always perused with THOS. McFARLANE,

Sec'y American Aberdeen-Angus Breeders

Illinois, Oct. 25th, 1902.

With the comfortable surplus of \$3,000 on hand, the Western Fair management are already planning improvements for the show of 1903.



Two-year-old Clydesdale stallion. Winner of second prize, Toronto Exhibition, 1902. IMPORTED AND EXHIBITED BY DALGETY BROS., LONDON, ONT.

couraging results, for a time, his purchases on several occasions, owing to the imperfect facilities for shipping in those days, finding a grave in the bottom of the sea, while the enterprising importer returned with only a bridle and a blanket to show for heavy outlays. But with indomitable pluck he tried again and again, till he succeeded in landing Loudoun Tom [127], a horse of splendid breeding and quality, who helped the heroic importer to square himself with the world. When this horse died, Thompson tried again and landed Netherby [126], who proved a fortune-builder for his importer, attracting a very large patronage by his superior individuality and prepotency, his progeny being much sought after and selling for the highest prices. Other horses of note imported later by Mr. Thompson were Annandale [513], Stirling [204], Glancer [197], Hercules [236], and Thistleford [279]. A proud day in the history of our hero was that at the Dominion Exhibition at Ottawa, in 1879, when he received from the hand of Her Royal Highness the Princess Louise, the sweepstakes medal for best horse in the Clydesdale class. Soon after this, feeling the weight of years coming upon him, he retired from husiness and settled down in his quiet home, in the Village of Columbus, where, in comfort, his desire to look into the twentieth century was gratified and he passed away in the enjoyment of the friendship and sympathy of a wide circle of friends.

Flock Notes.

Now is the time, before winter sets in, to treat the sheep for the eradication of ticks. It will pay well for doing, whether it appears to be necessary or not. It will pay in the assured health and thrift of the flock, and in the increased growth and weight of wool and mutton. If neglected now, the result may be a shabbylooking and emaciated flock before spring. It doesn't pay to feed these blood-suckers, and while they are at work more food will be required to keep up the condition of the flock. The operation of pouring from a coffee pot a solution of one of the advertised sheep dips is easily practicable at any time in December, and if carefully performed may be made quite effectual. To make rapid progress in the work, three men or hoys are required. One to hold the sheep, one to part the wool, and one to pour the liquid, which should be kept and applied warm, as it will run more freely over the skin in that condition and prove most effectual. The sheep is first set upon its rump, the wool parted at intervals of four or five inches on neck and belly, then turning first on one side, then on the other, opening the wool in streaks, and pouring in enough of the dip to run along the skin, covering the spaces between the openings, lastly standing the sheep on its feet, open the wool the entire length of the back, from tail to forelock, and pour in freely of the liquid, which will thus cover all the surface of the skin. As a rule, one quart of the liquid is sufficient for an ordinary-sized sheep, but if more is required to make the operation thorough, it should not be grudged. It is well, before commencing this operation, to prepare for it by first, with the shears, squaring the tails of the sheep and clipping away any dirt that may have accumulated.

It is well to avoid too sudden a change from succulent to dry food when sheep are taken into winter quarters. If roots are not available, let the sheep run out by day on the pastures. Indeed, this is good practice for the in-lamb ewe flock at any time in winter when fields are bare of snow. It may not be good for the pasture, but some field that is to be plowed in spring may be thus utilized. Exercise is essential to the production of strong, healthy lambs.

It is well to make sure that the ram in use is proving sure. If the indications are that he is not, it may be better to make a change before it is too late. It sometimes happens that a ram that is not sure at the beginning of the season is more sure later on, but if a considerable proportion of the ewes return the third time it is time for a change.

In all well-managed flocks, the breeding ewes and the last-spring lambs are kept in separate lots, and the latter more liberally fed. If there are a few aged ewes that require better feeding than the younger ones, these may be fed with the lambs, but there is no profit, as a rule, in keeping ewes that are over five years old or whose teeth have failed them. Salt should be kept in a box in the sheep pen at all times, so that they may take it at will.

Quality

Quality is a word much used in reference to live stock, and yet, perhaps, not very fully understood. Many men know well what they understand by quality, but would be at a loss to define it in words. Prof. Mumford, in a bulletin recently issued from the Illinois Experiment Station, gives the following definition, which is worthy of careful study:

"Quality may be considered, first as a general quality, and second as a quality of flesh and condition of the animal. General quality in the fat steer is indicated by a medium-sized, fine, clean-cut, breedy-featured head, bearing ears of moderate size and texture; short legs, with clean, fine bone; a fine, nicely tapering tail; fine hair; a pliable skin of medium thickness; and

smooth, well-rounded outlines. "The quality of beef depends largely upon the condition of the animal. By condition we refer to the degree of fatness of a bullock. It should not be assumed, however, that the highest quality of beef is found in the fattest beast. There are three principal reasons for fattening a steer. First, in order that, when dressed, there will not be a high percentage of offal and other waste, as a fat animal, other things being equal. will dress a higher percentage of carcass than a half-fat or thin one; and, furthermore, in the fat animal the proportion of those parts which from their very nature are unsalable is reduced to the minimum. Second, in order that the flesh or lean meat shall be rendered more tender, juicy and of better flavor by the deposition of fat through its substance. Third, in order to permit of proper ripening of the meat, as a thin carcass, being full of moisture and lacking the protection of a covering of fat, will rot before it will ripen."

Finishing Hogs for Market.

During the fall and early winter, when the marketable supply of hogs is increasing, and the price in consequence on the decline, many are induced to market their hogs before the most desirable weight has been reached. The outcome of this is the weekly cry from packers that too many light ones are coming forward, and the trade, as a result, is the sufferer, if not the feeder himself. On the other hand, some will continue feeding when the price is at a low ebb, hoping for an advance, until their stock is classed overweight. Both these conditions must be regarded as extremes, and those who are making the most money from hog-raising are not the men who pursue such practices.

In the matter of feed, the quality and character must depend largely on the condition of the hogs. If they be strong in bone and comparatively lean, it will pay to have a ration high in fattening elements, such as barley or corn, but where they have become rather fat before reaching the desired weight, oats, shorts and bran, with roots, should constitute the bulk of the food. Usually, the quantity of roots or green feed given may be diminished during the finishing period. Exercise, too, is not necessary at this time, unless where the animals are too fat. The principal factors to be borne in mind are: feed to suit the condition; keep pens clean, and market when 160 to 200 lbs. in weight.

Hog Cholera Germ.

In the official instructions which have lately been issued from Ottawa, regarding hog cholera, the following is noted:

The bacilli of hog cholera will live in water



LAVENDER 11394, IMP.

Clydesdale stallion, two years old; sired by Glanzier 10353, by Mains of Airies.

IMPORTED AND OWNED BY SMITH & RICHARDSON, COLUMBUS, ONT.

from two to four months, and in manure for an indefinite period, varying according to the season. During the prevalence of this disease, the manure should be carefully collected from the piggeries, and at once mixed with newly-slaked lime, and removed in water-tight wagon boxes to an inclosed yard, to which none of the animals on the farm have access. This is the more necessary on account of the impossibility of disinfecting a barnyard or manure pile during hot weather, or so long as frost lasts. When used, it should be plowed in, not spread as a top dressing. Avoid the careless custom of throwing it into common piles in the barnyard, over which all classes of stock root and trample it down, for this is one of the means by which the disease is perpetuated and extended. There is no other contagious disease of domestic animals that requires for its eradication so much persistent co-operation between the owners and the Government veterinary inspectors.

Hog Cholera Treatment.

To the Editor "Farrer's Advocate":

Sir,—In dealing with hog cholera the only thing required is that hogs that have been exposed to cholera, and are not sick, be placed under quarantine till the State Board of Live Stock Commissioners see fit to release them from quarantine. But exposed hogs are not condemned. Any person taking diseased hogs about or violating quarantine laws is subject to a

severe penalty.

I know of no treatment that will cure the disease. The liberal use of germicide about the pens, and keeping the yards clean, I regard as the only satisfactory method of keeping down the trouble. Personally, although I have had charge of swine for years, I have never suffered from the herd being afflicted with cholera.

C. S. PLUMB,
Professor of Animal Husbandry.
Ohio College of Agriculture.

Raising Pigs.

An important point in successful pig-raising is involved in arranging the breeding operations so as to have the pigs born at the best seasons in order to their steady growth and development. It will be generally agreed that pigs born in the early spring months, as a rule, do best, owing to comfortable weather and the opportunity for healthful exercise, a bite of fresh grass and access to the grit which they find in the ground and which their nature seems to demand. But we cannot, in these times of a steady demand the year 'round for pigs at good prices, be content with spring pigs only or with one litter in the year from each sow.

Experience has taught that in order to their best growth, fall litters should be born in September, while the weather conditions are such that they can be given abundant exercise while young, in order to promote the growth of bone and muscle and lay the foundation of a strong constitution which will carry them safely through the winter months, when confinement to close quarters is in many instances inevitable, and in most cases a necessary condition.

Allowing four months as, in round numbers, the period of gestation in sows, they should, for early April pigs, be bred in early December, and for September pigs, the mating should be in May. Allowing six weeks as the period of nursing, if the sows are to produce two litters in the year—one in April and the other in September—it will be clear that the first must come as near the first of April as possible, and where favorable weather conditions generally prevail in March, and suitable quarters are available, it may be better to have the spring litter arrive in that month, which leaves time to have the second litter come early in September, and the earlier in that month the better

The strength and vitality of the litter at birth will depend very much upon the treatment of the dam during the term of pregnancy. Ample exercise, and a variety of food, in which roots, oats and bran are included, will go far towards keeping her in the best condition. A sow fed heavily with rich or sloppy food, and confined in a pen without exercise, is liable to produce soft, flabby, helpless pigs, which, in many instances, are born but to die in a few hours, and prove a total loss. A good plan to induce exercise on the part of the sow is to scatter grain on the ground, so that she must work for what she gets.

A couple of weeks before the time she will be due to farrow, the sow should be given a comfortable pen to herself, that she may get well used to her surroundings, but may be let out for exercise on fine days. She should be lightly fed at this time, and with food having a loosening effect on the bowels. It is well, also, to accustom her to being handled in order that she may be quiet in case of difficulty in parturition. Ordinarily, if the pigs come strong and able to help themselves, no assistance is needed at farrowing time, and in that case, the less interference, as a rule, the better. But if the pigs are weak and the sow restless, it may be well to place them where they can receive nourishment, or to rub them dry and place in a basket until all are born, when, by rubbing the udder, the sow may be quieted and the piglings placed at the milkfountain. No feed will be required by the sow for the first twelve hours after farrowing and then only a drink of warm swill. The feeding for the first few days should be light, and may be gradually increased in quantity and richness until she is on full feed, which should be of a sloppy nature, and will be needed as the requirements of the litter increase. At the age of three weeks, the pigs will learn to take feed in the form of milk, which should be warmed and fed a little at a time, in a low, flat trough, protected from the sow by means of a partition under which the pigs can pass. Before weaning, a little sifted oatmeal and bran may be added to the milk, and at six weeks old the pigs may be safely weaned, though if the time for again breeding the sow allow, they will be all the better for her help till they are eight weeks old. From this time, milk will be found, by all odds, the best food as the bulk of their supply, with the addition of shorts, ground oats, barley, wheat, or, better, a mixture of these. When the milk supply proves insufficient for the demand, the next best thing is kitchen swill, and whenever practicable, a run on grass or a supply of roots is essential in the growing stage, and richer and more concentrated food in the finishing period.

Live Stock Interests Helped.

Success to the "Farmer's Advocate." It has done more for pure-bred stock than all the other farm papers combined. Your editorials are just splendid. I do not know how you can produce such a paper for the small sum of \$1.00. I will do all in my power to advance your interests in this section of Quebec.

ANDREW GILMORE. Huntingdon Co., Quebec, Oct. 27, 1902.

Shepherds' Dog Trials.

Keen interest is still taken by Scottish people in the annual trials of collie dogs in handling sheep under trying circumstances, as indicated by the following extract from a report in the Scottish Farmer, of the New Cumnock trial last month, at which 25 dogs were entered for competition, and 800 people witnessed the trial, about three-fourths of which were men of the "crook and plaid."

The spectators were stationed on one side of the glen, the trials taking place on the other, a hill burn running between. The competing shepherd was placed well in towards the level of the burn, and four sheep were liberated from a pen towards the head of the burn, on the opposite side. These sheep had to be brought along on the "bune" side of two single poles, through between two sets of poles, turned to the left, then brought across the burn between two more poles, and up past the shepherd, passing between yet other two poles, and thereafter "shed." was made about nine o'clock, and the whole of the twenty-five competitors had done their work by half-past two in the afternoon. Then the public favorites for first place were Buff, a black dog, belonging to Mr. M'Morran, Kerroch, Dalry, and Mr. B. Murray's Ken, from Minnygrill, Moniaive. Other two dogs, however, had five marks in the judge's books, and these were Gip, belonging to Mr. A. Murray, Glenochar, Abington, and Sam, a black and tan bearded collie, belonging to Mr J. Paterson, Meiklehill, New Cumnock. After luncheon, these four had another trial, but on this occasion three sheep were let out, and these were brought half-way, after which other two sheep were released. The dog had to be sent back for these two, leaving the first three, and after getting the five together, bring them to the shepherd. Gip was first put on trial. She tried the patience of the spectators a bit by her leisurely way of going out, but she did work when she got out. She missed two of the poles, however, which took four points off her record. Buff was next run, and made a splendid show. He had got his three sheep half-way and had gone back for the two, but in the interval the first three had got some distance up the hill. In getting the five together, he put in some really splendid work, and vas favored with a cheer when he got them through the last poles without having made a mistake. Sam was next tried, but missed one set of poles, thus losing two points. Then Ken was put on his mettle, and came out with flying colors. He had exactly the same difficulty to get over in collecting his five as Buff had, but succeeded in getting them all through without making one mistake. Sam and Gip were now relegated to third and fourth places respectively, but Buff and Ken were still equal in marks. The general trend of opinion at this time was to award the prize to Ken, whose obedience to orders and gentle, intelligent way of handling the sheep marked him out for special favor. The judges, however, thought it better to still have another trial of the two dogs. On this occasion, Buff missed the first two poles, and though he gave a splendid display afterwards, Ken, when his turn came, managed without a mistake. His last performance was a marvellous piece of work, and thoroughly deserved the hearty applause.

Another Charge Against Dogs.

n.d

n-

he

he

at-

at

d,

) W

ill

1k

he

re

mt

en

SS

ng

er

Ist

ce

ill

Hog cholera, it is said, has cost Iowa and South Dakota, in times past, as much as \$30,000,000 a year. In support of his idea that hog cholera is communicated by hogs, Dr. S. A. Brown says:

"My own investigation has shown me that the disease is almost invariably spread by dogs. The farmer who has no dogs is a rarity, but there is one here and there, and he has no cholera among his hogs. It is well known that whenever a dog finds a carcass, he rolls upon it so as to get the carrion into his hair. What he does it for is unknown to the writer. He goes home with every hair of his body charged with whatever is contagious after the death of the animal, and so persistent as to at times for two years. Let one hog die of cholera, and every dog within a radius of many miles will find the carcass and load himself with infection. Dogs often travel with a female great distances, being away from home days at a time. They have great opportunities to find and carry disease. When they are at home, their constant delight is to worry and nag the swine.'

Winter Fattening Lambs.

The indications at present are that this season's lambs carried on and fitted for sale about February will bring good money. They should be separated from the ewes, be dipped for ticks, allowed room for exercise, and when the grass fails, be given a fair allowance of roots. Feed grain very lightly on the start, and at the heaviest not more than half a pound daily of oats and barley or oats and peas.

Sheep and Dogs Again.

To the Editor "Farmer's Advocate":

While you have already published quite a few articles on sheep and dogs, which contained many good ideas, I feel there is still room for more. At present, there are sheep inspectors appointed in each township to value sheep said to be destroyed by dogs, also to vouch for the fact that they have been destroyed by dogs. When this bylaws has been passed by the council, the sheepowner is paid two-thirds the value of his sheep. Now, I think the owner should be paid in full the value of his sheep, and in order to do this, every dog in town and country should be taxed. Let the dog tax be raised or lowered according to the death rate of sheep. When a lot of sheep are killed, raise the dog tax. When there are not so many killed, lower the tax just the same as any other rate. Even the man that has his sheep worried will be at loss enough by the ill-effect on the thrift of his flock. While I have never rost any sheep by dogs, I don't know how soon my turn may come. One of my nearest neighbors lost seventeen of his flock one night this summer, and was paid only two-thirds their value. By doing it the way I have suggested, the dog owner and the sheep owner wiil be on friendlier terms. No man likes to see or know that his dog is shot down on suspicion, or because he has no tag on.

Lambton Co., Ont. A. G. SPARLING

however, I believe to be a mistake, for as age adadvances, they develop the catapult tactics of the mulley, and although less harmful when amongst themselves, are equally dangerous when directed against the owner. For captious indeed would be the critic who would discriminate be-tween being hooked to death or butted Animals may be dehorned at to death. any age, but the older they are the less favorable the results. I think the proper time is when the animal is about two years of age. At that time, it has learned to depend wholly on its horns as weapons of defence, and if deprived of them at this age, will be, no doubt, as harmless and docile as a sheep. Either the clipper or ordinary jointing saw may be used to perform the operation with perfect satisfaction. Animals may be dehorned any time, except in fly time or when the mercury has dropped below zero. Cold water is the only dressing needed.

W. D. MACCORMACK.

Addington Co., Ont.

Co., Ont. Veterinary Surgeon.

The Western Fair.

To the Editor "Farmer's Advocate":

Sir,—I have read with deep interest your article and the letters appearing in the "Advocate" regarding the management, or mismanagement, in certain lines at the Western Fair this fall.

Personally, I have many pleasant memories of the courtesy of the secretary, Mr. Nelles, and others in the office with whom I came in contact as an exhibitor of stock, and for several

reasons like to attend and exhibit at the London fair, but, as has been pointed out, there draware several backs which, if not remedied, can scarcely fail prove serious hindrances to the great possible progress of the said fair. In order to win the greatest success, exhibitors and visitors must be dealt with by boards of directors and officials generally in such ways as will put and keep themthe visitors-in the best of humor. And here I would ask if coating over pens and stalls and ringside railings with which whitewash, was so unwillingly carried off on gowns and mantles, tweeds and broadcloths, to the lasting detriment of the goods. can possibly prove



SOUTHDOWN SHEARLING EWE.

First prize at Ottawa, Toronto and London Exhibitions, 1902.

PROPERTY OF MR. F. E. CAME, CHAMCOOK STOCK FARM, ST. ANDREWS, NEW BRUNSWICK.

Dehorning of Cattle.

In this and other countries, for some years past, a heated controversy has, from time to time, been carried on, not only as to the advisability of dehorning, but also to the propriety of the proceeding. The advocates of the wholesale removal of horns, in many cases, exaggerate alike the necessity and the advantages occurring from the practice. On the other hand, their opponents are backed by the ultra humanitarian, who stigmatizes the operation as barbarous, or worse, and detect in the procedure grave cruelty to animals. Justly, then, does the operation amount to cruelty? I answer distinctly, it does not. Cruelty to animals may be defined as the infliction of unnecessary pain. Now, the operation of dehorning causes pain, as all surgical operations do, but it is not by any means more painful than many other operations to which we subject certain animals without a single thought. Moreover, the pain is slight, and, as a matter of fact, pales into insignificance before the severe and lasting torture inflicted as a matter of everyday occurrence by animals upon each other when allowed to wear their weapons of offence. As our cattle in the near future, by exportation, are liable to make more lengthened journeys by land and sea, the wholesale removal of horns will not only lessen the owner's risk, but add to the material comfort of the animals themselves. Some advocate the removal of horns by caustic while the animals are only two or three days old, with the object of having what is termed a mulley. This,

a drawing card to the fair at London? Nor will stock attendants carry kindly feelings towards that "white trash" which so provokingly fastened itself on trimmed fleece and polished bristles, on black skins and red skins, and so "disinfected" the uniforms as to make them look like Jacob's flock of the long ago. And the sleeping accommodation for stockmen is as had as it could be possibly made in such a good building. This a pity to find so excellent a stock barn so badly laid out as the end given the sheep exhibits is, with the fittings and fixtures so out-of-date and behind the times.

The widespread annoyance caused by the Sunday pass arrangement did not cast oil on the troubled waters, but this rather added fuel to flame, and righteous indignation resulted. Surely a better scheme can be easily devised.

The Western Fair, with its splendid situation, convenient to city, and surrounded by so excellent a country, and having an ideal park for exhibition purposes, is bound to grow and prosper, but that growth and progress is certain to be in proportion to the closeness of touch between exhibitors and management, and we may add, visitors. The board of management can make or mar by studying the necessities and comforts of exhibitors and their exhibits on the one hand, or indifferently and steadfastly ignoring them on the other.

JOHN CAMPBELL.

Victoria Co., Ont.

Bear in mind, when feeding young and growing animals, that foods capable of producing muscle and bone are essential. If these be not provided profitable gain cannot take place. Feed to a purpose and you will be rewarded.

Sheep Breeding.

At the Wisconsin Experiment Station a series of investigations with sheep have been carried on for a number of years, and the following summary of results, which has been recently handed out in bulletin form, should be read with interest by sheep breeders:

1. From the breeding records of 514 ewes at this station, we conclude that, for such animals and conditions as ours, the normal period of gestation ranges from 144 to 150 days after the date of service, and that more ewes will lamb 146 days after service than at any other time.

2. There is no appreciable difference in the period of gestation for male and female offspring in sheep.

3. There is an apparent relation between the duration of the period of gestation and the period required for reaching maturity. Quick maturing breeds appear to carry their young for a shorter period than those breeds requiring more time to mature.

4. Large lambs are, on the average, carried in utero for an apparently longer period than small or medium lambs.

5. Lambs dropped before the 144th and after 149th day of pregnancy, are lacking in strength and vitality at birth.

Shropshire ewes were more prolific than any of the other breeds and crosses, except the fourth cross of Shropshire rams on a Merino ewe foundation.

7. From the data presented, it is apparent that twins are the normal increase for ewes of the mutton type.

8. One-year-old rams are not so prolific as those two or three years old. Ewes also average a larger percentage of increase in lambs after they reach full maturity at three years of age until after they are six years old, when the rate of increase diminishes.

9. The amount of service required of the ram for breeding has an influence on the percentage increase in offspring of the ewes that produce lambs. Ewes bred early in the season of mating, to a single ram, dropped a larger percentage of lambs than those near the latter end of the season.

FARM.

Two and Four Cuttings of Alfalfa.

BY FRANK T. SHUTT, M. A., F. I. C., CHEMIST, DOMINION EXPERIMENTAL FARMS.

In the issue of the "Farmer's Advocate" for October 15th, the writer presented the results of an investigation with clover, undertaken to ascertain the nutritive and fertilizing values of the yield of the crop cut twice during the season compared with that obtained when cut four times. We now give the data from a similar experiment with alfalfa.

Though for many years alfalfa, or lucerne, has been largely grown in the far Western States, and more particularly in California, Utah and Colorado. It is only within recent years that this important and valuable fodder plant has received much attention in Canada. In the irrigated districts of the West it may be cut four to six times in a season, yielding eight to fourteen tons of fodder having a high protein content, and consequently of excellent feeding quality. Experience in the Eastern States and Eastern Canada, though somewhat limited as yet, shows it to be a forage crop of wide adaptability. In many parts of the Dominion it is undoubtedly capable of producing lucrative yields when once established. On account of the readiness with which the leaves drop off in the curing, this plant is more suitable for "soiling" purposes than for making into hay, though, by observing certain precautions, this stripping of the stems can be very largely prevented. Its property of quickly sending up an aftermath, also, makes alfalfa a valuable forage crop. We have already referred to the large number of times it may be cut in a season. As a cover crop for orchards, it has at Ottawa given excellent results, holding the snow and thus protecting the roots of the trees, and at the same time greatly enriching the soil in nitrogen and humus.

The plot of our experiment was sown in May of the previous year, so that the present results indicate returns from the second season's growth. Half the plot was cut twice, half mown four times, and the several yields weighed and analyzed.

TABLE I. ALFALFA.

	AVerage	Two	Two Cuttings per Acre.	cre.	Four	Four Cuttings per Acre.	cre.
Outting.	Height of Plants.	Weight of Crop.	Dry Matter.	Crude Protein,	Weight of Crop.	Dry Matter.	Crude Protein.
	Inches.	Tons. Lbs.	Tons. Lbs.	Lbs.	Tons, Lbs.	Tons. Lbs.	Lbs.
June 4	+30	12 1600	3	1027			
July 15	128				4 960	1 438	368
Aug. 1	\$20	4 320	1 445	384			
Aug. 19	120				5 1120	1 329	473
Sept. 18	120				2 1760	1168	295
Total		16 1920	4 742	1411	19 760	4 545	1658
* About on	e week befo	re blooming.	About one week before blooming. + Just bursting into bloom.	1.0	; About half the plants in bloom.	s in bloom. § A	bout one-tenth

The yield of fresh material is seen to be greater from the area cut four times, but owing to the fact that its average moisture content was higher by about five per cent., the yield of the two cuttings contains more dry matter. The dry matter of the former (four cuttings), however, furnished the more nutritive fodder, from the presence of an additional 250 lbs. of crude protein.

A comparison of the amounts of dry matter and albuminoids per ton of fresh material in the various cuttings—possibly the most interesting features in the investigation—is given in the following table:

TABLE II.

DRY MATTER AND ALBUMINOIDS PER TON IN

FRESH MAIRMAL		
	Dry Matter. Lbs.	Albumi noids. Lbs.
Half of plot cut twice— First cutting (June 21) Second cutting (Aug. 1)	492 588	49 63
Half of plot cut four times— First cutting (June 4) Second cutting (July 15) Third cutting (Aug. 19) Fourth cutting (Sept. 18)	404 544 419 405	46 66 60 70

The percentage of albuminoids in the dry matter was also determined:

matter was also determined:	
TABLE III. ALBUMINOIDS.	
That of process care	Percentag
First cutting (June 21). Second cutting (Aug. 1).	10.0
Half of plot cut four times— First cutting (June 4)	. 11.3
Second cutting (July 15) Third cutting (Aug. 19)	. 12.2
Fourth cutting (Sept. 18)	

From the data of Tables II. and III. it will be seen that the stage of growth influences both the amount of dry matter and the proportion of albuminoids in the dry matter. The later cuttings, weight for weight, will, as a rule, contain more dry matter, and invariably furnish a fodder richer in albuminoids.

Carnegie's Address.

Please inform me in the "Advocate," the address of Andrew Carnegie. W. W. Dufferin Co., Ont.

Ans.—Letters sent to Carnegie Institute, New York City, would probably reach him.

Wanted: Help on the Farm.

To the Editor "Farmer's Advocate":

One of the chief hindrance to success which many of our farmers have to contend with is the inability to obtain competent help on the farm. During the busy seasons, when the farmer is almost hurried to death with work, it is almost impossible to find a man worth having who is willing to hire, either by the day or month. Wages have gone away up lately. If by chance a farmer does happen to find a man or boy who is willing to hire, he has to pay such exorbitant wages that it takes a great deal of the income. Then, in nine cases out of ten, the man is lazy or untrustworthy. He will do very little work when alone. His employer needs to work with him all the time and keep pushing him on, as it were. The average hired man is far more interested in wondering if it is near meal time and longing for pay day to arrive quickly than he is in doing the work satisfactorily. As long as he puts in his time he is satisfied. When he is told to do a job, he either neglects to do it at all or fails to do it properly, unless his boss is watching him. During the summer season many men in this Province are engaged in fishing. As this is easy work, they prefer it to hiring out to work on a farm. Then, many of our most progressive, ambitious young men leave the Island. In many instances they receive no money for their services at home, merely their board and clothing. They are dissatisfied and leave the old homestead. It certainly would be better for the fathers to make satisfactory arrangements with the boys rather than let them leave home. The boys are needed at home. Far better, surely, for the fathers to pay them wages than pay strangers who take no interest in the work. Some folks are afraid that if this exodus continues much of the land will be left uncultivated.

Early marriages have of late years become very infrequent. As a natural consequence, small families are the rule. Some have one or two children, and others have none. Our land is fertile, and the climate healthful. We have excellent crops—no scarcity of food and clothing—but yet there is in this, our favored Isle, a remarkable scarcity of children, especially boys.

Now, what is the cause of this state of affairs? There is no doubt but that much of the blame rests on the shoulders of the young women. Many of them know little or nothing about house-keeping. They have some accomplishments, of course. They can play the piano and organ, but they can't or won't cook a dinner or milk a cow. They know all about the latest styles, and just love to go shopping, but they can't or won't bake a loaf of good bread or mend their own stockings. "O, mother can do those things," they say. They don't want to marry, for they are afraid they might have to work, and they just hate work. They have never been taught to work.

The young men take notice of their stylish dress and manner and conclude that they can't afford to marry at present. They think it would be an unwise proceeding. Certainly it would be unwise to marry a butterfly of fashion, for she would be likely to spend the money as fast as her husband can earn it.

Now, I would advise every young farmer to marry early, providing he can get a good, smart, who isn't afraid or ashamed to rel up her sleeves and go to work-one who can milk the cow or harness a horse, and who will not think herself above feeding the pigs occasionally, should her husband happen to be absent from home. One who has courage enough to take the horse and drive to market with the eggs, butter, chickens or vegetables. Marry a farmer's daughter. Why, some one asks? Because she will be likely to prove the most suitable wife for a farmer. One who has been reared on the farm will understand the work better and is more accustomed to roughing it (as it were) than the city girl. Now, young man, isn't there a nice little girl living just across the road? Smart, too, isn't she? Just drop in and see her one of these evenings. Keep your eye open. Make a wise choice. Don't be too particular about beauty of face and form: it is the beauty of soul and character that will stand the test. Select one who has a wise mother, who has taught her to work so that she may be a brave, true helpmate for her husband. Now, don't waste your time, young man. Pop the question-take this common-sense girl into partnership as soon as possible. Furnish your home plainly; only buy what you can pay for cash down, if you want to keep out of trouble. Be economical; lay by something for a rainy day, for you know rainy days come, sooner or later. Be industrious; if you want to get rich you must use your brains, and hustle too. Keep your work ahead; never procrastinate. Be good to your smart little wife, and try to lighten her burden as much as possible. Encourage her by kind words. Take her for a drive sometimes for a change, and don't forget to give her a little change of another kind so that she may purchase



THE HOME OF ALEX, McVICAR, OTTERBURNE, MAN.

any little article she needs. If you are fortunate be used, the process is quite different from boilenough to have a large family, you should rejoice. Plenty of boys and girls to help you is what you need on the farm. If they happen to arrive in pairs, so much the better. In a few years' time the little men will be able to do many odd jots around the farm.

Stay on the farm, young man. If you manage right you may soon become a rich man. Subscribe for some good agricultural journals, and study them carefully during these long evenings. Then carry your added knowledge into practice. Up-to-date farming pays. Courage and perseverance lead to success. MRS. ANNIE RODD. ance lead to success. P. E. Island.

What We Should Eat.

At a recent meeting of the Household Economic Association, Mrs. Corey gave a paper on albuminous foods. She defined a perfect food as one which supplied to the body, in proper proportion, all elements which its tissues, solids and fluids required. Every active tissue in plant and animal requires nitrogen. Plants alone have the power to absorb nitrogen, and so from these plants, and from the animals that live on them, we get our supply.

n.

10

ut

еу

be

he

as

n-

gs,

nı-

he

ice

of

8.

ut

ect

her

lp-

as

to

by

nat

us-

use

ork

our

ind

ase

Foolds which contain nitrogen were called proteids, the word proteid meaning, "I take first rank." The chief proteid foods have the albuminoids found in milk, eggs, gluten of wheat, and in vegetables. In speaking of milk, the interesting information was elicted that the scum forming on the top of boiling milk was very nutritious and should not be thrown away. It consisted of lact albumen, coagulated by the heat, a thin skin of altered casein and some entangled

Cheese is remarkable as presenting a large amount of nutrient in a small bulk, one pound of cheese containing as much nitrogenous food as two pounds of meat, and as much fat as three.

The second albuminous food on the list is the white of eggs, on the subject of which we get some interesting information. "The beaten white encloses air in small bubbles ; the heat of cooking expands the air and makes the walls of the air bubbles firm, hence their power of leavening or causing cakes to rise." Hard-boiled eggs are the most indigestible albumen known.

Thirdly, the gluten or albumen in wheat came in for its share of notice. "Fill a bag with wheaten flour and knead it under nunning water, the starch of the flour will all be washed away as a milky stream, while the gluten remains in the bag as a stringy, sticky, yellowish mass. In the desire to obtain a fine white flour, all the gluten is removed, leaving nothing but starch. In baking, this gluten coagulates, very much as the white of an egg does in boiling.

Fourthly, the writer spoke of the albumen of living muscle or myosm. "In grass," she said, there are the chemical constituents of albumen and fibrin, but even if we were capable of assimilating them, we should be kept half our waking hours eating enough to sustain us, but nature has come to our assistance and perfected a process by which the ox munches the grass at his leisure, and supplies us with the perfect albumen and fibrin, minus the enormous amount of

waste which the grass contains.' The lean of meat has, weight for weight, about five times as much protein as milk; the flesh of fowls, especially wild fowl, has, on an average, more protein than beef, that of fish less. In making beef broth, the hotter the water, the richer would be the broth and the poorer the meat. "In stewing, if the broth and the meat are to

ing; the meat is cut in small pieces, and instead of being quickly plunged into the boiling water, should be put into cold water, in order that the juices may be dissolved; the temperature should be slowly raised until it reaches 180 F., where it should be kept some hours. Treated in this way, the broth would be rich and the meat tender and

Lastly, the legumes were dealt with. "They are deficient in fats," she said, "that is why we combine beans and bacon, green peas and ham. For open-air workers, legumes are equal to meat in their nutritive qualities, a fact worth noting with the present high price in meats. Owing to the fact that they dry very hard, they should be soaked twenty-four hours, after which they should be boiled gently in soft water, since the lime and magnesia in hard water form insoluble compounds with legumes. There is no product in the animal kingdom so nutritious as beans, while the comparative cost is greatly in favor of a leguminous diet."

Riding Plow Commended.

To the Editor "Farmer's Advocate"

Sir,-With pleasure, I would add my words of praise for the "Advocate," as I know it is a first-class farmers' paper, having taken it a long time, and preserved all the numbers, and after years have passed, do frequently resurrect some useful article and make it do duty again, which often proves of more value than when it was first seen. I have never written the "Advocate" anything, and I feel that I am ungrateful in accepting so many good things contributed, and not trying to do something in return. On page 752, Oct. 15th issue, "Farmer" asks why haven't we a good Canadian riding plow. I want to say that we have, perhaps, more than one, but

I am only personally acquainted with one kind. If anyone has a proper conception of what thorough plowing means, and will take the pains to learn how, there is no job of plowing that can't be done in a proper and workmanlike manner with such a plow. I usually plow in the fall, about 8 inches deep, and set the plow to cut about 10 to 11 inches wide, using a 10-inch share and mouldboard, and with three good horses I average two acres per day, in heavy soil. When I bought my first sulky plow (about 20 years ago); I paid \$45.00. I can buy second-hand plows here for \$5 or \$6, that are all right by putting on a new point, and a point will last several years with care. My experience is that a riding plow does the acres with less expenditure of power than any walking plow that I have seen yet. If the "croaker" over the fence does say it looks lazy," crack your whip and go ahead, his say don't make grey hairs, but walking be-

hind the plow does. Elgin Co., Ont.

The McVicar Farm, Otterburne.

In the early eighties, when the Emerson branch of the C. P. R. (then called the Pembina branch), connecting with the Great Northern at St. Vincent, formed the main line of traffic into the country, a few pioneers located here and there along the line in preference to going further west, where at that time there were no railroads. Among these early settlers were several of the McVicar family, coming from the neighborhood of Parkhill, Middlesex County, Ontario. After a careful inspection, a location was made on the south side of the Rat River, just one mile west of Otterburne Station. There being no homestead or railway lands in the district traversed by this branch, when the Canadian Pacific transcontinental line was completed, and the Great Northern adopted as main line, the road through Dakota paralleling the Northern Pacific, the train service was reduced and little attention given to the development of the districts lying east of the Red River.

The faith of the early settlers in the country, however, never abated, and not only did the whole McVicar family move out from Ontario and occupy their farms, but their holdings were from time to time increased by the purchase of select wild lands in the neighborhood. Grain elevators were built by the members of the family and every effort made to develop the resources of the

That their faith was justified is now amply demonstrated by the rapid settlement and the rise in land values. No finer soil is to be founddeep, rich, black clay loam on a clay subsoil, drained by natural coulees, amply supplied with natural hay meadows; the purest of water obtainable by drilling; wood for fuel within easy access; convenient to elevators and within easy driving distance of the City of Winnipeg.

The amount of land actually operated by the McVicars exceeds 750 acres, of which there were this year 300 acres in wheat, 65 in oats, 60 in barley, 30 in flax, 90 in timothy, and 160 acres of summer-fallow. The system of farming followed is, as far as possible, to establish a regular grass rotation, using barley as a cleaning crop. It will be noticed a large area is now in timothy, which grass is preferred to any other. It is seeded along with wheat, six pounds of timothy seed being mixed with every two bushels of bluestoned wheat, and sown with shoe drill. Success has invariably followed this method of grass seeding, except in the event of an exceptionally dry season. The practice of deep seeding is considered distinctly advantageous. Summer-fallowing is only practiced when absolutely necessary to hold the weeds in check, and as far as season conditions permit, one thorough plowing, followed by frequent surface cultivation throughout the season, is the plan aimed at, but, of course, in such rich, heavy soil, modifications are frequently necessary, according to the seasons. All the winter's manure is applied directly to the land, and invariably with beneficial results, provided always that the soil is kept firm, this being absolutely essential, for loose soil in a dry season tends to the evaporation of moisture and crop failure, while in a wet season it results in a rank growth of straw, which is liable to lodge and not to yield well.

The average yields this year have been about as follows: Wheat 28, oats 40 and barley 35.
The farmsteads are abundantly supplied w

with At the main farm, convenient to both house and stables, is a splendid flowing well, which will rise eleven feet above the surface level. The flow is carried direct into a vat, where the creaming cans are set; from that it runs into the watering trough for the stock, and thence by pipes below frost level a short distance into a ravine where the piggery is located. On the farm of Alex. McVicar, the buildings on which are also situated on a coulee bank, is another flowing well from which a continuous stream of pure, cold water rushes at the rate of ten barrels an hour, or a barrel every six minutes. Small herds of Shorthorn grade cattle are kent. Steer feeding has been tried several times, but results have not



THE McVICAR HOMESTEAD, OTTERBURNE, MAN.

been found to justify the labor and expense. Hog feeding is carried on to a limited extent, and

As will be seen by the accompanying illustrations of the farm homes, tree culture has been given very considerable attention; nice native maple groves surround the buildings, and in the shelter of these groves small fruits and ornamentals are being cultivated.

Impurities in Grass and Clover Seed.

In the course of the investigation conducted by the seed laboratory, Department of Agriculture, Ottawa, weed seeds, although found in nearly all the samples of timothy collected in Quebec Province, were not as prevalent as in the clovers. A sample of timothy from St. Johns holds the record for the largest number of weed seeds per pound, with the astounding number of 237,690. Cinquefoil, plantain, sheep sorrel and peppergrass occurred most frequently. Ergot was found in two samples, but not in large quantities. This is a fungous growth which affects grasses and is very dangerous when fed to animals. These grains appear as black cylindrical bodies, about one-eighth of an inch long and with rather a smaller diameter than a timothy seed. They are difficult to detect, but, even in small numbers, should be sufficient to condemn a sample. By being sown with grasses and clovers they have a good opportunity to gain a foothold before being disturbed. There is, probably, no better way of judging of the thrift of a farmer than by his meadows and pastures. A consideration of the immense amount of capital invested in the growing of grasses and clovers shows how important it is that a farmer could know what kind of seed he is purchasing.

Disease in the Well.

Down in the average farm well lies the source of much of the sickness in the country to-day. In it too frequently lurks, amongst others, that deadly organism, coli communus, the active agent in the production of typhoid fever. From the results of official analyses of drinking water, which are continually being made, it is surprising that so many are enjoying the measure of good health which they do. If you have any doubts as to the chemical or bacteriological purity of that which is being used in your home, all it costs to have the test made is the express on a sample to and from the Ontario Agricultural College, where the officials will be glad to make the required examination.

When the rush of fall work is over it is a good time to pump the well out and remove all decayed animal or vegetable matter which may have collected during the summer, and if a bucket of charcoal, or even a few small lumps of lime, be placed in the bottom much of the impurities still remaining will be absorbed.

Protect Farm Implements.

When an artist makes a real winter picture of a poorly-managed farm, or one from which the mortgage should have been redeemed years ago, he always shows the implements lying about. exposed to the weather. Some will be seen in the fields on the spot where they were last used, and others around the barnyard where the stock roam at will. The annual loss from this source in Can ada is wonderful. An American exchange states that in that country it amounts to enough to pay the rural taxes. Why should this be true, when the cost of erecting a plain shed, large enough to hold all the machinery on an ordinary farm, means but a nominal sum? Very often there is in the barn a spare corner that can be used for the purpose. This is, of course, not quite so good as a separate house, which may be utilized at all seasons of the year, but does very well. It is the season now to devote a short period to this housing process. Let everything be gathered in; not even a harrow being left. plements, such as plows or cultivators, having a bright surface should have such parts well coated with machine oil or other preparations calculated to prevent rust. It is a good time, also, to estimate the amount of repairs required for next year, so that they can be purchased when convenient to do so. The main point, however, is to join the ranks of thoughtful-managing farm ers, and put everything under cover.

Sugar Beets in Alberta.

In the Mormon settlements of Southern Alberta very considerable attention is being given to the development of the sugar beet industry. At Raymond, a large factory is in course of erection, and a large area of land has been broken up for planting to beets next season. Arrangements are being made with the railroad company to haul beets from any point on the line to the factory at 25 cents a ton. The farmers are being asked to contract to plant a given number of acres next year, and the factory promises to pay at the rate of \$5.00 per ton delivered, which would leave the farmers \$4.75 per ton on the

Canadian-made Beet Sugar.

With four beet sugar factories—Berlin, Wallace-burg, Dresiden and Wiarton, Ont.—in operation this season, the industry has made a vigorous start, despite a somewhat unfavorable growing and harvesting season. The first run of sugar was turned out last week, President D. A. Gordon, of the Wallaceburg factory, writes:

"We are sending you a sample of the first sugar made by us, and hope this will be more than agreeable to your "sweet tooth," as you cannot fail to enjoy Canadian-made sugar from Canadian beets, grown on Canadian soil, and cultivated with Canadian hands. Incidentally, we might mention that it is possible to produce profitably all the sugar we use, at a cost not exceeding what we have paid on an average during the past three years, and in this way keep at home ten or twelve millions of dollars which in the past we have been sending away to employ labor in foreign lands, and in this way build up an industry in this country which benefits directly and indirectly every channel of trade in our midst."

Dr. A. E. Shuttleworth, Supt. agricultural department of the Ontario Sugar Company, Berlin, also sends us a sample of the first sugar made there.

Both are beautiful looking samples of granulated sugar, such as one purchases in the stores. The casual observer would see little difference between them and what is known as cane sugar. We procured a sample of the best cane sugar from a city grocery, and putting the three side by side, the Wallaceburg sample appears a shade finer and whiter in the grain than the cane suger, and the Berlin sugar crystals, though not quite as large as the cane crystals, are more unifrom in size and almost as clear.

Mr. W. K. Snider, agricultural superintendent of the Wiarton factory, on Nov. 6th reported their harvest in full swing, 50 per cent. of the beets cared for. They were having no trouble as to labor, having 3,500 acres in the hands of 1,300 farmers, there being no individual large crops. Yields have run as high as 15 to 20 tons per acre, but on low, undrained land, a few cases as low as 7 or 8 tons. The chemists' reports as to sugar contents (the all-important factor) are most encouraging. As to sugar contents and purity of juice, the Wiarton district beets rank high.

DAIRY.

Comparative Digestibility of Milk.

The Maryland Experiment Station, after an elaborate series of experiments to determine the comparative digestibility of raw, pasteurized and cooked milk, have arrived at the following conclusions:

1. Raw milk is more easily digested when fed to calves than either pasteurized or cooked milk.

2. Contrary to theory, cooked milk when fed to the calves used in these experiments caused violent scouring in the majority of trials.

3. A majority of physicians in charge of children's hospitals corresponded with, favored the use of raw milk for infants when the milk is known to be in perfect condition, but favored pasteurizing under ordinary conditions.

4. With one exception, all the physicians corresponded with discourage the use of cooked or

sterilized milk for infant feeding.
5. Skim milk was found to be as digestible as whole raw milk.

Care of Cow after Calving.

For a few days after having produced their calves it is safer to rather starve than to overfeed cows. A reasonable allowance of food the animals must, of course, have, but the practice followed in some quarters, of placing unlimited supplies of food within the reach of the cows, is one that is frequently attended with very injurious results. Another point that is deserving of special attention at this stage is the watering of the animals. Care should be taken to restrict the allowance of cold water given for at least two or three days after the calves are dropped. White drinks made with oatmeal are, of all others, perhaps, the best drinks to give for the first two days after cows have dropped their calves.

The Travelling Dairy.

During her travelling-dairy tour in Nova Scotia this season, Miss Laura Rose held 171 meetings, addressing over 6,000 people, travelling 723 miles, testing 640 samples of milk, and making 903 lbs. butter. Three counties were covered this year, in addition to four last season in Cape Breton. Secretary of Agriculture Chipman says the work will continue till every county is reached.

My Method of Buttermaking.

To the Editor "Farmer's Advocate":

As in the making of butter so in the best breed of cows for dairy profit, there is much disagreement. We have a herd of fine pure-bred Ayrshire cow, which we believe to be the best dairy breed for this country, as they are hardy, good rustlers, and give us a superior quality of milk. We use the De Laval, which we consider the best separator—here again is much difference of opinion, as each make of separator has its champion. We use the Maxwell churn and the Lever butterworker; those familiar with this butter-worker know that it stands on three legs, and is worked by rolling the lever backwards and forwards.

We are particular to have the cows milked, morning and evening, at precisely the same hour, this regularity being carried out both summer and winter. After the cream is separated it is taken to the cellar, which is clean and cold, to cool off before adding it to the cold cream. We have neither ice nor milk house, have no suitable place for keeping the cream sweet, and we had a tin can made which holds about twelve gallons. This can or pail has a close-fitting lid with a small round hole in the center, covered with fine sieve wire, and has a strong, firmly-attached handle. The cream is put into this can and let down the well fifteen feet, where it rests on a platform constructed for the purpose. After separating the cream from the milk, the can of cold cream is pulled out of the well and the fresh cream added morning and evening, stirring thoroughly each time. Sometimes the cream is quite sweet, at other times it is ripe enough for churning when we are ready to churn. I never have it very ripejust tart to the taste. When the cream is sweet I add one pint of good sour buttermilk the right before churning, stir it well into the cream, and leave it in the kitchen over night, where it is just warm enough to ripen the quantity of cream in the can, probably thirty quarts. When we are ready to churn, if the cream is too cold, I set it in a pan of hot water and stir until the temperature is 56 degrees in summer and 60 in winter. Before putting the cream into the churn I scald the churn with boiling water, and then drain and pour in cold water to cool it before putting in the cream. I use, in winter, a teaspoonful of butter coloring, but none in summer. We churn twice a week, and we make on an average 70 pounds of butter each week. Churning is too hard work for any woman to do if a large quantity of cream is churned, and when everything is ready, one of our hired men is called in to churn.

The man who churns is told to turn the crank evenly, not too fast, until the butter comes. One soon becomes accustomed to the "swishing sound which tells that the butter has formed into small granules about the size of grains of wheat. We then remove the plug at the bottom of the churn and drain off the buttermilk, and turn onto the granules a pail of cold water-turn a few times and repeat. We find that two washings is quite enough. The wash water should be about 48 degrees, varying according to the temperature of the room, and the wash water should have a handful of salt thrown into each pail of water. We always use the Windsor table salt, which we find the best in every way. It is done up in clean white bags, the extra cost is is no danger of dirt from the bags.

After washing and draining well, I add one ounce of salt to each pound of butter. The granules are lifted from the churn with butter spades, weighed and turned on the worker. The salt is put into a sieve and sifted over the butter, and mixed evenly through it. I press (do not "rub") gently with the lever, and then turn it into large cream can, which is lowered into the well and left there for two hours. I then take it up and work, pressing and rolling. I give the lever a half turn when rolling, and avoid rubbing or scraping. When working I do not destroy the grain of the butter, but work just enough to take the mottles

We use a one-pound square butter-mold, which was purchased in Winnipeg and cost \$2.50. I had three initials carved on the top, so that every pound of butter I sell is branded.

Before starting to work the butter I put the paper for wrapping in a weak solution of brine, and as I mould I lay one wrapper on the worker, drop butter out of mould onto paper, fold neatly and lay on table. When all are finished, the butter is packed in a tin can and placed on platform in the well over night, and is ready for the market the following morning, firm and sweet.

My friends frequently say to me, "What a lot of trouble you take in making butter," which is quite true. I have found that attention to details pay in buttermaking as much as in what may seem to be business of greater importance. My butter is always good, and we have a good market for it at 25 cents per pound the year round. We sell to one buyer, and can dispose of every pound we make.

Any person may learn to make good butter who cares to do so. I must confess that the first

butter I made was so bad we could not eat it, but, using my failures as stepping-stones, I have mastered the problem of buttermaking satisfactorily. I learn from every source: by reading articles with reference to buttermaking, by getting information from the wives of farmers who had the reputation of knowing how to make good butter, and by my own failures, as I said before visited creameries a number of times and watched the way they made butter there; asked all manner of questions, which the men were always ready to answer, and were most kind and obliging in giving me information, and would, I am sure, be equally kind to any farmer's wife who cares to go to the creamery for information MRS. E. A. POPE.

Questions Asked and Answered re Pasteurization.

To the Editor "Farmer's Advocate"

Sir,-Re the comparative results in my experience and observation of making butter from pasteurized and unpasteurized cream:

 In regard to flavor and keeping qualities? With satisfactory work, the immediate flavor of butter from unpasteurized cream is very apt to be superior to that from pasteurized cream and the use of pure cultures, but the ultimate flavor cannot possibly be as good, the deterioration being more marked as its age increases.

2. Does the flavor of butter from pasteurized cream suit the consumer as well?

The flavor of butter from pasteurized cream suits the English consumer better, but the local consumer less.

3. In regard to pasteurizing, would you make any distinction as between gathered cream or where separating is done at the creamery?

Pasteurization is an absolute necessity in handling gathered cream to obtain uniformity, but where separating is done at the creamery uniformity can be obtained with-

out pasteurization. What is the preferable method and temperature as far as your observation extends?

Continuous pasteurization of milk or cream at 185° F., and immediate subsequent cooling to

58° F. 5. Do you expect the system

to become general? The system must become general if we wish to dispose of our butter in England at top prices.

6. Do the advantages more than compensate for the outlay and trouble?

Can we afford to lose our hold on the English market and stop making butter altogether

May I add, that only by the adoption of pasteurization in the manufacture of our butter for export, do I think that we can ever realize as high prices as the Danes.

With regard to Mr. Fred Dean's experiences with gathered cream, I am surprised that cream should be delivered in the condition he mentions. have a set of rules for cream-gatherer and patrons (which I enclose herewith, for publication If desired), which are enforced with firmness, and I consider my cream supply is delivered in fine

condition than my milk supply. In the same letter, I do not understand how cream can have too little acid to be successfully pasteurized, but perhaps I have not caught Mr.

I must protest against Mr. Dean's statement Dean's meaning aright. that gathered-cream buttermakers have no use for a starter, as, in making butter daily from gathered cream and from milk separated at the creamery, I have just as much use of a starter

for one as the other. Of course, the farm separator takes out the sediment and dirt from the milk, the same as the factory separator; it is only in the washing of the separator and the subsequent care of the cream that additional impurities can be intro-

duced on the farm. I do not wish to place myself on record as being in favor of the cream-gathering system, for I think its introduction is to be deplored; but I do realize that the system brings many advantages to the dairy farmers under certain conditions, and I think there is room for both systems, and that a rivalry should be encouraged between them is not to the interests of export butter-

If pasteurization had been adopted generally making. before the advent of the farm separator, the advantages of farm separators would have been greatly done away with, but this not being the case, the necessity of adopting pasteurization is still further increased in order to successfully

manufacture their cream. Compton Co., Quebec. H. WESTON PARRY.

Re Pasteurizing.

At the separator creameries, where the milk is delivered in good condition, it is very little, if any, benefit to pasteurize the cream, as it is a comparatively easy matter to make a uniform and good keeping quality of butter from raw cream, but where skimming stations are operated in connection with a central creamery, or where the cream is skimmed on the farm and kept for some time before being delivered to the creamery, it is a decided advantage to pasteurize, as the flavor of the cream is frequently injured before the buttermaker gets control of it.

When butter is intended for early consumption, or is held in suitable storages, where the temperature is below the freezing point, just as good results are obtained by churning raw cream, but if butter is to be kept for some time under unfavorable conditions, such as usually prevail at most of the creameries or in transit to the British market, it is safer to pasteurize and destroy the germ life, which would otherwise develop if given sufficient time and the butter subjected to

high temperature. In conversation recently with three of the largest butter dealers of Western Ontario, I was informed that the unpasteurized butter from the separator creameries has usually given their customers in the Old Country better satisfaction than the pasteurized butter, the flavor being more suitable. The reason for this is probably the fact that most of the separator creameries sell their butter regularly, and put it on the market while it is fresh and before it has time to deteriorate.

facturing, more than the price of the mathinery, which is not expensive. It will also tend to greater uniformity, and is, in my opinion, the only means by which the cream-gathered creameries can ever hope to compete successfully on ARCH. SMITH. the British market. Middlesex Co., Ont.

Pasteurization of Cream for Butter.

Pasteurization as applied to the manufacture of butter is important, and I am pleased to see that you are taking an active interest in such live questions. It is by the use of such influence and through such mediums as yours that the most progressive methods become generally known and adopted. I hope the dairy departments of both our Dominion and Provincial Governments will give the pasteurization of gathered cream their attention and have the best methods of collecting and handling sought out and made public. In many of the districts, milk is so scattered that cream gathering is the only system that can be applied, other than having the butter made by the farmers themselves. To have the butter all manufactured in a creamery is certainly preferable to private dairying.

My experience leads me to believe that the flavoring of butter is more uniform from pasteurized cream than otherwise, and that the keeping qualities are also improved.

The flavor of the butter being more uniform, it is easier to keep customers.

Pasteurization of both gathered cream and creamery-separated cream should be adopted by all creameries.

I use a Reid continuous pasteurizer, and heat to between 175° and 180° F.

Indications are that the sale of hand separators will increase largely and the business of gathering cream will consequently

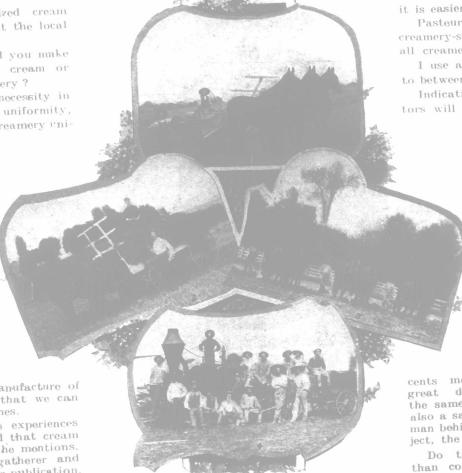
expand. There are two particular reasons for this. First, there is no food for young stock that will take the place of milk at the same cost, and stock raisers have a strong belief that to feed the skim milk with the "animal heat" in it (particularly to calves) is the proper thing. (I mignt but the proper thing, that I think, (I might say, properly handled, creamery skim milk is an equally good food. Hand-separator skim milk is more regular as to temperature when fed, which may be the greatest advantage.) Secondly, in districts where dairymen are scattered and it costs the patrons 10 or 12 cents per 100 lbs. and the creameryman from 2 to 5

cents more for hauling the milk, it is a great drawback. Cream can be gathered over the same district at very much less cost. It is also a saving in the creamery, and so long as the man behind the hand-separator crank does not object, the cream-gathered system will increase.

Do the advantages of pasteurization more than compensate for the trouble and outlay? This is the question we have to consider in every business: Does it pay? Well, I believe it does At present, my intention is to continue the pasteurization of both the cream we separate at the creamery and the gathered cream, unless it is proven to me that it is really of no benefit. The test is when the product is sold, and I include a few short extracts from letters received from purchasers, all of whom are large dealers in butter; also scores secured at exhibitions.

A firm in Toronto, in May, writes: "We are much pleased with the quality." Another firm— We received the butter all right, and think it to be of good quality." From Montreal, in June, Report your butter as being of very good qual-Another firm, in October, "Your butter is well made." "Quality was satisfactory." very well made." A shipment of June butter to Manchester, Eng., sold, on Oct. 1st. for 98 shillings, cash, a top price for Canadian butter at that time. Last January, at the Western Dairymen's Association, our butter scored 971 points, taking first over 18 other competitors; at Toronto Fair, this fall, we were given 93 and 941 points, and at the Western Fair, 97 points, taking second prize. The butter for these exhibits was taken from the regular make, without any selection whatever of cream or treatment. This is not given for an advertisement, but as an indication of the way in which our product has been received, and as we were the first creamery to pasteurize gathered cream in Canada, it is an important point as to the result, and helps us to arrive at the proper answer to the question: "Does it pay?" W. K. McLEOD.

Middlesex Co., Ont.



SNAP-SHOTS AT ILDERTON. Middlesex Co., Ont. Up to the present time, it has not been cus-

tomary to pasteurize at the cream-gathered creameries, as it would be very difficult to secure a good culture to ripen the cream, and frequently the cream is quite sour when delivered at the creamery, and it is generally supposed that it is impractical to pasteurize sour cream.

A few experiments were made at the Western Dairy School last winter for the benefit of the students, and for the past two months I have had a pasteurizing outfit (very kindly loamed by Richardson & Co., of St. Mary's) at work in Mr. Wenger's creamery, at Ayton, pasteurizing sour (gathered) cream, with excellent results. Some of the butter is now two months old and there is a wide difference in the quality of the pasteurized and unpasteurized butter, in favor of pasteurizing. The cream was heated to 160° and 180°. We find the higher temperature preferable. A number of samples have been shipped to England to be examined and reported on, the results of which will be published as soon as possible. Other samples have been examined by experts at the creamery, who in every case pronounced the pasteurized butter of much superior quality. A scorched flavor, which was noticeable on a number of samples when fresh, disappears with age, and the older the butter becomes, the greater is the difference in quality. If the flavor and keeping quality of the butter (which is its chief defect) can be greatly improved, which the present experiments seem to indicate, pasteurizing will no doubt become general. It does not add to the cost of manu-

ire

ed rs. ker red ed,

ken off ave ace can can ınd ire, The

vell onthe ded ach hen ght

and

Jst in are εet emurn hen ore teauman

ning

rge l in One inte eat. the onto few

e is out ture 70 8 iter. we lean

one des, t is ıb'') arge left ork, turn

ing.

the

ttles hich had very rine, ker, eatly

utter

m in

rket

lot h is tails may My good year se of

itter first

On

Methods of Milking.

In a recent bulletin, Prof. Woll, of the University of Wisconsin, reports the results of a thorough investigation of methods of milking, which emphasizes the importance of thorough "stripping." and manipulation of the udder in order to get the best results from the cow, to maintain a maximum flow of milk throughout the lactation period and to permanently develop dairy qualities in both the dam and her offspring.

In the university herd, the average daily production of milk from 24 cows was increased by 4.5 per cent. by means of the manipulation method, and the production of fat was increased by 9.2 per cent. (range 3.0—30.2 per cent. for individual cows) as the result of a milking experiment continued for four weeks; the average gain in milk being 1 pound, and in fat .09 pound per head per day.

A similar average increase in production was obtained for twelve dairy herds tested, viz., a gain of 1.08 pounds in the daily production of milk per cow, and .1 pound of fat. The results obtained in this investigation, extending over a period of four months, with cows in all stages of lactation, indicate that this gain is maintained through the whole period of lactation. An increase in the daily production of butter-fat per cow, of one-tenth of a pound, for the million cows in the State would mean an annual gain of 30,000,000 pounds of butter-fat if the cows give milk 300 days in the year; the value of this increase to the dairy industry of the State would be about \$6,000,000, on basis of a valuation of 20 cents a pound for butter-fat, a figure considerably below average Elgin prices.

The largest amount of milk obtained from a cow by the manipulation method, after the regular milking was done, was 5.5 pounds per day, and the lowest .20 pound. The corresponding figures for fat production were .64 and .02 pound. The former figure is considerably above the average total daily production of cows in this or

other States.

The greater portions of the gains obtained came through lack of care on part of the regular milker, as the cows were not milked perfectly clean. But even in herds, where the milkers did their work well, there were always one or more cows which gave an increase of nearly a pound of milk and one-tenth of a pound of butter-fat by the manipulation method.

The milk obtained by the manipulation method is similar in composition to that of "strippings"; on the average for all herds, it contained 10.32 per cent. fat and was found to be about two and one-half times richer than the ordinary milk. The highest per cent. of fat found in the after-milking from any one cow was 23.0 per cent., and from any herd, 14.41 per cent.

The difference in the work done by different milkers is brought out strongly by the results of the work done. In several cases, one milker did his work so much better than the others, in the same herd, as to be worth nearly \$10 a month more to the owner, on account of the larger yields of milk and fat which he obtained from the cows milked by him.

APIARY

Beekeepers' Annual Meeting.

The annual meeting of the Ontario Beekeepers' Association will be held in the town of Barrie, on Dec. 2, 3 and 4, 1902, when topics of vital importance to the industry will be discussed. Amongst other things, the programme calls for papers on such subjects as "Spring Management," "Producing and Marketing Extracted Honey," "The Business End of Beekeeping," "Market Reports," and an address by Prof. Shutt, Ottawa, on experiments with honey. All beekeepers are cordially invited.

The Future of Beekeeping.

In his annual address at the Denver convention, a few weeks ago, the president, speaking of the future of beekeeping, said "The history of kindred industries will be the history of beekeeping. First came discovery, invention and development; then came specialty; and now comes organization and co-operation. Organization has already done much for beekeeping. It has fostered a fraternal spirit, helped to scatter apicultural wisdom from ocean to ocean, protected its members from unjust persecution and secured favorable legislation.

"Honey may never be higher in price than it is now, but it will be produced at less cost. The continued development of specialty, and of organization, will lessen the cost of production. The number of bees will be increased, but not the number of beekeepers.

"Commercial beekeeping will be in the hands of specialists, men who have carefully selected and thoroughly understand their respective localities. Of men who keep enough bees to fully employ their hands, their brains and their capital. And among these men there will be complete organization and co-operation."

November in the Apiary.

In the beekeepers' calendar for November, the "Honey Bee" states: "The hives should now be in winter quarters, the quilt removed and absorbents placed in the upper story."

All possible shelter should be given for cellar wintering. The time of removing the bees should be at the opening of cold weather. The later in season that the bees are able to fly out and discharge their feces, the better. The beekeeper must regulate the time of housing his bees by the season and climate, being careful neither to take them in until cold weather appears to be fairly established, nor to leave them out too late. A cold day, immediately after a warm spell, is the best time to make this change.

GARDEN AND ORCHARD.

Fruit Growers' Meeting.

The annual meeting of the Ontario Fruit Growers' Association will be held at Walkerton, Monday, Tuesday and Wednesday, the 1st, 2nd and 3rd of December. A number of prominent speakers, including Prof. Craig, of Cornell, N.Y., Profs. J. B. Reynolds, H. L. Hutt and Wm. Lockhead, O. A. College, Guelph, and Prof. James, Deputy Minister of Agriculture, Toronto, will be present and it is expected that this will be the most important meeting ever held in the Province in the interests of fruit growing.

plished by Mr. Collyer, under ordinary conditions, may be the reward of any farmer or gardener who combines intelligence and skill in the growing of onions for market.

The Fruit Marks Act.

Mr. McNeil, acting chief of the fruit division at Ottawa, says that the Act has been used by dishonest dealers to cheat the farmers. They pretend that it interferes with them in packing the apples, and so secure them below the proper price. Mr. McNeill most emphatically declares that such is not the case. Anyone can pack and mark anything he has to sell, provided, of course, he does it honestly.

In travelling over the country one still finds a great deal of uncertainty on the part of farmers as to the conditions of the Act in regard to grades other than XXX, or firsts. The law is clear as to this grade, and most of the packers are trying to carry it out. More trouble arises, however, when XX or X grades are being put up. Mr. McKinnon, in speaking before the Fruit Growers' Association of Nova Scotia, said that the Act deals only with No. 1, which it defines. Anything below that is in the discretion of the owner as to what he shall ascribe to it. There is no definition of No. 2. If the barrel is No. 2 the inspectors have no authority to find fault with it, no matter how poor it is, unless the face does not correspond with the contents of the barrel, This last clause is the only restriction imposed on grades other than No. 1. Now, perhaps three-quarters of our apples are below XXX, or



HEAVY CROP OF YELLOW GLOBE DANVERS ONIONS Grown by G. P. Collyer, Middlesex Co., Ont.

Profits in Onions.

The profits to be obtained from growing onions is well illustrated in the accompanying cut, showing crop in the garden of G. P. Collyer, Middlesex Co. From less than for an acre were harvested 510 measured bushels of Yellow Globe Danvers, and when portrayed by a representative of this paper, on Sept. 4th, were truly a magnificent sight.

The soil on which they were grown has a clay subsoil, ranging from a black loam surface at one end to gravelly at the center and heavy clay towards the other end of the field. The loamy section produced the heaviest yield. Strange to say, onions have been grown on the same plot for the last four or five years, for each crop of which a very heavy application of well-rotted barnyard manure was applied. Last fall the land was plowed, being well laid up to the frost, but no manure was turned down. In the spring, a good mellow surface was prepared, and 600 pounds of pure bone-meal put on ahead of the seed, of which six pounds of a selected home-grown sample was sown on April 16th, in rows 17 inches apart. When the young plants had appeared above the surface, an Essex wheel hoe was put through, and ten days later the horse garden harrow. It was intended to have put on about 150 bushels wood ashes before the onions came up, but owing to wet weather at that time, the land was too soft for work. The exceptionally heavy yield, however, would indicate that the soil was not deficient in that element.

This is probably the heaviest yield ever recorded in Canada, but what has been accomNo. 1, and for these the Act is practically useless. The dishonest dealer can still ship his poor fruit to the foreign markets as of old, to the great detriment of the trade, the buyer running the risk of getting taken in on the deal. The intention of the Act is good, yet it should go farther. The Nova Scotians ask for a definition, also, of No. 2 grade as follows: "That such fruit shall consist of sound specimens of normal shape, and containing not less than 90 per cent. free from scab, worm-holes, bruises and other defects, and properly packed.

Many growers and packers wish to have the Act amended so that their apples can be inspected at the packing-house as they are put into the barrel, and there branded by the Government Inspector. Otherwise, unscrupulous buyers are able to declare that the fruit, when received by them, was not up to the standard as shown on the face, and so refuse to pay the price promised. This applies particularly to shipments within the country where the fruit cannot suffer materially from the shipping, and so allow of a deterioration in the grade between the packing-house and the destination. One grower said that he had been caught last year in a shipment to Winnipeg, and this year he was insisting on inspection of the apples at both ends of the line by some person acceptable to both parties concerned. Many dealers said they would willingly pay a small fee of five or ten cents a barrel for Government inspection of the fruit at the packinghouses

This matter is one of great importance to all interested in out fruit trade, and should be thor-

oughly discussed at the December meeting of the Ontario Fruit Growers' Association, which is to be held this year at Walkerton. The subject of grading and packing fruit occupies a prominent place on the programme, and the Dominion inspectors will all be present, prepared to discuss the matter in full.

Ontario Entomological Society Meets.

A gathering that proved to be one of more than usual importance to the farmers and fruitgrowers of Ontario, was the thirty-ninth annual meeting of the Entomological Society, held in the City of London, on Oct. 28 and 29. Since its inception in 1863, this society, promoted and encouraged by a few enthusiastic investigators of insect life, has done much to develop an intelligent interest in these friends or foes of the plant kingdom. Year by year, they have watched the arrival of new enemies to our Canadian shores, and with ever-increasing energy have these unselfish but scientific searchers worked out the life history of various destructive creatures, thus enabling their more economic brother to devise practical means of eradication.

Of such great value has the work of this society been to agriculture, that the Provincial Government annually sets apart a grant of one thousand dollars for the furtherance of their work, and no well-informed person would dare question the wisdom of such a policy. While at each annual session several papers of a technical character, bearing upon new discoveries, are read, yet considerable, and, in fact, the greater time, is taken up in discussion of the most destructive insect pests found the past season in the Province.

THE PEA WEEVIL.

When the meeting had been declared formally opened, by the president, Rev. Dr. Fyles, South Quebec, Dr. Jas. Fletcher, Dominion Entomologist, opened the discussion on that most destructive of all insects to the Ontario farmer-the pea weevil. He said that since the appearance of this pest, a few years ago, there had been a gradual falling off in the quantity grown, until this year's showed a decrease from 1901 of no less than 70,000 acres. There was no need for this falling off, as its life history is now well known, and a practical, cheap and easily applied remedy is obtainable. Since the insect lived altogether on the pea, some proposed that none be grown for a period of two years. This he believed to be impracticable, as even in the event of prohibitory legislation, enough would still be sown in gardens and out-of-the-way places to afford a means of propagation from year to year. only salvation, he claimed, lay in arousing public sentiment against it, and where farmers were prepared to co-operate in its extermination, splendid hopes of being able to retain our valuable pea-growing industry might be entertained. After careful investigation, Dr. Fletcher was satisfied that the best method of procedure was to cut the crop just as soon as barely ripe, thresh as quickly as possible, and either sell the grain at once or treat with bisulphide of carbon. He showed a sample of peas treated on Aug. 5th, but said that in an ordinary year this could be one week earlier that only seven per cent. of weevil-eaten peas grew. One Canadian seedsman was now importing his seed from Germany, and on the I ondon market, peas from Calcutta, equal in quality to our best, were now being laid down for three cents per bushel less. This was an alarming state of affairs. Were we to lose this trade when its salvation was in sight?

In continuing the discussion, Prof. Lochhead pointed out that the decrease in yield had amounted to seven million bushels in ten years. Few districts in Ontario, where peas are grown, were free from the weevil. During his lecturing tour of last summer, he had found it as far north as North Grey. Manitoulin and St. Joseph's Island were still free and the farmers there had a grand opportunity to make money from this crop. In relating the life history of the weevil, he said the eggs were laid during the blossoming time, on newly formed pods, where they hatched in a short time, and the young maggots immediately enter the pea to feed upon and grow up with it. He wished to emphasize the fact that when the peas had become ripe, the weevil was not mature, and at harvest time only one-half and generally not more than onethird the damage had been done. If the grain were threshed and treated at that time, few insects would escape. Prof. Lochhead said he was a strong believer in object lessons, and suggested that the Government could not do better than demonstrate, in a practical way, that this pest could be wiped out. The cost for material would not be much. Three ounces of bisulphide of carbon, sufficient to treat five bushels, could be had for fifteen cents. A territory could be chosen where its ravages had been severely felt, and an inspector appointed, having assistants, whose

oughly discussed at the December meeting of the duty it would be to fumigate all peas in that optorio Fruit Growers' Association, which is to district as soon as threshed.

Prof. C. C. James was satisfied this insect could be held in check. Canada had never yet been beaten in anything, and would not be this time. After other opinions had been given, all showing the benefits to be obtained from united action in this matter, Dr. Fletcher moved a resolution, which was unanimously carried, embodying Prof. Lochhead's suggestion, as stated, and declaring that, in the opinion of the Entomological Society of Ontario, a cessation of peagrowing for two years was not the best means of ridding the country of this pest, and requesting that the Department of Institutes have the sub-



WM. LOCHHEAD, B. A., M. S.

Professor of Biology and Geology, Ontario Agricultural College.

President Ontario Entomological Society.

ject brought up at every farmers' institute meeting the coming winter, so that public sentiment might be aroused and some definite work begun.

THE SAN JOSE SCALE.

Mr. Geo. Fisher, San Jose Inspector in Ontario, gave the result of his investigations with that insect during the past year. He was able to show beyond a doubt that in the lime and sulphur preparation a thoroughly effective remedy for the pernicious scale had been found. The only difficulty was in its preparation; at least two hours boiling being necessary to make ready for spraying, which had to be done while the liquid was warm, because when cooled, insoluble crystals would form. The proportions giving the best results were one pound lime to one-half pound sulphur and one gallon water. The lime should be placed in a large caldron, or boiling kettle, the water poured on, and as slacking is proceeding, the sulphur may be added. This preparation is cheap, effective, and easy to apply. It was pointed out, by some authorities present, that Ontario is now farther ahead in methods of combating scale insects than any State in the Union east of the Rockies.

THE EVENING SESSION.

At the evening session, which was held at the Normal School, Rev. Dr. Fyles gave his annual address as president of the society, dealing in a very eloquent manner with the subject, "Insect Life." Although largely scientific, it was intensely interesting, and well calculated to create a taste for this important branch of natural



PEA WEEVIL (Bruchus pisi).
[c, larva; d, pupa; b, adult: all enfarged.]

history. Prof. Lochhead followed with a very instructive address on some common butterflies and butterfly-hunters. These he illustrated with lantern pictures, portraying many of the early and

present-day heroes of the subject.
INJURIOUS INSECTS OF 1902.

The following day, Dr. Fletcher gave a report of the injurious insects of the past year. As a rule, grain crops, he said, had not suffered to any extent. Hessian fly had not been particularly troublesome, except in certain districts of Mani-

toba. Grasshoppers, too, had confined their ravages principally to the same country. It had been discovered that cutworms could be easily and cheaply poisoned by using Paris green on horsedropping, instead of bran balls, as heretofore recommended. Grasshoppers could be held in check by the same remedy. Nowhere in Canada had root crops suffered to any considerable extent. Potato beetles made their presence felt in Prince Edward Island, but in the other Provinces little trouble had been experienced. Various poisons had been used at the Experimental Farm, but nothing better suited to average conditions than Paris green had been found. The parsnip webworm, Dr. Fletcher said, had done considerable damage in Nova Scotia, and the squash bug is gradually spreading. For the wireworm, nothing better than two plowings in the fall had been found. The root maggots of cabbage and onions were not quite so destructive during the past summer; no new remedy had been found. The decrease in the number of insects he attributed to the increase in spraying. The bud moth had been harmful only in Nova Scotia, and the apple aphis principally in Prince Edward Island. The latter had attacked the fruit, and even gnarled them until they were unfit for sale.

Among the enemies to small fruits, two new ones had appeared, Fitche's soft scale and the rose scale. Fruit-tree dealers should look out for these, as they were particularly destructive to the blackberry. In forest trees, the birch had suffered from a sceletonizer, the larvæ of which bore into the wood, frequently causing the tree to die. The Mediterranean flour moth is becoming a terrible pest, and where it gains a foothold is not easily discharged. He said it was regrettable that in many mills in Canada it was now quite common, as the housekeepers could amply testify by the webbed-together condition of the meal. The only remedy was to sweep thoroughly, from top to bottom, and fumigate with carbon bisulphide.

Dr. Fletcher announced that a new pest had reached Canada during the past summer. This time, it was the brown-tailed moth, a very injurious insect to fruit trees of all kinds. It is about the size of the common cabbage butterfly, with white wings and a brown tail.

The election of officers resulted as follows:
President, Prof. William Lochhead, Guelph;
vice-president, John D. Evans, Trenton; secretary, W. E. Saunders, London; treasurer, Prof.
J. H. Bowman, London. Directors: Messrs. C. H.
Young, Ottawa; C. E. Grant, Orillia; E. M.
Walker, Toronto; G. E. Fisher, Freeman; J. A.
Balkwill, London. Librarian and curator, J. A.
Moffat; auditors, J. A. Balkwill, S. B. McCready; editor Canadian Entomologist, Rev. C.
J. S. Bethune.

When to Prune Grapes.

In Bulletin No. 156 of the U.S. Department of Agriculture, W.H. Ragan, Bureau of Plant Industry, deals with the pruning of grapes as follows:

An annual pruning should be given all grapevines at some time during the period of rest, between the late fall frosts and the early movement of the sap the following spring, but never prune when the wood is actually frozen. Good authorities agree upon this, though they may differ as to the exact time that is best to prune. The writer, in the latitude of central Indiana, found it hest for several good reasons, to practice fall pruning. If done then, it is out of the way of the rush of spring work. Also the weather is usually pleasant, and the work may be done with less personal exposure to the operator. If pruned in the fall, there can be no danger from "bleeding," a term used to designate the waste of sap from the newly-made wound which follows late spring pruning. If pruned in the fall and the prunings are immediately burned, many disease germs and insects will be destroyed that would otherwise survive the winter and that would prey upon the vines the following season. Furthermore, fall-pruned vines can be more easily protected from the severity of the ensuing winter.

Burn the Rubbish.

Now that soil cultivation for this season is practically over, the one thing needful about every orchard and garden is to gather up and burn every piece of old board, bark, bunches of leaves, stalks, vines, or any other rubbish to be found. These are at present the hiding places of hundreds of unseen insects which will carry destruction in their trail next season if left undisturbed. It is an instance of where that old adage, "A stitch in time saves nine," may be excelled. Many people leave this cleaning-up process for some fine day in spring, when our little foes have fled. This is the time to get to work, and if farmers and gardeners could be induced to act, a great deal less would be heard about the insect plague.

The long-talked-about winter show for draft horses is to materialize early in 1903.

Protect Strawberries.

Strawberries should be protected from frequent freezing and thawing during the winter by means of a nulch of some kind. Nothing is better than strawy or rather coarse manure. In the spring, it can be easily raked into the space between the rows, after the growth has started, where for a time it may serve a good purpose in retaining moisture, and be finally worked into the soil with the cultivator. The elements of fertility, too, which it may contain will aid in stimulating an early and vigorous growth in the plant, which in itself will be very helpful. It is not necessary that a heavy coating be made, from one to two inches being sufficient. This should not be applied until the ground is firmly frozen so that neither the horses nor wagons can injure the plants.

POULTRY.

Around the Scratching Pens.

If many farmers who believe that poultry do not pay were to give them the same attention that other departments of the farm receive, a different story might be told.

. . . Keep your eyes open for sick birds as you go about the pens. If one appears and you cannot diagnose the case, get it away from the others at once; it may be some contagious disease.

One of the chief causes of sickness in the chicken pens is uncleanliness. He who does not remove the droppings regularly, and otherwise observe the laws of sanitation, must expect to suffer. Apply whitewash to the walls without stint.

In preparing the dressed poultry for market, remember that the neatness with which the work is done will count for much when they are offered for sale. Parchment paper costs but little, and when the birds are nicely wrapped therein, they open after shipment with such a fresh appearance that buyers can afford to pay a higher price. Even though you have only a few for sale, do it right and reap the reward.

If you have not collected road dust during the dry season for the dust bath, supply plenty of ashes instead. It will prove one of the best means of keeping the birds free from lice. A box eighteen inches square and six inches deep, if placed in the corner, will occupy little room and answer the purpose first-rate.

Watch the local market get overstocked with ill-bred and unfattened-chickens, from this time on to Xmas. Notice the difference in price between these and others produced through proper mating and feeding, and then decide the course you will pursue next year.

Provide warm but well-ventilated roostingquarters for the feathered friends during winter. Feeding is an expensive way to keep up the animal heat necessary to ward off the cold incident to ill-protected quarters.

Don't forget that eggshells contain a great deal of lime. Winter eggs are no good without shells and lime in some form is necessary to their formation. Bone meal is high in this substance, and is hence useful in this capacity, but crushed oyster shells fill the bill even better. If placed within reach, the hens will satisfy themselves regarding the amount to be used.

Introduce New Blood.

There are few flocks that would not pay for an infusion of new blood. Many there are where the same strain has been carelessly bred for years. By the purchase of a good pure-bred male to be mated with the best pullets or hens in the yard, a decided improvement in the laying powers of the flock may be had. Be not content with the best grade which may be obtained from your neighbor; that is a backward step. A few dimes spent for a choice bird will be more than repaid by the end of the next breeding season. The winter poultry show is a grand place to make a selection. Look over the exhibition with this idea in mind.

The Turkey Club.

To the Editor "Farmer's Advocate":

Sir,-A meeting of the Turkey Club of Canada will be held in the city hall, Guelph, on Wednesday, Dec. 10th, at 7 o'clock p. m. It is to be hoped all breeders will attend this meeting and join with us, as the efforts of this club have secured a large amount of information on breeding and feeding turkeys, and have also succeeded in having more money offered as premiums on turkeys at Provincial Winter Fair (Western) than is offered by any other show in America. Birds are to be cooped singly, and Mr. Jas. Anderson, of Guelph, an old, experienced breeder, is to place the awards. W. J. Bell, secretary.

White Wyandotte Club.

Mr. L. H. Baldwin, Deer Park, Toronto, in writing to the "Farmer's Advocate," believes that the time is ripe in Canada for the formation of a White Wyandotte Club. The breed has been gaining greatly in favor of late, being highly commended by shippers to the English market. Among the advantages of an organization, he states, would be: the serving of a common interest in advertising the good qualities of the breed; mutual help in improving stock; increase of interest in this class at shows; and a membership which would carry with it the stamp of responsibility.

A meeting has been called, to be held at Guelph during the Winter Fair, when it is hoped as many as possible will join to make the proposed club thoroughly practical and of material help to its members. Mr. Baldwin would be pleased to receive suggestions from breeders who cannot be present.

Exclude the Male.

As poultry are kept on the average farm, one of the greatest mistakes made is in allowing the males full run of the yards during the entire year. Some have even yet failed to learn that the presence of the male is not necessary to a large of eggs. In fact, any experiments that have been conducted along this line have most emphatically declared this to be true, and in most cases the conclusions reached have been that even larger returns were obtained in the absence of the male bird. In the light of this, all specimens now on hand, not intended for breedingpurposes, should be promptly disposed of., Poultry-keeping will never bring the profits which it is capable of doing until such details are considered with care.



MATCHLES9 25TH = 37715 =. Three-year-old Shorthorn cow. Winner of first prize and sweepstakes, Winnipeg Industrial Exhibition, 1902.

SHOWN BY HON. THOS. GREENWAY, CHYSTAL CITY, MAN.

Supply Grit.

Someone has said that "grit is hens' teeth," and in a measure it is true, because the influence which it exerts in grinding the food while passing through the gizzard is comparable only to mastication as performed in animals. Fowls of all ages require it. In summer they have little difficulty in securing all they desire, but in winter, and especially when confined, the problem is different. Some poultry-supply houses keep on hand crushed granite, varying in size from a grain of wheat to that of corn. It may be said that the harder the material, the better, but glass and long splinters of hone should be avoided. Where a limited number of hens are kept, the expense of buying commercial grit may not be advisable. If sharp, fine gravel be obtainable, get in a supply before the severe weather comes, and place a small quantity within reach of the birds every day. If you have not tried this before, the results will be surprising.

Buff Leghorns Wanted.

Your paper contains an advertisement of White and Brown Leghorn fowl for sale, but no mention of the Buff Leghorn. I want to get a pair of the latter, but cannot find out any one who keeps them. Can you furnish me with information as to where they can be got?

W. J. HUNTER. Ans.-Will those who have these birds for sale consult their own interest by advertising at once

OUESTIONS AND ANSWERS

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

2nd.—Our purpose is to give help in real difficulties; there fore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.

3rd.—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, as a guarantee of good faith, though the name is not necessarily for publication.

kth.—In veterinary questions, the symptoms especially must

hth.—In reterinary questions, the symptoms especially must fully and clearly stated, otherwise satisfactory replies can-

Veterinary.

MARE WITH SWOLLEN LEG.

A sixteen-year-old brood mare swelled badly near hind leg last fall, and remained swollen all winter. When on grass, after foaling, the swelling disappeared. I have weaned the coit, and am working the mare. Am feeding her one gallon oats, mornings and noons, and boiled barley at nights. The swelling is appearing H. W. D. again.

Elgin Co., Ont.

Ans.-Feed less grain. Do not feed barley at Feed equal parts crushed oats and bran. Give 1 dr. iodide of potash, night and morning, for six days, and repeat in two or three weeks if necessary. If her bowels become constipated give one pint raw linseed oil. Exercise her regularly, and give her a large box stall while in the stable. Some mares are particularly predisposed to this condition when pregnant. J. H. REED, V. S.

NON-DELIVERY OF FETUS.

I was called to see a mare and pronounced her dying of inflammation. She died in a few hours, and a post-mortem revealed a dried-up and shrunken fetus in the womb. The hair and size of the bones indicated that the fetus had

matured; the hair was off in some places. She had not been bred for 5 years. E. J. Y Lambton Co., Ont.

Ans.—Conditions of this kind occasionally occur. some cases the fetus becomes rather mummified, as in this case, and others the soft parts slough and pass off as pus and only the bones remain. An operation by a veterinarian can be performed and the tus removed, after which the mare will In some breed. cases the periods of œstrum appear while the dead fetus or its remains are still in the womb, in others these periods do not occur. Conception under such circumstances rarely occurs.

d after the condition of the fetus has reached either condition mentioned, but there are usually symptoms shown for a time after its death. The death of this mare was not caused by the fetus. You state that you pronounced her dying of inflammation, but do not state what organ or organs you considered diseased, neither do you give the post-mortem appearances, beyond that of the contents of the womb, hence I cannot venture an opinion as J. H. REED, V.S. to the cause of death.

SEROUS ABSCESS ON COW'S KNPE.

I have a cow with a lump half the size of a man's head on her knee. She is not lame. She is a Jersey, and would make a show cow if this were removed.

York Co., Ont.

Ans.—The lump is a serous abscess, that has been caused by the cow lying on hard floors, with weight upon the knee. It can be treated by opening and after-attention. The contents of the lump is not joint oil, but serum. It would be dangerous for any person but an expert to attempt treatment. The trouble, course, will recur if the cause be kept up. She should be placed in a box stall and well supplied with bedding. J. H. REED, V.S.

BREWERY GRAINS FOR COLTS WART ON COLT. Is brewery grains good food for colts? I have a filly with a wart where the brow band fits.

J. O. N. Sumbury Co., N. B. Ans.-A small allowance of brewery grains can be given to colts with advantage, but they should be fed in small quantities, mixed with cut hay and bran, or a little crushed oats. The wart can be carefully dissected off, and the parts dressed with a 5-per-cent. solution of carbolic, three times daily until healed.

J. H. REED, V. S.

FATALITY IN SOW.

I had a sow with five pigs, and wishing to fatten her, I took three pigs away and put the other two with the fattening hogs. She did all right until Oct. 14th, when she acted strangely. She would not eat much, and seemed to be chilled. She would squeal and shake if the other pigs came near her. I removed her, and out off her ear and tail, but she died in the evening. Essex Co., Ont.

Ans.-The change of food was too sudden and caused indigestion, which resulted in inflammation of the bowels and death. Changes of food and usuage should be gradually made in all animals.

J. H. REED, V. S.

LUMP IN COW'S TEAT.

There is a small lump about the center of one of the front teats of my cow. It is movable. It can be pushed a little up and down or sideways. It is not sore, nor does it interfere with milking.

Russell Co., Ont.

ng

nid

ad

In

us

at ut

Ans.-As the lump does not in erfere with the utility of the cow, you had better leave it alone. If it grows and blocks the duct, an operation can be performed with a concealed bistoury, which will reopen the duct. The removal of the lump would entail cutting down upon it, and this is J. H. REED, V. S. a critical operation.

LUMP ON STIFLE.

My 3-year-old colt has a lump on his stifle. It did not cause lameness at first, but he goes a J. H. R. little lame now.

Elgin Co., Ont. Ans .- Your colt has partial dislocation of the patella. Blister the front and inside of the joint with 2 drs. each biniodide of mercury and cantharides, mixed with 2 oz. vaseline. Clip the hair off and rub the blister well in. Tie him so that he cannot bite the parts. In 24 hours, rub well again, and in 24 hours longer wash off and apply vaseline. Put him in a box stall and apply a little vaseline every day. Keep him as quiet as possible. Blister him every month all winter, and it is probable he will recover from the lameness, although the lump will likely remain. J. H. REED, V. S.

Miscellaneous.

BUILD AN ICE-HOUSE.

It is at this season that those who have not heretofore enjoyed the advantages of a supply of ice on the farm should be laying plans for the erection of a suitable building in which to store a few tons during the coming winter. Select a dry site, in some convenient place, where exposure to the glaring summer sun may be prevented by shade trees or other buildings. The plan will, of course, depend upon the size of house required, and amount of money to be expended, but a costly structure is not necessary. Some farmers use cedar posts eight inches in diameter as a frame, placing them about two feet in the ground, and nailing two-inch plank on the inside. For a roof, two by four inch scantling may be used as rafters, with boards and shingles added. This makes a fairly satisfactory building, but if a better appearance from without is desired, a scantling frame, boarded inside and out with inch lumber, would be advisable. Where the bottom is well drained, a board floor may be dispensed with by placing a good layer of round stone from 4 to 6 inches in diameter in the bottom and leveling up with gravel. It is desirable to have a small refrigerator room in connection with the building, suitable for storing fresh meats, dairy products, fruits, etc. A plan will be found by referring to our Jam. 1st issue of this year.

ROOT GRAFTS.

One of our subscribers, Mr. M. J. McInnis, of Prince Edward Island, writes, asking where he can purchase or how to procure root grafts?

Ans.—This question is too indefinite to answer satisfactorily. Root-grafting is practiced in the propagation of many kinds of fruits, and ornamental trees and plants, and any of the leading nurserymen can furnish trees or plants of both fruits and ornamentals propagated in this way. Root-grafting is done by grafting the scion directly upon the root, instead of on the trunk or on the branches. In some cases, the whole root of seedlings is used, and in others only sections of the root are taken off and used as a stock from which to work the scion. Various methods of uniting the scion and stock are practiced, but the one most usually adopted is that known as the "whip graft," by which smooth, sloping cuts are made at the top of the root and at the base of the scion. A small slit is then cut in the center of each, and the tongue of one is inserted into the slit of the other, so that they hold firmly together, care being taken that the inner bark of both scion and stock are in close contact at least on one side. This root-grafting is usually practiced by nurserymen during the winter time, the stocks and scions having been stored away in the fall in cellars, where they may be kept fresh. In the spring, the grafts are trans-H. L. HUTT. planted into nursery rows. Ontario Agricultural College.

WHEN A HOUND MAY BE SHOT.

A farmer saw a dog crossing his place. He pursued, and just as it turned into his orchard, he shouted at it. The dog gave one yelp, and as the farmer declares, pursued his sheep across the orchard. He continued shouting. The dog did not touch the sheep, but left the orchard from the east side and took a circle to a point back of the barn, about where first seen. Farmer went to his house, got his gun, and came out in the direction where the dog was circling and while the dog was running shot it. Owner sued for damages occasioned by loss of his dog, which it appears was a valuable hound. Farmer pleaded as a defence the act for the protection of sheep. The judge decided that the act justifies the killing of the dog only while the dog is in the actual act of worrying, giving tongue to, or terrifying sheep, and gave judgment for the plaintiff of twenty dollars and costs.

The foregoing appears to be a peculiar decision in the sheep-worrying line. Why do not the farmers insist on having a plain, simple law that will permit any dog to be killed that is found wandering, except it be on an adjacent farm? What is your opinion of the case as presented? M.

Elgin Co., Ont. Ans.—The judgment seems to us to be right. Even when fullest benefit of the Act is given defendant, it cannot but be legally considered that his shooting of the dog was quite unjustifiable.

SAN JOSE SCALE. Have mailed you, to-day, a sample of scale that is causing so much trouble here. Is this the San Jose scale? If it is not, what is it?

NIAGARA FRUIT-GROWER.

Ans.—The twig received was badly infested with San Jose scale; no doubt whatever.

we are enabled, through the kindness of Arch. McNeilage, 93 Hope St., Glasgow, Scotland, Secretary of the Clydesdale Studbook of Great Britain, to publish the following:

On payment of the entrance fee of ten shillings and life subscription of £10, life governors will receive all the published volumes of the Studbook gratis. In addition to the entrance fee of ten shillings, life members pay one subscription of £5, and annual members pay an annual subscription of ten shillings, and they are entitled to receive the last published volume of the Studbook gratis.

CLYDESDALE STUDBOOK.

asked in our last edition by J. J., Bothwell Co.,

As a further answer to the question which was

Life members can also purchase the back numbers of the Studbook, except the first and fifteenth volumes, at five shillings each, which is one-half of published price. Annual members are entitled to purchase back numbers at the following rates: The first and fifteenth volumes, at ten shillings each; Volumes II. to XIV., inclusive, at two shillings sixpence each; and the remaining volumes at five shillings each, in each case without postage.

CASTRATION OF LAMBS AND CALVES - QUAN-TITY OF WATER FOR PORS

I have heard it said that in the castration of lambs the best way is to take them when about ten days old, or within ten days of birth, and with a pair of shears cut off the scrotum skin and testicles. I would be pleased to hear if this is so. Is there no danger of them bleeding or not being strong enough to stand the operation? I have also heard that some farmers apply this rule to calves, and that it does have any injurious effect on them. shall be obliged if

you would give me your opinion on this question.

2. In fattening hogs, where the ration is soaked peas, is it advisable to let the hogs have as much water as they can drink? I have heard it stated that hogs and steers fatten better with little or no water, but soft food, such as soaked peas or barley meal mixed with water.

G. M. S. N. Westminster, B.C. The Ans.-1. method of castration outlined is practiced very largely and with good success by American sheep breeders, but in this country it has al-ways been considered safer to cut the end off the sack or scrotum and with a firm grip on the testicles draw them away one at a time. old English shepherd uses his teeth for this pur-

pose, but Canadian-born sheepmen prefer to use It must be their fingers or a pair of forceps. said, however, that the Old Countrymen probably operate with the lowest percentage of loss. In castrating calves it is not advisable to cut off There would the entire scrotum as mentioned. in most cases be considerable difficulty from bleed Where the ordinary method of slitting the sack, stripping the testicle and drawing the cord is performed and an antiseptic such as carbolic acid one part in fifty of water is applied to the

wound no loss is likely to resurt. 2. In our experience it is never advisable to withhold water from any fattening animal. The organization is not likely to call for drink unless a function is to be performed. Of course where salt is not supplied at will an animal is apt to take too much and hence drink accordingly; but under normal conditions only that amount which is required by the system will be consumed.

PAYMENT FOR SERVICES OF BUILT.

A has a bull for service, advertised for cash at time of service for the last two years. Last year collected pay for the cows that got in calf. . This year few, if any, got with call after being repeatedly returned. Can A collect pay for cows SUBSCRIBER. that are not in calf? Bruce Co., Ont.

Ans.-Yes, if served. At least there appears, in the statement of facts, no legal reason why he should not do so.



SUMMER BILL DALMENY SUNFLOWER. of first prize at Toronto and London Exhibitions, 1902. IMPJETED AND SHOWN BY D. C. FLATT & SON, MILLGROVE, ONT., AND SOLD FOR \$400.

WHY FEED CHESTNUTS?—MANGELS FOR BROOD MARE.

1. Why are horse-chestnuts fed to horses? 2. Is it good practice to feed mangels to brood mares in foal? I have been feeding two every day to a mare until her legs have become swollen. Her other feed has been hay and three quarts chopped oats, daily, and although loing heavy work no indication of swelling was notice able until the mangels were fed.

Brant Co., Ont. Ans.-1. So far as known, horse-chestnuts

have no special value as a food.

2. We have never known any evil effects from feeding mangels to any animal that would eat them. Usually horses prefer carrots or turnips. The swelling in the mare's legs is undoubtedly due to some cause not included in the question. Sufficient exercise should be given regularly.

DEVICE FOR PLOW COLTER.

Kindly let me know of any device for throwing long stubble off the colter. I mind of seeing a colter with a finger to throw the stubble into the furrow. Do you know where I could secure it?

York Co., Ont.

Ans.—We have never seen, in operation, any attachment to a colter that would successfully throw off stubble. Such devices have been recommended, but where anything useful in this line may be obtained at present, we know not. We would be pleased to hear from any reader who has the necessary information.

BEAN HARVESTER — SOW THISTLE — BOOK ON STOCK-FREDING,

1. Please let me know what kind of a machine a bean harvester is. Does it pull or cut the beans? Is it expensive and where purchased?

2. What is the best method to get rid of sow thistles? Do they grow from seed or root, or both?

3. Can you give me the name of a book which treats in a simple manner on the feeding and care of all kinds of young stock, so as to insure the most rapid growth and at the same time te healthy and come to maturity as early as possible? SUBSCRIBER.

Durham Co., Ont.

Ans.-1. Bean harvesters are built according to different patterns. A correspondent, in Bothwell County, writes that he has been using one made by the American Horse Cultivator Co., Windsor, Ont., which can be attached to the frame of a cultivator by taking off the teeth. Another style, known as Duck's bean harvester, is made in Ridgetown, Ont. It is a one-horse puller, gives good satisfaction, and is said to be comparatively inexpensive. Write Mr. Gosnel, Ridgetown, Ont., who probably has these implements for sale.

2. The best method to get rid of sow thistle will be found described in July 15th issue "Farmer's Advocate," page 530. There are two species of this weed: one, known by the scientific name, Sonchus oleraceus, is an annual, growing from the seed only; the other, Sonchus arvensis, is a perennial, reproducing from seed as well as root. The former is distinguished by the leaves, on the outer margin of which short teeth are always to be found pointing backwards.

The best book for the purpose is "Feeds and Feeding," by Henry, price \$2.00. It may be ordered through this office, at the sum mentioned.

VALUE OF BUTTERMILK FOR YOUNG PIGS. I would like to know whether it would pay to buy buttermilk (pure) at a creamery and draw it 11 miles, and feed it to young hogs three months old, to be fed, of course, with barley and oat chop mixed in equal proportions, and pay at the rate of 25 cents per barrel for it? Do you think that a fair price for it? R. J. L. Grenfell.

Ans.-Yes. The investment would be profitable. Buttermilk as drink and food for growing pigs is equal to skim milk, since it furnishes, in about the proper ratio, all the bone and musclebuilding elements. This, combined with food containing substances for fat and heat production, such as chop wheat, barley and oats, will yield the most profitable returns. Care should be exercised in the administration of the food, and experiments demonstrate the returns to be the highest when a ration is fed of about four pounds of milk to one pound of meal. Buttermilk and barley or oats, fed in the above proportion, yield an average gain of one pound for every three pounds of barley and thirteen pounds of milk consumed. Fixing the price of buttermilk at 25 cents per barrel of 250 pounds and the barley at 48 cents per bushel, the cost of one pound of gain would be 4 3-10 cents. This, with a selling price for pork of 7 cents, would give 2 7-10 cents profit for every pound of gain in weight. With a liberal pasture run, where grass and water could be had in abundance, the cost per pound of increase would be reduced.

The above figures are based on the supposition that all feed has to be bought, but when the food is produced on the farm the cost of one increase would be reduced one half. The expense of hauling the buttermilk 11 miles would add but little to the feeding cost. The price is reason-W. A. WILSON.

Dairy Supt., Assa. NUMBER OF HOGS ON TWENTY ACRES BOOK ON HOG-RAISING.

1. How many pigs could be raised and maintained yearly on twenty acres of land, through which a creek runs? 2. Where could I obtain the best work on raising pigs for market

JOHN BURGESS. Toronto. Ans.-1. In devoting twenty acres exclusively to hog-raising, one quarter that area would require to be utilized as pasture, including rape, clover, etc. Other two acres should be used for growing roots (mangels preferred), which would leave thirteen acres for the production of barley and oats. As it is never profitable to feed these two grains alone during the entire growing period of a pig, a considerable quantity of shorts must necessarily be bought, say equal to onethird the weight of grain on hand. Estimating on this basis, which seems the only sensible one, from the standpoint of profitable pork-production, we would say that, with good care and careful management, fifty matured hogs could be sold annually from such an acreage. 2. There is no book devoted entirely to hog-raising and suited in every respect to Canadian conditions. The best we know of is an English work, "Pigs: Breeds and Management," by Sanders Spencer, price \$1.00. There is also in "Feeds and Feeding," by Henry, of Wisconsin, price \$2.00, an excellent chapter on the subject, from which Canadian producers might obtain much information. Either of these books may be ordered through this office, at the price named.

TURNIP MAGGOTS - WORMS IN PIGS.

What is the cause of a little white worm working in turnips in the field, eating at the roots? Was it on account of too much manure in the ground?

2. In feeding pigs roots they are liable to have worms. What will prevent it?

Simcoe Co.

Ans.-1. The maggot found eating at the base of your turnips is not due to the manure which has been applied to the land. The name and peculiarities of this insect we cannot give with any degree of accuracy without seeing a specimen. It is rather probable, however, that the little pest is a wireworm. If you can procure a sample, send it, carefully packed, to this office, and we shall be pleased to give fuller information.

2. In our experience we have never known that pigs fed roots were any more subject to worms than those which were not. What say our readers on this point? Where pigs are thought to be troubled with worms a good condiment consisting of charcoal and ashes, with a small quantity of salt, should be kept constantly where they may partake at will. In fact, such a regulator should be in every pen where hogs are confined and economical gains are expected.

DOUBT ABOUT BEIFER BEING WITH CALF.

I have a fine Holstein heifer which calved about the middle of May; have only seen her in heat once since, but did not have her served with my own bull, but she might have got with calf some time by a bull of my neighbor's. How am I to tell if she is with calf or not? F. K. M.

York Co., N.B. Ans.—Time will tell. She may have been only once in heat and from some check in her health may not come in season for months, when the functions of nature may again work regularly. If she is in calf the head of the calf may be felt when she is about 6 months gone by punching her in the right side, above and forward of the flank, with the fingers and thumb grouped togeth-We know of no other means of determining the condition.



FENEMERA.

Aberdeen-Angus heifer, two years old. Winner of first prize at Toronto Exhibition, 1902.

IMPORTED AND OWNED BY JOHN RICHARDS, BIDEFORD, P. E. I. CEMENT WALLS FOR WELL.

Recement lining for well, I beg to say that what I most desire to know is can the concrete be made in moulds, in sections that could be easily handled, and allowed to set before love ered into the well? The well will be about 4 ft. square. What proportion of cement is necessary, and how thick should the wall be? Prescott Co., Ont.

Ans.—The cheapest and most satisfactory way to do this work would be to build the concrete right in the well, in same manner as when building concrete cistern (see my pamphlet, page 14), but of course it would be necessary to keep water pumped out whilst work is being done. In either case, concrete walls should be made about 6 in. thick. Concrete mixed in proportion of three fine gravel (not sand) to one of cement. Mix thoroughly and ram well, same as is done in making ordinary concrete wall. I. USHER.

PROFITS IN BEET SUGAR - COST OF MACHINERY. 1. Do factories for producing beet sugar pay?

2. What is the average price paid for the sugar, and is there a demand for it?

3. How much machinery is necessary for a factory?

Yarmouth Co., N. S. Ans.-1. As the beet sugar industry in Canada is just in its infancy, and no factory has yet completed a season's manufacture, definite results in our own country cannot be given, but in United States, under conditions no more favorable, the factories have been paying good dividends on the money invested, and as a rule the farmers supplying beets have been well satisfied with their share of the returns.

2. Nearly all the granulated sugar now used is made from beets, and consequently there is a steady demand, the present wholesale price being about 3.85 per cwt.

3. The machinery for an ordinary factory, capable of handling 600 tons of beets daily, costs WHEN TO WEAN A CALF.

Please answer the following question: How long is it profitable to feed a calf skim milk? F. K. M. York Co., N. B.

Ans.-The exact period at which a calf should cease to be given skim milk depends not upon its age, but largely upon the extent to which it has been taught to make use of other foods. Where a calf will readily consume a fair ration of meal and sufficient water to allay thirst, skim milk may be discontinued at three or four months of age. The change, however, must be made gradually, say by adding warm water to the milk for a time, and it must not be forgotten that skim milk, which is strong in protein and ash, is a great bone and muscle former, and hence when its use is discontinued the calf must be able to assimilate a substitute in the form of ground oats, bran and linseed meal. Should this milk be plentiful and not required for other stock, we would advise its use even longer than suggested.

GRAPEVINES UNPRODUCTIVE.

Having recently bought a farm on which there is a quantity of white grapes, which have grown wood in abundance this summer and covered with leaves, but the fruit is both scarce and small; and having no experience in grape-growing, I would ask you to kindly inform me through your valuable paper what to do to cause them to produce JOHN TRACE. more fruit?

Simcoe Co., Ont. Ans.-The failure of your vines to bear profitably may be due to different causes. First, the location being so far north of the grape-growing region of Ontario may be one of too great exposure, and while the wood may grow abundantly through the summer the spring frosts are probably destructive to the blossoms. Again, it is probable that the vines may have outgrown themselves, and if it were possible to cultivate a vineyard successfully in that section, a new planting should take place. As to whether the trouble is due to these causes a fuller acquaintance with the conditions would be necessary to determine. If, in your opinion, it is not, try pruning the vines well back, next March, and giving frequent

surface cultivation during early summer. DEAINS FOR NEIGHBOR'S BENEFIT.

After tile-draining my farm, am I obliged to carry the surface water from adjoining lands over or through my drains, the owners of said lands having contributed nothing toward the cost of my drains?

2. Can I require such owners to extend my drains a certain distance on their lands, and to pay me for extra expense incurred in laying larger tile than I required, to provide for their

3. Am I obliged to make and maintain an open ditch in addition to my drains to carry off

water from adjoining lands? OLD SUBSCRIBER. Ans.-1. Not unless your drains have interfered with natural water courses which had af-

forded outlet for such water. 2. It is a matter for agreement between you and your neighbors. Without an agreement for it we do not see that you are in a position to go the length of taking legal steps to compel them to do what is suggested, notwithstanding that it seems only reasonable under the circumstances that they should be required to so do their part.

3. We think not, if the open ditch referred be not an existing and natural water course.

PRACTISING WITHOUT V. S. DIPLOMA.

1. I have been practising doctoring horses and cattle for over thirty-five years and with good success, and have been able to compete with most of the vets., but have not a diploma. Is there any way for me to get a diploma without graduating? 2. Would the length of time that I have been practising get me one? 3. I went to Manitoba for three months this summer and got a great practice there. I mostly sell prescriptions for different diseases at so much each. Would it be lawful for me to sell prescriptions at so much or not? I am a farmer and about 60 years of age, and do not care to graduate now.

Wellington Co., Ont. Ans.-1. No. 2. No. 3. It would not be il-

legal, provided you did not hold yourself out as a veterinary surgeon.

LEGAL WEIGHT OF ONIONS.

Please let me know the legal weight for a bushel of onions, in Ontario and also in Quebec. Was the weight ever changed; if so, when? Lanark Co., Ont. READER.

Ans.—Previous to 1898 the legal weight of onions for all Provinces in Canada was 60 pounds per bushel. By Act of Parliament in that year the required weight was changed to 50 pounds, at which it has remained to this day.

WHITE CLOVER SEED WANTED.

Please let me know where white clover seed may be obtained and the price. J. H. R. Haldimand Co.

Ans.-White clover seed may be obtained through any of the leading seedsmen. At present it is ranging in price from 30 to 35 cents per

366

OW

uld on

ds.

ion

ths

ade

the

ten

und

nd

ust

his

her

an

ere

wn

ith

and

uld

lu-

the

ing

ех-

nt-

ere

it

wn

e a.

nt-

ble

ith

ne.

the

ent

ged

ads

aid

ost

my

ar-

eir

er-

af-

for

go

em

ces

ad-

ve

ni-

8.

ns

it

ch

of

ar

S,

ed

nt

VICIOUS HORSE.

I have a six-year-old horse that has a bad habit, when hitched double, of jumping at the other horse and grabbing him by the back of the neck with his teeth, when going to turn or back up, and hanging on. Whipping was tried before I owned him, with no effect. Would you kindly give me some plan of breaking him of it

SUBSCRIBER. Ans.-Since your horse has acquired such a vicious habit, it will be necessary to have him rebroken. Drive single for some time, until trained to do just as you say, after which a well-broken horse may be attached by halter to his side and all the movements through which he formerly showed viciousness gone through. If he has not forgotten his old habits he can be easily chastised while in single harness. Later he may be hitched double, but a bit with side flanges, to prevent its being pulled through the mouth, should be used, and when a dispostition toward ugly conduct is shown, good horsemanship should be executed at the other end of the lines.

TENANT REMOVING STRAW, ETC.

I rented a farm with stock and implements for 1901, the landlord leaving a certain quantity of straw and hay to feed the stock. Last spring he made an auction sale and sold all his stock and implements. I rented it for 1902 and paid him for the hay and straw he left the first year. He Breeders' Association, together with representatives sold the farm this season. Now, can I remove the straw and hay on to my own farm, or could I draw the manure to my own farm if I feed it to stock on his farm till my lease expires, being the 1st of March, 1903?

Lanark P. O.

Ans.-In the absence of express agreement, or custom of the locality to the contrary, you are entitled to remove straw and hay, but not ma-

OFF COLORS IN BEEF CATTLE.

1. What colors are called off colors in beef cattle, and what effect has it in value? 2. Does the color of the nose have any effect, and to what extent? 3. Does the color of the nose denote any good or bad qualities in a dairy cow

Elgin Co., Ont. SUBSCRIBER. Ans.—1. The term off colors in beef cattle, as used in the stock-yards and market reports, refers to animals showing the color markings of a dairy breed, and hence defective in beef type. The difference in the selling price of such, as compared with the best beef type, often ranges, according to condition, from one to two dollars per 100 lbs. 2. No, not in the market for butchers'

cattle. 3. No.

Three years ago I bought some Dorset Horned sheep, which were to be registered, but I did not receive the certificate nor ear-label which should have been in one sheep's ear. One year later I bought some more sheep of the same party, paid part of the money at the time and agreed to pay the balance of it after he shipped the sheep and sent the certificates and ear labels of both lots of sheep which I bought of him. I have seen the party at different times since and he says, "Pay me the balance of that money and I will send you the certificate. I was afraid you would not pay it, as you were not suited with the sneep.'

1. What steps should I take to get the certificates and ear labels, as they have cost me much trouble and money? 2. Can he collect the money?

Ans.-1. Propose suit in default of his furnishing the certificates and labels by a certain This might bring them. If, however, legal proceedings should become necessary they would be by way of action for damages for his breach of contract.

2. Not without first performing his part of the contract by supplying certificates and labels. DAMAGES FOR LUSS OF CALF.

A verbally agreed with B to pasture a calf. The price of pasture was not mentioned, but B promised to pay A reasonably for the pasture, and B paid A for driving the calf from his place over to A's lot to pasture. It now transpires that the calf has strayed away.

1. Is A liable for the price of the calf and for the expense of looking it up?

2. If so, what process would B have to take

to recover damages? AN ADDINGTON SUBSCRIBER.

Ans.-1. He is, assuming that the loss of the calf was owing to negligence on his part. in the absence of such negligence he would not be liable.

Suit in the Division Court.

LINSEEU MEAL FOR DAIRY COWS. Kindly give your opinion on linseed meal for milch cows, and how much it is safe to feed at a time. Quebec.

Ans.-Our experience with linseed meal has been that it imparts a very beneficial influence to dairy cows when fed in limited quantity. A soft, pliable, oily skin, and a general thrifty condition is usually the result of its feeding, and in milkers these are splendid indications that the organization is able to do its best. Some dairymen contend that when fed in large quantities milk hav-

texture are produced, but we are satisfied that if not more than two pounds be fed daily no evil effects will be noticeable.

GLEANSING MORSE'S BLOOD-BORROWING MONEY. 1. What is the best medium to use in cleans-

ing a horse's blood? I generally use sulphate of iron and chlorate of potash, one dram of each.

2. Please direct me as to where money can be borrowed on first mortgage at four per cent. Private money would be preferable. Wellington Co., Ont.

Ans.-1. As a blood stimulant and aid in building up a run-down constitution the following is very highly recommended: Two ounces each of gentian, fenugreek, sulphate of iron, and one pound ginger. Mix all together, and give one teaspoonful, twice daily, in soft food.

We know of no place where money can be borrowed at four per cent. Five and six are the current rates, and the demand is increasing.

FARM GOSSIP.

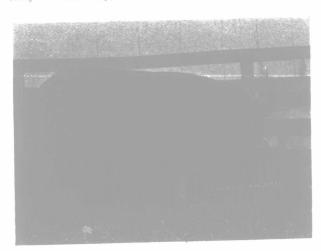
Horse Breeders' Meeting.

DRAFT STALLION SHOW.

A meeting of the directors of the Canadian Horse from the Clydesdale and Shire Associations, took place at the Palmer House, Toronto, Monday, November 3rd, at 7.30 p. m.

Dr. Andrew Smith occupied the chair, and the following gentlemen were present: Col. D. McCrae, Guelph; J. M. Gardhouse, Highfield; John Bright, Myrtle; Peter Christie, Manchester; John Vipond, Brooklin; William Smith, Columbus; Robert Miller, Stouffville; E. C. H. Tisdale, Beaverton; Robert Beith, M. P., Bowmanville; H. M. Robinson, Toronto; William Wellington, Toronto; and H. Wade, Secretary.

The chairman said "the object of the meeting was to consider the advisability of holding a horse show early in February, and a discussion of that subject



WILLOW LODGE PERFECTION. Berkshire boar. Winner of first prize at Ottawa, Toronto and London Exhibitions, 1902, as over 6 and under 12 months. PROPERTY OF WM. WILSON, SNELGROVE, ONT.

was now in order." Several of those present then gave their opinion, pointing out that with the Clydesdale Association this question had been long talked of. It has been felt that the spring horse show Toronto although a great success and viewed with favor by all horsemen, was held rather late in the season for purchasers of heavy horses who wished to make their arrangements in good time for horses going to different districts, and especially late for men from Manitoba coming down to purchase horses for that country. This Northwest trade should not be allowed to go to the United States. If the show was well advertised buyers might be expected from across the border, as well as the great West. Now was a good time to begin, because horses were paying better than for years, and with the establishment of such an institution at this time there would be no difficulty in continuing it in future.

DRAFT HORSES ONLY.

The first idea was that all the different breeds of horses be represented, but after discussing it, it was thought to be probably best at the beginning to confine it to draft breeds and make this exhibition a draft stallion show, including Clydes and Shires, both imported and Canadian-bred. If it were found advisable afterwards the other breeds could be represented, but, as pointed out by several gentlemen, the spring show in Toronto is better for the exhibition of the Hackneys, the Standard-breds, Thoroughbreds and Coach horses, and gives them a better chance of being seen and admired than would the exhibition at present proposed and which would only have a limited area.

In regard to the financial aspect of the problem, it was thought that if \$1,000 were given by the Canadian Association, with supplementary grants from the Clydesdale and Shire associations, a satisfactory prize list could be made up. At length, the following resolutions were submitted and carried:

1. "That a show for the heavy breeds of horses be

held in the early part of February, 1903." 2. "That the Canadian Horse Breeders' Associa-

ing an objectionable flavor and butter oily in tion give a grant of one thousand dollars to this spring show."

CHARACTER OF THE SHOW.

As to whether mares should be allowed to show there was considerable difference of opinion. Some took the ground that without them there would not be enough animals to make a good exhibition, and that the annual spring show comes at a time when those heavy in foal could not be safely moved, and hence if not at this time no opportunity was given for their being shown. Another reason why they should be included in the list was because Westerners left a lot of money annually in Ontario for females, and were just as anxious for them now as ever. It would be a small representation of what was to be found in this country if only males came out.

On the other hand, it was contended that the selling of mares should not be encouraged at a time when breeding was so profitable. We have not in Ontsrio, at the present time, any more good females than we require; besides, no man who has a valuable breeding mare would care to risk shipping any distance, even at the beginning of February. Again, it was better to give liberal prizes for stallions than distribute the money over the number of sections that would be necessary if mares were included. It was finally agreed that stallions only be shown this year.

WHERE HELD.

The place of holding the show was not considered at great length, but the consensus of opinion seemed in favor of some place like Grand's Repository, where the horses could be all kept in one stable that would be warm and otherwise comfortable. It was mentioned that Mr. Smith had already made an offer and a proposition had also come from Guelph. It was thought that the time had come when the Industrial Exhibition Association should urge the city to provide accommodations for such an event. However, for the present the matter is in the hands of the committee, and a definite announcement mad be expected at an

OFFICERS APPOINTED.

The following officers were appointed to carry on the show: Chairman, Dr. Andrew Smith, Toronto; First Vice-Chairman, W. E. Wellington, Foronto; Second Vice-Chairman, Col. McCrae, Guelph; Sec. Treas., Henry Wade, Toronto. Committee from the Canadian Horse Breeders' Association: Dr. Andrew Smith, Robt. Beith, M. P., Wm. Hendrie, Jr., Jno. Macdonald, Thos. Graham, and H. N. Crossley. From Shire Association: W. E. Wellington and J. M. Gardhouse. From Clydesdale Association: Col. McCrae, Peter Christie, Robt. Miller and Wm. Smith.

CLYDESDALE BREEDERS MEET.

At the conclusion of the meeting of Canadian Association, the directors of the Clydesdale Association held a short session, in which a grant of \$500 was made to the stallion show. The following resolutions were also moved and carried, after which the meeting

adjourned: 1. "That in the Canadian-bred class, animals must not trace to an imported dam, and that the ordinary ruling of the Clydesdale Association apply in this

case. 2. "That there be two yearling classes, one for imported and one for Canadian-bred."

Oxford County, Ont.

The season is still keeping up its reputation for or less every few days. Very little corn has been got into the barn on account of the wet, and it is very doubtful if corn will keep in the barn, even with the greatest care, on account of its unmatured state and such continued wet weather. Roots are turning out a great crop-the largest and best we ever had. Mangolds and beets are now all in, and we are busy at the turnips. They harrow out well this year on account of their large size, and we have not drawn off the tops. They don't seem to bother the harrows at all. Of course, we still believe pulling them by hand is the best way to harvest turnips, but it is harder work. Of course, we top them with the hoe. Potatoes generally were a very poor crop, and many of them rotted badly, and likely the prices will rule high. Those planted late did best with some farmers. Apples have been a big crop, but the quality has not been good, many, especially Spies, being badly spotted, and the packers culled them badly. All varieties were generally small. Some farmers hauled out considerable to the evaporators, getting twenty cents per hundred pounds, but when help is so hard to get and so expensive, there is not much return at twenty cents per hundred pounds. The pigs have eaten a great quantity of apples hereabouts.

Live hogs are still dull sale at about 5; cents, but the rush of fall-fed pigs will soon be over, and they may get a little better in price. Cheese is keeping up in price—our last sale was 111 cents. There is no word of making butter this season. Cheese has certainly paid the best. Young cattle were very high in price, as much as \$33 having been paid for one bunch of very fine yearling steers, but the excitement is getting over and the prices are now a little easier. It pays to raise the best. We have been thinking seriously of letting two calves suck one cow next spring, instead of feeding the calves from the pail.

Ottawa Notes.

EXPERIMENTS WITH CATTLE.

The experiment which has been conducted for the past three winters for the purpose of finding out whether it is advisable to fatten steers loose or tied will be continued again this winter. Prof. G. H. Grisdale returned last week from the vicinity of Myrtle, Ont., where he purchased fifty-four head of steers, comprising yearlings, two and three year olds. The average weight of the yearlings was about nine hundred and fifty pounds; two-year-olds, ten hundred and fifty; and three-year-olds, thirteen hundred pounds. They are the most typical lot of steers that have ever been put on feed at the Experimental Farm, and it seems strange that farmers, especially those living in the vicinity of Myrtle, where growing beef is one of the principal occupations of the farm, would dispose of their animals when they are just at an age for putting on flesh and making money for the owners. Nine steers of each age have been tied in the stable, and three lots, each containing nine animals, have been turned loose in large box stalls. The one lot running loose have only been allotted two-thirds the space given the other two lots. The animals will be fed about fifty pounds of ensilage and roots per day until about the middle of December, when they will be given a pound of gluten meal each day.

The experiment termed the "Full Fattening vs. the Limited Growing," conducted with calves, is still in progress, the object being to find out if calves intended for beef should be rushed from birth to block, or, in other words, to determine the comparative economy of feeding calves a full fattening ration from the start as contrasted with a limited growing ration. The talves on the former ration are about seventeen months old and their average weight is in the neighborhood of one thousand pounds, while the calves on the limited growing ration weigh about seven hundred and twenty-five pounds each.

DAIRY COWS.

The milch cows, numbering twenty-five, are giving about four hundred pounds of milk per day. It is heing manufactured into butter. They were put in the stable on the first of November, and their daily ration consists of twenty-five pounds of ensilage, two pounds of long hay, and four pounds of meal taken from a mixture of two hundred pounds of gluten meal, one hundred and fifty pounds of ground oats, and one hundred pounds of bran. In all probability an experiment will be conducted with some of the milch cows the coming winter.

In the piggery 196 pigs of all ages and breeds are to be found. An experiment is being conducted with a number of spring pigs, the object being to find out if it is advisable to keep hogs confined from birth until they are marketed, or if it is better to give them the run of a pasture with plenty of rape. There are six pigs in each lot. The pigs inside are getting barley meal and milk; the second lot, barley meal without milk; and the third, shorts and milk. The different lots outside are getting the same feed with rape. While not finished, the experiments give indications of showing that it makes little difference, where pigs are fed so long as they are properly cared for.

The spring pigs of that new breed known as Large Blacks are about ready or market. They are good feeders, and have averaged nearly one and one-quarter pounds per day since they were put on feed.

POULTRY.

In the poultry department an experiment is being conducted with a number of hens for the purpose of finding out if it is necessary to let fowls have a limited run or if they should be penned up in order to bring on early winter laying. The hens in the pens are being fed the regular winter ration, with some whole grain thrown in the straw on the floor to give them exercise. The number of laying birds this winter will number about two hundred and twenty. They are being fed the following ration: two parts shorts, one part ground barley, one part cornmeal, and one part ground oats, together with animal meat.

PROFITS IN SHIPPING FRUIT.

An experiment, recently made by the Experimental Farm officials, in apple shipping to the British market has demonstrated the demand which it is possible to create for Canadian fruit. There were shipped on October 1st, one hundred bushels of No. 1 apples, packed in boxes of one bushel each. They were sent to a commission merchant in London in the name of the officials, in order that there should be no favoritism created on account of their being Government Farm grown. The returns, which were received to-day, show that the apples sold quickly, bringing a profit, after commission and freight had been paid, of three dollars per barrel. There were thirty-three barrels in the shipment.

DEMONSTRATIONS IN ROADMAKING.

The famous Eastern Ontario good-roads train has now gone out of business, having completed the last stretch of model road at Kempville about two weeks ago. All together, some ten stretches of model road, located in nine different counties, were made. In most cases, between a half and four-fifths of a mile of macadam or stone road was built. Model stretches were built at Gananoque and Landsdowne, in Leeds County; Iroquois, in Dundas; Alexandria, in Glengarry; Plantagenet, in Prescott; Carp, in Carleton; Almonte, in Lanark; Eganville and Pembroke, in Ren-

frew; and Kemptville, in Grenville County. At all of these points, and at Newington, in Stormont County, sample concrete culverts were made. As a means of educating the public in the best methods of road-building, the work done by the good-roads train is of inestimable value.

Chicago Notes.

(Special correspondence by J. J. Ferguson.)

The horse show has come and gone. We have no words to describe the beauty and splendor, both social and equine. Our memory of it is a mixture of some acres of bunting, a few hundred of the finest horses and outfits on earth, and some thousands of Chicago's swellest people. It was a big success, with entries more than a hundred in advance of those of either of the previous events. As in all good things, Ontario was represented. George Pepper, who has been to the fore in American rings so often, was out with several splendid entries, and landed several good places. The event of the show was the sensational high jump made by Willett's "Heatherbloom." This wonderful horse, in a special exhibition event, cleared the bars at seven feet eight inches, and made a world's record thereby.

One of the best features of the show was the display of pairs, four-in-hands, and six-horse teams of heavy delivery and truck horses. The big packers had been preparing for this for a year, and great was the show. Most of the best places went to Swift & Co., on their grey Percheron entries.

THE COMING INTERNATIONAL.

The eyes of all stockmen are looking towards Dexter Park, where soon will gather the greatest collection of pure-bred stock ever brought together. The management have made many changes and improvements since last year, and the event promises bigger and better than ever.

BUSINESS AT THE YARDS.

The live-stock trade conditions of the past year have been most uncertain. On the one hand we heard the general consuming public clamoring wildly and aimlessly against the packers-the beef barons. Meats on the open market soared almost to famine prices. The extra margin over the prices current two years ago did not all go into the pockets of the middlemen and packers. The men who grew beef, mutton and pork reaped a harvest. Think of these prices: Prime steers, \$8.85 per cwt.; hogs, \$6.75, and higher; grass mutton, a nickel a pound, live weight. The public had to pay the price or go meat hungry, and many of the poorer classes have practically foregone flesh meats. The total number of hogs received up to the present has been far short of an average season's receipts. The supply of beef has been fairly steady, with really good stuff scarce. Feeders have rushed their stock in, fearing a decline from stiff prices. The supply of sheep and lambs has been simply unprecedented. On October 7th, 1901, the writer was in this market when the record offerings up to that date were on offer, namely, 39,599 head sheep and lambs. This was certainly big for one day's receipts, but on the first Monday morning in October, of this year, this number was exceeded by 20,000 head, there being, in round numbers, 60,000 head of sheep and lambs on sale. Pricas have been strong, but never before have so many feeders gone out of these yards to the feed lots. These will all be back in a few months. They were bought at long prices, the bulk at over four cents. It must mean there will have to be some careful feeding done if there is to be any profit for the men who are doing the work. THE BEEF "TRUST."

The public thinks there is a trust, but the public is not always right. The much-talked-of merger of the great packing interests of this center is a common topic on the street and in the press. The latest rumor has it that a consolidation of all interests, with the big firm (Swift & Co., Armour & Co., Nelson Morris & Co., and the S. & S. Co.) at the head, will soon be consummated, and that by January 1st all packing interests will be directed by the one management is the current topic. It will not mean higher-priced meat to the consumers, but will eventually result in a great reduction of expenses through lessened competition, so that cheaper prices should finally rule.

PRIME BEEVES AND CANNERS. It is a fact that for months the export packing trade has been a losing game. Many shipments of "market toppers" shipped across the water have netted the shippers a loss of fifteen to twenty dollars per head. The cheap stuff picked up at two to three cents has been the material which supplied the sinews of war and made business profitable. This is cold encouragement for the producers of prime steers from pure-bred or high-grade stock, but it is an actual fact just the same. Just now the packers would rather handle a "canner" than half a dozen steers fed and fitted for a block test. The point we make is this: The advantage and increased profit from pure-bred stock lies altogether the way of the producer, comsequently the man who raises the steers has to fight his battles out alone, but let him not weary in welldoing. The work of stock improvement brings its own reward both in satisfaction and in dollars to the man who undertakes it.

THE PURE-BRED LIVE-STOCK RECORD BUILDING.

The management of the Union Stock-yards Company have the interests of the greatest industry of this continent seriously in mind. Another evidence is new to be seen in the magnificent brick and steel building which has lately been erected on Exchange Avenue, at

the entrance to the yards. It has cost the company over \$100,000, and has been built as a free-will offering to the stockmen of America and their united interests. All registry associations are united in permanently house their work and records on the second floor of this building. Space, heat, light and janitor service are to be supplied by the Union Stock-yards Company free of cost to the associations. Chicago is everywhere regarded as the center of the live-stock trade of the continent. It is hoped that the bringing together of the pure-breed interests will mean a great impetus to the work of the breeder.

P. E. Island.

At this date of writing, crops are all gathered in. The weather is still very fine, and favorable for fall work on the farm. Roads are still dry and firm, making it easy to move produce to shipping ports. Considerable shipping has been done at the outports, and prices have been up to the average. The crop of 1902 has been an average one, with the exception of grass. The exceedingly dry weather of last year and the bare winter resulted in a great shortage of pasturage and the hay crop. This is a great drawback to us here, who come to depend so largely on stock for the dairy as well as for the block. It is becoming very evident to all that if we are going to make a success of stock farming we must provide more soiling crops to supplement the pastures in summer, so that we can keep more cattle on less acreage without the risk of being short of feed in a dry season. The poor pastures of this season have told seriously on our dairy output, which, I think, will not be more than two-thirds of the output of two years ago. The greater number of patrons of cheese factories depend altogether on pasturage for their cattle, consequently a dry season shortens the milk supply very much. Now is the time to lay plans for next season, while we are feeling the effects of shortage of feed. It is better to grow a large amount of supplementary feed every year, and if we should not want it all in the summer we can cure it for winter feed. We have found a mixture of oats, peas and vetches to be the best. The addition of vetches thickens up the feed and makes it stand up better than if they are omitted and more peas sown. Corn, this year, did not do very well on account of the cold season, but still it was a great help in the dairy in September and October. Taking one year with another, it always pays to grow it for fall feed. Our cheese season closed November 1st, and most of the factories are now operating butter plants. The price of cheese for the season will average up well. The last sales here were at 11%c. Quite a lot of butter is being made now, as the weather is very fine and there is still a good deal of pasturage. The hog crop is being marketed now at good prices-\$6 per hundred for bacon hogs. There are more hogs to market than ever before. Lambs have been mostly shipped, S. H. Jones, of Sabrevois, Que., has handled most of them. The price is half a cent less than last year-three cents for lambs over ninety pounds and two and a half cents for between seventy and ninety. The egg season is over. The price of eggs has been higher this season than for many years, averaging about 13 cents. Chickens are in good demand for the fattening stations, which are doing a greatly increased and profitable business. Winter apples are selling for \$2.00 per bbl., without the barrel. Quite a few are being shipped to the Old Country. Oats sell at 30 to 34 cents; potatoes, 20 to 22 cents; carcass pork, 71 to 71 cents; beef, 5 to 51 cents by carcass. The Dominion Packing Co. are now handling cattle and sheep, as well as hogs, at their factory. A Halifax started a bacon-curing establishment in Charlottetown. The hog is king here just now, but the farmers are still vigorously protesting against the Government guaranteeing any company's bonds. November 7th.

Michigan Sugar Beet Harvest.

The Michigan sugar beet growers, this season, have experienced a good deal of trouble, both in cultivation and harvesting, owing to exceptionally wet weather. A gentleman who has just been over the Bay City district tells us that some fields could not be harvested at all, it being impossible to get upon the land. Speaking generally, the industry has made great strides in the State, and there is ample scope for it owing to the enormous consumption of sugar, which is said, on a low estimate, to average, both in Canada and the States, one pound per day for a family of five.

MARKETS.

Buffalo Markets.

East Buffalo, Nov. 11.—Cattle—Receipts, 100 head; handy butchers' cattle, good demand, stronger; others barely steady; veals steady; tops, \$8.25 to \$8.75; common to good, \$5.50 to \$8.00. Hogs—Receipts, 3,500 head; active, 5c. higher; heavy, \$6.50 to \$6.60; mixed, \$6.40 to \$6.45; Yorkers, \$6.20 to \$6.30; pigs, \$6.35 to \$6.40; roughs, \$5.90 to \$6.15; stags, \$5.50. Sheep and lambs—Receipts, 1.000 head; steady; top lambs, \$5.40 to \$5.60; culls to good, \$4.25 to \$5.25; yearlings, \$4.00 to \$4.25; ewes, \$3.50 to \$3.75; sheep, top mixed, \$3.60 to \$3.75; culls to good, \$1.75 to \$3.50.

Toronto Markets.

The trade in live stock at the Toronto market is gradually assuming a more encouraging tone. The stock, as a rule, are somewhat improved in quality, and this with a little better demand has caused the offerings to change hands readily. The prices, however, cannot be said to have changed very materially, but the outlook is promising for next week unless depressing news comes from Great Britain. The total run was 83 loads, including 1,355 cattle, 1.659 sheep and lambs, 25 calves, and 747 hogs.

Export Cattle were, on an average, of better quality than on previous markets, and buyers showed more interest than usual. For choice lots, the prices ranged from \$4.75 to \$5.10, with medium stuff going at about \$4.50. More good ones, however, would have found a

ready sale at the above prices.

Butchers' Cattle of choice sort were not present in any number, and these are the kind buyers are looking for and ready to pay the price. Those equal in quality to the best exporters and weighing about 1,100 sold quickly at prices ranging from \$4.50 to \$4.75. Choice lots of heifers and steers brought about \$4.25; medium butchers', \$3.60 to \$4.00; and common cows at \$2.25 to \$2.95.

Feeders and Stockers.-Feeders weighing 1,000 lbs. or more, suitable for short-keep feeding, were scarce and firm at prices ranging from \$4.00 to \$4.50. Lighter weights are comparatively scarce, with prices rather firmer. In stockers there are less of the rough conformation coming forward. Those from 500 to 700 in weight and of fair quality are worth \$3.00 to \$3.25 per cwt., but the inferior kind go as low as \$2.25.

Milch Cows.-Milch cows are scarce, and good ones

sell well at from \$35 to \$60 each. Calves.-Calves are ranging from \$3.50 to \$5.00

per cwt. Sheep.-There was a fairly heavy run of sheep,

with the demand active. Ewes sold at \$3.25 to \$3.90, and bucks, \$2.50 to \$2.75. Lambs were somewhat higher, ranging from \$3.25

to \$3.75 per cwt. Hogs.-In hogs, the run was light and prices re-

mained the same-\$6.00 for selects and \$5.75 for lights

GRAIN AND PRODUCE.

On the St. Lawrence market the deliveries of grain, hay and apples were heavy, with potatoes and dressed logs coming forward in fair quality. The prices, however, remained about the same.

Wheat -500 bush. white sold at 71c. to 72c.; 200 bush, red at 711c., and 300 bush, goose at 66c.

Barley.-1,500 bush. sold at 47c. to 491c. Oats.-1,200 bush. sold at 35c. to 36c.

Rye.-100 bush. sold at 52c. Hay.-Timothy, \$13 to \$16 per ton; and mixed

clover, \$6 to \$10. Dressed Hogs.-Market quiet, but good quality sells

readily at \$7.50 to \$8.00.

Dressed Meats.—Beef fore quarters per cwt., \$5.00 to \$6.00; hind quarters, \$6.50 to \$7.50. Apples.—The winter varieties are now being offered,

and, in consequence, the range of prices is greater. Poor quality is not wanted, in fact, at any price; while choice lots are firm, from \$1.00 to \$2.00 per

Potatoes continue to be scarce, and the market is firm at \$1.00 to \$1.15 per bag.

Montreal Markets.

Montreal, Nov. 10.-There were about 600 head of butchers' cattle, 25 calves, and 900 sheep and lambs offered for sale at the East End abattoir to-day. The butchers were present in large numbers, and there an active demand, with firm prices paid for anything moderately good, but common and inferior stock brought less money than on Thursday's market. A few of the best cattle sold at from 4c. to nearly 41c. per lb., with pretty good stock at from 34c. to 4c., and the common animals at from 2c. to 3c. per lb., while the lean cows and small bulls were bought by the canners at from 1%c. to 2c. per lb. Calves sold at from \$2.50 to \$10.00 each, or from 3c. to 5c. per lb. Sheep sold at from 2%c. to nearly 3%c. per lb., and the lambs at from 31c. to a little over 4c. per lb. Good lots of fat hogs sold at about 6c. per lb., weighed off the cars.

Chicago Markets.

Chicago, Nov. 11.—Cattle—Receipts, 12,000, including 4,000 Texans; slow; good to prime steers, \$6.25 to \$7.00; poor to medium, \$3.50 to \$6.00; stockers and feeder's, \$2.00 to \$4.60; cows, \$1.40 to \$4.50; heifers, \$2.00 to \$5.00; canners, \$1.40 to \$2.50; bulls, \$3.00 to \$4.50; calves, \$3.50 to \$7.40; Texas fed steers, \$3.00 to \$4.00; Western steers, \$3.75 to \$6.00. Hogs-Receipts, 35,000; left over, 6,000; 10c. to 20c. lower; closed weak; mixed and butchers', \$5.10 to \$6.40; good to choice heavy, \$6.20 to \$6.45; rough heavy, \$6.00 to \$6.15; light, \$6.00 to \$6.25; bulk of sales, \$6.15 to \$6.25. Sheep—Receipts, 35,000 sheep steady; lambs lower; good to choice wethers, \$3.50 to \$4.00; fair to choice mixed, \$2.50 to \$3.50; native lambs, \$3.50 to \$5.25.

British Cable Markets.

London, Nov. 10.-American cattle, 67d.; Canadian, 61d.; Canadian sheep, 6d. Liverpool, Nov. 10.—Canadian cattle, 6d.; sheep,

"Farmer's Advocate" What Doing for You.

To the Editor Farmer's Advocate:

Dear Sir,-Having had last night a quiet hour to spare, I read the November 1st number of your issue, which you were good enough to send me. The excellence of the typography and the interest of the illustrations are supported by the variety of common-sense freshness and practical utility of the editorial and other reading matter. The family departments, too, are excellent. Such a journal does a good and patriotic work with every issue in helping on the upbuilding and development of the Dominion. In writing thus, I do not do so as postmaster, but as an old I am, very truly yours, journalist.

JOHN CAMERON. London, November 4th, 1902.

Editorial Note.—"As many of our readers will know, the author of the above tribute, one of the oldest journalists in Canada, was the founder and editor of the London Advertiser, and for several years editor of the Toronto Globe. Of all Canadian industries, Mr. Cameron's keenest personal interest was always in agriculture, and it is gratifying to observe his continued regard for farm literature. He expresses what the best farmers and stockmen everywhere say of the 'Farmer's Advocate.'"

Things that You Want.

The world is full of HAS-BEEN'S and WILL-BE'S. For 36 years the FARMER'S ADVOCATE has aimed to be a DOER every issue, and that is the plan and policy today. It is not an organ for men or parties, but a searcher after facts for farmers, and a place for their prompt publication in attractive form. That is our programme for 1903—getting at the truth about the practice of agriculture, stock-raising, dairying, gardening, fruit and flower growing, beekeeping, treatment of ailing animals, the home life, and the thousand and one questions that confront the farmer every year. Practical answers to questions is one of its strong features, dealt with by a corps "When I get stuck," of specialists. writes one reader, "I write for information to the ADVOCATE." And another adds: "The beauty of your answers is that they can be relied upon and worked out in practice."

Practical and Competent Staff.

The great secret of the paper's success is that its editors and contributors are practical and competent. We have writers in every corner of the country. Our constant aim is to make the information published reliable. By steering clear of boomsters, faddists and fakers, and enlisting the co-operation of fairminded and enlightened farmers in every province, adjoining States and Great Britain, we serve our readers with what is up-to-date and helpful. Practical men read it because it pays them, and because they want the best. "For improved stock breeding," writes an Eastern breeder, "you have done more than all other papers put together." Its reports of shows and herds are the reports that are read and that command respect.

Illustrated Teaching.

By using the best type, paper and ink, we make the paper readable, and we illustrate it with the best engravings money can procure, because we believe that one of the most affective ways to teach is through the eye. We make the camera serve our readers with knowledge, as well as please them. Every issue is an object-lesson.

Experiment Stations.

In constant touch with all Experiment Stations, we give our readers, promptly, the benefit of their investigations.

A Home Paper.

We believe in the home and home improvement, literary culture and art; hence, our readers have the "Home Magazine," with a larger and betterequipped staff than any other paper of its class. Old and young peruse its pages with delight and profit.

About Our Premiums.

Do we give premiums with the FARM-ER'S ADVOCATE? No, but we do give liberal and handsome premiums as a reward to present readers who obtain new subscribers to the paper. The reader finds the paper itself a premium, and everybody asks how can you give such a splendid paper for such a small subscription price. Our premiums, announced elsewhere in this and other issues, are like the FARMER'S ADVOCATE itself, "not how cheap, but how good." Note especially the Farmer's Knife, Collie Dogs, "The Big Four" Pictures, Curb-link Bracelet, Microscopes, Watches, Books for the farmer's library, and the celebrated Bagster's Teacher's Bible, which for students is invaluable. The small effort required to obtain three new subscribers for so good and popular a paper as the FARMER'S ADVOCATE makes it still a "bargain," for such Bibles cannot be purchased anywhere for less than \$3 cash. Look up the Premium pages.

Two Christmas Numbers.

In extending our subscription list our present readers are our best friends. We give to new subscribers every issue of this paper from now till the end of 1903, including the Christmas numbers of both years, for the regular yearly rate of \$1.

How to Get Your Paper Free.

By sending us the names of two new subscribers, at \$1 each, we will extend your subscription for one year, gratis, from expiry of your present subscription.

Write us at once for free SAMPLE COPIES, and push the canvass at once.

Address The William Weld Co., London, Ont., Canada.



"The ill-timed truth we might have kept-Who knows how sharp it pierced and stung? The word we had not sense to say-Who knows how grandly it had rung?"

Mary Lane's Higher Education. BY MARGUERITE STABLES.

Mrs. Lane dropped down on the doorstep and fanned herself with her apron. "It does beat all," she said, aloud to herself, "how trifling these heathen are. Here I am paying seven dollars a week to this miserable Chinaman to do nothing but the cooking. and now if he doesn't slip off without a word, and leave me to do all the work."

"Don't bother about it, mamma," answered Mary Lane, with an abstracted air, "pingo, irregular, we can eat, pingere, anything. It's too hot to worry, pinxi, pinctum."

Mary meant to be kind, but as she hunched her shoulders over her book again, her mother's trials were entirely out of her mind. But for once in her life the overworked woman's patience forsook her. "I've got to bother," she said, wearily, "what with a houseful of city boarders, and this being quarterly conference and the ministers coming here to dinner, and that heathen away, I can't let it go, I've got to bother." Then she arose and walked away quickly, so her plaints should not disturb her daughter's study-

A few moments later a gentle knock was heard at the door, and-" Mamma says she would like to have screens pit into her windows, Mrs. Lane," said a crisp-looking young girl who had put her head into the door, "and the water won't run up-stairs, and we need more-why, what in the world is the matter "" she finished abruptly, for poor Mrs. Lane had put down her pitcher, looking as if this was the last

"Everything is the matter," the tired woman answered, and motioned the girl into the hall to explain that all her troubles seemed to have culminated that morning, and that the ministers were to be there for

"Can't you get any one to help you?" the girl asked, looking inquiringly through the door at Mary.

'No, she's too busy studying; I wouldn't have her stop preparing for her Latin examination for anything. She is going to have a higher education, you know," she added with a touch of pride.

The youthful summer boarder looked down at the tired little woman with a bright smile. "Oh, Mrs. Lane, I'm coming right in to help you myself," she said; "I just love to do things in the kitchen, honestly, I do," commencing to take off her rings and rolling up her sleeves, as she saw Mrs. Lane had not fully grasped what she had said.

"No, you must not stay in this hot place," the woman said, noticing the stiff collar and freshlystarched duck skirt; "and, and besides," she continued to herself, as she remembered how some of her boarders, last summer, had tried to have a candypull and had set the house on fire, "I can't be bothered now showing her. I know how these city

girls work." But by this time the "city giri," unconscious of Mrs. Lane's thoughts, had one of the latter's big kitchen aprons tied around her waist, and was waving a big kitchen spoon by way of punctuating her orders.

"Now, Mrs. Lane, I'm the new hired girl. Blanche is my name, and although I have no recommendation from my last place to give you, I assure you I am honest and willing. You don't know how I just love to get a chance to fuss around a kitchen of-" Here the potatoes boiled over, and she flew to take off the lid.

The morning wore away much more peacefully for Mrs. Lane than it had begun. Many steps were saved her by the "new girl's watchfulness, and there were even several bursts of merry laughter from the buttery, which dispelled more clouds than the real assistance

did. "I may not be so skilled in making bread and doing useful things," Blanche apologized, "for I have taken only the 'classical course' in cookery. Nettie and I spent last summer down at Aunt Cornelia's while the rest of the family were in Europe, and she told us we could do whatever we pleased, and what do you suppose we chose? I chose puttering around the kitchen, and Nettie took to hoeing the weeds out of the vegetable garden. And it was such fun !"

The ministers came earlier than they were εx pected, and Mrs. Lane was hurried out of the kitchen to put on her good dress, with a pledge to secrecy as to the force in the culinary department.

By dinner time the Chinaman, having unexpectedly put in his appearance, was waiting on the table as if nothing had happened, but Mrs. Lane was too nervous and apprehensive, at first, even to notice how different the table looked. There were roses everywhere, a gorgeous American Beauty at each place, and the fish globe in the center of the table was full of them; but they were all of one variety. Mrs. Lane thought secretly that when the larkspurs and hollyhocks were so fine it did seem a pity not to mix a few in just to give a little style. She had grave doubts as to the salad when she saw it brought on, although she was bound to admit the yellow-green lettuce looked very pretty, garnished with bright red petals; but when she tasted it she was reassured. She could not make out what it was made of, but she only hoped it seemed as palatable to every one else as it did to her.

The success of the next course was due to Mrs. Lane, for the "new girl" explained to the mistress that meats and vegetables did not come in the "classical course." "Brother" Hicks talked so volubly about foreign missions that Mary did not notice that even the currant jelly was made to do part in developing the color scheme of the table, and that it matched the roses as exactly as if it had been made after a sample. But when the cake was brought in and set before her to be cut, she thought, at the first glance, it was another flower piece, but she saw the quick, approving glance shot from her mother to Miss Blanche, and suspected the new boarder might have suggested its design. It was set on the large wooden tray used to mash the augar in. Even the frosting was tinted an American Beauty pink, and around its base a garland of the same glowing roses. Through the jumble of irregular verbs and the rules for indirect discourse the secret suddenly dawned upon her. It was the city girl who walked with her head so high and wore such beautiful dresses who had made the dinner such a success, while she-but that was different, she was preparing for college.

Mrs. Lane was complacent and happy the remainder of the evening, and less tired than she had been for many days, and when the ministers took their leave of her the presiding elder said, "I shall remember this evening and the beautiful repast you have given us for a lone time to come, Sister Lane."

Blanche's bright eyes sparkled with fun, and Mary, although she could not have told why, felt just a bit uncomfortable. "Isn't it interesting to know that our English words transfer and translate come from the same root?" she said, presently, in her own mind trying to vindicate herself for not helping her mother.

"Oh, don't," broke in Blanche, laughingly, "talk about the dirty old roots under ground when we have these glorious flowers that grow on top.'

It had grown too dark for any one to see the pity in Mary's smile for this frivolous city-bred girl who wasted her time and amusements in learning a little chafing-dish cooking, and didn't even know what a Latin root was.

Blanche's mother was kept in her room the next day with a headache, so Blanche's time was divided between taking care of her invalid and lending a hand to Mrs. Lane till she could get another cook. Mrs. Lane had never expected Mary to help her; knowing how hard her own life had been, she was trying to fit her for a teacher, but as she watched Blanche flying about the house, setting the table, rolling out her cheese straws, running up and down to her mother's room with a patch of flower on her curly hair, and singing gayly about her work, her tired eyes followed the young girl wistfully. It would be worth a good deal, she admitted, to have a daughter even if she had not a word of Latin in her head. But of course, the higher education of her daughter could not be interfered with by the old-fashioned way of bringing up a daughter, and Mary took to books.

"I am going to college this fall if I pass the entrance examinations," Mary announced at the lunch table, with just a touch of superiority in her tone. She could not have explained just why she felt so resentful toward the city girl. "Are you going east or will you stay out here on the coast?" Blanche asked, as if it were the most every-day thing to go to

"I have not decided yet, for I shall be the only girl around here who has gone to college," she answered, nibbling one of Blanche's cheese straws with an evident relish.

"Have another," Blanche interrupted, passing her the plate with a hand that showed two burns and a slight scald. "We used to serve them with tamales when our friends came down from town to the trial football games."

"Why, I thought you lived in San Francisco?" Mary said, looking up in surprise.

"I do," Blanche answered, "but I've bean down at Stanford the last four years, and have just finished this last summer."

Mary's eyes almost popped out of her head. Why," she began, incredulously, "I thought youyou-" She did not like to say she had thought that the sunny-faced girl before her had no appreciation of education because she liked to do useful, domestic things too.

You thought I could do nothing but cook?"

Blanche finished, laughingly.

But Mary did not answer. Blanche Hallsey was certainly not much older than she, and vet, with all her college education, she had been in the kitchen all care who knows it! "

that hot morning, kneading bread and soouring silver for Mrs. Lane.

"If you decide to go to Stanford, I can write to some of the girls to look out for you," Blanche went on, for she had not noticed Mary's attitude of superiority the last few days.

"Oh, would you, please?" Mary Lane pleaded, in a tone that would have greatly surprised her mother had she heard it, for not even she guessed how the fear of going among strangers for the first time in her life had been haunting her diffident little girl.

It was several days, however, before Mary, with her forehead puckered into knots over the "ablative absolute." could bring herself to knock at Miss Hallsey's door and ask for a little assistance.

But that was the beginning of the end of Mary Lane's priggishness, and the first step toward a higher education in the true sense of the word. She passed her entrance examinations with honors, due, perhaps, to the patient coaching she received during the rest of the summer from Blanche Hallsey. She learned, too, besides irregular verbs, a great many other things fully as useful, topping off with what the college girl called "a classical course in cookery."-[Youth.

Justice Mixed with Humor.

In a small town in the United States lives an elderly German, who, because of the high esteem in which he is held in the community, has been elected justice of the peace. The old gentleman was recently called upon to decide a most perp'exing question.

One of his neighbors is the possessor of a dog. The dog, although not actually vicious, delights in running out of the gate and barking savagely at passers-by. This had been the source of great annoyance to the neighbors, especially to one, who vowed to get even with "the pesky critter." Recently this neighbor was returning from a shooting trip, gun in hand. He was set upon by the dog, whereupon he raised his weapon and fired at the brute. His aim was not very good, and the dog ran yelping, minus his caudal appen-

The owner of the dog had his neighbor haled before the old justice on a charge of cruelty to animals, and the court-room was crowded with the partizans of both men. The justice heard the charge, and then the defence that the dog was a dangerous animal and a menace to the neighborhood. The old German thereupon cleared his throat and delivered the dictum:

"Der man-he has been guilty of gruelty to animals." And one side of the court-room applauded the justice of the decision. "But der tog-he was a vicious tog." And

the other side voiced its approval. "I will fine der man five tollars." Another

murmur in the court-room.

"But I will gif him anordder shot at der tog." And both sides cheered.

More Important Than a Clue.

"Now, if you will show me where the buglars got into your shop," said the detective, "I will see if I can find some clue.

In a moment," said the proprietor. "I am working at something a little more important than hunting for a clue just now. Take a scat." And while the detective waited, the merchant

wrote as follows at his desk 'The burglar who broke into Katzenhefter's shop, on the night of the 15th, and carried away a silk hat, a pair of French calfskin boots, a furtrimmed overcoat, a black broadcloth suit, and two suits of silk underwear, was a black-hearted villain and scoundrel, but a man whose judgment cannot be called into question. He knew where to go when he wanted the finest clothing the market affords."

"Jacob," he said to the book-keeper, "send a copy of this to all the papers, and tell 'em I want it printed in big black type, to occupy half a column to-morrow morning. Now, Mr. Hawkshaw, I am at your service.

Not His Name.

In some country districts of Ireland, it is not unusual to see the owners' name simply chalked on carts and other vehicles, in order to comply with legal regulations. Unfortunately, this custom lends itself to the playing of pranks on the part of "bhoys" maliciously inclined, who sometimes rub off the lettering and thereby get the cart-owner into trouble with the police. A case of this kind having occurred, a constabulary sergeant accosted a countryman whose name had been thus wiped out unknown to him.

"Is this cart yours, my good man?"
"Av coorse it is," was the reply; "do you

see anything the matter wid it?"
"I obsarve," said the pompous policeman, that yer name is o-blitherated."

"Then ye're wrong," quoth the countryman, who had never come across the long dictionary word before, "for me name's O'Reilly, an' I don't 366

ri-

ler

her

y's

ary

her

sed

ps,

est

ed, her

col-

em

een

ing

og.

hts

ely

eat

ne,

r."

n a

by

and

od,

em-

led

to

ith

the

s a

or-

his

to

ap-

And

her

g."

lars

will

ant

at.''

ant

er's

wav

fur-

and

rted

aent

here

mar-

send

m I

half

wk-

not

lked

nply

cus-

the

who

get

lary

had

you

man,

nan,

nary

lon't

A

Travelling Notes.

I have been spending a few months in the beautiful counties of Kent and Sussex, always a lovely part of England, but particularly so in the autumn, when the hop gardens are in perfection. The hops were not considered a good crop this year; still, their ingathering brought, as usual, hundreds and hundreds of hop-pickers down from London. For the hop-picking season, whole families come into the country and camp out, or live in huts, thus getting for themselves a jolly holiday and some money in their pockets besides. Although I did not join in the hop gathering, I did join in, and greatly enjoy, gathering the mushrooms, which could be picked up by the bushel in the fields and all over Romney Marsh. Those of my readers who have seen Romney Marsh will doubtless remember, as one of its most interesting features, the sight of literally millions of sheep grazing in those beautiful pastures; and surh fine sheep too, so large, so white, and oh! so fat!

After Romney, followed a short visit to Tunbridge Wells, where the good aunt had arranged a meeting of "Home and Colonial Nieces," eight of us, all the daughters of her different brothers. Amongst our pleasures was a trip taken quite out into the country, some miles from a railway station, where all was so beautifully quiet that one could almost hear the dew fall. Then, for me, came, first, a few days at St. Leonard's-on-the-Sea before passing on to Rye, a most ancient town, and one of the Cinque Ports, which were called into existence at a very remote date. These five ports, viz., Dover, Hastings, Sandwich, Romney and Hythe, with alterwards the addition of Rye and Winchelsea, were the first parents of the English navy, from whence the earliest monarchs, down to the accession of the Tudors, drew the whole of their naval force. It was expected of these ports that they should guard the narrow seas which separate England from the coast of France and Holland. This was before cannon were introduced, when they had but small ships, and their only weapons of defence were spears, crossbows and bows and arrows.

The Archives of Rye are rich in historical remains, especially in the town hall, where I was shown many things of interest, amongst them four of the oldest and most exquisite maces in England, two immense brass ones, much too heavy for me to carry off, and two small silver ones, equally treasured. The names of the mayors and barons of the olden times, the corporation which succeeded them, and the town council of the present day, are all preserved with equal care, so that the record exists in an unbroken series for nearly four hundred years. It is apparent that the barons and goodmen of the ports, having done great and signal service to their sovereigns from a very early period, were consequently endowed with many very unique and valuable privileges. For instance, the Barons of the Cinque Ports-by which title they were known—paid no taxes to the King; if any ship was wrecked on their coast, the barons were entitled to the wreck, but if any ship of their own was wrecked on any other coast of England, the wreck was still their property they also had the privilege of attending kings and queens on their coronations, at which ceremony they carried two canopies of silk and gold, under which they, respectively, walked from Westminster Hall to Westminster Abbey. In fact, they played a great part in all old ceremonials, and although the office or title does not now exist, the mayors and solicitors of these old Cinque Ports, in recognition of the old customs, were this year, by command of the King, invited to take part in his coronation in Westminster Abbey.

One of these gentlemen, a personal friend, showed me his elaborate dress for the occasion, which consisted of a black silk-velvet coat, lined with white silk, black silk-velvet knee breeches, the coat having brass buttons, upon which were embossed the arms of the Cinque Ports; an elaborately worked waistcoast, even the buttons being covered with silk embroidery; black silk stockings; low shoes and buckles, and, over all, a beautiful scarlet cloth cloak, with bands on one shoulder and lined with silk; these, with lace in his sleeves and a lace jabot and a curiously shaped cap, completed the costume, which I need hardly tell you was very costly. These barons had to go up to Westminster Abbey for two rehearsals, and story is told that one of them, having forgotten his long black silk stockings, had to bribe a housemaid to lend him a pair of her black cotton ones, his only alternative being to dye his legs. Happily for him, the friendly maiden was as stout of limb as she was kind of heart.

Amongst the antiquities still remaining in Rye are old gateways, old towers and old houses, one in particular having beautifully carved oak partitions and ceilings and mantels, with a fire-

place so huge that it contains benches capable "Diogenes in Search of an Honest Man." of seating eight or ten people. I leave you to picture the cosiness and solid comfort of sitting around your own ingle nook, right within the base of the big chimney itself, upon a cold winter's night. The inhabitants are proud of the old church of St. Mary's, parts of which are claimed to have been built in the thirteenth century. has, too, a wonderful old steeple, containing the town clock, which is supposed to be one of the oldest now "going" in England. This clock has a remarkable pendulum, about 18 feet in length, which swings to and fro inside the church, and over it one reads the silent message, "For our time is a very shadow that passeth away." And now before I end my short record of Rye, I want to tell you, as a link between it and our own Canada, of a delightful little visit I paid to a delightful little English home, owned by two maiden ladies, to know whom is alike a privilege and an honor.

One of them had only lately returned from the Northwest of Canada, whither she had flown a year and a half ago, to the assistance of a nephew, who, having lost his wife, was left with eight small children. Without one thought of self, this excellent lady had given up her comfortable home life in England, had said good-bye to her

This eccentric character was born about 412 B. C. His youth is said to have been spent in dissolute extravagance, but at Athens he was attracted, singularly enough, by Antisthenes, the founder of the Cynics. Antisthenes was a bitter and sarcastic disclaimer against all that he regarded as inconsistent and insincere, and Diogenes followed him till he set up for himseif. In fact, he soon outdid his master in his utter contempt of all the comforts and conveniences of life, and, to show his indifference to bodily comfort, he is said to have rolled in hot sand in summer and in winter to have embraced statues covered with snow. The story of his living in a large tub has been called in question, but as there is good authority for as well as against it, we will regard it as true. It is certainly consistent with the character of the man, and we rather like to fancy him sitting or lying therein, either in utter disregard of the outside world or delivering his caustic remarks to those who had the temerity to accost him. He seems to have had the respect of the Athenians, for he was accorded the privilege of rebuking anything he disapproved with the utmost liberty. famous illustra-

tion of his indifference to rank and power is his interview with Alexander Great. The great conqueror having approached and courteously asked if he could oblige him in any way, Diogenes growled out in reply, "Yes, by standing out of my sunlight." So far from being offended at this rude speech, Alexander was so struck by the contrast between the sycophancy to which he was accustomed and this man's utter contempt of worldly rank, that ne is reported to have said, "If I were not Alexander, 1 should wish to Diogenes. Diogenes had not much confidence in the integrity of his fellows, and to give emphasis to his opinion he is said to have gone about in the daytime with a lighted lantern, in quest of an honest man, though the unaided sunlight were not sufficient for so difficult an undertaking. While journeying from Athens to Ægina the ship in which he travelled was taken by pirates and Diogenes



(From the original painting by Salvator Rosa.)

"DIOGENES IN SEARCH OF AN HONEST MAN."

much-loved sister and others near and dear to her, and had gone out alone in the middle of winter to enter right into all the work of a busy Northwest farmer's home, cooking, cleaning, mending and working to an extent she had never before known; this, too, not only without one mlurmur of regret, but rather happily rejoicing that in spite of advancing years and the drawback of deafness, it had been granted to her to render just the aid most needed in that stricken home; nor had she left it until the wheels of its domestic machinery were running almost smoothly once more.

I wish I could portray for you the simple, unselfish lives of both these sisters, that of the one who went and of the one who stayed behind in her loneliness, or the many acts of kindness and liberality to others, bought by their denials of self. I cannot do this, for perhaps they would not like it, but I know how dear they are to their nephews in the West of Canada, as well as to those who thankfully count them friends on this side of the Atlantic. Truly, such unselfish lives speak and need no written record.

MOLLIE.

was exposed at Crete for sale as a slave. When asked what business he understood, he replied, "How to command men," and asked to be sold to someone who needed a ruler. He was purchased by Xeniades, of Corinth, whose ruler he virtually became. The picture of Salvator Rosa is characteristic at once of the subject and of the painter. This able representative of the "Naturalisti" was born at Naples in 1615, and died in 1673.

A story is told of an English schoolmaster who offered a prize to the boy who should write the best composition in five minutes on "How to Overcome Habit."

At the expiration of five minutes the compositions were read. The prize went to a lad of nine Following is his essay:

"Well, sir, habit is hard to overcome. If you take off the first letter, it does not change 'abit.' If you take off another you still have a 'bit' left. If you take off still another, the whole of 'it' remains. If you take off another, it is not wholly used up; all of which goes to show that if you want to get rid of a habit you must throw it off altogether."



My dear Guests,-

"Ere in the northern gale

The summer tresses of the trees are gone, The woods of autumn all around our vale

The woods of autumn all around our vale

Have put their glory on,"

was the quotation which memory recalled to me
one bright morning in October, as I gazed from

one bright morning in October, as I gazed from the window of a cheery room, where I, 'The Hostess, was established as "guest," and one of my "Guests" and her kind family were my entertainers. Many had been the invitations to partake of "Margareta's" hospitality, so although it meant going somewhat out of my way (being en route for one of our large Western towns), I was unable to resist the temptation to accept.

Very slowly, it seemed to me, did the train move after leaving Belleville (does it not always seem so when one is eager to reach the end of a journey?), but at last the desired station was called out, and soon I found myself comfortably settled for a drive of a few miles, and chatting to "Margareta" and her big brother as though I had known them all my life, instead of meeting for the first time but a few moments before. The night was fine, the road good, and we soon arrived at our destination, where a cordial welcome, given with true Scottish sincerity, awaited me.

When daylight returned, a somewhat mountainous country met my gaze, but oh, how very beautiful it was! Truly, the woods in this sheltered nook had "put their glory on," and crimson maples, gusset oak, mingling with the luxuriant green of the pines, adorned the lofty hills, while through the valley between, a tortuous silver stream chattered along. Orchards, weighted with rosy or golden apples, surrounded every house, lending an air of comfort and plenty

to all the scene. The charms of the outer world, however delightful, could not compare with those within the happy home, of which, for some days, I was an inmate; for a real home, not merely a dwelling-place, it proved to be. Have you not experienced the inexpressible charm that pervades the atmosphere of a home where all is harmony? A home where the young are allowed all innocent amusements and enjoy them in the company of parents, who, although time is silvering their hair, have retained their youthful hearts? Such are the environments of our friend "Margareta," and very thoroughly I enjoyed my visit with her. I had also the pleasure of taking tea with "Mai," former contributor, who has since assumed the duties of hostess in a snug little home of her leaving my kind enterown; them, regretful at tainers, I resumed my journey, reaching my terminus quite late at night. Since then, I have been gazing on the beauties (?) of a busy town, and mentally contrasting them with those I but attempted to describe in the beginning of my chat, with the result that I am still firm in my old belief, that no place is so lovely as the coun-

try.

"Jewess," I have been in the neighborhood of your home, and thought of you. How I about like to see my Guests!

should like to see my Guests!

"Annie Laurie," you must excuse me from appearing in the big chair; you see, my guests may now idealize me to their heart's content, so I would not like to shatter ideals, which are certain to be more pleasing than the reality. I am glad your prize pleased you.

OUR COMPETITIONS.

Owing to absence from home, the result of the commundrum contest will be somewhat delayed. So many have requested a repetition of the

MEMORY GEM CONTEST.

that I now announce a new one. Three prizes will be given for the best sets of memory gens, sent in in accordance with the following rules:

Each set to contain ten and only ten quotations. Author's name to accompany each quotation (only partial value will be allowed where this is not done). Contestants to state to which class they belong; class I. comprising all over twenty years of age; class II., fifteen and under twenty; class III., all under fifteen years. One prize will be given in each class. Quotations which appeared in last contest will not be accepted. All work must reach Pakenham on or before Dec. 10th. Address work to

Ingle Nook Chats, Pakenham, Ont.

Still Amongst the Cotswolds.

I am afraid that now both "Mollie" and "H. A. B." write from old England, there may be a sameness in our jottings for the "Home Magazine," but for my own more especial comfort I remember that what "Mollie" has to tell is more specifically about the wonderful historical events of the day, of the grand ceremonials she is so fortunate as to be able to view, of the welcomes she receives from that friend of Canada and all Canadians, Lord Strathcona, and from others who hold the "open sesame" which admits her even to functions where not only England's notabilities, but where royalty itself has passed almost within touch of her loyal hands. My chief fear is that presently even "Mollie" may tire of festivities and end up by a long stay in some rural corner of England, and want to tell you all about that, too, and then where would

Just for the moment, however, I fancy that I have, so to speak, "the floor"—the rural floor, I mean—and before I lose it I want to tell our readers a little bit more about what I have seem in the Cotswold hills, believing that as many of the subscribers to the "Farmer's Advocate" come from the rural districts of the mother country as from its cities and towns, my scrappy notes may not be without interest for them. To begin with, let me pick up one or two lost threads. When I wrote of Painswick I quite forgot to tell you about the ancient stocks (of which we give an illustration) which, in excellent repair, still stand just outside the south gate of its churchyard. It is many a long day since man met his punishment in the village stocks or woman's gossip found its quietus in the ducking stool. I forgot, also, to tell you of the tumulus in the Cranham woods on the Birdlip road, within which were once found skeletons of people who must have lived long before the time of Roman occupation. At this point the Romans are supposed to have seen shining on the Severn valley and conceived the idea of building Gloucester." And this brings me back to Birdlip itself, where, at what was once the "Old Black Horse" hostelry, where messeng-



ANCIENT STOCKS AT PAINSWICK.

ers in the olden times changed horses, I sat under the trees drinking a cup of modern afternoon tea, looking up at the window of the room where Bishop Hooper, of martyr memory, spent his last night on earth before his cruel death at Gloucester. Am old man often passes my window, with stooping gait and rheumatic limbs, bearing over his shoulders, on a long forked stick, a big faggot which he has managed to gather in the Birdlip woods just below us. I admire his industry, and I know how valuable a contribution to his winter's store will be that heavy bundle of But I hesitate to address him, to venture a word of sympathy, or even to put to him a few questions which might elicit some interesting information, lest I might tread upon a tender spot, for I am told that Gloucestershire people are quick to resent what may seem to them to be an impertinence, however little it may be so intended. I should like to know just how old that man is, because longevity in this wonderful air seems to be the rule rather than the exception, but in the face of the rebuff which, under somewhat similar circumstances, met Mr. Gladstone himself in the Isle of Man some twenty years ago, I dare not risk so ticklish a question. The story as related of the "Grand Old Man" is as follows: "When Mr. Gladstone paid a visit to the Isle of Man, in the eighties, during a walk through a little village, he came upon a woman pitching corn from a cart to a stack. This, as anybody knows who has tried it, is exceedingly hard labor. Mr. Gladstone stopped, and, admiring the woman's strength, remarked: 'My good woman, that is exceedingly hard work, and you look well and strong; may I ask how old you are?' 'How oul' art thou theeself, thou imperent oul' man?' was the reply." Talking of longevity starts me telling you of an excursion I made with a charming young companion, whose acquaintance, with that of her kind mother and sister. I have been fortunate enough to make since my stay at Birdlip. "Coberley church (pro-nounced Cubberley) would be well worth a visit if not too long a walk-about two and a half to three miles, I understand. I will go with you if you like". I was a little staggered at the distance, even in prospect, but I was a great deal more staggered at the reality. Three long miles certainly brought us to the confines of Coberley parish, and when we reached a gateway which

opened upon a picturesque but apparently private road or right of way, and were told that the church and village was "only a mile funder on," we hesitated, but felt bound to persevere. Never was a mile so long, so circuitous, so deceiving. One gate only led to another, through fields, between hedges, in sight of farms and homesteads, but Coberley itself and Coberley church remained invisible. For one brief moment, peeping between the trees ahead of us, we caught just a glimpse of the square tower of the old edifice which was to be our goal, and then it disappeared. We literally had to hunt for it, so embowered was it in trees. We got the keys at the rectory, and we found two men at work in the peaceful churchyard, and thus found entrance without further difficulty. We sank thankfully upon the first bench within its sacred walls that we could reach. The matter of getting home again had to be tackled later on, and thereby hangs a tale. Now for the "longevity" thread which runs through all stories of villages on the Cotswold 'Yes, ma'am, the church have been rehills. stored—since our rector have been in Coberley."
"How long has that been?" "Well-nigh upon forty years he've been here. He's getting pretty well on now. He is eighty-eight, he is, but he do take three services every Sunday. Still, he isn't as old as the rector before him. He lived to 91, he did." The good sexton then pointed out a gravestone with a queer inscription, a good deal defaced, standing against an old wall which was all that remained of what had been a castle in olden times. It ran thus:

"Here lyes the body of John Walker,
A industrious working man,
But not covetous for gain;
A cheerful, good companion,
And never felt much pain;
But finished his days
With peaceable good ways,
On the 8th of January, 1788,
In his arm-chair,
Free from all care,
In his eighty-fourth year."

Coberley, like Witcombe, Brimpsfield, and other churches around this, had its sundial in the tower. That of Coberley was dated 1693. There seems great difficulty in fixing the dates of the churches hereabouts, such insufficient records being kept, but in each of those I have as yet visited there are well-defined arches and other bits of Norman architecture, proving their antiquity, though other ages have left their marks, too, whilst arresting decay or widening the original limits. At Coberley there are three full-grown figures, with one smaller one, evidently the child of the knight and his lady, all without a recognizable feature, the ravages of time not naving left them with one decent nose between them. "I don't know who they be for certain," said the sexton, "but I think they be Berkleys." As I expressed disappointment that in the restoration of the building so little remained marking its age and history, our cicerone remarked, "Oh! but there be some, ma'am, up at the coach-house of the rectory. The reverend, he be taking good care of them." So let us hope that some day they may be found where they more fittingly belong, in the walls or on the floors of this most interesting little church.

"Is there no trap we could hire to take us back to Birdlip?" we had asked more than once at a tidy cottage door, and in the immaculately clean village shop and post office. "If So-and-so were at home we might do so," but, there, 'twas "only a chance that he would be," and, of course, he wasn't. A happy thought struck our friend. the sexton, who said, "there was a cart, pretty high 'un, if we didn't mind that." We would have welcomed it had it required a six-foot ladder to get into it, which it nearly did, and gladly and thankfully we availed ourselves of the offer. I myself, with a pull in front, and a friendly hoist from my more agile young friend behind, scrambled to my perch, while she hopped up like a bird, a pretty nosegay in hand, culled from her gay little garden by the wife of our friend the sexton. Then our driver, who turned out to be the village carrier (caught on an off day), took up a position half on and half off the seat, which stretched from side to side, chirruped "g'loug" to his horse, and away we jogged up and down hill to Birdlip. It was interesting to note on the small triangular village green, a shaft or column of shining whiteness, in reality a sundial with a crown on its summit, a monument erected in the year of jubilee as a testimony to the love and loyalty for their Queen, which thus found expression in this quiet

little nook in the Cotswold hills.

One more entry and I have done, and that is to tell you that it was the brother of my admirable young friends of Birdlip House who cwned that Massey-Harris machine of which I told you in a previous note. Of course I lent him my copy of the "Farmer's Advocate" that he might realize how well to the front Canada keeps in everything which touches the interest of the farmer. He said he knew it, but was glad to see our admirable paper, nevertheless.

H.A.B.

THE QUIET HOUR.

As He Did Aforetime.

"The heights by great men reached and kept Were not attained by sudden flight; But they, while their companions slept, Were toiling upwards in the night.

Walking home from church, a Sunday or two ago, my small niece said to a still smaller neph-'I don't believe you listened to the story of

Daniel in the lion's den."
"I did, too!" was the indignant reply—and indeed who could help listening to that wonderful story, which seems to gain in force and beauty every time it is repeated? I had been listening too, and was particularly impressed by the words, "As he did aforetime." We may marvel at the cool, undaunted courage of the man who dared openly to confess his God, even though he knew only a miracle could save him from a terrible death-and miracles were not everyday events then, any more than they are now, But the secret of his behavior, under God, lies in the words, "As he did aforetime." The truth that habit is second nature, applies to prayer as to other things. Long and patient practice can produce marvelous results. Set a difficult piece of music before a beginner, and only a miracle could enable him to play it at sight, but after years of hard work, the once impossible task becomes easy and the fingers fly over the keys, striking the right notes, without the slightest difficulty. I once tried to learn telegraphy, but did not keep at it long enough to produce any practical result. The click, click of the instrument is too swift for my untrained ear to distinguish more than an occasional letter, while a skilled operator can read every world without effort, but this skill cannot be acquired in a day or a week. It is easy for you to read this page, and you have probably forgotten the hard work "aforetime" which has made it easy. There was a time when, "Is it an ox? It is an ox!" had to be spelled out slowly and laboriously. Try to teach some one else to read, and see if reading is really as easy and simple as you find it now.

But I must not multiply instances, we all know that "practice makes perfect," but perhaps we don't always believe that this principle holds golod in things moral and spiritual, as well as in things physical and mental. There is no royal road to holiness; character can never be made in a hurry. People say of one who has spent many years in the pursuit of holiness, "Oh, it is easy for him to be good." Of course it is much easier for him than for one who is only a beginner, for "drudgery is the gray angel of success.

The opportunity of gaining some advantage by dishonorable means presents itself to two men. To one it is a real temptation, to be overcome or yielded to; while the other never gives it a second thought, for it simply is impossible to him. 'The difference lies in what each man has done aforetime. Habits of honor and honesty may be formed which are as hard to break as evil habits. It is hard for one main to pass the door of a bar-room, while another would be very uncomfortable if he had to spend an evening there. It all depends on what each man has been accustomed to do aforetime.

Take this case of Daniel's for example. It was comparatively easy for him to offer up his prayers and praises three times a day, becathrough a long life he had formed the habit daily, regular prayer. He did not always feel like praying, but never thought of excusing himself from offering homage to his God and King, on the plea that he was not in a mood for de-The position of first president over a votion. great kingdom did not leave much leisure to one who served his earthly sovereign so faithfully that even jealous enemies, eagerly seeking occasion against him, could find no error or fault to take hold of. Yet, like David, he always found time-or made time-to hold communion with God "evening, and morning, and noon." Was it any wonder that the habit of years was strong

enough to stand a severe test?

of

10

an

ff

ve

n-

ge

in

eir

et

ed

cht

in

What sort of habits of prayer are we forming? Do we hurry through our prayers as a matter of form, perhaps forgetting them altogether, if other things-which we consider more important-are pressing? Then be very sure Satan will never need to bring a den of lions to try and frighten us into slurring over or altogether neglecting this solemn duty. Prayer is not only necessary to our spiritual welfare, it is also a debt we owe to God, to be offered daily. It is impossible to perform a week's devotions in advance, as I once heard of a girl attempting. She was going away for a week's visit, and repeated her usual number of prayers before starting, saying that she could then take a holiday from praying. The bread we need for our souls is daily bread, and will not keep for a week any more than would the manna in the wilderness. As the Jews were required to burn incense at certain hours each day, so David says," Let my prayer be set forth before Thee as incense; and the lifting up of my hands as the evening sacrifice." It is a glorious thought that

our prayers may, if we will, be offered by the angel "With the prayers of all saints, upon the golden altar before the Throne." We know that our sacrifices of prayer and praise are too faulty and imperfect to be fit to pour into the " Golden vials full of odours, which are the prayers of saints." But remember that they are never presented alone; the angel is given much incense on purpose to offer with them, and of our prayers too, it may be said: "The smoke of the incense which came with the prayers of the saints ascended up before God out of the angel's hand.

We have seen that tasks which were once impossible may be performed with ease after years of patient practice, so let us be careful that the daily habits which are steadily hardening into character are the kind we really want to become part of us.

"Habits are soon assumed, but when we strive To strip them off-'tis being flayed alive.'

HOPE.

THE CHILDREN'S CORNER

Puzzled.



"I want to ask a question: Now, 'splain me this who can: How is it that when I get hurt, I'm 'mother's great big man, Too large, of course, and brave to cry'; But when I ask for cheese, Or maybe pickles with my lunch, Why then-now listen, please-Oh no, I am 'too little, dear, Must eat nice milk and bread. I think and worry over this Until it hurts my head; And I'd be very much obliged, If some one would tell me, Just 'zactly what's the proper size A fellow ought to be."

Between Ourselves.

Now set your wits to work, children, and write something you will not be ashamed to see in print. Prizes will be given for the best original story suitable for our Corner. No one over sixteen may compete and, if possible, the competitors will be divided into classes. The stories must be about life on a Canadian farm. Don't let them be too long, for "Pussy wants a corner" is a game the "Advocate" doesn't approve of. We are given one corner and expected to stay in it. All MSS. must reach me before Christmas. Write your name, age and address on the back, and send as usual to Cousin Dorothy, Box 92, Newcastle, Ont.

What shall we talk about to-day? Well, all the grown-up people have been talking of nothing but coal, lately, and we might as well be in the fashion. "But coal is not very interesting!"-is that what I hear you saying? Well, if you don't care to hear about black diamonds, perhaps you may find white diamonds more interesting. Do you know why lumps of coal are often called black diamonds? Don't you really know?-I thought children knew everything nowadays. It is because coal and diamonds, although they

look very unlike, are made of the same material. Diamonds are pure carbon; coal is carbon too, mixed with other things, or it wouldn't leave any cinders or ashes. The black lead which is so useful for cleaning stoves, the graphite which we put on our bicycle chains, and the lead which is made into lead pencils, may also be called black diamonds, being almost pure carbon. Would you like to hear where diamonds have been found? Once a negro pulled up a vegetable in his garden, and found one fastened to its root. Sometimes diamonds have been found in the crops of fowl. Probably the birds thought they would be fine things for grinding grain in their private mills; for the diamond is, I believe, the hardest substance known. When people want to cut and polish them, they have to use diamond dust, as nothing else can even scratch them.

It isn't at all likely that you have any loose diamonds lying about your farm, but unlikely things do happen sometimes. We hear a good deal about the diamond fields in South Africa; but the first diamond discovered there is said to have been picked up by a little Dutch boy on his father's farm. The child had a fancy for gathering curious stones, and in his collection was one particularly bright specimen, which his mother one day showed to a neighbor. The neighbor offered to buy it, thinking it might be valuable. He was not far wrong, for the Governor of the colony afterwards bought it for more than two thousand dollars. Then crowds of people rushed off to Africa to look for diamonds, sometimes finding them in very queer places. Some were discovered in the walls of a farmhouse which had been plastered with mud from a pond, and more of these valuable stones were found in the pond

A Swiss once picked up a little box on a battle-field. He opened it and found, as he thought, two little bits of glass, one bright and the other a milky white. Thinking the box contained rothing of value, he threw it away, but afterwards picked it up again on the chance that somebody might give him the price of a drink for the stones. One was a pearl and the other a diamond. He sold them for a trifle, and they were passed from one purchaser to another. The diamond has since been valued at \$525,000. It was a good thing the finder did not know what it was worth, for he would surely have drunk himself to death if he had. Indeed, it is often a very unfortunate thing for a man to find a precious stone. Two hundred years ago, a slave was lucky enough, as he thought, to discover a magnificent diamond. In order to hide this stone he made a wound in his thigh, placed the diamond in the wound, and covered it with a bandage. fered the gem to a sailor, on the understanding that he would help him to escape from his slaverv. The sailor murdered the poor fellow and sold the stone for a thousand pounds; but this ill-gotten wealth was soon wasted, and he committed suicide. This stone was at one time set in the sword of Napoleon.

But I must not break the rules by slipping out of our Conner into another which does not belong to me, so no more at present from-

COUSIN DOROTHY.

The Fading Light of Day.

- "Jenny, gather up the scraps, and Hetty, bring the broom
- Sally, push the settle back and tidy up the room; Now's the time, 'twixt day and dark, to clear the work away;
- For the morn make ready by the fading light of day.
- "Come, my boys, bring in the wood, and split the kindling fine ;
- Fetch some water from the spring, and feed the waiting kine:
- You'll not need the lantern, lads, the twilight's clear and gray,
- Haste, and you will finish by the fading light of day."
- Thus the dear housemother spake, still busy all the while,
- Helping girls and cheering boys with gentle word and smile,
- Till the tasks were ended, and the sons and daughters gay
- Gathered round the fireplace by the fading light of day.
- Scattered, scattered, far and wide, in distant lands, and dead! Long the grass has waved above the gentle mother's
- head; But at nightfall, even yet I seem to hear her say, "For the morn make ready by the fading light of
- day."
- Wiser now, methinks therein that hidden meanings lurk. Teaching ere that night shall come "wherein no man
- can work."
- Every soul be girded, ready; God alone can say If our eyes again behold the fading light of day.
 - -Marion F. Harmon, in Boston Transcript.

Christmas Cakes and Desserts.

The dessert is oftentimes the most perplexing A workman plied his clumsy spade part of the meal to the housekeeper, and particularly so during the holiday season, when she is anxious to have something particularly dainty and pleasing both to the eye and the palate. The subjoined recipes may be of some service, none of the cakes being too rich to serve where ices form the chief part of the dessert course.

DELICATE WHITE PUFFS.

Beat a pint of rich milk and the white of four eggs until very light, and add, slowly beating all the while, a cupful of finely-sifted flour and a scant cupful of powdered sugar and the grated peel of half a lemon. Bake in buttered tins in a very hot oven, turn over, sift powdered sugar over them and serve hot with lemon sauce.

SNOW APPLE PUDDING.

Remove the inside from six large baked apples. Beat to a stiff froth the whites of three eggs, stir into the apple and serve with the following sauce: Beat the yolks of the eggs with one cup of sugar, adding one-half a cup of boiling milk, and flavor with lemon.

CHOCOLATE BLANCMANGE

Cover an ounce of gelatine with water. Boil one quart of milk, four ounces of chocolate and Add the twelve ounces of sugar five minutes. gelatine and boil five minutes longer, stirring Flavor with vanilla, and pour into constantly. moulds to cool. This dessert may be served with sweetened cream or a rich custard sauce.

CHRISTMAS PARTY CAKE.

Mix six ounces of butter and eleven ounces of sugar to a cream; add the beaten yolks of five eggs. Beat until very light. Add a teaspoonful of vanilla, a fourth of a grated nutmeg, with the juice and grated rind of one lemon. Whip the whites of the eggs to a froth, add them with a teacupful of thin cream to the butter. Sift half a pound of pastry flour, three tablespoonfuls of cornstarch and two teaspoonfuls of baking powder together, and add to the mixture. Pour into a greased mould and bake in a quick oven. When

HOLIDAY CAKE.

Beat four ounces of butter, three ounces of sugar and the yolks of four eggs together. four ounces of flour, the grated rind of half a lemon, a teaspoonful of rose water and the beaten whites of the eggs. Fill small fancy cake moulds with the mixture, sprinkle the tops with chopped almonds and powdered sugar. Set in a moderate oven for forty minutes .- [Ladies' Home Journal.

Two Surprises.

As the sun was going down; The German king, with a cavalcade, On his way to Berlin town,

Reined up his steed at the old man's side. "My toiling friend," said he,

- "Why not cease work at eventide When the laborer should be free?"
- "I do not slave," the old man said; " And I am always free, Tho' I work from the time I leave my bed Till I can hardly see."
- "How much," said the king, "is thy gain in a day?"
- "Eight groschen," the man replied. 'And thou canst live on this meagre pay?" "Like a king," he said with pride.
- "Two groschen for me and my wife, good friend, And two for a debt I owe;
- Two groschen to lend and two to spend For those who can't labor, you know."
- "Thy debt?" said the king; said the toiler, "Yea, To my mother, with age oppressed, Who cared for me, toiled for me many a day. And now hath need of rest."
- "To whom dost lend of thy daily store?" "To my boys-for their schooling; you see, When I am too feeble to toil any more, They will care for their mother and me."
- "And thy last two groschen?" the monarch said.
- " My sisters are old and lame; I give them two groschen for raiment and bread, All in the Father's name."
- Tears welled up in the good king's eyes,
- "Thou knowest me not," said he; "As thou hast given me one surprise, Here is another for thee:
- "I am thy king; give me thy hand,"-And he heaped it high with gold-
- "When more thou needst, I command That I at once be told.
- For I would bless with rich reward
- The man who can proudly say, That eight souls doth he keep and guard
- On eight poor groschen a day.' -R. W. McAlpine, in St. Nicholas for March.

Work of Diplomacy.

The agent for Rawdon's Renovating Rubbers walked briskly up the path to Miss Sophronia Ficott's side piazza. Miss Sophronia and her sixteen-year-old niece were engaged in unraveling the plot of a serial story from the light thrown on it by the first two chapters.

"Madam," said the agent, stopping respectfully at the piazza steps and taking off his hat, "I feel sorry to interrupt you, and should not do so save that I have in my bag an article which will so lessen the work of your house that you will have much more time to spend in the literary pursuits in which I see you are now engaged."

Miss Sophronia brought the wisdom of sixty years to focus on him through her spectacles, and waved dismissal.

"I shall be sorry if you don't try a Rawdon's Renovating Rubber," said the agent. "Of course I shall not press it upon you, but as I came up the walk and saw you and your sister sitting there, I thought-"

"My niece," said Miss Sophronia, conscientiously, but in a tone of unusual mildness.

"Niete!" ejaculated the agent, and raised his eyes to heaven in default of words. "Really, madam, of course I must believe what you say, but-

"Let me see what you have, young man," interrupted Miss Picott. "I don't object to labor-saving goods on principle, for I don't hold to growing old before your time," she added affably.

Fifteen minutes later the agent turned his back on three of Rawdon's Renovating Rubbers, and Miss Sophronia went into the house to hint up some longdiscarded curling-tongs.

Why the Andience Laughed.

At a public entertainment recently, a conjurer had an experience which was highly comical, though quite disastrous from a professional point

Having produced an egg from a previously he announced that he would follow empty beer, up this trick by bringing from the bag the hen that laid the egg.

This little arrangement he had left to his con-

federate to carry out. He proceeded to draw the bird from the bag, but what was his surprise on finding that the alleged hen was an old rooster, which strutted about the stage with ruffled feathers and offended dignity, and set up as vigorous a crowing as if it had just awakened from its nocturnal slum-

bers. The whole audience shrieked with laughter. and the unfortunate conjurer made a bolt for the dressing-room.

GOSSIP.

Cedar Dale stock farm lies in the County of Grev, in the suburbs of the County of Grey, in the suburbs of the village of Markdale, and is the property of Dr. T. S. Sproule, M. P. The doctor is a very, very busy man, for when he is not occupied with parliamentary, medical or a host of other duties, his spare moments are spent at his splendid farm, where a choice herd of Shorthorn cattle engages his attention. The bulk of this stock belong to the well-known Flora and Beauty families, the foundation cows of which are Ida of Brooksdale, Vol. 15, sired by Reporter 3rd 19825; dam Lady Aberdeen 18085, by Baron Nonpareil. She belongs to the Flora family. The Beauty-bred cow is Hopeville Beauty, sired by Dusty Joe Hopeville Beauty, sired by Dusty Joe 6962; dam Della 8855, by Hobart Pacha. As will be seen by referring to the Dr.'s ad., which appears in another column, he is offering for sale three bulls, from one to two years old out of these cows, and two of them sired by Lord Głoster 26995, the other by Cedarville Chief 26838. These males are big. growthy animals, and can be bought well worth the money. Write the Doctor, to Markdale P. O. Hopeville Beauty, sired by Dusty Joe

IMPORTANT SHORTHORN SALE ANNOUNCED.

As intimated in the advertisement in this issue, another grand sale of superior Shorthorn cattle will be held in the new sale pavilion of the Stock Yards Company, in the city of Hamilton, Ont., on January 21st, when sixty head of high-class cattle, contributed by a number of breeders, will be disposed of by public competition. The gratifying success of the first sale of this series, held in August last under the management of Mr. W. D. Flatt, may be considered a pretty good guarantee of the outcome of the coming event. The times are even more prosperous, the scarcity and the need of good cattle and the demand for them as great as ever, and the urgent necessity for a wider distribution and more general dissemination of good cattle never more obvious than now. Breeders will consult their own best interest and the best interests of the breed by entering for this sale only strictly first-class animals. That is the class that will surely sell well, and those contemplating the founding of a herd, or needing to replenish their herds, will serve their own interests by buying only the best available. We anticipate with serve their own interests by buying only the best available. We anticipate with confidence a very successful event in the coming sale at Hamilton. See the advertisement on page 847.

Pine Hill stock farm, in our advertising columns, offers some choice Berkshires and poultry at very reasonable prices for this month only in order to clear surplus stock. Quality and breeding of stock No. 1. See ad. for prices. D. A. araham, proprietor.

On our rounds, a few days ago, we had the pleasure of again calling on the veteran Shorthorn breeder, Mr. Arthur Johnston, of Vandeleur, owner of the well-known stock farm, Orchard Hill, and, as is usual with Mr. Johnson, we found hin brimful of good humor and at page with all the world. And well he found hin briming of good.

peace with all the world. And well he might be with his beautiful and well-arranged home and his herd of twenty-nine head of up-to-date Shorthorn cattle.

The best of a goodly heritage. Orchard nine head of up-to-date Shorthorn cattle. Truly his is a goodly heritage. Orchard Hill farm lies in the county of Grey, five miles east of Markdale station, on the C. P. R. At the head of Mr. Johnston's herd is the richly-bred bull, Lord Lavender 26855, by Imp. Sittyton Stamp; dam Imp. Lavinia, by First Choice. He is a red, and, as might be expected from his royal breeding, is a very evenly-built animal, and is proving a superior sire. The females represent the Lustre, Rosina, Kilhleam Beauty, Roan Duchess, Claret and Lady Spray the Lustre, Rosina. Kilbleam Beauty, Roan Duchess, Claret and Lady Spray families, among which is Imp. Beauty 21st, bred by Geo. Shepperd, Aberdeenshire, sired by Mirabeau, by Star of Morning; dam Beauty 19th, by Craibstone. She belongs to the Kilblean Beauty family. One of the representative Claret cows is Clarissa 4th, Vol. 15. by Guardian 18928; dam Clarissa 24223, by Sir Walter. The Rosinas are represented by Butterfly's Beauty, Vol. 19, by Imp. Verschoyle; dam Butterfly of Durham 3rd 84219, by Sir Walter 13557. The Lustre family by Lustre 28th, sired by Beau Ideal 17733; dam Lustre 26th, by Venture (imp.). The Roan Duchess fam-The Lustre family by Lustre 28th, sired by Beau Ideal 17733; dam Lustre 26th, by Venture (imp.). The Roan Duchess family by Duchess 9th of Allan Park, Vol. 18; by Bentick Lustre 28528; dam Duchess 7th of Allan Park 34630, by Carrick Chief 2nd; and the Lady Sprays by Lady Spray 5th, Vol. 18, by Lord Kirklevington 26577; dam Lady Spray 2nd, by Baron Kirklevington. All told, there are for sale three two-year-old heifers in calf to Lord Lavender, three year-old heifers, seven heifer calves, four bulls from ten to thirteen months old, all very closely related to Indian Chief (imp.). Mr. Johnston is offering seven cows in calf to stock bull, all of them very heavy milkers. He also reports trade as being unusually good, having lately sold, to different parties, over a dozen head.

The Berkshire boar, Willow Lodge Perfection, whose picture appears in this paper, property of Mr. Wm. Wilson, Snelgrove, Ont.—and, by the way, the pig is better than the picture - was farrowed on September 5th, 1901; sired by Long-fellow 10th of H. F.; dam Stratton Lizzie 17th of H. F. At twelve months old he weighed 463 pounds. He won first prize under twelve months at Ottawa, Toronto and London this fall.

NOTICES.

CHANGE IN WINTER FAIR RULE.

CHANGE IN WINTER FAIR RULE.

At a meeting of the Board of the Provincial Winter Fair, held at Guelph, Monday, November 3rd, it was decided that rule 8 should be amended, which reads as follows:

"All animals must be the Lona fide property of the exhibitor. All animals entered in the pure-bred classes must be either bred by or born in the possession of the exhibitor. In the grade classes, all animals must have been owned and fed by the exhibitor for at least three months previous to the first date of the show." This rule as changed will read as follows: "Ail animals must be the bona fide property of the exhibitor, and must have been owned and fed by the exhibitor for at least three mcnths previous to the first date of the show." A. P. Westervelt, Secretary.

Merits of Absorbine for Man and Horse

Mr. W. F. Young, Springfield, Mass. Dear Sir,—On the 6th of this month I received by express a full-sized bottle of Absorbine for the horse. I also received the four-ounce bottle of Absorbine Jr., Absorbine for the horse. I also received the four-ounce bottle of Absorbine Jr., some time ago, and have been applying it right along to a ganglion on the back of the hand, and it was rather \$12\text{gc}\$, but at this writing it is about gone. It was quite hard and solid, but it got soft and is now, in a measure, gone. I had little faith in the virtue of the medicine at the start, but it has done its work, and I must, therefore, say it is all right, and if the stronger preparation will do as much for horses you have something you can rely on, and what every man who keeps a horse ought to have. I had about condemned it after the lapse of one week, not seeing any change, but a little more perseverance and the lump was gone.

Yours truly,

L. P. FARQUITAR,
Dec. 15th, 1898. Zanesville, O.
Send twenty-five cents for a sample

Send twenty-five cents for a sample bottle and pamphlet, "How to take care of the Horse," to W. F. Young, P.D.F., Springfield, Mass., or Lyman, Sons & Co., Montreal, Canadian Agents.

AN EVENING'S ENTERTAINMENT.-With the winter coming on, people will be planning for social and musical evenings of various kinds. One of the most popular means of entertainment is by the use of the modern Gramophone, which has been rendered well-nigh perfect as a reproducer of the human voice in song or speech, humorous or otherwise, and instrumental music of all kinds. affording endless diversion and pleasure. With a good variety of "records," such as are obtainable at little expense, it is a capital way of filling out a proramme engagement phones can now be obtained on easy terms. For information on this subject, consult the advertisement of E. Berliner, 2315-19 St. Catherines street, Montreal, P. Q., in another column, and communicate with him at once, mentioning the "Farmer's Advocate."

ELMIRA AGRICULTURAL WORKS are becoming more favorably known from year to year by the farmers of this from year to year by the farmers of this country who have been fortunate enough to secure their machines. While not one of the largest firms in Canada, they have been able to hold a strong place because of the quality of their machines and the honesty and fairness shown in their transactions with farmers generally. Mr. O. M. Umbach, formerly assistant manager of the Waterloo Mig. Co., is now associated with the company, and will add to the splendid business ability heretofore characteristic of these people. In addition to food boilers, which they advertise in this issue, they which they advertise in this issue, they make a specialty of hay-making machin-ery, including hay-loaders, side-delivery rakes, and hay tedders. They are also manufacturers of Excelsior machinery, used in turning out excelsior, that curly, bunchy material used in packing mer-chandise of all kinds.

GOSSIP.

In the review of the Glen Allan Ferd of Shorthorns, owned by Mr. S. Dyment, Barrie. Ont., in the October 15th issue of the "Advocate," page 768, the weight of his cow, Oro Duchess. by a typographical error was given as 1,600 lbs. It should have read "1,900 lbs. In breeding condition." in breeding condition."

A combination sale of Shorthorn cattle will be held in the

Sale Pavilion of the Hamilton Stock-yards Company,

of Hamilton, Ontario, on January 21st, 1903.

Breeders desiring to contribute animals to this sale will make it known to W. D. Flatt, Manager, on or before November 25th, sending pedigrees with application. None but strictly first-class cattle, in good sale condition, will be accepted. After 60 head have been accepted, further applications will be returned.

W. D. FLATT, HAMILTON, ONT.



Remnants SILK RIBBONS almost FREE

mently purchased several Thousand Dollars boon Remnants, in London, England, much tual cost of manufacture. We are thereby below the actual cost of manufacture. We are thereby enabled to offer the lady readers of this paper am immense barrain in choice Ribbons. They are all from one to three yards in length, and some 3 inches wide. Amongst these Ribbons are some of the very fluest quality, Crown Edge, Gros-Grain, Moire, Picot Rdge, Satin Ed. e. Silk Broades, Striped Ottoman and various other plain and fancy styles, in a variety of fashionable colors, all shades and widths, suitable for Bonnet Strings, Neckwear, Trimmings for Hats and Dresses, Bows, Scarfs, etc., etc. All first class. No lady can purchase such fine Ribbons as these at any store in the land for many times our price. Don't miss this Barrain.

Brite. We Gallagher, East Clifton Quee, says: "I consider your Ribbons the cheapest Bargain lever got." Price, per box, only 35c., or 3 boxes for 30c. ver got." Price, per box, only 35c., or 3 boxes for 90c, stpaid. Mil.inery Sup. ly Co., Box F. A. Toronto.

Toronto, Ontario.

O-Piece China Tea Set. 12 Cups. 12 Saucers. 12 Tea Plates, 2 Cake Plates.

551.

FARMER'S MENTION ADVOCATE.

Dept.

Mr. T. Mercer, of Markdale, Ont., the well-known Shorthorn breeder, has lately sold to Mr. David Harrell, of Austin, Texas, nine heifers, including four Missies, two Clarets, two Floras and one Starling; also, ten-months-old Village Girl bull calf to Mr. Green, of same place, to go in the same shipment.

lage Girl bull calf to Mr. Green, of same place, to go in the same shipment.

Messrs. B. H. Bull & Son, Jersey breeders, of Brampton, Ont., report the sale of twelve Jersey bulls during the last ten weeks. Belvoir King, the celebrated show bull that headed their show herd this fall, has been purchased by Messrs. R. J. Lawrence & Son, of Humber, Ont. Althotgh this bull is up in years, he will be a valuable addition to the excellent herd of dairy cows (Jerseys and Jersey grades) kept at his new home. Thos. Brock, of Exeter, Ont., is the proud purchaser of one of the best working cows in the Brampton herd. Mr. Brock writes that he won first prize with this bull, and says that he is the best bull he ever owned. A full trother of this bull was purchased by F. C. Pettit, of Burgessville, Ont. This animal was nearly two years old, and has figured prominently in the show-ring the last two years. Brampton Golden Gem, that milked 42 lbs. per day when less than three years old, is a fill sister of these bulls. She was the first-prize yearling heifer in milk at Toronto, London and Ottawa in 1901. A son of Monarch's, out of a niece of Adelaide of St. Lambert, was purchased by Wm. Patton, of Bluevale. This bull is of the same breeding as Brampton Gold Prince, the first prize bull calf in Toronto in 1901, and now owned by James Walsham, of Portage la Prairie, Manitoba. This bull won first prize as yearling and male championship at Winnipeg this year. The purchase of Mr. Patton is equally as promising as Gold Prince, and no doubt in his hands he will develop into a very superior animal. The herd of James Baggs, of Grahamsville, is headed by a full brother of the last mentioned bull, and Mr. Baggs is delighted with the full brother of the last mentioned bull, and Mr. Baggs is delighted with the and Mr. Baggs is delighted with the calves that this bull is leaving. Other young bulls of great promise have been sold to W. J. Maxwell, of Nova Scotia; James Sorley, Ottawa; J. J. Horning & Sons, Hamilton; R. B. Smith, Newbury; the Misses Macdonald, Guelph; W. J. Lumsden, of Manitoba.

Maple Grange Shorthorns

CLARETS, LAVINIAS AND BEAUTYS, Sired by such Scotch bulls as Commodore 31025. Scottish Bard, Imp. Baron's Heir. 18 heiters, 12 bulls, a number of cows (heavy milkers), to be sold

well worth the money.

Owen Sound P. O. and Station and Port.



Mr. Geo. D. Fletcher, Binkham, Ont., breeder of Shorthorn cattle, in ordering a change of ad., writes: "I have recently decided to offer for sale man reset stock bull. Spicy Robin =28250=, which has made himself famous both as a stock bull and also as a show bull, having won second prize both at Toronto and London exhibitions, 1902; also second for bull and four of his get at bondon, and many other prizes in strong rings; also having sired Roan Missie, which sold for seven hundred and forty dollars (\$740.00) at nineteen months old, by public auction, at Mr. W. C. Edwards' sale, Chicago, and also fire of Verbena Anglish, nighest-prized loint le at Brovincial sale in fuelph, 1902, and several others equally as good. Though Spicy Robin has been used for show purposes, yet he has never been pumper ed in any way to interfere with his usefulness in heading a herd, as he is both active and sure. My only reason for selling him is that I have cuite a usefulness in heading a herd, as he is both active and sure. My only reason for selling him is that I have cuite a number of his heifers, which I wish to keep in my herd, and so require another stock buil. Spicy Robin was bred by J. & W. B. Watt, Salem, was sired by Red Robin =24808=, by Royal Sallor (imp.); dam Roan Lady =24755=, by Barmpton Hero. My young stock at present are superior to what has ever been in the herd before, as I have several heifers by Spicy Robin and out several heifers by Spicy Robin and out of some of my best cows.

COON AND COMIC SONGS.

674 My Dinah.
504 A Little Bit Off the Top.
733 When Mr. Shakespeare Comes to Town.
339 The Mick Who Threw the Brick.

2315-19 St. Catherine St., Montreal, P. Q.:

Enclosed find one dollar in payment on the Standard Berliner Gram-o-phone, type A, complete, with 16-inch Japanned concert horn and three records. If satisfactory after five days' trial, I agree to pay eight monthly payments of two dollars each. If not satisfactory, I will return the Gram-o-phone and this order is null and void.

Coon, Coon, Coon. Hear Dem Bells. Turkey in de Straw. Just Because She Made Dem Goo-Goo Eyes.

Good Morning, Carrie.
Bill Baily, Won't You Please Come Home?

alu

BAND RECORDS.

- At a Georgia Camp Meeting. Whistling Rufus. Nearer, My God, to Thee. Imperial Edward March.

d

ct,

er-

et,

nd m-

KS

wn

his gh one ney ace

- 187 Imperial Édward March.
 208 A Mosquito Parade.
 A Mosquito Parade.
 300 Washington Post March.
 482 Blue Danube Waltz.
 578 God Save the King.
 803 Reminiscences of Scotland.
 806 Bonnie Brier Bush March.
 807 Soldiers of the Queen.
 805 The Maple Leaf.
 810 John Anderson, My Joe.
 821 Lancers, 1st and 2nd Figures.
 822 "3rd and 4th Figures. Send your order for additional Records when ordering the GRAM-O-
- Lancers, 5th Figure. Quadrille, 1st and 2nd. " 3rd and 4th. " 5th.
- Wearing of the Green. Scots Wha Hae.
- - SONGS.

 Good-Bye, Dolly Gray.

 When the Roses Bloom Again.

 Sweet Annie Moore.

 The Blue and the Gray.

 Stay in Your Own Back Yard.

 Late In the Golden Field of Grain.

 The Bridge.

 All Hail the Power of Jesus' Name.

 Private Tommy Atkins.

The Entire Family Enjoys The Berliner Gram-o-phone

The The Berliner GRAM=0=PH(

is an Enjoyable ENTERTAINER for Every Member of the Family.

Nursery rhymes, lullables for the little tots; band and banjo music, comic sengs, minstrel shows and choruses, and music and songs from the latest light operas for the young men; violin, guitar, mandolin and piano music, and sentimental and operatic songs for the young ladies; orchestral music, grand opera, songs of Scotland and Ireland, and choir and church music for the old folks, and hundreds of other instrumental and vocal selections that will enjoyably entertain the entire family and their friends. We're always adding something new. The Berliner Gram-ophone is the only talking machine made in Canada, and guaranteed for five years.

Our new "Automatic Sound Box" gives the Gram-o-phone undoubted precedence over all other talking machines, no matter what the price. RECORDS—50c. each; \$5.00 a dozen. Records are sold for cash only-practically indestructible.

Here Are a Few of Our New Records. There Are Over a Thousand More:

- Whistling Coon. And Her Golden Hair was Hanging.
 - RECITATIONS.
- Auction Sale of Household Goods, Scene at a Dog Fight. Sermon on the Mount. 23rd Psalm and Lord's Prayer.
- VOCAL QUARTETS.

- 36 Evening Prayer. 80 I'se Gwine Back to Dixie.

495 Blue Bells of Scotland.
483 My Faith Looks Up to Thee.
383 The Holy City.
754 In the Sweet Bye-and-Bye. These are only a few of over a thousand records. Piano, Violin, Cornet, Trombone, Banjo, Mandolin, Flute, Piccolo, Chime Bells, Church Choir and other records. We'll be pleased to send you a complete catalogue.

E. BERLINER.

P. O. Address .

282 731

OUR SPECIAL EASY-PAYMENT OFFER.

As the orders keep pouring in, we have decided to continue our easy-payment plan. Send us one dollar with this coupon, promising, if the Gram-o-phone proves satisfactory after six days' trial, to pay two dollars a month for eight months, and we will ship you at once a genuine Berliner Gram-o-phone, type "A," with three records of your own choice free. Enclose two dollars extra if you want spun-brass horn.

GIVE OUR OFFER A THOROUGH TEST.

Description of Berliner Gram-o-phone.

PHONE, thus saving time and express charges.

Cabinet—Quartered oak, highly finished, Horn—16 inches long, 10-inch bell, Finish—All exposed heavily nickel-plated. Sound Box.—The Improved Automatic Concert Sound Box.

Needles—200 free, Records—Three 7-inch records free, Guarantee—Written guarantee for 5 years. Weight—Completely boxed, 25 lbs,

CASH PRICE.

With Japanned Steel Horn, \$15. With Spun-Brass Horn, \$17.

EASY-PAYMENT PRICE. With Japanned Steel Horn, \$17. With Spun-Brass Horn, \$19.

MONTREAL. EMANUEL BLOUT, Manager for Canada.

2315-19	St.	Catherine	St.,
0.40	CO DI	TDEAL	

If you wish a spun-brass horn instead of the japanned horn, enclose two dollars extra.

Also send free of charge the following three records:

No...... No......

Township......



The World Burning Oil for Fue

Clear-sighted, hard-headed financiers like J. Pierpont Morgan and the Rockefellers find no difficulty in reading the signs of the times in regard to

the oil situation. With steamships, locomotives, factories and millions of homes burning oil for fuel, the price of oil stocks will advance.

Present Allotment of Eastern Consolidated Oil Co. Stock at 50c. a Share is ALMOST GONE, and is Certain to Be Oversubscribed.
The Chances Now Are That the

Advance to \$ by December

Scarcely one month—probably less time—to get in your orders before the price advances 100 per cent.

Facts That Force Up the Price of This Stock.

Dividends.—This Company has paid 20% on the investment to stockholders in 10 months.

Immense Holdings.-Over 21,000 acres of rich oil land in Ohio and California, valued at over half a million dollars.

Enormous Production.—107 richly-producing oil wells, with production sold for cash.

Development.—Over \$150,000 already expended for development of oil properties.

Kern River.—Two big wells now, expect 15 wells by Christmas. Land worth \$10 an acre three years ago, now valued at \$5,000 an acre.

Ohio Field.-1,200 acres proven oil land-105 oil wells. Thousands of barrels of oil monthly.

Oversubscription of present allotment at share is sure. Orders filled in the order in which they are received.

Certainty.—No "ifs," "ands" or guesswork, but solid facts. Those who subscribed a year ago took all the risks. You have a chance to pick

Brains, Energy, Push and Perseverance

have made the Eastern Consolidated Oil Co. what it is to-day. Such men as the Hon. Earnest Cady, ex-Lieutenant-Governor of Connecticut, for President; Hon. Charles J. Noyes, Speaker of the Massachusettes Legislature for five terms, and Hon. Lewis A Corbin, prominent envelope manufacturer, on the board of directors, give weight and character.

All of these gentlemen have visited all the properties of the Company. President Cady is now in California

Fortunes Made in Oil.

The following partial list shows what fortunes can be made in good oil investments:

Senator Buller Invested \$9,500 His Profits \$100,000 Edward Doberry Invested 1,700 His Profits 100,000 100 His Profits 31,620 Richard Ellis Invested Invested 6,000 His Profits 150,000 W. B. Hardison . 480 His Profits 100,000 6. Parker ... Invested Edward Strasburg Invested 3,500 His Profits 120,000 Clark & Bryan . . . Invested 2,700 Their Profits 75,000

Is not this a lesson for you? The Eastern Consolidated Oil Co. offers just as great opportunities!



GOSSIP.

H. B. Webster, Fergus, Ont., reports that he has made several sales lately, and that his herd of Scotch Shorthorn cattle were never in better breeding condition. At the head of the herd is Lord Stanley 4th =22678= (own brother of Topsman), sired by Lord Stanley junior champion at World's Fair, Chicago. He is now eight years old, and it is doubtful if there is a better-looking bull of his age in the Province, having a mel-

Dentonia Park farm advertises, in another column, for a cattleman, whom they wish to say would not be required to take charge of the calves or bulls, but would have one man to help him for

The High Price of Coal is the cause of much present anxiety but there is a practical way of overcoming is to some extent. With an Appleton Wood Saw you can rapidly and with ease and safety \$5 to \$15 DAY Strong, rigid trame, adjustable dust proof oil boxes, etc. We make 5 styles. Also the famous "Hero" Friction Feed Drag and Fodder Cutters, APPLETON MFG. CO., 53 Fargo St., Batavia.III.

CHICKENS DUCKS TURKEYS GEESE

Empty crates forwarded on application.

Highess market prices paid. Correspondence solicited. Toronto Poultry and Produce Co.

OFFICE: 740 YONGE ST., TORONTO. FOR HATCHING EGGS Barred Rocks (exclusively). From two pens headed by two imported cockerels bred from a \$75 trio of A. C. Hawkin's Royal Blue strain; \$1.00 per setting of 13.

Box 100. Walkerton.

PINE HILL STOCK FARM
AND POULTRY YARDS

(ffers bargains in Berkshires and poultry this month.
B. and W. Rocks, Wyandottes, Leghorns, Langshans,
L. Brahmas, \$1 each and up. Pekin ducks, \$3 per
pair, M. B. turkeys, \$4 a pair, Also Embden geese.

D. A. GRAHAM. Thedford D. A. GRAHAM, Thedford.

Barred Rocks and Pekin Ducks A number of choice cockerels, finely barred, bred from prizewinning stock. Fifteen pairs of extra fine Pekin ducks, bred from A. J. Hallock's prizewinning stock, Long Island. A. McINTYRE, - - MANILLA, ONT

For Sale: BARRED WHITE ROCKS, Golden, Silver, White Wyandoties, Brown and R. C. B. Leghorns, Pekin, Rouen, Cayuaga ducks; Toulouse, Embden geese. Geese, \$2 each; Others, \$1.

R. J. LAURIE, WOLVERTON, ONTARIO.

Barred Rocks and Pekin Ducks. We offer special bargains in young stock, from our choice strains, for 30 days. Send for FREE ILLUSTRATED CIRCULAR.

H. GEE & SONS, FISHERVILLE, ONT. Wanted. An aged imported Shorthorn bull. Must be of a good milking strain, a sure getter, a good server, well behaved, and a solid deep red. Write

Tom Way, Chapman P.O., Hastings Co., Ont W. R. BOWMAN MT. FOREST, ONT.,

is offering Yorkshire sows, in farrow, at \$15 to \$20, sired by 2nd-prize boar at Toronto. Suffolk Down rams and ewes, bred close to imported stock, at \$10 to \$15. Two Polled Angus bulls at \$75.



Tenders for Supplies, 1903.

The undersigned will receive tenders up to noon on MONDAY, 24TH INST., for supplies of butchers' meat, creamery butter, flour, oatmeal, potatoes, cordwood, etc., etc., for the following institutions during the year 1903, viz.:

At the Asylums for the Insane in Toronto, London, Kingston, Hamilton, Mimico, Brockville, Cobourg and Orillia; the Central Prison and Mercer Reformatory, Toronto; the Reformatory for Boys, Penetanguishene; the Institutions for Deaf and Dumb, Belleville, and the Blind at Brantford.

Exception.—Tenders are not required for the supply of meat to the Asylums in Toronto, London, Kingston, Hamilton and Brock ville, nor for the Central Prison and Mercer Reformatory, Toronto.

A marked check for five per cent. of the estimated amount of the contract, payable to the order of the Honorable the Provincial Secretary, must be furnished by each tenderer as a guarantee of his bona fides. Two sufficient sureties will be required for the due fulfillment of each contract, and should any tender be withdrawn before the contract is awarded, or should the tenderer fail to furnish such security, the amount of the deposit will be forfeited. Specifications and forms of tender may be had on application to the Department of the Provincial Secretary, Toronto, or to the Bursars of the respective institutions.

The lowest or any tender not necessarily accepted.

Newspapers inserting this advertisement will be the provincial Secretary, from the Department will will be the provincial Secretary. Toronto, or to the Bursars of the respective institutions.

cepted.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.

L. D. STRATTON

J. R. STRATTON,
Provincial Secretary.
Parliament Buildings, Toronto, November 10,
1902

ne.

on

Co.

1G

ON,

onth. hans, 3 per geese.

cks

rred

rs of Hal-

NT

OCKS, loties, horns,

RIO.

cks.

m our

DNT.

bull. ter, a

Ont

N

at \$10

303.

up to lies of tmeal, owing

Brock-Prison ne Re-the In-le, and

for the

o, Lon-lle, nor forma-

he estito the
Secreer as a
fficient
illment
der be
ded, or
rected.
nay be
of the
Bursars

rily ac-

sement nt will

eretary. aber 10,

Good time Poor time has its 210 ending in an Every Elgin watch has the word "Elgin" engraved on the works, and is guaranteed against original defect of every character. A booklet about watches will be mailed to you for the asking. every character. A booklet about ELGIN NATIONAL WATCH COMPANY, Elgin, Illinois.

BOOK REVIEW.

Any book reviewed in this department may be ordered through this office, at the price stated.

In reviewing a copy of the American Tanner, by N. R. Briggs, we found it contains improved and quick methods of curing, tanning and coloring the skins of the sheep, goat, dog, rabbit, otter, beaver, muskrat, mink, wolf and fox, as well as other heavier hides. It also includes a plain description of the necessary utensils and practical directions for their use, being in every particular just such a book as farmers have been enquiring for, and the price is only 25 cents.

We have just received from the Orange, Judd Co., of New York, a copy of "Taxidermy," a concise little volume of 160 pages, devoted to the skinning, stuffing and mounting of birds, mam-mals and fish, edited by Paul N. Hasluck. This book is very practical and easily understood, being specially fitted to suit the needs of amateurs, and contains information which even professionals might read. Every feature of the art of taxidermy from the skinning knife up is fully dealt with. Price 50 cents.

"The American Sugar Industry" is the title of a manual just issued by Herbert Myrick, on the production of sugar beets and sugar cane, and the manufacture of sugar therefrom. It is divided into four sections, the first dealing with the economics of domestic sugar production; the second, with the cane sugar industry; and the third, with the beet sugar industry in America prior to 1897; while part four gives a complete history of the development since that date. This is a volume of much practical and scientific informawell intended to give to the farmers, as well as the general public, a true presentation of the great new industry. Considerable space is devoted to the culture of the sugar beet, including soil, tillage, planting, cultivation, and all the other phases of interest to growers. The book is handsomely illustrated and contains 230 large pages. Price, \$1.50.

CHEMISTRY OF THE FARM.-Chemistry of the Farm, by Warrington, that standard old work on that all-important subject to the intelligent farmer, has just received its fourth revision, and although but little behind the times before, is now strictly up-to-date, comprising all the recent discoveries in the science as applied to agriculture. It contains over 250 pages, of eleven chapters, dealing quite conclusively and yet in simple language with such topics as plant growth, the atmosphere and soil, manures, rotation of crops, animal nutrition, foods, relation of food to animal requirements, and the dairy. It is full of information on the changes which take place in the soil when manures are applied; how the various constituents of plant food are held and made use of. A very important chapter is the one dealing with assimilation of food in the animal body, explaining the different changes that the nutients undergo before forming permanent tissue. We can heartily commend this book to any of our readers who desire to improve their knowledge of agricultural chemistry. The price is only \$1.00. ONTARIO PROVINCIAL

A combination exhibition of both Live and Dressed Cattle, Sheep, Swine, and Poultry; also a Dairy Show.

Will be held at

GUELPH, ONT., **December 8 to 12, 1902**

Over \$7,000 offered in prizes.

Live-stock entries close November 22nd.
Poultry entries close November 24th.

Experts will deliver practical lectures on interesting Live-stock, Poultry and Dairy topics.

Increased accommodations this year for the convenience and comfort of visitors, exhibitors and their exhibits.

RAILWAY RATES: SINGLE FAIR FROM ALL POINTS.

For prize list, entry form, and any further information, apply to

A. W. SMITH, President, Maple Lodge, Ont. A. P. WESTERVELT, Parliament Buildings, TORONTO, ONT.

SHORTHORNS. CEDARDALE SHORTHORNS.
FOR SALE.—3 bulls from 1 to 2 years old, two
of them of Lord Gloster 26995 and Flora dams, the
other by Cedarville Chief 26838, Beauty dam; a big. growthy, sappy lot. Dr. T. S. Sproule, Markdale, Ont., P.O. and Sta.

WANTED

AN EXPERIENCED HERDS

MAN for a large Shorthorn
herd, also a man competent to
take charge of Large Yorkmen preferred, State references
THOS. H. CANFIELD,
om.
Lake Park Minneagta ILS. A Lake Park, Min

Belgian Stallions Just imported, the finest lot of draft horses that ever came to Canada. For sale:

EIGHT BELGIAN STALLIONS Fully registered; immense size and wonderful action, ranging from 1,700 to 2,200 pounds; all dark colored. All broken to harness. Can pull easy from a road-cart to a six-story house. Don't mistake for the clumsy, sleepy Clyde. Extra short back, splendid high feet; no long hair on legs to be bothered with. The Belgian draft horse awarded the first prize at the Paris Exhibition, 1900, beating everything in that class, including Clydes and Percherons—beaten at their own home. Visitors cordially invited. Correspondence solicited.

"BARON DE CHAMPLOUIS," Proprietor, Importer,

DANVILLE, QUEBEC, SAVES TROUBLE





handy in case of a bruise or strain. This remedy is rapid to cure, pleasant to use, and horse soon ready for work. No blister, no hair gone.

ABSORBINE removes any soft bunch from animal or mankind. \$2.00 per bottle, de-livered, or of regular dealers. W.F. Young, P. D. F., Springfield, Mass. -om LYMAN, SONS & CO., Agts. for Canada, MONTEBAL,

GOSSIP.

The annual meeting of the American Shropshire Registry Association will be held in the new Record Building, Union Stock Yards, Chicago, Tuesday, December 2nd, 1902, 10.30 a. m.

Hodgkinson & Tisdale, Beaverton, Ont., report the sale of that fancy-bred Clydesdale stallion, Wayward Boy (2773), to Graham Bros., Claremont, for a long price.

James Addison, of Malton, Ont., a well-known importer and owner of heavy draft horses, died at that place, Nov. 3rd, at the advanced age of 62 years, He was an honorable man, and much respected by all who knew him. It was a coincidence that he and Joe Thompson, another noted horseman of the old times were having on the seme day. times, were buried on the same day

A meeting of the members of the American Leicester Breeders' Association is called at the Transit House, Union Stock Yards, Chicago, on Thursday, December 4th, 1902, at 5 p.m., to vote on an increase of the capital stock of said corporation, and such other business as may properly come before said

W. R. Bowman, Mt. Forest, in sending in a change of advertisement, to be found in another column, offers for sale a few choice Yorkshire sows at a very moderate sum. They are by the second-prize boar at Toronto Industrial, and are now in farrow. He has also well-bred Suffolk rams and ewes, and two Polled Angus bulls that may be had at prices commensurate with their quality. Look up his announcement. Look up his announcement

Dalgety Bros., London, Ont., among many other imported horses placed lately, have sold to Mr. Robt. Burchall, Mitchell, Ont., the two-year-old Clydesdale stallion, Mosstrooper Champion, illustrated in this issue, winner of second prize in a strong class in which the same firm had the first-prize winner in Fidelity, sold to Messrs. Robson, Ilderton, Ont. Messrs. Dalgety have also sold to Mr. W. J. Prangley, Strathroy, Ont., the splendidly-bred five-year-old Hackney stallion, Imp. Sportsman III. (6908), a Highland Society Show winner, sired by Agility 2999, dam Brunerte, winner of 200 prizes, including championship at London Hackney Show.

FOR SALE:

SEVERAL YOUNG

Clydesdale Stallions

Also two aged Clyde stallions. Also one very fine young stallion, win-ner of first and sweepstakes prizes. At very low prices. Write for par-ticulars and prices to

ROBERT DAVIES, TODMORDEN, ONTARIO,

OR CITY ADDRESS, 34 Toronto Street, Toronto, Ontario.

ROSEDALE STOCK FARM. Clyde and shire horses, Shorthorn cattle, Leicester sheep. Imp. first-prize Shire stallion, Newharris Duke, and the four-year-old Clyde stallion, Gay Gordon, half-brother to Hiawatha, now in service. The imp. bull, Chief Ruler, bred by W. S. Marr, Uppermill, heads the herd. Young bulls and females for sale. Our flock of Leicesters has won at the leading shows of Canada and U. S., and we have a grand lot of rams and ewes for sale. My motto: The bestisnonetoogood.

J. M. GARDHOUSE, HIGHFIELD P. O. MALTON, G. T. E.; WESTON, C. P. E. - OM

YDESDALES

AYRSHIRES and POULTRY.

R. Ness & Sons, Howick, Que. importers of Clyde, Percheron

and Hackney stallions, Ayrshire cattle, and poultry, have for sale 5 Clyde stallions, sired by Baron's Pride, Sir Everitt, and Royal Carrick, I Percheron, and I Hackney ney, winners. Ayrshires of both sexes, and poultry.

WANTED A reliable man to work on a farm. Steady employment. Use of cottage and garden. Apply to O WESTMINSTER, F. ADVOCATE OFFICE, LONDON.



Seeing is Believing.

Come to our stables and see 15 Clyde stallions weighing 15 tons, of the best quality, action and color. We also represent the best Hackney blood in

GRAHAM BROS.. CLAREMONT, ONT.

Pioneer Stud

BUSHNELL, ILL.,

Has for 24 YEARS been headquarters for the CHOICEST

SHIRE, PERCHERON, SUFFOLK AND

STALLIONS.

Sixth importation for this season received November 10th.

20 to 30 Good Practical Salesmen Wanted

Best lot of draft stallions in the United States or Canada. Notwithstanding the superior quality of our horses, it is a fact that our prices are lower than can be obtained elsewhere in America. If there is no first-class stallion in your neighborhood please write us. For our 24th annual catalogue, etc., address

J. G. TRUMAN, MANAGER, BUSHNELL, ILL.



BAWDEN & McDONELL, EXETER, ONT.

Clydesdale, Shire and Hackney Horses

are now offering several imp. Clydesdale, Shire and two Hackney stallions, prizewinners in England, Scotland and Canada, and representing the best blood alive; also several choice Canadian-bred ones. These animals are all true to type, and possess substance, quality, style and action.

Dalgety Bros.

Largest Importers of Horses in Canada.

OUR third consignment for this year of stallions and fillies is now on the ocean, and will be at

Black Horse Hotel, Toronto,

on and after Monday, November 24th. Come quick, if you want a good one.

DALGETY BROS., LONDON, ONT.

International Importing Barn, Sarnia, Ontario.



Clydesdale and Shire Stallions, and Spanish Jacks.

My third importation within the last fourteen months arrived Sept. 4th.



H. H. CALISTER, Manager and Salesman.

Imp. Clydesdales in Shorth



Messrs. Smith & Richardson. COLUMBUS, ONT.,

Importers and breeders of Clydesdale horses and Shorthorn cattle, are now offering 14 stallions, 9 of them imported, including brothers of the world-renowned Baron's Pride, Hiawatha, and Royal Cairnton; also 13 mares bred from imported stock. Shorthorns, imported and home-bred, all ages. Stations:

Oshawa & Brooklin, G.T.R., Myrtle, G.P.R. Long-distance Telephone, Columbus. Telegraph, Brooklin.



CLYDESDA

FOR SALE:

OF ALL AGES, IMPORTED AND HOME-BRED.

Sired by such noted sires as Baron's Pride, Mains of Airies, Sir Christopher, Prince Thomas, and others.

Among them is Prince Fragrant, the first-prize threeyear-old at Toronto Industrial, 1902. Stables half mile
from town. Parties desiring to purchase, please
write or call upon

Wm. Colquhoun, Mitchell. R. R. Station: Mitchell, G. T. R.



Glydesdales and

FOR SALE: Seven choice young stallions, and several young mares and fillies. Five young bulls and bull calves, and thirty-five excellent young cows and heifers. Mostly registered in the American Herdbook.

JOHN BRIGHT, MYRTLE, ONTARIO.

Hodgkinson & Tisdale

BEAVERTON, ONT.,

Breeders of

CLYDESDALE AND HACKNEY HORSES AND SHORTHORN CATTLE,

are now offering a number of choice mares and fillies, and a few young stallions, winners at Toronto; also a few nice harness horses.

Shorthorns of both sexes for sale. BEAVERTON P.O. AND STATION.

H. J. Davis, Woodstock, Ont. 40 HEAD IMPORTED and

CANADIAN-BRED SHORTHORNS.

22 head just home from quarantine, including a choice lot of heifers and young bulls of the best breeding. Herd headed by the Willis Cruicks hank-bred bull, Bapton Chancellor (imp.), and the Lovat bull, Viceroy. Woodstock: Main line G. T. R. and C. P. R. om

Mr. Robert Davies, Todmorden, or 34 Toronto St., Toronto, advertises in this issue several young Clydesdale stallions, one a sweepstakes winner, and two-yearold stallions at low prices. See the ad., and write for particulars.

DALGETY'S CLYDESDALES.

DALGETY'S CLYDESDALES.

Never in the history of the country has the horse industry been on a sounder basis than it is to-day. Dealers in closest touch with the trade report the demand for high-class horses, whether for road or dray pusposes, quite unprecedented. To whom are we indebted for this happy state of affairs but to the men who risk their lives and money in the venture of importing fresh blood to invigorate and strengthen our stock by crossing on our home-bred mares. One of the men to whom Canada is indebted for the energy he has displayed in importing a large number of high-class Clydesdale horses to this country is Mr. James Dalgety, of London, Ont., who for the last twelve years has made several importations annually, and it is safe to say that no mean in the lusiness in recent years has done more to improve the draft horse in Canada than he. Being a horseman by natural intuition, he is a critical judge and locates the weak points at a glance. He it was that imported that remarkable show horse, King of Clydes, that won three times at Toronto, and this year at Winnipeg won first and sweepstakes and diploma as best draft stallion any breed; also, that grand stallion, Strathcona, that, last spring, at Toronto, won first and championship. Again, this fall at Toronto, horses of his importation won first and second in the two-year-old class in what was perhaps the strongest ring ever seen at that show. Included in his midsummer importation this year was the splendidly-bred five-year-old Hackney stallion, Sportsman III. (1908), bright bay, standing sixteen hands, and a particularly high all-round mover. Both his sire and dam won first at the London (Eng.) Hackney Show, and he, shown only once, in backward condition, stood second at the Highland Show last year. His sire, Agility 2999, besides winning in London, is the sire of many noted winners, and his dam, Brunette (49), has won over 200 prizes, including championship at London in 1898. His latest importation, that landed a few days ago, consists of 18 hea

SUNNYSIDE HEREFORDS.

O'Neil Bros., Southgate, Ont., are the owners of the beautiful and well-arranged Sunnyside stock farm, which lies in the County of Middlesex, five miles south of Lucan station, on the main line of the G. T. R., and five miles east of Denfield, on the L. H. & B. R. For several years O'Neil Bros. have been centering their energies on getting together a high-class herd of Hereford cattle, and to-day a look over their magnificent herd of ninety-five head of imported and Canadian-bred animals will convince the most skeptical that they have pretty well succeeded. Excellence imported and Canadian-bred animals will convince the most skeptical that they have pretty well succeeded. Excellence of character, true breed type, smooth, even finish, and abundance of quality are indelibly stamped on the hend. The stock bull is that thick, beefy, quality animal, Imp. Sunny Slope Tom 1st 86085, breed by C. S. Cross, Emporia, Kansas, U. S., sired by Wild Fom 51592, by Beau Ideal: dam Lilac, by Stone Mason, by Beau Ideal. O'Neil Bros. made a wonderful stride towards the goal of their ambition when they succeeded in getting this bull to head their herd, as his stock are true to type, and in finish are unexcelled. One of the cows that deserves special mention is English Lady 92875 (imp.), sired by the great bull, Diplomat; dam Lalla Rookh 80132, by Statesman. It will thus be seen that English Lady has seventy-five per cent. of the blood of that great cow, Lady Help, Vol. 22, that sold for \$2,600, and was champion of England for two years. Another of the crackers is Uneedher 93844 (imp.), bred on La Fayette strck farm, Ind., sired by Banker 88608; dam Angelica 58380. Her pedigree combines the blood of such notables as Garfield, Anxiety, Lord Wilton, and The Grove 3rd In two-year-old heifers, special mention must be made of Sunny Slope Lass 110450, by the stock bull: also, Lady Sunnyside and Uneedher Sunnyside, two heifers that won second and third places at London this year. Space will not permit us to go more extensively into individual description. Suffice it to say there are twenty-five heifers, from one to two and a half years old, that are an exceptionally nice lot; also, fifteen heifer calves, and fifteen bulls from six to thirty months old, among which are a number of herd headers. All these youngsters, together with ten choice cows, are for sale. Messrs. O'Neil report the demand for good Herefords as unusually strong, they having lately sold, and at the time of our visit were preparing to ship, one carload of excellent cattle to a purchaser in Iowa, and during the past year have shipped to Horse Owners Should Use GOMBAULT'S

The Great French Veterinary Remedy.



exclusive-ly by J. E. Gombault ex-Veteri-mary Sur-geon to the French Govern-ment Stud

SUPERSEDES ALL CAUTERY OR FIRING

SUPERSEDES ALL CAUTERY OR FIRING
Impossible to produce any scar or blemish. The
safest best Bilster ever used. Takes the place
of all liniments for mild or severe action. Removes
all Bunches or Blemishes from Horees or Cattle.

As a HUMAN REMEDY for Rheumatism,
Spraine, Sore Throat, Etc., it is invaluable.
WE GUARANTEE that one tablespoonful of
produce more actual results than a whole bottle of
any liniment or spavin ours mixture ever made.

Every bottle of Caustio Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggista, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAWRENCE-WILLIAMS CO., Toronto, Can.

Horse Health



is one of the most important things for every farmer to consider.

Dick's **Blood Purifier**

will build up a run down horse.

It tones up the system, rids stomach of bots, worms and other parasites which undermine an animal's health.

50 cts. a package.

LEEMING MILES & CO. AGENTS. - - - MONTREAL. Write for books on Horses and Cattle. IT IS FREE.

You Lose Money



every time your horse is laid up with Sore Shoulders, Neck or back. Tuttle's Elixir

cures them and Curb, Splint, Sprained Cord, Spavin, etc. Given internally it is unequaled for Colic, Distemper, Founder, Pneumonia, etc. Used and Endorsed by Adams Express Company. **Tuttle's American Condition Powders**

-A specific for impure blood and all diseases arising therefrom. TUTTLE'S FAMILY ELIXIR cures rheumatism, prains, bruises, etc. Kills pain instantly. Our 100-page book, Veterinary Experience," FREE.

Dr. S. A. TUTTLE, 66 Beverly St., Boston, Mass. Beware of so-called Elixirs-none genuine but Tuttle's. Avoid all 'disters; they offer only temporary relief, if any. LYMAN, KNOX & SON, Agente, Montreal and Toronto, Canada.

KINELLAR LODGE STOCK FARM. Clydesdale horses, Shorthorn cattle, Cotswold sheep, and Berkshire pigs. I have for sale 3 young bulls, 3 shearling bucks and 2 two-shears, and 6 shearling ewes; also this season's crop of lambs, both sexes; Berkshire boar and 2 sows.

J. I. BALSDON, Markham P. O. and Sta.



DR. PAGE'S ENGLISH SPAVIN CURE

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls,
Capped Hock, 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 YORKSHIBE ROAD,
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. 171 KING STREET, EAST, TORONTO, ONT.

Vaccinating Bugs.

The science of medicine has reached wonderful perfection. The microbe theory in certain diseases has been proven true beyond doubt. The inoculation of chintz bugs with the microbes of contagious diseases, in order that epidemics may spread among the little pests, is a practical method now in use. Dr. D. M. Bye, the eminent specialist for cancer, of Indianapolis, Ind., says that dosing with medicine, cutting with knives or burning with plasters to cure cancer is no longer to be recognized, but that he has discovered a combination of soothing, balmy oils which kill the cancer microbes and cure the most malignant cases. Those who read this will confer a great favor by cutting it out and sending it to a friend who is afflicted. Book sent free, giving particulars and prices of Oils. Address Dr. D. M. Bye, Drawer 505, Indianapolis, Ind.—Advt. o



ND

ared

NO

ım,

ir

nt, etc. olic, tc.

ers

888.

M. wold oung ad 6 both

m Sta.

RE ting-talls, ises, iper, o re-ents. hers)

ill a and EED-

COLD WATCH
LAPY'S OR GENT'S SIZE
Double Hunting case, beautifully
Gold dinshed and richly engraved in
handsome Solid Gold designs, stem
wind and set, imported jewelled
works, accurate and reliable. As
worth 8 00.00. We give it for
selling at 15c, each only 1 dez.
fashionable Gold finished Hat Pins,
with beautifully designed tops set
with large sparkling imitation Sapphires. Rubles, Emeralds,
etc., and helping ut oget a few more
agents. Our Hat Pins look
cakes. You can earn this elegant watch in a
few minutes. Write to-day and we will send Hat Pins,
postpaid. JEWELRY CD., Dept. F H. TORONTO



Elegant, Soft and Warm Comfortable and Stylish Full length, made of soft, warm, glossy, black fur, a perfect imitation of the finest Sable, with fur, a perfect imitation of the finest Sable, with real head and three full tails, very presty. Giv-om absolutely Free for selling at 15c., each only 8 handsome pieces of Jewelry, Stick Plns, Lockets, Cuff Links, Hat Pins, etc., and helping us to get a few more agents. Every pieces of our Jewelry looks worth 50c. At 15c., you can sell the 8 pieces in a few minutes. Write to-day and we will send the Jewelry portpaid. We trust you. Ganadian Premium Syndicate, Dept. F.R.F., Toronto

WANTED.

10,000 (ten thousand) cords of No. 1 hard wood, soft wood, hard and soft wood labs, edgings. Apply to THOS. MYLES' SONS, Bamilton, Ont.

Telegraphy Thoroughly and quickly taught. Full-course scholarship, telegraphy and typewriting, \$40. Expenses low. Write to-day for free catalogue. Sharp's School of Telegraphy, Huntington,

"Tweedhill" Aberdeen-Angus. Individuals from this herd or their calves have been first at all the best shows since 1896. Females and young bulls for sale.

JAMES SHARP, ROOKSIDE. ONTARIO. Cheltenham station, C. P. R. and G. T. R. om



ABERDEEN - ANGUS. For Sale: Laird of Tweed-hill 29486. A prizewinner, 4 years old; 1-year-old bull and two bull calves, sired by him and out of winners

W. HALL, Washington P. O. Drumbo Station.

CHOICE HEREFORDS.

A. S. HUNTER, DURHAM, ONT., has for sale the following high-bred Herefords:

25 Young Registered Bulls. 30 Young Registered Helfers, 10 Young Registered Cows.

stock are in good condition, and are bred from imported and American-bred sires. Ran chers will do well to inspect this offering.



SALE! INGLESIDE HEREFORDS. Young bulls, cows up-to-date type and breeding. If you want good Here-fords at good-value prices, send for illustrated catalogue, and state requirements Also and bred Hereford cows and beifers H. D. SMITH, Compton, Que

The Sunny Side Herefords. Imp. Sunny Slope Tom 1st at head. We have the best of head. We have the best of blood lines, also individual merit. For sale: 8 cows, from 3 to 7 years old; 10 heifers, bred and safe in calf or ready to breed; 1 bull, 2 yrs.; 1 bull, 1 yr., and 12 young bulls ready for service, by our stock bull. Visitors always welcome.

O'NEIL BROS., Southrate, Ont.

Centre Wellington Scotch Shorthorns

Young bulls, heifers and young cows for sale. Farm adjoining town on G. T. R. and C. P. R. Correspond-

H. B. Webster.

Box 66.

FERGUS, ONT.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

About 2 miles south-west of Gore Ray, on Manitoulin Island, lies Poplar Grove stock narm, the property of Mr. Edwin. Beck, breeder of Shorthorn cattle. Mr. Beck is one of the progressive, up-to-date, go-ahead farmers of the Island, who believes in the policy of improvement, and having a splendid, as well as extensive, farm there, on which is erected a modern bank barn, he decided a couple of years ago to establish a herd of pure-bred Shorthorns, and to that end purchased the following cuoice animals: Ruby Jane 24847, by Collynie Prince 18231; dam Lady Seaforth 24443, by Lovelia Enght 13234. She is a big, straight-built roan cow, and has a one-year-old heifer, by Gordon Prince, that is the makia-g of something good. Nelly Booth 23790, by Imp. General Booth; dam Lady Grant 9502, bv Duke of Kent, is another extra good red cow, one of the low-down, beely kind, and has a one-year-old bull by Gordon Prince. A full sister of hers is Aggie Booth 2307, also an extra good cow. She, too, has an eight-months-old bull calf by Gordon Prince. A full sister of hers in Aggie Booth 2307, also an extra good cow. She, too, has an eight-months-old bull calf by Gordon Prince. A nother half-sister is Mina May 26451, by Imp. General Booth; dam Isabella Broughton 15842, by Favorite 4853, an Isabella-bred cow and a good one. Minnie Moss 2nd is sired by Imp. Indian Chief; dam Minnie Moss, by Imp. Indian Chief; dam Minnie Moss, by Imp. Indian Chief; dam Minnie Moss, by Imp. Beck's choice of fot ndation animals shows that he is determined to rise to a high position among Shorthorn breeders, for all these animals are up-to-date and in prime condition.

Nine miles from Campoell? rd and twelve miles from Bright min in the

Nine miles from Jampoell? I'd and twelve miles from Brighton, in the County of Northumberland, Ont., lies Valley farm, the property of Mr. A. B. Armstrong, whose P. O. address is Codrington, breeder of Improved Yorkshire hogs, high-class poultry, and Collie dogs. At the head of Mr. Armstrong's extensive herd of Yorkshires is the boar, Summer Hill Model 4691, bred by D. C. Flatt; sired by Imp. S. H. Holywell Diamond; dam Imp. Fancy E. This boar is an ideal type of the breed and faultless in his make-up, and his stock are his living images. A few of the older brood sows are Oak Lodge White Rose 5th 3355, sired by O. L. Jacko; Valley Royal Queen 6849, by O. L. Ottoman, dam S. H. Queen, who is also one of the brood sows; Valley White Rose, by S. H. Victor, etc. Mr. Armstrong's reputation as a breeder of choice animals is an envisible one. Representatives of this herd can be found in every Province of the Dominion and several States of the Union. There are on hand, for sale, both sexes of different ages. In poultry, the specialties are B. P. Rocks, W. Wyandottes, Buff Orpingtons, White and Brown Leghorns, and Bronze turkeys. The W. Wyandottes and B. Rocks of this season that are for sale are bred from stock imported last December from Hawkins, of Mass. There are also for sale, young stock in White and Frown Leghorns and Bronze turkeys, all the Orpingtons being sold. The breeding bitches in Collies are: Scotty, by Line, by Roscoe; dam Highland Lass, by Auchairnia Boy, by Auchairnia. Another is a daughter of hers, sired by Boughlin Sandy (imp.). She is Dolly Perfection, and an extremely sweet animal. We were shown a large number of letters Mr. Armstrong had received from customers to whom he had shipped stock, and in every case the writer evinced perfect satisfaction, which is very satisfactory indeed.

A visit to Bellevue stock farm, the property of Mr. Edwin Battye, a short

stock, and in every case the writer evinced perfect satisfaction, which is very satisfactory indeed.

A visit to Bellevue stock farm, the property of Mr. Edwin Battye, a short distance from Gore Bay, on Manitoulin Island, found his large herd of forty-five head of imported and Canadian-bred Shorthorns in splendid condition, representing such noted and fashionable families as Jilts. Duchesses of Gloster, Village Blossoms, Crimson Flowers, Minas, Matchlesses, Hawthorns, and Winsome Beautys, at the head of which is the richly-bred bull, Imp. Royal Emperor (79809), bred by W. S. Marr, Uppermill, and sired by Bapton Emperor; dam Roan Lady 32nd, by Wanderer; grandam Red Lady 18th, by William of Orange. Among the Imported cows we were particularly struck with the splendid appearance of the cow, Picture 4th, bred by Mr. Dudding, sired by Golden Robin; dam Picture 2nd, by Premier Pansy. She is a roan of massive build and ideal type, and is now in calf to the stock bull. Another is Honeysuckle 2nd (imp.), sire Rosario; dam Houeysuckle, by Coldstream. She is another big, thick cow, with straight, smooth lines, and is now suckling a two-monthsold heifer calf by the stock bull. Winsome Beauty 3rd (imp.) is sired by the prizewinning bull, Lord James; dam Winsome Beauty, by Ravensworth. She also is a roan, of perfect type and quality, now in calf to Royal Emperor. Jilt 22nd is sired by Spicebox; dam Unchess of Gloster 45th is an extra good cow, sired by Imp. Grand Sweep; dam Duchess of Gloster 45th is an extra good cow, sired by Imp. Grand Sweep; dam Duchess of Gloster 24th, by Imp. Duke of Lavender. Crimson Fuchsia 9th, sired by Imp. Clan Campbell, dam Crimson Arundel, by Imp. Lewis Arundel, is another good one; and thus we might go on. Suffice it to say that the entire herd, both in breeding and individually, are as good a lot as it has been our privilege to look over for many a day. There are a number of heifers in the herd, and everything old enough is in calf to the stock bull, and any one, or every one, is

Plaster Hill Shorthorns. We are now offering a number of very heavy milkers, among which are several winners in Provincial dairy tests, also 10 young bulls and 16 heifers. A choice lot and bred in the purple. F. MARTINDALK & SON, York P. th. Caladonia Sta

Shorthorns, Clydesdales and Leicesters

FOR SALE: Young animals of both sexes always on hand for sale; bred in the purple, and as good as the best. 20 Leicesters, both sexes, all

WM. McINTOSH, Burgoyne P. O.

F. JEFFS & SON, BOND HEAD, ONT., breeders of Shorthorns, Leicesters and Berkshires, have for sale 10 young bulls, 7 heifers, 5 boars, 11 young sows and suckers, not akin; 12 rams and 20 ewes, various ages. Write for prices, or come and see stock.



T. DOUGLAS & SONS, STRATHROY, ONT., BRIEDERS OF

Shorthorns 💋 Clydesdales

100 SHORTHORNS TO SELECT FROM. Herd bulls (imp.) Diamond Jubilee =28861= and Double Gold =37852=. We offer for sale a choice lot of young bulls, cows and helfers of all ages. Also one 3-year-old stallion, and one 4-year-old brood mare. Farm one mile north of town,

GLASS SHORTHORNS

Imp. Spicy Count 36117 heads the herd. Just now 1 bulls, from 12 to 18 months, 1 very superior; 10 or 15 young cows and heifers in calf; and a lot of Yorkshire nigr JAS, MOARTHUR. Goble's, Ontario,

BARRIE, ONT.

Breeder of Scotch Shorthorns

Imported Morning Star at head of herd.

IMPORTED and CANADIAN-BRED

ORDERS TAKEN FOR BULLS AND HEIFERS, COTSWOLD AND LEICESTER SHEEP, YORKSHIRE AND BERKSHIRE PIGS, AND DE-LIVERED TO ANY PART OF MAN-ITOBA OR THE NORTHWEST.

Write for prices. Satisfaction guaranteed.

Macville, Unt. Goodfellow Bros.,

-om R. MITCHELL & SON, NELSON P. O., ONT.

Scotch Shorthorns. We now have for sale three red bulls from 7 to 10 mos. old, by imported sires, and out of Imp. Rosemary, Duchess, Gwynne and Mayflower dams. Also a number of females, Scotch and Scotch-topped, in calf o imported bulls.

Burlington Jct, Station and Tele. Office.

High Park Stock Farm Galloway Cattle, A and bulls for sale, Inspection invited. SHAW & MARSTON (Late A. M. & R. Shaw). P. O. Box 294, BRANTFORD, ONT.

W. G. PETTIT & SONS

FREEMAN P. O., ONT.,

IMPORTERS AND BREEDERS OF

Scotch Shorthorns and Shropshire Sheep,

Make a Special Offering for May and June:

One of our imp. stock bulls, 3 years old, red; one imp. bull, 2 years, roan; two bulls imp. in dam, 15 months; four bull calves from imp. cows, 12 and 14 months; four home-bred bulls by imp. bulls, 15 to 18 months; seventy-five imp. and home-bred cows and heifers, all ages. Catalogues on application.

Burlington Jct., G.T.R. Stn., Tele. & 'Phone.

WANTED

Single cattleman wanted. He must have experience in the feeding of dairy cows.

DENTONIA PARK FARM, East Toronto,

DENTONIA PARK FARM, East Toronto,

Ont. Coleman P. O., Ont.

Shorthorns and Leicesters.

Herd Established 1855.

A number of young bulls, cows and heifors for sale.

Imported Christopher = 28509 = heads the herd of large cows of grand milking qualities. Also a number of Leicesters of both sexes, from imported foundation.

JAMES DOUGLAS. OALEDONIA, ONT.

Shorthorns and Yorkshires In Shorthorns we are offering four young bulls from 7 to 9 months, also a few heifers. In Yorkshires we can supply either sex of various ages. All at o J. R. McCallum & Son. living prices. Iona Sta. and P. O., Elgin Co.

SHORTHORN BULLS FOR SALE: A choice lot to 16 months old, sired by Imp. British Statesman (63729) = 20833 =; and cows of the Mara family. They must be sold at once. Prices away down to suit customers. FITZGERALD BROS., om

J. & W. B. WATT,

SALEM, ONTARIO,

POST OFFICE AND TELEGRAPH OFFICE. BREEDERS AND IMPORTERS OF

Shorthorn Cattle, Clydesdales, Leicesters, Oxfords, and Berkshire Pigs.

Our herd represents such families as Matchlesses, English Ladyr, Mildreds, Village Buds, Missies, Stam-fords, Mysies, Vanillas, Clarets, Marthas, and others. The imported bull, Scottish Peer, and Coming Star, a prizewinner at Chicago in 1991, head the herd. Imported and home-bred stockfor sale. Also twenty registered ewes and lambs.

Farms 2 miles from Elora Stn., G.T.B., and O.P.B., 13 miles north of Guelph.

LAKE VIEW STOCK FARM.

SCOTCH SHORTHORNS, both sexes, all ages.

As good as the bost.

Meaford Station,
G. T. R. North,

JAMES BOWES,
Strathnaira P. O. G. T. R. North,

Maple Lodge Stock Farm. ESTABLISHED 1854.

SHORTHORNS.—First-prise milking strains, best Scotch breeding. Young bulls and believe for sale. LECOMSTERS.—A grand lot of ewes, bred to our imported gams, and a few choice rams, now for sale.

A. W. SMITH, Ailea Oraig Station, om Maple Lodge P. O., G.T.R., 3} miles.

SHORTHORNS, SHROPSHIRES, COTS WOLDS. We are now offering a number of heifers and heifer calves; a few bull calves; a number of cows; all bred in the purple and as good as the best. Also Shropshire and Cotswold sheep. om JOSEPH BELL ESTATE, Bradford P.O. & Sta.

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheen.



LIERD prise and sweep-stake at Toronto.
Industrial Exhibition,
1897 and 1898. Herd
headed by the Marr
Missie bull, Imp. Wanderer's Last, last of the
get of the great sire,
Wanderer, of the Orulokshape Rewith Rud shank Brawith Bud tribe. High-class Short-horns of all ages for sale. Also prizewinning Lin-Apply

T. E. ROBSON, ILDERTON, ONT.

"ORCHARD HILL" SHORTHORNS.

Herd comprises representatives of best Scotch-bred families, with Lord Levender at head. Young animals of both sexes for sale.

om ARTHUR JOHNSTON, Vandeleur, Ont.

SHORTHORNS FOR SALE! Six good bulls, fit for service; also females. Imp.
Prince William at head of herd. JAS. GIBB, - - BROOKSDALE, ONT.

RIVER FARM SHORTHORNS I am now offering 6 choice young bulls, from 8 to 16 months old, sired by Lord Lavender 26856. They are rare good ones. Price right. H. PARKER, DURHAM P. O. and STATION.

SHORTHORNS.

THORNHILL HERD. ESTABLISHED 27 YEARS.

Imp. Royal Member and Sailor Champion now at head of herd, which are all bred on straight Scotch lines, and are of the up-to-date kind. Present offering: some choice young bulls.

REDMOND BROS., Millbrook Sta. and P. O. CHARLES RANKIN, WYEBRIDGE, ONT. Importer and breeder of

Shorthorns, Oxford Downs and Berkshire Pigs Young stock always on hand.

BELLEVUE SHORTHORNS. Both sexes. Imported and home-bred. All ages. Prizewinners at home and abroad.

Basins.



EIGHT REASONS FOR ADOPTING THE **Woodward Water Basins.**

6th. Nothing to get out of order. Everything automatic. While you are asleep or away they work amouthly and constantly. Give you a contented mind.

Seventh Reason Next Issue.

Ont. Wind Engine & Pump Co., Ltd. TORONTO.

STOCK - RAISERS.

PROFS. A. & M. DAY'S ENGLISH TONIC Powders furnish all requirements for the cure and prevention of diseases of the horse, cattle, hog, sheep, and poultry. A separate package for each kind of stock. Full directions on each package for preparing a Tonic Food for fattening purposes. Each package of powder is sufficient to prepare 25 to 40 pounds of Tonic Food. 35 cents a package. For sale in most towns; if not in your town, write us for free sample. Mention kind wanted.

THE DAY'S STOCK FOOD CO'Y. TORONTO, ONT.

QUEENSTON HEIGHTS SHORTHORNS SCOTCH AND SCOTCH TOPPED

In service: Derby (imp.) = 39057 = ; Lord Montalis, by Collynie Archer (imp.) = 38860 = . Some choice heifers and young cows with calf at foot or in calf to imported bull at moderate prices.

HUDSON USHER,

QUEENSTON, ONT. FARM 3 MILES NORTH NIAGARA FALLS

SHORTHORNS: JILTS and MARAS: 6 heifers from 1 to 3 year-old; 5 with calves at foot and in calf again to Imp. British Statesman. Also two young bulls (roan). LOUIS ELLARD, Loretta P.O., Beeton Sta

SHORTHORNS: We are offering 3 extra choice yearling bulls, all from imported sires, straight Cruichshank, with Lavendar and Miss Ramsdon dams, THOS. ALLIN & BROS., om Oshawa, Ont.

e choice young YORKSHIRES For Sale Some choice young YORKSHIRES (Holywell strain) of both sexes and different ages; also young Shorthorn bulls, sired by British Hope (30946). Price moderate. Write: C. & J. CARRUTHERS, Cebourg Station and P. O., Ont.

ercer's Shorthorns

Are represented by Missies, Stamfords, Floras, Claret Princesses, Red Roses, Fashions, Crimson Flowers, and Matchless families. Headed by Village Squire 24995, a son of Abbottsford. Stock of both sexes and

T. MEROER, MARKDALE P. O. A STN.

Imp. Shorthorns and Lincolns

A. D. MOGUGAN, RODNEY, ONT., P. O. AND STA.,

Now offers one year-old roan bull, out of Imp. Day spring; sire Abbotsford 14946; a prizewinner sure. Also a few choice heifers out of imp, and home-bred dams, and ram lambe out of imp. Dudding ewes.

Shorthorn Gattle, Lincoln Sheep

Imp. Prime Minister at head of herd. Imp. Clippers, Miss Ramsdens, and other Scotch families. Lincolns won more than half the money and first for flock at the Pan-American; International, Chicago, 1901 and 1902.

J. T. GIBSON, om DENFIELD, ONT.

SHORTHORNS FOR SALE,

Sired by Scottish Chief and Abbotsford, and from prizewinning dams. Also cows, heifers, and Berkshire pigs.

ALEX. LOVE. - EAGLE P. O. BIBMARCE STATION ON M. C. R.

GOSSIP.

Mr. H. J. Davis, Woodstock, Ont., importer and breeder of high-class Shortnorns and Yorkshires, advertises in this issue forty head of imported and home-bred Shorthorns, twenty-two of which are imported animals just home from quarantine, including a choice lot of heifers and young bulls. This herd, which is headed by the Willis Cruickshank bull, Imp. Bapton Chancellor, and the Lord Lovat bull, Viceroy, now ranks with the best in the Dominion. Those who have seen the new importation speak of the animals in terms of the highest praise. Mr. Davis has shown much enterprize in his importations, and is deserving of the success he enjoys.

PINE GROVE YORKSHIRES.
Messrs. Jos. Featherston & Son,
Streetsville, Ont., proprietors of the
oldest established registered herd of
Yorkshire hogs in Canada, renew their
advertisement in this issue, in which
they intimate that they have a large
number of imported boars and sows and some twenty home-bred brood sows in their herd, besides a number of young boars and sows of suitable age for breeding, and young pigs recently weaned, for which they are prepared to fill orders for single pigs, or pairs or trios not akin. Note the ad., and write Messrs. Featherston for prices and partic-

BAWDEN & McDONNEL'S IMPORTED HORSES. In whatever line of live-stock breeding a man may be engaged, it is absolutely necessary that new blood be continuously infused therein, and for that purpose imported animals of superior individual merit and breeding have proven the most satisfactory, and to that end certain men periodically cross the osean and Scotland, an search of the state of the osean and Scotland, an search of the state of the osean and Scotland, an search of the state of the periodical sepecimens and stock the Messrs. Bawden & McDonnel, of Exter, Ont. For years this firm have been importing high-class Clydesdale, Shire and Hackney horses, and it is safe to say that they have brought over as many high-priced and superior horses as any in the business. As proof of this, we may mention stontales as the Shire stallion Belshazzar, a horse that, no doubt, has won as many top ring honors as any horse alive. Newnham Duke, another sweepstakes and medal winner; Calthorpe Loyalty, Willcott Thumper, all Shires; and the crack Hackneys, Connaught's Heir, Clerkenwell, and Builer, all winners of a high order. Their latest importation contains a number of stallions the like of which are hard to duplicate in any country. The Clydes are: Cannocyte of a high order. Their latest importation contains a number of stallions the like of which are hard to duplicate in any country. The Clydes are: Cannocyte by the Miduly of the contains an interest of the contains of the best kind of feet, and a grand, spring, action. All together he is one of the best kind of feet, and a grand, spring, action. All together he is one of the best kind of feet, and a grand, spring, action. All together he is one of the best kind of feet, and a grand, spring, action. All together he is one of the best kind of feet, and a grand, spring action. All together he is one of the best kind of feet, and a grand, spring action. All together he is one of the best kind of feet, and an

ful care of Mr. John Thompson, stable manager, are in the pink of condition, and reflect great credit on his skill as a fitter and handler.

NERVE - FORG

is undoubtedly impaired, and dyspepsia promoted by the use of the colored and doctored Teas of Japan-

Natural Green Tea of Ceylon is a Boon to all Japan Tea Drinkers—" IT'S PURE."

Sealed lead packets only — same form as the celebrated Black Teas of "SALADA" Brand.

Queenston Cement

VE have reduced our prices, and are prepared to demonstrate that no better value for the money is obtainable anywhere. All work done with our cement according to our instructions is guaranteed to be absolutely perfect. A barrel of Queenston Cement, though weighing less, contains just as many cubic inches of cement as any barrel of Portland. In mixing concrete, the cement is gauged by measure, not by weight. Farmers and others will do well to remember this fact, and not be misled by false statements. Write me, or see my agents, for full particulars.

Isaac Usher.

QUEENSTON. ONT.



iamond frame, all other metal est steel, well finished and hand at only 1805, each, and neiping us to get a rew more agents. Please remember, you have to sell only \$3.60 worth of Jewelry. The Bicycle will \$3.60 worth of Jewelry. The Bicycle will be belowed by the Bicycle will be below the Bicycle. It is the easiest running wheel I have ever been on. Frank Clemens, Tara, Orr." Write to-day, and we will ad you the Jewelry, on credit, postpaid. Address, The Canadian Fremium Syndicate, Dept. F. B. Toronto.

Shorthorns

Won first prize for herd and the championship for best bull and best female, any age, at Toronto Industrial and Pan-American Exhibitions, 1901. We keep constantly in our herd a choice lot of imported and Canadian-bred cattle of both sexes. Personal inspection invited. Parties desiring to see the herd will be met on arrival of trains if notice is given. Visitors always welcome. Address:

JAMES SMITH, Manager. MILLGROVE, ONT. W. D. FLATT,

378 HESS ST., SOUTH, Hamilton,

Ontario.

Of both sexes, of the following noted families: Golden Drops, Rosebuds, Claras, Matchlesses, Strathallans, Vain Duchesses, Marr Beautys, Mayflowers, Crimson Flowers, and others; 56 head to select from. Herd headed by the imported Bracelet p. O. bull, Red Duke = 36084 = (77585). SON, ETHEL P. O., bull, Red Duke = 36084 = (77 Huron Co., Ont. Ethel Station, G.T.R., half mile from farm.

Mention Farmer's Advocate.

MANITOULIN SHORTHORNS Edwin Beck, Gore Bay, Manitoulin Island, Breeder of SCOTCH and SCOTCH-TOPPED SHORT-HORN CATTLE. A few choice animals.

Shorthorns, Berkshires and Leicesters. 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. om ISRAEL GROFF, ALMA, ONTARIO.

SHORTHORNS (IMP.)



Oows and heifers, imp. and home-bred. Bulls, imp. and home-bred-all ages. Represent-ing the fashionable blood of Scotland.

EDWARD ROBINSON, MARKHAM P. O. & STN.

HAWTHORN HERD of deep-milking Shorthorns for sale. Six young bulls of first-class quality and breeding and from Al dairy cows. WM. GRAINGER & SON, om Londesboro. Ont.

JOHN DRYDEN & SON,

BROOKLIN, ONTARIO, BREEDERS OF

ORUICKSHANK SHORTHORNS AND OHOICE SHROPSHIRE SHEEP.

40 shearling rams and 30 shearling ewes of extra size, substance and quality now for sale. Prices are interesting. Visitors welcome.

'OCK BU

FOR SALE.

Have decided to offer for sale my noted stock bull, Spicy Robin =28259=, winner of second prize at Toronto and London exhibitions, 1902. Also a number of cows and heifers for sale.

GEO. D. FLETCHER, Binkham P. O., Erin shipping station, C. P. R. Ont.

Shorthorns, Cotswolds # Berkshires



FOR SALE: 9 bull calves from three to nine months old; also cows, heifers and heifer calves. A choice lot of ram lambs, ewe lambs and yearling ewes. Young pigs of the long bacon type, from two to four months old. Can supply pairs not related.

F. BONNYCASTLE & SONS, Campbellford, Ont.

Rosevale Shorthorns

We are offering for sale several cows and heifers bred to Maringo's Hyden Duke (imp.), son of the great champion Maringo. Also several bred to Golden Able, imp. in dam. Also some choice young bulls. Any wishing to purchase apply at once. -om

W. J. SHEAN & CO'Y, OWEN SOUND, ONT.

FOR SALE.

Three Shorthorn bulls of first-class breeding, sired by Scotland's Fame (imp.). Color: 2 red, 1 roan. Prices right.

F. A. GARDNER, - BRITANNIA, ONT.

GEO. ISAAC, BOMANTON, ONT.,

IMPORTER AND BREEDER OF

Have imported, this year, 68 head of Shorthorns—6 bulls and 62 females. Twenty-seven head due to bulls and 62 females. Twenty-seven head due to leave quarantine 11th Sept. Intending purchasers should see this stock or correspond. BOMANTON P. O., COBOURG STATION, G.T.R.

GREEN GROVE SHORTHORNS :

I am now offering a few heifers, Clarets, Floras, and one Missie; also a choice year-old bull, by Aberdeen of Markham. W. G. MILSON, GORING P.O. and MARKDALE STATION.

SHORTHORNS (imported)

One imported and one Canadian-bred bull.
A few cows and heifers. THOS. RUSSELL. EXETER, ONT.

SHORTHORNS AND LINCOLNS. J. K. HUX. Rodney, Elgin Co., Ont., P. O. and Station,

now offers 7 young bulls, cows and heifers. Abbots-ford 19446 now at head of herd, Also ram lambs out of imp, Dudding ewes. SHORTHORNS.



LIVE STOCK EAR LABELS. Send for circular and price list and tack it up on the wall where you can see it when you want it.

R. W. James, Bowmanville, Out Craigieburn Shorthorns. G. A. BRODIE,
Stouffville Station, is now offering 10 choice
Shorthorn heiters and 10 young bulls. A splendid
lot and bred right. Also 12 Shropshire rams, bred
from imported stock on both sides.

GOSSIP.

At a sale, on October 15th, of Shire mares and fillies from the stud of Mr. R. W. Hudson, Danesfield, Marlow, England, an average of £117 was made for 46 animals. The highest price, 440 guineas, was paid for the three-year-old mare, Wern Blossom, by Moor's Phenomenon. The four-year-old mare, Danesfield Madge, by Blythwood Conqueror, sold for 360 guineas, and 18 head brought from 110 guineas up to the prices above named.

At the Kansas City sales of pure-bred cattle, last month, in connection with the breed shows, the highest price for a female, \$1,600, was realized for the Aberdeen-Angus cow, Imp. Princess Ivy. The highest price for a bull, \$1,005, was made for the two-year-old Hereford, Columbus 29th. The highest-priced Shorthorn sold was the two-year-old heifer, Emeline, who brought \$725. The highest-priced Shorthorn bull was Prince Collynie, a two-year-old, sold for \$525.

From the London Live Stock Journal we learn that on October 22nd were shipped from Glasgow to the order of Messrs. D. C. Flatt & Son. Millerove, Ont., thirty head of high-class Yorkshire hogs, selected from the Dalmeny Park herd of Lord Roseberry and others. among which were several very fine young boars and sows, sired by the Dalmeny stock boar, Borrowfield Topsman, which has been the sire of most of the prizewinning stock sold from the Dalmeny herd for the past eighteen months or so.

Plaster Hill stock farm lies in the County of Haldimand, Ontario, six miles south of Caledonia station, G. T. R., on the banks of the Grand River, which it overlooks, and is the property of Messrs. F. Martindale & Son, York P. O., Ont., breeders of Shorthorn cattle. Their herd now numbers forty-five head of Nonparells, Beautys, Waterloo Daisvs. Morlinas, Lady Janes, Grand Duchesses, Lavinas, Margarets, Julias, and Symes, at the head of which is the thick, wellbuilt and fashionably-bred bull, Bandolier 40106, by Imp. Sirius: dam Imp. Bessie 2nd, by Emancipator; grandam Roan Bessie, the dam of Lord Banff, that sold at Flatt's Chicago sale for \$5,000. His predecessor was Imp. Mariner, sired by Prince of Archers, a halfbrother to the Royal champion. Marengo; dam Miriam, by Beau Ideal. The bulk of the young stuff in the herd is stred by this bull. Prominent among the dams is the cow, Nonpareil of York 32724, by the Missie bull, Souter Johnny 23886; dam Nonpareil 53rd, by Prince Royal. She is a roan cow of twical build, large, smooth and straight and a first-prize winner. There is a roan helfer calf, seven months old, out of her by The Grange Stamp 35564, that is one of the best helfers in the country: a perfect model of perfection and a first-prize winner. Another good cow is Eugenta 40367, by Lord Killpont 21449; dam Killerby's Gem, by Imp. Killerby. She is a roan. of more than ordinary form and quality, and has a five-months-old roan bull calf, by Imp. Mariner, that is the making of a winner, sure. Stiff another is Bella of York, by Souter Johnny: dam Florence Cleveland 19850, by Grover Cleveland. She also is an extra nice type of animal, and has a vearling heifer by Kinellar of York 24504, and is now nursing a solendid heifer calf by Imp. Mariner. Thus we might go on to great length. Suffice it to say that this is one of the great herds of Canada and contains a number of very choice animals, many of them being very heavy milkers. some of which to say that this is one of the great herds of Canada and contains a number of very choice animals, many of them being very heavy milkers, some of which are Provincial Dairy Show winners. There are some seventeen heifers, from two years old down, that must be seen to be appreciated, as among them are some extra good ones, and all for sale. There are, also, about eight bulls from five to twenty months old; some of them fit to head any herd, two of them being sired by Imp. Mariner. Anything in this herd is for sale. Mr. John J. Sheil, of Areil P. O., Parry Sound District, lately nurchased two very fine animals from this herd, one of them, a splendid red heifer, by Kinellar of York and of the Lady Jane family. She is in calf to Randolier; also the young bull, Golden Chief 44263, by Golden Duke 2nd. Mr. Martindale revorts trade in Shorthorns as the best he ever expenienced, and the demand for good typical animals as increasing.

NOTICES.

THE CANADIAN HEREFORD HERD-BOOK.—To H. Wade. Parliament Ruildings, Toronto, Secretary and Registrar Canadian Hereford Association, we are indebted for a copy of Vol. II. of their herdbook. In it are recorded bulls from No. 1025 to 1718, and cows from 1404 to 2132. Copies may be had by applying to Mr. Wade.

SLEIGHS.—When the snows of winter have fallen, a good sleigh is indispensable on every farm; a poor one is a humbug. The commendable features in a bug. The commendable features in a sleigh are durability, strength, and lightness of draft. The Walkerville Wagon Co. have aimed to put something in the market that would make a name for itself. The success of their business is ample testimony that they have succeeded. Read their aid. in another column.

Splendid Round Cement Silo

BUILT BY OUR H. W. HAGAR FOR MR. P. D. EDE. OF OXFORD CENTRE, ONT., WITH

TLE'S "THOROID" CEM



SIZE OF SILO.

16 feet diameter inside; 34 feet high; 16-inch wall at bottom, tapering to ten inches at the top.

COST AS FOLLOWS:

Cement for wall, 80 barrels at \$1.15	\$92	00
Gravel, 44 loads (66 cubic yards), 10c. load	4	40
Stone, 10 loads (14 cubic yards), 10c. load	- 1	00
Labor, 5 men, 9 days each, at \$1.25 a day	56	
Superintendent, 9 days, at \$2.00 a day	18	
Plastering walls, inside and outside, cement, 5 barrels, at \$1.15		75
Labor 2 men, 3 days, at \$1.25 a day		50
Superintendent, 3 days, at \$2.00 a day	6	00
Wire, 4 strands, No. 9, twisted into a cable, and 5 cables put in between each of the five doors, about	_	50
Rent of moulds		50
Total cost		90

ESTATE JOHN BATTLE, MANUFACTURERS THOROLD, ONT.

H. SMITH, EXETER, ONT.

Scotch-bred Shorthorns. CHOICE SPECIMENS OF BOTH SEXES FOR SALE,

FARM ADJOINS EXETER, ON THE LONDON AND WINGHAM BRANCH OF THE G. T. R. 30 MILES NORTH OF LONDON.

BREEDING FEMALES ALL IMPORTED.

Imp. Golden Drop Victor our present stock bull. Eleven young bulls and some young cows for sale at reasonable prices,

> H. CARGILL & SON.

Cargill Station, G. T. R. CATALOGUE PREE. OM

Cargill, Ontario.

GREENWOOD, ONT., CAN,

HAS 24 HEAD OF

Now in quarantine, which he will sell in whole or in part; would prefer to sell a carload. They are

Mostly Yearlings and Two-year-old Heifers. They are Due Home About 10th November.



TERROR TO WORK.

work satisfactorily. The

WHY? CAST-IRON CONSTITUTION. MECHANISM SO SIMPLE. MATERIAL THE BEST.

ONT. WIND ENGINE & PUMP CO. LIMITED. TORONTO, ONT.



FUR RUFF \$1.99
Worth \$5.00. Send no money.
Just your name, address and near st
express office and we wilsen. this Ruff
for examination. When it a riv. s call
and examine it thoroughly, and if found
perfectly satisfactory pay the express
a ent \$1.99 and express charges and
secure the greatest bargain in fursever
offered. This magnificent Ruff is 4 feet
long, 5 inches wide, and m. de of 2moquality glossy black Alaska
Seal, well padded an i o namented
with six full tails. Warms, stylish
and very fashiemable. Going fast.
Order to day. Send \$1.99 with order and
ve will forward the Ruff by mail, postpaid. Johnston & Co., Bor \$46, Toronto



Stock Water Bowls

DOUBLE AND SINGLE, PAINTED OR GALVANIZED,

Circular and quotations given. Write: A. M. RUSH, HARRISTON, ONT.



FREE or selling at 10c. each only 10 utes." This wonderful walk-ing Doll is beautifully dressed in satin, trimmed with elegant lace. She has jointed neck and arms, gol-den ringlets, and when wound up walks as naturally as my living child. Write to-day and we will send the Perfume postnaid. Rose Perfume Co., Dept. 558, Toronto



E. W. GILLETT COMPANY Toronto, Ont.

Phosphates, or any Injuriant.

GOSSIP.

R. J. Laurie, Wolverton, Ont., makes change in his ad. of poultry in this issue. Mr. Laurie says his birds won 172 prizes in his own hands this fall. He finds trade good and demand active.

Eight imported Belgian stallions, fully registered and broken to harness, are advertised for sale elsewhere in this paper by Baron de Champlouis, Danville, Quebec. These horses are said to be big, weighing from 1,700 to 2,200 pounds, and to have wonderful action, with short, strong backs, good bone and feet, and free from surplus hair, and all dark colors. The owner claims for them that they can easily draw anything from a road-cart to a six-story house, and are full of spirit and grit.

At the sale of the Montgomery Shire Horse Association, held at Welshpool, England, last month, six Buscot Harold foals were offered, and sold at nn average of £88 4s. each. A filly foal offered by Firkin Bros. was bought by Lord Egerton of Tatton for 240 gs., and another filly foal, the property of Mr. Richard Jones, Pool Quay, was bought by Lord Powis for 100 gs.

An important sale of Thoroughbred brood mares, horses in training, two-year-olds, yearlings, weanlings, and saddle horses, from the well-known stud of Mr. Wm. Hendrie, Hamilton, Ont., is announced to take place at Grand's Repository, Toronto, on Wednesday, Nov. 19th. The annual sale of Thoroughbreds the property of Mr. Jos. E. Seagram, M. P., will be held at the same place on the same day.

Israel Groff, Alma, Ont., breeder of Shorthorns and Berkshires, reports the sale of the promising bull calves, Crimson Hero, to T. S. Shantz, Waterloo, Warden of the County, and Stamford Hero, to Wm. Burnett, Salem, Ont. Mr. Groff adds: "I have a number of choice heifers, yearlings and two-year-olds for sale, the latter well gone in calf, and all in fine condition. My Berkshires are now headed by the choice boar, Garfield, bred by Thos. Teasdale, and I have some grand young stock for sale.

THE KANSAS CITY SHOW.

THE KANSAS CITY SHOW.

The breed show and sale of cattle and hogs at Kansas City, last month, is described as having been a grand success, the attendance large and the arrangements and management priseworthy. In the Shorthorn class, with a three-cornered bench of judges, two acting in eactions at former shows this autumn were in several instances upset. Casey's Choice Goods held his alace of priority in the aged bull section, and was also made male champion, but Harding's Golden Victor, who had held second place on the circuit, was here displaced by Young Dainty, and bawen's Speculator fourth. Harding's Nongareil Blossom held the first place i two-year-old bulls, and their Ceremonious Archer was first in junior vearlings. Tomson's Daring Knight holding first place in senior yearlings. Casey's luberta was first in cows and the female champion, Bowen's Missie lustin variety and herd, Harding's 55th vachess of Gloster third. Casey won first in prasted herd, Harding second, Bowen third. For young herd, Robbins First, Wornall second, Harding third.

Herefords made a peerless showing, numerically and individually. Tom Clark, as single judge, did splendid work. The rating of aged bulls was: 1 Funkhouser's March On 6th; 2 Harris' Feau Donald 5th; 3 Van Natta's Marma lute. Two-year-olds—1 Gabbert's Columbus 3rd; 2 Stannard's Gem's Keep On; 3 Steward & Hucheon's Beaumont. Senior yearlings—1 Gudgell & Simpson's Bright Donald 5th; 3 Van Natta's Marma lute. Two-year-olds—1; Gabbert's Columbus 3rd; 2 Stannard's Gem's Keep On; 3 Steward & Hucheon's Beaumont. Senior yearlings—1 Gudgell & Simpson's Bright Donald; 2 Funkhouser's March On Cows—1 Harris' Russet; 2 Adam's Betty 2nd; 3 Funkhouser's Florence H.

Aberdeen-Angus, though late to enter for this show, made a capital showing. In aged bulls, Reynold's Ida's Elipser led. In two-year-olds—1 Thompson's Gardher's Drud's Anna Rockfield; 3 Binnie's Mina of Castlemik; 2 Moody's McDoual 4th of Tarbreoch; 3 White's Muscosis 3rd. Two-year-olds—1 Thompson's Galeb Miller; 2 Higgin's Je

BUY A SEPARATOR UNTIL YOU HAVE SEEN THE

EXAMINE

All wheels and bearings protected, being perfectly safe in the hands of a child. The simplicity of the design.

It has anti-friction ball bearings. Few parts to wash—only two pieces inside the bowl.

inside the bowl.

The National is made by The Raymond Mfg. Co. of Guelph, whose success with the celebrated Raymond Sewing Machine is sufficient guarantee of the high finish and workmanship.

In 1901 five machines a day were manufactured. For 1902 the capacity is increased to 25 machines per day, showing the satisfaction given by the National in the past two years.

The 1902 National contains all the strong points found in other separators, and is placed on the market with the guarantee of being the best and most up-to-date machine in every particular offered to the Western farmers to-day: ation by intending purchasers.

The National will well repay investigation by intending purchasers. National No. 1, capacity 330 to 350 lbs. per hour.

National No. 1 A, capacity 450 to 500 lbs. per hour.

AGENTS WANTED IN UNREPRESENTED DISTRICTS.

The Raymond Mfg. Co.

GUELPH, ONT.

WE ALSO MAKE GOOD SEWING MACHINES.

HIGH-CLASS SCOTCH SHORTHORNS

of the following families, for sale at moderate prices or the rollowing ramilies, for sale at moderate prices:
Village Girls, Broadhooks, Beaufort Roses, Missies,
Clarets, Marr Floras, Nonpareils, Minas and other
choice families. Write for catalogue. Shropshire
rams and ewes for sale as usual.

ROBERT MILLER, Stouffville, Ont.

LEONARD BURNETT, GREENBANK, ONT., BREEDER OF

Shorthorn cattle and Shropshire sheep.

40 rods north of Stouffville station, offers Scotch Shorthorns; choice Shropshires and Berkshires from imported and Canadian-bred sows. All at farmers' prices. Inspection BONNIE BURN STOCK FARM,

O. H. RUSNELL, STOUFFVILLE, ONT

SHORTHORNS & CLYDESDALES. Imp. Royal Prince, the other by Royal Duke 33577. Good ones. Also one Clydesdale stallion, coming 2 years old.

W. D. PUGH, CLAREMONT P. O. & STATION.

S'COTCH SHORTHORNS. Urys, Stamfords and Matchlesses, Young, vigorous females, all ages, for sale. Shropshire sheep and Yorkshire pigs, ROBT, BATTY.
Glenbournie Farm. Meaford P. O. & Sta

SCOTCH SHORTHORNS!

Nonpareils, Mysies, Isabellas, Urys, Minas, Strawberrys, and Matchlesses. Animals of both sexes and all ages for sale. Also choice Berkshires.

J. W. HARTMAN & SONS, Montrose Farm. Elm Hedge P. O. Meaford Sta.

Ridgedale Farm Holstein-Friesians for Sale. 2 yearling bulls; also bull and heifer calves; all of choice breeding. Prices always reasonable. Write, or come and see them. R. W. WALKER, Utica P. O. Shipping stations: Port Perry, G. T. R.; Myrtle, C.P.R. om

HOLSTEINS, TAMWORTHS, COTSWOLDS. Present offering: Young boars and sows fit to breed, and younger ones. Choice animals. Ram and ewe lambs and two 2-shear rams. Perfect covering. o R. O. Morrow, Hilton P. O., Brighton Stn.

RARE YOUNG BULLS

of serviceable age for sale; also females of all ages. Roans and reds. Prices right. -o

E.&C. Parkinson, Thornbury P. O. & Stn., G.T R.

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.

GEO. RICE, Currie's Crossing, Ontario.

OXFORD COUNTY.

Riverside Holsteins. 10_BULLS FOR SALE_10.

From 3 to 10 months old, sired by Victor DeKol Pietertje and Johanna Rue 4th Lad. A number of these bulls are from officially-tested dams in the Advanced Record of Merit. MATT. RICHARDSON & SON.

CALEDONIA, ONT.

4 HOLSTHIN BULLS 4 FOR SALE: From 4 to 7 months old, having sires in their pedigrees from such strains as Inka, Netherland, Royal Aaggie, and Tritonia Prince. and out of imported females that have proven their worth the pail. THOS. B. CARLAW & SON. Warkworth

St. Lambert Bull,

15 months old; solid color.

Strong and vigorous. His dam, sire's dam and her dam and grandam are all tested cows. This bull is a snap for a St. Lambert fancier. Also young bulls sired by Brampton Monarch (imp.) and out of tested show cows, and cows and heifers in calf to him. For prices, etc., address

B. H. BULL & SON, BRAMPTON, ONT. G. T. R. and C. P. R. stations.

ERSEYS:

Present offering: Two bulls, 8 months old; solid color; choice animals; sired by Nero of Glen Rouge, and out of deep-milking daws.

E. B. HINMAN & SONS, GRAFTON, ONT.

LAWNRIDGE STOCK FARM.

Jerseys for Sale. Yearling bull and bull eight months old. Registered cows and heifers of choicest breeding and individuality. Some fresh and others coming in scon. 100 head to choose from.

J. L. CLARK, Norval P.O. Norval station: G. T. R.

DO YOU WANT A SNAP? Jersey cows and heifers, also two young bulls, at low prices, from prizewinning stock. Write for

W. W. EVERITT, Dun-edin Park Farm, CHATHAM, ONT.

HOSTGINS of the richest breeding and finest quality are offered at MAPLE GROVE. Richly-bred bulls a specialty. For particulars and breeding write: oH. BOLLERT, CASSEL, ONTARIO.

BESEYS, COTSWOLDS, YORKSHIRFS. Registered Jersey cattle, Cotswold sheep and Yorkshire pigs for sale. A few nice heifers, 6 mos. to 2 years, and 1 yearling bull, by Count of Pine Ridge, grandson of Adelaide of St. Lambert, record 184 lbs. milk daily. om WM. WILLIS, NEWMARKET, ONT.

THE MOST NUTRITIOUS.

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 1 lb. tins, labelled JAMES EPPS & Co., Ld., Homeopathic Chemists, London, England.

GIVING STRENGTH & VIGOUR.

CORDS IN 10 HOURS

BY ONE MAN with the POLDING SAVING MACHINE made at Emex Centre, Ontarie. NO DUTY TO PAY NOW. Send to Main Office for FREE catalogue shoving LATEST IMPROVEMENTS, and address the property of t Folding Sawing Mach, Co. 55 N. Jefferson St., Chicago, III.



MONTREAL

Ins

es and

tario.

ns.

DeKol nber of in the

ONT.

sires in Nether-

out of orth at rth

m and
This
young
out of
calf to

S:

hs old ; of Glen

ONT.

ARM.

d cows duality. 0 head

K, 1 P.O. AP? bulls, at

M, ONT

HIRFS.

eep and , 6 mos. of Pine , record

em ONT.

N.

No Money Wanted.

Write me a postal, naming a friend who needs help. Tell me which book to

who needs help. Tell me which book to send.

It is but a slight service to aid a sick friend—and I will do this:

I will mail the sick one an order—good at any drug store—for six bottles of Dr. Shoop's Restorative. He may take it a month to learn what it can do. If it succeeds, the cost is \$5.50. If it fails, I will pay the druggist myself.

I will let the sick one decide.

No case is too difficult; I take the risk in all. My records show that 39 out of each 40 who make this test get well—and pay gladly. I cheerfully pay for the rest.

This Restorative is my discovery—the result of a lifetime's work. It is the only remedy that strengthens the inside nerves. My success comes from bringing back that nerve power which alone operates the vital organs. There is no other way to make weak organs strong.

Tell me who needs that help.

GOSSIP.

At the dispersion sale of the Shorthorn herd of Mr. G. T. King, near Bristol, England, on October 17th, 82 head were sold for the splendid average of \$175. The 100-guinea mark was reached in three instances, namely, for the bull, Lord Bruce, and for the cows, Anemone 32nd and Countess 62nd, the latter being purchased by the agent of His Majesty King Edward VII.

His Majesty King Edward VII.

Pine Grove stock farm, in the County of Oxforn, three miles north of Goble's station, on the G. T. R., is the property of Mr. James M. Arthur, breeder of Shorthorn cattle. The herd at present numbers forty-five head of the Gwynne, Duchess of Clarence, Languish and Rosena families, at the head of which is the grandly-bred and splendbilly-formed stock bull, Imp. Spicy Count, bred by William Anderson, Saphock, Aberdeenshire; sired by Spicy King; dam Countess of Balmoral 4th, by Velvet Jacket. His predecessor in the herd was Robert Bruce 31030, by New Year's Gift 22254, by Imp. Hantin Robin; dam Fanny B 31st 28894, by King of Wales 14657. Former stock bulls were Sultan Salem (imp.). bred by Cruickshank, sire Cumberland; Kinellar 19524, by Ingram 14272; and Imp. Sirius, bred by Duthie. The Gwynne family is represented by Flossy Gwynne 14th 25797, by 16th Duke of Hilledale; dam Flossy Gwynne 8th (imp.). The Languish family hy Molly Languish, by Plato 18827; cam Mary Languish 22124, by Waterloo Duke 18th. The Duchess of Clarence tribe by Pine Grove Duchess of Clarence, by Plato; dam Duchess of Clarence, by Plato; dam Duchess of Clarence, by Plato; dam Duchess of Clarence 36th. The Rosenas by Red Rose of Pine Grove, sired by Imp. Sultan Salem; dam Rcan Topsy 2md. This herd is a good representative one of the present-day type of Shorthorn, and contains a large number of really excellent animals, among which are a number of heifers of various ages, thick, blocky models that should develop into crackers. There are, also, about fifteen young bulls from six to twenty-four months old, among which can be picked out some A1 animals.

PIONEER STUD FARM.

PIONEER STUD FARM.

The Pioneer Stud farm, of Jushnell, IM., whose advertisement of Shire, l'ercheron, Suffolk and Hackney stallions runs in this paper, has recently received its fifth importation for this season. Among the lot are four Shire stallions from the Blaisdon stud, including the champion yearling, Blaisdon Harold 2rd. He is sired by the noted horse Blaisdon Harold (17776), and his dam, Hawthorn 16758, has produced other notable horses.

thorn 16758, has produced other notable horses.

Blaisdon Albert (19350) is a two-year-old, from the same stud. He is a beautiful chestnut, with a grand set of legs, two good ends, and a middle and loin that leaves nothing to be desired, and, with his extraordinary action, classes him among the greatest horses of his age ever seen in this or any other country. This colt is a son of Blaisdon Conqueror (15989), acknowledged to be one of the greatest sires in the history of Shire breeding.

The Trumans tried hard to get Mr. Stubs, the owner, to part with him, but their offer of \$15,000 was refused. Another two-year-old that Mr. Stubs aupplied is the bay, Blaisdon Farmer (19353). Here, again, we find breeding of the highest quality, being sired by Blaisdon Conqueror (15989), dam Wild Rose 17620, by Pluto (5262), the sire of Blaisdon Pluto, the champion and gold medal winner at the last International show held in Chicago.

Blaisdon Cardinal (18527) is a three-year-old, a big, wide, sappy colt, with all the style and action possible to get and one we are sure to hear of iater on in his new home. He is a full brother of the champion yearling, Blaisdon Ilarold 2nd.

In the black two-year-old Grandford the champion yearling, Blaisdon Stand 1870 (1905) and 1870 (1905)

All the sbut a slight service to aid a sick friend—and I will do this:

I will mail the sick one an order—good at any drug store—for six bottles of Dr. Shoop's Restorative. He may take i. a month to learn what it can do. I fit succeeds, the cost is \$5.50. If it fails, I will pay the druggist myself.

I will let the sick one decide.

No case is too difficult; I take the risk in all. My records show that 30 out of each 40 who make this test get well—and pay gladly. I cheerfully pay the druggist myself.

The Restorative is my discovery—the result of a lifetime's work. It is the only remedy that strengthens the inside nerves. My success comes from bringing back that nerve power which alone operates the vital organs. There is no otherway to make weak organs strong.

Tell me who needs that help.

Simply state which Book No. 20 on the Rideay. Book No. 2

Any Spavin Gured

It will be costly to doubt this because we have the proof and there's no cost if Fleming's Spayin Cure ever fails. One 45minute application is usually all required to cure the spavins that others can't cure. Ringbone, Splint, Curb, etc., just as easy. Our FREE BOOK will be worth dollars to you.

Miles Crandall, Rochelle, Ill., writes: "It is wonderful. Case of bone spavin of about one year's standing. Had several veterinarians who could not cure. Got worse all the time. One application of your Spavin Care cured to stay cured.

Fistula and Poll Evil Cured in 15 to 30 Days.

Not one failure in the two years. Cures in half the ordinary time. Cures easily the cases nothing else can cure. Simple, humane and sure. No cure, no pay. Write today for circular about Fleming's Fistula and Poll Evil Cure.

FLEMING'S LUMP JAW CURE.

About as certain to cure Lump Jaw as that water will put out fire. Recent or severe cases alike curable. Easy to use, can't harm, prompt and thorough, and seldom leaves even a scar. Death certain if you neglect the disease; cure certain if you use the remedy. Send for illustrated book today.

A postal brings printed matter on all the above. Mention this paper.

FLEMING BROS., Chemists,

36 Front St., West, Toronto, Ont.

WATSON OGILVIE, PROPRIETOR.

Ogilvie's Ayrshires won the herd and young prizes at Toronto, London and Ottawa in 1900; all o at the Pan-American, in 1901, and in 1902 they won all the herd prizes and medals, sweep-takes and diplomas, with one exception. The cows are all imported, and were carefully selected for strength and constitution, style, size of teats, and milk (quantity and quality). The herd is headed by Douglasdale (imp), champion at the Pan-American and at Ottawa, Toronto and London, in 1902, ably a bisted by Black Prince (imp.). Stock, imported and home-bred, for sale at all times,

ROBERT HUNTER, Manager.

Near Montreal.
One mile from electric cars. Lachine Rapids, P. Q.

Best Jersey Bulls High-class HIPORTED AND AYRSHIRES, AT LOWEST PRICES.

Owing to the large sale of registered Jersey cows, all in milk (18 head), that I have just made, I offer several bull calves, of unsurpassed breeding and from tested dams, at prices that will surprise purchasers. This, because the sa'e of so many cows in profit leaves me short of milk for the present. Also some choice wife, and the present of the pr heifers in calf.

Maple Cliff Dairy and Stock Farm BREEDERS OF

AYRSHIRE CATTLE,
BERKSHIRE and TAMWORTH PIGS.

We have for sale 10 bulls from 1 month to 18 months old, of the same breeding as the first prize calves at Ottawa and Toronto.

R. RESD & CO.,
Farm adjoins Central

Hintonburg, Ont. Experimental Farm.

Menie Stock Farm Ayrs Hire bulls and heifer calves, from 2 to 9 months old. Also cows and heifers all ages. Write WM. STEWART & SON.

SUNNYLEA FARM.

FOI Sale : Jerseys—6 yearling bulls; females sows, different ages. Shropshire sheep—rams and ewes of good breeding. Prices reasonable.

FOR SALE :

including cows, heifers and young buils out of our prize and sweepstakes cows. Foundation selected with due regard to quality and pro-ductiveness. Come or write.

heifers in calf.

Mrs. E. M Jones, Brockville, Ont.

Box 324.

Box 324.

Ont.

Ont.

Box 324.

Ont.

Ont

DAVID A. McFARLANE, KELSO, P. Q. Breeder of high-class

AYRSEIRES. oung stock for sale from imported and home-bred undation. Prices reasonable.

SPRING BURN STOCK FARM H. J. WHITTEKER & SONS, PROPS. Breeders of North Williamsburg, Ont. AYRSHIRE CATTLE, OXFORD DOWN SHEEP, BERKSHIRE PIGS AND BLACK JAVA FOWLS,

For Sale: 5 Bulls, from 6 to 12 months old. Females any age. One 2-year-old ram, six shearling rams, and five ram lambs. Winchester, C. P. R. Morrisburg, G. T. R.

A YRSHIRE CATTLE, Shropshire sheep, Berkshire pigs, and B. P. Rock fowl. A fine lot of shearling and ram lambs for sale.

J. Yuill & Sons, - Carleten Piace, Ont.

Homecroft Stock and Dairy.

Ayrabires, Chester Whites, B. P. Rocks. Write us for best young bull in Canada. Some A i bull calves; also some beauties for young sows. See that you look up our chickens.

J. F. PARSONS & SONS, BARNSTON, QUE.

SUNNYLEA FARM.

CHOICE AYRSHIRES.

Present offering: 4 bulls, from 1 to 2 years old, by choice sires, and out of producing dams, and A 1 individuals.

H. E. WILLIAMS, Knowlton, P.Q. N. DYMENT, Clappison P. O., Dundas Sta.

THE VALUE OF CHARCOAL.

Few People Know How Useful it is in Preserving Health and Beauty

Nearly everybody knows that charcoal is the safest and most efficient disinfectant and purifier in nature, but few realize its value when taken into the human system for the same cleansing

Charcoal is a remedy that the more you take of it the better; it is not a drug at all, but simply absorba the gases and impurities always present in the stomach and intestines, and carries them out of the system.

gases and impurities always present in the stomach and intestines, and carries them out of the system.

Charcoal sweetens the breath after smoking, drinking, or after eating onions and other odorous vegetables.

Charcoal effectually clears and improves the complexion, it whitens the teeth, and further acts as a natural and eminently safe cathartic.

It absorbs the injurious gases which collect in the stomach and bowels; it this infects the mouth and throat from the poison of catarrh.

All druggists sell charcoal in one form or another, but probably the best charcoal, and the most for the money, is in Stuart's Absorbent Lozenges. 'hey are composed of the finest powdered willow charcoal, and other harmless antiseptics in tablet form, or rather in the form of large, pleasant tasting lozenges, the charcoal being mixed with honey.

The daily use of these lozenges will soon tell in a much improved condition of the general health, better complexion, swester breath, and purer blood; and the beauty of it is, that no possible harm can result from their continued use, but, on the contrary, great benefit.

A Buffalo physician, in speaking of the benefits of charcoal, says: "I advise Stuart's Absorbent Lozenges to all patients suffering from gas in stomach and bowels, and to clear the complexion and purify the breath, mouth and throat. I also believe the liver is greatly benefited by the daily use of them. They cost but twenty-five cents a box at drug stores, and although in some sense a patent preparation, yet I believe I get more and better charcoal in Stuart's Absorbent Lozenges than in any of the ordinary charcoal tablets."—Adv.

O-m

PROVINCIAL AUGTION SALES

of Pure-bred Breeding Stock will be held at

Ottawa, Ont., February 11th, 1903, and Guelph, Ont., February 25th, 1903.

40 Shorthorn bulls and 10 Ayrshire bulls will be sold at Ottawa; 80 bulls (beef breeds) will be sold at Guelph.

ENTRIES CLOSE DEC. 1ST, 1902.

For rules, entry forms and further information

A. W. Smith, President,

A. P. Westervelt. Secretary, Maple Lodge, Parliament Buildings, Ont. o Toronto, Ont.

SPRINGHILL FARM.

Males and females for sale, ROBERT HUNTER & SONS, Maxville, Ont.

HIGH-CLASS AYRSHIRES

We are now through exhibiting, and offer at bargain prices, if taken before going into winter quarters, the following prizewinning bulls: The winner of 4th prize at Toronto as yearling, and four other 1st prizes; sired by Caspian of St. Annes (imp.). The August, 1901, calf, a very promising light-colored one, sire Hovera-Blink. Two February, 1902, calves, winners of 3rd and several other 1st and 2nd prizes elsewhere; and an April, 1902, winner of 4th prize at Toronto. All sired by Prince of Barcheskie (imp., in dam), and light-colored. Two August, 1902, bull calves from imported sires and dams. Correspondence solicited. ALEX. HUME & CO., MENIE P. O., ONT.

Ayrshire Bulls. Two choice August (1901) bulls. Four March (1902) calves, by imported bull and out of dams from imported stock. All good ones. W. W. BALLANTYNE, ("Neidpath Farm" adjoins city.) Stratford, Ont. Main line G. T. R.

FOR SALE:

Three grandly-bred Ayrehire bull calves, 12 to 15 mos. old. Also young calves, by Napoleon of Auchenbrain (imp.), whose dam has a record of 72 lbs, of milk per day. A few choice young Berkshire and Yorkshire sows could be served before shipping. Gollie pups, from Perfection Queen. Address—

T. D. McCALLUM, Danville, Que Nether Les. -0100

AYRSHIRES AND YORKSHIRES. My Ayrshires are all bred from imported stock; Yorkshires from Mr. D. C. Flatt's imported stock. Choice young animals for sale.

James McCormick, Sr., Rockton, Ontario,

GOSSIP.

Quite close to Lyn station, on the main line of the G. T. R., lies the farm of Brown Bros., breeders of Holstein cattle. Their herd now numbers thirty-two head, many of them in the Advanced Registry, at the head of which is the splendid prizewinning bull, Emperor Joseph, sired by Colanthus Abbekirk's Sir Oliver; dam Empress Josephine of Brookside. This bull is the sire of most of the heifers and young bulls in the herd, which are for sale, they being out of such noted cows as Jessie Veeman, whose official record is 26 lbs. 4 ozs. butter in seven days; Lorena Diamond Netherland, record 17 lbs. in seven days; Tidy Abbekirk De Kol, 13 lbs. 12 ozs. as a three-year-old, after milking four months; Empress Josephine of Brookside, the dam of the stock bull, milk record 14,700 lbs, in ten months: Lady Aakrum Pietertje's Josephine, milk record 14,700 lbs, in ten months: Lady Aakrum Pietertje's Josephine, milk record are sired by him. Brown Bros. have lately purchased, as stock bull, the richly-bred youngster, Sir Ybma De Kol Hengerveld, sired by De Kol's Butter Boy 3rd; dam Ybma 3rd's Pledge, whose two-year-old butter record is 15 lbs. in one week. This firm is offering for sale several young bulls and a few females. See their advertisement, and write them to Lyn P. O. Ont.

Brown Bros. report the following recent sales from their herd: To D. M. Webster, Athens, Ont., the three-vear-old heifer, Jenne Hengerveld De Kol, who has a record of 60 lbs. of milk ner day; to A. R. Hanton, Frankville, Ont., Pietertje Josephine De Kol, rane Hengerveld De Kol, who has a record of 60 lbs. of milk ner day; to A. R. Hanton, Frankville, Ont., Pietertje Josephine Abbekirk B., Pietertje Beauty Ole Kol, and Patty's Emperor Joseph, first-prize bull calf at Ottawa and Brockville; to Henry Stevens & Sons, Lacona, N. Y., Jessie Veeman A., official record at two years 15 lbs. 4 ozs.; Pietertje Josephine Abbekirk B., Pietertje Josephine Abbekirk B., pietertje Josephine Abbekirk B., pietertje Josephine Abbekirk B., pietertje Josephine Abbekirk B.

Six miles south of Tavistock, in the County of Oxford, lies Maple Grove dairy stock farm, the property of Mr. H. Bollert, Cassel, Ont., importer and breeder of Holstein cattle, Yorkshirchogs, and pure-bred poultry, who for nineteen years has been importing and breeding this class of cattle, and it is safe to say that there is no man in the business to-day in Canada that has bred more high-class producing animals than he. He it was imported the dam of the heifer, Aalta Posch, that made the phenomenal record of 27 lbs. 4 ozs. of butter in seven days, and also bred her sire, the sire of the twenty-seven two-year-old heifers now in the Advanced Regristry. Mr. Bollert bred and developed the heifers that stamd third and seventh in place of merit. He also bred Heimke 4th's Colantha, who gave, as a two-year-old, 55 lbs. of milk a dey, that tested 5.2 per cent. of butter-fat. His herd at present numbers twenty-five head, at the head of which stands the richly-bred bull. Prince Pauline De Kol, a son of De Kol 2nd's Queen, whose two-vear-old milk record of 9,750 lbs. in ten months, and three-year-old butter record 28 lbs. 7 ozs. in seven days, and who holds the world's record on productiveness, as it required but 14.47 lbs. of her milk to make a pound of butter; fat. She by Paragon Netherlands Alban. Her dam, Netherland Homer's Cialba, has a milk record of 78 lbs. a day, testing 4.40 per cent. butter-fat. she by Paragon Netherlands Alban. Her dam, Netherland Homer's Cialba, has a milk record of 18 lbs. a day, testing 4.90 per cent. butter-fat. she by Paragon Netherlands Alban. Her dam, Netherland Homer's Cialba, has a milk record of 18 lbs. a day, testing 4 per cent butter-fat. Sir Pauline De Kol is by Pauline Paul 2nd's Colanthus, which tested 5.6 per cent. of butter-fat at Chicago World's Fair, and his dam, Pauline Paul 2nd's Colanthus, which tested 6.6 per cent butter-fat as a splendid five-months, and butter record 68 lbs. milk a day. She is sired by Millas Pictertie Netherland, a son of Alberta Abbekirk 2nd, three-ye

PRINCIPAL AWARDS GAINED BY SUFFOLKS AND SUFFOLK CROSSES IN OPEN COMPETITION AGAINST ALL BREEDS, 1898 TO 1901.

OVEL BILLION INC.				
SCOTTISH NATIONAL FAT STOCK SHOW— Championship of the yard Reserve number for ditto	1898	1899	1900	1901
Reserve number for disco	1898	1899	1900 1900	
SMITHFIELD CLUB SHOW (Carcass Competitions) Centenary gold medal (best carcass in the yard). Reserve number for ditto. First prize—Short-wool lambs. Second prize— " " Fourth prize— " " First prize—Short-wool wethers. Third prize— " " First prize—Long-wool wethers. Second prize— " " Second prize— " " Second prize— " " Third prize— " "	1898 1898 1898 1898 1898	1899 1899 1899	1900 1900 1900 1900	1901 1901 1901 1901 1901 1901 1901

AN UNEQUALLED RECORD. Pamphlet, with full description of the breed, show-yard honors, live and dead weights of rams, ewes and lambs, can be obtained on application to

ERNEST PRENTICE, Secretary Suffolk Sheep Society, IPSWIGH, ENGLAND.

EUROPEAN ADVERTISEMENTS.

W. W. CHAPMAN,

Secretary of the National Sheep Breeders' Association,

Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and late Secretary of the Southdown

Sheep Society. Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries

Address: FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W.

Cables-Sheepcote, London.

English Shorthorns.

Booth and Bates Shorthorns, topped with Cruickshank bulls. Young cows, bulls and heifers always on hand for sale. Eligible for the American hardbook. Royal and Highland prizewinners included for the last two years. Close on £400 won in prizes last year and this.

WM. BELL.

Ratcheugh Farm, Alnwick, Northumberland, Eng.

Robert W. Hobbs

Kelmscott, Lechlade, England.

One of the largest flocks in Oxford Down Flockbook. Numerous prizes obtained for ram lambs at principal shows. Rams and ewes always on sale.

FAMOUS ALL OVER THE WORLD ALFRED MANSELL & CO., LIVE STOCK AGENTS AND EXPORTERS, SHREWSBURY.

BRITISH STOCK selected and shipped to all parts of the world. Write for prices to ALFRED MAN-SELL & CO., Shrewsbury, England, or to our American representative, Robert Miller, Stouffville, Ont.,

JOHN BRYAN & SON, Southleigh, Witney, oldest registered flocks of pure-bred Oxford Downs. Annual sale of rams. Oxford ram fair. Rams and ewes for sale at home. Inspection invited.

Southdowns of Collies



Both imported and home-bred. Correspondence solicited. Railway station, London.



ROBT. MCEWEN, BYRON, ONT.

SHROPSHIRES FOR SALE.—Shearling rams, also shearling and older ewee, about 50 head all told. All registered or eligible. Low-set, well covered, in fine condition and form. Sires from Campbell and Dryden flocks.

MALCOLIM McDOUGALL, Dryden flocks. Tiverton, Ont.

PRIZEWINNING COTSWOLDS. Imported and home-bred stock, prizewinners at all the leading fairs. **ELGIN F. PARK**, om Box 21, Burgessville, Ontario, Canada,

SHROPSHIRES. One well-covered yearling ram, with good bone, from imported Mansell ram, and four home-bred ram lambs. Write for prices. ROWAT BROS., HILLSDALE, ONT.

Shropshire Sheep, and Chester White Swine of good bacon type. Write for prices.
W. E. WRIGHT, GLANWORTH, ONT. "SUMMYSIDE STOCK FARM."

SHROPSHIRES

Special Sale for This Month.

20 Ram Lambs, 5 Shearling Rams, and a Few Choice Ewe Lambs, of superior quality, by imported sires. Prices right, as we must have room

ISALEIGH GRANGE FARM, DANVILLE, QUE.

AGAIN STOP! AND LISTEN!! FAIRVIEW SHROPSHIRES

Have this season produced a Have this season produced a Great crop of high-class lambs. Do you want a flock header? If so, let us tell you that we Have excellent imported and Home-bred rams of different ages To sell at good values to purchasers. They are of the best breeding. Are of good size, and extra quality. JOHN CAMPBELL, Woodville, Ont., Can.

This season I am offering for sale SHROPSHIRE lambs of both sexes. Also shearling ewes and 2 shearling rams, Prices right and quality guaranteed. o GEO, HINDMARSH, Allsa Craig, Ont.

SHROPSHIRES. For sale—8 shearling rams, 12 shearling ewes, a number of 2- and 3-year-old ewes and this year's lambs; a low-down, well-covered tot.

C. H. ROWE, ORILLIA P. Of and STATION. SHROPSHIRES. I am offering for sale 1 imported stock ram, 14 earling rams and two-year-olds, 30 ram and ewe ambs, 10 shearling ewes, all in good condition.

ABRAM RUDELL, Hespeler P. O., Ont. Shropshire Sheep For Sale.

NUMBER of shearling rams, ram lawbs and young ewes, all well covered; also Shorthorn bull fit for service, 2 bull calves, young cow. All stock registered or eligible for registration. Have been breeding Shropshires successfully for past eighteen years, and only keep best strains. Farm three miles north of Waterloo. JOS. B. SNYDER, WATERLOO, ONTARIO.

PENNABANK STOCK FARM. Twenty-five ram lambs; a few ewe lambs and shear lings with Imp. Williams or Knox-bred sires; 1 good two-shear ram. Four fine young Shorthorn bulls. Hugh Pugh, Whitevale, Ont.

LEICESTER SHEEP. Quality, with good size and wool. Address: C. & E. WOOD, FREEMAN P. O. BURLINGTON ST., ONT.

Oxford Downs. Present offerings: A choice lot of ram and ewe lambs fit for show, and one three-year-old ram and one two-year-old ram, one very superior shearling ewe. The above are all fit for show. -o SMITH EVANS, Gourock, Ont.

FAIRFIELD LINCOLNS Imported ewes and lambs. Can supply show flocks.

J. H. PATRICK, ILDERTON, ONT., CAN.

Dorsets & Chesters Young stock in Dorset Sheep and Chester White Hogs of good quality for sale, reasonable. R. H. HARDING, THORNDALE, ONT.
OM "NAPLEVIEW FARM."

W. S. CARPENTER, "MODEL FARM." SIMCOE, ONT..
Importer and breeder of Shropshire sheep. My flock was represented at Toronto, and won first on shearling ram, first and second on aged ewes, and second on the pen. First time exhibiting. If in need of a first-class yearling ram, imported or homebred, write! Your wants can be supplied, and at prices consistent with quality. Have a choice lot to choose from, and can guarantee satisfaction. Come and see them. or a card will bring them. and see them, or a card will bring them.

Station One-half Mile from Farm, Wabash and G. T. R.

PLEASE MENTION FARMER'S ADVOCATE

WHAT CAUSES DEAFNESS.

The Principal Cause is Curable, but Generally Overlooked.

Many things may cause deafness, and ery often it is difficult to trace a cuse. Some people inherit deafness.



=

da

M,

111

TEC

nd 2

Ont 9. es, a

ION.

n, 14 l ewe i**tion.**

Ont

le.

and

thorn

RIO.

good bulls,

Ont.

P.

0.

e are Ont

MAC.

ck in

NT. lML.10

R,

NT.

My first s, and If in home-and at lot to

Come

arm,

ATE

All Have

Acute diseases, like scarlet fever, sometimes cause deafness. But by far the most common cause of loss of nearing is catarrh in the head and throat.

A prominent specialist on ear trouble gives as his opinion that nine out of ten cases of deafness is traced to throat trouble. This is probably overstated, but it is certainly true that more than half of all cases of poor hearing were caused by catarrh.

The catarrhal secretion in the nose and throat finds its way into the Eustachian tube and, by clogging it upvery soon affects the hearing, and the hardening of the secretion makes the loss of hearing permanent, unless the catarrh which caused the trouble is cured.

catarrn which caused the trouble is cured.

Those who are hard of hearing may think this a little farfetched, but any one at all observant must have noticed how a hard cold in the head will affect the hearing, and that catarrh, if long neglected, will certainly impair the sense of hearing and ultimately cause designation. hearing and ultimately cause deaf-

of hearing and ultimately cause dearness.

If the nose and throat are kept clear and free from the unhealthy secretions of catarrh, the hearing will at once greatly improve, and anyone suffering from deafness and catarrh can satisfy themselves on this point by using a fitty cent box of Stuart's Catarrh Tablets, a new catarrh cure, which in the past year has won the approval of thousands of catarrh sufferers, as well as physicians, because it is in convenient form to use, contains no cocaine or opiate, and is as safe and pleasant for children as for their elders.

Stuart's Catarrh Tablets is a wholesome combination of Bloodroot, Guaiacot, Eucalyptol, and similar antiseptics, and they cure catarrh and catarrhal deafness by action upon the blood and mucous membrane of the nose and thoat.

throat.

As one physician aptly expresses it:

"You do not have to draw upon the imagination to discover whether you are getting benefit from Stuart's Catarrh Tablets; improvement and relief are apparent from the first tablet taken."

All druggists sell and recommend them. They cost but fifty cents for full sized package, and any catarrh sufferer who has wasted time and money on sprays, salves and powders, will appreciate to the full the merit of Stuart's Catarrh Tablets.—Advt. Tablets — Advt. ()-III

SHROPSHIRES

We have for sale sixteen Shropshire yearling rams and 12 ewes, from Cooper and Mansell ewes, and sired by Mansell ram, also an extra good lot of ram lambs,

JOHN MILLER & SONS, BROUGHAM, ONT. CLAREMONT STATION, C. P. R.

American Leicester Breeders ASSOCIATION.

A. W. Smith, Pres., Maple Lodge, Ont. Pedigrees now being received for Vol. 4. For information, blanks, etc., address:

A. J. TEMPLE, SEC., CAMERON, ILL.

FOR SALE, AT MAPLE AVENUE STOCK FARM, CHOICE

Lincoln Sheep
Bred from best
English stock.

Shorthorn Cattle
Bred from Scotch bulls
of fashionable families. CAN SUPPLY EITHER IN CARLOAD LOTS.

Write us before buying elsewhere. Address: F. H. NEIL, Proprietor, LUCAN, ONT. Telegraph and Railway Station. Box 35.

SHROPSHIRES. Choice shearling rams at farmers' prices. A choice lot of ram and ewe lambs for sale.

D. G. GANTON, ELMVALE, ONT.

GOSSIP.

Ayrshire cattle in considerable numbers have, during the present year, been purchased in Scotland for exportation to foreign countries in Europe, and quite recently a number of first-class animals of this breed have been purchased for South Africa, selected from the well-known herds of Mr. James Howie, Hill-house, Kilmarnock; Mr. Wm. Winter, Drumsue, and others.

The attendance at the auction sale of Jersey cattle from the herds of here with the following of the C. Laidlaw, Wilton Grove, and Mrs. D. L. White, London, Ont., announced for Oct. 29th, was disappointing and the bidding discouraging, considering the excellent character and condition of the excellent character and condition of the extellent character and condition of the cattle offered. The grand four-year-old bull, King of Beechlands, went to J. L. Clark, Norval, a great bargain, at \$60. Mrs. White's beautiful imported four-year-old cow, Uncle Peter's Columbine, was withdrawn at \$200. Her handsome yearling heifer fell at a sacrifice to the bid yearling heifer fell at a sacrifice to the bid of B. H. Bull & Son, of Brampton, at \$40, of B. H. Bull & Son, of Brampton, at \$40, and her four-months-old son, Columbine's Coronation King, was bought for Mr. Laidiaw at \$68. The six-year-old cow, Stella of Ettrick, was taken at \$100 by Mr. Ketchen, manager of Dentonia Park Farm, Toronto. Flower's Butter Print, a beautiful two-year-old heifer in milk, went to Thos. Clark, East London, at \$105, and John Vining, Thamesford, got the five-year-old Flower of Ettrick at \$75. These were the principal sales. A number of others were withdrawn, the offerings not being considered near their value.

Craigieburn stock farm is one of the Craigieburn stock farm is one of the best known in the banner county of Ontario, first, on account of being the farm that won the gold medal as the Lest appointed farm in the sixth district in 1891, and secondly, as being, for a great many years, the home of an exceptionally choice herd of Shorthorn cattle. This farm is the property of G. A. Brodie, Bethesda, Ont., and lies five rules west of Stouffville station, G. T. C. For a great many years Mr. Brodie has been breeding Shorthorn cattle, and very many of the herds of to-day were founded on animals purchased at Craigieburn, but it is doubtful if ever in the history of this noted herd were a better lot of up-to-date youngsters seen together in the stables than those housed there at present. They comprise about a dozen heifers, from eight months to one year old, and about the same number of young bulls, the bulk of them sired by the grand stock hull, Sir Robert 30629, by Royal Bruce, by Imp. Royal Member; dam Wedding Gift, by Imp. Lord Roseberry. These young ones are all for sale, and should go quick at the price asked. In Shropshires, there are about thirty for sale, all either imported or bred directly from imported stock, among which are twelve rams, five of which are shearlings, the balance this season's lambs. The ewes and ewe lambs that are for sale number about eighteen. They are all Mansell strain, the ewes being Mansell-bred (imported), and the lambs by an imported Mansell-bred ram. The lot all through, in form, type, covering, quality and strength, are choice. Mr. Brodie is also offering for sale three exceptionally good Cotswold rams, shearlings. A big, neavy, well-covered lot. best known in the banner county of the

Mr. W. D. Flatt, of Hamilton, Ontario, says the London Live Stock Journal, shipped from Glasgow, on October 22nd, an excellent and very valuable lot of seventy-six Shorthorns, which he purchased during his recent visit to this country. Seventy-two of the lot were females, mostly heifers, the remainder of the animals being bulls. One of the bulls was the Royal Star yearling, Baron country. Seventy-two of the for were females, mostly heifers, the remainder of the animals being bulls. One of the bulls was the Royal Star yearling, Baron Beaufort, bred by Lord Lovat, and which W. S. Marr purchased this year at Birmingham for 335 gs. Baron Beaufort has done exceedingly well, and Mr. Marr has a big lot of his cows in calf to him. Another of the bulls was Diamond Prince, which was bought by the Dalmeny manager, Mr. Sinclair, other day at the Uppermill sale for 120 gs. The third of the bulls in the group was Rosicrucian of Dalmeny, a vearling of great promise, by the stock bull, Villager, out of Regina 6th. The females are a very fine selection. Amongst them was the fine Lovat champion yearling heifer, Pandora, which was bought at the Jackson sale a fortnight ago for 200 gs. Another was the grand cow, Vanora, which was bought at the same sale for 115 gs. Six very good neifers also came from Mr. Robertson, Ballechin, including Lovely Tulip, first at the Highland Society's Show at Perth and champion Shorthorn at Perth this year. Mr. Cameron, Balnakyle, also supplied two very superior animals in Marchioness 30th and Merry Lass 6th. Dalmeny Fanny 6th, a beautifully-fleshed Leifer of the Fanny B family, was bought from Dalmeny. This heifer has never been shown, but she is one of exceptional merit. Eleven other excellent heifers were bought from Dalmeny, including Dalmeny Nonpareil 6th, Veronica 2nd, and Dalmeny Primula 2nd. This is the second large shipment of Shorthorns Mr. Flatt has made to Canada this year.

Fighty-seven pure-bred Yorkshire hogs, registered or eligible, property of W. S. Hodgins, box 393, London, Ont., will be sold on Nov. 19th, at his farm, lot 12 con. 4, Adelaide St., London, three miles from city market, one and a half miles from Oxford St. cars. Stock bred from purchases from D. C. Flatt and Brethour & Saunders. Young stock sired by Summer Hill Challenge 17th. YORKSHIRES AT AUCTION.

F— Large English Yorkshires. SUMMERHILL



Our winnings at the large shows, for 1901, are as follows: At Toronto every possible first prize and five seconds, two silver medals, and first for pen of pure-bred bacon hogs, also sweepstakes on bacon hogs over all breeds; at London every possible first but two; while at the Pan-American, where our herd was divided, half going to Toronto, we won six out of ten possible firsts, also sweepstakes on boar any age. At the Pan-American (Buffalo), Toronto and London there were thirty-six first premiums and medals given: all the medals and every first prize but six won by the Summer Hill Yorkshires. When in need of the best write D. C. FLATT & SON. MILLGROVE. ONT. om Telephone: Millgrove, Ont.

HILLCREST HERD OF My brood sows are imported or show animals, and Rerkshires

the sires are big, long fellows of the bacon type. For sale: An excellent lot of young pigs, and a few young sows recently bred. Can supply pairs not akin. Enquiries promptly answered. Vine station, G.T.R.—near Barrie. Jno. Lahmer, Vine, Ont.

Five rams (year-olds), both sires and dams imp.; 10 ewes (year-olds), sire imp. Also this year's lambs, both sexes; Yorkshire and Tamworth hogs.

BROOKS & LANGMAID, COURTICE P.O.

BROAD LEA OXFORDS. Am offering at present 30 superior shearling ewes, bred to a good ram, and a number of ewe and ram lambs for sale at reasonable prices. Always pleased to hear from or see sheepmen, whether they buy or not

W. H. ARKELL, TEESWATER, ONT.

Broad Lea Farm. MILDMAY, G. T. R. 7 miles from farm. TERSWATER, C. P. R. 31 miles from farm.

SUMMERHILL OXFORDS. Present offering: A choice lot of ram lambs and ewe lambs. Also 50 extra nice yearling ewes,
PETER ARKELL & SONS,
om Teeswater P.O. and Station.

LINDEN OXFORDS A choice lot of ram lambs (yearlings) and a few two and three shear rams fit for show and to head purebred flocks; imp. and home-bred, well covered, good quality. om R. J. HINE, Dutton, Ont.

"FARNHAM FARM" Oxford Down Sheep

Am offering 40 choice yearling rams to head flocks.
50 superior yearling ewes. 70 ranch rams, 100 ram
and ewe lambs of 1902. From imported sires, and a
number from imported dams. All registered.
Barred Rock eggs, 75 cents per setting. HENRY ARKELL. ARKELL. ONT.

SNELGROVE BERKSHIRES This old-established herd

This old-established nervi, having made a continental reputation, is not being exhibited this year, but we are still breeding Berkshires are still breeding heritaintes as good as ever, and of the right type for the present-day markets—large, lengthy and smooth. We have boars and sows four to eight months old, not akin, and young pigs two to three months. If you want the best, write us for prices and particulars. o SNELL & LYONS, Snelgrove, Ont.

Imported Poland-China Hogs. We are offering choice, of both sexes, any age (pairs not akin), from imported stock, and of the true type. Easy feeders, rapid growers. ROBT. L. SMYTH & SONS, ora Fargo P. O. and Station, M. C. R.

WILLOW LODGE BERKSHIRES

Herd headed by Long-fellow 10th of H. F., assisted by the noted prize-winner, Highelere Crown 3rd, Sows, the best money will buy, and are winners. Young stock of both sexes and all ages for sale, not akin.



W. WILSON, SNELGROVE, ONT.

Coldspring Herd Tamworths Offer choice Oct. and Nov. boars and sows. Also my stock boar, Advance. This is the spot for the best. Write for prices. They are moderate, quality considered.

NORMAN M. BLAIN, ST. GEORGE, ONT. BRANT CO.



Am offering two choice Tamworth boars, ready for service; several sows, ready to breed; also a choice lot of young pigs, ready to wean. Also a few choice Holsteins to offer, of different

A. C. HALLMAN, BRESLAU, ONT. Waterloo Co.

PINE GROVE FARM HERD of LARGE ENGLISH YORKSHIRES. The oldest-established registered herd in America. We have 12 imported boars and sows and 20 home-bred animals breeding, and have a limited number of young boars and sows for sale, suitable for this fall's breeding. Satisfaction guaranteed in all mail orders.

Joseph Featherston & Son, Streetsville Station, C. P. B., and P. O. and Telegraph. Clarkson Station, G. T. B.

IMP. COTSWOLD SHEEP For the Next 30 Days.

Newcastle Herd of Tamworth Swine hibition, but this year has excelled all past records, having taken the sweepstakes for the best herd; also both silver medals for best Tamworth boar and best Tamworth sow, besides many other prizes in the various classes. Our present best Tamworth boar and best Tamworth sow, besides many other prizes in the various classes. Our present offerings are several young sows, bred or just ready to breed; also a lot of beautiful young pigs of both sexes, just fit to wean and ship. They are all descendants of our sweepstakes stock. They will be sold very reasonably during the next 30 days. Pairs supplied not akin. Enquiries promptly answered.

Large English Yorkshires

Boars fit for service. Sows and bears four months old. Boars and sows two months old. All the above are extra quality and lengthy. Write for what you want. Address: JAS. A. RUSSELL, Precious Corners, Ont,

YORKSHIRES FOR SALE

Boars fit for service, sows in farrow and ready to breed, and young stock on hand. Prices reasonable, WM. HOWE, NORTH BRUCE, ONT.

YORKSHIRES AND POULTRY.

Young pigs, 3 weeks to 3 months old (bacon type), easy feeders, strictly choice. Winners for fall fairs in young White Wyandottes, Barred Plymouth Rocks (Hawkins strain) and White and Brown Leghorns—something extra. Also pedigreed collies. om A. B. ARMSTRONG, Codrington, Ont.

Improved Large

A fine lot of young pige on hand, sired by imported boars; pairs supplied not akin. Boars and



sws old enough to breed. Also choice Scotch Shorthorns, both sexes. Importations of Shorthorns and York-shires made yearly. Address: H. J. DAVIS.

Importer and breeder of Shorthorns and Yorkshires. Box 290. WOODSTOOK, 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 sife arrival of all stock shipped. Pairs turnished not akin. Write for prices. H. GEORGE & SONS, Crampton P.O., Ont.

Ten Choice Young Boars 5 months old, sired by Summer Hill Member; also orders taken for pairs not akin. PRED. O. SMITH. NEW HAMBURG, ONT.

Yorkshires—For the next 3 months I can supply either sex, that for ideal bacon type, smooth, even finish, are unsurpassed, Prices reasonable, WM. TEASDALE, om Thornhill Sta., and electric cars. Dollar P. O.

S. H. D. Chief 6th (Imp.) 9074

Farrowed March 17th, 1903.

Bred by Earl of Roseberry, Edinburgh, Scotland, I will deliver, transportation prepaid, this magnificent imported YORKSHIRE boar for \$40, anywhere in

GUS. LANGELIER, QUEBEC.

FOR SALE

Yorkshires and Holsteins Best type and quality. Young stock constantly on hand, Prices right. B. HONEY, om Brickley P. O., instead of Warkworth.

EXACT SIZE OF KNIFE.



DIRECT FROM SHEFFIELD, ENGLAND.

Strong and Durable. Finest Steel Blades.

Specially selected and ordered by the Manager of the ${\tt ADVOCATE}$ when in England last summer.

Beautiful Nickel Handle.

CANNOT BE DUPLICATED.

Every Farmer and Farmer's Son Should Have One

of These Knives.

START OUT FOR THE NAMES TO-DAY.

Farmers Harroul

HOW TO SECURE IT.

SEND

New Subscribers ? New Subscribers

TO THE

FARMER'S ADVOCATE

And we will send you the knife, postpaid.

"CANADA'S PRIDE" Nine celebrated draft horses.

"CANADA'S GLORY" Eleven celebrated light horses.

**CANADA'S IDEAL ** Admitted by judges, breeders and artists to be the most magnificent engraving of high-class modern Shorthorns ever issued in any country. 24 x 36 inches. Twelve animals. Twelve animals.

Your choice of
any two of
these for I new
subscriber, or all
f our beautiful
pictures for only 2
new subscribers.

THE GREAT PREMIUM PICTURE OFFER, FOR OBTAINING NEW SUBSCRIBERS TO THE "FARM-ER'S ADVOCATE" AT \$1 A YEAR.

"CANADA'S COLUMBIAN VICTORS"

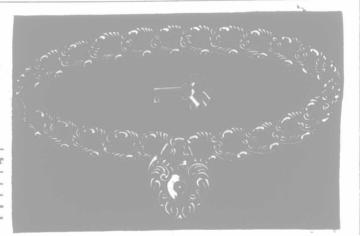
Thirteen celebrated Ayrshire cattle.

Containing the Old and New Testaments, according to the authorized version, together with new and revised helps to Bible study—a new Concordance and an Indexed Bible Atlas, with SIXTEEN FULL-PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.

HOW TO OBTAIN IT-Would retail at from \$3 to \$4. We will send (carefully packed, post prepaid) this Bible to anyone sending us the names of THREE NEW SUB-SCRIBERS to the FARMER'S ADVOCATE at \$1.00 each.

Handsome **Curb-link** Bracelet: Silver Filled

For 2 new subscribers. Sterling silver for 3 new subscrib-For each additional new sub-scriber, two Sterl-ing Silver Friendship Hearts.



AT ONCE

FOR NEW SUBSCRIBERS. The balance of 1902 will be sent FREE, including Christmas number, to all who now subscribe for 1903.

Subscription Price, \$1.00 per Annum.

HANDY, DURABLE and ATTRACTIVE. Made to contain the 24 issues of the year. We will forward this Binder, postpaid, to anyone sending us the names of TWO NEW SUBSCRIBERS and \$2.00.



Is a means of great entertainment and . instruction in the home and out of doors. To meet the wishes of many subscribers, we have arranged with a first-class firm for a supply of those instruments; which we now offer:

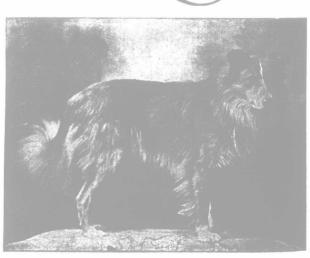
Tripod Microscope, with strong magnifying lens, useful for examining weed and other seeds, insects and other small objects, for obtaining one (1) new subscriber to the FARMER'S ADVOCATE.

A three-inch Magnifying Reading Glass for one new subscriber.

HOW TO GET A

Twelve New Subscribers.

TO ANY SUBSCRIB-ER sending us the names of 12 NEW yearly paid-up Subscribers we offer a young COLLIE, six weeks old or over, eligible for registration, and bred by Mr. R. McEwen, Byron, Ont., whose stock has been so successful in the leading shows in Canada and the United



Write for a sample copy of the Farmer's Advocate, and begin to work for these premiums. Cash must accompany new names.

COMPANY, LTD., LO

FARM BOOKS.

The farmer's home without an Agricultural Library is lacking in one of the chief aids to pleasure and success. We have gone over the available first-class works on agricultural subjects, and have selected the best. See below for prices and how to obtain.

SOIL AND CROP.

THE FERTILITY OF THE LAND.—Roberts. 372 pages. \$1.25.

A BOOK ON SILAGE.—Woll. 185 pages. \$1,00.

SOILING, ENSILAGE, AND BARN CONSTRUCTION.—F. S. Peer. 247 pages. \$1.00.

SOILING CROPS AND THE SILO.—Shaw. 366 pages. \$1.50.

LIVE STOCK.

VETERINARY ELEMENTS.—A. G. Hopkins, B. Agr., D. V. M. \$1.50. A practical book for stockmen and agricultural students.

THE STUDY OF BREEDS (CATTLE, SHEEP, AND SWINE).—Prof. Shaw. 400 pages; 60 engravings. \$1.50.

HORSE BREEDING.—Sanders. 423 pages. \$1.50.

LIGHT HORSES—BREEDS AND MANAGEMENT. 226 pages. \$1.00.

HEAVY HORSES—BREEDS AND MANAGEMENT. 219 pages. \$1.00.

SHEEP—BREEDS AND MANAGEMENT. 232 pages. \$1.00.

SHEEP—BREEDS AND MANAGEMENT. 232 pages. \$1.00.

ANIMAL BREEDING.—Shaw. 406 pages. \$1.50.

THE SHEEP.—Rushworth. 496 pages. \$1.50.

PIGS—BREEDS AND MANAGEMENT.—Sanders Spencer. 175 pages. \$1.00.

GENERAL AGRICULTURE.

AGRIGULTURE.—C. C. James. 200 pages. 30 cents.
FIRST PRINCIPLES OF AGRIGULTURE.—Voorhees. 207 pages. \$1.00.
AGRIGULTURE.—Storer. 1,875 pages; in three volumes. \$6.00.
CHEMISTRY OF THE FARM.—Warington. 183 pages. 90 cents.
FARMYARD MANURE.—Aikman. 65 pages. 50 cents.
IRRIGATION FOR THE FARM GARDEN AND ORCHARD.—Henry Stewart. \$1.00.
SUCCESSFUL FARMING.—Rennie. 300 pages. \$1.50, postpaid.

DAIRYING.

AMERICAN DAIRYING.—H. B. Gurler. 252 pages. \$1.00.
THE BOOK OF THE DAIRY.—Ficiochmann. 330 pages. \$2.75.
MILK AND ITS PRODUCTS.—Wing. 230 pages. \$1.00.
TESTING MILK AND ITS PRODUCTS.—Farrington & Wou. 255 pages. \$1.00.
DAIRYING FOR PROFIT.—Mrs. E. M. Jones. 50 cents.

POULTRY.

FARM POULTRY.—Watson. 341 pages. \$1.25.
ARTIFICIAL INCUBATING AND BROODING.—Cypher. 146 pages. 50 cents.
PRACTICAL POULTRY-KEEPER.—Wright. \$2.00.
AMERICAN STANDARD OF PERFECTION.—Pierce. 278 pages. \$1.00.

APIARY.

THE HONEYBEE.—Langstroth. 521 pages. \$1.50.

FEEDS AND FEEDING .- Henry. 600 pages. \$2.00.

FRUIT, FLOWERS, AND VEGETABLES.

VEGETABLE GARDENING.—Green. 224 pages. \$1.25.

PLOWERS AND HOW TO GROW THEM.—Rexford. 175 pages. 50 cents.

THE PRINCIPLES OF FRUIT-GROWING.—Bailey. 514 pages. \$1.25

BUSH FRUITS.—Card. 537 pages. \$1.50.

HORTICULTURIST'S RULE BOOK.—Bailey. 312 pages. 75 cents.

SPRAYING OF PLANTS.—Lodeman. 399 pages. \$1.00.

THE NURSERY BOOK.—Bailey. 365 pages; 152 illustrations. \$1.00.

AMATEUR FRUIT-GROWING.—Samuel B. Green. 5x7 inches; 134 pages, with numerous fly-leaves for notes; bound in cloth, and illustrated. 50 cents.

PLANT AND ANIMAL LIFE.

THE STORY OF THE PLANTS.—Grant Allen, 213 pages, 40 cents, THE STUDY OF ANIMAL LIFE.—J. A. Thomson, 375 pages, \$1.75. INSECTS INJURIOUS TO FRUITS.—Saunders, 436 pages, \$2.00.)

MISCELLANEOUS.

THE HOME PHYSICIAN AND CYCLOPEDIA OF MEDICINE.—By seven eminent physicians, aided by specialists. 1,300 pages; illustrated. Cloth, \$4.75; leather, \$5.75. LANDSCAPE GARDENING.—S. T. Maynard. 338 pages. \$1.50. BIRDS THAT HUNT AND ARE HUNTED.—Neltje Blanchan. 360 pages. \$2.25.

HOW TO OBTAIN THESE BOOKS:

We will furnish present subscribers any of the above books for cash or as premiums for obtaining new yearly subscribers to the FARMER'S ADVOCATE at \$1.00 each, according to the following scale:

Books valued at 50c. and under for 1 new subscriber.

Books valued over 50c. and up to \$1.00 for 2 new subscribers.

'' \$1.00 '' 1 '' \$1.50 '' 3 ''

'' \$1.50 '' 1 '' \$2.00 '' 4 ''

'' \$2.00 '' 1 '' \$2.50 '' 5 ''

at \$2.75 for 6 new subscribers.

'' \$6.00 '' 12 ''

We can furnish any of the above books at the regular retail price, which is given opposite the title of the book. By a careful study of the above list, any farmer can choose a select list of books suited to his needs, and for a small outlay in cash, or effort in obtaining new subscribers for the Advocate, secure the nucleus of a useful library.

Cash to accompany names in every case. Subscriptions credited a year in advance from date received.

The WILLIAM WELD CO., Ltd., London, Ontario.

WANT A GOOD WATCH?

E have succeeded in procuring from one of the most reliable jewelers in Canada a complete list of Gents' and Ladies' Watches of sufficient variety to suit every one, and have no hesitation in recommending them to our readers as premiums worthy of an effort to secure. These are not by any means trashy goods, but first-class in every particular, and we assure you that you will be pleased with whatever of the above premiums you may obtain. Let us hear from you at an early date with a good list of new subscribers accompanied by the cash, and take your choice.

and tal	ke your choice.	
	Gents' Watches.	
	Nev	v Sub- ibers.
No. 1.		2
No. 2.	Trump Nickel Watch	4
No. 3.	Trump Gun Metal Watch	5
No. 4.	No. 14 Silver Watch	8
No. 5.	7 Jeweled Gent's Elgin in 3 oz. Nickel Case	10
No. 6.	7 Jeweled Gent's Elgin in Gun Metal Case	11
No. 7.	7 Jeweled Gent's Elgin in Sterling Silver Case	14
No. 8.	7 Jeweled Gent's Elgin in 20- year Filled Case	18
No. 9.	7 Jeweled Gent's Elgin in 25- year Filled Case	21
No. 10.	15 Jeweled Gent's Elgin in 3 oz. Nickel Case	15
No. 11.	15 Jeweled Gent's Elgin in Gun Metal Case	15
No 13.	15 Jeweled Gent's Elgin in Sterling Silver Case	18
No. 13.	15 JeweledGent's Elgin in 20- year Filled Case	21
No. 14.	15 Jeweled Gent's Elgin in 25- year Filled Case	25
	Description of Water	haa

Description of Watches.

The accompanying cuts fairly well represent all the Ladies' and Gents' Watches, and a description of each as numbered is as follows:

No. 1. American Nickel Key-wind Boy's Watch that is absolutely guaranteed to keep good time and give satisfaction.

No. 2. Gent's Nickel American O. F. Watch; stem wind, and push-in stem and turn to set hands. This is a very strong, reliable Watch.

No. 3. Same as No. 2, excepting that it has Gun Metal case instead of Nickel case.

No. 4. Is a smaller-sized Gent's Watch, has sterling silver case, O.F. Screw Back and Bezel; stem wind, and push-in stem and turn to set hands. This is the lowest-priced and most reliable Boy's or small Gent's Silver Watch that is on the market.

No. 5. Is fitted with 7-Jeweled Nickel, firstquality Elgin movement. The case is a 3-oz O. F. Nickel case; stem wind and set; screw back and besel case.

No. 6. Same movement in Gun Metal or Black Steel screw back and bezel case.

Steel screw back and bezel case.

No. 7. Same movement with Sterling Silver

O. F. screw back and bezel case.

No. S. Same movement in 20-year guaranteed
Gold Filled O. F. screw back and bezel case.

No. 9. Same movement in 25-year guaranteed Gold Filled O. F. screw back and bezel case.

Nos. 10, 11, 12, 13 and 14 are fitted in the same style of cases as Nos. 5, 6, 7, 8 and 9; the difference is in the movement, and the movement is

No. 16. Is a small-sized Swiss O. F. Gun Metal Chatelaine Watch.

No. 16. Is thesame, only with Sterling Silver case, which can be had nicely engraved.

Nos. 17 and 18 are a good-quality American Watch, O. F. stem wind, and push-in stem and turn to set hands.

These are a little larger than the usual

push-in stem and turn to set hands. These are a little larger than the usual Ladies' Watches, and are smaller than the usual Boys' Watches, though can be used for either Boys, Girls or Young Ladies.

Nos. 19, 20 and 21 are small sized; in fact, are the exact size of cut. These are

fact, are the exact size of cut. These are American Watches, O. F. stem wind, and push-in stem and turn to set hands, and are first-class timekeepers. Will give perfect satisfaction.

If a nice leather wrist case is desired with these watches, send two extra subscribers.

Nos. 22, 23, 24 and 25 are similar to the accompanying cut. These are regular Ladies' Hunting Watches. Nos. 22 and 24 are fitted in 20-year guaranteed Gold Filled cases, nicely ornamented, or to be had in

plain or plain engine turned, and the same
plain or plain engine turned, and the same
applies to Nos. 23 and 25, excepting that they are fitted in 25-year guaranteed Gold Filled cases, and 14k Gold Filled; 22 and 23 are fitted with 7Jeweled Nickel, first-quality Elgin movements. Nos. 24 and 25 are fitted
with 15-Jeweled Nickel, first-quality Elgin movements.

When making your choice of Watch as premium, be sure to mention its number as given in premium list, also whether Lady's or Gent's.

The WM. WELD CO., Ltd., London, Ontario.



Ladies' Watches.

No. 15. Gun Metal Swiss Chatelaine....

No. 16. Sterling Silver Swiss Chatelaine.....

No. 17. Nickel American O. F., large

No. 18. Gun Metal American O. F.,

No. 19. Nickel, small size.....

No. 20. Gun Metal, small size..... 10

No. 31. Sterling Silver, small size... 10

No. 32. 7 Jeweled Eigh in 20-year 20

large size.....





IS MOUNTED IN 5, 10, 15, 20 OR 25 HORSE POWER.



WRITE

201 Queen St. E., TORONTO,

for catalogue and

Contemplating Marriage, Those Already in Wedded Bliss,

should present their bride or family, as the case may be, with a BEAUTIFUL MASON & RISCH PIANO. Liberal allowance made for old pianos and organs.

Call and get our prices before buying.



UMBER AT HALF PRICE WE PURCHASED THE PAN-AMERICAN EXPOSITION

Send us your lumber bill for our estimate, and we will make you prices delivered free of all charges at your shipping point. WRITE FOR OUR EXPOSITION CATALOGUE OF MATERIAL.

CHICAGO HOUSE WRECKING CO.,

PAN-AMERICAN, DEPARTMENT 56. BUFFALO, N. Y.



Buys a WATERPROOF
\$5.00 RAINCOAT

ND NO MONEY. Simply write
giving your name, address, nearest Express Office and chest measurement and we will send you this coat free
remainstion. When it arrives, try it on
and examine it carefully, and if found excuty as represented, and equal to any raincoat ever offered for \$5.00, pay the Express
agent \$2.60 and exp ess charges and tever offered for \$5.00, pay the kx cure this great bargain, grante English Mackintosh Rain the breasted and made of fine qu pullar stool gray water th, out in the latest pattern, with v sy plaid lin and cemented seams, concealed pockets, ailk worked buttonbeles and reinforced buttons. An easy fitting coat, A perfect protection against cold and wet. The very best coat ever made for those expo-ed much to the weather. Well finished throughout. Will weather. Well finished throughout. Will weather. We have only a few dozen of these coats. When they are gone there will be no more at this price. Order now. JOHNSTON & CO., Dept. F. A., TORONTO.



Rippley's 1903 improved **Combination Steam** Cookers. Hog and **Poultry House Heaters** and Water-Tank Heater.

Manufactured in Canada.

Will cook 25 bush. of feed or roots in two hours, or heat water in stock tanks or heat buildings 250 ft. from cooker by conveying the steam; made of boiler steel and the best cast fron; can't blow up; can be used outside or attached to a chimney: no flues to fill with soot, or leak. Indorsed and used by Canadian breeders and Experiment Stations. We manufacture 4 styles of cooker and 20 sizes. Catalogue and prices mailed free. Prices, \$10 to \$50.

Address, Rippley Hardware Co., London, Ont; or Grafton, Ill., U. S. A. Box 100.

VIA THE KING'S MAIL

A college education for every man and woman in Canada. HOME STUDY IS FOR YOU. It saves time and money. Educate your family. Cheap, thorough, practical courses in HIGH SCHOOL and BUSINESS STUDIES, HOUSEHOLD, IN-DUSTRIAL and AGRICULTURAL SCIENCE. DO YOU WISH TO MAKE MONEY? Agents wanted FREE booklet. Canadian Gorrespondence Gollege, Limited, TORONTO, OHTAR O.

Grain Grinders, Wood Pumps, Iron Pumps, Tanks, Water Boxes, Beekeepers' Supplies, Etc., Etc.

WRITE IF INTERESTED.

Shapley & Muir Co., Limited

BRANTFORD, ONT.



ROOFING

MICA PAINT

to repair leaky roofs.

Shingle, Iron

or Tin Roofs

painted with it

will last twice as

IT IS CHEAPER THAN SHINGLES,

USE

Mica Roofing

on all your buildings.

WATERPROOF,

FIREPROOF.



long. RAPIDLY TARING THE PLACE OF SHINGLES.

Is put up in rolls of one square each, 40 feet long by 32 inches wide, and costs only \$2.25, including nails, thus affording a light, durable, and inexpensive roofing, suitable for buildings of every description—especially flat roofs—and can be laid by any person of ordinary intelligence. HAMILTON MICA ROOFING CO., 101 REBECCA ST.. HAMILTON, ONT.

Page Metal Ornamental Fence. We now make ornamental. Very showy and surprisingly cheap. It is just what is wanted for door yards, division fences in town lots, grave yards. orchards, etc. It is 20 cts. PER RUNNING FOOT. Just think of it. Let us send you full particulars. We also make farm fence, poultry netting, nails and staples.

The Page Wire Fence Co. Limited, Walkerville, Ont. 3 The Page Wire Fence Co., Limited, Walkerville, Ont. 3



oughly and having satisfied yourself that they are worth many times what we ask, and the greatest being an yet have ever seep, pay the Express Agent 28.95 and Express charges and they are years. This is the chance of a litetime. You cannot afford to be without a pair. They are aimest invaluable to Ranchemen, Hunters, Saliors, etc. The greatest bargain in a high grade long distance Field Glass ever heard of. We bought they are worth many times what we ask, and they are years and they are years. This is the chance of a litetime. You cannot afford to be without a pair. They are aimest invaluable to Ranchemen, Hunters, Saliors, etc. The greatest bargain in a high grade long distance Field Glass ever heard of. We bought when they are years and they are years. They are aimest mixed to be impossible to get a glass of this quality for less than \$6.00. Don't delay, Order to-day.

JOHNSTON & CO., BOX 3327, TOKONTO.

NOVEMBER 15, 1902

They are Perfection,



The only Separator fitted with a brake and beautifullyenamelled bowl casing.

The Lightest Running and most durable Separator yet produced.

SENT ON TRIAL. Agents wanted where we are not already repre-ented. Write for catalogue.

R. A. LISTER & CO., LIMITED.

879 St. Paul Street, Montreal.



Buy the NEW

Nothing as good.

Simple, durable, easy to turn and clean. Five

WRITE FOR CIRCULARS AND INFORMATION. AGENTS WANTED.

C. RICHARDSON & CO., . . St. Hary's, Ont P. O. Box 1048,

Metal Wheels



FOR WAGONS. Made to fit any axle, any sized wheel, any width tire. Every farmer should have a set. They are logrand handy. They save labor, and the wide tires avoid cutting the farms into ruts. Write for Prices. Dominion Wrought Iron om Wheel Co., Lett.,

9 AND 11 BROCK AVE., TORONTO, ONT.

FENCE. AMB The H. R. LAMB FENCE CO., LIMITED, LONDON, ANT.



Family Enitter



Dundas Knitting Machine Company, DUNDAS, ONTARIO.