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FARMING

OCT.
1896



PUBLISHED BY THE BRYANT PRESS, TORONTO, CANADA.

In Five Minutes At Any Time

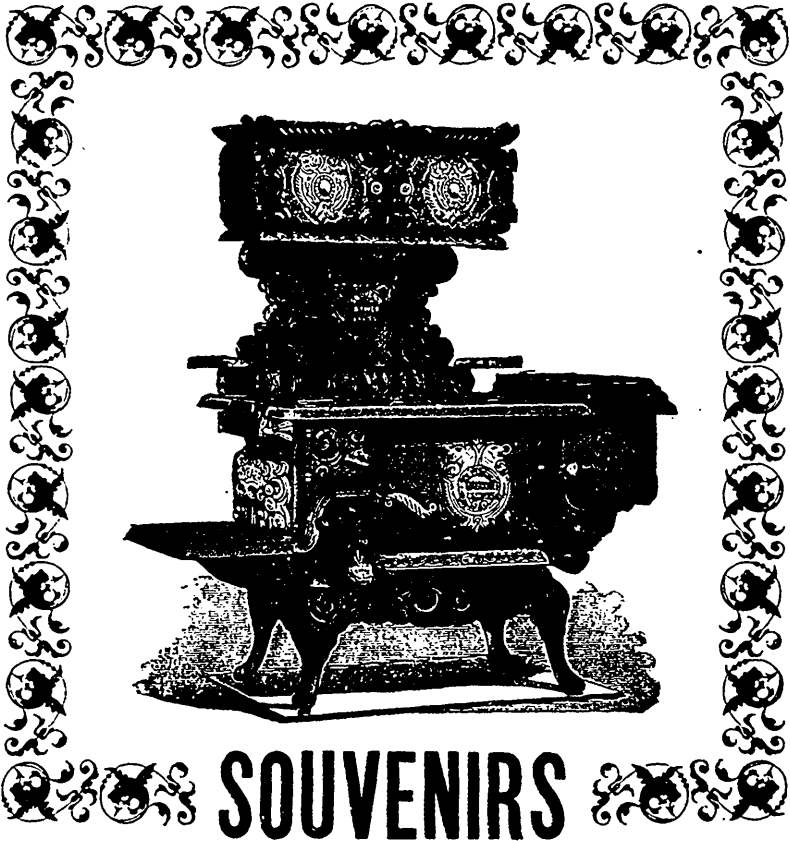
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HAMILTON, January 7th, 1895.

Dear Sirs.—In reply to yours of 1st, I have been using your "Souvenir" Range all Fall and Winter, and am delighted with it. I keep fire going day and night, and it gives positively no trouble. The oven works beautifully, is a perfect baker, and will give a roasting heat in five minutes at any time. It consumes on an average $1\frac{1}{2}$ scuttles nut coal in 24 hours. The "Souvenir" is, to my belief, the zenith of perfection.

Yours truly,

NETTIE CUTTRISS.



SOUVENIRS

Always Give Perfect Satisfaction. Sold Everywhere.

One Will Last a Lifetime.

The Gurney-Tilden Co. (Ltd.), - - - Hamilton.
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Headquarters for
Fall Wheat



EARLY ARCADIAN OATKA CHIEF
GENESEE GIANT WHITE LEADER
DAWSON GOLDEN CHAFF HELENA

And all the other leading varieties

ALSO

TIMOTHY O. GRASS ALFALFA
CRIMSON CLOVER FALL RYE, Etc.

Our Bulb and Fall Wheat Catalogue Ready
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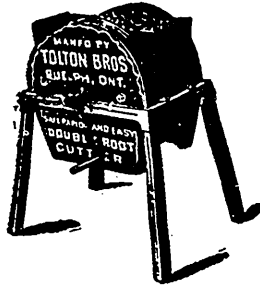
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The Latest and Best and the only Double Root Cutter Manufactured.

ALL THE WORLD LOVES A WINNER; CONSEQUENTLY

TOLTON'S NO. 1 DOUBLE ROOT CUTTER

Is the favorite among all Pulpers, having won all the first prizes last year; also captivated the hearts of all the stockmen who have used or seen it. It is a money winner to all concerned and a saver of time and labor to the operator, and one which sells at sight after a careful inspection, as it will either pulp coarse or fine, or slice by simply turning over the centre grate and turning crank the reverse way; and is considered in either capacity superior to any single machines.



Patented September 6th, 1894.

POINTS OF MERIT.

- 1st.—To change from pulping to slicing is but the work of a moment, which can be done at the one feeding, with no loss of time and no trouble.
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- 3rd.—The united force of both wheels is always used in doing the work in either capacity. This accounts for it being a steady, easy-running and rapid root cutter.
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- 5th.—Hence the Latest and Best, and what has been long looked for, a safe, rapid, and easy Double Root Cutter.

Soliciting your orders for same, we are, yours truly,

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Patrons: Governor-General of Canada and Lieutenant-Governor of Ontario. The most successful Veterinary Institution in America. Experienced teachers. Classes begin on Wednesday Oct. 14th, 1896. Fees, \$65 per session.

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and all kinds of
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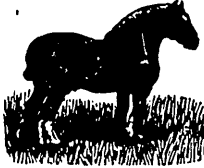
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437 TORONTO, CAN.

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

SHORTHORNS.
Choice young Heifers and Bulls by the celebrated Cruickshank bulls, Northern Light and Vice-Consul.

My stock in the above lines were very successful at all the large shows last year. Call and examine stock before purchasing elsewhere. Terms reasonable.



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ROBERT NESS

IMPORTER AND BREEDER OF

CLYDESDALES

From the best studs in Scotland, English and French Carriage Horses, Shetland Ponies, and Ayrshire Cattle.

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Oldest Stud of Hackneys in America.

FOR SALE * **Highly-bred Young Hackney Stallions.**

Prize-winning Imported Mares and Homebred Fillies of the most fashionable breeding, in harness and saddle show condition. Prices low. Write for particulars or come.

M. H. COCHRANE,

Hillhurst Station, Que.

483

SHORTHORNS.

SHORTHORNS



LINTON LUSTRE - 18425

Young bulls and heifers of finest Booth breeding always on hand at reasonable prices. Write for particulars.

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For Sale—Choice young cattle of both sexes of the most select breeding. Also young Berkshire pigs from sows selected from the herd of J. C. Snell, Edmonton, Ont. Write for prices. **W. WARD,** Birchton, Quebec. Farm one-half mile from station, C.P.R.

- FOR SALE -

We have yet on hand Two Very Fine Bull Calves, about twelve months old, one from an imported Cruickshank cow, the other a Matchless, and both sired by (Imp.) General Booth (54353).

W. J. BIGGINS,
Elmhurst Farm, CLINTON, ONT.

"THE BRIARS"

SUTTON WEST, ONT.



I have a number of exceedingly well-bred horses and colts on hand of Norland, Veteran, Clear Grit, Royal Revenge, and other blood, which can be bought on advantageous terms. If you want really good registered Shorthorns, I can supply these as well. Now is the time to buy.

F. C. SIBBALD,
J. CARSON, Agent, Yorkton, Assa.

631

SIMMONS & QUIRIE

Shorthorns and Berkshires.

The herd is headed by the Matchless bull, Royal Saxon =10527=, by Excelsior (Imp.) =2693=(51233), with Barmpton M. =18240=, sired by Barmpton Hero =724=, as reserve. Among the females are representatives of the Strathallans, Minas, Golden Drops, Mystes, Elvira—all pure Scotch breeding, except the Elvira, which are Scotch crosses. The herd of Berkshires includes many prize-winners, and are an exceedingly good lot.

Farm 7 miles from Iderton Station, G.T.R. Stock of all kinds for sale. Apply to

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One Year Old. Fit For Service.

Was awarded first prize as a calf at Markham Fall Fair, 1895, beating the third-prize calf at Toronto.

Several Young Heifers

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CHOICE Shorthorn BULL CALVES

By same sire as

SCOTTISH LEADER, Winner of First Prizes

Toronto, Montreal, and Ottawa. If you want a really fine animal, good color, fit for service, see these.

JOHN DAVIDSON,

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PINE GROVE STOCK FARM.
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Special bargains on young bulls of superior merit and select Scotch breeding. Also thick young heifers at the right prices. Two imported Cruickshank Bulls for sale; also Ayrshires, Jerseys, Shropshire Sheep, and Clydesdale Horses.

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North Nation Mills, Que.

Ayrshires, imported and homebred; herd headed by Imported **Tam Glen 2nd**, No. 1310 D. A. H. B. **Jerseys** all of the celebrated St. Lambert family; herd headed by **Lisgar Pogle of St. Anne's 25704** A. J. C. C. **Berkshire Pigs**. Young stock of all the above breeds for sale. Post Office, Telegraph Office, and Railway Station, North Nation Mills, P.Q., on the C.P.R.

A. E. SCHEYER, Manager.

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FOR SALE



Six young Bulls twelve months old and under, and all the Heifers you want bred any way you wish from different strains of blood in Imported and Homebred Cows. Come and see them or write.

H. CARGILL & SON,

Station on Farm.

Cargill Station and P.O.

FOR SALE Shorthorns, Berkshires
Southdowns and Leicesters.

Seven choice bull calves and six heifers, three young boars and five sows, also a fine lot of sheep of all ages and both sexes.

WRITE ME, OR
COME AND SEE.

532

H. B. JEFFS, Bond Head, Ont.

**ARTHUR JOHNSTON
GREENWOOD, ONT.**



Offers for sale a very choicely bred lot of prime young

Shorthorn Bulls

and heifers in the finest show form; also Registered Berkshire pigs of the best strains. Send for Catalogue. "No business, no harm," is our motto.

Claremont Station, C.P.R. Pickering Station, G.T.R.
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4 Grand Young Shorthorn Bulls 4

Twenty heifers of finest quality and best Scotch breeding. Sired by the greatest living Cruickshank bull, Sittyton Stamp (66368). Also a few high-class Welsh ponies. Prices low. Write us. 497

JOHN MILLER & SONS, Brougham, Ont.

H. I. ELLIOTT

Breeder of Scotch Shorthorns and Southdown Sheep
Imported King James at the head of herd.

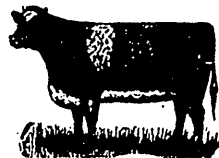
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Riverview Farm, Danville, Que.

**Cherry Grove
Stock Farm**

We have for sale this year seven choice young bulls and a number of heifers, sired by our stock bull, **Royal Lavender**, by **Indian Chief (imp.)**. These are of superior blood and qualities. This cut is a representation of our herd.

Call or write.



JOHN MORGAN & SONS,

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FOR SALE, 3 choicely bred **SCOTCH SHORTHORN BULLS** from 12 to 18 months old. Good colors and good animals, at prices and terms to suit purchasers.

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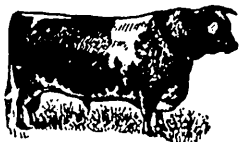
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It cuts both ways, does not crush. One clip
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DEHORNING
KNIFE

SHORTHORNS.

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Importer and Breeder of
**Cruikshank and Campbell
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A number of splendid cows and heifers and seven young bulls from Royal Gloucester; also a grand lot of Minas, and four of the Fanny B. sort, for sale on very reasonable terms.

R. R. Sangster, - Lancaster, Ont.

HEREFORDS.

**Ingleside
Herefords..**

THE BEST ALWAYS CHEAPEST

**CHOICE BULL CALVES
FOR SALE**

**YORKSHIRE AND TAMWORTH
SWINE**

All Ages and the Right Sort.

Satisfaction **H. D. SMITH, Ingleside Farm,**
Guaranteed.. 536 **Compton, Que.**

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**BRAMPTON JERSEY HERD
A.J.C.O. OF CHOICEST STRAINS**

For sale, a grand yearling bull, Rhoda's Son of Brampton, a prize winner, and from first-prize stock. Also, registered bull calves and high-grade cows and heifers. Sir Ollie heads the herd.

B. H. BULL & SON, 544 Brampton, Ont.

FOR SALE—Pure St. Lambert Yearling Bull, \$40.
Also purebred and high-grade cows and heifers bred to Sir Ollie.

JERSEY COWS AND HEIFERS.

The highest testing strains.
Rich breeding and good colors.

454 **ALSO TAMWORTH PIGS.**

JOHN PULFER, - Brampton, Ont.

**THE MANOR FIELD FARM
OF JERSEYS**

Combines blue blood with vigorous constitutions and undeniable dairy qualities. The St. Lambert bull, Kaiser Fritz 21173, bred by D. S. Dodge, Connecticut, U.S., heads the herd. Write or prices on young stock.

548 **WILLIAM BACON,** Orillia, Ont.

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AYRSHIRES.

AYRSHIRES FOR SALE

Six young bulls, fit for service; also a choice lot of young calves from deep milkers, sired by White Prince II. and Earl of Percy; bred by J. H. Douglas, Warkworth, and a few cows and heifers at prices to suit the times.

F. W. TAYLOR,

576



Wellman's Corners, Ont.
Hoard's Station, G.T.R.

AYRSHIRES

—OF THE—
RICHEST MILKING STRAINS

—AND THE—
CHOICEST BREEDING

ARE KEPT AT THE GLEN FARM.

YOUNG BULLS AND HEIFERS FOR SALE

531

WHITESIDE BROS.,

Correspondence solicited.

INNERKIP, ONT.

MAPLE CLIFF STOCK AND DAIRY FARM

AYRSHIRE CATTLE, BERKSHIRE AND TAMWORTH SWINE. Our herd is headed by the grandly bred Gold Ring 1387, from Nellie Osborne (imp.) 2018. We have still three young Bulls for sale, and young Pigs of both breeds.

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Sydenham Farm, Oshawa, Ont.



**AYRSHIRE CATTLE LEICESTER SHEEP
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Four Young Bulls from prize-winning stock now for sale. Closely related to winners at the World's Fair. Write for particulars.

757

AYRSHIRES

Always for sale. Some choice young bulls and heifers bred from the Glenhurst herd.

John Sandilands, Williamstown, Ont. 852

FOR SALE

Choice young Ayrshires, of both sexes, sired by imported bulls Silver King and Glencairn. Write, or come and see them.

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Maple Cliffe Herd of Ayrshires

NOTED PRIZE WINNERS—Choice quality and heavy milking families. Exceptionally choice young animals of both sexes for sale at prices to suit the times.

Apply to

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Among the young stock now for sale is Lord Stirling, that won 1st and Diploma at Sherbrooke, and 1st at Montreal. Also Dalny Lad, 1st at Sherbrooke and a winner at Montreal. Other choice animals from prize winners. For pedigrees, etc., write

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Isaleigh Grange Stock Farm

OUR STOCK OF PUREBRED
**AYRSHIRE AND GUERNSEY CATTLE,
 SHROPSHIRE SHEEP, AND
 IMPROVED YORKSHIRE SWINE**

are now in the pink of condition, and having at our recent annual auction sale disposed of a lot of our surplus stock we are better prepared to attend to our correspondents. Our list of prizes, medals, and diplomas, together with the gilt-edged Stock which have merited the honors granted them at all the leading exhibitions, places Isaleigh Grange Stock Farm at the head of all competitors. Our farm is 7,000 acres in extent. Visitors will be welcomed at all times. Correspondence invited.

J. N. GREENSHIELDS, Proprietor.

T. D. McCALLUM, Manager.

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DANVILLE, - - QUEBEC.

Imported Ayrshire COWS and HEIFERS

... FOR SALE ...

I will offer for sale my herd of AYRSHIRES, including my imported heifers

Alice of Hatton, Violet of Park, Fair Queen, Imp., Miss Bonnie Doon, two heifers from Fairy Queen, also heifer calf, dam, Alice of Hatton, bull calf, dam, Violet of Park, both calved about 1st October, 1895, and a number of yearling and heifer calves sired by Dominion Chief, also two purebred Short-horn yearling heifers sired by Gibson Duke.

Write for prices and particulars. . . .

JOHN H. DOUGLAS,

WARKWORTH, - - ONTARIO.

PARK HILL HERD

OF AYRSHIRES



Young Stock of both sexes for sale from the best milking strains.

For pedigrees and full information address

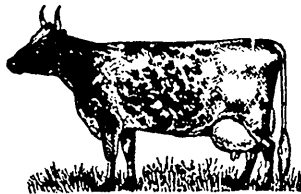
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PETITE COTE, - - QUE.

Woodroffe Dairy AND Stock Farm

OTTAWA, CANADA.

Ayrshires
 Clydesdales
 Yorkshires



Breeding with special regard to producing the best dairy cows enables me to furnish the most profitable animals to purchasers. I have now a number of Prize-Winners for sale. Address

J. G. CLARK, Proprietor, OTTAWA.

CHOICE AYRSHIRES OF DEEP MILKING STRAIN Largest and Oldest Herd in Canada,

Headed by Leonard Meadowside, prize-winner at Chicago, Ottawa, and Gananoque. Shropshire sheep and choice Berkshires.

Visitors met at Queen's Hotel, Carleton Place.

Give us a call before buying elsewhere.

J. YUILL & SONS.

Carleton Place.



◀ ◀ AYRSHIRES ▶ ▶

Purebred, of different ages and both sexes. No inferior animals. Write for particulars.

A. MCCALLUM & SON,
 Spruce Hill Dairy Farm. 566 DANVILLE, QUE.

Prize-Winning Ayrshires

Oxford Downs Berkshires

Ayrshires

This year my Ayrshires are exceptionally strong in young stock and they are all in fine shape. At the Toronto Fair just held I won first prize for herd of four calves under one year; also second and third prizes for bull calves under one year, and second and third for heifer calves under six months. An illustration of three young calves appears in FARMING for this month (page 87). My Ayrshires are all of the best milking strains.

Oxford Downs

In Oxford Downs I have a lot of choice stock of all ages.

Berkshires

My young Berkshire stock is all from prize-winning boars and sows.

Correspondence Solicited
 Satisfaction Guaranteed

A. Terrill, Wooler, Ont.

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**PUREBRED HOLSTEINS
AND
TAMWORTHS**

Carmen Sylvia, the sweepstakes cow over all breeds in milk tests at Toronto and Gananoque, was bred by me. Pieterije, Jewel, Sir Henry of Maplewood, and Mercedes strains. Catholine 5th's Sir Aggie Clothilde at the head of the herd. Tamworths from imported stock.

Brockville, on **THOS. DAVIDSON,**
G.T.R. and C.P.R. 577 Spring Valley, Ont.

HELBON STOCK FARM



Holstein-Friesians of the highest producing strains, founded on the best imported families of NORTH HOLLAND.

A few choice females of different ages and a yearling bull on hand at reasonable prices and easy terms. Also improve Large Yorkshires of Sanders Spencer and Walker-Jones' breeding. Also choice Oxford Down rams.

J. W. LEE, 809 **Simcoe, Ont.**

Holstein - Friesians

Choice young bulls and heifers, richly bred from BARTON, BARRINGTON, MERCEDES, and ARTIS strains. Prices reasonable.

807 **T. W. CHARLTON, St. George, Ont.**

HOLSTEIN-FRIESIANS

Purebred stock of all ages, male and female, of Netherland, Johanna, Moore, and Peel strains, for sale at lowest prices.
519 **JOHN MCGREGOR, Constance, Ont.**
Londesboro Stn.

GEM HOLSTEIN HERD.

SNAP, \$75 CASH Sir Archibald Mascot, 353, C.H. F.H.B., four years old, Oct. 8th, 1895, was never sick a day, is a splendid stock-getter, and is in every respect a first quality bull. We have used him as our stock bull with the very best results, only part with him to change breeding. Was a prize-winner three years in succession at Toronto Industrial Exhibition.

600 **ELLIS BROS.,**
Shipping Stn., Toronto. Bedford Park, Ont.

We have a number of

**Choice Young Holstein Bulls and Heifers
FOR SALE**

Price and quality must sell them!

Mostly sired by Stepkje 3rd Mink Mercedes Baron, a World's Fair prize winner.

Heifers and young cows bred to Sir Paul De Kol Clothilde, a milk and butter prince. His nineteen nearest relatives average twenty-two pounds of butter a week, and fourteen average 16,283 pounds of milk in one year. Write us for records of the dams of these young bulls. Four of our cows have won money in public tests (more to follow).

A. & G. RICE, Brookbank **Currie's P.O.,** Oxford
Stock Farm, County, Ont.

MAPLE HILL

HOLSTEIN-FRIESIANS

DeKOLS MECHTHILDES TIRANIAS
ABBEKERKS PIETERTJES MERCEDES
INKAS AAGGIES NETHERLANDS
ARTIS TENSSENS BARRINGTONS
AKKRUMS EMPRESS JOSEPHINES

Young stock of both sexes for sale. 550

G. W. CLEMONS, - **St. George, Ont.**

HOLSTEINS.

SPRING BROOK STOCK FARM
Holstein-Friesian Cattle and Tamworth Swine.

Though not on exhibition, owing to a trip to the Northwest, still the leading and most select herd in Canada. You cannot afford to invest before inspecting this famous herd. Write at once for prices.

A. C. HALLMAN,
Waterloo Co. 413 New Dundee, Ont.

POLLED ANGUS.

WILLOW GROVE STOCK FARM.



Breeders and Importers of highly-bred ABERDEEN ANGUS CATTLE AND SHROPSHIRE SHEEP. Choice young animals, PRIZE-WINNERS AT TORONTO and from noted first-prize stock, For Sale at Reasonable Prices. RAM AND EWE LAMBS from imported prize-winning stock, extra fine, equal to the best, for sale at bargains. **WILLIAM STEWART & SON,** Lucasville, Ont.

Oxford King.

SHEEP.

REGISTERED

SHROPSHIRE RAMS

Wholesale or Retail

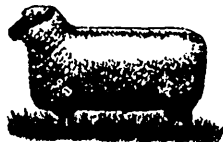
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T. C. PATTESON, P.M., Toronto.

OXFORD DOWNS

FOR SALE. — A fine lot of ram and ewe lambs, bred from imported sire and dams. Prices to suit the times.

SMITH EVANS,
491 **GOUROK, ONT.**
BREEDER AND IMPORTER



SHROPSHIRE

Our flock, one of the oldest established Shropshire flocks in Canada, was founded in 1887. Importations arrive from time to time, selected in person from best English flocks. Imported stock of both sexes for sale. Homebred January and February lambs by the typical Mountford Exile and English-bred ewes are also offered. **JAMES COOPER, JR.,** Appen, Ont.
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**FAIRVIEW
SHROPSHIRE.**

As my yearling rams and ewes have wintered remarkably well, I am now ready to book orders, guaranteeing to fill them from the best all-round lot ever offered by me. My rams are specially good, and with the excellent breeding of their sires and dams will not fail to prove valuable heading flocks. Inspection and correspondence invited.

JOHN CAMPBELL,
606 Fairview Farm. **WOODVILLE, Ont.**

ON account of the Death of R. L. BURGESS, his entire stock of registered Southdown Sheep and Berkshire Swine will be sold. Apply early. Mrs. R. L. BURGESS, Burgessville, Ont. 842

SHEEP.

McDOUGALL'S SHEEP DIP . .

And Cattle Wash. Non-poisonous, and reliable. Mail orders promptly supplied. Imported and for sale by

S. E. STONE,
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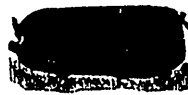
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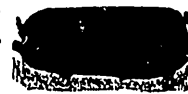
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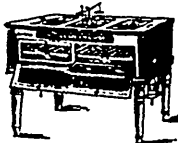
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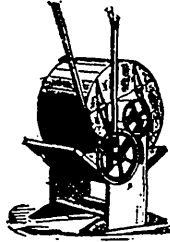
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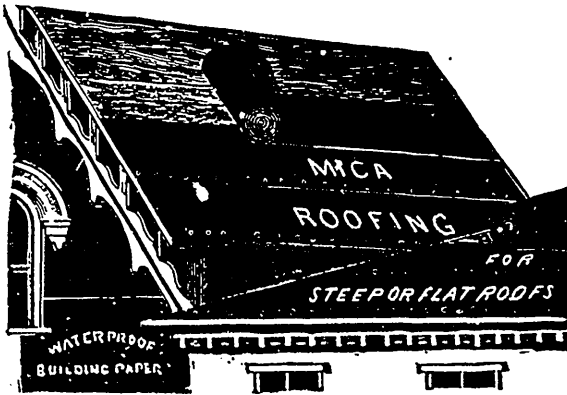
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DAVID McCRAE, Janefield, Guelph, Canada, Importer and Breeder of Galloway Cattle, Clydesdale Horses, and Cotswold sheep. Choice animals for sale. 630

AYRSHIRES.

J. McCORMACK, Rockton, Ont., Breeder of Ayrshire Cattle, Toulouse Geese, and Colored and Silver-Gray Dorkings. 629

W. M. & J. C. SMITH, Fairfield Plains, Ont., Breeders of World's Fair prize-winning Ayrshires, Merino Sheep, Poland-China Pigs, and Poultry. Stock for sale. 526

W. F. & J. A. STEPHEN, Brook Hill Farm, Trout River, Que., Breeders of Ayrshire Cattle and Yorkshire Pigs. Young stock for sale at reasonable prices. 635

WALTER NICHOL, Plattsville, Ont., Breeder of Ayrshire Cattle and Leicester Sheep. Choice young stock for sale. 527

JERSEYS.

WM. ROLPH, Glen Rouge Farm, Markham, Ont., Breeder of Jersey Cattle. Herd nearly all pure St. Lambert. Young stock always for sale at reasonable prices. 708

E. P. BALL, Rock Island, Que., Breeder of Standard-bred and Roadster Horses, St. Lambert Jersey Cattle, and Shropshire Sheep. 766

D. H. KITCHESON, Menie, Ont., Breeder of A. J. C. C. Jerseys, Shropshire Sheep, and Berkshire Pigs. Stock for sale. Hoard's Station (G.T.R.). 737

WM. WILLIS, Pine Ridge Farm, Newmarket, Ont., breeder of St. Lambert Jersey Cattle, also Cotswold Sheep, registered. Stock always for sale. 855

DOBT. REESOR, Locust Hill, Ont., Breeder of Jersey Cattle and Shetland Ponies. Young stock for sale at reasonable prices. Locust Hill is 20 miles from Toronto on the C.P.R. 744

J. H. SMITH & SON, Willow Grove Farm, Highfield, Ont., Breeder of St. Lambert and St. Helen's Cattle. Prize herd at the last Industrial. Young stock for sale. 702

HOLSTEINS.

E. PANNABECKER, Fairview Farm, Hespeler, Ont., Breeder of Registered Holsteins. Stock for sale. 720

WM. ARMSTRONG, Locust Hill, Ont., Breeder of Purebred and High-Grade Holstein Cattle. Stock for sale. 694

JOHN A. RICHARDSON, South March, Ont., Breeder of Holstein-Friesian Cattle, Dorset Horn Sheep, and Tamworth Swine. All registered. 745

DEVONS.

W. J. RUDD, Eden Mills, Ont., Breeder of Devon Cattle, Cotswold and Suffolk Sheep, Berkshire Pigs, Plymouth Rock Fowls, and White Turkeys. 740

SWINE.

R. J. LAURIE, Wolverton, Ont., Breeder of Tamworth Swine, Toulouse Geese, Rouen and Aylesbury Ducks. Stock for sale. 840

FOR the finest Tamworth Swine correspond with H. FEARMAN, Hamilton, Ont. 625

W. H. O'DELL, Belmont, Ont., Breeder of Registered Tamworth Pigs. Stock for sale. 738

COLLIE DOGS, Tamworth Swine, Duroc-Jersey Swine, Oxford Sheep, Bronze Turkeys, Toulouse Geese, Pekin Ducks, and Buff Leghorns. A. ELLIOTT, Pond Mills, Ont. 618

M. E. STRATFORD, Brantford, Ontario, has twenty very fine thoroughbred Tamworth and Improved Chester sows, just now ready for service. Prices right. 802

J. O. FRASER & SON, Fellows, Ont., registered Duroc-Jersey swine, bred, and for sale. 856

SHEEP.

JAS. P. PHIN, The Grange, Hespeler, Ont., breeding and importing Shropshire Sheep a specialty. 736

A. TELFER & SONS, Paris, Ont., Breeders and Importers of registered Southdown Sheep. Stock for sale. 670

JNO. A. MCGILLIVRAY, Q.C., Jerseyville Farm, Uxbridge, Ont., Breeder and Importer of Dorset Horned Sheep, Jersey Cattle, and Tamworth Pigs. 494

JOHN JACKSON & SONS, Abingdon, Ont. Southdown Sheep. Champion flock at World's Fair. Awarded 20 prizes—10 firsts. 628

JOSEPH STRATFORD, Brantford, Ontario, has twenty beautiful thoroughbred Dorset rams, one, two, and three shear. Prices right. 803

D. A. CAMPBELL, Mayfair, Ont., Breeder of registered Lincoln Sheep. 600

W. H. BEATTIE, Wilton Grove, Ont., Breeder and Importer of Shropshire Down Sheep, Collie Dogs, and B. and W. Turkeys. 607

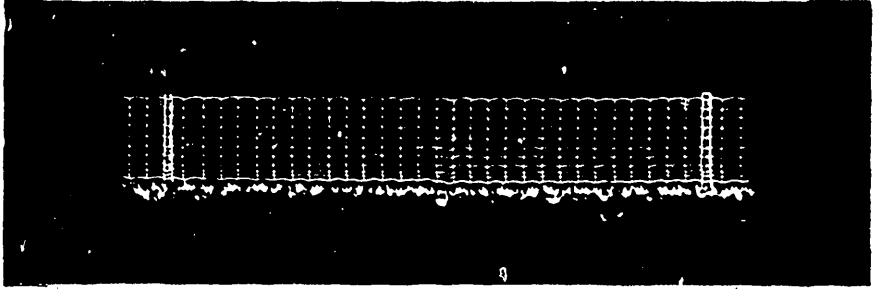
POLLED ANGUS.

WALTER HALL, Washington, Ont., Breeder of registered Polled Angus Cattle of the choicest strains. 562

JAMES BUCHANAN, Napier, Ont., breeder of registered Aberdeen Angus Cattle. Choice young stock by Lord Forest for sale.




Page Fence at the Fairs

We shall have an exhibit this year at nearly all the Fairs, and we trust that every farmer not already using the Page Fence will call and see it for himself, and also get one of our handsome new catalogues (containing over twenty half-tone engravings), which can be had free for the asking.

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624

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20 Bay Street, Toronto, Canada.

FARMING

for November
December
January

"FARMING" for 1896-97 will be the finest and most attractive agricultural monthly magazine ever published.

We have received showers of compliments from our exchanges in favor of our September number. We will leave it to our readers if these compliments were not deserved.

We venture to believe that the present October number of "FARMING" is the most attractive single issue of an agricultural publication ever issued on the continent.

The November Number

The November Number of "FARMING" will contain a Special Article on **"THE FARMERS' INSTITUTE SYSTEM OF ONTARIO."**

This article will contain a full account of the working of this magnificent system which in the year ending June 30, 1896, held 666 meetings, at which 102,461 farmers and people connected with farming attended, and at which 2,637 papers were read or addresses given that were of special interest to farmers, and at which forty-five of the most practical and successful farmers to be found in Canada were employed as special delegates to meet with their brother farmers and discuss with them matters of practical interest to farmers. **Every farmer in Canada should read this article.** It will be copiously illustrated.

Other Special Features for November

will be

1. An article entitled **"COLD STORAGE AND RAILWAY AND OCEAN TRANSPORTATION OF FARM AND DAIRY PRODUCTS."** By James M. Douglas, D.D., M.P. for Eastern Assiniboia, Chairman of the House of Commons' Special Committee on Agriculture.

This question is the burning question of the day—at least so far as farmers are concerned. Dr. Douglas has made himself thoroughly familiar with the question, and his presentation of the subject should be read by every farmer in Canada.

2. An article on **"THE BEEF TRADE OF CANADA, Its Possibilities, its Needs and its Difficulties; with special reference to our Quarantine regulations and the free interchange of new blood between Canadian and American herds."** By D. McCrae, Guelph.

This article will be of the most timely character. The maintenance of the high character of our herds is of prime necessity to the stockbreeder and farmer. Mr. McCrae's knowledge of the situation is complete, and his opinions will be read with the deepest interest by everyone engaged in stock-raising.

3. The Great Fair at Ottawa, 1896

The Canada Central Exhibition, Ottawa, this year, was one of the most successful fairs ever held in Canada.

We have arranged to have a special account of it from the stockbreeders' point of view, and the account will be illustrated by some magnificent illustrations of the stock exhibited.

4. The Feeding, Care, and Management of Dairy Cattle

By George Harcourt, B.S.A.

This will be a very practical article, showing how a herd of common cows can be turned into a profitable, milk-producing, improved dairy herd. It will be an article that every farmer who wishes to make money out of his cows should carefully read and study.

The November Number will also contain a host of other interesting matter.

DON'T FORGET the Special O.A.C. Article

Which will appear in the **December** number; or the **Special Article** on the work which is being done for Canadian Agriculture by the Dominion Government, which will appear in the **January** number.

(For further particulars regarding these articles see our announcement in September.)

FARMING

For November
December
January—Continued.

In addition to the O.A.C. article above mentioned, we propose to make our **December number**

A Special Swine Number

Numerous articles, written from the **farmer's standpoint**, on the breeding, feeding, care, and management of swine, will be given. These articles will all be by **practical Swine Breeders**—by farmers engaged in the everyday work of raising hogs for our home markets. All the different breeds of swine raised in Canada will be **illustrated by photographs of typical animals**; and **portraits** of some of the choicest and most renowned prize-winning hogs will be given, with descriptions of the methods taken by their owners to breed them and fit them for showing. **Portraits also of a number of our leading swine men** will be given, and, altogether the article will be one of great practical value and timely interest.

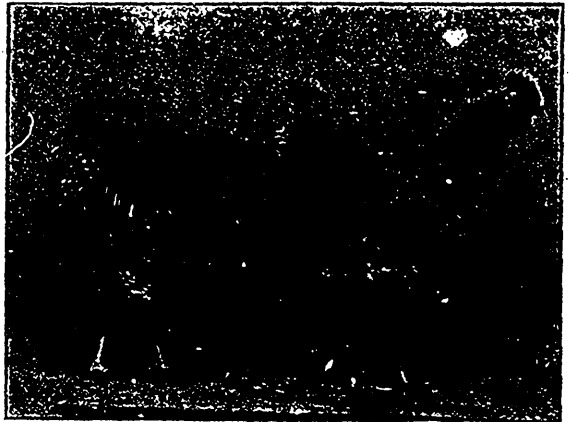


The above portrait represents a purebred sow of a standard breed, bred by a well-known Canadian breeder. Many such portraits will appear in our January number.

In addition to the article on "The Work done by the Dominion Government for the Advancement of Agriculture," we propose to make of our **January number**

A Special Poultry Number

Poultry-keeping constitutes a means of profit-making to the farmer that costs but little to begin with, and can be carried on quite extensively with but little outlay of money; it is always certain in results, and it never fails to interest every member of the farmer's household, male and female. In our January number we shall have a **series of articles on poultry-raising**, written from the farmer's standpoint, showing how to breed fowls, how to raise them, how to feed and attend to them, and how to market their products. The various breeds of fowls suitable for farm use will be described and **illustrated by portraits of typical specimens**. Portraits also of prize-winning birds will be given, and their points described. The practical experience of successful poultrymen will be detailed for the instruction of beginners; and the experience of farmers and others who have used brooders and incubators will be given. Portraits of a number of the distinguished poultrymen of the Dominion will be inserted, accompanied by sketches of the work done by them, and the successes they have achieved.



Many portraits of poultry will appear in our January number.

STANDING OFFER

To present subscribers of **Farming** only. If you will obtain for us a **new subscriber**, and send us his subscription (\$1.00), we will advance your own subscription **six months**. If you will obtain **two new subscribers** for us, sending us \$2.00, we will advance your own subscription **one year**.

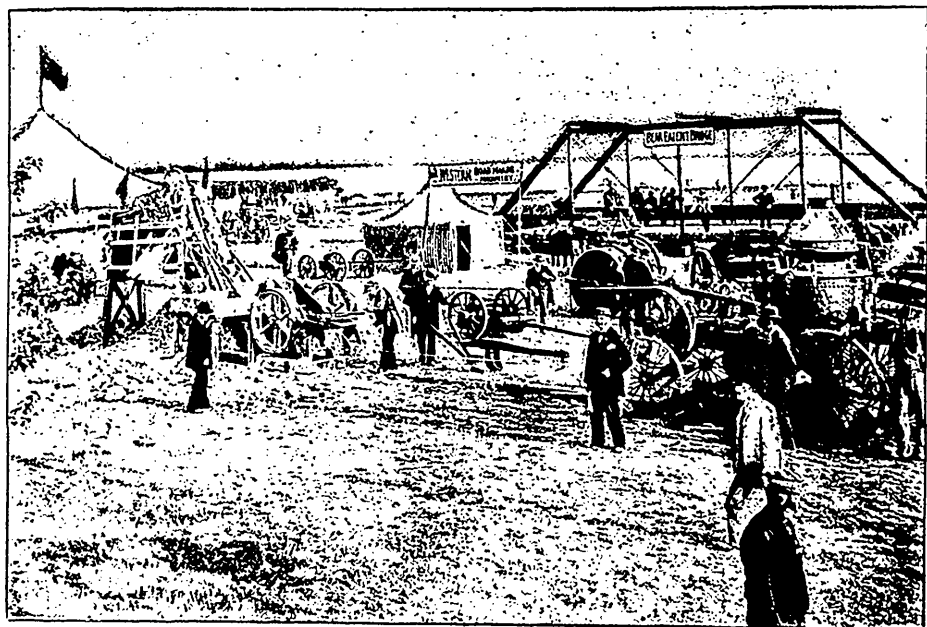
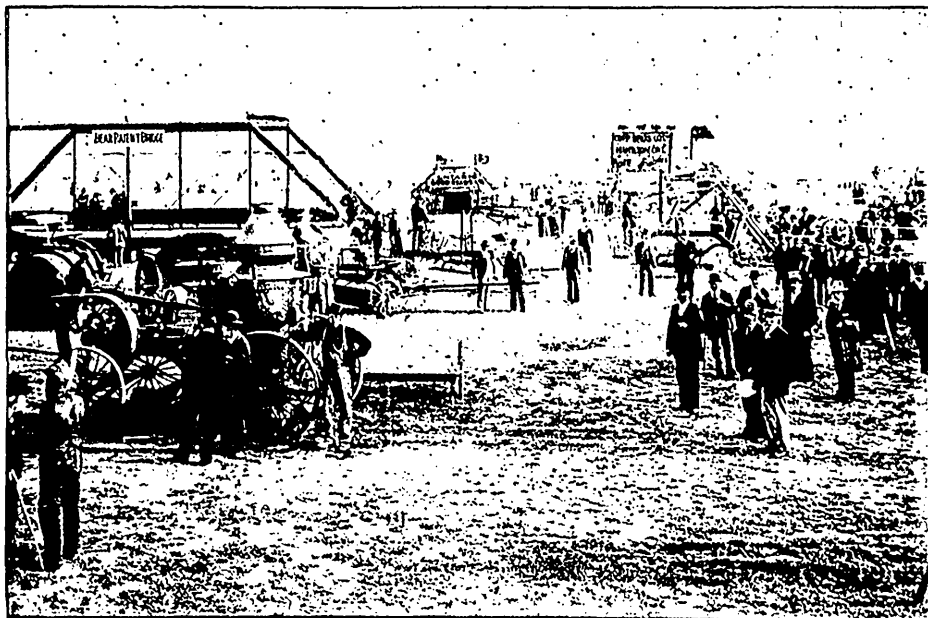
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TORONTO, CANADA.



The Ontario Good Roads Association Exhibit

At the Toronto Industrial Exhibition, 1896. The upper view represents the western half of the exhibit; the lower view the eastern half. The tent of the Association, which during the exhibition was occupied by Captain Sheppard, the director-in-charge, and other officers of the Association, is seen in the background of the upper view. Captain Sheppard is himself in the foreground of the upper view. For further information respecting the exhibit see our special report in this issue of FARMING.

FARMING

Vol. XIV.

OCTOBER, 1896.

No. 2

METHODS OF BREEDING SHEEP, AND BENEFITS OF BALANCED BREEDING.

By JOHN A. CRAIG, B.S.A., Professor of Animal Husbandry, University of Wisconsin, Madison, Wisconsin; formerly Editor of *The Canadian Live Stock and Farm Journal*.

J. A. CRAIG is Professor of Animal Husbandry in the University of Wisconsin, and has charge of the live stock belonging to the Agricultural Experiment Station of that State, and of the breeding and feeding experiments connected therewith. He is a Canadian in birth, family connections, and education, having been born on Christmas day, 1868, in the county of Russell, Ont., where his father is a well-known merchant, farmer, and dairyman.



In 1885, at the age of seventeen, Mr. Craig entered the Ontario Agricultural College, and remained there three years, receiving the degree of B.S.A. from the University of Toronto in 1888, being one of the first class of the college to receive that degree. His course at the college was very distinguished, and on graduation he enjoyed the utmost good will of the president and other members of the faculty, who one and all predicted that his subsequent career would be a most brilliant one. For a year he was assistant editor of *The Canadian Live Stock and Farm Journal* (the predecessor of *FARMING*), and in August, 1889, on its removal from Hamilton to Toronto, he was appointed its managing editor. He remained in charge of *The Journal* until 1891, when, upon the recommendation of President Mills, he was appointed to the position upon the staff of the University of Wisconsin and State Agricultural Experiment Station which he now holds. As an editorial writer Mr. Craig was fertile in ideas and suggestions, and took strong ground in favor of live stock raising, and especially dairying and sheep and swine breeding, as the profitable industries for Ontario farmers. In his work at the Experiment Station in Wisconsin Professor Craig has taken special interest in sheep, and is already considered an authority on sheep matters throughout all the sheep-raising states. His teaching is thoroughly practical, and his students work with him everywhere—on the farm, in the college stables and

pens, and in the stables and pens of neighboring farmers, wherever useful lessons are to be gained. As a result of this practical work his students become thorough stockmen, a statement that is evidenced by the fact that this year students who have completed their courses under him are acting as single expert live stock judges at no less than thirty-seven county fairs.

The breeder of purebred sheep, in establishing his flock, may choose to follow in-and-in breeding, line breeding, or out-crossing, and for another method that has not been named I shall use the term "balanced breeding." While these methods may be said to limit the choice of the flockmaster who has the care of registered flocks, there is wider scope for the farmer in making a choice, as he may also include crossbreeding. It will be more satisfactory, then, to discuss the methods of breeding singly from the standpoint of the

breeder, and again from the point of view of the farmer who is rearing sheep for the general market.

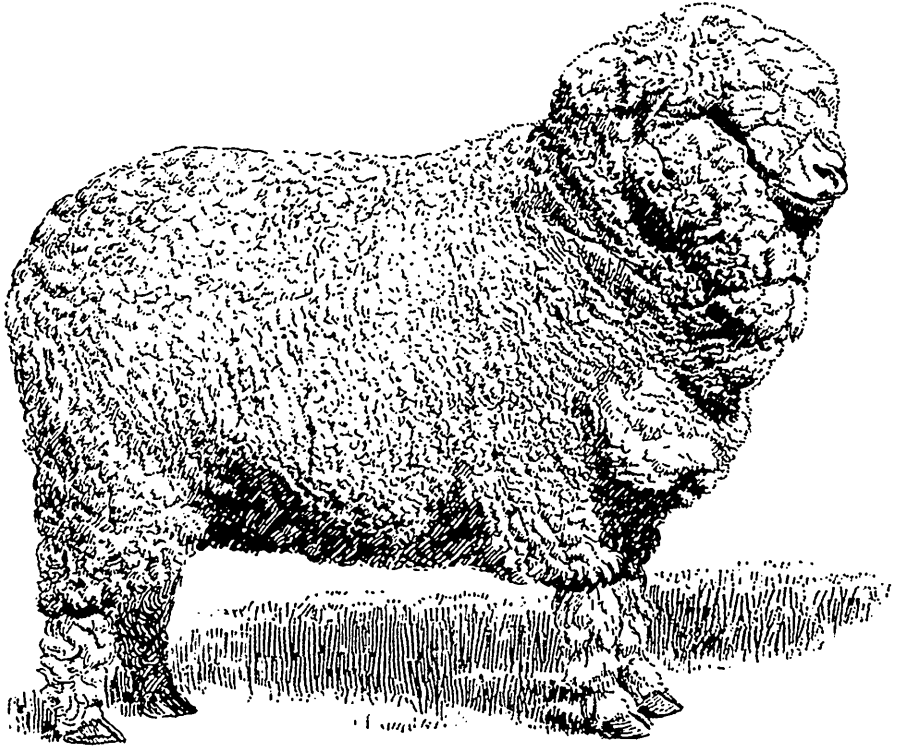
WHAT IN-AND-IN BREEDING IS.

In-and-in breeding should be defined before it is discussed, and yet it is the difficulty in doing this that has caused the copious controversies that have been published. A definition has been put forward to the effect that in-and-in breeding is mating animals that are as closely related as

cousins. If this understanding of in-and-in breeding is accepted—and it has to be so treated because of the need of a better one—it will be found to include the mating of the following relationships: sire and daughter, son and dam, brother and sister, half-brother and half-sister, grandsire and granddaughter, uncle and niece, nephew and aunt, grand nephew and grand aunt. This definition seems to embrace too much, and it is this general application of the term that has been the cause of much misunderstanding. For instance, when sire and daughter are mated the

that followed its usage at an early time were due, to some extent, to the new material that the breeders found available, and also, in a greater degree, to the fact that they were exceedingly cautious in the selection of the animals that they so mated.

It may be said in brief that the beneficial effects of in-and-in breeding are that it is of material assistance in evolving and maintaining a type; it intensifies characteristics, and it is conducive to quality. It does not follow with surety that because animals are related that they are of



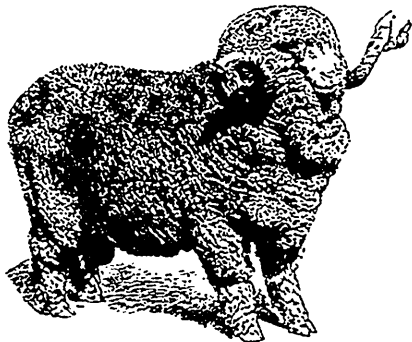
Grace, the property of Alex. Murray, of Mount Crawford, Adelaide, South Australia. Grazed on natural grasses only; neither fed nor housed. Winner of many cups and prizes as champion ewe at the Royal Shows, Adelaide. Grace was bred in a direct line for fifty years without change of blood.

relationship is very much closer than when half-brother and half-sister are bred to each other; and yet if the mating of the former has been found to result injuriously the other is included in the general condemnation, because it also is in-and-in breeding, though there is a wide difference in the methods.

The vast variation that there is in the forms of in-and-in breeding may in a large measure explain the fact that both successes and disappointments have followed its observance; though there is every reason to believe that the good results

similar type. Oftentimes brothers and sisters illustrate extremes in appearances; but it is none the less true that there is likely to be more similarity between animals that are closely related than between those that are distantly so. It is this liability to variation, even among close relations, that keeps the principle of selection to the fore without any respect to the method of breeding that is followed. In the evolution of a new breed of sheep, in-and-in breeding is a necessity, for the purpose of fixing a type from diversified material, and to strengthen characteristics so

that they may be prepotent over all other influences; hence, in the establishment of all the breeds of sheep, there was a time when in-and-in breeding was absolutely necessary, and the breeders, in making the breeds, had to follow it. In reference to the comment that in-and-in breeding is the road to quality, there is no doubt as to its effectiveness in that direction, but it is usually a refinement that indicates weakening of the constitution. A thin skin, light bone, and fine hair are the evidences of such quality, and these are indicative of a lack of constitution.



Jacob, the property of Alex. Murray, of Mount Crawford, Adelaide South Australia, whose flock has been line bred for over fifty years. Grazed at large on natural grasses only; neither fed nor housed. Winner of many cups and prizes as champion ram at the Royal Shows, Adelaide.

INJURIOUS RESULTS FROM CLOSE IN-AND-IN BREEDING.

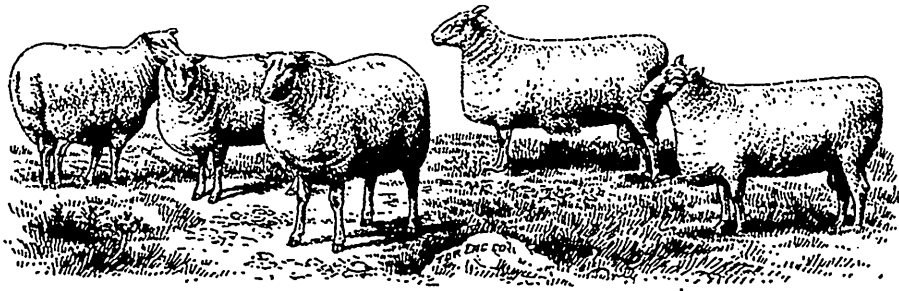
The injurious results that follow close in-and-in breeding are tendencies towards weakness of constitution and all the disfigurements in appearance that this implies, together with infertility. In my estimation, these are the source of the most baneful troubles that may reduce a flock. Weakness in constitution means the most favorable conditions for the introduction of all diseases that sheep are likely to have. To indicate how susceptible in-and-in bred animals are to defects and diseases, let me cite one instance that has oc-

curred in my experience. A ram of excellent type was used on grade ewes. The best ewe lambs were retained, and, owing to force of circumstances, these were bred to their sire. A defect in the ram that had escaped me asserted itself in the second generation. The ram was slightly crooked in his hind legs, and the lambs in the first generation failed to show their defect, because of the counter influence of the ewes; but in the second generation, the lambs, when quite young, were so deformed and weak in their hocks that they were almost helpless.

The earliest sheep-breeders, Bakewell, Ellman, and others, who are frequently quoted as followers of in-and-in breeding, in their flock operations were compelled to breed in-and-in, or else permit their flocks to recede through the use of inferior foreign blood. But even they were unable to avoid the dangers, although the blood that they began with was fresh and vigorous. It is John Ellman's direct statement that fresh blood in a flock is absolutely necessary to keep up the constitution; as he said, "You may retain your good shape and aptitude to fatten, but by breeding too long in-and-in you will lose that strength of constitution which in Southdowns especially, after all, is that which has spread them over the whole kingdom and has made them so valuable." The Duke of Richmond also added to the same discussion the remark that whenever in-and-in breeding had been tried in his flock he found the produce deficient in size and constitution.

EFFICIENCY OF LINE BREEDING.

It remains to be said of in-and-in breeding that its advantages can be secured and its injurious tendencies evaded. That the fixing of a type can be accomplished without close in-and-in breeding has been demonstrated by many flocks that are line bred. Line breeding is very similar to in-and-in breeding, except that relationship is wider. The uniformity of the ancestry evolves a type, and it gives prepotency, while the relation-

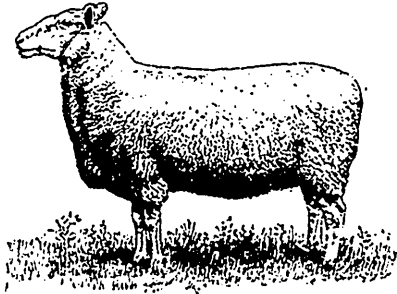


Group of Border Leicesters, representing the line-bred flock owned by Lord Polwarth, Mertoun, Scotland. This engraving, made from a painting, shows these sheep as they appeared in 1873, when a representative of this flock sold for £125, and the average made was £44 15s. 2½d. For over fifty years line breeding has been methodically followed in establishing this flock.

ship is so wide that the dangers of in-and-in breeding are avoided. It may be said that line breeding limits the range of selection, but, as a family of sheep includes so many individuals, it does not apply with much force to sheep-breeding. There is no doubt but that line breeding is the most generally adopted system of breeding followed in the flocks of the world. I have been favored with the opinions of thirty-nine of the leading sheep-breeders of Europe, Canada, and the United States, and of these only five express a preference for fresh infusions of outside blood into their flocks, while the others follow line breeding.

SUCCESSFUL FLOCKS THAT ARE LINE BRED.

While there must be many superior line-bred flocks throughout the world, because of the large

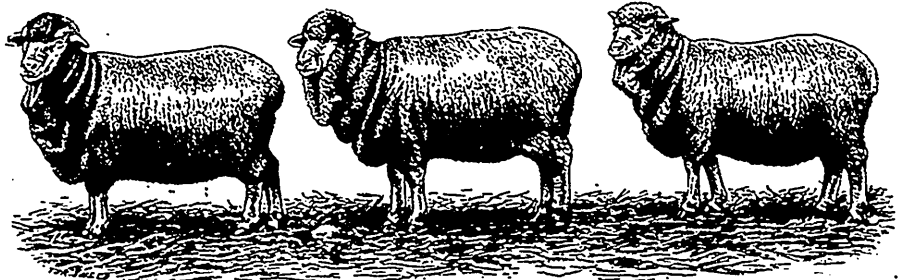


A Half-bred Leicester-Cheviot Ewe, representing the cross that is most popular in Scotland for rearing fat lambs from hill sheep. This ewe has been the winner of many prizes in her class. The property of Thomas Scott, Clifton Farm, Scotland.

number of prominent breeders that follow it in their practice, there are two that have particularly remarkable records, established because of pronounced adherence to this method of breeding. I refer to the large flock owned by the Murray Bros., in Australia, and the Border Leicester flock owned by Lord Polwarth, in Scotland. The first-mentioned flock was established fifty-four years ago, and since then no outside blood has been mingled with it. Mr. Murray, in addition to being a sage in sheep lore, possessed also sound and steady judgment, which he used in

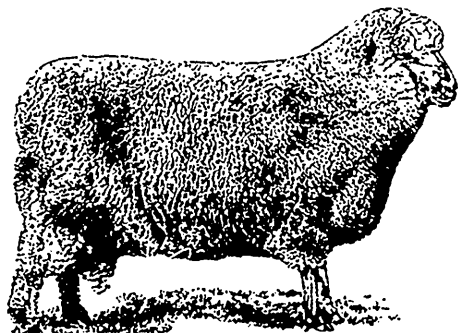
the selection and mating of his sheep. He recognized the danger of in-and-in breeding at the beginning of his operations, and he never failed to place the quality of constitution before all others in making his selections. He increased the weight and density and quality of the fleeces of his flock and the size of the carcasses, and made the type of his sheep pronounced. Between the years 1856 and 1885 he sold 18,459 stud rams, that realized £91,048, which of itself indicates the character of his flock. I have been favored with samples of wool from this flock, and also with photos of his sheep. I may say that the flock is never housed nor artificially fed; hence the size of the sheep and the character of the wool have their origin in the system of breeding that is followed. The wool fibre shows a remarkable combination of length, strength, fineness, and softness; while the fleeces are renowned because of their weight and density. While Mr. Murray's sheep are in-and-in bred to the extent that they are descended from one ram, yet the system that is followed is nearer to line breeding. A correspondent, who personally inspected the flock, states: "The rams are used in small paddocks singly, and a system of line breeding is followed with considerable judgment in the matter of mating a type of ram with a type of ewe to produce some desired characteristic in the progeny." The flock is made up of a number of different families, and these are blended, without the introduction of outside blood, so that the excellences that are desired are made apparent. As illustrative of the type of sheep that has been evolved, it may be said that several of the rams reared on natural pasture weigh over 200 pounds, and as further evidence of the constitution of the ewes I submit the photo of the champion ewe, Grace. She has been a winner many times.

Border Leicesters from the flock of Lord Polwarth first appeared in the sale ring in 1819, and since then they have attracted attention by the high averages that have been made. The highest



Merino Ewes, representing those in the flock used in cross breeding Shropshires and Merinos at the Wisconsin Agricultural Experiment Station.

price then paid was £7.10s. for a ram, and this has gradually grown, reaching £195 in 1873, £155 in 1890, and £150 in 1892. Hon. Henry Scott, in discussing the system followed in breeding this flock, makes the comment that there are natural laws that forbid the mating of very close relations, and then goes on to say that "it is this very system of line breeding that has brought the Border Leicester to its present high state of perfection." He says, further: "The Mertoun flock, I think, may claim to rank high among ram-producing flocks, and almost all leading breeders use Mertoun rams with success. None but homebred rams have been



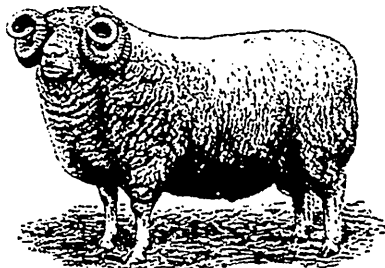
Purebred Shropshire Yearling Ram, used in the cross breeding experiments with Shropshires and Merinos at the Wisconsin Agricultural Experiment Station.

used at Mertoun for about fifty years, and no ewes have been brought in. The flock contains five leading families, besides numerous combinations of blood, and it is by crossing the various strains that it is found possible to carry on the system."

BALANCED BREEDING THE FOUNDATION OF ALL SUCCESSFUL SYSTEMS.

It is noteworthy that in the operations carried on with the Murray and the Mertoun flocks, as well as with others that have attained notoriety, there is an effort made to balance the characteristics of the sires and dams so that the progeny may possess uniform merit. This may be termed balanced breeding. It is a method of breeding in which all the qualities of the parents are so blended as to tend towards perfection in the progeny. It is based on the correct assumption that no animal is perfect, and that the nearest approach to perfection is obtained by mating animals in which the faults of the one are offset by the merits of the other. The occurrence of "nicks" in breeding has led the writer to study their origin as accurately as possible. The results seem to strengthen the claims of this method of breeding. It appears that in all classes of stock there are certain strains which, when brought together, have produced an unusually large number of remarkable animals. Their blood lines, in common

terms, are said to "nick." For purposes of brief illustration reference is made to the merit of the Cruickshank and Bates blending in Shorthorns. The former transmit to the latter some merits that they lack, and the reverse is also true. In trotting horses, the wonderful speed prolificacy of the Hambletonian Mambrino Chief or Morgan union is widely known. These strains more or less strengthen each other in temperament, conformation, and other qualities. The Clydesdale families, Darnley and Prince of Wales, have been the producers of a large number of exceptional animals, and it seems to have its origin in the way that they strengthen each other's weaknesses when the union is effected. The prolificacy of the Harold-Premier cross in prize-winning Shires is also well known, and among Hackneys a similar fact is observable in the unusual success of the Denmark and Fireaway blend. There are a multitude of instances of the truth of this principle (and they are common to all classes of stock), emphasizing the observance of balanced breeding, no matter what other system may come afterwards. To apply this in practice to a flock, we will suppose that the ewes that are to make the foundation for it have been selected as closely as possible to a chosen type. They have faults, as all sheep have, and the ram is selected to remove those faults as far as possible in the next generation. The young ewes are retained, and these also are mostly of a type showing uniformity in their weaknesses as well as in their merits. The ram



Purebred Imported Dorset Ram used in crossing Dorsets and Shropshires at the Wisconsin Agricultural Experiment Station.

that is mated with them has been selected to counteract those weaknesses. It is evident that each year brings the flock nearer to perfection, and the choice of a ram becomes a matter of closer discrimination, for the weaknesses should grow less evident with each remove. None the less, they always have some faults, as new ones are constantly appearing. If the rams first used are retained and bred to the foundation ewes as long as they remain in the flock, more uniformity may be secured as each successive step forward is made from the same basis.

As far as I have studied the methods that are available to the breeder of purebred sheep, the results are a preference for line breeding as far as pedigree is concerned, and, when the direct choice of individuals is made, then the requirements of balanced breeding are to be observed.

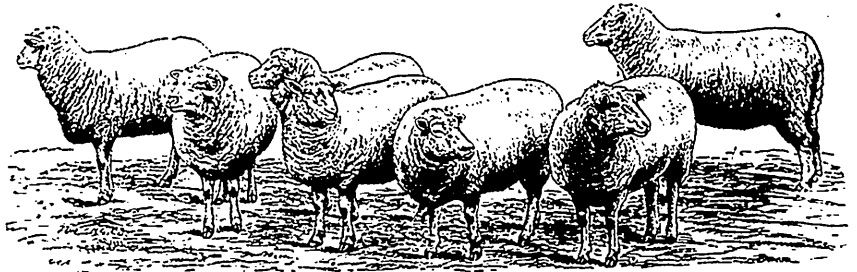
BREEDING METHODS FOR FARMERS' FLOCKS.

The ordinary flock of the farm consists of grade sheep employed in the production of wool and mutton for the common market. Under such circumstances it is possible to follow any of the systems of breeding that have been already discussed, as well as cross breeding. I shall present the subject of cross breeding not with the intention of recommending it as a system to be followed in ordinary flocks, but rather to use it as an argument in favor of the method which I have called balanced breeding. The effective reason why cross breeding cannot be recommended for adoption in the operations of the ordinary flock is that it is altogether too expensive, as it requires the purchase of a num-

fact about cross breeding, that supports the idea that it owes its excellences to its similarity to balanced breeding, is the fact that the first cross is usually more meritorious than any of the succeeding crosses. The reason appears to me to be because of the degree to which the weaknesses and the merits are made to blend. In the cross-bred progeny the extremes have met, and the result in the first cross is a remarkable uniformity of unusual merit. It seems to differ from balanced breeding only in the degree to which the qualities vary from each other. This being self-evident, I shall indicate what has been accomplished from cross breeding, so that it may lead to a better understanding of what may be expected from the observance of the principles of balanced breeding.

CROSS BREEDING IN GREAT BRITAIN.

In being the source of supply for so many different breeds of sheep, the flocks of Great Britain afford unusual facilities for cross breeding. Consequently the practice is quite generally followed



First Cross Dorset-Shropshire Ewes. Average weight of the seven two-year-old ewes shown in the engraving, 185½ lbs.; average weight of fleece, 20.3 lbs.

ber of animals that are purebred and of two distinct breeds.

THE SOURCE OF SUCCESSFUL CROSS BREEDING.

Cross breeding is the fusion of the blood of two distinct breeds. It is a fact that has been abundantly proved that cross breeding gives unusual vigor to the progeny. This feature is the most striking part of the experience of all who have made any experiments in this direction. Why it should do so must be largely a matter of theory, while the knowledge that it does do so is altogether a matter of fact. It seems to me that the increased vigor of constitution that it parts, and the excellence that it produces, are due to the same features that are common to balanced breeding. Cross breeding, to my mind, is usually so successful because there is a balancing of the defects of the representative of the one breed with the merits of the other, and the reverse also comes into play. Another noticeable

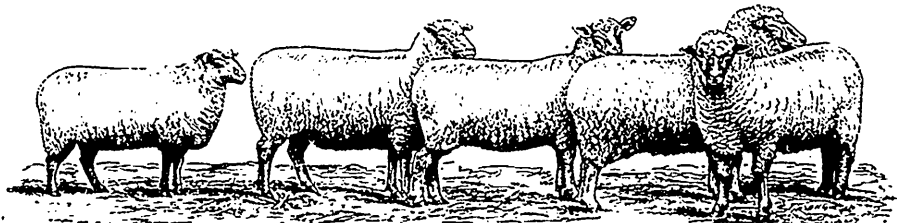
among the farmers of England and Scotland when the production of the best mutton is desired. The hill sheep of Scotland, the Cheviots and the Blackfaces, are brought south and bred to Leicester rams and others of the larger mutton breeds. This crossing for market purposes usually results in the production of a breed. Omitting but three or four of the breeds of sheep of Great Britain, it may be said that the remaining twenty or so have been made through cross breeding, in which either the Southdown or the Leicester has figured conspicuously.

Crossbred sheep at the Smithfield show in England have made a notable record. In 1887 the crossbred sheep shown at Smithfield stood third in the daily rate of gain, with .73 lb. to their credit, while the 'highest was .76. In the class for wethers the same year, the crossbred wethers made a daily gain of .47 lb., which was only excelled by another pen that had made an average daily gain of .54. In the class

for fat wether lambs in 1889 the best crossbreds made a daily average gain of .67, which was surpassed by three other pens. The crossbred wethers over twelve months averaged .43 lb. per head daily, which was beaten by seven other pens, representatives of the purebred sheep. In 1890 the crossbred sheep held a very inferior position, except in the class for twelve months old or over, where their gain of .49 per head daily was only beaten by the .52 lb. daily gain of the winners. In 1891 the crossbred wether lambs that were shown were at the head of the list in daily gain, as they made .79 lb. per head. In the other class, for older wethers, they stood fourth with a daily gain to their credit of .48 lb. In 1892 the crossbred lambs were third in rate of gain, as they made .8 per head daily, while the pen that made the highest rate (Cotswolds) made the unusual gain of .89 lb., which has never been surpassed. Among the wethers over twelve months old the crossbreds stood fourth, having made an average daily rate of gain of .45 lb. In the lamb class in 1893 the crossbred

cusses very fully the question of cross breeding sheep as it applies to all the colonies. With the growth of the trade in frozen mutton, which has developed into enormous proportions between the colonies and the mother country, the crossing of some of the British mutton breeds on the Merino sheep, common to the colonies, has excited much interest. Mr. Bruce urges that cross breeding should be more generally adopted, as he states it is imperative that a remunerative outlet should be obtained from their surplus mutton, and as their sheep are mostly of the Merino breed, and that breed is not as suitable as crossbreds for the export trade, it is most essential, in his view, that cross breeding should be adopted, though chiefly for the reason that crossbred wool in their market is, as a rule, more saleable, and brings fully better prices than the Merino.

The Lincoln-Merino cross apparently has given the best satisfaction for the purposes of the country, as they give the best return in both wool and mutton. The Border Leicester and Merino crosses, on rich pasture and other nutritious foods,



Grade Shropshire Ewes, representing the flock used in cross breeding Dorsets and Shropshires at the Wisconsin Agricultural Experiment Station.

lambs were surpassed by twelve pens of lambs that were purebred, which was not a creditable showing, while in the older class for wethers they stood fifth. A better record was made in 1894 in the lamb class, when the crossbred lambs had to their credit the highest daily gain, which was .82 lb., and in the class for twelve months and over they stood seventh.

I have the records preceding 1888, as far back as 1882, and the position of the crossbred sheep does not vary much from that which has been given. Taking the record that they have made, extending over a number of years, it will be found that the fattening qualities of the crossbred sheep have been high, though there are only a few instances in which they have won a first place when judged on the points of the carcasses.

CROSS BREEDING IN AUSTRALIA AND NEW ZEALAND.

In a publication issued by the New South Wales Department of Agriculture, Mr. A. Bruce, Chief Inspector of Stock for New Zealand, dis-

give almost as satisfactory returns. They are found to be hardier than the Lincoln cross, while, at the same time, producing a crossbred sheep with more rotundity of frame and depth of flesh. Their weak point is said to be the comparative lightness of the fleece and lack of covering, especially on the belly and legs. The English Leicester ranks next to the Border Leicester, the chief objection in their instance being the inferior quality of the mutton. Of the Shropshire-Merino cross, the breeders say that an excellent butcher's sheep is made from this union, as the carcass is short, compact, broad on the back and loin, round on the shoulder, and deep-fleshed, while the mutton is of prime quality. The wool of this cross does not, however, find a ready sale in the markets of that country. This objection they also make to the Shropshire, and they find it is even more applicable to the Southdown, as it is stated by the breeders that the wool is lighter than and inferior to that of the Shropshire cross, and the carcass also weighs less, though the quality and flavor of the mutton is high. The

Hampshire-Merino crosses have been found to have the advantages of large-size, shapely carcass, and good mutton, but the fleece is very poor, both as regards quality and weight.

The following statement, showing the views of breeders in New Zealand as to the relative values of the different English sheep for crossing is submitted by Mr. Bruce. It indicates how nearly they have secured a sheep that is satisfactory for their conditions by this method :

Breed.	Hardiness and Soundness.		Lambing and Increase.	Form and Shapes.	The Mutton.			The Fleece.			Satisfactory for Crossing.	Total.
	Constitution.	On Feet.			Appearance.	Quality.	Weight.	Weight.	Quality.			
	7	8	5	6	12	3	7	6	20	20	6	100
Lincoln	6	4	3	4	11	2	5	6	20	18	5	84
Border Leicester...	7	6	4	5	12	2	6	4	17	19	6	88
English Leicester...	7	5	3	5	10	1	4	3	17	18	4	77
Romney Marsh.....	5	7	5	6	11	2	5	4	17	14	5	81
Shropshire Down ...	6	6	3	6	12	3	7	3	14	12	3	75
Southdown.....	6	5	3	5	12	3	7	2	12	11	2	68
Hampshire Down....	6	5	3	5	11	2	6	8	12	12	2	72

CROSS BREEDING IN AMERICA.

The cross breeding that has been carried on in this country has been somewhat similar to that which has been done in Australia, as the basis in both instances has consisted of the fine-woolled Merino. The depression in the wool market has led many to breed their flocks more in the direction of mutton, and to do this the same problem

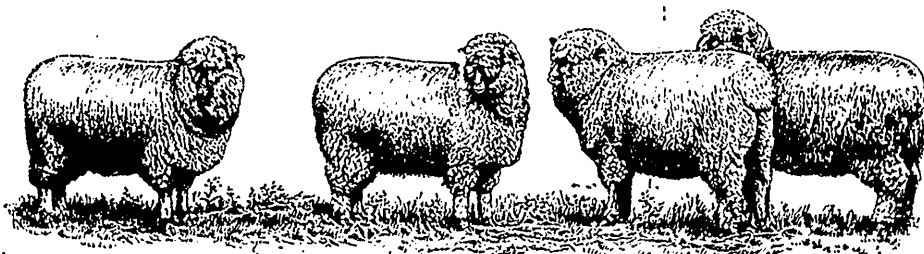
arose as that which confronted the Australian breeder: Which of the British breeds of sheep, when crossed on the Merino, produces the best combination of wool and mutton for our markets, and, at the same time, is adapted to our farm conditions? Under the conditions that prevail over the west, where the fine-woolled sheep had obtained the strongest foothold, the Shropshire had the greatest patronage of any of the distinctly mutton breeds, and consequently they have been tried more extensively for this purpose. They have given good satisfaction, as the result of the cross is a sheep that is exceptionally adapted for the range, and it only requires a few crosses to make a sheep that in all market essentials is the equal of the purebred Shropshire.

We have experimented with this cross for a number of years, and we now have a number that are of the third cross of the Shropshire on the Merino. The Merinos that we used were in no way exceptional, as they represented the common fine-woolled sheep that are prevalent over the west. We were very careful, in the selection of Shropshire rams, to use only the best.

The first cross Shropshire-Merinos are sheep of exceptional utility for our conditions. Though not large, they weighed more than the Merino ewes, and they were especially good in the essential mutton points. The fleece is of high merit, both in respect to the protection that it gives the sheep and also in regard to its market value. While the first crosses only sheared about the same weight of wool as the Merinos, yet the fleece was worth more, as the price per pound for it was higher. The improvement in weight, and mutton form, and feeding qualities, were the chief gains through this infusion of Shropshire blood.

The second cross of the Shropshire on the Merino again increased the weight of the carcass, and made it much more valuable from a butcher's point of view. The wool is worth more per pound than that of the Merino or the first cross, as it was longer and stronger in fibre. While the second cross gains in these particular points, the density of the fleece that is characteristic of the first cross is lost.

The third cross shows a nearer approach to the purebred Shropshire. In fact, we have some second and third crosses that could hardly be separated from purebred Shropshires on their appearance, and for common market purposes they are equally profitable. The third cross wool is slightly longer, coarser, and stronger than any of the preceding crosses, and on the market it does not bring any more per pound than that of the second crosses.



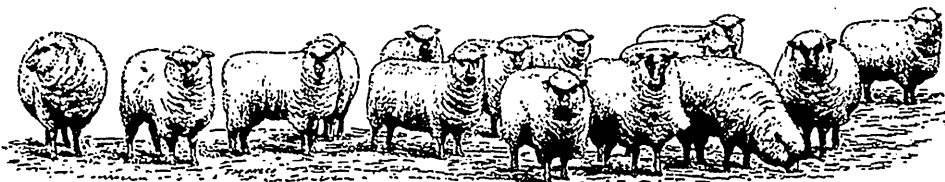
Second Cross Shropshire-Merino Yearlings, bred at Wisconsin Agricultural Experiment Station. This cross shows a remarkable improvement in form in comparison with the Merino ancestors, and the fleece is worth more in our present markets.

As in all instances of cross breeding the first cross shows the greatest improvement. The blending of the qualities of the two breeds, the fine, dense fleece of the Merino and the mutton carcass of the Shropshire, seems to be most effectively accomplished in the first cross.

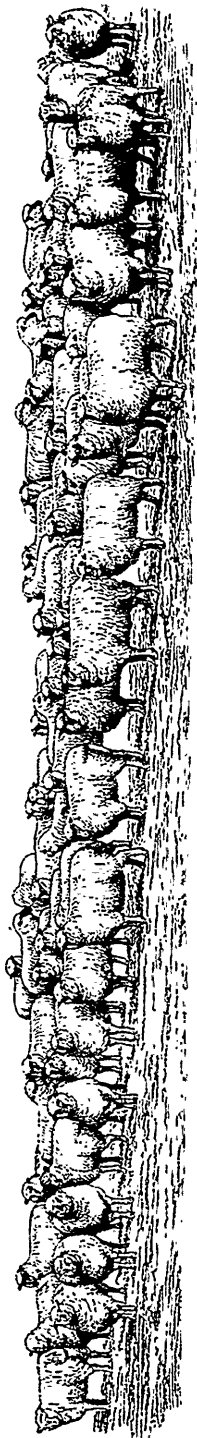
Another line of cross breeding that we have tried at our station has been the crossing of the Dorset and the Shropshire, with the object of establishing a flock for breeding early lambs. In this the first cross has proved to be an unusual sheep. They have been an improvement in many particulars over the representatives of both of the purebreds that were used. As will be seen in the photo that is here presented, they are exceptionally fine-bodied sheep, with a remarkable spring of the rib, indicating good constitutions. The fleece is rather light, but the wool is in demand, owing to its fineness, softness, and strength. The most remarkable feature about the cross, however, aside from the fact that they are early breeders, is the excellence of the forms of the first crosses from the butcher's standpoint. We have not found that all of the first crosses are uniform in respect to the time that they will breed. It will likely require more top crosses of the Dorset to make this characteristic fixed to the degree that it should be to make a flock profitable for breeding early lambs. The second crosses do not show the vigor that is characteristic of the first, though they are in no wise markedly deficient in that respect.

BALANCED BREEDING THE MOST SUCCESSFUL METHOD.

That exceptional results have been obtained from cross breeding under a great variety of conditions is undoubtedly true, but I believe that through another method the beneficial features may be secured without entailing as large expense. Cross breeding, as before intimated, is but balanced breeding through the mating of animals representing wider extremes than those brought together in balanced breeding. I am satisfied that the latter is the best course for the farmer who is trying to build up a flock to produce wool and mutton for the common market. As to what can be accomplished by following the method of balanced breeding in a grade flock, I shall put our own in evidence. We started with a mixed collection of ewes, and, after one or two cullings, made them moderately uniform. After three years' breeding on this method, and some culling, the engraving which is here presented shows the first-fruits in a collection of ewe lambs that were retained as additions to our flock. Better evidence than these as to the success of the method might not be required; but we have it in the form of a direct experiment as to the profit of lambs so bred, and those of the ordinary nondescript breeding that is followed on some farms. Last winter I purchased one hundred lambs in the northern part of our state. They were lambs that were thoroughly representative of those bred from common roadside flocks. From among



Group of High-grade Shropshire Ewe Lambs, raised on Wisconsin Agricultural Experiment Station Farm, where balanced breeding has been followed. Average age, 13 months; average weight, 127 lbs.; average weight of wool shorn, 10 lbs.



Group of Grade Shropshire Lambs, under one year old, from which the twenty-five were selected that averaged 93 lbs. and returned a comparative profit of 60 cents per head after eight weeks' feeding on a ration similar to that given to the twelve lambs selected from the Wisconsin Experiment Station stock. These lambs illustrate the type and the profit that universally result from breeding without method.

these I selected twenty-five head that were thrifty and representative of the rest. From among our own lambs I selected twelve that were equally representative of our lambs. These two lots of lambs were fed exactly alike in every particular, except that they were all given as much as they would eat. The ration in all cases consisted of peas and corn as the grain portion, with corn fodder in addition. The following table presents the results of the trial :

	Twenty-five Lambs of Inferior Breeding.	Twelve Lambs of Good Breeding.
Weight at end of feeding trial.	lbs. 2342½	lbs. 1737½
Weight at beginning of trial...	1889½	1391
Gain in eight weeks.....	453	346½
Average weekly gain per head.	2.2c	3.6c
Amount of food eaten :		
Corn fodder.....	2569½	1620
Corn.....	1221	852
Peas.....	1221	852
Total cost of food.....	\$20.75	\$14.14
Cost 100 lbs. gain.....	\$4.58	\$4.08

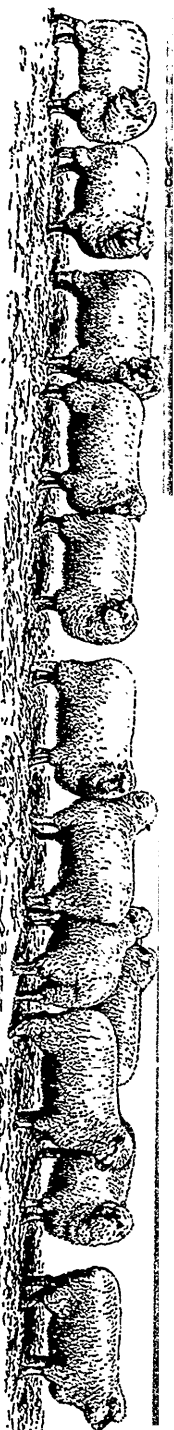
It will be seen from this statement that our lambs were better feeders than the others, and the gain was correspondingly greater. The point of importance, however, is that our lambs returned us nearly double the profit obtained by those of inferior breeding. The following table makes this clear :

	25 Lambs of inferior breeding.	12 Lambs of good breeding.
Estimated cost	1889½ lbs. @ 3c., \$56.68	1391 lbs. @ 3c., \$41.73
Estimated val.	2342½ " @ 4c., \$93.70	1737½ " @ 4c., \$69.50
Cost of food eaten.....	\$20.75	\$14.14
Profit per head	60 cts.	\$ 1.13

This is the best argument that I can offer for balanced breeding. We select our rams to correct the faults of our ewes ; and in this way we have found that each year we have a few lambs that show decided progress in useful essentials to add to the main flock.

Everyone must recognize the strides forward which Canadian magazine literature and art have made during the past year, and in no instance is this more apparent than in the first current number of the new volume of FARMING, published by The Bryant Press, which has an enviable reputation for typographical and artistic excellence. I venture the opinion (as a subscriber to several agricultural journals) that nowhere has a better number of a periodical of this class ever been issued than this September number, with its seventy illustrations, its special article on "Organized Agricultural Effort in Ontario," and its general versatility and many practical features. At one dollar a year no farmer with progressive ideas can afford to be without it. It will be found most interesting to all and a revelation to many who do not know what is being done systematically by and for the yeomanry of Canada—the backbone of our country.—Col. W. N. Ponton, in *Belleville Daily Intelligencer*.

Twelve Shropshire Grade Lambs, under one year old, that averaged in weight 144 lbs., and returned a comparative profit of \$1.13 after eight weeks' feeding. These lambs are representatives of the Wisconsin Experiment Station stock, where balanced breeding is followed as a method.



BREEDING AND MANAGEMENT OF HEAVY HORSES.

By ALEX. GALBRAITH, Secretary American Clydesdale Association.

ALEXANDER GALBRAITH was born May 20th, 1853, at Croy Cunningham, Killearn, Stirlingshire, Scotland. He was the second son of the late Alexander Galbraith, one of Scotland's best known Clydesdale breeders and judges of the last generation, whose horses won many honors in all the leading show rings of Scotland, one of them, Stirlingshire Champion (830), having won the first prize at the first stallion show ever held in Glasgow—exactly sixty



years ago.—Mr. Galbraith left his father's farm when sixteen and entered a mercantile house in Glasgow, where he remained fourteen years. In 1883 he came to Janesville, Wisconsin, where he joined his brothers in the breeding and importing of Clydesdale horses. The business of the firm grew rapidly, until it became the largest of the kind on the continent. From 1883 to 1893 they imported over 900 stallions, all being of the British breeds, viz., Clydesdales, Shires, Suffolks, Cleveland Bays, and Hackneys. The firm enjoyed an enviable reputation all over the United States, and many of their customers came 1,500 and even 2,000 miles to buy horses from them. They won the highest honors time and again at the leading State fairs, and at New Orleans, Philadelphia, Chicago, and other great shows, during ten successive years.—Mr. Galbraith is secretary of the American Clydesdale Association, and *pro-tem* secretary of the American Suffolk Horse Association. He was for six years president of the American Shire Horse Association, and is still a director of that institution, as also of the American Cleveland Bay Association. He is frequently called upon to judge at important horse shows. At the World's Fair, Chicago, three different breeds of horses were assigned to him, and at St. Louis, Philadelphia, Toronto, Montreal, and many other centres he is a well-known and frequent arbitrator of the red and blue ribands in the show ring. He is also a frequent contributor to such papers as *The Breeder's Gazette* and *The Horseman*, of Chicago; *The Live Stock Journal*,

London; *The North British Agriculturist*, *The Scottish Farmer*, etc. For the last two seasons he has been on the staff of the Wisconsin Farmers' Institutes. Last spring Mr. Galbraith was commissioned by Mr. F. C. Stevens, of Washington, D.C., to purchase high-class Hackneys in England. This task he performed with so much success that one of his importations secured the champion gold medal at Philadelphia three weeks after landing.

In the present intensely practical age no excuse need be offered for writing on a subject which, although somewhat trite and frequently handled with great ability, is always fresh and interesting, because it appeals to the farmer's daily life and work. "Not to know at large of things remote from daily use, but that which most concerns us in our humble life, is the true wisdom." Like many other Shakespearean sayings, this is as applicable to-day as when spoken by the Stratford sage three centuries ago. Whatever interest or pleasure the average Canadian farmer may find in outside studies, it is, after all, matters connected with the farm and the means of obtaining a livelihood that are of the most direct and absorbing interest to him. And there is no branch of farming more important, more interesting, or more uniformly profitable than the raising of good draft horses. True, we are now suffering from a long-continued spell of depression—one of those periodic spells common to all agricultural, mercantile, or indus-

trial pursuits—times when, from some cause or combination of causes, the markets become glutted, and values fall below cost of production. The horse market is glutted to-day—not with good horses, but inferior ones—the kinds that have been produced from all manner of combinations—while really good horses, and especially good draft horses of weight and quality, are exceedingly scarce, and therefore command correspondingly good prices both in Canada and in Great Britain.

I am afraid that many of our American farmers, and possibly some Canadians also, have pursued the same policy in their horse-breeding operations as the Scotchman who confined his devotional reading to the summer season on the plea that if he bought oil in winter to read by "the cost might o'ergang the profit." They have been afraid to invest fifteen or twenty dollars for the service of a good draft stallion, and used a common or inferior one at eight or ten dollars, in the false belief that they were saving the difference,

whereas, in reality, they were generally losing heavily—the pound foolishness being an inevitable sequel to this penny wisdom.

In writing this short article—done somewhat hurriedly—I desire it to be distinctly understood that I am not setting myself up as a teacher or dictator to others, many of whom have far greater practical experience and ability than myself. Many men, many minds, and so different tastes, different views; and different circumstances must necessarily affect and control our work in various ways in the breeding and management of heavy horses.

THE BROOD MARE.

The first branch is breeding, and here let us begin with the brood mare. "A guid coo aff a guid kind" may be well applied to the brood mare. Let her not only be a good individual, but from a good family if possible, and, above all things, free from every kind of hereditary disease. Some eight or ten years ago every old, infirm, and inferior mare in the country was put to breeding because fit for nothing else, and so was instrumental in perpetuating her own infirmities, a blunder for which those breeders are now paying the natural penalty. The model draft mare should weigh not less than 1,500 lbs., and if 1,700 lbs. all the better. She should be short-legged, low, long, and wide; a neat, well-shaped head, and slim neck; lengthy level quarters, with a set of good limbs properly set on; bone, flat and clean; pasterns, good length and oblique; feet, good size, prominent at the heels, and free from side bones. Her action should be straight and free, the hocks especially being kept pretty close together, and withal she must have a good disposition. If you have such mares, and particularly such as have proved to be good breeders, do not part with them.

THE STALLION.

In seeking for a stallion to mate with your mares, keep especially in view weight and substance with quality combined, good pedigree, and absolute soundness. No one horse will suit different types of mares; so breeders must use their best judgment in regard to mating, but they should not hesitate to use the very best they can find, even if it costs five or ten dollars extra, as they will generally find it money well invested. If the mare has any prominent defects in conformation try to have those defects rectified in the stallion, or at any rate not intensified. For instance, if the mare has a long back or a plain head, the breeder will naturally select a stallion that is good in those points.

RELATIVE POTENCY OF SIRE AND DAM.

The breeding problem is by no means an easy one to solve, and it will often be found that one man's experience differs materially from his neighbor's. Mr. W. R. Trotter, one of the best horsemen in England, maintains that the sire ought always to be especially good in his limbs and his action, as he is much more impressive than the dam in those points, while the latter is more liable to give to the offspring her own head, neck, body, and respiratory organs. I cannot say that my own observation confirms this opinion, although there may be something in it.

Another theory, which no less an authority than Prof. McCall, of the Glasgow Veterinary College, believes firmly in, is that the male parent influences the female offspring, and *vice versa*; that whichever parent is strongest and most vigorous in health at the time of mating—that parent will almost always influence the offspring, and even control the sex—a filly being produced if the sire is most vigorous and potent, and a colt if the dam happens to be the stronger. The professor informed me recently that the foregoing observations are the result of over thirty years' experience in breeding, and are applicable to all kinds of animals—the human family not excepted. The subject is a highly interesting and important one, and the theory, coming, as it does, from a gentleman of the highest standing and very wide experience, is well worthy of consideration.

AGE TO BREED.

The custom of breeding fillies at three years old is not nearly so general in England now as formerly, many people believing that if well grown the young mare should be put at two years old, and if undersized she might as well run until four years old, and do some work first. The writer's experience in this country, however, is that better results are generally got by breeding the filly at three rather than two years old. After the mare is bred she should be tried with a stallion in fourteen days afterwards, and each subsequent week for, say, two months, by which time it may be safely concluded she is with foal. If a young unbroken filly, she will naturally go at pasture, but if four years old or over she may be worked pretty regularly—in either case, it should be borne in mind that exercise is most essential for both the mare and her offspring.

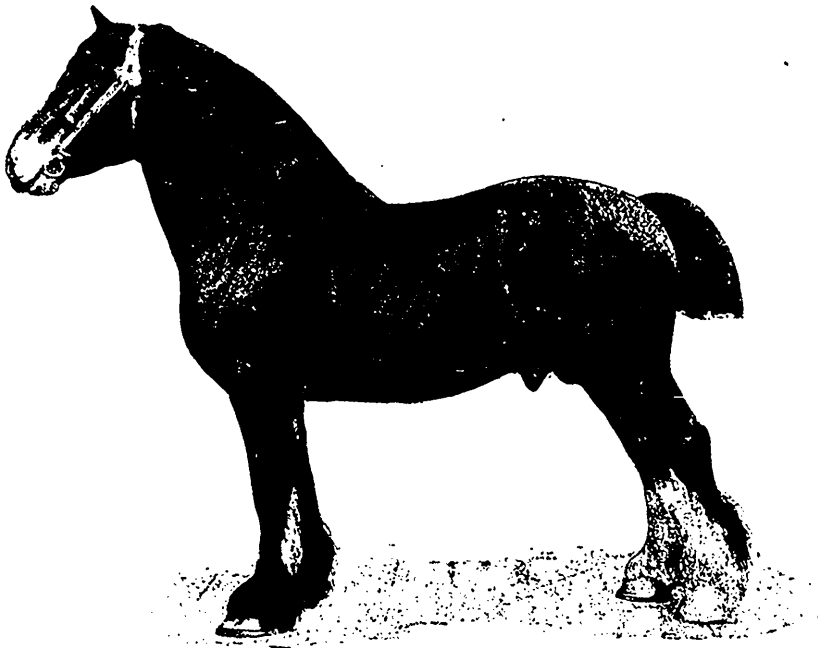
CARE OF THE DAM.

I may as well state also that the combined uses of showing and breeding can scarcely be carried on successfully. If a breeder wishes to do full justice to his brood mares and their foals he can-

not take the risk of feeding them up for showing, according to modern requirements. It does not, of course, follow that fat mares have always poor little foals, or bad luck in losing them altogether, but experience goes to show that the tendency is in that direction. But while idleness and fat are undesirable in the brood mare, neither must she be allowed to run down in condition either through too hard work or bare pastures. In the latter case oats ought to be fed once or twice a day, as required for the sustenance of both the dam and the foal she is carrying. Good, nutritious, concentrated food ought to be given during pregnancy, and no harm will come from working the mare lightly up till the very day she foals.

with clean straw. A most desirable kind of stall is that whereby the attendant can feed and water the mare without going inside the stall to disturb her. Many mares of a nervous temperament are apt to become more or less excitable at such a time, and the quieter they can be kept the better.

The mare should be watched closely day and night, and when the pains commence an examination should be made to find out whether the foetus is being naturally presented, or, in other words, if the foal is coming all right. In the event of a false presentation a veterinary surgeon, or other skilful person, should at once be procured, although in most cases there will be no need of other than ordinary assistance. The most important thing



The Imported Clydesdale Stallion, Royal Standard (2221),

Sweepstakes winner at the Canadian Horse Show, 1896. The property of Messrs. Graham Bros., Claremont, Ont.

If the mare is unbroken, see that she receives plenty of exercise every day. Do not shut her up in a stable, but rather let her have the run of a yard or small pasture all winter, with a stall to go into at night and when weather is stormy.

On the mare's general health will necessarily depend the condition of the foal, hence it is always desirable to see that her bowels are all right, and particularly as she approaches the time for foaling. An occasional bran mash should be given, and when the time for parturition arrives she should be turned into a box stall that has previously been most thoroughly cleaned out and well bedded

to attend to at birth is the umbilical cord, or navel string. This will usually break itself all right; but, if not, the attendant should have it cut and tied firmly with soft string to prevent bleeding.

CARE OF THE FOAL.

The next duty is to induce the foal to suck, and this can usually be accomplished without much trouble or delay by a little persevering effort on the attendant's part. Sometimes it may be necessary to relieve the foal's bowels by administering a small dose of castor oil—in fact, many successful breeders give this as a matter of course, and

occasionally an injection of tepid water is required within the first two or three days. The foal's bowels should be closely watched, as neither constipation nor diarrhoea can go on any length of time without serious results.

The greatest source of danger to a young foal, however, is what is known as septicæmia, which results in joint-ill and causes the death of the foal within the first few weeks. It is caused by the absorption of diseased germs or organisms through the navel of the foal or the uterus of the mare through the attendant's hand, and unless a preventive be used and great care exercised in having the box stall scrupulously clean the worst results are liable to follow. Once the poison is absorbed the case is practically hopeless; swelling of the hocks and other joints being a preliminary symptom of the fatal results which speedily follow. An excellent preventive, in addition to absolute cleanliness, is to bathe the foal's navel at birth and twice daily for three or four days afterwards with diluted carbolic acid. One of the largest breeders of draft horses in the United States had very heavy losses some years ago from this trouble, but now uses a carbolic preparation called "umbilicure" on each foal at time of birth, with the most satisfactory results.

After the first day or so the mare and foal may be allowed to run out a part of the day—weather permitting; but in the case of rain they should at once be put under cover, as the woolly texture of the young foal's coat holds moisture, which is apt to cause bowel troubles.

It is not advisable to work the mare while she is suckling a foal—the American custom to the contrary notwithstanding—and if pastures become bare the mare ought to have a daily allowance of green corn or oats during the fall. The foal will gradually learn to nibble at the oats, so that when weaned at five or six months old it will be quite independent of its dam's milk. When weaned, it should not be left alone, but have some other animal for company, say another foal, or an old quiet horse when outside.

The foal at this stage should not be allowed to fall off in condition; indeed, it requires more nutrition the first winter than at any subsequent time, so that its bones and muscles may continue growing all the while. The staple food should be oats (preferably ground), bran, and flaxseed, with a few carrots and bright clover or timothy hay. If the hay can be chopped and fed with the grain, so much the better, and if the food can conveniently be cooked, still better results will be got from its use than when fed in the raw state.

One highly important matter, which is frequently overlooked by the average farmer, is to see that

the foal's feet are properly and regularly rasped down so as to keep them straight. There is frequently a tendency to twist outwards, or inwards, and it is only when the feet are in a soft, cartilaginous state that they can be straightened out. This rasping of the feet during the first year of the colt's life is so important that I would lay special emphasis on it, knowing, as I do, that it is very frequently neglected until too late.

As the colt grows up, he should be handled frequently and kindly, and at two or three years old broken to harness—it being understood that he has been accustomed to lead in the halter while sucking his dam. As a rule, draft geldings or fillies are very little trouble to break, but may, without much preliminary work, be hitched up along with their dam or some other quiet horse and put into plow or wagon without any difficulty or mishap. It is, of course, necessary to accustom them to the bit beforehand, and the first lessons should be given by a patient, level-headed man, as any young animal can easily be spoiled by irrational or unkind treatment.

CARE OF FARM HORSES.

The shoeing of farm horses should receive more consideration than it gets—many blacksmiths ruining the feet of horses by rasping off great portions of the outer crust, and cutting out too much of the sole. These are points which should be let alone. Let him cut down the heels well, so as to promote expansion of the foot, and drive as few nails as possible into the frog. Too little shoeing may be bad, but too much shoeing is infinitely worse.

The feeding and watering of horses should also receive the most constant attention. Watering should be done *before feeding* always, and never after feeding. The most suitable water is from a running stream or reservoir, and rain water is also good, but well water should be used only after it has been subjected to the sun and air, and so has become oxidized.

In feeding a horse, it is well to remember that his stomach is extremely small in comparison with that of a cow, and, consequently, it is essential that he be fed regularly, and not too much at one time. The food ought to be nutritious and concentrated, especially when the horse has heavy work to do.

One word about stabling. Horses are social beings, and like to see each other. Where box stalls are used (and they are infinitely preferable to close stalls) they should not be shut off from each other—an iron grating between the stalls being much better than boards or planks, even in the case of stallions. Ventilation in a stable is of

primary importance and most essential to the health of the stock, but care must be taken that between the ingress and egress of air the horse does not stand in a draft, or he may contract rheumatism or other affections that would prove injurious to his health. The drainage of stables ought also to be seen to, many bad effects resulting from choked-up drains, which generate gases of the most deadly poison.

In marketing draft horses, the same rule ap-

plies as in any other kind of stock, viz., to have them in the best possible condition—not soft and flabby, but in good hard flesh and perfect health and vigor, “with skins like velvet.” At no time in the past has condition cut more of a figure in the selling value of horses than it does to-day, and a little extra time and money expended with this in view will bring good pecuniary returns to the seller, and, at the same time, enhance his reputation in the market.

THE HACKNEY HORSE.

By ALEX. GALBRAITH, Janesville, Wisconsin, Secretary American Clydesdale Association.

“Give a Yorkshire man a halter and he will soon find a horse” is an old-time adage, which, although suggestive of a breach of the eighth commandment, really means that his inherent love of horses is so strong that he naturally and instinctively takes to the business. In no other county in England is there probably half as many natural born horsemen as in Yorkshire, and it is, therefore, not surprising that our best coaching and Hackney horses have been bred and developed in the East Riding of that noted country; for it cannot be denied that although the county of Norfolk was for generations the home nursery of the Hackney, and that nearly all the best blood of the present day traces back to Norfolk strains, the breeders of Yorkshire have, in this generation, and especially in recent years, clearly outstripped their southern neighbors in the production of prize-winners. And why? Perhaps for various reasons, but, in the writer's opinion, the main causes have been a judicious infusion of Thoroughbred blood, and greater care exercised in the mating of their breeding stock. “Norfolk for action, Yorkshire for quality,” is a popular expression, which, like most other sayings of the kind, contains both truth and error. The fact of old D'Oyley's Confidence being able to get, with almost unerring certainty, colts of great action, and, therefore, good sellers, no matter what kind of mares they were from, doubtless led to this celebrated horse, and many others in Norfolk, being used promiscuously on all sort and conditions of mares, from the Shetly up to the carting mare. The result of such breeding is that the county of Norfolk—similar in this respect to many counties and states of America, where a like system of breeding has been pursued—is filled to-day with a heterogeneous lot of nondescript horses, and their Yorkshire neighbors can well afford to laugh at the Norfolk breeders' methods, as they themselves

walk off with the principal prizes at London every spring.

Now, there is a wholesome lesson to Canadian and American breeders in the Norfolk men's experience, and it is simply this: that, to keep up the quality and the reputation of a county, or a district, for its equine stock, the utmost care must be taken and the most zealous eye kept on the merits not only of the sires, but of the dams as well, and also on their suitability for mating with each other. This knowledge of “nicking” comes only with experience and observation, but the worst kind of mistake a farmer can make is in being too cheese-paring—there being in the present hard times a very strong tendency in the line of economy, which frequently finds expression in the use of cheap and inferior animals. Economy is an admirable virtue, but let it be exercised elsewhere than in the selection of cheap breeding stock.

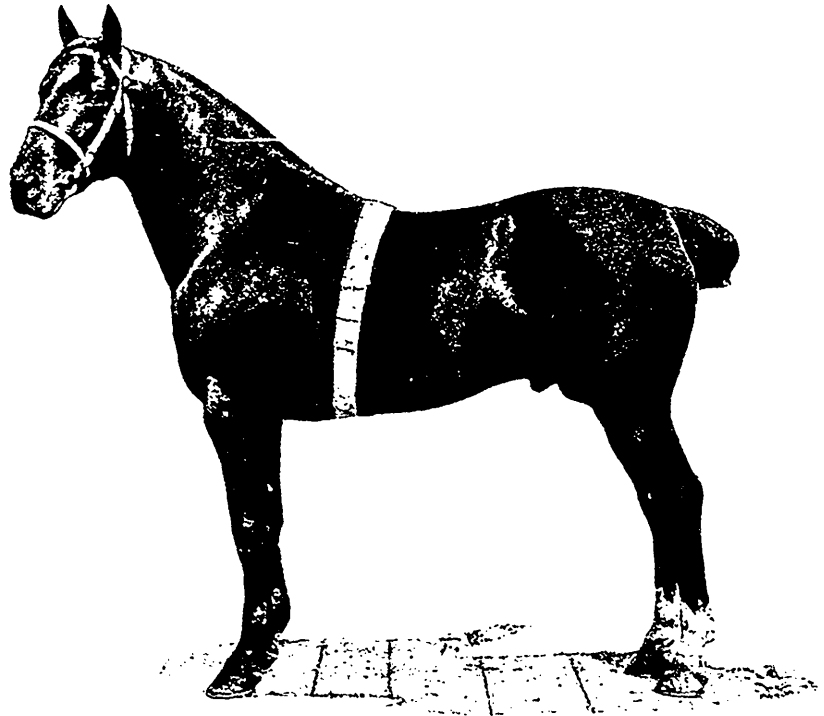
Since horses of the Hackney type have become popular in this country it is a very common thing to see in any of the cities the most veritable plugs with docked tails and heavily weighted shoes—the most spurious kind of imitation Hackney possible, about as like the genuine article as chalk is like cheese. It is such animals as these that set people talking against the Hackney. Having had no opportunity to see a genuine representative of the breed, the spectator very naturally assumes that the animal he sees in heavy harness, with all the usual “outward adorning,” is an average specimen, and, therefore, he does not hesitate to condemn the breed, when, in reality, he has never seen a Hackney.

The origin and history of the Hackney horse have been so fully and ably treated in Mr. Henry F. Euren's introduction to the Hackney Stud Book that I need only refer briefly to a few leading points in it. The name Hackney is, at least, six hundred years old, and was introduced into

England at the time of William the Conqueror. Although existent in England, in a more or less definite form, for several hundred years, the modern Hackney is, however, really a product of the latter half of the last century, and his ancestors, like those of the Thoroughbred, were of Arabian stock. Not only so, but his pedigree is considered equally trustworthy with the Thoroughbred, and his long line of ancestry has so intensified the strong trotting gait in the breed that it is hard to imagine a Hackney horse on a gallop.

He stands usually from 15 to 15½ hands high, and experience shows that nearly all the best

the eyes, ears short and active, neck rather strong and well arched, shoulders deep and oblique, and for riding purposes moderately fine on top, chest deep and wide, denoting vigor and vitality, back short and wide, body round and ample, coupling short and loins strong, quarters long and heavily muscled, tail well carried, but lower set than in the Thoroughbred or Cleveland Bay, thighs powerfully muscled and well let down into the hind legs, which are strong and cordy, pasterns oblique and of moderate length, feet tough, fairly deep, and of medium size, action bold, free, straight, and lofty—perfect unison



The Imported Hackney Stallion, Royal Standard (3918), Sweepstakes winner at the Canadian Horse Show, 1896, and Toronto Industrial Exhibition, 1896. The property of Messrs. Graham Bros., Claremont, Ont.

breeding sires, until quite recently, have been within these limits, but the demand for larger horses of late years has had the effect of raising the standard nearly an inch—15.3 being the measurement of such great horses as Ganymede, Cadet, Matchless of Londesboro, and Langton Performer. Over this height—15.3—it is considered that no good Hackney should go, as he then becomes more of a coacher, and is out of his class. The prevailing color of Hackneys is chestnut, but there are many bays and browns.

The Hackney is stoutly built, strong and short in his cannon bones, head neat and wide between

being maintained between shoulders, knees, and hocks. General characteristics: vigor, promptness, plumpness, and high all-round action.

The Hackney's disposition is perfect, his soundness is probably unequalled in any breed, and his power of endurance is without a parallel. As a "ride and drive" animal he is a universal favorite, and as a general utility horse he comes probably nearer filling the bill than any other breed. His long line of high-stepping ancestry makes him prepotent, and enables him to get the most beautiful and attractive carriage horses from the finer boned mares—whether Hackney, Thorough-

bred, or standard-bred. As an improver of the horse stock of Canada and the United States he has proved a distinct success, and it is no mere figure of speech to say he is the most popular horse in America to-day.

While the palm for excessive speed, for short distances, at the trot, properly belongs to the United States, that for long distances, carrying weight, must in justice be awarded to the English Hackney. The following are only a few records taken from a long list published in the Stud Book:

Old Driver, a son of Shales, foaled in 1765, trotted 17 miles within an hour. Adonis, in 1787, trotted 16 miles an hour carrying 16 stone (224 lbs.). On August 15th, 1790, Shuffler trotted 14 miles in 56½ minutes, carrying 18 stone (252 lbs.). Bishop's brown trotting mare, when eighteen years old, on October 24th, 1791, trotted on the road 16 miles in 56 minutes. Ogden's mare, the dam of Chadd's Black Shales, trotted 10 miles in 32 minutes, 30 miles in two hours, and 40 miles in three hours, carrying 18 stone (252 lbs.). Cartwright, a gelding nearly thirty years old, trotted 32 miles in two hours on the road between Stilton and Cambridge. The well-known Marshland Shales trotted 17 miles in 58 minutes, and died when thirty-three years old. Bellfounder, imported into the United States by James Booth, of Boston, in 1822, and since noted as sire of the dam of Rysdyk's Hambletonian, was out of the Hackney mare, Velocity, that trotted 16 miles an hour on the Norwich road in 1806, and Bellfounder himself trotted before importation two miles in six minutes and nine miles in less than thirty minutes, thereby winning a purse of 200 guineas.

There are numerous other instances of the Hackney's capability to trot fast, even generations ago, and had the English people striven after world's records, and, like the Americans, sacrificed everything to speed, the Hackney would have had more speed and much less beauty and style than he has to-day.

Mr. Morton, of Darvel, Scotland, one of the largest and most successful breeders, truly says: "There is an electric fire about a Hackney of the proper sort that makes him the essence of all horses. From the tip of the ear to the last hair in his tail he is the model of symmetry and beauty. Quiet and affectionate in the stable, there is yet in his composition that something which at the merest word or touch can electrify him into the liveliest and brightest of animals."

As showing the immense value, from a breeding standpoint, of such a horse as old Triffitt's Fire-away—only a few years dead—Mr. Burdett-Coutts computed that the stock this horse left in Yorkshire represented about £250,000, while that of D'Oyley's Confidence, in Norfolk, he estimated at three times that amount, or nearly four million dollars. The possession of such horses in any country is a veritable gold mine.

One word of advice to breeders. Don't be too anxious to increase size by choosing overgrown Hackneys for breeding purposes. It is seldom that a stallion not truly typical of his kind is himself a uniform or satisfactory breeder. If he is an accident in size or otherwise he is liable to breed accidentally, and remember that in gaining size you are apt to lose quality, and, what is of equal importance, Hackney character.

Another matter of importance is to see that the back breeding of your horse is right. There are, doubtless, many good Hackneys with short or uncertain pedigrees, but such horses are, as a rule, not very reliable breeders. Depend upon it, "blood will tell," and if there should be any extraneous blood in the sire a cross or two back (unless it be Thoroughbred, in which case the horse may be all the better for it) it will show itself in the irregularity of the produce. Like all pedigreed stockbreeders, the Hackney man must see that the blood he uses on both sides of the house is as good and pure as can be got, and he should preserve that purity with the most jealous care.

It is not likely that the Hackney will ever be bred in his purity in Canada, to any great extent; it is rather as an improver of the native stock that the Hackney sire has been, and will continue to be, used. Great honor and credit belong to such enterprising pioneers in the business as Messrs. Cochrane, Beith, Graham Bros., Crossley, Sorby Bros., and others, all of whom have done excellent work in importing and breeding many splendid specimens of the breed, and so aided largely in popularizing the Hackney in Canada.

In conclusion, I ask two questions. What do our driving horses lack more than anything else? Bone, substance, rotundity of shape, style, and action. I think this will be universally admitted. If so, what breed possesses those characteristics in the most marked degree, and is most likely to impart them to his offspring? There can be but one answer: The Hackney.

THE BREEDING OF DAIRY CATTLE.

By A. C. HALLMAN, New Dundee, Ont.

A. C. HALLMAN, of New Dundee, Ontario, is one of the best known breeders of Holstein cattle in Canada. He is a comparatively young man, being only thirty-seven years old. His father was a well-known and successful farmer, who took a great interest in the cattle industry, and who, becoming dissatisfied with the milking qualities of the grade cattle of the district where he lived, associated himself with two other farmers and imported from the State of



Illinois three female and two male purebred Holsteins, for their own use, to improve the milking qualities of their own herds. This was in 1883. At that time there were few Holsteins in the country. When Mr. Hallman, senior, purchased the members of this importation he supposed there were actually none in the country; but when the cattle were going through quarantine he found that Messrs. Cook & Sons, of Aultsville, had made one importation before him.—Mr. A. C. Hallman went into the Holstein business for himself in 1884, being then only twenty-five years old, and his first importation consisted of seven females and one male, brought direct from Holland. This was the foundation of his herd. Ever since then he has done everything possible to improve and extend it, and, as a result, has worked up a very considerable business and a very excellent name. He soon found that there was a growing demand for animals of his chosen breed, and he took every pains to satisfy it from his own herd. In 1886 he imported eight head from the herds of Smiths, Powell & Lamb, of Syracuse, N.Y., and T. G. Ycomans, of Walworth, N.Y., selecting the best from these famous herds. In 1888 he imported twelve head from the herds of Smiths, Powell & Lamb and the Hon. G. S. Miller, of Peterboro, N.Y. In 1885 Mr. Hallman began to show at our Canadian fairs, and in that year, with no previous experience in showing or fair-fitting, won prizes both at the Provincial at London and at the Industrial in Toronto, winning the bronze medal for his herd at the latter show. In 1886 he showed both at Toronto and at the Provincial at Guelph, and again won first and other honor prizes. Ever since then he has been a prize-winner at every leading show (until this year, when he did not exhibit at all), and has won six silver medals and his share of all the other important prizes, being especially successful in the prizes for bull and four of his get.—Mr. Hallman's career is especially noteworthy from the fact that he has done what he has done through his own unaided efforts. He has had no financial help in his stock-raising business, except what any man of equal character and ability and judgment may get in the open market. He had no financial help from his father. But he likes his business, and is fond of cattle, and makes a study of their dispositions and wants, and so is successful in breeding and raising them.—As regards Holsteins, he, of course, prefers them to every other breed. This is his individual preference, but he thinks he can show reasons for it. He thinks that Holsteins have been greatly misrepresented in this country through prejudice. But in his opinion they are, with good breeding and proper selection, superior to any other breed for the *general farmer*, inasmuch as they stand at the head of all breeds for milk production and for total solids, and are equal to any other breed in butter production. At the same time, when they have to be sold to the butcher, they make a very good quality and weight of beef. In proof of this Mr. Hallman instances a cow of his that had a butter record of over 20 lbs. a week, and when, because of an accident that she had, it was necessary to beef her, she weighed 1,800 lbs. live weight, and dressed over 1,050 lbs., or nearly sixty per cent. of her live weight, and her beef also was of superior quality. Moreover, so Mr. Hallman claims, Holstein calves are superior to those of any other breed as vealers. Then, as to grades, Mr. Hallman claims that when a matured cow of the common stock of the country is bred to a good Holstein bull, her daughters, as two-year-olds, will outmilk their mother, and will also largely increase in their records as they grow older. However, Mr. Hallman's advice to the general farmer who has begun, or is about to begin, to improve his herd by the introduction of thoroughbred blood into it is: "When once you have decided on your breed and chosen your line of breeding, stick to it; mixed breeding will never do at all."—Mr. Hallman's farm is only one hundred acres in extent, but on that he runs an average of from twenty-five to thirty head of cattle, and from sixty to one hundred head of swine, and buys only middlings and bran at times. He never sells any grain off his farm but fall wheat, and of that he sells enough to pay for the concentrated fodder he buys, so that his farm practically supports his stock entirely. Mr. Hallman is a firm believer in corn ensilage. He maintains that *no farmer is either too rich or too poor not to have a corn silo*. With him corn ensilage forms the chief portion of the fodder he uses. He also considers it an important part of the ration for his horses when they are idle in winter. He has not yet used it for feeding swine to any great extent. He looks upon swine-breeding as a very important adjunct to the dairy, and in his own experience he has found it a very profitable part of his whole business.—Mr. Hallman has been an official member of the Holstein-Friesian Association of Canada from the beginning, and has been director, vice-president, and president. He was president when the Dominion Holstein-Friesian Herdbook was established. When the idea of a separate herdbook for Canada was first mooted the members of the

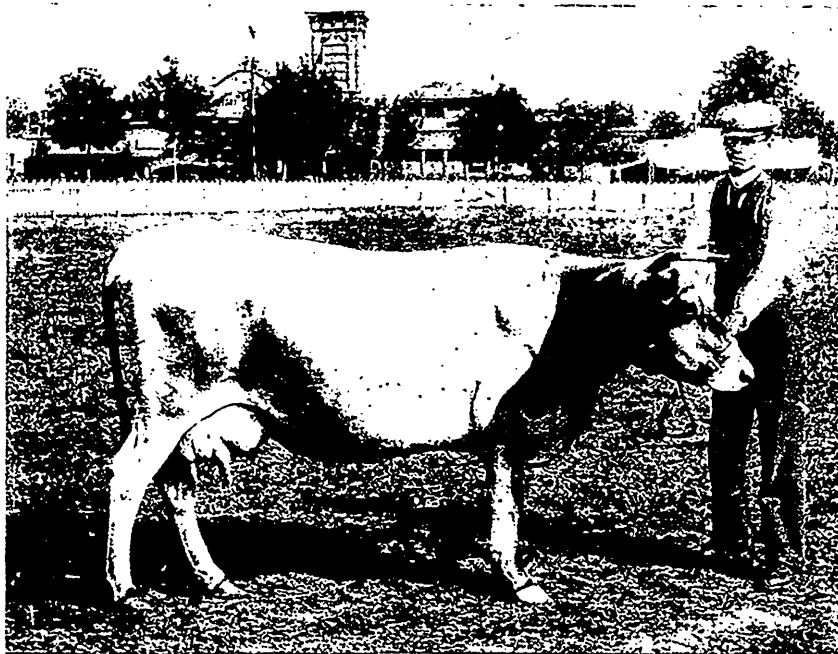
association generally thought that the scheme was impracticable; but, as president, he called a special meeting of the association to consider the matter, and he and Mr. D. E. Smith, of Churchville, were appointed a committee to devise ways and means to establish a Canadian record and publish a herd-book, and this they successfully accomplished. Mr. Hallman is a valued worker in our Farmers' Institute system, and was out as a speaker last year, and will go out again next year.

The breeding of dairy cattle is a subject of much importance. This importance is to be seen when we remember that the subject is one that every dairyman in this and every other country is interested in, and that the cash balance in our bank account entirely depends on the quality of the cows we keep, and the way we care for them.

The man who attains the highest success in

great trouble with most of our farmers is, they have no clear understanding of these laws. They keep mixing up their herds, first trying one breed, then another, then a third, and so on, until they have a mixture of the whole, and then they whine over their failure. Is it any wonder that they make hash?

Heredity is the line of descent traced from



Prize-Winning Jersey Cow, Sunbeam of St. Lambert,
Shown at Toronto Industrial Exhibition, 1896. The property of David Duncan, Don.

breeding and dairying must have a love for his calling. He must be an observant man, quick to perceive all the little details that constantly confront him. He should be fond of animals; because, if he is not, he will not be likely to give them the kind and considerate treatment which is necessary to success. The man who is fond of animals naturally looks carefully after their comforts.

In order to make a success of breeding, we should know something of that most mysterious of nature's laws, heredity, in order that we may breed intelligently, and thus produce animals that will contribute generously to our profits. The

progenitors to offspring. People look at their children, and wonder why they are so much unlike themselves. They forget that they are not the only parents of the child; they should remember that they are the *last* parents, that is all. The child has thousands of parents, and it is the antecedent parentage of the child that marks its character a thousand times more than the last parentage. This we call heredity. Few breeders have been intelligent enough to observe the effect of this law, and to adhere strictly to it. There are some, however, who do this, and it is a fact that wherever this law has been intelligently observed we see the fruits of it, and are cheered by results.

Having this law riveted firmly in our mind, we now launch out. It would be much less of a task to me to deal only with thoroughbreds in this paper, but since my desire is to reach the masses, and in a humble way to give them some food for reflection, I shall endeavor to make the application as broad as possible.

Having decided on the branch of dairying we wish to pursue, we should select a cow adapted to the business, and breed her in a manner not only to reproduce her own good qualities, but to improve upon them. It may be urged that the average farmer about to engage in dairying cannot afford to purchase thoroughbreds of any breed; nor, indeed, is this necessary. I may say,

Where the foundation is not laid with thoroughbreds, secure good natives or grade cows. Test them, that you may be sure of their capacity. Keep none but good ones. Aim to secure a herd of uniformly large producers, that produce milk of a quality best suited to your particular purpose.

Place you ideal high. You will be surprised how soon you will change the character of your herd with systematic breeding and careful feeding. See whether your cows are boarding you, or whether you are boarding the cows. Times are too close to have any delinquents in this respect. Take a short cut with the poor ones. Their carcasses are worth more to feed you than their pro-



Prize-Winning Holstein Cow, Artis Queen Jewel Mercedes,
Shown at Toronto Industrial Exhibition, 1896. The property of A. & G. Rice, Curries, Ont.

however, that at their present low price thoroughbreds would prove a good investment, and many farmers would find it money well spent just to start with one pair, male and female. Ex-Governor Hoard has truly said: "What is the use of wasting a great deal of time in trying to find out whether some cows of the beef breeds can be developed into profitable milkers, when there are now already breeds developed into profitable milkers to an extent that no breeder can hope to attain to even in fifty years? From fifty to one hundred years' start in any line is certainly of advantage to any breeder." There is much food for reflection in these remarks.

ducts. If your cow makes only 150 lbs. of butter in one year doom her at once (that is, if it is the cow's fault and not the feeder's). Replace her with one that is capable, with careful feeding, to give at least 300 lbs. per year. Where your average Canadian cow gives 3,000 lbs. of milk per season, strive to double it. Then gradually raise your standard till you reach 10,000 lbs. of milk per year. This is none too high a limit for you to aim at.

The cost of production must not be overlooked. The profitable animal is the one that produces the most at the least cost. Such a herd cannot be picked up in a day. It must be the result of

careful breeding and skilful feeding and good judgment in selection.

To accomplish these high attainments the herd must be headed by a thoroughbred bull of high merit, of the type you are aiming to produce. His breeding must be unquestionable. His ancestry must belong to a deep, rich line of heavy performers both at the pail and in the churn. He should be of strong conformation, but not coarse; masculine in action and appearance, but not stubborn. He should also possess to a large degree the feminine points desirable in your females. He should be vigorous and strong, and then he

wise useful and not vicious. The best stock often comes when the bull is at full maturity.

By careful and judicious selection in a few years you may build up an excellent herd.

Weeding is always necessary. Here is where expert judgment and practical experience will be of great value. Spare none that are inferior; let only the fittest survive.

One inferior animal will spoil the looks of a whole herd, and if kept for breeding will do untold damage.

If the calves and heifers are properly raised they should begin to milk at from 24 to 30 months old.



Twin Ayrshire Cows, Snow Flight and Snow Flake,

The property of Daniel Drummond, Petite Cote, Quebec. Snow Flake is dam of the young bull, Shining Star, which headed the young herd of Mr. Drummond which took first prize at Montreal Exhibition this year. Nellie Osborne, the grandam of these twins, also won highest honors at Montreal this year, taking first prize as aged cow, and also the sweepstakes prize.

will be sure to impress his characteristics on his offspring. It is here where heredity will show itself. Blood will tell. It is truly and well said that a bull is half the herd. He may be used until his get begin to come in; then another bull from the same breed and same general type should be selected.

It is well to mention here that aged bulls that have proved good sires should not by any means be discarded. If a bull has proved himself a good stock-getter, there is no reason why he should not be used until ten years old if other-

Early development is very essential. It is not only that heifers maturing early will yield a profit more quickly than others, but they will make more useful cows.

A heifer with her first calf must have your best attention. It is then that you fix her future usefulness. Never allow her to go back on her flow of milk. Keep her supplied with an abundance of rich, succulent food. She will pay you back tenfold. Milk her regularly for at least twelve months. It is in this way that you establish her milking period. When once established it is hard

to change. If she needs rest give it between the first and second calving. You can easily regulate this in breeding.

Gentleness is worth gold with dairy cows, especially with heifers. Regular milking, skillfully performed, pays big interest and large dividends.

The improved cow is like unto an improved machine that is built on scientific principles. But when we once find this machine we must use it as a piece of living mechanism, with inherited powers and tendencies which can be estimated only after a full knowledge of its ancestral antecedents.

But, further, when we reflect that the force by which this living machine acts cannot be kept up without some nutritious elements regularly and judiciously supplied, we see that it is of the first importance that we supply these materials liberally, in such quantities as are required to keep the living machine in healthy tone, and also to furnish enough over for the extra force needed for a heavy producing animal.

Breeding without liberal feeding brings disappointment, but combine the two, and you will accomplish something that not only will give you pleasure but great remuneration for your outlay.

SOURCES OF CONTAMINATION OF MILK AND METHODS OF PREVENTION.

By F. C. HARRISON, B.S.A., Bacteriologist, Ontario Agricultural College.

Every cheesemaker is unfortunately familiar with some form or other of gassy fermentation made manifest by the presence of holes in the curd, in greater or less quantity, from a few pin holes, in number, to a curd which will actually float, by reason of its inflation with gas. The occurrence of this fermentation is all the more to

be regretted from the fact that it is well known that the endless trouble and loss which it causes to the makers might all be saved by a little care, a small amount of extra time and the exercise of cleanliness. This is, however, not the only trouble which makers have to contend with. Other types of abnormal conditions, as, for example, acidity, overripeness of the milk, bad odors, bitterness, and many more, are often met. There is a tendency to ascribe some of the affections above mentioned to the food consumed by the animal, and very often the blame is thrown on this factor; but when we reflect that these alterations occur only some time *after* milking, it is manifestly unfair to do this. Modern science shows conclusively that the trouble is due to minute organisms, called germs, microbes, or bacteria, introduced into the milk after it is formed in the cow's udder. These so-called bacteria are

one-celled plants of microscopic size, so small that 25,000 placed side by side would barely measure an inch.

These little organisms were once placed by naturalists in the animal kingdom, but at the present time their plant nature is generally recognized. They are related to the algæ, of which the green, slimy filaments found in ponds and streams may serve as an example, only bacteria contain no leaf-green, or chlorophyl, as it is technically called.

GERM REPRODUCTION.

These tiny forms reproduce by one individual splitting into two, a process called fission. Hence, bacteria have been termed fission-fungi. Their manner of reproduction is very rapid, the process having been observed under the microscope to take place in about twenty minutes. Let us therefore assume, as Cohn writes, that "a microbe divides into two within an hour; these two into four in the next hour; these again into eight in the third hour, and so on. At the end of twenty-four hours the number thus produced would exceed sixteen and one-half millions; in two days they would increase to forty-seven trillions, and in a week the number expressing them would be made up of fifty-one figures," unless their food supply became exhausted or some other retarding influence checked the process of reproduction.

Many bacteria have also another way of reproduction, which is of great importance to the cheesemaker and farmer, namely, by the production of small bodies called spores, which are able to resist unfavorable conditions—such as excessive



F. C. Harrison, B.S.A.

heat, drying, lack of food material, etc. All germs, however, do not possess the ability to form spores, but only certain kinds. These spores have far greater resisting powers than the bacteria from which they are derived.

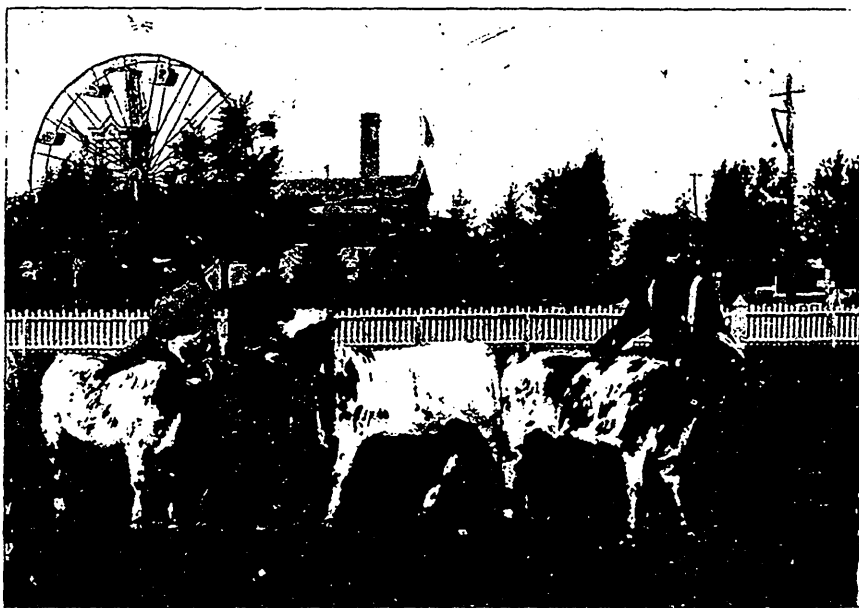
GERMS IN MILK.

Having thus briefly glanced at the life history of germs, let us return to their presence in milk. It has been stated that bacteria, microbes, or germs, as they are variously called, are the prime cause of all undesirable fermentations in milk (that is, if we make exception of the affections which are directly due to feeding, such as turnipy flavor or oniony smell). A fairly safe guide in

Let us now for a moment turn and examine the sources by which the milk becomes seeded with bacterial life.

CONTAMINATION FROM THE FORE MILK.

Milk in the udder of a perfectly healthy cow is sterile; that is, there are no germs contained in it. By the use of a perfectly clean milking tube, and by taking certain precautions, milk has been obtained entirely free from germs; but, practically, as it comes from the cow, it usually has a number of bacteria in it. Thus we may state that the first contamination comes from the fore milk (the milk first drawn). No matter how well a cow has been milked, a certain quantity of milk wil



Prize-Winning Ayrshire Calves,

The property of A. Terrill, Wooler, Ont. These calves, with one not shown in the engraving, took first prize at Toronto this year for best four calves bred and owned by exhibitor.

distinguishing between a physiological trouble and a bacterial one, *i.e.*, one due to germs, is our sense of smell. In the former case the trouble will be most noticeable when the milk is first drawn, whilst in the latter case the trouble will increase with age. It should be remembered, however, that milk will absorb any odor that may be close to it, provided the milk is of a lower temperature than the surrounding atmosphere, and a distinction should be made between the absorption of odor by old milk and a trouble due to bacteria. Usually a careful survey of the surroundings will at once enable a person to distinguish between these two.

always be left in the teat between milking times. This furnishes not only an excellent food for the germs which find lodgment there through contact of the lower part of the teat with unclean particles of bedding, dust, or manure (all of which materials bear countless hordes of germs), but, also, the body heat of the animal makes of this teat an ideal incubator where the bacteria may develop under conditions pre-eminently suited for their rapid multiplication.

Schultz, a German investigator, found in milk tested by him from 55,000 to 78,000 germs per cubic centimetre in the fore milk, and from 0 to 600 in the strippings. From experiments made

in the Ontario Agricultural College, I have found, on an average, 40,000 germs per cubic centimetre in an analysis of the first pint of milk drawn from all of four teats; and only 3,000 per cubic centimetre from the middle milk, the experiments having been conducted in the month of March, 1896.

The commonest germs are those that produce lactic acid, which cause the familiar souring of milk. When we bear in mind the example quoted of the enormous increase of germs, we at once see what an amount of life is seeded into the milk when 40,000 germs per c.c. are put in to start with. And we can see how easily this first contamination can be controlled by milking the first few streams from each teat on the ground.

CONTAMINATION FROM OUTSIDE INFLUENCES.

The second factor of infection is contamination from the animal and milker. Countless germs are resident in particles of filth and manure, in the bedding, on the animal and the clothes of the milker, in the air; in fact, everywhere. The hairy coat of the cow affords a resting-place for these myriads, and, being in a dry condition, the slightest movement effects their dislodgment, very often into the milking pail. Animals pasturing in the summer, wading in pools and ponds, where oftentimes there is stagnant water, will pick up from this medium many injurious forms, which, when they find their way into the milk pail, will meet in the milk conditions best suited for their growth and multiplication. Even the milker, with his dusty clothes, contributes many germs to the milk; also the movements during milking, the switching of the animal's tail, all contribute to seed the milk with bacteria. Everyone knows that even in strained milk many particles, such as

pieces of fodder, manure, hairs, and dirt of all kinds, can be found, and all of these are laden with germs.

Some of this infection cannot, perhaps, be avoided, but as bacteria easily fall from a dry surface, and *cannot* from a moist one, much may be done to lessen the number of germs, by moistening the flanks, udder, and other parts, before milking, care being taken that, the coat although thoroughly wet, be not so wet that water will drop from the surface.

The milker should not moisten his hands with the first streams of milk, but should wash them before milking, and he should also change his coat for one kept especially for the purpose, which should be washed frequently and should be kept, when not in use, out of the dust.

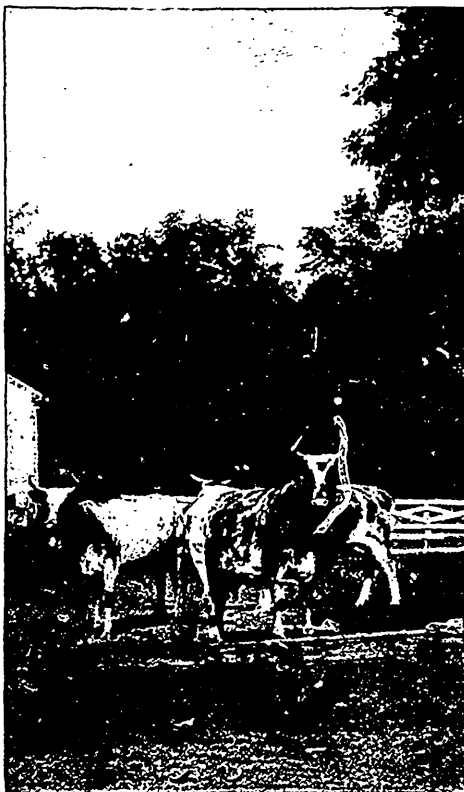
In experiments conducted at Wisconsin Experiment Station, 3,250 germs per minute were deposited in a ten-inch pail, when no precautions were taken, but with precautionary measures, only 115 per minute were deposited.

The dusty air of the barn is also responsible for a number of germs. Especially is this the case when dry and dusty fodders are fed. If these were either moistened or

fed an hour or so before milking, much might be done to lessen the evil caused by them; also if care were taken to hold the milk pail at an angle in order to minimize as much as possible the number of germs which might fall in. Milk, too, should be immediately removed from the barn to a separate room, and strained.

CONTAMINATION FROM UNCLEAN UTENSILS.

Thirdly, there is the contamination arising from the use of unclean utensils. Milk pails, storage cans, strainers, and dippers quickly become in-



Group of Milking Purebred Ayrshire Cows,
The property of Robert Ness, Howick, Que.

fects with germs, which find lodgment in the cracks and seams of the cans. Washing in warm water, or scalding, as ordinarily carried out, is totally insufficient to cleanse these utensils, that is, to make them bacteriologically clean, or sterile. The resistant spores that are always present can quite easily resist these momentary applications; in fact, many even resist a steam heat for several hours. Since this is true, care should be taken that the cans be first washed in tepid water, then thoroughly washed, not with water at 160°-170° or 180° F., but with water at 212° F., or boiling, and, if possible, steam should be used as the final cleaner, confining it, if possible, so that it shall penetrate to every crack and crevice. After this final washing, the pails, etc., should be left to drain. A good practice, where there is little dust, is to expose them to the sunlight during the day, in the same position, outside and away from the barn. Sunlight has a powerful germicidal action, which should not be forgotten.

Wooden milk pails, cotton strainers, and the like should not be used, as the chance of infection is much greater when these are used. If cotton strainers are used, they should be thoroughly washed, and boiled or steamed for at least half an hour.

The practice of carrying the by-products back to the farm, in the same cans as the milk was brought in, is strongly to be deprecated, as very often the result of one patron's carelessness may in this manner be communicated to all the rest, and be an endless source of annoyance.

These by-products are always extremely rich in germ life, and in spores, and if they find harbour in the patron's cans, to get them out is no

easy matter, since steam is not, as a rule, at the command of a farmer.

At Wisconsin Experiment Station, in milk that was milked into a sterile milk pail, 165 germs per c.c. were found, whilst that milked in an ordinary pail had 4,265 germs per c.c., the former remaining sweet nine hours longer than the latter.

INFLUENCE OF TEMPERATURE ON GERM PRODUCTION.

Lastly, the influence of temperature in milk should be borne in mind: increase in temperature generally bringing about an increase in reproduction. Note the difference between summer and winter milk. Milk should therefore be cooled as soon as possible after milking, as this has an *inhibiting* or retarding effect on the multiplication of the germs. Milk, if allowed to cool naturally, takes several hours in the process, which gives the best conditions for bacterial growth. In order to hasten this lowering of temperature, any of the so-called coolers, if placed in a clear atmosphere, are efficacious. The use of ice and suitable aerators all tend to lower the temperature of milk and increase its keeping quality.

Factorymen should pay particular attention to the cleanliness of their vats, washing them with boiling water, after the preliminary washing with tepid water, and if possible apply steam. This also holds good for all cloths, dippers, strainers, and sinks.

Should these simple directions be carried out, much could be done to do away with all those abnormal conditions which are the bane of the maker's life, and it would help to stop the many complaints made to the farmers.



Holstein-Friesian Cow, Emery Beauty,

The property of A. Hoover, Jr., Emery, Ont. Calved March 14th, 1892. Bred by S. Shunk, Jr., Edgely, Ont. Winner of the Milk Test at the Toronto Industrial, 1896. Also winner of the Milk Test for three-year-olds at the Provincial Dairy Show, held at Gananoque, October, 1895.

RAISING HOGS FOR THE MARKET WITH PROFIT.

By W. S. FRASER, Bradford, Ont.



W. S. FRASER has always been an active worker in every movement that tends to advance the interests and position of the farmer. He is the proprietor of "Helmsdale Farm," which is situated in the county of Simcoe, about three miles from the town of Bradford. He has always been considered to be a "good" farmer, and, as an evidence of this, it may be mentioned that he was awarded a silver medal in the prize farm competition of 1890. Although his farm is situated in one of the best wheat districts of the province, Mr. Fraser early realized that when he sold wheat he sold along with it too much of the good material of his farm. He, therefore, some time ago, ceased to grow wheat for sale, and gave his attention to dairying, and began to substitute corn-raising and clover-growing for the use of the bare summer fallow, and with such success that he is able to grow as much grain as formerly, and to keep more cattle; but he sells from off his farm only butter and cream and swine. The residue of the milk (after the butter and cream have been taken from it) he feeds wholly to his young pigs, using with it shorts, bran, and ground grain. Mr. Fraser is confident that, if pigs are carefully fed, they can be made to pay, even at present low prices.

The hog, which is so common in our land, is, perhaps, the least understood of our domestic animals. It is thought by many to be the most stupid, filthy, greedy, and lazy animal that we have. Now, as for his stupidity, it has been proved that he is as capable of receiving instruction as the ordinary dog; his greediness is but his willingness to turn our coarser farm products into delicious ham and bacon; his filthiness is always more the fault of his owner than of himself; while as to his laziness, for which he is so

proverbial, it can be truthfully said that he is never guilty of it, whenever he is in need of anything.

To raise hogs profitably there are three things to remember, namely, that we cannot afford to waste either time, or food, or tissue.

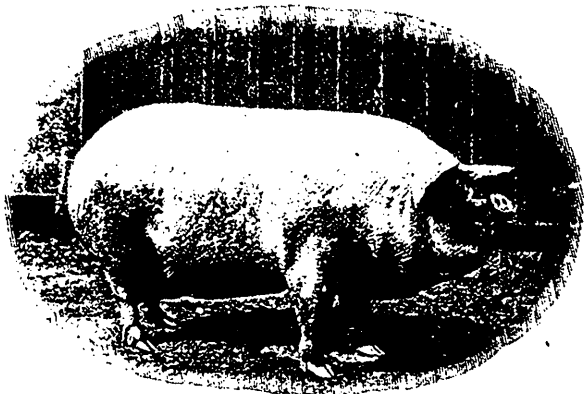
The *breed* is the first thing for consideration. It has been said, and said truly, that feed is more than breed. A poor breed well cared for is better than a good breed badly attended to; yet a good breed well cared for is better still. At present the long-sided, light-shouldered breeds are in demand, for the reason that they produce the

most desirable bacon. The Tamworth, Yorkshire, and Chester White furnish us with the mixed meat which is now so much desired by the consumer. These breeds are prolific, good feeders, and quick growers.

The Berkshire, Essex, and Suffolk are shorter, thicker shouldered, heavier jawed and finer boned. These breeds develop quickly, lay on fat easily, and for the amount of food which they consume give us in return more pounds of meat than do the larger breeds.

These smaller breeds may be profitably crossed with the larger breeds. By using a Berkshire boar with a Tamworth or a Large Yorkshire sow, larger litters are secured than in crossing the other way.

In these days of close competition and small profits, we must economize in every particular, and a sow that does not raise more than six, seven, or even eight pigs cannot profitably be kept. A good brood sow should raise at least twenty pigs each year, and she should continue doing this for ten years. The practice of changing sows often, keeping them but a year or two,



Prize-Winning Improved Yorkshire Sow, Shown at Toronto Industrial Exhibition. The property of J. E. Brethour, Burford, Ont.

is foolishness. Old sows produce larger litters, and, as a rule, make better mothers, than younger ones.

Sows should be kindly treated—not chased by dogs, nor beaten at every opportunity, nor neglected in any way, either in bed or board. When butchering is going on, the brooding sows should first be put away beyond hearing, because the excitement produced by the noises they would hear tends to make them suspicious and cross.

A sow should not be mated until she is seven or eight months old. At all times she should have plenty of exercise and be well fed, especially on food that is largely nitrogenous.

Before farrowing, the sow should be placed in a comfortable pen, where she should have a limited but sufficient supply of fine bedding.

After farrowing she should have a warm drink, but nothing else for twenty-four hours. For the first few days after she has farrowed she should be fed lightly.

The tendency of sows to eat their young is caused by their being fed food that is too concentrated; or by a lack of exercise. A mixture of bran and ground oats, with some roots or grass fed previous to farrowing, will prevent this unnatural desire.

As the young pigs grow older the sow should have all the food she can eat (ground oats and peas and slop), and if a portion of the pen be set apart so that the young pigs can have access in it to a trough in which a mixture of ground grain and bran is kept, the young family will soon learn to eat and become gradually self-dependent.

Castration should be done before the pigs are weaned. The pigs should be weaned when they are about seven weeks old. After the first separation the sow should be returned to the pigs in about twelve hours, and this return should be repeated once or twice. In this way the sow is relieved and her milk utilized.

About the fifth day after weaning takes place the sow may again be mated.

The young pigs after weaning should be kept growing continuously, and to secure this they

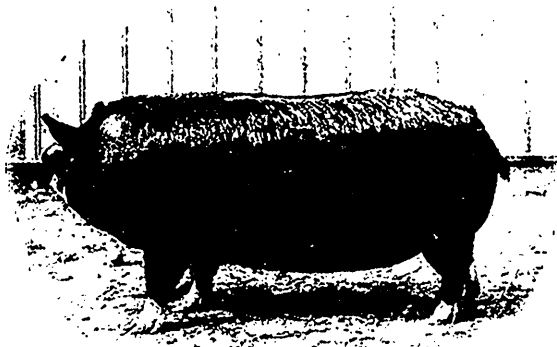
should be fed liberally with ground oats and shorts and all the milk and kitchen slops that are available. Ashes and salt should be kept within their reach at all times. If their pen is small, place a wide board set on edge between their trough and their bed, so as to give them exercise and prevent foundering.

Spring litters are most profitable if fed on clover. A half acre of lucerne clover will grow feed enough, with light rations of grain, for twenty hogs during the summer, and will produce pork at a cost that will give a good profit even at present prices.

Fall litters require more food than others and, to make them pay, more attention. Their pen must be comfortable, and their troughs so constructed that no food shall be wasted. Their ration should consist of a greater proportion of heat-producing food than that for summer litters; such as barley or peas, with a mixture of wheat middlings or bran.

It is better to give them water before feeding them, and to feed them their meal dry, moistening it slightly in the troughs.

By raising hogs and feeding them carefully we can obtain a better price for our grain, as pork, than by putting our grain on the market direct, and then we have the manure besides.



Prize-Winning Berkshire Sow,
Shown at Toronto Industrial Exhibition. The property of J. G. Snell,
Snelgrove.

Things to be remembered in hog-raising:

- (1) Never feed hogs after they attain a weight of 180 lbs. live weight; because it costs more to put a pound of flesh on them than when they are younger.
- (2) Do not keep more hogs than you can maintain in good growing condition.
- (3) Exercise and cleanliness are essential to profitable hog-raising.
- (4) Get your spring litters on the market as early as possible.
- (5) Do not keep two or three sows doing only the work of one.
- (6) Kind treatment, even of hogs, pays.

I am glad to note that FARMING always keeps abreast of the times, furnishing valuable and instructive information relating to every branch of agriculture and stock-raising.—J. S. Sproule, M.D., M.P. for East Grey.

LAND DRAINAGE.

By THOMAS McMILLAN, Seaforth.

In the improvement of the physical character of soils, the first place must be given to under-drainage, because it must precede all other methods of improvement. In fact, all efforts at effectual cultivation must be a failure so long as the land is allowed to remain in a water-soaked condition, as the more we work it in this condition the more solid and less porous it becomes. The reason for this is that the continual overplus of water effectually excludes the air, and prevents it from exercising its beneficial influence upon the soil. This condition also prevents the warm rains of summer from penetrating the soil and producing the beneficial effects which they otherwise would. A great many farmers would lead us to think, from the network of water furrows they have on the surface of their fields, that the object in draining is to get the water *out of* the land; but our aim should be to get the water *through* the land. We may expect satisfactory returns from our crops only where the rainfall finds a gradual passage through the soil, sinking where it falls, carrying the warmer temperature of the air into the land, carrying also the elements of plant food which the air contains to the roots of the plants, and making passages for the circulation of the air itself, that great element upon which the very life of vegetation depends.

No matter how rich a soil may naturally be, there is probably not more than one per cent. of its substance at any moment in a fit condition for nourishing crops. The great bulk of its plant food is in a tied up condition, unavailable for use, and is only slowly liberated by the action of air, heat, moisture, and manure. Therefore, knowing this, we can understand that our soil is simply a great laboratory, in which the elements of plant food are constantly being prepared for the use of plants; and the productiveness of a soil, at any time, depends upon its condition being such as will enable these elements to be properly prepared for use.

BENEFITS GAINED BY DRAINING.

I have already stated that land in a water-soaked condition prevents the air from exercising a beneficial action on the soil, because it is excluded. Some of the benefits to be gained by draining are:

(1) It deepens that portion of the soil where the fertility is available, because it carries off the surplus water, and allows the air to penetrate to a considerable depth.

(2) It assists pulverization.

(3) It also prevents surface washing, by enabling the rains to sink as they fall and percolate through the soil, and the overplus to be carried off by the drains.

(4) It tends to lengthen the season of growth, as it enables us to get on the land earlier in spring and cultivate later in the fall. Drained land, also, dries more rapidly after heavy rains during the summer.

(5) It makes the land lighter to work, as it prevents baking.

(6) It prevents plants, more particularly fall wheat and clover, from being heaved out by the action of frost. We all know from experience how injuriously frost acts upon the wet portions of our wheat and clover land in the early spring.

(7) It tends to prevent drouth, for although to those unacquainted with the principles of drainage and its effect upon the soil, it may appear inconsistent to say that land well drained is drier in wet weather and more moist in dry weather than undrained land, yet all experience proves this to be true of a well drained soil.

(8) Upon land in this condition, also, weeds are much more easily kept in check, inasmuch as the crops which are sown are very much more likely to grow and thrive than they are in undrained land, and thus they will tend to smother the weeds and prevent their coming to maturity.

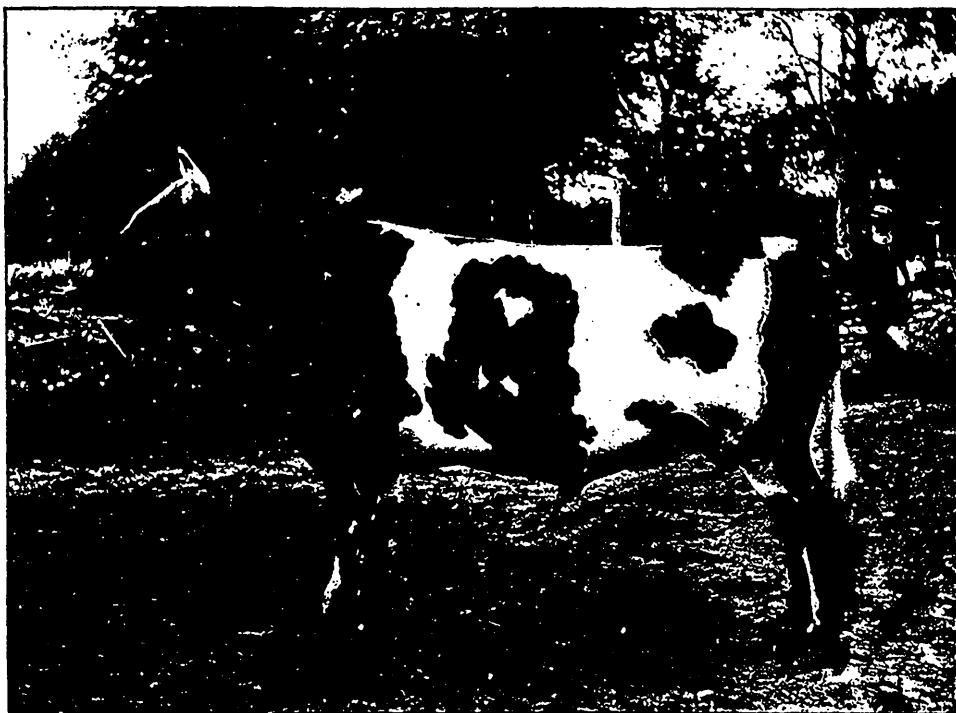
(9) By allowing the warm rains of summer to filter through the soil before being carried off by the drains, the soil is thus able to retain and absorb almost all the plant food which is thus brought down from the atmosphere; and, the surplus water having gone, space is left which is filled by the warm air, which raises the temperature of the soil higher than can ever be attained in a wet soil, because in a wet soil, where the pores of the soil are constantly filled with water, the land is cold, as water is a poor conductor of heat, and heat which would otherwise penetrate the soil is absorbed by the evaporating water which is on or near the surface. In order to practically test the actual difference in the temperature of drained and undrained land, elaborate experiments have been conducted with thermometers in red moss land, with the result that, at a depth of seven inches from the surface, a temperature of 10° F. was gained in drained compared with undrained land in the same field.

All these improved conditions of the soil caused by drainage tend to give us an earlier harvest, a

greater variety of crops, a better quality of produce, and a more abundant yield, results which we are all striving to obtain.

Further, with regard to drainage and the application of manure, I would remark that the secret of success in the operations of the successful farmer is the fact that he is able to give back to the soil through the manure heap nearly all that is extracted by the crops (or, indeed, more, if he buys additional feed), yet it is simply time misspent to apply manure to wet lands, for the reason that such lands are unable to effectually extract from it the

The first, and a very important, point in draining is to find a proper outlet for the whole system. This outlet should be from eight inches to a foot deeper than the small drains which are to be put in. Avoid, if possible, open ditches as leading drains. If an eight inch tile will take the water, do not have an open ditch. Where an open ditch must be used keep it well cleaned out, so that the drains running into it do not become blocked. Have as few openings as possible into open ditches and you will be less bothered in keeping the openings clear, and remember that



Prize-Winning Ayrshire Bull, Nelson of Park Hill,

Head of the old established Ayrshire herd of Mr. James Drummond, Petite Cote, Quebec. Mr. Drummond himself, who is one of the most successful Ayrshire breeders in the Dominion, is seen in the background.

fertilizing elements it contains. This fact alone should be sufficient to induce any farmer to thoroughly underdrain his land where it requires it.

PRINCIPLES TO BE OBSERVED IN DRAINAGE.

No rigid rules can be followed in the draining of land. The nature of the soil and subsoil and the inclination of the surface must be taken into consideration. We must also find out, if possible, whether the wet is caused by surface water or springs; when this is understood it will be easier to decide upon the best plan.

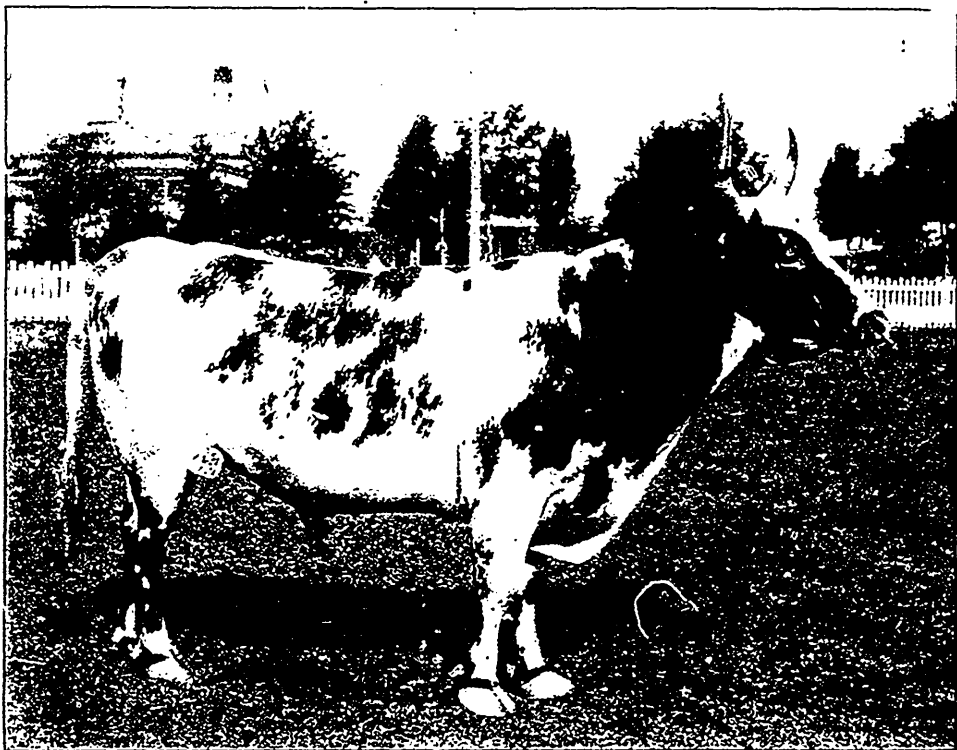
the action of frost and the atmosphere will, in time, crumble any tiles that are exposed. To overcome this difficulty, it is a good plan in the case of all openings into open ditches to put stone in for four or five feet, built with an opening fully as large as the tile. Upon level land of a uniform quality, the main drains should be placed on the lowest ground and dug from three to five inches deeper than the laterals. The lateral drains may run at right angles to the main drains, but they should always enter them with a bend at ten to fifteen feet from the ends, so that

the water coming from them may flow easily into the main drain, without causing back water by the meeting of the two currents. If, where the main drain should be placed, there is quite a slope and any danger of the soil being washed off the tile during a freshet, I would always place the main drain a little to one side of the run-way.

THE DEPTH OF THE DRAINS.

The depth of the drains and their distance apart must also be determined by the nature of the soil. In a very stiff clay soil, of considerable

snow has disappeared, and just after a good rain. Places requiring drains will generally be seen to present a glazed and watery appearance; this is more particularly the case upon springy land, and on knolls where water rises. Upon grass lands the wet spots generally present a rough surface, caused by the frost heaving the roots of the plants. Drains should be dug in the damp season, in order to have means to be sure of sufficient fall and a level bottom, as we then generally have plenty of water oozing from the soil for levelling purposes.



The Imported Ayrshire Bull, Carlyle of Lessnessock,

Winner of the first prize in his class at the Toronto Industrial Exhibition, 1896. The property of R. G. Steacy, Lyn.

depth, I have seen drains that were put down three feet almost entirely useless, owing to their being placed too deep; but upon digging fresh drains in the same part of the field, two feet deep, they would draw much farther. Upon such soils we should have comparatively shallow drains at close intervals. Upon more open soils the drains can be placed deeper and farther apart.

WHEN TO LAY OUT THE PLAN.

The best time to go into a field to see where drains should be placed is in the spring, when the

GETTING THE DRAINS RIGHT.

Some writers advocate the use of instruments for levelling purposes; but to the intending drainer I would say: The most practical method, that of actually seeing the water running, is the simplest and best; and when the drain is dug, if there is any doubt as to the fall, and no water running, (bear in mind you have already done too much to have your drain finished imperfectly) carry a few pails of water, if only a short distance, and pour them into the drain, and if a longer

distance use a barrel of water, and you will be surprised to see how far it will run, even in the bottom of a dry drain.

When available, round tile is the best material, but the bottom of the drain must be made smooth and even.

HOW TO LAY THE TILE.

Great care must be taken in laying the tile firm and even. In laying the tile we always start from the outlet and lay up grade, standing on each tile after it is laid and has received a tap up against the last one to see that it is lying close and solid. If you come across any soft spots or quicksand, dig the drain a little deeper than the tile is to be laid, and tramp the extra depth full

2½ inch bore, per 1000....	\$ 9 00
3 " " " "	11 50
4 " " " "	17 50
5 " " " "	22 70
6 " " " "	33 60
7 " " " "	45 00

Cost when laid in the field :

2½.....	\$11 00
3.....	13 50
6.....	39 00

For digging drains under 2½ feet deep we pay 10 cents per rod, with board, and 12½ cents per rod for drains that depth and over. At these prices a three-inch tile drain will cost about 40 cents per rod, and a six-inch tile drain about 90 cents per rod. To drain land as we have it drained, with the drains on an average about four



Prize-Winning Group of Ayrshires,

Winners of the first prize for four animals the progeny of one bull, at Toronto Industrial Exhibition, 1896. The property of William Stewart, Jr., & Son, Menie, Ont.

with clay on which the tile may be firmly laid. Then over the tile tramp about three inches deep of surface soil, after which fill the drain with the plow.

COST OF DRAINING.

We never let draining at so much per rod by contract—or put in the tile by contract. This latter matter is the most important thing of all, and the farmer should be present to see that the work has been properly done; so we always put in the tile and fill the drain ourselves. The cost of draining depends upon the quality of the soil, the price of tile, distance it has to be drawn, etc. Our tile cost us in 1895, at Seaforth station, six miles from home :

rods apart, it will cost in the neighborhood of \$15 per acre ; and I am convinced that draining, where it is required, will pay for itself in from three to five crops.

A farmer with plenty of help can drain cheaper by taking off the surface with the plow and loosening the second furrow without the mould-board before shovelling the earth out. Proper draining spades and scoops for taking out the bottom of the drains should always be used.

Every farmer should have a map of his farm drawn on paper to a certain scale, and each year, as he sinks his drains, he should place them upon the map, which will thus be found very convenient for future reference.

HOW TO CULTIVATE THE SOIL SO AS BEST TO RETAIN ITS FERTILITY.

By WM. RENNIE, Farm Superintendent, Agricultural College, Guelph.

To secure the best results from our farms, certain principles must be adhered to in order that the fertility of our soil be not only retained but increased, and at the least possible cost.



Mr. Wm. Rennie, O.A.C.

Many of our new lands in this province, when first cultivated, were capable of growing

good crops for a number of years, but in many cases the supply of plant food has now become exhausted, and to renew our farms so that they will produce as good crops as formerly is the all-important question at the present time.

In order to do this one of the first steps to be taken will be to adopt a system of rotation of crops which will be best suited to the circumstances, considering the location, the kind of soil, and the number and kind of animals to be provided for. In adopting a rotation it is essential that a crop of clover or sod be plowed under every three or four years, in addition to the barnyard manure, in order to restore the required amount of vegetable matter for the growth of cereal and other crops; and it is not only necessary to fill the soil with vegetable matter, but it must be made available as plant food before we can derive any benefit from it. It is ordinarily supposed that a chemist has only to make an analysis of a soil in order to tell you just what it lacks, and what elements should be added in order to make it productive. What chemical analysis does actually show is the elements which are present, and in what quantities, but it does not tell whether they are available as plant food or not, and it is just this point that we require to know in order to supply the deficiency.

Plowing under a crop of some leguminous plant, such as clover or peas, together with a liberal application of barnyard manure, will provide sufficient plant food for one or two crops of grain, but it must first be made available for plant food by the action of heat, moisture, and air. This vegetable matter in the soil is termed "humus"; and when

decomposed by the bacteria of nitrification, its constituents become available as plant food.

Humus in a soil has a distinct value, apart from the plant food which it contains. It absorbs and retains moisture much more readily than any other ingredient, so that a soil which is rich in humus will withstand drouth very much better. It aids in the decomposition of the mineral matter of the soil, changing unavailable into available plant food. It fixes ammonia in the soil, and thus prevents its being lost by leaching or evaporation; and it improves the mechanical condition of a heavy soil, making it lighter, more porous, and less adhesive. On a sandy soil it seems to bind together the loose particles of sand, and so prevents the excessive leaching of plant food.

Stimulating fertilizers, such as gypsum, lime, and salt, may be used to advantage on a soil which is well supplied with vegetable matter to change it into available plant food quickly; but as these are only stimulants, and do not furnish much plant food in themselves, their continued use must, and does, exhaust the soil of its supplies of nitrogen, potash, and phosphatic compounds, so that the result is a more rapid and complete exhaustion of the soil than when these stimulating fertilizers are not used. That is why the use of land plaster does not give such good results as in former years.

In adopting a system of rotation of crops, summer-fallowing should not be included, because plowing the land several times during the summer season adds nothing to its fertility, and is particularly destructive to the humus and nitrogen. It temporarily puts the soil in better condition by improving the tilth, and thus making some of the plant food already in the soil available; but before this plant food is required a large portion of it is lost by leaching and evaporation.

The rotation adopted at the Ontario Experimental Farm is a four years' course, viz., first and second year, meadow and pasture, principally clover; third year, corn, roots, and peas; fourth year, grain, viz., wheat, oats, and barley, with all of which clover and grass seed is sown.

Sod land should be plowed soon after haying, say, the last week in July or first of August. This will give ample time for the clover and grass roots to decompose and become available for plant food the following season.

As soon as the land is plowed it should be thoroughly pulverized on the surface with a common harrow or disc; this will act as a mulch and hasten decomposition, and at the same time it will start Canada thistles and other perennials, and germinate any weed seeds which may be on or near the surface.

When these are two or three inches high the broad-share cultivator should be used, cutting off every weed about two inches below the surface, after which a single stroke of the harrow will leave them in good shape for the sun to destroy. This should be repeated at intervals of about two weeks until November, when the land intended for corn, roots, and other hoed crops should be manured, and then ribbed, or drilled up with a double mould-board plow; this will throw all the manure into the centre of the drills, where it will decompose and mingle with the soil and will not be washed out by rain and melting snow, which will run off in the furrows without disturbing the manure and decomposed vegetable matter in the heart of the drill.

In the following spring, when those drills are harrowed down, the soil will be in the best pos-

sible condition for growing corn and roots. The cultivation of these crops should be shallow but thorough during the summer.

As soon as the peas, corn, and roots are harvested, instead of fall plowing go over the land with a set of grubber teeth in the cultivator, as deep as possible, and follow with the broad shares.

On light land no further cultivation is required in the fall; heavy clay land had better be drilled up, so that the winter frosts will pulverize the soil, and leave it in good shape for a grain crop and seeding with clover the following spring.

I would just add, in conclusion, that when stock-raising is followed, and all the coarse grain raised on the farm is consumed as food, together with a quantity of bran purchased, there is no loss of fertility, but rather a gain, providing that clover is grown to supply the necessary nitrogen; and let it be remembered that in the cultivation of the soil the two chief requisites are to provide the soil with a sufficient quantity of animal and vegetable matter, and to have it made available as plant food.



Sweepstakes Galloway Bull, Canadian Borderer,

The property of D. McCrae, Guelph. This bull headed Mr. McCrae's herd which took first place both at Toronto and Montreal this year. Borderer is a steadily working animal, used for cutting feed on tread power. He cut for 63 cattle and 8 horses all last winter.

THE FARMER'S FERTILIZER.

By D. Z. GIBSON, B.S.A., Willow Grove, Ont.



D. Z. GIBSON is a farmer's son, who himself follows farming. He is a graduate of the Ontario Agricultural College, being a gold medallist of that institution for the year 1891. In the following year he received his degree of B.S.A. from the University of Toronto. Since leaving college Mr. Gibson has been constantly engaged in farm work. For some years past he has been employed as a speaker at Farmers Institutes, and his papers and addresses given in this work have always been practical and to the point.

Successful farming depends upon successful crop growing. This is true in nearly all cases, regardless of the line of farming pursued.

It does not require much argument to prove that the farmer who raises the most food per acre will, other things being equal, make the most money. Large crops are therefore absolutely necessary if much profit is to be derived from the business of farming.

But even the most skilful farmer cannot grow good crops, for any length of time, unless he restores to the land by some means or other the larger part of the plant-food ingredients contained in the heavy crops removed.

In view of these facts, then, the question of maintaining the fertility of his farm confronts every farmer. How can this question be worked out?

At the present day there are many methods, the practising of any one of which, or two combined, will enable the farmer to keep his soil in a fair state of fertility. The cost, convenience, adaptability, certainty of action of any method, is something that must be considered.

I intend in this paper to deal only with farm-yard manure—believing it to be a factor that will ever continue to play an important part in fertilizing the farm. Of course, in the future, it may be necessary to use artificial fertilizers, as they are being used to-day in the New England



Prize-Winning Herd of Herefords

The property of Mr. H. D. Smith, Compton, Quebec. This herd took first prize both at Toronto and Montreal this year. The bull is Amos of Ingleside, who stood first in his class and also won the sweepstake prize at Toronto. The cow to the extreme right is Lady Tushingham 3rd, who also was first in her class and the winner of the sweepstakes prize at Toronto this year.

States and Europe. Some find it profitable to do so now in this country. But it is questionable if the average farm in Ontario is sufficiently exhausted in mineral constituents to justify the use of artificial fertilizers to any great extent.

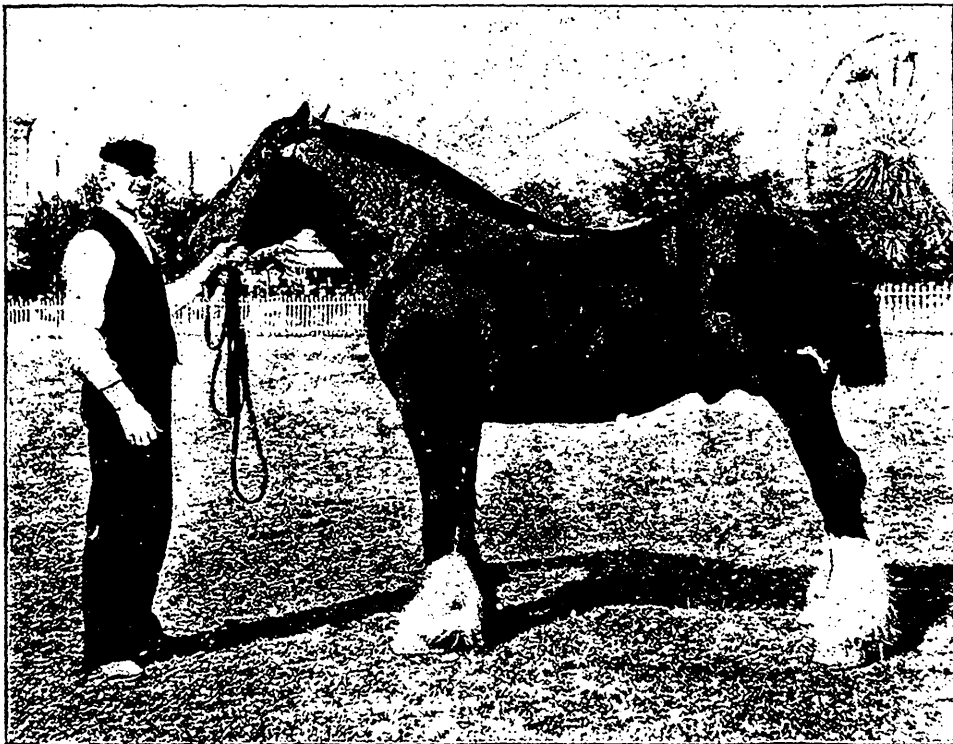
It is well also to bear in mind, in this connection, that along with thorough drainage a knowledge of the chemical properties and the requirements of the soil is necessary before it would be wise to expend large sums in enriching our farms by artificial fertilizers.

Our experimental stations have not yet clearly

table mould or humus, the presence of which in any soil makes it warmer, and, at the same time, more retentive of moisture, which is important in seasons of drought. By its use heavy soils are made porous and more easily worked; while, on the other hand, it renders light soils more compact and less liable to leach.

Because of these important advantages it behooves the farmer to pay close attention to farmyard manure and handle it carefully, so as to save as much as possible of it.

Farmyard manure is not a concentrated ferti-



Imported Shire Stallion, *Pride of Hatfield*,

The property of Morris, Stone & Wellington, Fonthill. *Pride of Hatfield* won first place for aged stallion at Toronto this year, and was sweepstakes stallion at the Toronto Horse Show last spring.

proved to us that the commercial fertilizer is a great boon to the farmer. Therefore, at the present day, all things considered, farmyard manure is the safest and most important source of enrichment for our land. It is certain in its action. It supplies plant food nearly similar in composition to the plant itself. Its effects are also durable. It exerts, when decaying, a good influence upon the land, inasmuch as it renders soluble insoluble plant food, so that it can be made use of by the plant.

It is also especially valuable in furnishing vege-

lizer, and is rather bulky and expensive to handle. This is perhaps its greatest disadvantage.

It costs no more, however, to handle a ton of rich than a ton of poor manure containing only half as much plant food; therefore the labor of handling plant food in rich manure is less than in poor manure. Hence the advisability of making manure as rich as possible, so long as this is consistent with economy.

The quality of the food fed affects the richness of manure, and we can expect a rich manure only from food rich in manurial constituents. The

care of manure also governs its richness, and right here is a wide field for study and observation, which are necessary if the best results would be obtained.

Those elements in manure that are of practical value, and concern the farmer most, are nitrogen, phosphoric acid, and potash. Fattening animals void about ninety-five per cent. of these elements, while the droppings from milking and growing animals are not quite so rich.

and haul them to the land, thus saving the chaff and losing the wheat.

Allowing farm stock to lie and roam about yards, lanes, and other by-places will result in the loss of much fertilizing material, since the excrements voided on those places seldom, if ever, reach the fields. In the hog-house, where concentrated foods are fed, large loss will take place if the bedding which is necessary to absorb the liquid is insufficient. Liquid manure left



Prize-Winning Shire Filly Colt, Laura,
The property of Morris, Stone & Wellington, Fonthill. Winner of first prize at Toronto Industrial Exhibition, 1896.
Her dam, Daisy, was winner of prize for best mare with foal by her side.

Generally speaking, the liquid manure from common farm animals is worth twice as much as the solids, excepting that from the working horse, which is worth nearly three times as much.

Liquid manure also contains food in a form more available for the use of plants.

Yet, in the light of these facts, some farmers bore holes in the horse stable floor, so that the liquid may run through and not soil their horses, and at the same time carefully collect the solids

lying unabsorbed for twenty-four hours in a gutter behind the eaves will ferment, causing about a third of its nitrogen to pass off in the atmosphere.

The necessity for providing absorbents, such as straw (better if cut), gypsum, muck, or loam, is, therefore, very apparent.

Horse manure, where convenient, is used by some as an absorbent in the cow stable. When thus mixed with cattle manure it will not ferment so readily, another great source of loss in many instances.

A great deal has been said and written about stock-raising and dairying as a means of retaining or restoring the fertility of the farm; but is it not, to a great extent, all in vain if those channels of waste above mentioned (and there are many others) are not cut off?

The best place to make manure is in an apartment where stock are allowed to run loose. In such places the liquids and solids are well mixed. The manure is packed by the treading of the animals upon it, and fermentation is largely prevented. In cold weather it will not be frozen, and can be hauled direct to the land at any time.

The liability to waste is thus reduced to a minimum. This method can be practised, to a

ten per cent. When loss occurs, in nearly all cases it is in the handling of the manure before it is applied to the land.

In view of this, then, manure should be spread upon the land in as fresh a state as possible. Practically no waste will take place from leaching unless the land be very hilly. When applied fresh, more humus or vegetable mould is added to the land, with its accompanying advantages. Very little will be lost through being exposed to the air. There is also an advantage in having this part of the farm work over before spring work comes on.

If manure cannot be hauled out as it is made, on account of deep snow or other causes, a cov-



Heavy Draught Brood Mare, Kate Hill 2nd, with her Foal,

The property of Wm. Brewster, MacIntyre, Ont. Winner of the first prize for brood mare and foal, at Toronto, 1896; also for mare with two of her progeny; also for best mare of any size. The foal also won first prize.

certain extent, by nearly every farmer, since de-horning has become so common.

The old notion that manure must be well rotted before being applied to the land is fast dying out, and the sooner the better for the farmer.

It may look more like manure when rotten than when fresh; but it cannot be any richer, and the chances are ten to one that it will be a great deal poorer in fertilizing properties. Professor Roberts, of Cornell University, found that horse manure piled up loosely for four or five months lost half of its manurial value, while cow manure, under the same conditions, suffered to the extent of forty-three per cent.

The same manure, closely packed, lost only

ered yard or shed should be provided, so as to prevent leaching. Some have uncovered yards formed so as to slope from all sides to the centre. Of course, in this case, if the bottom of the yard is water-tight, no manurial value will be wasted; but the manure will become saturated with rain and melted snow, and the labor of handling be increased because of the large amount of useless water to be lifted.

Scientists have been trying for years to convert the free nitrogen of the air into some article suitable for man's use, but, as yet, only the farmer has made a success of it. This is accomplished through the growing of leguminous plants, such as clover, peas, beans, etc. When these are

grown and fed to stock, and the resulting manure carefully saved, the fertility of a farm may not only be maintained, but can be increased as to its supply of nitrogen, that most valuable, and at the same time most elusive, element in farm practice. It is ever striving to outwit the farmer, to get out of his grasp, and get into the air again.

As clover, peas, and beans require large amounts of phosphoric acid, potash, and lime for successful growth, and as there are other crops that must be grown on the average farm that cannot get their nitrogen from the air, it becomes

necessary for the farmer to supply the aforesaid elements in some way or other, if he would maintain fertility. He can do this by feeding the crops grown upon his farm and returning the manure to the fields. If concentrated foods such as oil cake, cotton-seed meal, bran, etc., are bought and fed, these will increase the fertility.

In conclusion, it can be safely said that without the use of artificial manure the fertility of the farm can be *maintained*, and in many cases *increased*, if close attention be given to the manure heap, aptly termed the farmer's treasury.

HOW TO GROW STRAWBERRIES FOR HOME USE.

By CAPT. JAMES SHEPPARD, Queenston, Ont.

CAPTAIN JAMES SHEPPARD, of Queenston, Ont., is a fruit-grower of experience and success, his specialties being peaches, grapes, and early tomatoes, though he also grows other fruits, such as pears, plums, and strawberries. He is a member of the Ontario Fruit Growers' Association, president of the Niagara River Fruit Growers' Association, and vice-president of the Lincoln County Farmers' Institute. As a speaker on fruit topics at farmers' institutes he has been a success, and was employed as a lecturer last year, and goes out again this year. He is also an executive officer of the Ontario Good Roads Association, and has done a great deal to promote the making of good roads in rural districts, and was in charge of the exhibit of the association at the Toronto Fair just held. He is reeve of Niagara township, and is captain of the 2nd Dragoons Cavalry, of Welland.—Captain Sheppard is an enthusiastic fruit-grower, and was the first man in his district to introduce the growth of strawberries as a commercial undertaking. He has been especially successful in raising early tomatoes, which he does entirely by means of outdoor cultivation. He believes that money can be made in fruit-growing; that it is both a pleasant and profitable occupation. But he advocates very strongly that more care should be taken by fruit-growers in grading fruit for market. Fruit is now, to a large extent, "pooled" in the selling, and the poorer grades bring about as large a price as the better grades. The man, therefore, who is careless in his packing and grading reaps a portion of the profit that should go to the honest and careful fruit-grower who is strict and conscientious in the grading and packing of his fruit. He, therefore, advocates that local associations of fruit-growers should provide a means for controlling the grading and sale of fruit, so as to secure higher prices for the better grades of fruit. In this way the fruit industry would be benefited, and the purchaser



protected from imposition and misrepresentation.—Captain Sheppard's fruit farm is thirty-five acres, and he thinks that is quite as much as one man can attend to properly. As to farmers going into fruit-raising, he is strongly of the opinion that every farmer ought to grow his own fruit, and keep his table bountifully supplied with all kinds, but especially with small fruits, as being conducive both to health and to the comfort of the home.

Except your soil is very stiff clay, you do not need any special preparation for strawberries. Let the land be clean and in a good state of cultivation. If hard clay, trench deep in the fall; and if coal ashes can be had, apply a heavy dressing before planting.

Plant as early in the spring as the ground will work. Make your rows four feet apart, and set

plants one foot in the row. Pinch off all fruit buds and large leaves. Pack the earth firmly around the roots of the plants, and keep the ground loose with hoe and cultivation. Do not let the runners start too soon, as that tends to weaken the plants; about the middle of August is soon enough. After that they may be allowed to run, and, if kept in along the row, will form a

solid bed, which, however, should not be over a foot or fifteen inches wide.

As soon as the ground is frozen in the fall, cover with a thick layer of straw or evergreen boughs. Do not remove the covering too early in the spring, as the mulch keeps the plants back, and reduces the damage from frost. Rake off the covering, stir the ground, and put the mulch back between the rows, and no further attention is required till the fruit is ripe.

Do not plant many varieties; two or three are enough. Bear in mind that there is a difference in strawberries. Some are perfect flowering varieties, known as *staminate*, which will bear if no

other variety is near them; and some other varieties, known as *stillate*, will only bear when planted near staminate varieties. Much disappointment and loss have often arisen from neglect to mark this fact.

Do not imagine when you have once planted a strawberry bed that it will last a lifetime. Plant a few new plants every year; and as the old rows get grassy and run out plow down, and clean the land with some hoe crop; then give a dressing of manure, and you can plant again. As suitable varieties I would name, for *staminates*, Wilson, Williams, Jessie; and, for *pistillates*, Crescent, Buback, and Haverland.

THE CULTIVATION OF THE APPLE IN THE NORTHERN COUNTIES OF ONTARIO.

By W. W. HILBORN, Southwestern Fruit Experiment Station, Leamington, Ont.



W. W. HILBORN, of Leamington, Ont., is a born horticulturist. Even as a boy he experimented with new fruits and in the raising of seedlings. He originated the "Hilborn Black Cap," a variety of raspberry more largely grown in Canada at present than any other black cap. When the work at Ottawa, in connection with the Experimental Farm there, was first organized he was appointed horticulturist, and he held the office for three years; after which he resigned it to engage in peach culture for himself, as a business. Mr. Hilborn's peach orchard is situated in Essex county, where he has about one hundred acres planted to that fruit. Essex county is acknowledged to be the best location in Canada for the growing of peaches, and it is doubtful if any other district on the continent can produce peaches of better quality than it does—if, indeed, as good. Thousands of acres are being planted to peaches in Essex, and the prospects of the district as a peach-growing area are of the brightest. When the Ontario Fruit Experiment Stations were instituted, Essex was chosen as the district for experiments in peaches, and Mr. Hilborn was placed in charge of the station there, which was named the Southwestern. He has already over 150 varieties of peaches growing on his experimental grounds, and from his study of these he hopes, in the course of time, to be able to give fruit-growers much valuable information.

Simcoe county is about the northern limit of the territory in which the apple succeeds, and whenever we approach this limit the cultivation of the apple must be carried on with special care if we wish to have a very profitable crop.

There is no doubt in my mind but that the apple can be grown very extensively in the northern counties of our province, and give greater returns for the time and money expended upon it than can be obtained in growing most other crops. We all know that grain farming does

not pay as it once did. We should, therefore, look around and see what crops can be raised instead of grain, that will pay. There is a large portion of all our northern counties that is admirably adapted to the growth of the apple, and we must remember that the farther north we can perfect this fruit the higher color, finer flavor, and better keeping qualities it will have.

These are all points of the greatest importance; but it must not be forgotten that more care and skill are required in the cultivation and manage-

ment of the orchard where the growing season is somewhat shorter and the cold of winter is more intense than we find to be the case in our more southern counties. We must aim, therefore, in northern orchards, to get an early and vigorous growth of wood, and to ripen this wood and the fruit buds thoroughly in the autumn. With this end in view, I would recommend the following method of planting and cultivating an apple orchard as likely, in our northern counties, to give the greatest measure of success:

SELECTION OF THE TREES.

Always select young, healthy trees, two years

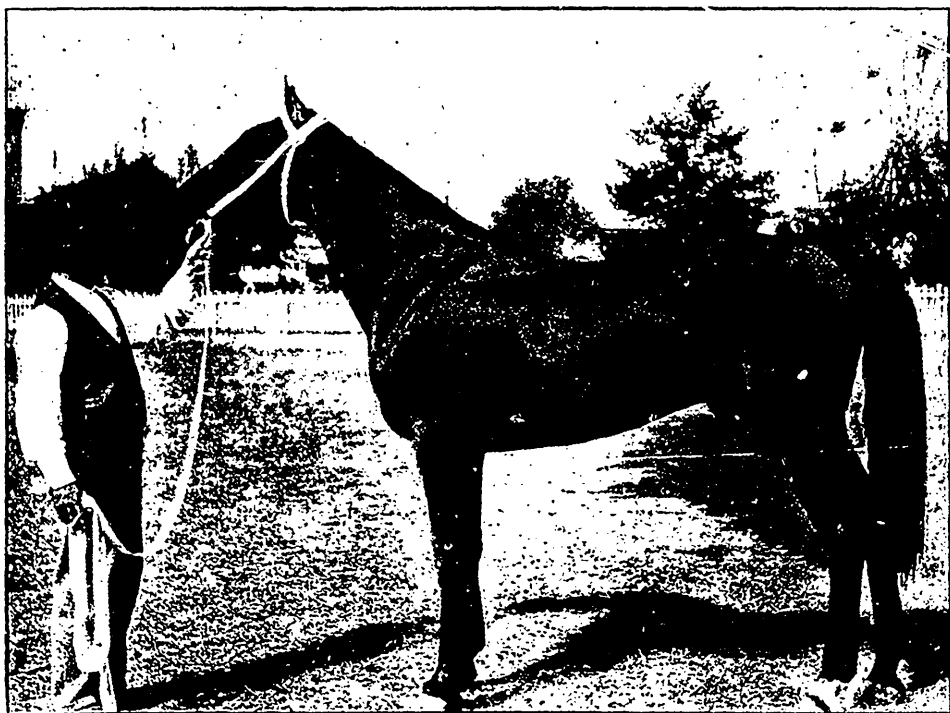
find the hearts of the trees dead or discolored. If so they will not recover, and will never make healthy trees.

SOIL.

The soil should be a good friable loam, well drained, either naturally or by underdraining. A northern slope is to be preferred. Select the highest elevation you have, other conditions being equal.

PLANTING.

This should be done when growth begins in early spring. Plant your trees a little deeper than they were in the nursery. First prune off



Standard-Bred Trotting Stallion, Vrowsky,

The property of Graham Bros., Claremont. Winner of first prize in the four-year-old class at Toronto, 1896; also of the medal for best stallion of any age.

old from the bud, or not more than three years old from the graft. If they show any appearance of black-heart do not plant them, since if they are thus affected they will not recover. This black-heart may be detected by looking at the scars made on the trunk of the tree where the side branches have been pruned off in the nursery. If these wounds have healed over nicely there will be no danger of black-heart. If they have not healed over, but have turned black, and if the bark around them shows a dark discoloration, caused by the sap oozing out, I should expect to

all injured roots and one-half, or more, of the top. Dig the holes larger and deeper than required to admit the roots of the tree. Use soil of good medium fertility to put in among the roots. This soil should be well rammed in among the roots. Always save the richest soil or loam to put on top to serve as a mulch around the tree. Never let manure come in contact with the roots of any plant or tree when planting it. Never plant when the soil is wet enough to cleave together badly when handling.

Another important matter is to keep the roots

covered while out of the ground. Many a failure can be traced to the neglect of this precaution. My own method is to place a large box on a stone-boat and put the trees in the box, and mix wet straw with the roots. I then drive the boat along as I plant, and take out the trees just as I want them.

To give the best results the trees should be planted, at least, forty feet apart, especially now that spraying has to be resorted to.

CULTIVATION.

Cultivation is the all-important matter. We find that nearly all of the orchards throughout the country are very much neglected in this respect. Especially is this true in regard to old or bearing trees. This absence of cultivation gives one the impression that bearing trees are considered old enough to take care of themselves. Such a method of treatment will pay the apple-grower just as well as the dairyman is paid who keeps his dairy cows around the straw stack during winter, with no other food or protection than the stack may afford them.

Very many farmers do not know that an old orchard requires cultivation. This ignorance, no doubt,

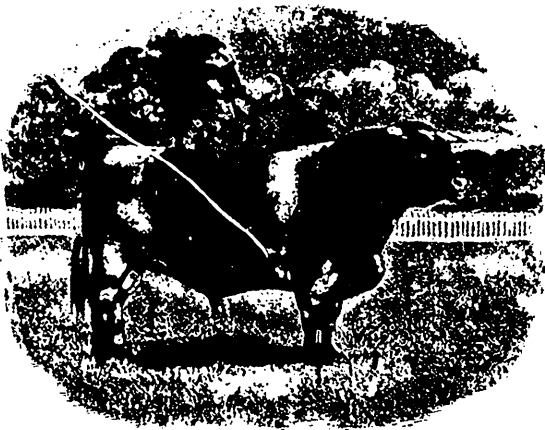
is largely owing to the fact that many of the nursery stock agents who go around selling trees tell their customers that no special cultivation is required with an orchard; that if they set out an orchard they can grow grain or other crops among the trees while they are young, and seed the orchard down when the trees are older, and get crops of hay off their orchard as well as apples.

With the experience I have had I would recommend that no more trees be planted than can be well cared for every season. With the method of cultivation I am here outlining, I have no hesitation in affirming that more net profit can be obtained from one acre of orchard so cultivated than is usually obtained from ten acres as orchards are generally managed.

We must know something about the needs and requirements of our trees before we can cultivate them intelligently. We must ever keep in mind the fact that mother earth is the greatest storehouse of plant food we can have access to, and that all the fertilizers we can add to it are only of secondary consideration. We must, therefore, cultivate or stir the soil of the orchard often to prepare the plant food that is in it, and bring it into a condition to be utilized by our trees. We must also remember that, however great is the supply of plant food contained in the soil, it can be of little use to the trees unless there is also a sufficient supply of moisture during the period of growth. In the spring moisture is present in sufficient quantities, and later in the season it may be conserved during dry weather by oft-repeated stirring of the soil.

While the trees are young, any crop may be planted between them that will admit of early and constant cultivation. But when the trees are old enough to produce paying crops of fruit no other crop should be grown. Give all of the space to the trees, and never fail to give them good cultivation from early spring until the middle of August or first of September. Then

sow to rye, fall wheat, or crimson clover. This early sowing of grain will give a covering to the soil that will catch and hold the snow during winter, and prevent the sudden changes in the soil that would be caused by freezing and thawing. The greatest benefit, however, that this seeding brings about is usually the great evaporation that takes place of the surplus moisture, through the medium of the growing plants. This moisture would otherwise go to stimulate late growths of wood in the trees that would not fully mature their fruit buds. The crop so obtained must be plowed under early in the following spring, but the same treatment as here outlined should be continued from year to year. Never allow the orchard to remain for a single season in grain or grass.



Three-year-old Shorthorn Bull, Abbotsford,

The property of H. & W. Smith, Hay, Ont. Winner of first place in his class at Toronto, 1896; also head of the Shorthorn herd winning second prize at same show. At London Abbotsford was first in his class and winner of the sweepstakes prize, and he also headed the first-prize herd.

Cultivation should always reach to about the same depth, whether it is done with the harrow, or the cultivator, or the plow; and especially is this rule to be followed with large trees. The small fibrous or feeding roots of the trees naturally come towards the surface, or as near to the surface as the top of the soil that is undisturbed. It will be quite evident, therefore, that if the soil be worked shallow for some time and then be turned up deep countless numbers of those rootlets will be destroyed. For this reason I strongly advocate shallow cultivation in the orchard at all times. I am pursuing this method in my own orchards with very satisfactory results.

TRIMMING.

Trimming may be done every spring as soon as hard freezing weather is past. Cut out all superfluous branches, and shorten in the new growths of young trees, especially if they are growing rapidly.

It is quite common to find the pruning of the bearing orchard neglected for two or three years at a time. Then the professional pruner comes along in the winter, looking for a job, and, if he has an oily tongue, usually succeeds in getting

one. When he invades an apple tree his first operation is to cut out the centre of the top; as he says, to let in the sunshine, but, more properly speaking, to make room for himself to stand while mutilating the tree. When he is done with a tree it is hard to tell whether the tree or the ground has the most of the top. The sudden check to the growth of the tree caused by this inconsiderate pruning is most ruinous. When the sun shines directly into a tree-top that has heretofore been shaded, so that its rays strike the larger limbs, they are sun-scalded, and borers get in their work, and ruin is the result.

Should the pruning of an orchard be neglected for two or three years, it will not do to take out in one season all the growth that should be removed. Rather two or three years should be taken to rectify the mistake or neglect previously made.

Thin out the tops enough to admit of a free circulation of air, and leave enough foliage in the centres of the trees to shade the large limbs. If properly trimmed every spring there will be but few large limbs to be taken out at any time, and the health of the trees will thus be preserved.



Portion of Exhibit of Hardy Apples,

Made by the Prince Edward Fruit Experiment Station at the Toronto Industrial Exhibition, 1895. The whole exhibit comprised 130 different hardy varieties, all of which had been grown by Mr. W. H. Dempsey, Trenton, who is in charge of the Station, and all of which had been tested by Mr. Dempsey or by his father the late P. C. Dempsey.



NOTES FROM THE AGRICULTURAL COLLEGE, GUELPH.

Visiting Experiment Stations.—Mr. C. A. Zavitz, college experimentalist, went south in September. During his absence he spent some time in the Department of Agriculture, Washington, and visited the Delaware Experiment Station, Newark, Delaware; Maryland Station, College Park, Maryland; West Virginia Station, Morgantown, Va.; Ohio Station, Wooster, Ohio; and the Pennsylvania Station, State College, Penn. He also inspected the trial grounds of the following seedsmen: W. Atlee Burpee & Co., Doylestown, Penn.; Samuel Wilson, Mechanicsville, Penn.; and Landreth & Sons, Bristol, Pennsylvania, and New Jersey.

Judging Stock.—Mr. G. E. Day, college agriculturist, and Dr. Hugo Reed, college veterinarian, went east on the 18th of last month, in company with John I. Hobson, chairman of the college board, to judge live stock and agricultural products at the exhibition in St. John, New Brunswick.

Dairy Tests.—Professor Dean took charge of the dairy test at the Industrial Fair, Toronto, to determine the respective quantities of milk solids given in two days by competing cows, without taking the food into account. Large prizes were offered, and twenty cows were entered, but only nine put in an appearance, eight of which (all Holsteins) remained to the end of the test. Emery Beauty, a nice Holstein cow, owned by A. Hoover, jr., Emery P. O., Ont., headed the list. In two days, at six milkings, she gave 124 lbs. of milk, which tested 3 per cent. of fat and yielded a total of 14.6 lbs. of milk solids. Prof. Dean also conducted a dairy test at Brantford on a different basis. The results will appear next issue.

Milking Machine.—The Thistle Milking Machine, which was tested and favorably reported upon by the college last year, has not been in use this year, because, owing to pressure of other work, the college could not find time to provide suitable power to run it. This difficulty is now over. The college engineer is planning a rope drive from the home dairy engine, and it is expected that the machine will be in regular use at an early date.

Artesian Wells.—The college is now providing its own water. Two wells were sunk this year,

about 80 feet apart, one 1,000 feet deep, and the other 475 feet. The water stands 50 feet below the surface in each, and they are connected by an underground passage, in which a shaft from the engine room works pumps in both wells, separately or conjointly. The pumps lift 50 to 60 gallons a minute, or from 72,000 to 86 gallons per day, if required. The president is of opinion that the college can pump the water it requires for a considerable sum less than the amount demanded by the city.

Dairy Schools.—President Mills has been visiting the eastern and western dairy schools at Kingston and Strathroy within the last few days, to arrange for next session's work in these schools.

Growing the Black Walnut.—Five hundred black walnut seedlings, from six inches to a foot in height, were planted in rows seven feet apart on the college farm in the spring of 1880, sixteen years ago. It was thought that they would not stand the severity of the climate at Guelph, but they have done so and have made a very fair growth. At the present time they are quite thrifty, measure from four to seven inches in diameter, and are bearing a good crop of nuts.

Ensilage Corn.—The indications this year, as for some time past, are that the best varieties of corn for ensilage in Ontario are as follows: Cloud's Early Yellow Dent and Thoroughbred White Flint for the southern section of the province; Mammoth Cuban (Yellow Dent) and Wisconsin Earliest White Dent for the central section; Salzer's North Dakota and Compton's Early, both flint varieties, for the northern section.

Varieties of Oats.—The Siberian, a white oat, again gives promise of heading the list in a test of 98 varieties of oats on the college experimental grounds. Grain first-class; straw long and stiff, and above the average in freedom from rust.

The College at the Fairs.—Mr. J. F. Clark represented the college at the recent fairs held in Toronto, London, and Ottawa. Numerous young men, sons of farmers and others, called upon him, seeking information with a view to attending. Mr. Clark was much gratified by the interest taken in the college by the young men he met, and by the number of applications he received.

THE TORONTO INDUSTRIAL EXHIBITION.

The Toronto Industrial Exhibition, lasting from August 31st to September 12th, was in every respect the most successful exhibition ever held in Canada. It was feared by many that in receipts and attendance it would be impossible for the records of some previous years to be exceeded, and this fear became pretty general during the first week of the exhibition, when, on account of bad weather, the attendance on some days, and especially on the Saturday, was very small. But during the second week the exhibition was favored with magnificent weather, and as a result the total receipts ran up to a sum almost \$7,750 in excess of the sum received last year, and about \$5,000 in excess of the greatest sum ever before received, the receipts for Monday alone having been \$20,000, while the gross attendance for that day could not have been much less than 80,000.

This Toronto Exhibition is deservedly reckoned to be one of the great institutions of Canada. Not only is there nothing else like it so big in Canada; there is nothing like it anywhere nearly so big in the United States, or in Britain, or in Europe. And it is not merely big; it is good also—good as a means of bringing people together to see what is best in the natural products of our country, and what is best in our manufactures; good, too, in stimulating the pursuit of excellence in the raising of these natural pro-

ducts, and in the production of these manufactures; good, too, as a means of objective education, not only in general information, but also in the specialized pursuit particular to the individual sight-seer; and, lastly, good as a wholesome and liberalizing diversion for the people—for the great masses of the people, who, perhaps, otherwise would not have any equivalent means of diversion.

We repeat that the Toronto fair is a great and good thing; and the citizens of Toronto, and the people of Ontario generally, ought to be proud of it, and accord honor and praise to the public-spirited men who have been instrumental in bringing it to its present pitch of greatness and excellence. Perhaps it is not generally known that, with the exception of the manager and the treasurers, all the other officers and directors of the institution do not receive one penny of reward for their services in helping to carry it on. It is plain, then, that a great measure of public thanks should be accorded these gentlemen



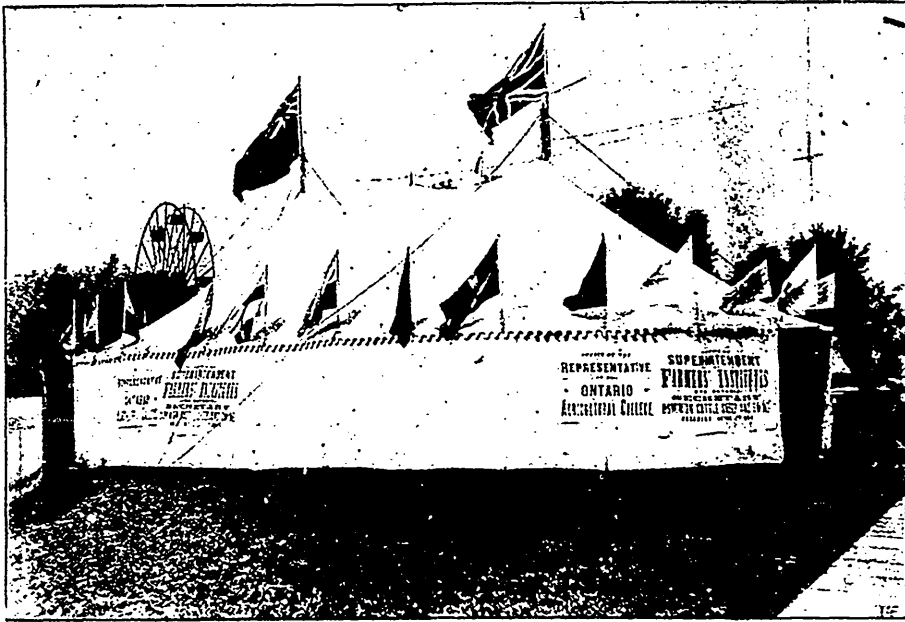
H. J. Hill, Toronto,
Manager and Secretary of the Industrial Exhibition Association of Toronto.

year by year. And these thanks are due in especial measure to the president, Mr. J. J. Withrow, not only for his constant and assiduous care in presiding over the affairs of the institution from the first, and for the liberal and enterprising measures which he from time to time proposes, and does much to carry out, for the improvement and advance of the institution; but

also because it was he who, in the very beginning, conceived the plan of the fair, and, amid discouragements on every hand, took the necessary steps to make it a success.

But, of course, the fair, no matter how nobly conceived, how wisely planned for, would fail of success if its executive officers were inefficient. But it happens that in this case the executive officers are all that can be wished for. The financial affairs of the institution are, we believe, carefully and prudently looked after by the treasurers, the Messrs. Edwards. But it is the General Manager that the public come in contact with. And it is he, above all others, that the public recognize as the embodiment and personi-

fication of the fair; that they interfere with its educational work; that they tend to lower the character of the exhibition, etc. There is but one answer to all this criticism; the most of it is Pecksniffian. These critics nearly all take in the grand stand (to see the fireworks!); many of them take it in twice. Would it not be franker and more human-like to say that after the summer heat is over, and before the hard work of the winter begins, we all of us, civilians and countrymen alike, enjoy the relaxation which the show affords? The truth is, a difficult acrobatic feat never fails to delight the soul of the generous sight-seer, and to stir up in him a vague, but, nevertheless, conscious, desire of emulation; while the curious



Tent of the Superintendent of Farmers' Institutes,

Occupied at Toronto, London, and Ottawa by Mr. F. W. Hodson; also by Mr. Henry Wade, Provincial Registrar of Live Stock, and by Mr. J. F. Clark, Representative of the Ontario Agricultural College.

fication of the push, the enterprise, the daring "go-aheadiveness" that are seen everywhere to be the characteristics of the management of the fair; and we believe the public are right. As one prominent gentleman expressed it on the show ground lately, "There is only one Hill in the show fair business; but he is a *mountain!*"

THE FAIR AS A PLACE OF AMUSEMENT.

Now, a word as to the amusements provided by Mr. Hill and his fellow-directors for the entertainment of the people. There has been a great deal—and is always a great deal—of criticism of these amusements—that they derogate from the dignity

tricks which trained animals perform as a result of kindness and patient treatment are a never-failing object lesson in humanity.

And the entertainment provided this year was *good*. The agility of that Arab troupe was marvellous; their posings in the air most graceful; and the strength of the one who supported the ten others on his shoulders something not to be realized unless seen. The tumbling of those three people in evening dress was exceedingly funny. The horizontal bar performances of the Dunham family will, we have no doubt, be an inspiration in many a barn-mow gymnasium during the coming winter. The diving of those two men from the high tower (almost ninety

feet in height) was something that never seemed credible even when witnessed time and again. The performances of the six trained ponies were the delight of the thousands and thousands of boys and girls who saw them, and we have no doubt will be an incentive to similar training to every one of them who has the good fortune to have anything to do with a pony or a horse; while the antics and gymnastics of the three trained elephants constituted, without doubt, the most generally attractive amusement ever presented on a Toronto stage.



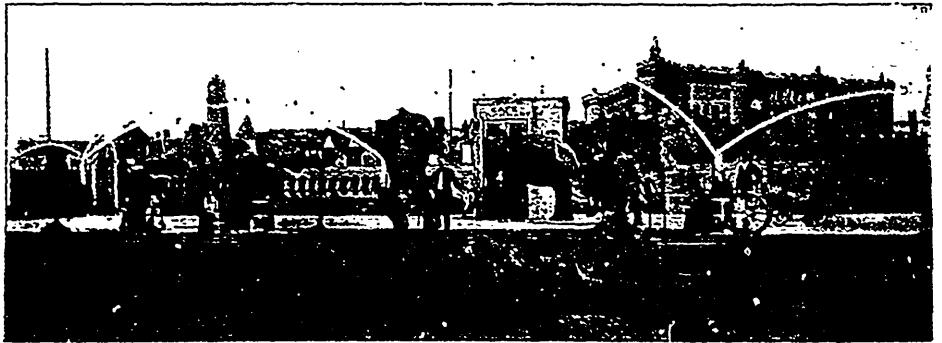
Trick Elephant, "Boney,"
Riding a bicycle, Toronto Industrial Exhibition, 1896.

However, at the risk of being ourselves called Pecksniffian, we have one criticism to offer, and one piece of advice to give to Manager Hill and his co-directors. In future keep those ballet performances away from the afternoon entertainments; reserve all that sort of thing for the evening. We heard but one opinion, and that a universal one; it was, that on an open stage, in the glare of a September sun, ballet performances are not only not attractive, but positively repellent. In the evening, amid the many-colored lights of the exhibition, softened, as they

were, by the surrounding darkness, the spectacle of "The Feast of All Nations" was certainly beautiful.

EDUCATIONAL VALUE OF THE FAIR.

We have also one serious criticism to offer, which we hope the fair managers will take note of. The fair, in itself, is capable of being the grandest instrument in industrial education that our country is capable of producing. We have no hesitation in saying that, as things now are, it falls far short of being this. In the rush and hurry, on the part of the fair managers, of keeping things going smoothly, and carrying out their programme, and in the eagerness, on the part of the exhibitors, for winning prizes and making sales, the needs of the sight-seers who visit the fair for instruction and information are lost sight of. Take the live stock departments as an example. In pen after pen—in fact, in the majority of pens—it would be impossible for a visitor, unless he was either previously well informed, or else particularly inquisitive, to get any proper idea of the exhibits. He could find no information, except of the most general sort (and this, indeed, he might easily overlook), indicating to what breed the animals he inspected belonged. In very few instances, indeed, could he discover who were the exhibitors of the animals. And in a still less number of instances could he tell which were prize-winning animals and which were not. The entry tickets were generally placed where they could not possibly be read. Even the entry numbers—by which, with the aid of the catalogue, one might possibly get some information—were, in most cases, neglected to be put up, or else were put up so as to be misleading. And the prize tickets, which ought certainly to be placed so as to identify the prize-winning animals, were generally hung up in ostentatious rows that were useless to the inquiring sight-seer, or else altogether concealed. As a consequence, a visitor to the sheep or swine pens could get no information but what he had most pertina-



View of Stage, Toronto Industrial Exhibition, 1896,
Showing the three trained elephants, one standing on his head.

ciously to ferret out for himself, in spite of all the difficulties which obstructed him. The same thing was true with the cattle stables and the horse stables, and with every part of the live stock exhibition except the poultry house. In fact, it may be said that of all the thousands who annually visit the fair *not five per cent.*, if not previously acquainted with the stock shown, get any information from the stock exhibits that can be of any practical value to them.

The same sort of criticism applies to the facilities for getting information when the stock is being judged, except, perhaps, that, if possible, the facilities are worse. It may, possibly, be replied that the exhibitors, in looking after their own interests, will attend to the giving of information to the public, and that the caretakers are there to see that entry tickets and numbers and prize cards are properly displayed, and that if the directors in charge of the exhibits would insist on the caretakers attending to this duty there would be no cause of complaint. As a matter of fact, it is useless to rely upon any of these means. The exhibitors, as a rule, have no thought for the public. They are wholly intent on winning prizes and making sales, and not one person in a hundred visiting the stock exhibits desires to make purchases while so doing; and the exhibitors know this, and, therefore, pay no attention to the public, and

prefer, if anything, to conceal their animals rather than exhibit them. The caretakers have no interest in the matter, and, at any rate, would not be competent to carry out any scheme for giving information to the public. And the directors in charge during the progress of the fair have too much occupation otherwise.

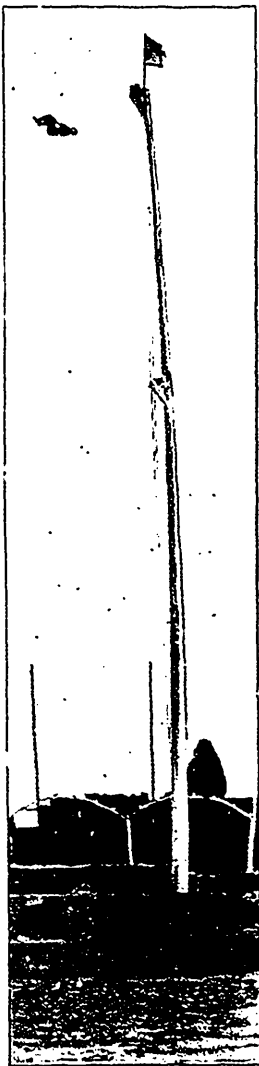
There is only one way of remedying this fault; but it is a comparatively easy one. Let the directors appoint some one man, of energy, ability, and intelligence, to act as *general supervisor of the exhibits*, with a view to make them of educational value to the public. Let him be paid enough to give him an incentive to do his work well, and let him have authority and means at his command to enable him to carry out his ideas effectively. Such a man going about among the different exhibits would see, for example, that every entry number was properly affixed to the animal it belonged to; that every entry ticket was placed where it could be easily read; that every prize card was displayed so that the animal it was given to could be easily identified; and that placards, etc., were put up in sufficient numbers to accurately indicate in what class of stock the various animals were entered. And in numerous other ways such an officer could make his services tell for the benefit and instruction of the public.

OUR EXPERT REPORTS.

The special reports upon the different exhibits of interest to farmers which we publish herewith have all been prepared for FARMING by experts in the several lines reported on, and will, we think, be found by our readers not only interesting but perfectly trustworthy. We also have pleasure in presenting in this issue photographic portraits of a number of the prize-winning animals, believing that too much pains cannot be taken to familiarize the public with the types of live stock which find favor in the eyes of competent judges. We shall also continue to present similar portraits during the coming winter. We have pleasure, too, in presenting to our readers a few portraits of some of our prominent breeders and exhibitors, for we believe that the more our readers are acquainted with the men who are engaged in the live stock industry, and the more they learn of the methods which these men practise in farming, the better it will be for them, both socially and as a business matter. It will make them more interested in their calling, and therefore increase their own self-respect. It will also put them in the way of making improvements in their own methods, and give them higher ideals, both in aim and in effort.

SPECIAL FEATURES OF THE FAIR.

There were some features of the fair of special interest to farmers. One of the most commendable of these was the placing on the fair grounds, near the



The 90-foot High Dive,
As performed at Toronto Industrial
Exhibition, 1896.

stock exhibit, of a large tent, at which were in constant attendance the superintendent of Farmers' Institutes (Mr. F. W. Hodson) and the provincial registrar of live stock (Mr. Henry Wade). This tent, first erected last year at the instance of Mr. Hodson, has proved a very great convenience to stockmen, farmers, and others visiting the fair, as a gen-



H. N. Crossley, Rosseau, Ont.,
Exhibitor of Shires and Hackneys and prize-winner at
Toronto Industrial Exhibition.

eral rendezvous, and as a place for holding both formal and informal meetings. The assemblage of breeders and stockmen which gathered there on Tuesday of the second week to meet the Hon. Sidney Fisher, Minister of Agriculture for the Dominion, was, without doubt, the most notable aggregation of stockmen ever seen together in Canada in one place. Another special feature, and one in which farmers took the liveliest interest, was the exhibit of the Good Roads Association, where every sort of appliance for the quick and economical building of roads was seen being put to actual use. We have little doubt but that our readers will be much pleased with the two views of this exhibit which we present on our frontispiece page.

Horses.

Specially reported for "Farming."

The turnout of horses this year was large and good. The entries were so numerous that the accommodation was taxed to its utmost, and the attendants had considerable difficulty in getting all the exhibitors the stall room they needed. Eight hundred and eighty entries were in the official catalogue, and this number did not include the racing stables, with their numerous entries for both the trotting and running races. The

number of horses on the grounds would be a good deal over a thousand. As to quality, they were the choicest specimens that could be gathered from this part of the Dominion. Some of the classes were but thinly filled; others showed a marked advance in general quality; but in none were there any entries that could be fairly classed as record-breakers, and worthy of special mention as novelties. In many of the classes the winners were old and well-known favorites, and in few were the younger animals able to wrest the red ribbons from their seniors. The stables are well-built, roomy, airy, and comfortable. On the other hand, the rings and grounds for showing, and the accommodation and facilities whereby the public may see the judging, are far behind many a county fair.

CLYDES.—There was a good show of Clydes, but one not excelling the display of last year. Grandeur (6814), owned by D. & O. Sorby, Guelph, was out in good form, though rather bare of feather, and came first in his class. He is an old and well-known winner, and carries his years well. He was twice champion of the Spring Show, in 1893 and in 1894. The Spring Show champion of 1896, Royal Standard [2220], owned by Graham Bros., looked in great form, but did not do himself justice in his moving. Westfield Stamp [1819], a light bay, was third. He is owned by Y. & J. Little, Mono Mills, and is by Cairnbrogie Stamp. In the breeding class Westfield Stamp took second with a very nice lot. D. & O. Sorby being first with Grandeur, who entered the ring with four very good ones, indeed, to his credit. This son of Darnley (222) is breeding well; and, as he paraded around the ring with his progeny following, they made as fine a lot as has been seen on the Toronto grounds for a long time. For three-year-old stallions Robert Beith, M.P., had a clear first in Locksley [2182], by Sir Walter [1131], Jam, the prize mare, Maria [979]. Locksley is a big, strong colt, and will be a winner again if he does well. Robert Davies had the yearling winner in King's Own [2172], by Queen's Own [1708]. Both these animals were winners at the Spring Show. In yearlings Mr. Davies was again first with another colt out of the fine mare, Candour, and Candour herself got the special prize for best mare and two of her progeny. Candour is a fine, big brown mare by Macgregor (1487). She has fair pasterns and good feather, but was showing a bit slack in the back. D. & O. Sorby had a string of fillies, all by Grandeur. They got first for three-year-olds, first and third for yearlings, and second for two-year-olds. They show a good family type, all bay with little white. Robert Davies got first for a span of mares, and had out a grand lot. In the class for brood mare Barr Bell, also owned by him, got first, as also did her foal by Prince of Quality



James Gardhouse, Highfield, Ont.,
(Recently succeeded by his son, J. M. Gardhouse), exhibitor
of Shires and prize-winner at Toronto Industrial Exhibition.

[2173]. James I. Davidson & Son got first for their two-year-old filly, Boydston Lass 7th [2286], and also second for a yearling filly. Altogether the class was a very good one.

Judges.—R. Ness, Howick, Que.; J. Y. Ormsby, Woodstock; John Warrilaw, Owen Sound.

Awards.—Clydesdale stallion and four of his progeny, the progeny not to be over two years old—1st, D. & O. Sorby, Guelph (Grandeur); 2nd, Y. & J. Little, Mono Road (West-

field Stamp). Clydesdale stallion, four years old and upwards—1st, D. & O. Sorby (Grandeur); 2nd, Graham Bros. (Royal Standard); 3rd, Y. & J. Little (Westfield Stamp); 4th, Graham Bros. (Golden Crown). Stallion, three years old—1st, Robert Beith & Co., Bowmanville (Locksley). Stallion, two years old—1st, Robert Davies, Toronto (King's Own); 2nd, Alex. Doherty, Ellesmere (Macqueen); 3rd, I. Devitt & Sons, Freeman (Grandeur 2nd). Yearling colt, entire—1st, Robert Davies, Toronto (Black Prince); 2nd, D. & O. Sorby (Boydston's Heir); 3rd, James I. Davidson & Son, Balsam (Pride of Balsam). Clydesdale stallion of any age—1st, D. & O. Sorby (Grandeur). Filly, three years old—1st, D. & O. Sorby (Lady Gerty). Filly, two years old—1st, James I. Davidson & Son (Boydston Lass); 2nd, D. & O. Sorby (Lady Grace); 3rd, William Foster & Sons, Humber (Nell). Yearling filly or gelding—1st, D. & O. Sorby (Starlight); 2nd, John Davidson, Ashburn (Albani); 3rd, D. & O. Sorby (Eva). Brood mare with foal of same breed by her side—1st, Robert Davies, Toronto (Barr Bell); 2nd, Robert Davies (Pride of Thorncliffe); 3rd, James I. Davidson & Sons (Boydston Lass). Foal of 1896—1st, Robert Davies (Princess Belle); 2nd, Robert Davies (Princess Beatrice); 3rd, James I. Davidson & Son (Boydston Yet). Mare with two of her progeny—1st, Robert Davies, Toronto (Candour). Span of Clydes, geldings or mares—1st, Robert Davies (Rose of Thorncliffe and Daisy); 2nd, Hendrie & Co., Toronto (Empress and Jess); 3rd, James I. Davidson & Son, Balsam. Best mare of any age—Robert Davies, Toronto (Candour).

SHIRES.—In this class there were three aged stallions out, and the winner at the last Spring Show, Pride of Hatfield [256], owned by Morris, Stone & Wellington, was first. He was, however, beaten for the medal by the three-year-old, Kilburn [265], imported and owned by Berry & Geiger, Hensall, Huron county. Kilburn's sire was Herod (1869), a well-known English horse. He is a brown horse with a little white behind; he is not massive, but looks like a good, useful horse. Morris, Stone & Wellington got the prize for their brood mare, Daisy [82], and for her very fine foal, Laura [112], sired by Pride of Hatfield, and also for yearling and two-year-old fillies. H. N. Crossley, Rosseau, won second for his brood mare, Queen of Althorpe [10], and first for mare and two of her progeny. He also got first for the three-year-old filly, Rosseau Propriety [99], described as a gray with four black legs. She is a strange color—almost a blue gray. She is a short-legged chunk, almost a pony beside

Yearling colt, entire—no entries. Best stallion of any age—1st, Berry & Geiger, Hensall (Kilburn). Filly, three years old—1st, H. N. Crossley, Rosseau (Rosseau Propriety); 2nd, Morris, Stone & Wellington, Welland (Belle); 3rd, Morris, Stone & Wellington (Fannie). Filly, two years old—1st, Morris, Stone & Wellington (Rival). Yearling, filly or gelding—1st, Morris, Stone & Wellington (Dolly); 2nd, H. N. Crossley (Rosseau Queenie); 3rd, Morris, Stone & Wellington (Triuby). Brood mare, with foal of same breed by her side—1st, Morris, Stone & Wellington (Daisy); 2nd, H. N. Crossley (Queen of Althorpe); 3rd, Wm. Fenwick, Stanley Mills (Sham). Foal of 1896—1st, Morris, Stone & Wellington (Laura); 2nd,



W. J. Rudd, Eden Mills, Ont.

Exhibitor of Devons and prize-winner at Toronto Industrial Exhibition; also at Quebec Provincial Fair, Montreal.

H. N. Crossley, Rosseau; 3rd, Wm. Fenwick (Sampson of Stanley Mills). Mare, with two of her progeny—1st, H. N. Crossley (Queen of Althorpe). Span of Shire horses, geldings or mares—1st, J. M. Gardhouse, Highfield (Nell and Kate). Best mare, of any age—1st, H. N. Crossley (Rosseau Propriety).

HEAVY DRAUGHT.—This class, open only to animals foaled in Canada, was a good one; and, while the sections were not all filled, many of the animals shown were of good quality. This remark is specially true of the fillies. In the three-year-old class there were two dappled bay animals brought out that puzzled the judges to place. Very much of a color, they were both extra good animals, but of rather different types. They had met before, however, and the unbeaten Queen of Atha, by Queen's Own (7176), owned by Graham Bros., was again the winner; Amos & Agar, Nashville, being second with Bell, by Castlemore Bob [1425]. In the two-year-olds James I. Davidson & Son, of Balsam, had the winner in Kate Hill 3rd [7127], a thick, well-ribbed filly with good legs and feet. D. & O. Sorby, Guelph, got first for the yearling filly, Eva 2277, by Grandeur (6814), a dark bay with white markings and well-set pasterns. William Brewster, of MacIntyre, was a winner with his mare, Kate Hill 2nd [1923], by Lewie Gordon (7018). This mare is not very big, but she is of fine quality and clean, good bone, and is a fine breeder, having the first-prize foal at foot, sired by Tofty [2123]. She won the sweepstakes for best mare of any age, and also the special prize for best mare, with two of her progeny. There was a good class of geldings. Hendrie & Co. got first with a well-grown big horse, and William Wilson second with a blocky gray, a good sort, sired by Eastfield Laddie. The stallion class was headed by Samson [2070], by King Leader (4667), owned by P. Harold, V.S., Tavistock. He is of a good old-fashioned black sort, a trifle coarse in the hair. Second place went to Ira Nattrass, Millbrook, for Top Gallant [2211], a thick black horse with white markings, good bone and pasterns. This class was well filled, but for the three-year-old stallion class there was not an entry. Hendrie & Co. took first for a team, with George Morrisson, Toronto, second.

Judges.—D. McCrae, Guelph; John Gardhouse, Highfield; John Willoughby, Keswick.

Awards.—Heavy draught stallion, four years old and upwards—1st, P. Harold, V.S., Tavistock (Sampson); 2nd, Ira Nattrass, Millbrook (Top Gallant); 3rd, D. & F. McGeachy, Coleraine (Lochiel II.). Stallion, three years old—no entries.



Alfred Stone, Guelph,

Exhibitor of Herefords and prize-winner at Toronto Industrial Exhibition; also at Western Fair, London.

some of the Clydes, but thick-set and of good quality. The Shire class has not improved very much in recent years.

Judges.—Robert Ness, Howick, Quebec; J. Y. Ormsby, Woodstock; John Warrilaw, Owen Sound.

Awards.—Stallion, four years old and upwards—1st, Morris, Stone & Wellington, Welland (Pride of Hatfield); 2nd, J. M. Gardhouse, Highfield (Duke of Blagdon); 3rd, Geo. Garbutt, Histlestown (Darnley). Stallion, three years old—1st, Berry & Geiger, Hensall (Kilburn). Stallion, two years old—no entries.

Heavy draught gelding—1st, Hendrie & Co., Toronto (Douglas); 2nd, W. Wilson, Oshawa (Duke); 3rd, I. Devitt & Sons, Freeman (Billy). Heavy draught stallion, any age—1st, P. Harold, V.S. (Sampson). Filly, three years old—1st, Graham Bros., Claremont (Queen of Atha); 2nd, Amos Agar, Nashville (Bell); 3rd, H. S. Parkin, Oxford Centre (Tinnie). Filly, two years old—1st, Jas. I. Davidson & Son, Balsam (Kate Hill 3rd); 2nd, Colin Cameron, Thistletown (Smithfield Maid); 3rd, Graham Bros. (Corinne). Yearling, filly or gelding—1st, D. & O. Sorby, Guelph (Eva); 2nd, Amos Agar (Rose); 3rd, Colin Cameron (The Thistle). Brood mare, with foal of same breed by her side—1st, Wm. Brewster, McIntyre (Kate Hill



James Bowman, Guelph,

Exhibitor of Polled-Angus cattle and prize-winner at Toronto Industrial Exhibition; also at Quebec Provincial Fair, Montreal.

2nd); 2nd, Colin Cameron, Thistletown (Dolly Newburn); 3rd, H. S. Parkin (Rose Beresford). Foal of 1896—1st, Wm. Brewster, McIntyre; 2nd, Colin Cameron (Smithfield Girl); 3rd, H. S. Parkin (Seli Esteem). Mare, with two of her progeny—1st, Wm. Brewster (Kate Hill 2nd). Span of heavy draught horses, geldings or mares—1st, Hendrie & Co., Toronto (Thumper and Bouncer); 2nd, George Morrison, Toronto (Sandy and Tom). Best mare, of any age—Wm. Brewster, McIntyre (Kate Hill 2nd).

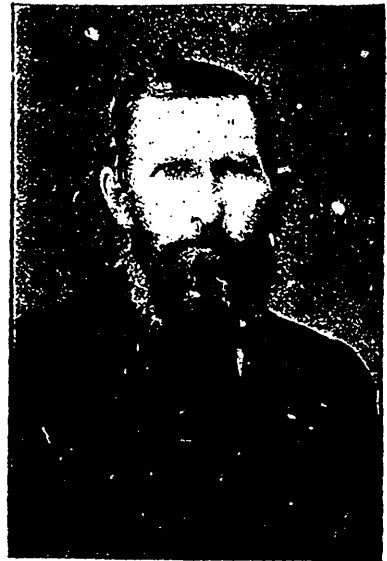
GENERAL PURPOSE HORSES.—This class was not over-filled. It has been in the past the class where anything that had little chance in the other classes could have a shy for prize money. There was a glorious uncertainty about it. One could never tell what would win. The rules define this horse as one suitable either for the wagon, carriage, buggy, saddle, or plow. This allows a fair margin for different opinions in judging. This year, however, the directors specified weights which must not be exceeded. One exhibitor found that his animal was over weight; and he had a lively time, by a course of steady exercise, sweating powders, and starvation, in getting just under the limit and so winning a prize. There were some good ones in the class. John H. Ferguson, Brampton, got the sweepstakes with a daughter of Wiley Buckles. He had also first on a mare and first for her foal—both strong in Thoroughbred blood. The mare is a nice dark brown, but small and very much of a roadster type. J. L. Clark, also of Brampton, had a nice bay mare with points of the coaching type, her sire being Derby, a Yorkshire horse. The team prize went to Michael Wolfe, Hespeler. This year, in the judging of this class, the light type of horse had the best of it, but next year some Clydesdale fancier may get a turn at judging and be pleased with nothing that has not lots of feather on the legs.

Judges.—John Keith, Toronto; James Robinson, Newton Brook.

Awards.—Mare or gelding, four years old and upwards—1st, J. L. Clark, Brampton (Bella); 2nd, M. Harrison & Son, Brampton (Cap); 3rd, Geo. Jackson, Cooksville (Blossom). Filly or gelding, three years old—1st, M. Harrison & Son

(Bonnie); 2nd, R. Shawwood (London); 3rd, J. L. Clark, Brampton (Mayflower). Filly or gelding, two years old—1st, J. L. Clark (William); 2nd, Eli Dolson, Alloa (Prince); 3rd, H. S. Parkin, Oxford Centre. Yearling, filly or gelding—1st, R. P. Wilson, Sheridan; 2nd, John H. Ferguson, Brampton (Rose Buckles); 3rd, E. Dolson, Alloa. Brood mare, with foal by her side—1st, J. H. Ferguson (Kate); 2nd, M. Harrison & Son (Nettie); 3rd, H. S. Parkin (Fannie). Foal of 1896—1st, J. H. Ferguson (Queen Buckles); 2nd, M. Harrison & Son (Maud); 3rd, Harris & Reynolds, Oakville (Wednesday). Matched team, geldings or mares, in harness—1st, Michael Wolfe, Hespeler (Polly and Nat); 2nd, Harris & Reynolds, Oakville (Frank and Tom); 3rd, J. L. Clark (Jess and Darling). Best mare of any age—J. H. Ferguson, Brampton (Rose Buckles).

THOROUGHBREDS.—The Thoroughbreds were not a large class, but there were some good ones. Woodburn, by King Alfonso, owned by Brown & Gilkinson, Brampton, got first in the aged class, with Graham Bros. Montana, by Doncaster, second. In the class for stallions best calculated to produce hunters and saddle horses, Graham Bros. got first with Goddard, a Kentucky-bred horse by King Ban—a nicely-formed chestnut, but barely as big as one would like to see in this class. Wiley Buckles, owned by Quinn Bros., got the blue ribbon, a change of color after a good many red ones taken to decorate the Brampton stable. There were no three-year-olds, and only two in the two-year-old class. First prize in this class went to A. Frank & Son, The Grange, Caledon, for a nice bay by Dandie Dinmont, out of a mare by Terror. There were three very nice yearlings shown. Robert Davies was fortunate in getting both first and second, as Scott & Millman, Guelph, had a good dark-brown by Dandie Dinmont, out of a Terror mare, that had to be content with third place. Allegretto, the winner of the first, is a big colt, with good barrel and clean legs, a son of May Duke; while the winner of the blue is a bay with white feet, named Scottish Chief, by Admiral, he by St. Blaize. This colt is out of the first-prize mare, Thistle, by Master Kildore, as is also the first-prize foal, a chestnut with three white socks, sired by Parisian. The



James H. Smith, Highfield, Ont.,

Exhibitor of Jerseys and prize-winner at Toronto Industrial Exhibition.

sweepstakes mare was found in the yearling filly, Bullseye, by Oxlip, also owned by Robert Davies, a young mare of fine quality and quiet and nice under the saddle. Mr. N. Dymont, Barrie, had some very good ones in this class, and got several prizes. His three-year-old filly, Minnie Lightfoot, by Oddfellow, winning in her class.

Judge.—Dr. Hodgson.

Awards.—Stallion, four years old and upwards—1st, Brown & Gilkinson, Brampton (Woodburn); 2nd, Graham Brothers, Claremont (Montana); 3rd, W. J. Thompson, Orkney (King Bob). Stallion, four years old and upwards, best calculated to

produce hunters and saddle horses—1st, Graham Brothers (Goddard); 2nd, Quinn Bros., Brampton (Wiley Buckles); 3rd, E. B. Andros, Port Hope (The Poacher). Stallion, three years old—no entries. Stallion, two years old—1st, A. Frank & Son, The Grange; 2nd, H. E. Simpson, Toronto (Exitus). Yearling colt, entire—1st, Robert Davies, Toronto (Scottish Chief); 2nd, Robert Davies (Allegretto); 3rd, Royal City Stables, Guelph. Stallion of any age—Graham Brothers, Claremont (Goddard). Mare or gelding, four years old and upwards—1st, Capt. R. Myles, Toronto (Harpoon); 2nd, N. Dymont, Barrie (Galena); 3rd, H. E. Simpson, Toronto (Alfonsina). Filly, three years old—1st, N. Dymont (Minnie Lightfoot); 2nd, Robert Davies (Music); 3rd, A. Frank & Sons (Caledon Maid). Filly, two years old—1st, N. Dymont (Madeline). Yearling, filly or gelding—1st, Robert Davies (Bull's Eye); 2nd, N. Dymont (Flying Bess); 3rd, R. H. Simpson, Toronto. Brood mare, with foal by her side—1st, Robert Davies (Thistle); 2nd, N. Dymont (Hyalia). Foal of 1896—1st, Robert Davies; 2nd, Robert Davies; 3rd, N. Dymont (Hyalia's filly). Best mare of any age—Robt. Davies (Bull's Eye).

HALF-BREDS.—There is a desire amongst the admirers of the light-legged horses to have a full list of prizes for half-bred—that is, for horses not Thoroughbred, but sired by a Thoroughbred horse. In class 13 the directors have offered prizes for two-year-old and three-year-old horses of this breeding, but the list should be longer. W. W. Ward, Utica, Ont., had the winner in the three-year-olds, a filly by Dennison, a likely hunter. Major Foster, of Toronto, had the first prize for his filly, Ruth, among the two-year-olds. Breeders would like to see a full class for mares and youngsters, and the directors might very well consider the matter. At present horses of this class are divided up between the roadster, carriage, and general purpose classes, the owner guessing in which of these classes he has most chance of winning, and making his entries to correspond. If the directors were to establish a full list of prizes for the class, the action would be a popular one.

Judges.—James Carruthers, Toronto; Major Mead, Toronto; A. W. Smith, Toronto.

Awards.—Three-year-old filly or gelding, not Thoroughbred, but sired by a Thoroughbred—1st, W. W. Ward, Utica (Pearl D.); 2nd, E. Dolson, Altona (Victoria); 3rd, William Fenwick, Stanley Mills (Jet). Two-year-old filly or gelding, not Thoroughbred, but sired by a Thoroughbred—1st, Major Foster, Toronto (Ruth); 2nd, J. T. Hill, Napanee; 3rd, Wm. Hendrie, Hamilton (Bess of Winona).

Wiry Jim 15617. Miss Sterling, by Twilight 315, won for best brood mare, and her foal, —, by Keswick 10144, was also first. They are owned by S. I. Cole, of Woodstock. G. H. Briggs, Toronto, had a nice yearling in Edna Briggs 27507, a very promising youngster by Wildbrino 10073. A filly, Elfreda, three years old, by the same sire, owned by O. B. Sheppard, Toronto, not only got first in her class, but captured the silver medal for best mare in the class;

Judges.—J. H. Allan, Picton; Jacob Errett, Ottawa.

Awards.—Stallion, four years old and upwards—1st, Graham Bros., Claremont (Vrowsky); 2nd, John Sharen, Woodstock (Keswick); 3rd, D. Dalton, Delhi (Shadeland



William Walker, Denfield, Ont.,

(Of Gibson & Walker), exhibitor of Lincolns and prize-winner at Toronto Exhibition; also at Western Fair, London.

Duval). Stallion, three years old—1st, Hugh Smith, Claude (Uncle Bob); 2nd, Graham Bros. (Gallant Graham); 3rd, T. C. Tinline, Toronto Junction (Bourbon Nut). Stallion, two years old—no entry. Yearling colt, entire—no entry. Stallion of any age—Graham Bros. (Vrowsky). Gelding or filly, three years old—1st, O. B. Sheppard, Toronto (Elfreda). Gelding or filly, two years old—1st, Hugh Smith, Claude (Bonnie Scott). Yearling, gelding or filly—1st, G. H. Briggs, Toronto (Edna Briggs); 2nd, Hugh Smith, Claude (Comely Girl); 3rd, George Jackson & Son, Downsview. Brood mare with foal of the same breed by her side—1st, S. J. Cole, Woodstock (Miss Sterling); 2nd, Robert Davies, Toronto (Prairie Belle 2nd); 3rd, James Childs, Eglinton (Hermione). Foal of 1896—1st, S. J. Cole; 2nd, Robert Davies. Pair of matched horses, geldings or mares in harness—no entries. Single horse, gelding or mare, in harness—1st, Robert Porteous, Simcoe (Miss Hinman); 2nd, George Brown, Toronto (Blue Bells); 3rd, George Jackson & Son, Downsview. Best mare of any age—O. B. Sheppard, Toronto (Elfreda).

HACKNEYS.—The Hackneys were the delight of the grand stand whenever they made a parade. They made a good show; they could not well fail to do so with nigh to fifty entries of the best that Canada could produce. Graham Bros., Claremont, were first with Royal Standard—55—, imported by them and bred by B. H. Lane, Limavady, Ireland. Royal Standard is a good horse, and a great mover; he has good hock action, and is exceedingly well shown by Mr. Thomas Graham, who also captured the sweepstakes medal with him. Robert Beith & Co.'s Banquo—3— was second, with H. N. Crossley's Fireworks—16—third. All these horses are now well known to the Canadian public. In the two-year-old class Mr. Cochrane, of Hillhurst Farm, Hillhurst, Quebec, was first with Bartholomew Performer, a very fine dark chestnut, bred by Thomas Jennings, Kirkham Abbey, York, England; and Mr. Crossley was second with Rosseau Performer (2973). Rosseau Performer, a roan, by Enthorpe Performer, is an extra good mover, and shows great knee action. In the two-year-old class the positions were reversed, and Mr. Crossley won first with Rosseau Fireball, a brown horse, a fine specimen of the breed, while Hillhurst Farm was second with Danish Duke. Mr. Crossley's mare, Althorpe Duchess—21—, won in her class, as did also his yearling filly; in fact, in yearling fillies he got first and second with two daughters of Fireworks (3602).



B. H. Bull, Brampton, Ont.,

Exhibitor of Jerseys and prize-winner at Toronto Industrial Exhibition.

STANDARD-BRED TROTTERS.—The sections in the class for standard-bred trotters were barely filled with enough animals to take the ribbons. Considering the large number of trotters in the country, this is rather to be wondered at. Graham Bros. won in the aged stallion class with Vrowsky 8166, by Red Wilkes 1743. Vrowsky also beat Uncle Bob 23785, by Wildbrino 10073, the winner in the three-year-old class, his only competitor for the sweepstakes medal. Uncle Bob is owned by Hugh Smith, of Claude, who had also the winning two-year-old filly in Bonnie Scott 25751, and the second-prize yearling filly, Comely Girl, both these fillies being sired by

Robert Beith's Jessica—25—again captured the red in the two-year-old section. She is a beautiful brown, and has an unbeaten record. Mr. Cochrane, Hillhurst, Quebec, got first for Princess Dagmar—10—as a brood mare. This mare is by Danegelt (174). Mr. Crossley's Lady Bird—15—was second, and Mr. Beith's Lady Aberdeen—5—third in this class. G. H. Hastings, Deer Park, in the three-year-old section, got first for Fannie Bardolph—38—by Lord Bardolph (412). Fannie is a bright chestnut with white feet, and shows fine Hackney character. There is no more popular breed for a show than the Hackneys, and the general public would be glad to see more of them.

Judges.—F. S. Peers, Mount Morris, N.Y.; I. T. Gibson, Denfield.

Awards.—Hackney stallion and four of his progeny, the progeny not to be over two years old—1st, H. N. Crossley, Rosseau (Fireworks). Stallion, four years old and upwards—1st, Graham Bros., Claremont (Royal Standard); 2nd, Robert Beith & Co., Bowmanville (Banquo); 3rd, H. N. Crossley, Rosseau (Fireworks). Stallion, three years old—1st, Hillhurst Farm, Hillhurst, Que. (Barthorpe Performer); 2nd, H. N. Crossley (Rosseau Performer). Stallion, two years old—1st, H. N. Crossley (Rosseau Fireball); 2nd, Hillhurst Farm (Danish Duke). Yearling colt, entire—1st, Hillhurst Farm (Hillhurst Sensation); 2nd, G. H. Hastings, Deer Park, Toronto (Alhambra). Stallion of any age—1st, Graham Bros. (Royal Standard). Filly, three years old—1st, G. H. Hastings (Fanny Bardolph); 2nd, Hillhurst Farm (Matchless Maid). Filly, two years old—1st, R. Beith & Co. (Jessica); 2nd, Graham Bros. (Rose); 3rd, G. H. Hastings (Princess Denmark). Yearling filly—1st, H. N. Crossley, Rosseau (Rosseau Victoria); 2nd, H. N. Crossley (Rosseau Birdie); 3rd, Hillhurst Farm (Lady Shales). Brood mare with foal of same breed by her side—1st, Hillhurst Farm (Princess Dagmar); 2nd, H. N. Crossley (Lady Bird); 3rd, R. Beith & Co. (Lady Aberdeen). Foal of 1896—1st, Robert Beith & Co. (Lorenzo); 2nd, Hillhurst Farm (Lady Dagmar); 3rd, H. N. Crossley. Single horse, mare or gelding, not more than 15½ hands—1st, H. N. Crossley (Althorpe Duchess); 2nd, Robert Beith & Co. (Mona's Queen); 3rd, Hillhurst Farm (Chatwoman). Best mare of any age—Hillhurst Farm (Princess Dagmar). Best Hackney or pony mare, filly or filly foal, registered in the English Hackney Stud Book—1st, Hillhurst Farm (Princess Dagmar). Best Hackney stallion, entire colt or colt foal, registered in the English Hackney Stud Book—1st, Graham Bros. (Royal Standard).

ROADSTERS.—The roadster class was a very large one, and, judging by the growling in the stables, the exhibitors all wanted the ribbons, and were much displeased there were not enough to go around. There was a splendid exhibit of matched teams, and a whole field of single drivers in harness. In the



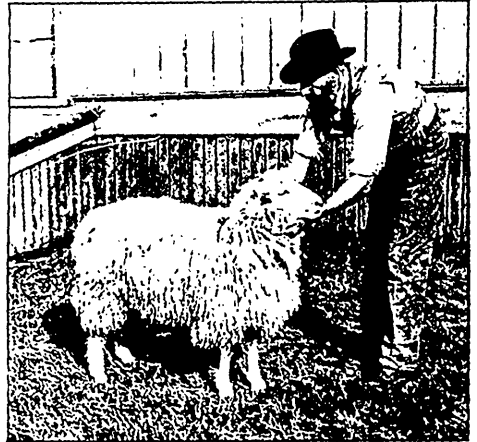
Mr. William Oliver, Avonbank, and his Aged Lincoln Ram.

teams, J. C. Dietrich, of Galt, was the winner, with a fine team of bays, Alva and Ava, both by Axland. They are close on sixteen hands, bright, light bays, full sisters, and good goers. J. C. Burns, Toronto, won in the class for smaller

horses, and also in the single drivers. There were some forty entries for single drivers 15½ hands and under. First prize went to Waldie Steen, Meadowvale, for Little Friday. In stallions, Black Valentyne, owned by C. H. Amey, Cannington, got the sweepstakes, while Graham Bros., Claremont, had in the brood mare, Mayflower, the winner in the female classes. Mayflower is a beautiful bay, with good loins and fine quarters, and altogether a mare of extra good quality.

Judges.—A. Choate, Port Hope; F. G. Hulton, V.S., Weland; Dr. Aikins, Burnhamthorpe.

Awards.—Stallion, four years old and upwards—1st, C. H. Amey, Cannington (Black Valentyne); 2nd, John McBride, Newtonbrook (Tony Wilkes); 3rd, J. D. Smith, Campbell's Cross (Gold Dust); 4th, J. M. Boyles, V.S., Toronto Junction (Arizona); 5th, Washburn Jebb, Cookstown (Harper Hamilton). Stallions, three years old—1st, H. G. Charlesworth, Bedford Park (Rialto); 2nd, C. W. Brereton, Bethany (Aurelian). Stallion, two years old—1st, M. Higgins, Toronto (Ambrose L.); 2nd, J. B. Cowieson, Queensville (Victor); 3rd,



Mr. John T. Gibson, Denfield, and his Lincoln Ewe Lamb,

As shown at the Toronto Industrial, 1896.

G. L. Asling, Saintfield (Glen Wood). Yearling colt, entire—1st, Harry Gamble, Richmond Hill; 2nd, J. Wenman, Toronto (Widflower); 3rd, H. H. Clark, Alton. Stallion of any age—C. H. Amey (Black Valentyne). Gelding or filly, three years old—1st, Robert Wilson, Brampton (Nelly Sharpe); 2nd, W. W. Ward, Utica (Miss Dennison); 3rd, P. Farrell, Woodstock (George); 4th, T. A. Crow, Toronto (Maud). Gelding or filly, two years old—1st, Joseph Pipher, Newmarket; 2nd, J. J. & S. Kiscock, Guthrie (Nelly K.); 3rd, H. G. Boag, Queensville (Hella B.); 4th, E. McClurg & N. Zavitz, Ivan. Yearling, gelding or filly—1st, J. B. Cowieson, Queensville (Maid); 2nd, Graham Bros., Claremont (Princess); 3rd, J. Shook, Brampton (Maple Leaf); 4th, W. G. Rudd, Toronto (Myria R.). Brood mare, with foal by her side—1st, Graham Bros., Claremont (May Flower); 2nd, Dent Dalton, Delhi (Daisy Patchen); 3rd, George Jackson, Cooksville (Victor); 4th, J. B. Cowieson, Queensville (Maud). Foal of 1896—1st, George Jackson, Cooksville (Tom); 2nd, Wm. McEwen, Elora; 3rd, John McBride, Newtonbrook (Miss Altoner); 4th, J. B. Cowieson (Queen). Pair matched horses, geldings or mares, in harness, sixteen hands and under, and over fifteen and a half hands—1st, J. C. Dietrich, Galt (Alva and Ava); 2nd, F. E. Shaver, Islington (Brock and Beecher); 3rd, J. L. Clark, Brampton (Fashion and Zephyr); 4th, John I. Noble, Cooksville (Lady and Rosy). Pair matched horses, geldings or mares, in harness, fifteen and a half hands and under—1st, C. A. Burns, Toronto (Bella Cook and Eva); 2nd, P. Irving, Woodstock; 3rd, J. C. Dietrich, Galt; 4th, Sheldon B. Miller, Jerseyville (Nettie Scott and Kit Scott); 5th, D. Wilson, Wilsonville. Single horse, gelding or mare, in harness, sixteen hands and under, and over fifteen and a half—1st, C. A. Burns, Toronto (Jardine); 2nd, Josiah Oliver, Derry West (Maud); 3rd, Duncan McKenzie, Guelph (Johnny Cope); 4th, T. Bowes, Oakwood (George). Single horse, gelding or mare, in harness, fifteen and a half hands and under—1st, Waldie Steen, Meadowvale (Little Friday); 2nd, J. K. Hessey, Brampton (Little Harry); 3rd, N. Zavitz, Ivan; 4th, T. Brownridge, Brampton (Star Wilkes); 5th, J. Palmer, Richmond Hill.

CARRIAGE HORSES.—There was an excellent exhibit of carriage horses. They were decidedly better than last year, especially in the harness sections. In the aged stallion section

two German coachers came to the front. One, Kaiser Wilhelm, owned by J. P. Thompson, Woodstock, a gay, good goer; the other, owned by George Cockburn, of Baltimore, a good, strong, bright bay, with heavy bone and plenty of size and substance. The former, Kaiser Wilhelm, won the sweepstakes. In the harness sections the Toronto Horse Exchange, and D. T. Lowes and Quinn Bros., of Brampton, had a lot of fine animals on exhibition. The two former won for matched pairs. T. A. Crow, Toronto, got first on single carriage horse over 16½ hands. With over twenty teams in the ring, and very many more single drivers, it was hard to get into the first three. In the special class for high-steppers George H. Good-



John Park, Burgessville, Ont.,

Exhibitor of Cotswolds and prize-winner at Toronto Industrial Exhibition; also at Western Fair, London.

erham, Toronto, was first with a very stylish pair of light bays. H. N. Crossley, Rosseau, had a popular winner in the single high-stepping class, Althorpe Duchess. She has fine knee action, and is a pleasing mover. In the dog-cart class, shown to harness, W. A. Lawrence, Milton, had a fine dark bay, High Roller, by Crown Imperial, dam by Terror, this mixture of trotting and Thoroughbred blood giving a good animal and excellent action. Mr. Cochrane, of Hillhurst Farm, Que., was second with Vina, by Wildfire 1234, bred on Hackney lines. In the cob class the same exhibitor was again second with Lady Lynn, by Great Shot 329. The sweepstakes mare in the carriage class was Bell Cora, by General Cleveland, shown by James McQueen, Elora. She failed to get a place in the ordinary list, but captured the medal, a very unusual occurrence. She is from Clear Grit stock on the side of her sire, and is from a half-bred mare by Revenge, an imported English Thoroughbred. She is a big mare—16 hands, well made, good round barrel, with good muscular development, chestnut in color, with four white stockings.

Judges.—W. C. Edwards, M. P., Rockland; J. D. O'Neil, V. S., London; Dr. Strange, Toronto.

Awards.—Stallion, four years old and upwards, 16 hands and over—1st, J. P. Thompson, Woodstock (Kaiser Wilhelm); 2nd, Geo. Cockburn, Baltimore; 3rd, J. P. Fischer, Brussels; 4th, Joseph Manary, Going (Prince Arthur). Stallion, three years old—1st, W. C. Brown, Meadowvale (Prince

(George); 2nd, Joseph Pipher, Newmarket; 3rd, Dent Dalton, Delhi (Charlie Duval). Stallion, two years old—J. L. Reid (Derry West (Rainbow)). Yearling colt, entire—1st, William Galbraith, Brampton; 2nd, J. L. Reid (Statesman); 3rd, A. Summerfeldt, Cashel (Golden Eagle). Stallion of any age—J. P. Thompson (Kaiser Wilhelm). Pair matched carriage horses, mares or geldings—1st, Toronto Horse Exchange, Toronto; 2nd, T. A. Crow, Toronto; 3rd, F. Chisholm, Milton (Lillie and Minnie); 4th, C. Dennis, Toronto. Pair matched carriage horses, not less than 15½ and under 16½ hands—1st, D. T. Lowes, Brampton; 2nd, Toronto Horse Exchange, Toronto; 3rd, W. A. Lawrence, Milton; 4th, Robert Beith, M. P., Bowmanville (Magnat & Spartan). Gelding or filly, three years old—1st, A. Summerfeldt, Cashel (Golden Kate); 2nd, D. B. Simpson, Bowmanville; 3rd, Josiah Oliver, Derry West (May Flower). Gelding or filly, two years old—1st, P. Farrell, Woodstock (Mike); 2nd, A. Summerfeldt (Skip); 3rd, John Clarkson, Summerville (Nelly). Yearling, gelding or filly—1st, Horace Chisholm, Paris; 2nd, J. T. Hill, Napanee; 3rd, G. L. Asling, Saintfield (Nancy D.). Brood mare, 16 hands and over, with foal of same breed by her side—1st, W. C. Brown, Meadowvale (Princess Royal); 2nd, R. L. Wilson, Delhi (Nelly Stanton); 3rd, J. L. Reid, Derry West (Hyacinthia). Foal of 1896—1st, W. W. Ward, Utica; 2nd, T. M. Wilson, Delhi (Silverwone); 3rd, J. L. Reid (May Flower). Single carriage horse, gelding or mare, in harness, 15½ to 16½ hands—1st, Walter Harland Smith, Toronto (Tourist); 2nd, Toronto Horse Exchange, Toronto; 3rd, T. A. Crow, Toronto (Prize); 4th, Smith & Head, Rockwood (Ida G.). Single carriage horse, gelding or mare, in harness, not less than 16½ hands—1st, T. A. Crow, Toronto (Prince); 2nd, Frank Helmer, Aylmer (King Bay); 3rd, Smith & Head, Rockwood (Rockwood). Best mare of any age—James McQueen, Elora (Bell Cora).

Specials. For High Steppers.

Judges.—F. S. Peers, Mount Morris, N. Y.; J. T. Gibson, Denfield.

Awards.—Pair of matched horses, high steppers, mares or geldings, not more than 15½ hands—1st, George H. Gooderham, Toronto; 2nd, Ansley Yeager, Simcoe; 3rd, Quinn Bros., Brampton. Single horse, high stepper, mare or gelding, not more than 15½ hands—1st, H. N. Crossley, Rosseau (Althorpe Duchess); 2nd, Toronto Horse Exchange, Toronto; 3rd, T. A. Crow, Toronto (Sharron Chief).

Specials. For Dog Carts and Cobs.

Judges.—D. W. Alexander, Toronto; John Hendrie, Hamilton; Col. Otter, Toronto.

Awards.—Dog cart horse, mare or gelding, four years and over, not under 15½ hands, shown to gig or dog cart—1st, T. A. Crow, Toronto; 2nd, D. B. Simpson, Bowmanville (Jubilee Chief); 3rd, Toronto Horse Exchange. Dog cart horse, mare or gelding, four years and over, under 15½ and over 15 hands, shown to gig or dog cart—1st, W. A. Lawrence, Milton (High Roller); 2nd, Hillhurst Farm (Vina); 3rd, D. T. Lowes, Brampton. Cob in harness, mare or gelding, four years and over, not under 14 hands and not over 15—1st, Toronto Horse Exchange, Toronto; 2nd, Hillhurst Farm (Lady Lynn); 3rd, W. H. Pearson, jr., Toronto (Highland Boy).



Mr. C. T. Garbutt's Aged Cotswold Ewes (Imported), As shown at the Toronto Industrial, 1896.

HUNTERS AND SADDLERS.—The horses in this class were much better than the exhibit last year in general excellence; but, nevertheless, they did not provide any specially brilliant stars. A. Beck, of the London stables, was the chief winner both in the classes for hunters and for jumpers. He had an excellent lot. Captain R. Myles, of Toronto, got second prize for his saddle horse, Harpoon, by The Chicken; and D. King Smith third for his heavy-weight hunter, a very good mount. Hume Blake won second prize for ladies' saddle horse with Nora Creena. There is not yet a special class for gaited saddlers. This might very well be tried in another year, and a most popular Kentucky institution introduced into Canada. In the saddle classes the judging had to be done at a disadvantage to both judges and spectators. In one class three horses were led out by one owner and two of these had to wait till the rider of the third could be spared to take a turn on the others. It is safe to say that there is hardly a township fair in Canada that would permit this sort of thing, and that such an arrangement would be permitted in a show such as the Toronto Industrial is does certainly seem strange.

Judges.—James Carruthers, Toronto; Major Mead, Toronto; A. W. Smith, Toronto.

Awards.—Saddle horse, gelding or mare—1st, A. Beck, London; 2nd, Capt. R. Myles, Toronto (Harpoon); 3rd, A. Beck; 4th, Ansley Yeager, Simcoe. Hunter, heavy-weight, up to 15 stone—1st, A. Beck, London; 2nd, A. Beck, London; 3rd, D. King Smith, Toronto; 4th, R. Bond, Toronto. Hunters, light-weight, up to 11 stone—1st, A. Beck, London; 2nd, A. Beck, London; 3rd, Hillhurst Farm, Hillhurst, Que. (Hartington). Ladies' saddle horse—1st, A. Beck, London; 2nd, Hume Blake, Toronto (Nora Creena); 3rd, Graham Bros., Claremont; 4th, Ansley Yeager, Simcoe. Horse, best leaper—1st, R. Kilgour, Toronto; 2nd, T. H. Craig, Guelph. Best horse in this class—Toronto Horse Exchange.

Specials. For High Jumping.

Judges.—Horton Walker, Toronto; Major Mead, Toronto; A. W. Smith, Toronto.

Awards.—Light-weight green hunters, carrying not less than 125 lbs.—1st, 2nd, and 3rd prizes, A. Beck, London; 4th, Hillhurst Farm, Hillhurst, Que. (Hartington). Heavy-weight green hunters, carrying not less than 175 lbs.—1st and 2nd, A. Beck, London; 3rd, R. Bond, Toronto. Light-weight qualified hunters, carrying not less than 154 lbs.—1st, R. Kilgour, Toronto; 2nd and 3rd, A. Beck, London. Heavy-weight qualified hunters, carrying not less than 175 lbs.—1st, J. F. Crean, Toronto (Prince Charlie); 2nd, A. Beck, London; 3rd, J. Kilgour, Toronto. Hunter showing best performance in jumping—1st, A. Beck, London; 2nd, R. Kilgour, Toronto; 3rd, A. Beck, London.

FANCY DRIVING.—The Toronto Horse Exchange turned out the best four-in-hands. The driving of Aurel Batonyi, of New York, was much admired, and never failed to bring out the plaudits of the crowd of spectators



Mr. John Kelly, Shakespeare, and his Aged Leicester Ram,
As shown at the Toronto Industrial.

on the grand stand. To those who have patronized the Toronto Horse Show Mr. Batonyi is no stranger; but these were but the few amongst the thousands who saw and admired for the first time his able handling of the ribbons at the Toronto Industrial. The Hackneys from Hillhurst farm, Quebec, were the winners for the best tandem team, while John Macdonald, Oaklands, Toronto, was a good second. George H. Gooderman won for gentlemen's pair in both classes.

PONIES.—There was an excellent show of ponies, there being over seventy entries. George Smith & Son, Grimsby, got first for a pair of dappled cream-colored beauties. The pony to win in single harness was Greta, owned by Robert Beith, M.P., Bowmanville, while Mrs. George Taylor, Toronto, got second place with Queen Lillian. Mrs. Taylor also won first place for the best children's turnout driven by a boy or girl



Mr. Thomas Whitelaw, Guelph, and his Leicester Ewe Lamb,
As shown at the Toronto Industrial, 1896.

under 15. George Dobie, Glencoe, had a lot of beauties, and won several prizes. He got first for Arab Chief in the stallion class. Perhaps the most notable animal in the pony class was Creta, owned by Miss E. Davies, Toronto (daughter of Robert Davies)—a beautiful black of 12½ hands. She runs fast, trots true, and is a wonderful jumper, clearing a five-foot hurdle and beating easily a whole string of horses twice her size. Creta is out of the pony mare, Flos, by the Thoroughbred horse, Parisian, and is built on blood lines, with limbs like a deer. She also won the pony race under 13 hands.

Judges.—C. Brodie, V.S., Claremont; D. King Smith, Toronto.

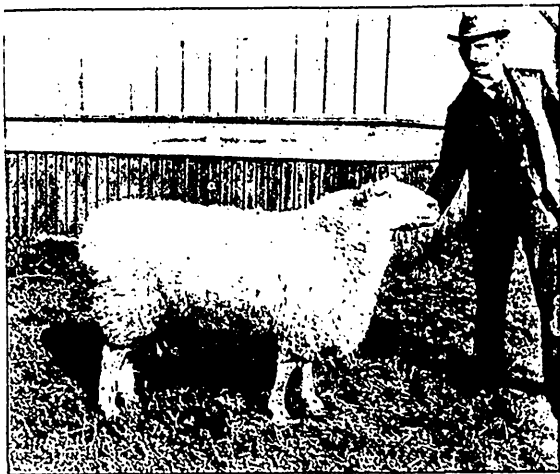
Awards.—Stallion, 13½ hands and under—1st, Geo. Dobie, Glencoe (Arab Chief); 2nd, J. E. Verral, Parkdale (Crocket). Pony in single harness, 11 hands and under—1st, H. G. Boag, Queensville (Donald); 2nd, Wm. Martin, Parkdale (Jumbo); 3rd, Joseph Park, Toronto (Billy). Pony in single harness, over 11 hands up to 12 hands—1st, W. Dobson, Toronto (Jeff Davis); 2nd, S. Jackson, Parkdale; 3rd, C. F. Nason, Toronto (Trilby). Pair of ponies in harness, 12 hands and under—1st, Geo. Smith & Son, Grimsby (First Attempt and Little George); 2nd, Geo. Dobie, Glencoe (Minnie and Bisk). Pony in single harness, over 12 hands, up to 13½ hands—1st, Robert Beith & Co., Bowmanville (Greta); 2nd, Mrs. Geo. C. Taylor, Toronto (Queen Lillian); 3rd, Graham Bros., Claremont. Pair of ponies in harness, over 12 hands and up to 13½ hands—not competed for. Pony in single harness, over 13½ hands, up to 14½ hands—1st, J. H. Hillock, Brampton; 2nd, A. Cuthbert, Toronto (Anna); 3rd, J. T. Farr, Thistle-town (Dolly G.). Pair of ponies in harness, over 13½ hands, up to 14½ hands—1st, Waldie Steen, Meadowvale (Dandy and Sport); 2nd, Smith & Head, Rockwood (King and Joe); 3rd,

Wm. Hartley, Guelph. Pony running race for ponies 13 hands and under—1st, Robt. Davies, Toronto (Creta); 2nd, R. H. Muir, Toronto (Jersey); 3rd, J. A. Morrison, Toronto (Dr. D.). Pony running race for ponies 12 hands and under—1st, Geo. Dobie, Glencoe; 2nd, Geo. Smith & Son, Grimsby (First Attempt); 3rd, Robt. Davies (Victor). Pony trotting race, to harness in pony cart, 12 hands and under—1st, H. M. Robinson, Toronto (Dolly); 2nd, P. McConvey, Toronto

(Little Frank); 3rd, G. V. Foster, Toronto (Oliver). Pony Trotting Race, to harness in pony cart, over 12 hands and under 14 hands—1st, James Locke, Toronto (Frank L.); and, H. Webb, Toronto; 3rd, C. F. Rupert, Toronto (Fanny Parnell).

Special Prizes.

PROFESSIONAL COACHMAN IN LIVERY. *Judges*—John Macdonald and George A. Case. Driving a pair of horses—



Mr. J. M. Gardhouse, Highfield, and his Aged Leicester Ram, As shown at the Toronto Industrial, 1896.

1st, Walter Budd, Toronto, for A. E. Gooderham; 2nd, Walter Keeling, Toronto, for T. G. Blackstock; 3rd, James Martin, Toronto, for George Gooderham.

FOUR-IN-HANDS. *Judge*—A. Batonyi, New York. Best four-in-hand team, shown to brack, coach, or carriage—1st and 2nd, Toronto Horse Exchange.

TANDEMS. *Judge*—A. Batonyi, New York. Best tandem and turnout—1st, Hillhurst Farm, Hillhurst, Que.; 2nd, John Macdonald, Oaklands, Toronto.

BEST AND BEST APPOINTED GENTLEMAN'S PAIR TURNOUT—DEALERS IN HORSES EXCLUDED. *Judge*—A. Batonyi, New York. 1st, George H. Gooderham, Toronto; 2nd, A. E. Gooderham, Toronto; 3rd, John Macdonald, Toronto.

BEST AND BEST APPOINTED GENTLEMAN'S PAIR TURNOUT—OPEN TO A.L. *Judge*—A. Batonyi, New York. 1st, George H. Gooderham, Toronto; 2nd, T. A. Crowe, Toronto; 3rd, A. E. Gooderham, Toronto.

BOY RIDERS. *Judges*—Harton Walker, Major Mead, A. W. Smith, Toronto. Best boy rider, under fourteen years of age, on pony under 13½ hands—1st, George Dobie, Glencoe; 2nd, J. Meldrum, Toronto; 3rd, Arthur Buckner, Toronto.

CHILDREN'S TURNOUT. *Judge*—A. Batonyi, New York. Pony under 13 hands, harnessed to two-wheeled cart, driven by boy or girl under 15 years of age. 1st, Mrs. George C. Taylor, Toronto (Queen Lillian); 2nd, G. V. Foster, Toronto (Oliver).

There were a good many buyers present, and, while prices were low as a whole, many horses changed hands at fair figures. Buyers were present from many parts of Canada and the United States. Anything that was strictly first-class in the harness classes could be sold for a good price. The trouble was that such animals were hard to buy, owners often being loath to part with a good one. At the close of the show a number of prominent horsemen waited on the Directors and asked that before another year better facilities be provided for showing the horses in the light classes. It is proposed to build an oval ring with seating accommodation, and if the Dominion Exhibition can be arranged for next year the Directors have promised that this proposition will be carried out.

Beef Cattle.

SHORTHORNS.—Never, during the last six years at any rate, has there been such a fine display of Shorthorn cattle as were present at this show this year. Not counting the entries for the herd and those for four calves, there were one hundred and twenty-three animals entered, and the general average was very high. Aged bulls formed one of the smallest sections, there being but three of the four entries on hand. J. & W. Russell's World's Fair sweepstakes bull, Lord Stanley, which showed the Americans what a white could do, was awarded first. He has lots of quality, and his lines are beyond reproach, but he has hardly done as well as his admirers expected. Alex. Burns, Rockwood, carried second on Strathallan Lad, a good, blocky one, but shortish behind. To Simmons & Quirie, Ivan, went third for Royal Saxon, a bull of good style and girth. There was a very fair ring of three-year-olds. H. & W. Smith, Hay, got the red ticket on Abbotsford, who was second last year. He has gone on improving, and is a good, square bull, with a good front, but a little lightish in his thighs. Capt. Robson, Ilderton, had Nominee forward, an even roan, but not so good a handler as he might be. He got second on him, beating Messrs. Crerar's Brampton M., which was first last year in the two-year-old class. Brampton M. has a good skin, back, and hams. Some fancied him for first place. Out of the five two-year-old bulls shown there were three clear, outstanding winners, and good ones they were. To James Leask's Moneyfuffel Lad, last year's first-prize yearling and sweepstakes bull, went first. He has gone on well, is very level-fleshed, and the judges once more awarded him the sweepstakes for the best bull. The second-prize yearling last year, Indian Brave, shown by Messrs. Nicholson, and a son of Indian Chief, a grand bull, came second, followed by J. S. Smith's Caithness, a red of very good points. Eight yearlings contested for the honors. John Davidson, Ashburn, had a smooth red with a little white, Duke, a late yearling, but well grown, which headed this class. Second went to a level red, shown by T. Russell & Son, Exeter, and third to Lord Stanley 4th, a roan son of Messrs. Russell's white bull, owned by George Gier, Grand Valley. Out of the thirty-two bull calves entered, twenty-one faced the judges, who, after a critical survey, selected seven for the short leet. Eventually, first was sent to a very taking son of Knight of St. John, Banker, shown by W. C. Edwards & Co., Rockland, Ont.

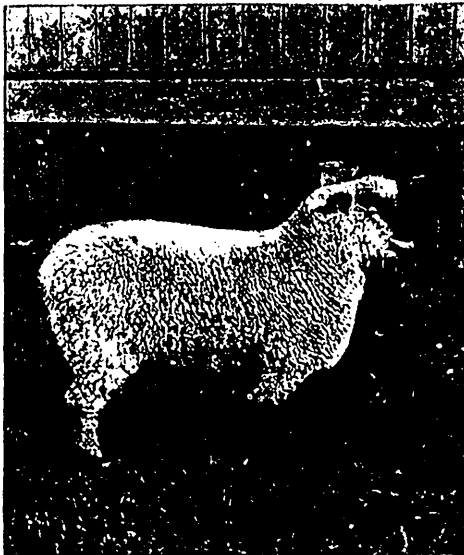


Peter Arkell, Teeswater, Ont.,

Exhibitor of Oxford Downs, and prize-winner at Toronto Industrial Exhibition; also at Western Fair, London.

He has good conformation and color, and carries his flesh out well to his tail. Messrs. Watt's thick, sappy roan, Judge Roan, came next in order, with a neat dark roan son of Lord Stanley, from Messrs. Russell's herd, third, fourth going to Messrs. Davidson's Sittytan Hero, a most promising calf, that many fancied would have been higher in the prize list,

and fifth to Capt. Robson's light roan, with a good, mellow hide. For the sweepstakes were drawn up six of the best bulls that have competed for that honor for some time back. Eventually, as mentioned above, Moneyfuffel Lad got that coveted honor. The struggle for the prizes in the aged cow class was very keen between the four best cows. The red ticket was sent to Messrs. Russell's Centennial Isabella 25th, a sweet-topped cow, which won second as a two-year-old at



Mr. Smith Evans, Gourock, and his Oxford Down Ewe Lamb, As shown at Toronto Industrial, 1896.

the World's Fair, J. & P. Crerar's Kirklevington Duchess 8th, a cow of very good type, coming second, with H. & W. Smith's Vanity, a very nice cow, third. Nonpareil sand won another first honor for J. & W. Russell in the three-year-old class, with Messrs. Crerar's Ruby Hill 2nd and A. J. Watson's Ivy Leaf second and third, respectively, both thick cows. Two-year-old heifers were a hard class to judge, such a good lot were they. The prizes were sent to Messrs. Davidson's Village Beauty 7th, Simmons & Quirie's Daisy of Strathallan 12th, and H. & W. Smith's Gowan. Yearling heifers were another strong class of ten head. J. & W. Russell again scored first, and second as well, with Coral and Centennial Isabella 36th, the former a square, level heifer with a good back, while her companion was of a longer build. H. & W. Smith were a close third, with Freida, a daughter of Abbotsford. Heifer calves, like bull calves, were a grand lot, twenty in number. So even were they that it was a question where the prizes would go. Eventually, a capital calf, shown by J. Groff, Alma, got first place, with a red from the Salem herd next in order, R. & S. Nicholson's Mina of Sylvan third, J. & W. Russell's Miss Ramsden 6th fourth, and a very pretty thing, Marabel, shown by John Miller, Markham, fifth. When all the prizes had been awarded there were still many good ones left out. Messrs. Watt had the winning herd of four calves, with W. C. Edwards' lot a close second, and J. & W. Russell's entries not far behind. The herd prize went to the Richmond Hill herd, H. & W. Smith's herd being second. The competition for the sweepstakes for best female lay between three of Messrs. Russell's females and Messrs. Davidson's two-year-old heifer. The prize was sent to Messrs. Russell's yearling heifer, Coral.

Awards.—Aged bull—1st, J. & W. Russell, Richmond Hill; 2nd, Alex Burns, Rockwood; 3rd, Simmons & Quirie, Ivan. Three-year-old bulls—1st, H. & W. Smith, Hay; 2nd, T. E. Robson, Ilderton; 3rd, J. & P. Crerar, Shakespeare. Bull, two years old—1st, Jas. Leask, Greenbank; 2nd, R. & S. Nicholson, Sylvan; 3rd, J. S. Smith, Maple Lodge. Yearling bull—1st, John Davidson, Ashburn; 2nd, T. Russell & Son, Exeter; 3rd, Geo. Gier, Grand Valley. Bull calf—1st, W. C. Edwards & Co., Rockland; 2nd, J. & W. B. Watt, Salem; 3rd, J. & W. Russell; 4th, Jas. I. Davidson & Son, Balsam; 5th, T. E. Robson. Bull of any age—1st, Jas. Leask (Moneyfuffel Lad). Aged cow—1st, J. & W. Russell; 2nd, J. & P. Crerar; 3rd, H. & W. Smith. Cow, three years old—1st, J. &

W. Russell; 2nd, J. & P. Crerar; 3rd, A. J. Watson, Castleberg. Heifer, two years old—1st, Jas. I. Davidson & Son; 2nd, Simmons & Quirie; 3rd, H. & W. Smith. Yearling heifer—1st and 2nd, J. & W. Russell; 3rd, H. & W. Smith. Heifer calf—1st, J. Groff, Alma; 2nd, J. & W. B. Watt; 3rd, R. & S. Nicholson; 4th, J. & W. Russell; 5th, John Miller, Markham. Four calves—1st, J. & W. B. Watt; 2nd, W. C. Edwards & Co.; 3rd, J. & W. Russell. Herd—1st, J. & W. Russell; 2nd, H. & W. Smith; 3rd, J. & P. Crerar. Female of any age—1st, J. & W. Russell (Coral).

Judges.—R. Gibson, Delaware; W. J. Biggins, Clinton.

HEREFORDS.—There was a much better turn-out of Herefords than last year, thanks to the increased prize list, the female sections especially being well filled. Fleming & Co., Weston, had the first-prize aged bull in Young Pinkham, with Earl Douglas, shown by D. M. Wilson, Moe's River, Que., second. H. D. Smith, Compton, had a clear first in the two-year-old class, with Amos of Ingleside, a bull which has been at the top since he was a calf. He is going on well, and putting his flesh on smoothly. He was awarded the sweepstakes for bulls. Alfred Stone, Guelph, had a really nice yearling bull which won first, beating H. D. Smith's entry. D. M. Wilson's bull calf took first place. His principal fault is that he is a little low in the back. A. Stone's Silver Creek is a straight one. He won second, with H. D. Smith's Amos 3rd of Ingleside, a lengthy smooth calf, third. Aged cows made up a good class. H. D. Smith could not be beaten on his old-time winner, Lady Tushingham 3rd, or on her companion, Spot 3rd, a low blocky cow of good quality. A large, fine cow, Cherry 28th, won third honors for Mr. Stone. Three-year-old cows had a neat compact entry of Fleming & Co.'s to head them, A. Stone's entry of larger frame coming next. Two-year-old heifers were nine in number, and made a good display. They were none of them perfect, but they were mostly thick-fleshed animals. H. D. Smith was first with Sylvan 3rd of Ingleside. Yearling heifers totalled five. H. D. Smith's capital heifer won here, with D. M. Wilson's entry second, and another of Mr. Smith's third. The first and second herd prizes went to H. D. Smith, and also the sweepstakes for females, for Lady Tushingham 3rd.

Awards.—Aged bull—1st, Fleming & Co., Weston; 2nd, D. M. Wilson, Moe's River, Que. Bull, two years old—1st, H. D. Smith, Compton; 2nd, A. Stone, Guelph. Yearling bull—1st and 3rd, A. Stone; 2nd, H. D. Smith. Bull calf—1st, D. M. Wilson; 2nd, A. Stone; 3rd, H. D. Smith. Bull, of any age—1st, H. D. Smith (Amos of Ingleside). Aged cow—1st and 2nd, H. D. Smith; 3rd, A. Stone. Cow, three years old—1st, Fleming & Co.; 2nd, A. Stone; 3rd, H. D. Smith. Heifer, two years old—1st, H. D. Smith; 2nd, D. M.



James P. Phin, Hespeler, Ont., Exhibitor of Shropshires and prize-winner at Toronto Industrial Exhibition.

Wilson; 3rd, A. Stone. Yearling heifer—1st and 3rd, H. D. Smith; 2nd, D. M. Wilson. Heifer calf—1st, Fleming & Co.; 2nd, A. Stone; 3rd, H. D. Smith. Herd—1st and 2nd, H. D. Smith; 3rd, Fleming & Co. Female, of any age—1st, H. D. Smith (Lady Tushingham 3rd).

Judges.—A. Rawlings, Forest; R. J. Mackie, Oshawa.

POLLED ANGUS.—The entry of these was fully up to the average. Aged bulls, however, were a small class, with only two forward. Walter Hall, Washington, was placed first with Lucretius, a bull of good conformation and well shown. Wm. Stewart & Son, Lucasville, were second with Prince of Thorndale. Two-year olds were a large class, all of the five entries being in the ring. Walter Hall once more carried the day with Oxford King, a son of Lucretius, a good smooth one. D. M. Wilson, Moe's River, Que., was placed second with Ringwold, while James Bowman, Guelph, who showed Lord Aberdeen 3rd, a son of Lord Forest, had to take third place, although a good many considered that his bull was entitled to second prize. To Messrs. Stewart went all three prizes for yearling bulls. A capital son of Kyma 3rd, Kyma's Laddie, won the red ticket for Jas. Bowman in the bull calf section, with two younger things of Walter Hall's second and third. The last named exhibitor had also the sweepstakes bull in Lucretius. Kyma 2nd and Kyma of Tweedhill were 1st and 3rd respectively in the aged cow section. They are both owned by Jas. Bowman, and the first is an oldtime winner both in her class and of the sweepstakes, repeating both victories this year, while the latter was considered by competent judges to be better than Walter Hall's smaller entry, which won second in the aged class. Walter Hall was first and second in the three-year-old class with two good ones, but we fancied that their positions should have been reversed. Messrs. Stewart carried third with Mayflower of Willow Grove. Walter Hall once more had the winning entry in two-year-olds, a good thick one, slanting slightly to the tail head. Jas. Bowman was second with a good straight heifer, while D. M. Wilson had a smooth thing that was placed third. Jas. Bowman's yearling was good enough for 2nd place. She is a daughter of Kyma 3rd. D. M. Wilson came in second, and Walter Hall, who was expected to take second place only got third. A very nice heifer calf of Mr. Wilson's was first in her class, with one of Jas. Bowman's second, and one of Messrs. Stewart's third. The herd prizes went to Walter Hall, Jas. Bowman, and Messrs. Stewart in the order named.

Awards.—Aged bull—1st, Walter Hall, Washington; 2nd, Wm. Stewart & Son, Lucasville. Bull, two years old—1st, W. Hall; 2nd, D. M. Wilson, Moe's River; 3rd, Jas. Bowman, Guelph. Yearling bull—1st, 2nd, and 3rd, W. Stewart & Son. Bull calf—1st, J. Bowman; 2nd and 3rd, W. Hall. Bull of any age—1st, W. Hall (Lucretius). Aged cow—1st and 3rd, J. Bowman; 2nd, W. Hall. Cow, three years old—1st and 2nd, W. Hall; 3rd, W. Stewart & Son. Heifer, two years old—1st, W. Hall; 2nd, J. Bowman; 3rd, D. M. Wilson. Yearling heifer—1st, J. Bowman; 2nd, D. M. Wilson; 3rd, W. Hall. Heifer calf—1st, D. M. Wilson; 2nd, J. Bowman; 3rd, W. Stewart & Son. Herd—1st, W. Hall; 2nd, J. Bowman; 3rd, W. Stewart & Son. Female of any age—1st, J. Bowman (Kyma 2nd).

Judges.—C. McNeill, Vellore; J. C. Snell, Snelgrove.



Mr. John Campbell, Woodville, and his Aged Shropshire Ram, As shown at the Toronto Industrial.

GALLOWAYS.—The Galloway sections were pretty well filled all through. In the aged bull class D. McCrae, Guelph, had two entered, Canadian Borderer and College Boy, the former an old time winner in his class and of the sweepstakes, as he once more did this year. He is beginning to show signs of wear, however, and not a few thought that A. M. & R. Shaw's MacCartney, or John Sibbald's Ottawa would have been placed ahead of him. These were placed 2nd and 3rd. They

are good bulls, and were well shown. D. McCrae had a good, straight thing, with a fine coat of hair, in Archie, in the two-year-old class, which won 1st, his companion taking 3rd. Messrs. Shaw's 2nd prize one was a good one, but failed a little on the back. Their entry in the yearling section took 1st, while a smaller, but very neat, one of John Sibbald's, with a beautiful coat of hair, stood next to him. A well-grown bull-calf of Mr. McCrae's was placed 1st, with a smooth one of Messrs. Shaw's next, Mr. Sibbald's entry, a young thing, being good enough for 3rd place. There were six head of aged cows. Here the knowing ones had selected John Sibbald's Countess of Glencairn 3rd for premier honors, but the judges sent the red ticket to D. McCrae's Maid Marian B., and placed the other 2nd, with A. M. & R. Shaw's Rose McElin 3rd. Three-year-old cows were six in number, but only a fair class. There were four grand two-year-old heifers in that section. A beautiful entry of Mr. McCrae's, Semiramis E., won the day, with a large, thrifty one of Mr. Sibbald's with a deep body, next, and a second entry of Mr. McCrae's 3rd. Mr. McCrae won all three prizes in the yearling class, the first two having grand coats of hair. He also captured the red and blue tickets in the heifer calf section, a younger one of Mr. Sibbald's being 3rd. The herd prizes went to D. McCrae, John Sibbald, and A. M. & R. Shaw, in the order named, while the first-mentioned exhibitor's beautiful two-year-old heifer, Semiramis E., won the sweepstakes for females.

Awards.—Aged bull—1st, D. McCrae, Guelph; 2nd, A. M. & R. Shaw, Brantford; 3rd, John Sibbald, Annapolis. Bull, two years old—1st and 3rd, D. McCrae; 2nd, A. M. & R. Shaw. Yearling bull—1st, A. M. & R. Shaw; 2nd, J. Sibbald; 3rd, D. McCrae. Bull calf—1st, D. McCrae; 2nd, A. M. & R. Shaw; 3rd, J. Sibbald. Bull, any age—1st, D. McCrae (Canadian Borderer). Aged cow—1st, D. McCrae; 2nd, J. Sibbald; 3rd, A. M. & R. Shaw. Cow, three years old—1st and 3rd, D. McCrae; 2nd, A. M. & R. Shaw. Heifer, two years old—1st and 3rd, D. McCrae; 2nd, J. Sibbald. Yearling heifer—1st, 2nd, and 3rd, D. McCrae. Heifer calf—1st and 2nd, D. McCrae; 3rd, J. Sibbald. Herd—1st, D. McCrae; 2nd, J. Sibbald; 3rd, A. M. & R. Shaw. Female, any age—1st, D. McCrae (Semiramis E.).

Judges.—C. McNeill, Vellore; J. C. Snell, Snelgrove.

DEVONS.—The only exhibitor of Devons was W. J. Rudd, Eden Mills, who took all the prizes for which he entered.

Awards.—Aged bull—1st, W. J. Rudd. Bull, two years old—1st, W. J. Rudd. Yearling bull—1st, W. J. Rudd. Bull calf—1st and 2nd, W. J. Rudd. Bull, any age—1st, W. J. Rudd. Aged cow—1st and 2nd, W. J. Rudd. Cow, three years old—1st, W. J. Rudd. Heifer, two years old—1st, W. J. Rudd. Yearling heifer—1st, W. J. Rudd. Heifer calf—1st and 2nd, W. J. Rudd. Herd—1st, W. J. Rudd. Female, any age—1st, W. J. Rudd (Flora).

Judges.—A. Rawlings, Forest; R. J. Mackie, Oshawa.

FAT CATTLE.—These were present in very fair numbers. In the aged steer section a red shown by James Rutherford, Roseville, came first, followed by a smooth steer, not so highly fitted, brought out by T. Russell & Son, Exeter. Third went to James Oke & Son. The two-year-old section was headed by the grand steer, Clinker, bred by D. D. Wilson, Seaforth, and shown by W. H. Nichols, Hamilton. He has grown immensely since his victory at Guelph last December, and now tops the beam at 2,100 lbs. T. Russell & Son again came second, while Jas. Bowman, Guelph, carried third with an unfinished animal of good quality. A well-fitted roan by Valasco 2nd secured the red ribbon for James Rennie, Wick, in the yearling section, followed by a very fair entry of James Leask's, Greenbank. Four good calves comprised the calf section. Here a big, well-covered calf shown by Jas. Rennie took first place, John Fried, Roseville, coming second, and Jas. Leask third, with two of a good sort. Two Polled Angus cows exhibited by Jas. Bowman were placed first and third in the four-year-old cow class with an entry of Jas. Oke & Son placed between. There was a good display of heifers under four years. Jas. Rennie was once again victorious, with a white, a half-sister to the silver medal heifer at Guelph last December, and a good one to boot. John Fried's entry was second, and Messrs. Nicholson, Exeter, took the third premium. The four pairs of cattle shown in section 7 were a very good lot. First place worthily fell to Jas. Leask's excellent pair, one of which was first last year as a calf. H. & W. Smith, Hay, secured second with two neat whites, while John Fried was the other successful exhibitor.

Awards.—Ox or steer, three years old and over—1st, Jas. Rutherford, Roseville; 2nd, T. Russell & Son, Exeter; 3rd, Jas. Oke & Son, Alvington. Steer, two years old—1st, W. H.

Nichols, Hamilton; and, T. Russell & Son; 3rd, Jas. Bowman, Guelph. Steer, one year old—1st, Jas. Rennie, Wick; 2nd, Jas. Leask, Greenbank. Steer calf—1st, Jas. Rennie; 2nd, John Fried, Roseville; 3rd, Jas. Leask. Cow, four years old and over—1st and 3rd, Jas. Bowman; 2nd, Jas. Oke. Heifer, under four years—1st, Jas. Rennie; 2nd, J. Fried; 3rd, R. & S. Nicholson. Pair of fat cattle, not entered in other sections—1st, Jas. Leask; 2nd, H. & W. Smith; 3rd, J. Fried.

Judges.—James Wilson and Jesse Dunn, Toronto; T. Russell, Exeter.

GRADE CATTLE.—In the section for grade cows over four years old the competition by between four well-known veterans, James Yule's well-known Lady and Maud, the former of which has swept the boards time and again as winner in her class, as well as of the sweepstakes medal, and James Leask's equally well-known two entries. It was generally expected that Lady would once more repeat her previous victories, and, therefore, it was with surprise that the onlookers perceived that she did not even get a place at the judges' hands, first and second going to James Leask's two fine roans, and third to James Yule's Maud. Three-year-olds mustered four head, James Oke's entry coming in first, followed by James Leask's and James Yule's, in the order named. Here, too, the judging came in for some criticism. Two-year-olds were a fair class, as were yearlings. James Oke & Son had the winning entry in the latter section, while James Rennie carried second and third with two well-grown roans. A daughter of the silver medal Shorthorn bull last year, shown by James Leask, was deservedly placed first in the calf section, a very promising white from James Yule's herd winning the blue ticket, closely followed by H. K. Fairbairn's red, a little smaller in size. The herd prizes for four females over one year, owned by the exhibitor and not entered in any other class, went to James Leask, James Yule, and James Oke & Son, in the order named. The first-named also won the medal for the best female.

Awards.—Cow, four years old and upwards—1st and 2nd, Jas. Leask, Greenbank; 3rd, Jas. Yule, Elder's Mills. Cow, three years old—1st, Jas. Oke & Son, Alvinston; 2nd, Jas. Leask; 3rd, Jas. Yule. Heifer, two years old—1st, Jas. Leask; 2nd, Jas. Oke & Son; 3rd, Jas. Rennie, Wick. Yearling heifer—1st, Jas. Oke & Son; 2nd and 3rd, Jas. Rennie. Heifer calf—1st, Jas. Leask; 2nd, Jas. Yule; 3rd, H. K. Fairbairn, Thedford. Four females over one year old—1st, Jas. Leask; 2nd, Jas. Yule; 3rd, Jas. Oke & Son.

Judges.—John I. Hobson, Mosboro; William Shunk, Sherwood.

Dairy Breeds.

It was a noticeable feature among the dairy breeds that, with the exception, perhaps, of Guernseys, they were scarcely up to the average in respect to the number of exhibitors showing, although there were a large number of first-class animals present.

AYRSHIRES.—These came first on the catalogue, and in company with the other dairy breeds were judged on the Friday of the first week, with the exception of some few sections which were finished off on Saturday. Four aged bulls answered the call. These were R. G. Steacy's Carlyle of Lessnessock (imp.), who has distinguished himself in previous show rings, and was in fine shape; Thos. Ballantyne & Son's Beauty Style of Auchincbrain (imp.), a fine, lengthy, smooth animal; Jas. McCormack & Son's neat entry, Jack Morton, and Alex. Hume & Co.'s low-set Sir Colin. The competition lay between the two first named for first place, the judges eventually awarding the four prizes in the order named. Wm. Stewart & Son's Highland Chief, a bull of good type, was placed ahead of Messrs. Ballantyne's entry in the two-year-old section, followed by R. G. Steacy's imported Lord Douglas 1st. Yearling bulls were five in number. A very promising neat low-set Bull, Bright Star, belonging to Messrs. McCormack, carried first here, and afterwards secured the sweepstakes for bull of any age. Alex. Hume & Co.'s Dominion Lad, which won first last year as a calf, had to be content with second place, while Messrs. Stewart and Messrs. Smith came third and fourth, the latter showing the bull that headed the first-prize herd at Winnipeg last July. From a string of twenty bull calves the judges drew out eight head for the final selection, and, after a careful inspection, the competition being very close) picked out a son of Nellie Osborne, by Glencairn 3rd, for first place. He was shown by Messrs. Smith, and is a most promising youngster. Two neat things from Mr. Terrill's herd were placed second and third, Wm. Stewart & Son winning fourth with a good son of Douglas of Loudoun. I. Springtly 3rd Jas. McCormack & Son had a thoroughly useful-looking cow that secured first in the aged cow class, second place falling to Messrs. Hume's well-known Eva Barcheskie (imp.), which carried a fine udder, running well forward. Two other imported cows filled the remaining places, the first, May Queen of Craighead, being exhibited by Mr. Steacy, and the other, Daisy 1st of Auchincbrain, by

Messrs. Ballantyne. The latter had most noticeable milk veins and good udder, although over six months in milk. The Lyn herd carried two prizes in the three-year-old class, Wylie 2nd of Lessnessock being first, and Lily of the Vale 6th of Lessnessock fourth. Messrs. Stewart had a most pronounced milker in the second prize cow, Scotch Lassie Jean, as had Messrs. Ballantyne in Stylish Daisy (imp.), which stood third. The last-named firm came to the fore with two-year-olds, winning both first and second, Messrs. Stewart and Steacy following in the order named. Eight yearlings competed for the prizes offered. Messrs. McCormack and Hume were first and second respectively with two animals in milk, the other two prizes going to Messrs. Stewart and Ballantyne.

There was a small but nice ring of calves under one year old. Here Messrs. Stewart were clearly to the fore, winning all the three leading prizes with very good animals, which, however, some judges considered might have been differently placed as regards their individual positions. Messrs. Hume had a calf with a grand skin which took fourth place. There were seven calves under six months old. A new exhibitor, Wm. Dracup, Wellman's Corners, here came in first, followed by two good entries of A. Terrill, Wooler, Messrs. Hume being fourth. The prizes for four animals, the progeny of one bull, went to Wm. Stewart & Son, Thos. Ballantyne & Son, Jas. McCormack & Son, and W. M. & J. C. Smith, in the order named, whilst A. Terrill, Wooler, rightly led for four calves under one



Mr. W. H. Beattie, Wilton Grove, and his Shropshire Ram Lamb,

As shown at the Toronto Industrial, 1896.

year, Messrs. Stewart making a good second, and Messrs. Hume and McCormack winning the remaining prizes. The awarding of the prizes for the herds took some time, as the prizes in the various sections were spread over the different herds. Messrs. McCormack's herd, too, was greatly weakened by the loss of their cow Primrose 6th, which had been taken down with milk fever, otherwise it would probably have stood higher. Eventually the prizes were awarded as in the prize list appended. The sweepstakes for the best female fell to Mr. Steacy's Wylie and of Lessnessock.

Awards.—Aged bull—1st, R. G. Steacy, Lyn; 2nd, T. Ballantyne & Son, Stratford; 3rd, Jas. McCormack & Son, Rockton; 4th, A. Hume & Co., Burnbrae. Bull, two years old—1st, Wm. Stewart & Son, Menie; 2nd, T. Ballantyne & Son; 3rd, R. G. Steacy. Yearling bull—1st, Jas. McCormack & Son; 2nd, A. Hume & Co.; 3rd, W. Stewart & Son; 4th, W. M. & J. C. Smith, Fairfield Plains. Bull calf—1st, W. M. & J. C. Smith; 2nd and 3rd, A. Terrill, Wooler; 4th, W. Stewart & Son. Bull of any age—1st, Jas. McCormack & Son (Bright Star). Aged cow—1st, Jas. McCormack & Son; 2nd, A. Hume & Co.; 3rd, R. G. Steacy; 4th, T. Ballantyne & Son. Cow, three years old—1st and 4th, R. G. Steacy; 2nd, W. Stewart & Son; 3rd, T. Ballantyne & Son. Heifer, two

years old—1st and 2nd, T. Ballantyne & Son; 3rd, W. Stewart & Son; 4th, R. G. Steacy. Yearling heifer—1st, Jas. McCormack & Son; 2nd, A. Hume & Co.; 3rd, W. Stewart & Son; 4th, T. Ballantyne & Son. Heifer calf under one year—1st, 2nd, and 3rd, W. Stewart & Son; 4th, A. Hume & Co. Heifer calf, under six months—1st, Wm. Dracup, Wellman's Corners; 2nd and 3rd, A. Terrill; 4th, A. Hume & Co. Four animals, the set of one bull—1st, W. Stewart & Son; 2nd, T. Ballantyne & Son; 3rd, Jas. McCormack & Son; 4th, W. M. & J. C. Smith. Four calves, under one year—1st, A. Terrill; 2nd, W. Stewart & Son; 3rd, A. Hume & Co.; 4th, Jas. McCormack & Son. Herd—1st, T. Ballantyne & Son; 2nd, R. G. Steacy; 3rd, Jas. McCormack & Son; 4th, A. Hume & Co. Female of any age—1st, R. G. Steacy (Wylie 2nd of Lessnessock).

Judges—J. H. Douglas, Warkworth; H. G. Clarke, Brampton.

HOLSTEINS.—There was a smaller exhibit of Holsteins than usual, about thirty head less than last year. Still there were plenty of good ones present, and the American judge, Mr. H. Langworthy, West Edmeston, N.Y., had plenty to do in deciding on the merits of the animals brought before him. Like his confrere in the Jersey class, he gave his decisions promptly, with no loss of time. Aged bulls were a fine lot, five in number. C. J. Gilroy & Son, Glen Buell, carried first with Inka Kathleen's Son, a fine, smooth bull, straight in his lines. Second went to Count Mink Mercedes, a level, handsome fellow,



A. Telfer, Paris, Ont.,

Exhibitor of Southdowns and prize-winner at Toronto Industrial Exhibition; also at Western Fair, London.

shown by G. W. Clemons, St. George. R. S. Stevenson, Ancaster, had Netherland Consul, last year's sweepstakes bull, present, a bull of great quality, but he only got 3rd place, while Ellis Bros., Bedford Park, were 4th with Sir Archibald Mascot, a right good one. A. Hoover, jr., Emery, was the solitary exhibitor of a two-year-old bull. This was Baron Witzde, and he is a good one. Two yearlings contested for honors, 1st going to Mr. Clemons' Sir P. J. Meschilde, a bull of very good conformation, and 2nd to Sir Paul de Kol Clothilde, shown by A. & G. Rice, Curries. A particularly handsome bull calf, owned by C. J. Gilroy & Son, drew the red ticket in that class. This calf was younger than most of the class, and was, moreover, considered by the judge good enough to win the sweepstakes for bull of any age as well. An older calf of R. S. Stevenson's stood next, Messrs. Hoover & Ellis coming 3rd and 4th. The aged cow class was a fine one, eighteen head in all being drawn up in line. Messrs. Gilroy's well-known Carmen Sylvia, which was in good bloom, was selected for 1st place, and in order coming to G. W. Clemons' Cornelia Tensen, well known for her records in days gone by, when owned by Smith Bros., Churchville. She carried a nice udder. Ellis Bros. won 3rd and 4th with Princess Lida 4th, a big cow, with a good level udder, and Maud Tensen, a daughter of Cornelia Tensen. Several good cows, including Messrs. Rice's Eunice Clay and Calamity Jane, and others shown by other breeders were unnoticed by the judge. A. & G. Rice were to the front for three-year-old cows with Artis Queen Jewel

Mercedes, G. W. Clemons coming 2nd and 3rd with Cornelia Artis and Inka Rose De Kol, the latter, if we mistake not, the better cow of the two. She won 1st last year as a two-year-old. R. S. Stevenson's Ideal III. was placed 4th. Two-year-old heifers were headed by Mr. Clemons' Mandamin Daisy Barrington, which has given an average of 50 lbs. a day for six months, and holds the Canadian record for a day of 62 lbs. Messrs. Gilroy came 2nd and 3rd here, as in the yearling class, with two good ones. G. W. Clemons had 1st as well for a yearling, a very fine one, with a nicely hung udder. R. S. Stevenson's yearling was also good. The last-named breeder came in 1st and 2nd on heifer calves under one year, a daughter of Calamity Jane coming next. A very nice array of heifer calves under six months was headed by Messrs. Gilroy's level calf. To these exhibitors went the 1st herd prize, G. W. Clemons being second, as he also was for young calves. The sweepstakes for females also went to Mr. Clemons for his yearling Artis Peer's Poem, while Mr. Stevenson had four good calves, which came in ahead in the section for four females, the progeny of one bull.

Awards.—Aged bull—1st, C. J. Gilroy & Son, Glen Buell; 2nd, G. W. Clemons, St. George; 3rd, R. S. Stevenson, Ancaster; 4th, Ellis Bros., Bedford Park. Bull, two years old—1st, A. Hoover, jr., Emery. Yearling bull—1st, G. W. Clemons; 2nd, A. & G. Rice, Curries. Bull calf—1st, C. J. Gilroy & Son; 2nd, R. S. Stevenson; 3rd, A. Hoover, jr.; 4th, Ellis Bros. Bull, any age—1st, C. J. Gilroy & Son (Jennie E.'s 4th Sir Pietertje). Aged cow—1st, C. J. Gilroy & Son; 2nd, G. W. Clemons; 3rd and 4th, Ellis Bros. Three-year-old cow—1st, A. & G. Rice; 2nd and 3rd, G. W. Clemons; 4th, R. S. Stevenson. Heifer, two years old—1st, G. W. Clemons; 2nd and 3rd, C. J. Gilroy & Son; 4th, Ellis Bros. Yearling heifer—1st, G. W. Clemons; 2nd and 3rd, C. J. Gilroy & Son; 4th, R. S. Stevenson. Heifer calf, under one year—1st and 2nd, R. S. Stevenson; 3rd, A. & G. Rice; 4th, G. W. Clemons. Heifer calf, under six months—1st and 3rd, C. J. Gilroy & Son; 2nd, G. W. Clemons; 4th, R. S. Stevenson. Herd—1st, C. J. Gilroy & Son; 2nd, G. W. Clemons; 3rd, A. Hoover, jr.; 4th, Ellis Bros. Four females, get of one bull—1st, R. S. Stevenson; 2nd, A. & G. Rice; 3rd, Ellis Bros. Female, any age—1st, G. W. Clemons (Artis Peer's Poem).

Judge.—H. Langworthy, West Edmeston, N.Y.

JERSEYS.—There was a good entry of Jerseys, among those who had animals present being some new exhibitors. A most commendable feature was the prompt manner in which the expert judge, Mr. T. S. Cooper, Coopersburg, Pa., awarded the premiums, after carefully looking over the animals, a point in which some Canadian judges might do better, as nothing is more tiring to exhibitors and onlookers than to see judges unable to make up their minds. Eight aged bulls answered to the call, and the section was a good one. Wm. Rolph's Two Hundred Per Cent., a fine bull of good quality, came 1st, with J. H. Smith's King of Highfield next. This is a smooth bull, perhaps a little small, but his prominent teats would show him to be of milking stock. J. L. Clark's Mighty Dollar, a well-known old sweepstakes winner, had to be satisfied with 3rd place, while G. Smith & Son's Plunkett of St. L. came 4th. A fine quintette of two-year-olds faced the judge. Here the Grimby entry got 1st, with J. M. McKay's Captain of Orchard Grove next, and Wm. Baker's two entries, Kaiser Fritz, jr., and L'Exile of Manorfield, 3rd and 4th. In the yearling class, a level, smooth animal shown by J. H. Smith & Son secured first place, David Duncan's nice young bull, Costa Rica's Son, being placed next. Eighteen bull calves, large and small, showed up. A capital young thing from the Highfield herd headed this class, B. H. Bull & Son being well up with Ollie Boy of Brampton. To Capt. Rolph's aged bull went the sweepstakes. In the aged cow class J. H. Smith's Signal Rosa May, which has several times held the same position, came to the front. She was shown in good shape, and also, later on, won the sweepstakes for females. David Duncan's Sunbeam of St. Lambert, a cow that gives indications of being a first-class milker, was 2nd, with G. Smith & Son's Kit's Fancy of St. Lambert next, followed by another cow from the Highfield herd. Capt. Rolph took 1st and 2nd in the three-year-old class with two good-looking cows with well-developed udders. The Highfield herd's entry, that was placed next, showed great quality. Only four two-year-olds were present. A heifer from Messrs. Bull's herd, with a well-hung bag, carried the day, with one from the Markham lot of larger type and large teats next, the other two prizes going to Messrs. Smith, Highfield. A big class, was the yearling one, fifteen head being drawn up for inspection. Messrs. Bull got 1st and 3rd here, their first entry having a grand skin and a promising udder; and went to Elena of Highfield, a good one, but her udder was not so well developed. Messrs. Bull added another feather to their cap by winning 1st for heifer calves, W. J. Thompson, Orkney, securing 2nd, and the Markham and Highfield entries 3rd and 4th respectively. In the class for heifers calved after February 1st, 1896, twelve youngsters were on hand. Robt. Wright, Binbrook, a new exhibitor, won here, the Brampton, Don, and Highfield herds coming after, in the

order named. Capt. Rolph had a strong entry in the class for four animals, the progeny of one bull, and secured 1st, the Grimsby, Highfield, and Brampton youngsters winning 2nd, 3rd, and 4th, respectively, the last-named ones being very young. J. H. Smith & Son captured the herd prize, and that for four calves, Capt. Rolph coming 2nd for the herd.

Awards.—Aged bull—1st, W. Rolph, Markham; 2nd, J. H. Smith & Son, Highfield; 3rd, J. L. Clark, Brampton; 4th, G. Smith & Son, Grimsby. Bull, two years old—1st, G. Smith & Son; 2nd, J. M. McKay, Elmbank; 3rd and 4th, W. Bacon, Orillia. Yearling bull—1st, J. H. Smith & Son; 2nd, D. Duncan, Don; 3rd, W. Wicks, New Toronto; 4th, H. M. Dixon, Richview. Bull calf—1st, J. H. Smith & Son; 2nd, B. H. Bull & Son, Brampton; 3rd, T. G. Rice, St. Catharines; 4th, W. Rolph. Bull, of any age—1st, W. Rolph (200 Per Cent.). Aged cow—1st and 4th, J. H. Smith & Son; 2nd, D. Duncan; 3rd, G. Smith & Son. Cow, three years old—1st and 2nd, W. Rolph; 3rd, J. H. Smith & Son; 4th, B. H. Bull & Son. Heifer, two years old—1st, B. H. Bull & Son; 2nd, W. Rolph; 3rd and 4th, J. H. Smith & Son. Yearling heifer—1st and 3rd, B. H. Bull & Son; 2nd, J. H. Smith & Son; 4th, W. Rolph. Heifer calf, under one year—1st, B. H. Bull & Son; 2nd, W. J. Thompson, Orkney; 3rd, W. Rolph; 4th, J. H. Smith & Son. Heifer calf, under six months—1st, R. Wright, Binbrook; 2nd, B. H. Bull & Son; 3rd, D. Duncan; 4th, J. H. Smith & Son. Four animals, the get of one bull—1st, W. Rolph; 2nd, G. Smith & Son; 3rd, J. H. Smith & Son; 4th, B. H. Bull & Son. Four calves, under one year—1st, J. H. Smith & Son; 2nd, B. H. Bull & Son; 3rd, W. Rolph; 4th, D. Duncan. Herd—1st, J. H. Smith & Son; 2nd, W. Rolph; 3rd, G. Smith & Son; 4th,



Mr. John Jackson, Abingdon, and his Southdown Ram Lamb,

As shown at the Toronto Industrial.

B. H. Bull & Son. Female, any age—1st, J. H. Smith & Son (Signal Rosa May).

Judge—T. S. Cooper, Coopersville, Pa.

GUERNSEYS.—The wisdom of increasing the number of prizes offered for Guernseys is demonstrated by the very fair number of entries made this year. Four aged bulls faced the judge. Alex. Wallace, Verschoyle, had a capital son of Ontario's Pride, which won in this class, and to this bull also went the sweepstakes. His name is Prince of Sunny Springs. W. H. & C. H. McNish, Lyn, showed another son of Ontario's Pride, Presto of Elm Grove, which won second, as he did last year; while J. N. Greenshields, Montreal, had to be content with third for Ontario's Pride, which was thus beaten by his two sons. William Butler & Son, Decham Centre, had the only two-year-old bull present, King of Oxford, a very promising animal, with a good skin and of nice color. This bull should be heard from in future showings, if he is rightly looked after. Two good-looking yearlings shown by Messrs. McNish were the only entries in that class. Messrs. Butler scored first for bull calves with Dereham Pride, an animal of the right color, two young calves from the Lyn herd winning the other two prizes. In the aged cow class Little May Queen and May Queen won first and second respectively for Mr. Greenshields, Adn of Eastview carrying third honors for Messrs. McNish. The result would have been different had Messrs. Butler's grand cow, Iona, arrived a few minutes earlier from quarantine. As it was, she was shown for the medal for the best female, and captured it easily. She is a cow of fine frame and color, and looks like a business cow. She was imported from the States. Balmida of Eastview carried first for Messrs. McNish, and another entry of theirs, Zell, was placed next.

Messrs. Butler had the first and third-prize two-year-old heifers, with Messrs. McNish's heifer placed second, and to the former also went first for yearlings and the first herd prize, while the Montreal herd were strongest in the two calf sections.

Awards.—Aged bull—1st, Alex. Wallace, Verschoyle; 2nd, W. H. & C. H. McNish, Lyn; 3rd, J. N. Greenshields, Montreal. Bull, two years old—1st, Wm. Butler & Son. Yearling bull—1st and 2nd, W. H. & C. H. McNish. Bull calf—1st, Wm. Butler & Son; 2nd and 3rd, W. H. & C. H. McNish. Bull, of any age—1st, Alex. Wallace (Prince of Sunny Springs). Aged cow—1st and 2nd, J. N. Greenshields; 3rd, W. H. & C. H. McNish. Three-year-old cow—1st and 2nd, W. H. & C. H. McNish; 3rd, J. N. Greenshields. Heifer, two years old—1st and 3rd, Wm. Butler & Son; 2nd, W. H. & C. H. McNish. Yearling heifer—1st, W. Butler & Son; 2nd, J. N. Greenshields; 3rd, W. H. & C. H. McNish. Heifer calf, under one year—1st, J. N. Greenshields; 2nd, W. Butler & Son; 3rd, W. H. & C. H. McNish. Heifer calf, under six months—1st, J. N. Greenshields; 2nd and 3rd, W. H. & C. H. McNish. Herd—1st, W. Butler & Son; 2nd, J. N. Greenshields; 3rd, W. H. & C. H. McNish. Female, of any age—1st, W. Butler & Son (Iona).

Judge—T. S. Cooper, Coopersburg, Pa.

SUSSEX.—There were two Sussex heifers shown by A. Stone, Guelph, to which prizes were awarded.

Sheep.

There was a magnificent show of sheep, which more than comfortably filled the sheds provided for them and also a large tent which had been erected for their accommodation. Sheep shires were out in very large numbers, and, as some of the best sheep in the country were present, the battle was keenly fought. Lincolns were rather weak in point of numbers, but what were present were of splendid quality.

LINCOLNS.—Although William Oliver, Avonbank, had made several entries in this class, he did not show up, so the competition lay between Gibson & Walker, Ilderton, and T. E. Robson, of the same place. The former showed thirty head, all homebred but one, and took all the first premiums, besides several seconds and thirds. Their sheep were a grand lot, especially the lambs. T. E. Robson had only nine head or so on the grounds, all sheep of typical style, and they were shown in good shape.

Awards.—Lincolns, aged ram—1st and 2nd, Gibson & Walker, Ilderton; 3rd, T. E. Robson, Ilderton. Shearling ram—1st and 2nd, Gibson & Walker; 3rd, T. E. Robson. Ram lamb—1st, 3rd, and 4th, Gibson & Walker; 2nd, T. E. Robson. Two aged ewes—1st and 3rd, Gibson & Walker; 2nd, T. E. Robson. Two shearling ewes—1st and 3rd, Gibson & Walker; 2nd, T. E. Robson. Two ewe lambs—1st and 2nd, Gibson & Walker; 3rd, T. E. Robson. Pen—1st, Gibson & Walker; 2nd, T. E. Robson. Canadian-bred pen—1st and 2nd, Gibson & Walker.

Judges.—James Brooks, Whalen; R. G. Garbutt, Belleville.

COTSWOLDS.—William Thompson, Uxbridge, had only six head in the sheds, but managed to score three firsts with them. His shearling ram, Canadian-bred, is a square, blocky sheep, with a well covered back. He won first in his class, as did the ram lamb shown by the same exhibitor, a lamb of choice quality, excellent fleece and skin. He was imported this year from Charles Gillett. His first-prize shearling ewes, which won first at the Royal this year, were bought from Hurlbert. They are a grand pair. John Park, Burgessville, had the honor of winning first on aged rams with a homebred sheep, very square and with a magnificent back, while his skin and fleece were of the best. His weight is about 450 lbs. A shearling and ram lamb of Mr. Park's were second in their respective classes, the latter having a nicely covered head. A pair of very good aged ewes of Mr. Park's headed their class, and a nice pair of ewe lambs did the same in their section. First for Canadian-bred flock was awarded to this flock. C. T. Garbutt, Claremont, got a good share of the honors, including the open pen prize, and second for Canadian-bred pen. This exhibitor's aged ram, Lora Lorne (imp.), which last year headed his class, had to be content with second place. He is a fine sheep, of a blocky type, scaling some 300 lbs. Mr. Garbutt had four beautiful imported ewes on the grounds, a pair of which won second. His lambs were also of the right kind. Heber Rawlings & Son, Ravenswood, won third on aged rams, and the same on shearlings, with good, blocky sheep. Their ewe lambs, which won fourth, were very late lambs.

Awards.—Cotswolds, aged ram—1st, John Park, Burgessville; 2nd, C. T. Garbutt, Uxbridge; 3rd, Heber Rawlings & Son, Ravenswood. Shearling ram—1st, Wm. Thompson, Uxbridge; 2nd, J. Park; 3rd, H. Rawlings & Son. Ram lamb—1st, W. Thompson; 2nd and 3rd, J. Park; 4th, C. T. Garbutt. Two aged ewes—1st, J. Park; 2nd, C. T. Garbutt; 3rd, H. Rawlings & Son. Two shearling ewes—1st, W. Thompson; 2nd and 3rd, C. T. Garbutt. Two ewe lambs—1st, J. Park; 2nd and 3rd, C. T. Garbutt; 4th, H. Rawlings & Son. Pen—

1st, C. T. Garbutt; 2nd, H. Rawlings & Son. Canadian-bred pen—1st, J. Park; 2nd, C. T. Garbutt.

Judges.—Thomas Teasdale, Concord; V. Ficht, Oriol.

LAMBSTERS.—These formed a good, strong class. John Kelly, Shakespeare, who is always well to the front in this class, was not so strong as usual in rams, owing to the fact that he had sold his ram lambs too closely last season. He was first, however, for aged rams with a sheep of splendid quality, well-woolled, and with a fine back and skin—a very even sheep. This sheep has never been shown before, and was not in too high condition. Two nicely covered ram lambs won for him second and third, and a pair of aged ewes also got the second place, the one a very compact sheep, the other of a looser build. For shearing ewes he carried the day with a good pair, which were first and second respectively in the lamb class last year. His third-prize shearlings were but little inferior to those which won first, the two pairs forming a beautiful quartette. The ewe lambs shown by Mr. Kelly took second and third, the third-prize pair not mating well, although the best of the two was superior to any in the pairs put above him. James S. Smith, Maple Lodge, comes out stronger each year in this class. His sheep were well fitted, and showed to good advantage. He won the blue ticket on his aged ram, a blocky sheep, wide on the back and well ribbed out, with legs well covered with meat low down. His first-prize shearing was a well-covered sheep, as were his aged ewes, a grand pair with nice fleeces. He won first prize for Canadian pen. William Whitelaw, Guelph, was another competitor who did well in the prize list. His aged ram is a lengthy, well-woolled sheep with well-sprung ribs and level back. He won third, as did a shearing, a handsome one, but not big. He had first for ram lambs and for ewe lambs, good sheep, especially one of the ewes. Orr & Lillico, Galt, new exhibitors, won second on shearing rams and fourth on ewe lambs, the shearing being good on the back and up in the neck, with a wide front. Among exhibitors who did not get into the prize list were J. M. Gardhouse, Highfield, who had some sheep of nice type, including an aged ram and some shearing ewes; C. & E. Wood, Freeman; and Abram Easton, Appleby, both of whom made several entries.

Awards.—Aged ram—1st, J. Kelly, Shakespeare; 2nd, J. S. Smith, Maple Lodge; 3rd, Whitelaw Bros. Guelph. Shearing ram—1st, J. S. Smith; 2nd, Orr & Lillico, Galt; 3rd, Whitelaw Bros. Ram lamb—1st, Whitelaw Bros.; 2nd, 3rd, and 4th, J. Kelly. Two aged ewes—1st and 3rd, J. S. Smith; 2nd, J. Kelly. Two shearing ewes—1st and 3rd, J. Kelly; 2nd, Whitelaw Bros. Two ewe lambs—1st, Whitelaw Bros.; 2nd and 3rd, J. Kelly; 4th, Orr & Lillico. Pen—1st, J. Kelly; 2nd, Whitelaw Bros. Canadian-bred pen—1st, J. S. Smith; 2nd, J. Kelly.

Judges.—James Brooks, Whalen; R. G. Garbutt, Belleville.

HAMPSHIRE.—John Kelly, Shakespeare, had seven head of Hampshires entered, which comprised a good aged ram, a shearing ram and nice ram lamb, a pair of aged ewes, and a pair of ewe lambs, which were awarded prizes in that class. The ram lamb was afterwards sold to go to the Experimental Farm, Guelph.

OXFORD DOWNS.—Smith Evans, Gourcock, and Peter Arkell, Teeswater, were the only exhibitors of Oxfords, but they both had full flocks present. The latter had the 1st prize aged ram, as he had last year, a grand backed sheep, with a great front, and good coat of wool. Smith Evans won 1st and 2nd on shearing rams, the 1st prize one being a low-set, blocky sheep, well woolled; 1st, 2nd, and 4th prizes for ram lambs, and 1st to the same exhibitor. The 1st prize one was imported this year from Geo. Adams, Farrington, England, and, though not in heavy flesh, has very good style. The other two, though late lambs, are well grown. P. Arkell had the 1st and 2nd prize aged ewes, and good ones they were, of great quality, and large frame. He had also a nice pair of shearing ewes which took 2nd. Smith Evans' 1st prize shearing ewes were a very fine pair, one of which was 1st as a lamb last year. The 1st prize pair of ewe lambs were imported this year, while those that took 2nd are homebred. The open pen prize went to Mr. Arkell, and the Canadian-bred pen prize and the specials to Mr. Evans.

Awards.—Aged ram—1st and 3rd, Peter Arkell, Teeswater; 2nd, Smith Evans, Gourcock. Shearing ram—1st and 2nd, S. Evans; 3rd, P. Arkell. Ram lamb—1st, 2nd, and 4th, S. Evans; 3rd, P. Arkell. Two aged ewes—1st and 2nd, P. Arkell; 3rd, S. Evans. Two shearing ewes—1st and 3rd, S. Evans; 2nd, P. Arkell. Two ewe lambs—1st and 2nd, S. Evans; 3rd, P. Arkell. Pen—1st, P. Arkell; 2nd, S. Evans. Canadian-bred pen—1st, S. Evans; 2nd, P. Arkell. Pen of four lambs—1st, S. Evans; 2nd, P. Arkell. Yearling ram—1st, S. Evans; 2nd, P. Arkell. Pair yearling ewes—1st, S. Evans; 2nd, P. Arkell.

Judges.—R. J. Hine, Dutton; John Harcourt, St. Ann's.

SHROPSHIRE.—Shropshires were a grand class. There were one hundred and nineteen entries, counting the pairs of aged ewes, shearlings, and ewe lambs, and excluding the pen entries. John Campbell, Woodville, proved to

be the strongest exhibitor, having present, in addition to his homebred sheep, the pick of his late importation. He won every first prize offered, except that for ewe lambs and flock of four lambs, as well as some seconds and minor prizes. His first-prize aged ram was a homebred one, sired by Newton Lord, his dam being a first prize winner at the World's Fair. This sheep was first at New York last year, as well as at several Canadian shows. A ram bred by E. Mansell, and a winner at the Shropshire and West Midland Show, won first for him in the shearing section, second going to a son of Newton Lord, which several good judges, including his owner, preferred to the imported ram. One of a pen of five that won first in the open class at the Shropshire and West Midland Show carried first in the ram lamb section, his companion, which won second, being the choice of a pen of five that won first in the tenant farmers' class at the same show. This latter was sired by a brother to Newton Lord. The first-prize aged ewes were a pair from J. Bowen-Jones' flock, while the shearing ewes that won a similar honor were by Newton Lord, beating here several pairs of highly commended ewes at the Royal this year. The ewe lambs that won second here for Mr. Campbell are from winners at the Royal and Shropshire shows. It may here be noted that Canadian-bred shearing ewes and ewe lambs at this show fairly beat some of the best selections from English flocks. D. G. Hamner & Son, Mt. Vernon, had, as usual, a splendid lot of Canadian-bred sheep, well fitted and in splendid show shape, among them being some of their famous stock ram, Wool Merchant's, get. They



Mr. R. Dorsey, Burnhamthorpe and his Suffolk Sows, As shown at Toronto Industrial, 1896.

fought a great fight against Mr. Campbell, and, while they did not succeed in beating him, except in the section for flock of four lambs, yet they are to be congratulated on standing so well where the competition was so severe. Their third-prize aged ram is a lengthy sheep, with a firm fleece, that scales 300 lbs. In shearing rams they showed a son of Wool Merchant, a short-legged, thick sheep, deep through the heart, but not so lengthy as the two that took first and second over him. They had a grand ram lamb, which took third. He has a great front, and was sold to go to the Experimental Farm, Guelph. Their second-prize aged ewes were probably the heaviest Shropshire ewes on the ground, and some considered that they might have been placed higher. A pair of blocky, thick-set shearing ewes, with good, firm backs, which took second, and a pair of ewe lambs of nice quality, but small, as they were dropped late, formed a most attractive sight. The pen of lambs which won first were a very thick, low-set lot. J. P. Phin, Hespeler, in spite of the severe competition, managed to get second on his aged ram, imported last year from Mr. Harding by R. Miller. He also had the honor of beating Mr. Campbell's imported ewe lambs with a pair of homebred ones. All his sheep were a blocky, well-covered lot. Robert Davies, Toronto, had a number of good sheep entered, but, good as they were, he only secured third on aged ewes. The Hillhursts: Farm, Hillhurst, Que.; The Isaleigh Grange Farm, Danville, Que.; R. Gibson, Delaware; and W. H. Beattie, Wilton Grove, had

Featherston. Yearling sow—1st, J. Featherston; 2nd, R. G. Martin; 3rd, J. E. Brethour. Sow, over six and under twelve months—1st, H. J. Davis, Woodstock; 2nd and 3rd, J. Featherston. Sow, under six months—1st, R. G. Martin; 2nd, J. N. Greenshields; 3rd, J. Featherston. Herd—1st, R. G. Martin; 2nd, J. Featherston. Boar and four of his get—1st, J. Featherston; 2nd, J. E. Brethour. Sow and four of her produce—1st, J. E. Brethour; 2nd, J. Featherston.

Judges—G. B. Hood, Guelph; J. W. Hurley, Belleville.

TAMWORTHS.—Tamworths made a very nice display, though, perhaps, hardly up to that of last year. There were three exhibitors who had pigs forward—H. George & Sons, Crampton; J. C. Nichol, Hubrey; and W. T. Elliott, Hamilton. First for aged boars went to W. T. Elliott's boar, which has never had to take second place, an entry from the same herd winning the yellow ticket, with H. George & Sons' boar sandwiched in between. The last-named firm's yearling boar headed his class, with an animal from Mr. Nichol's exhibit, of a good type, coming second. The Crampton herd stood first and third, both for boars under twelve and under six months, a good, even lot, with J. C. Nichol's smooth entries second in both classes. The Crampton herd again scored for aged sows, with Mr. Nichol second, as in the previous two sections, while the latter won on sows under twelve months, and the Hamilton herd on sows under six months, the winners in both cases being pigs of good, even type. There were several nice young pigs exhibited by all the exhibitors. Two of the first herd prizes went to the Crampton herd, and one to J. C. Nichol.

Awards.—Aged boar—1st and 3rd, W. T. Elliott, Hamilton; 2nd, H. George & Son, Crampton. Yearling boar—1st, H. George & Sons; 2nd, J. C. Nichol, Hubrey; 3rd, W. T. Elliott. Boar, over six and under twelve months—1st and 3rd, H. George & Sons; 2nd, J. C. Nichol. Boar, under six months—1st and 3rd, H. George & Sons; 2nd, J. C. Nichol. Aged sow—1st and 3rd, H. George & Sons; 2nd, J. C. Nichol. Yearling sow—1st, W. T. Elliott; 2nd and 3rd, H. George & Sons. Sow, over six and under twelve months—1st and 3rd, J. C. Nichol; 2nd, W. T. Elliott. Sow, under six months—1st, W. T. Elliott; 2nd and 3rd, J. C. Nichol. Herd—1st, H. George & Sons; 2nd, W. T. Elliott. Boar and four of his get—1st, H. George & Sons; 2nd, W. T. Elliott. Sow and four of her produce—1st, J. C. Nichol; 2nd, H. George & Sons.

Judges—D. G. Hamner, Mt. Vernon; George Green, Fairview.

CHESTER WHITES.—Wm. Butler & Son, Dereham Centre, had a strong, representative entry of Chester Whites, headed by their great imported boar, a good, smooth pig, which captured 1st in his class. In the yearling class, they had equal success with a long, even pig, while in the younger boar sections they took a blue and yellow ticket for excellent youngsters. Nor were they less successful in the sow and herd sections, winning 1st for sow and four of her produce, 1st for boar and four of his get, and the special premium offered by the American Association, besides three 2nds and some other premiums. H. George & Sons, Crampton, did very well. To them went 1st for boar and two sows of any age, 1st for boars under twelve and under six months, 1st for aged sows and yearling sows, and for aged boar, and some 3rds. Their entries comprised deep, thick animals, with good style, evenness, and quality. D. DeCoursey, Bornholm, showed some twenty head, among which were some very promising young things. His yearling boar and yearling sow, both of which took 2nd, were of excellent type, with good shoulders, and good through the heart. He had a good aged boar, winner of 3rd prize in his class, a pair of straight sows under twelve months old and two under six months, three of which secured prizes. A boar, under six months, level and neat, won the blue ribbon in that section, while his yearling boar headed the section for boar and four of his get.

Awards.—Aged boar—1st, Wm. Butler & Son, Dereham Centre; 2nd, H. George & Sons, Crampton; 3rd, D. DeCoursey, Bornholm. Yearling boar—1st, W. Butler & Son; 2nd, D. DeCoursey; 3rd, H. George & Sons. Boar, over six and under twelve months—1st, H. George & Sons; 2nd, W. Butler & Son; 3rd, D. DeCoursey. Boar, under six months—1st, H. George & Sons; 2nd, D. DeCoursey; 3rd, W. Butler & Son. Aged sow—1st and 3rd, H. George & Sons; 2nd, W. Butler & Son. Yearling sow—1st, H. George & Sons; 2nd, D. DeCoursey; 3rd, W. Butler & Son. Sow, over six and under twelve months—1st, D. DeCoursey; 2nd and 3rd, W. Butler & Son. Sow, under six months—1st and 3rd, D. DeCoursey; 2nd, W. Butler & Son. Herd—1st, H. George & Sons; 2nd, W. Butler & Son; 3rd, H. George & Sons. Boar and four of his get—1st, W. Butler & Son; 2nd, D. DeCoursey. Sow and four of her produce—1st, W. Butler & Son; 2nd, D. DeCoursey. Special—Best four pigs—1st, W. Butler & Son.

Judges—G. B. Hood, Guelph; J. M. Hurley, Belleville.

DUROC-JERSEYS.—Tape Bros., Ridgetown, carried off the bulk of the principal prizes for this breed. They had a strong exhibit of sixteen head, nearly all of which were well fitted.

They had a very superior aged boar, and two under six months, while their aged and yearling sows and younger sows were particularly nice. Wm. Butler & Son won for yearling boars and boars under one year, but they were badly handicapped by the loss of some of their show animals before the show. They carried off, however, several seconds and thirds in addition to the two first prizes previously mentioned. H. George & Sons showed a few head, getting a share of the prize list.

Awards.—Aged boar—1st, Tape Bros., Ridgetown; 2nd, W. Butler & Son, Dereham Centre. Yearling boar—1st and 3rd, W. Butler & Son; 2nd, Tape Bros. Boar, over six and under twelve months—1st, W. Butler & Son; 2nd, Tape Bros.; 3rd, H. George & Sons, Crampton. Boar, under six months—1st and 2nd, Tape Bros.; 3rd, W. Butler & Son. Aged sow—1st and 2nd, Tape Bros.; 3rd, W. Butler & Son. Yearling sow—1st and 3rd, Tape Bros.; 2nd, W. Butler & Son. Sow, over six and under twelve months—1st, Tape Bros.; 2nd, H. George & Sons; 3rd, W. Butler & Son. Sow, under six months—1st, 2nd, and 3rd, Tape Bros. Herd—1st, Tape Bros.; 2nd, W. Butler & Son. Boar, and four of his get—1st, Tape Bros. Sow, and four of her produce—1st, Tape Bros.

Judges—D. G. Hamner, Mount Vernon; George Green, Fairview.

POLAND-CHINAS.—This breed had fewer exhibitors to represent it than the Tamworths had, as only two firms were present to contest in the show ring. There was no falling off in quality, however, as will be understood when we mention that those who exhibited were W. & H. Jones, Mount Elgin, and W. M. & J. C. Smith, Fairfield Plains. The former secured the bulk of the principal prizes, but Messrs. Smith's entry did them great credit. Messrs. Jones had no competitors in the aged boar class, in which they showed their splendid boar, Darkness Quality (imp.), which was placed 1st, with a second entry from the same herd next to him. Messrs. Smith had the best of it in the yearling and following sections with pigs of good type, and a sow of theirs captured the red ribbon in the class for sows under twelve months, a good straight pig. The sow that won the sweepstakes at Guelph Fat Stock Show last year headed the section for yearlings for Messrs. Jones, and their aged sows, as well as those that won in the younger sections, were a very nice lot. All the herd and produce premiums fell to the share of the Mount Elgin herd.

Awards.—Aged boars—1st and 2nd, W. & H. Jones, Mount Elgin. Yearling boar—1st and 3rd, W. M. & J. C. Smith, Fairfield Plains; 2nd, W. & H. Jones. Boar, over six and under twelve months—1st, W. M. & J. C. Smith; 2nd and 3rd, W. & H. Jones. Boar, under six months—1st, 2nd, and 3rd, W. & H. Jones. Aged sow—1st, 2nd, and 3rd, W. & H. Jones. Yearling sow—1st and 3rd, W. H. Jones; 2nd, W. M. & J. C. Smith. Sow, over six and under twelve months—1st, W. M. & J. C. Smith; 2nd and 3rd, W. & H. Jones. Sow, under six months—1st, 2nd, and 3rd, W. & H. Jones. Herd—1st, W. & H. Jones; 2nd, W. M. & J. C. Smith. Boar and four of his get—1st and 2nd, W. & H. Jones. Sow and four of her produce—1st and 2nd, W. & H. Jones. Special—Four pigs, over six months old and under one year—1st, W. & H. Jones.

Judges—Jas. Main, Milton; A. Johnston, Greenwood.

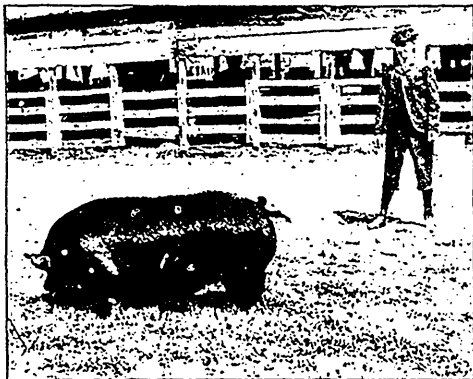
BERKSHIRES.—J. G. Snell, Snelgrove, had a capital lot of pigs present, totalling a dozen. Prominent among these were his great stock boar, Baron Lee 4th, who has sired so many good ones, many of whom were to be found in pens of other exhibitors in the sheds. It goes without saying that he stood first in his class, and also headed the first-prize herd and the section for boar and four of his produce. While all Mr. Snell's exhibit was good, particular mention must be made of his yearling sow, his yearling boar, and his sow under one year old. These were all of excellent quality and evenness, and had the depth so much desired by the packers at the present time. Thomas Teasdale, Concord, proved invincible in the aged sow class, one of the strongest classes of sows we have ever seen. His entry is a beautiful sow with a grand back, deep sides, splendid hind end, and heavy hams, while her markings are perfect. He also showed a son of hers in the class under six months, a most promising youngster which headed his class, while a sister of his came second in sows under the year, and another brother proved a clean winner in the yearling class. With this aged sow and her offspring Mr. Teasdale had a clear claim to first in the section for sow and four of her produce, and got it. George Green, Fairview, was another strong exhibitor who showed up well in the prize list. His yearling boars were of a good stamp, and thoroughly deserved the places of second and third in that section. The third-prize one had his ears frozen, which detracted somewhat from his appearance, otherwise it might have beaten its companion. Mr. Green had a grand entry in the aged class for sows, which, however, had to take second place to Mr. Teasdale's sow, previously mentioned. Second prize for yearling sows also fell to a well-built entry of his and the blue ticket as well for boar and four of his produce. T. A. Cox, Branford, did not get a large share of the prizes, but this was owing to the strong com-

several entries, but did not succeed in getting a share of the prizes.

Awards.—Aged ram—1st, John Campbell, Woodville; 2nd, Jas. P. Phin, Hespeler; 3rd, D. G. Hanmer & Son, Mt. Vernon. Shearling ram—1st and 2nd, J. Campbell; 3rd, D. G. Hanmer & Son. Ram lamb—1st, 2nd, and 4th, J. Campbell; 3rd, D. G. Hanmer & Son. Two aged ewes—1st, J. Campbell; 2nd, D. G. Hanmer & Son; 3rd, R. Davies, Toronto. Two shearling ewes—1st and 3rd, J. Campbell; 2nd, D. G. Hanmer & Son. Two ewe lambs—1st, J. P. Phin; 2nd, J. Campbell; 3rd, D. G. Hanmer & Son. Pen—1st, J. Campbell; 2nd, D. G. Hanmer & Son. Canadian-bred pen—1st, J. Campbell; 2nd, D. G. Hanmer & Son. One ram, one year old or over, and three ewes, any ages—1st and 2nd, J. Campbell. Flock of four lambs, one ram and three ewes—1st, J. Campbell; 2nd, D. G. Hanmer & Son. Flock of four lambs, all to be bred and owned by the exhibitor—1st, D. G. Hanmer & Son; 2nd, J. Campbell.

Judges.—S. H. Todd, Wakeman, Ohio; Alf. Brown, Bethel. **SOUTH-DOWNS.**—These were out in great force. The veteran exhibitors, John Jackson & Son, Abingdon, had an excellent display forward, and, as usual, won a large proportion of the prizes offered. T. C. Douglas, Galt, however, won three firsts, including that for Canadian-bred pen, and A. Telfer & Son, Paris, and Robert Shaw & Son, Glanford Station, also won a portion of the prizes offered. Geo. Baker & Son, Simcoe, had a round dozen present, in which number we noticed two good shearling ewes. F. W. Barrett, Wadsworth, N.Y., had made several entries, but failed to be present.

Awards.—Aged ram—1st and 2nd, John Jackson & Son, Abingdon; 3rd, A. Telfer & Son, Paris; Shearling ram—1st and 3rd, T. C. Douglas, Galt; 2nd, J. Jackson & Son. Ram



Prize-winning Essex Aged Sow,

The property of Mr. Joseph Featherston, M.P., shown at Toronto Industrial, 1896.

lamb—1st, J. Jackson & Son; 2nd, Robert Shaw & Son, Glanford Station; 3rd, A. Telfer & Son; 4th, T. C. Douglas. Two aged ewes—1st, J. Jackson & Son; 2nd, T. C. Douglas; 3rd, R. Shaw & Son. Two shearling ewes—1st and 3rd, T. C. Douglas; 2nd, A. Telfer & Son. Two ewe lambs—1st and 4th, J. Jackson & Son; 2nd, R. Shaw & Son; 3rd, A. Telfer & Son. Pen—1st, J. Jackson & Son; 2nd, R. Shaw & Son. Canadian-bred pen—1st, T. C. Douglas; 2nd, A. Telfer & Son.

Judges.—H. Arkell, Arkell; John Miller, Markham.

DORSET HORNS.—John A. McGillivray, Uxbridge, won the open pen prize for this breed. He won first on shearling rams with the sheep that stood first in his class as a lamb in 1895 at Toronto, Montreal, and Ottawa, and third on an aged ram, which latter was sold to the Experimental Farm, Guelph. He was strong in aged ewes, winning first and second, the first named being the ewe that won first, the sweepstakes, and silver cup at the World's Fair. She is a beautiful sheep, and was bred by Culverwell. R. H. Harding, Thorndale, had a prime aged ram and two ram lambs that came to the front. His sheep were all homebred, and it was evident that his ewes are regular breeders, having suckled lambs during the present season. He won second on ewe lambs, both of which were dropped since last January. The Hillhurst Farm, while winning second on aged rams, were stronger in shearling ewes and ewe lambs, all of which were of very good type. They won first on the Canadian-bred pen, and second on the open pen. G. H. Smedley, Islington had a few entries made.

Awards.—Aged ram—1st, R. H. Harding, The Dale; 2nd, Hillhurst Farm, Hillhurst, Que.; 3rd, John A. McGillivray, Uxbridge. Shearling ram—1st and 2nd, J. A. McGillivray; 3rd, R. H. Harding. Ram lamb—1st and 2nd, R. H. Harding; 3rd, J. A. McGillivray. Two aged ewes—1st and 2nd, J. A. McGillivray; 3rd, R. H. Harding. Two shearling ewes—1st, 2nd, and 3rd, Hillhurst Farm. Two ewe lambs—1st and 3rd, Hillhurst Farm; 2nd, R. H. Harding. Pen—1st, J. A. McGillivray; 2nd, Hillhurst Farm. Canadian-bred pen—1st, Hillhurst Farm; 2nd, R. H. Harding.

Judges.—Geo. P. Everett, Mount Vernon; John Jackson, Abingdon.

MERINOS.—As at previous exhibitions there were but two exhibitors of Merinos, Robert Shaw & Son, Glanford Station, and W. M. & J. C. Smith, Fairfield Plains, who divided the prizes pretty evenly between them.

Awards.—Aged ram—1st and 2nd, R. Shaw & Son, Glanford Station; 3rd, W. M. & J. C. Smith, Fairfield Plains. Shearling ram—1st and 3rd, W. M. & J. C. Smith; 2nd, R. Shaw & Son. Ram lamb—1st and 2nd, W. M. & J. C. Smith; 3rd, R. Shaw & Son. Two aged ewes—1st, W. M. & J. C. Smith; 2nd and 3rd, R. Shaw & Son. Two shearling ewes—1st, R. Shaw & Son; 2nd and 3rd, W. M. & J. C. Smith. Two ewe lambs—1st and 3rd, W. M. & J. C. Smith; 2nd, R. Shaw & Son. Pen—1st, R. Shaw & Son; 2nd, W. M. & J. C. Smith.

Judges.—Geo. P. Everett, Mount Vernon; John Jackson, Abingdon.

FAT SHEEP.—There was a better turn-out of fat sheep than we ever remember before. To encourage this class there should be more prizes offered, as two in each section are quite insufficient. John Rutherford, Roseville, won both prizes in the long-wooled wether class, two shears and over. In the long-wooled section under two years Gibson & Walker won first with two Lincolns, and John Kelly second with Leicesters. The section for wethers of the short-wooled breed over two years had four entries. Here a pair of Southdowns won first for John Jackson & Son, followed by two Shropshires shown by W. B. Beattie. In the short-wooled section under two years John Campbell's Shropshires came to the front, with Orr & Lillico's pair next. These latter were crossbred by an Oxford Down sire out of a Southdown dam.

Swine.

The show of swine was very good, every pen in the sheds being full, with some animals crowded out. Berkshires surpassed the entry of previous years, both in number and quality, the show of them being really grand, while other breeds were well represented.

YORKSHIRES.—That Yorkshire pigs have lost none of their popularity is evidenced by the grand exhibition of these pigs this year. Joseph Featherston, Streetsville, had twenty-five head in all, and a fine lot they were. Both 1st and 2nd in the aged boar class fell to him, while in the youngest boar class he captured all of the prizes. A capital yearling sow from his herd headed that class, and 1st for boar and four of his get also came his way, while several 2nds and 3rds were also added to his credit. The Yorkshire class could scarcely be thought complete unless J. E. Brethour, Burford, was exhibiting. His string this year consisted of sixteen head, and right good ones they were, too, although not so highly fitted as is generally the case. Quality and conformation, however, count for something in the show ring, and so his aged sow, a winner in previous years, easily led her class, as did a boar of the Oak Lodge herd in the class under one year, a companion of his being 2nd. Second for boar and four of his get, and 1st for sow and four of her produce, also came to this herd, not to mention other prizes. R. G. Martin, Marysville, besides exhibiting Berkshires, had a small, but very select, lot of Yorkshires. His yearling boar was a clear winner in his class, a pig of fine conformation. Perhaps his best entry was a perfect young sow under six months, which proved too strong for her opponents. This sow has, we understand, been sold, but we shall hope to see her again at future shows. A yearling sow shown by Mr. Martin secured 2nd in her class, and 1st for herd also came to him. The other two exhibitors were J. N. G. eenshields, Montreal, and H. J. Davis, Woodstock, the former of whom showed several head, among which we noticed a nice aged boar and an aged sow, also a young sow which captured 2nd in the class for sows under six months. These pigs are all well bred and of good form, but were not fitted for showing, otherwise they would have done better. The red ticket for sows under one year fell to H. J. Davis, whose pigs showed great evenness and good length.

Awards.—Aged boar—1st and 2nd, Joseph Featherston, Streetsville; 3rd, J. N. Greenshields, Montreal. Yearling boar—1st, R. G. Martin, Marysville; 2nd, J. E. Brethour, Burford; 3rd, J. Featherston. Boar, over six and under twelve months—1st and 2nd, J. E. Brethour; 3rd, J. Featherston. Boar, under six months—1st, 2nd, and 3rd, J. Featherston. Aged sow—1st, J. E. Brethour; 2nd, R. G. Martin; 3rd, J.

petition, as he had a nice lot of pigs in his pens, including his aged boar, Bright Prince, some yearling sows, and younger stock. H. J. Davis, Woodstock, had only a small entry, most of which were quite young. They were a nice, even lot. He won third on his aged boar. P. W. Boynton, Dollar, had a good aged boar, bred by S. Coxworth, Whitby, which carried off the blue ticket in that class. With the exception of two aged sows, all his stock were young. C. T. Garbutt, Claremont, had a choice young sow under six months, which the judges placed second in that class. He also showed some young boars. R. G. Martin, Marysville, a new exhibitor, had an aged boar and some young things, which, however, were unnoticed.

Awards.—Aged boar—1st, J. G. Snell, Snelgrove; 2nd, P. W. Boynton & Son, Dollar; 3rd, H. J. Davis, Woodstock. Yearling boar—1st, J. G. Snell; 2nd and 3rd, Geo. Green, Fairview. Boar, over six and under twelve months—1st, Thos. Teasdale, Concord; 2nd, G. Green; 3rd, J. G. Snell. Boar, under six months—1st, T. Teasdale; 2nd, G. Green; 3rd, J. G. Snell. Aged sow—1st, T. Teasdale; 2nd, G. Green; 3rd, J. G. Snell. Yearling sow—1st, J. G. Snell; 2nd, G. Green; 3rd, T. A. Cox, Brantford. Sow, over six and under twelve months—1st, J. G. Snell; 2nd, T. Teasdale; 3rd, G. Green. Sow, under six months—1st, J. G. Snell; 2nd, C. T. Garbutt, Claremont; 3rd, T. A. Cox. Herd—1st, J. G. Snell; 2nd, T. Teasdale. Boar and four of his get—1st, J. G. Snell; 2nd, G. Green. Sow and four of her produce—1st, T. Teasdale; 2nd, J. G. Snell.

Judges.—James Main, Milton; A. Johnston, Greenwood.

ESSEX AND SUFFOLKS.—The general paucity of entries of Essex pigs in previous years caused the directors to class them with Suffolks for this season. In the competition the Suffolks fared the best, winning nearly everything. J. Featherston, Sweetsville, and R. Dorsey, Burnhamthorpe, were the principal prize-winners, the latter having rather the best of it. A. Frank & Son, The Grange, R. F. Duck, Port Credit, and A. B. Cooper, Islington, were the other exhibitors.

Awards.—Aged boar—1st, Robt. Dorsey, Burnhamthorpe; 2nd, J. Featherston, Streetsville; 3rd, A. Frank & Son, The Grange. Yearling boar—1st, R. Dorsey; 2nd and 3rd, J. Featherston. Boar, over six and under twelve months—1st and 2nd, R. Dorsey; 3rd, R. F. Duck, Port Credit. Boar, under six months—1st and 3rd, J. Featherston; 2nd, R. Dorsey. Aged sow—1st, R. Dorsey; 2nd and 3rd, J. Featherston. Yearling sow—1st and 3rd, J. Featherston; 2nd, R. Dorsey. Sow, over six and under twelve months—1st and 3rd, R. Dorsey; 2nd, J. Featherston. Sow, under six months—1st and 3rd, R. Dorsey; 2nd, J. Featherston. Herd—1st, R. Dorsey; 2nd, J. Featherston. Boar, and four of his get—1st, J. Featherston. Sow, and four of her produce—1st, J. Featherston.

Judges.—D. G. Hamner, Mount Vernon; George Green, Fairview.

Poultry.

Specially reported for "Farmi...g."

The Poultry Department of the Industrial Exhibition was again a grand success. Notwithstanding the fact that the Association erected a new addition to the building, every available coop was occupied, and quite a large number of birds were shown in coops of the exhibitors. The quality of the birds was of a very high order. It was felt by not a few that the extension of the period during which the birds were to be on exhibition would tend to decrease the entries. While this may have been so, there was a much larger number of entries than ever before, and it would have been impossible to have cooped more birds. It was also thought that the eight days' penning would probably do injury to the fowl, but such was not the case. I have never seen birds leave a show in better condition.

The old reliable superintendent, Mr. C. J. Daniels, Toronto, was again in charge. He has a very able and attentive assistants, and all the birds were well and thoroughly cared for. The coops were cleaned out three times, and the building thoroughly disinfected every day. Plenty of green food in the shape of pulped apples was fed daily, and a bountiful supply of mica crystal grit was always at their disposal.

A pleasing feature of the exhibition was the visit of the Hon. Sydney Fisher, Minister of Agriculture for the Dominion, to the poultry house. Mr. Fisher was very much interested in the display of the utility breeds, especially of those sorts most suitable for use and keeping on farms, and he took a large number of notes respecting fowls, their sorts and their breeders.

Light Brahmas were a nice class, and well judged, with the exception of the hens. I thought the second prize hen preferable to the winner.

Dark Brahmas were also a nice class, as also were **Langshans**. Mr. Wm. Hodgson, Brooklin, showed a fine cock.

Cochins made nice classes. There were not a large number out, but the quality was fair. Dr. A. W. Bell, Toronto, won the bulk of the prizes in **Buff** and **Partridge**, while Messrs. Wm. McNeill and R. B. Millard divided honors in the **Whites** and **Blacks**. The doctor also won the medal for the largest and best collection of **Antatics**.

Dorkings were out in great force, and the quality was something extra, particularly in **Coloreds**. Here Mr. John Lawrie, Malvern, won the majority of the premiums with a grand lot of birds, the specimens exhibited by him being extra large and of grand color. He also showed a nice pen of **White Dorkings**.

Wyandottes made very large and nice classes. In **Whites**, Mr. Charles Massio, Port Hope, showed as sweet a cockerel and pullet as I have ever seen at this season of the year. They were perfect gems.

Silver Wyandottes brought forth very keen competition. Cocks were extra fine, Mr. J. E. Meyer, Kossuth, winning first with a grand specimen. In hens, Mr. Jacob Dorst, Toronto, got two splendidly leaced specimens, winning first and second. In cockerels Mr. James Arthur, London, had a nicely marked bird, which won first; while in pullets, Mr. Jacob Dorst won the coveted honor with a beautiful specimen. Mr. J. E. Meyer captured first on pen, Mr. Dorst being a close second.

Goldens were very nice, some grand specimens being shown by Messrs. Oldrieve and Wilkinson, Kingston, and R. Oke, London.

Black Minorcas made the largest class in the show. The quality has never been equalled in America, there being coop after coop of imported birds, but in all cases home bred birds won. Mr. Thomas A. Duff, Toronto, won first and third for cock, first, medal, and second for hen, first, second, and third on both cockerels and pullets, and first and second on pen. There were many grand birds, fit to win anywhere, left out.

White Minorcas also made nice classes, Mr. Duff winning first and second on cock and cockerel, first, second, and third on hen and pullet, and first on breeding pen; also **Mediterranean** class medal for largest and best display.

The **French** varieties had nice classes of **Lafleche**, **Creve Coeurs**, and **Houdans**.

The **Game** classes were well represented with splendid specimens, honors being divided amongst Messrs. Wm. Barber and Fred. Troth, Toronto, Oldrieve & Wilkinson, Kingston, and Wm. Main, Milton.

Leghorns were large classes of excellent birds. Mr. Thomas Rice, Whitby; James Laird, Brampton; and John Pletsch, Shakespeare, winning the bulk of the premiums. In **Rose Comb White Leghorns**, Mr. W. J. Bell, Angus, had a very creditable display.

Hamburgs were all fine classes of grand birds. Indeed, I have never seen the equal of the blacks.

Polands were also splendidly represented, and made excellent classes. They were much admired by the ladies.

Barred Plymouth Rocks were largely represented, and the classes were very fine. The first cock was a very nicely barred bird, with a good head. He was owned by Mr. E. Dickinson, jr., North Glauford. Mr. Thomas A. Duff, Toronto, won second. The first and second prize hens were grand ones, and easy winners. Perhaps two better hens have never been shown by one exhibitor for many years. Both were owned by Mr. Duff. Cockerels were good, the first going to Dickinson; second, to Oldrieve & Wilkinson, which was, however, my choice for first; third, Duff. Messrs. Oldrieve & Wilkinson won first with a grand pullet, but was closely pressed by Duff, whose bird was quite as good, but not so old. Dickinson won first on pen, with Duff second.

White Rocks, contrary to all expectations, made very small classes. It was thought there would have been a very large show. Heretofore this variety has always been exceptionally well represented, but, for some cause, there was a very small class this year. Mr. Thomas Rice, Whitby, and Mr. J. A. Pierson, Weston, had nice specimens.

Buff Rocks were largely represented, and certainly showed more marked improvement than any other variety shown. The specimens exhibited by Mr. R. E. Essex, Toronto, were grand. This gentleman won every first but one, and nearly all the seconds and thirds. Mr. George Robins, Malvern, had a nice pair of very young chicks.

Turkeys made large classes, the principal exhibitors being Messrs. Wm. Main, Milton; W. J. Bell, Angus; Wm. Hodgson, Brooklin; W. J. Haycraft, Agincourt; W. H. Beattie, Wilton Grove; and W. M. Smith, Fairfield Plains, and all of these exhibitors pretty well divided the money amongst them.

Geese were also represented largely, some nice speci-

mens being shown by Messrs. Allan Bogue, London; W. J. Haycraft, Wm. Hodgson, Wm. Mah; John A. McGillivray, Uxbridge; and J. H. Houser, Cauboro.

Ducks made very large classes, the principal exhibitors being Messrs. Hodgson, Bogue, Haycraft, Smith, Main, Meyer, Houser, and F. R. Webber, Guelph.

Bantams, Pigeons, Cage Birds, Rabbits, and other pet stock, were largely represented, with excellent specimens.

Incubators and Brooders were also out in force, and the hatching process certainly attracted much attention. In the hatching contest Mr. J. E. Meyer, Kossuth, won first with a very creditable showing of eighty-one and a half per cent. This is certainly very good when it is borne in mind that Mr. Meyer had to transport his eggs from Kossuth to Toronto after they had been in the machine for about seventeen days. The Toronto Incubator was second, and the machine of The Wagner Incubator third. For the best incubator, workmanship, ventilation, moisture, and simplicity of operation considered, the Toronto Incubator Co. won first, and the Wagner second; while, for the best incubator not exceeding \$15 in price, the Toronto machine won first with one of sixty-three eggs capacity, and The Wagner second, with a twenty-five egg machine.

For the best brooder, Wagner won first, and Mr. J. E. Meyer second. The writer, however, much prefers the brooder of Mr. Meyer to that of The Wagner Incubator Company.

The judges on poultry were Messrs. Sharpe Butterfield, Windsor; L. G. Jarvis, O.A.C., Guelph; and Thos. H. Smelt, Woodstock. For pigeons and pet stock, Mr. I. B. Johnson, Toronto. For cage birds, Mr. J. Bertie, Toronto; while the poultry committee placed the awards on incubators and poultry appliances.

The display of Pan-a-ces and Instant Lice Killer, made by Dr. Hess & Co., Ashland, Ohio, was very fine, and the committee awarded it a bronze medal. The Pan-a-ces and Lice Killer are excellent preparations. Practical illustrations of their worth were given in the show room.

The W. A. Freeman Co., Ltd., of Hamilton, were also awarded a bronze medal for a splendid display of blood meal, crushed oyster shell, grit, meat scraps, and cooked meat. They certainly deserve much credit for the skill displayed.

The Mica Crystal Grit Company, Concord, N. H., had also a display. Their grit is the best I have ever used.

F. W. Mann & Co., of Milford, Mass., had a nice machine on exhibition.

There was also a very creditable display of shipping coops made to conform to the new express tariff. Mr. W. J. Wilkie, who is employed by Mr. Thomas A. Duff, Toronto, won first prize with a very neat coop. It was twenty-two inches long, twenty-two high, and eighteen wide. The bottom was made of three-eighth pine, inch pieces being used as the uprights. Canvas was put all around the sides, and then slats two inches wide and four inches apart were placed over this. The top had a seven inch piece in the centre, in which a neat hole for a handle had been cut, and then slats were placed on each side. This makes a very light, neat, and convenient coop.

Testimonial to Mr. Daniels.

In view of the fact that Mr. C. J. Daniels had been superintendent of the department for ten years, during which time he had always discharged his duties zealously and well, the exhibitors felt that they would like to make him a small presentation. So on Thursday of the second week all gathered at his office. Mr. Allan Bogue, London, acted as chairman, and in a few well-chosen words stated the object of the gathering. He then called upon Mr. Richard Oke, London, who read the following address:—

Mr. C. J. Daniels,—

Your friends, the poultry exhibitors at this Industrial Fair, recognizing the fact that you are so devoted to the superintendency and wellbeing of your charges, and that no opportunity would be afforded them of expressing individually the good will they bear towards you, beg to collectively take this method of acknowledging their obligations to you for the care you have always bestowed upon their stock.

Your attention and experience during the past ten years have, in no small degree, contributed towards the success of this department of the Exhibition, and the exhibitors trust that the future will find in your continued efforts an assurance that their interests are safe.

At the request of these gentlemen we beg to ask your acceptance of this proof of their good will.

(Signed) W. McNEIL, } For Exhibitors.
W. BARBER, }
H. B. DONOVAN, }
R. OKE, Sec'y.

Mr. Barber then presented Mr. Daniels with a combination china dinner and tea set, comprising one hundred and fifteen pieces, a silver tea service, and a dozen silver knives and forks.

Mr. Daniels was completely taken by surprise, and at first could not find words with which to thank the exhibitors, but after all had sung "For he's a jolly good fellow," he found his tongue, and, in a few well-chosen words, thanked one and all for their kindness, and assured them that he appreciated it.

The chairman then called upon Messrs. Thos. A. Duff, Toronto; Wm. McNeil, London; G. B. Oldrieve, Kingston; and John Cole, Hamilton, for short addresses, and all testified to the kindness and ability of Mr. Daniels as superintendent. The meeting closed by singing "God save the Queen."

Poultry Awards.

FOWLS.

Dark Brahmas.—Cock—1st and 2nd, Thorpe & Scott, London; 3rd, Brown & Casar, Toronto. Hen—1st and 2nd, Thorpe & Scott; 3rd, Brown & Casar.

Light Brahmas.—Cock—1st, C. Glendenning, London; 2nd, Oldrieve & Wilkinson, Kingston; 3rd, John Cole, Hamilton. Hen—1st, Oldrieve & Wilkinson; 2nd, John Cole; 3rd, George Bogue, Strathroy.

Buff Cochins.—Cock—1st, F. C. Hare, Whitby; 2nd, A. H. Caulfield, Toronto. Hen—1st, A. W. Bell, Toronto; 2nd, F. C. Hare.

Partridge Cochins.—Cock—1st, Joseph Forster, Brampton; 2nd, A. W. Bell. Hen—1st, A. W. Bell; 2nd, Richard Oke, London; 3rd, Thos. Cockburn, Clappison.

White Cochins.—Cock—1st and 2nd, Wm. McNeil, London. Hen—1st, H. Emerick, Bridgeburg; 2nd and 3rd, Wm. McNeil.

Black Cochins.—Cock—1st, Chas. A. Stewart, London; 2nd, R. B. Millard, London. Hen—1st and 2nd, Chas. A. Stewart.

Black Langshans.—Cock—1st, E. McCormick, Newmarket; 2nd, R. McConnell, London; 3rd, Wm. Temple, Toronto. Hen—1st, J. Forster; 2nd, Oldrieve & Wilkinson.

White Langshans.—Cock—1st, E. McCormick; 2nd, John Cole. Hen—1st, John Cole; 2nd, E. McCormick.

Colored Dorkings.—Cock—1st, Allan Bogue, London; 2nd and 3rd, John Lawrie, Malvern. Hen—1st, A. Bogue; 2nd and 3rd, John Lawrie.

Silver Grey Dorkings.—Cock—1st, A. Noden, Toronto; 2nd, A. Bogue; 3rd, John McKee, Norwich. Hen—1st, John McKee; 2nd, A. Bogue; 3rd, A. Noden.

White Dorkings.—Cock—1st and 2nd, A. Bogue. Hen—1st and 2nd, A. Bogue.

Houdans.—Cock—1st, A. Bogue; 2nd and 3rd, J. A. Pierson, Weston. Hen—1st, A. Bogue; 2nd, Oldrieve & Wilkinson; 3rd, J. A. Pierson.

Lefleche.—Cock—1st and 2nd, R. Oke. Hen—1st and 2nd, R. Oke.

Creve Coeurs.—Cock—1st, R. Oke. Hen—1st and 2nd, R. Oke.

Black Wyandottes.—Cock—1st, G. Bogue; 2nd, R. Oke; 3rd, C. Grimsby, Toronto. Hen—1st, G. Bogue; 2nd, C. Grimsby; 3rd, R. Oke.

White Wyandottes.—Cock—1st, R. B. Millard. Hen—1st and 2nd, Fred Berner, Doncaster.

Silver-Laced Wyandottes.—Cock—1st, G. Bogue; 2nd, J. E. Meyer, Kossuth; 3rd, Jacob Dorst, Toronto. Hen—1st and 2nd, J. Dorst; 3rd, J. E. Meyer.

Golden-Laced Wyandottes.—Cock—1st, J. R. Devins & Co., Emery; 2nd, R. Oke; 3rd, Oldrieve & Wilkinson. Hen—1st, Oldrieve & Wilkinson; 2nd, R. Oke; 3rd, J. R. Devins & Co.

Barred Plymouth Rocks.—Cock—1st and 3rd, E. Dickinson, jun., North Glanford; 2nd, T. A. Duff, Toronto. Hen—1st and 2nd, T. A. Duff; 3rd, J. E. Bennett, Toronto.

White Plymouth Rocks.—Cock—1st, R. B. Millard; 2nd, S. M. Clemow, Galt; 3rd, J. Forster. Hen—1st, Oldrieve & Wilkinson; 2nd, Thos. Rice, Whitby; 3rd, Wm. Elliott, Oshawa.

Buff Plymouth Rocks.—Cock—1st and 3rd, R. H. Essex, Toronto; 2nd, R. Oke. Hen—1st and 2nd, R. H. Essex; 3rd, R. Oke.

Dominique.—Cock—1st and 2nd, G. Bogue. Hen—1st and 3rd, G. Bogue; 2nd, Oldrieve & Wilkinson.

Black Red Game.—Cock—1st, Oldrieve & Wilkinson; 2nd, W. Barber & Co., Toronto; 3rd, W. Main, Milton West. Hen—1st and 2nd, W. Barber & Co.; 3rd, Oldrieve & Wilkinson.

Brown Red Game.—Cock—1st, Oldrieve & Wilkinson; 2nd, W. Barber & Co. Hen—1st and 3rd, W. Barber & Co.; 2nd, Oldrieve & Wilkinson.

Black Sumatra Game.—Cock—1st and 2nd, G. E. Manson, Toronto. Hen—1st and 2nd, G. E. Manson.

Duckwing Game.—Cock—1st, W. Barber & Co.; 2nd, Oldrieve & Wilkinson; 3rd, F. Troth, Toronto. Hen—1st, Oldrieve & Wilkinson; 2nd, F. Troth.

Pile Game.—Cock—1st, Oldrieve & Wilkinson; 2nd and 3rd, W. Barber & Co. Hen—1st, Oldrieve & Wilkinson; 2nd, W. Barber & Co.; 3rd, F. Troth.

Indian Game.—Cock—1st, Oldrieve & Wilkinson; 2nd, John Modlin, Hamilton; 3rd, J. R. Devins & Co. Hen—1st, Oldrieve & Wilkinson; 2nd, John Modlin; 3rd, J. R. Devins & Co.

Any other variety of Game.—Cock—2nd, H. B. Plater, Todmorden. Hen—1st, Oldrieve & Wilkinson; 2nd, H. B. Plater.

Black Hamburgs.—Cock—1st, W. McNeil; 2nd, James Henderson, Toronto; 3rd, R. Oke. Hen—1st, W. McNeil; 2nd, James Henderson; 3rd, R. Oke.

Golden Pencilled Hamburgs.—Cock—1st, W. McNeil; 2nd, R. Oke. Hen—1st, R. Oke; 2nd, R. E. Middlemiss, Brantford.

Silver Pencilled Hamburgs.—Cock—1st, W. McNeil; 2nd, R. Oke; 3rd, A. Bogue. Hen—1st, W. McNeil; 2nd, R. Oke; 3rd, A. Bogue.

Golden Spangled Hamburgs.—Cock—1st, W. McNeil; 2nd, R. Oke; 3rd, A. Bogue. Hen—1st, W. McNeil; 2nd, R. Oke; 3rd, A. Bogue.

Silver Spangled Hamburgs.—Cock—1st, A. Bogue; 2nd, W. McNeil; 3rd, J. Forster. Hen—1st, W. McNeil; 2nd, R. Oke; 3rd, A. Bogue.

Red Caps.—Cock—1st, F. J. Matson, Toronto; 2nd, J. R. Devins & Co.; 3rd, Wm. Hodgson, Brooklin. Hen—1st, J. R. Devins & Co; 2nd, F. J. Matson; 3rd, Oldrieve & Wilkinson.

Black Javas.—Cock—1st, J. R. Devins & Co.; 2nd, J. Forster. Hen—1st, J. R. Devins & Co.; 2nd, J. Forster.

An, other color, Javas.—Cock—1st, R. Oke; 2nd and 3rd, F. R. Webber, Guelph. Hen—1st, F. R. Webber; 2nd, R. Oke; 3rd, J. R. Devins & Co.

White Leghorns.—Cock—1st, Thos. Rice, Whitby; 2nd, John Pletsch, Shakespeare; 3rd, J. A. Laird, Brampton. Hen—1st, J. A. Laird; 2nd, John Pletsch; 3rd, T. Rice.

Brown Leghorns.—Cock—1st and 3rd, T. Rice, 2nd, J. Pletsch. Hen—1st, J. Pletsch; 2nd, W. Main; 3rd, J. McKenzie, Toronto.

Rose Comb Brown Leghorns.—Cock—1st and 3rd, C. Glendinning; 2nd, Oldrieve & Wilkinson. Hen—1st and 3rd, C. Glendinning; 2nd, Oldrieve & Wilkinson.

Rose Comb White Leghorns.—Cock—1st and 2nd, R. Oke; 3rd, W. J. Bell, Angus. Hen—1st and 2nd, R. Oke; 3rd, W. Stewart & Son, Menie.

Black Leghorns.—Hen—1st and 2nd, J. R. Devins & Co.; 3rd, A. G. H. Luxton, Hamilton.

Buff Leghorns.—Cock—1st, George Whillans, Toronto; 2nd, F. B. Hawkes, Toronto; 3rd, R. Hollingshead, Clineburg. Hen—1st, Wagner Incubator Co., Toronto; 2nd, G. Whillans; 3rd, James Dundas, Toronto.

Spanish.—Cock—1st, F. C. Hare; 2nd, W. H. Reid, Kingston; 3rd, J. R. Devins & Co. Hen—1st and 2nd, F. C. Hare; 3rd, W. H. Reid.

Andalusians.—Cock—1st, Newton Cosh, Woodstock; 2nd, A. Noden; 3rd, W. H. Duston, Bowmanville. Hen—1st and 3rd, N. Cosh; 2nd, W. H. Duston.

Black Minorcas.—Cock—1st and 3rd, T. A. Duff; 2nd, R. Minto, Galt. Hen—1st and 2nd, T. A. Duff; 3rd, John Ford, Toronto.

White Minorcas.—Cock—1st and 2nd, T. A. Duff; 3rd, Thos. A. Senior, Hamilton. Hen—1st, 2nd, and 3rd, T. A. Duff.

White Crested Black Polands.—Cock—1st, A. Bogue; 2nd, W. McNeil; 3rd, R. Minto. Hen—1st, A. Bogue; 2nd, W. McNeil; 3rd, R. E. Middlemiss.

White Unbearded Polands.—Cock—1st, W. McNeil; 2nd, A. Bogue. Hen—1st, W. McNeil; 2nd, A. Bogue.

White Polands.—Cock—1st, W. McNeil; 2nd, A. Bogue. Hen—1st, W. McNeil; 2nd, A. Bogue.

Silver Polands.—Cock—1st, A. Bogue; 2nd, W. McNeil. Hen—1st, W. McNeil; 2nd, A. Bogue; 3rd, E. J. Howitt, Guelph.

Golden Polands.—Cock—1st, W. McNeil; 2nd, A. Bogue. Hen—1st, W. McNeil; 2nd, A. Bogue.

Buff Laced Polands.—Cock—1st and 2nd, W. McNeil. Hen—1st and 2nd, W. McNeil.

Polands, any color, unbearded, except white.—Cock—1st, A. Bogue; 2nd, W. McNeil. Hen—1st, W. McNeil; 2nd, A. Bogue.

Silky.—Cock—1st, W. McNeil; 2nd and 3rd, H. B. Donovan, Toronto. Hen—1st and 2nd, H. B. Donovan; 3rd, W. McNeil.

Any other variety of fowl.—Cock—1st, R. Oke. Hen—1st, R. Oke

CHICKENS.

Dark Brahmas.—Cockerel—1st and 2nd, Thorpe & Scott. Pullet—1st and 2nd, Thorpe & Scott; 3rd, T. C. Nicholls, Uxbridge.

Light Brahmas.—Cockerel—1st, J. Cole; 2nd, Hugh Symington, Hamilton; 3rd, Oldrieve & Wilkinson. Pullet—1st and 3rd, J. Cole; 2nd, Oldrieve & Wilkinson.

Buff Cochins.—Cockerel—1st and 3rd, F. C. Hare; 2nd, A. W. Bell. Pullet—1st and 2nd, A. W. Bell; 3rd, F. C. Hare.

Partridge Cochins.—Cockerel—1st, 2nd, and 3rd, A. W. Bell. Pullet—1st, 2nd, and 3rd, A. W. Bell.

White Cochins.—Cockerel—1st, R. B. Millard; 2nd and 3rd, W. McNeil. Pullet—1st and 3rd, R. B. Millard; 2nd, W. McNeil.

Black Cochins.—Cockerel—1st, Chas. A. Stewart, London; 2nd, R. B. Millard; 3rd, C. E. Smith, Fairfield Plains. Pullet—1st, R. B. Millard; 2nd, C. A. Stewart; 3rd, C. E. Smith.

Black Langshans.—Cockerel—1st and 2nd, H. Kain, Guelph; 3rd, R. McConnell, London. Pullet—1st and 3rd, J. A. Pierson; 2nd, H. Kain.

White Langshans.—Cockerel—1st and 2nd, R. T. Knight, Guelph; 3rd, R. J. Barker, Rochester. Pullet—1st and 2nd, R. T. Knight; 3rd, R. J. Barker.

Colored Dorkings.—Cockerel—1st and 3rd, J. Lawrie; 2nd, A. Bogue. Pullet—1st and 2nd, J. Lawrie; 3rd, A. Bogue.

Silver Grey Dorkings.—Cockerel—1st, A. Noden; 2nd, J. McKee; 3rd, A. Raffey, Doncaster. Pullet—1st, A. Noden; 2nd, A. Bogue; 3rd, J. McKee.

White Dorkings.—Cockerel—1st and 2nd, A. Bogue. Pullet—1st and 2nd, A. Bogue.

Houdans.—Cockerel—1st and 2nd, A. Bogue; 3rd, J. A. Pierson. Pullet—1st and 2nd, A. Bogue.

Lafschs.—Cockerel—1st and 2nd, R. Oke. Pullet—1st and 2nd, R. Oke.

Creve Coeurs.—Cockerel—1st and 2nd, R. Oke. Pullet—1st and 2nd, R. Oke.

Black Wyandottes.—Cockerel—1st and 3rd, C. Grimsby; 2nd, G. Bogue. Pullet—1st, C. Grimsby; 2nd, R. Oke; 3rd, F. R. Webber.

White Wyandottes.—Cockerel—1st, C. Massie, Port Hope; 2nd, R. B. Millard; 3rd, R. T. Knight. Pullet—1st, C. Massie; 2nd and 3rd, G. Pain, Aldershot.

Silver Laced Wyandottes.—Cockerel—1st, J. Arthur, London; 2nd, J. E. Meyer; 3rd, G. Bogue. Pullet—1st, J. Dorst; 2nd, J. Arthur; 3rd, J. E. Meyer.

Golden Laced Wyandottes.—Cockerel—1st, Oldrieve & Wilkinson; 2nd, R. Oke; 3rd, J. Modlin. Pullet—1st, Oldrieve & Wilkinson; 2nd, R. Oke; 3rd, J. R. Devins & Co.

Barred Plymouth Rocks.—Cockerel—1st, E. Dickinson, jun.; 2nd, Oldrieve & Wilkinson; 3rd, T. A. Duff. Pullet—1st, Oldrieve & Wilkinson; 2nd, T. A. Duff; 3rd, J. E. Bennett.

White Plymouth Rocks.—Cockerel—1st and 2nd, T. Rice; 3rd, G. Bogue. Pullet—1st and 3rd, T. Rice; 2nd, J. A. Pierson.

Buff Plymouth Rocks.—Cockerel—1st, R. Oke; 2nd and 3rd, R. H. Essex. Pullet—1st and 3rd, R. H. Essex; 2nd, R. Oke.

Dominique.—Cockerel—1st and 2nd, G. Bogue. Pullet—1st and 2nd, G. Bogue.

Black Red Game.—Cockerel—1st and 2nd, W. Main; 3rd, W. Barber & Co. Pullet—1st and 3rd, W. Main; 2nd, W. Barber & Co.

Brown Red Game.—Cockerel—1st and 2nd, W. Barber & Co. Pullet—1st and 2nd, W. Barber & Co.

Black Sumatra Game.—Cockerel—1st and 2nd, G. E. Manson. Pullet—1st and 2nd, G. E. Manson.

Duckwing Game.—Cockerel—1st and 2nd, F. Troth. Pullet—1st and 2nd, F. Troth; 3rd, W. Barber & Co.

Pile Game.—Cockerel—1st, W. Barber & Co. Pullet—1st, F. Troth; 2nd and 3rd, W. Barber & Co.

Indian Game.—Cockerel—1st and 3rd, J. B. Lindy; 2nd, J. Modlin. Pullet—1st, J. Modlin; 2nd and 3rd, J. B. Lindy.

Black Hamburgs.—Cockerel—1st, W. McNeil; 2nd, R. Oke. Pullet—1st, W. McNeil; 2nd, R. Oke.

Golden Pencilled Hamburgs.—Cockerel—1st, W. McNeil; 2nd, R. Oke. Pullet—1st, R. Oke; 2nd, W. McNeil.

Silver Pencilled Hamburgs.—Cockerel—1st, W. McNeil; 2nd, A. Bogue. Pullet—1st, W. McNeil; 2nd, A. Bogue.

Golden Spangled Hamburgs.—Cockerel—1st, W. McNeil; 2nd, A. Bogue; 3rd, R. Oke. Pullet—1st, W. McNeil; 2nd, R. Oke.

Silver Spangled Hamburgs.—Cockerel—1st, W. McNeil; 2nd, A. Bogue; 3rd, R. Minto. Pullet—1st, W. McNeil; 2nd, R. Oke; 3rd, A. Bogue.

Red Caps.—Cockerel—1st and 2nd, J. R. Devins & Co.; 3rd, W. Hodgson. Pullet—1st and 2nd, J. R. Devins & Co.; 3rd, W. Hodgson.

Black Javas.—Cockerel—1st, J. R. Devins & Co.; 2nd, J. Forster. Pullet—1st and 2nd, F. R. Webber; 3rd, J. Forster.

Any other color of Javas.—Cockerel—1st and 2nd, F. R.

Webber; 3rd, J. R. Devins & Co. Pullet—1st and 2nd, F. R. Webber; 3rd, J. R. Devins & Co.
White Leghorns.—Cockerel—1st, T. Rice; 2nd and 3rd, R. B. Millard. Pullet—1st, T. Rice; 2nd, J. Pletsch; 3rd, R. B. Millard.
Brown L. horns.—Cockerel—1st and 2nd, T. Rice. Pullet—1st, T. Rice; 2nd, J. R. Wilson, Toronto.
Rose Comb Brown Leghorns.—Cockerel—1st, John Page, Woodstock; 2nd, C. Glendenning; 3rd, Oldrieve & Wilkinson. Pullet—1st, C. Crimsby; 2nd, C. Glendenning; 3rd, John Page.
Rose Comb White Leghorns.—Cockerel—1st, R. Oke; 2nd, W. J. Bell; 3rd, W. Stewart & Son. Pullet—1st, R. Oke; 2nd, W. Stewart & Son; 3rd, W. J. Bell.
Black Leghorns.—Cockerel—W. H. Readwin, Guelph; 2nd and 3rd, J. R. Devins & Co. Pullet—1st, W. H. Readwin; 2nd and 3rd, J. R. Devins & Co.
Buff Leghorns.—Cockerel—1st, J. Dundas; 2nd, Wagner Incubator Co.; 3rd, G. Berner. Pullet—1st, J. Cole; 2nd, J. Dundas; 3rd, G. Whillans.
Spanish.—Cockerel—1st and 2nd, F. C. Hare. Pullet—1st and 2nd, F. C. Hare; 3rd, J. Modlin.
Andalusians.—Cockerel—1st, N. Cosh; 2nd, A. Noden. Pullet—1st, N. C. sh.
Black Minorcas.—Cockerel—1st, 2nd, and 3rd, T. A. Duff. Pullet—1st, 2nd and 3rd, T. A. Duff.
White Minorcas.—Cockerel—1st and 2nd, T. A. Duff; 3rd, W. M. Fletcher, Toronto. Pullet—1st, 2nd and 3rd, T. A. Duff.
White Crested Black Polands.—Cockerel—1st, A. Bogue; 2nd, Wm. McNeil. Pullet—1st, Wm. McNeil; 2nd, A. Bogue.
White Unbearded Polands.—Cockerel—1st, A. Bogue; 2nd, W. McNeil. Pullet—1st, W. McNeil; 2nd, A. Bogue.
White Polands.—Cockerel—1st, W. McNeil; 2nd, A. Bogue. Pullet—1st, A. Bogue; 2nd, W. McNeil.
Silver Polands.—Cockerel—1st, A. Bogue; 2nd, W. McNeil. Pullet—1st, W. McNeil; 2nd, A. Bogue.
Golden Polands.—Cockerel—1st, A. Bogue; 2nd, W. McNeil. Pullet—1st, W. McNeil; 2nd, A. Bogue.
Buff Laced Polands.—Cockerel—1st and 2nd, W. McNeil. Pullet—1st and 2nd, W. McNeil.
Polands, any color, unbearded, except white.—Cockerel—1st, W. McNeil; 2nd, A. Bogue. Pullet—1st, W. McNeil.
Silky.—Cockerel—1st and 2nd, H. B. Donovan. Pullet—1st and 2nd, H. B. Donovan.
Any other variety of Chickens.—Cockerel—1st, W. McNeil; 2nd, R. Oke; 3rd, Fred Berner. Pullet—1st, W. McNeil; 2nd, Fred Berner; 3rd, R. Oke.

BREEDING PENS.

Light Brahmas.—1st, Hugh Symington.
Dark Brahmas.—1st, Thorpe & Scott; 2nd, A. Raffey.
Partridge Cochins.—1st, T. Cockburn; 2nd, J. M. Ramsay, Malvern.
Buff Cochins.—1st, A. W. Bell; 2nd, H. Emerick.
Any other color Cochins.—1st, W. McNeil.
Langshans.—1st, E. McCormick; 2nd, R. McConnell.
White Dorkings.—1st, J. Lawrie.
Silver Grey Dorkings.—1st, A. Noden; 2nd, A. Raffey.
Any other color Dorkings.—1st, J. Lawrie; 2nd, A. Bogue.
Barred Plymouth Rocks.—1st, E. Dickinson, jr.; 2nd, T. A. Duff.
Buff Plymouth Rocks.—1st and 2nd, R. H. Essex.
Any other color Plymouth Rocks.—1st, T. Rice.
Black Red Game.—1st, W. Main; 2nd, W. Barber & Co.
Pile Game.—1st, W. Barber & Co.
Any other color Game.—1st, W. Barber & Co.
Black Hamburgs.—1st, W. McNeil; 2nd, R. Oke.
Spangled Hamburgs.—1st, W. McNeil; 2nd, R. Oke.
Pencilled Hamburgs.—1st, W. McNeil; 2nd, R. Oke.
Red Caps.—1st, J. R. Devins & Co.
White Single Comb Leghorns.—1st, T. Rice; 2nd, J. Pletsch.
White Rose Comb Leghorns.—1st, R. Oke; 2nd, W. J. Bell.
Brown Single Comb Leghorns.—1st, J. R. Wilson; 2nd, J. Pletsch.
Brown Rose Comb Leghorns.—1st, C. Glendenning.
Buff Leghorns.—1st, G. Berner; 2nd, F. B. Hawkes.
Any other color Leghorns.—1st, A. G. H. Luxton.
French.—1st, J. A. Pierson; 2nd, A. Hobbs, Bowmanville.
Spanish.—1st, F. C. Hare.
Silver Polish.—1st, A. Bogue; 2nd, W. McNeil.
Golden Polish.—1st, W. McNeil.
Any other color Polish.—1st, W. McNeil.
Andalusians.—1st, W. H. Dunston.
Black Minorcas.—1st and 2nd, T. A. Duff.
White Minorcas.—1st, T. A. Duff; 2nd, T. J. Senior.
Silver Wyandottes.—1st, J. E. Meyer; 2nd, J. Dorst.
Golden Wyandottes.—1st, R. Oke; 2nd, R. H. Essex.
Any other color Wyandottes.—1st, C. Crimsby; 2nd, A. Raffey.
Indian Games.—1st and 2nd, M. Richardson.

TURKEYS, GEESE, AND DUCKS.

Bronze Turkeys.—Male—1st and 3rd, W. Main; 2nd, W. J. Bell. Female—1st, W. Main; 2nd, W. J. Bell; 3rd, W. Hodgson.
White Turkeys.—Male—1st, W. H. Beattie, Wilton Grove; 2nd, C. E. Smith; 3rd, W. J. Haycraft. Female—1st and 2nd, W. H. Beattie; 3rd, W. J. Haycraft.
Any other variety Turkeys.—Male—1st, W. J. Haycraft. Female—W. J. Haycraft.
Bremen or Embden Geese.—Male—1st and 2nd, W. Main; 3rd, J. A. McGillivray, Uxbridge. Female—1st and 2nd, W. Main; 3rd, J. A. McGillivray.
Toulouse Geese.—Male—1st, A. Bogue; 2nd, J. Pletsch; 3rd, G. Colwell, Paris Station. Female—1st and 2nd, A. Bogue; 3rd, W. Hodgson.
Any other variety Geese.—1st, W. H. Reid; 2nd, G. Colwell; 3rd, C. E. Smith. Female—1st, G. Colwell; 2nd, W. H. Reid; 3rd, C. E. Smith.
Rouen Ducks.—Male—1st and 2nd, W. Main; 3rd, G. Colwell. Female—1st and 3rd, W. Main; 2nd, G. Colwell.
Aylesbury Ducks.—Male—1st, A. Bogue; 2nd, F. R. Webber; 3rd, C. E. Smith. Female—1st and 3rd, F. R. Webber; 2nd, A. Bogue.
Pekin Ducks.—Male—1st and 2nd, A. Bogue; 3rd, F. R. Webber. Female—1st and 2nd, A. Bogue; 3rd, G. Colwell.
Cayuga Ducks.—Male—E. J. Howitt; 2nd, G. Bogue; 3rd, C. E. Smith. Female—1st, E. J. Howitt; 2nd, W. Hodgson; 3rd, C. E. Smith.
Any other variety Ducks.—Male—1st, W. H. Reid; 2nd, C. E. Smith. Female—1st, W. H. Reid.

TURKEYS, GEESE, AND DUCKS OF 1896.

Bronze Turkeys.—Male—1st, W. H. Beattie; 2nd, W. Main; 3rd, W. Hodgson. Female—1st, W. H. Beattie; 2nd, W. Main; 3rd, W. Hodgson.
White Turkeys.—Male—1st and 3rd, W. H. Beattie; 2nd, C. E. Smith. Female—1st and 3rd—W. H. Beattie; 2nd, C. E. Smith.
Bremen or Embden Geese.—Male—1st, G. Colwell; 2nd, W. J. Haycraft; 3rd, W. Main. Female—1st, G. Colwell; 2nd, W. J. Haycraft; 3rd, W. Main.
Toulouse Geese.—Male—1st, W. J. Haycraft. Female—1st, W. J. Haycraft.
Any other variety Geese.—Male—1st and 2nd, A. G. H. Luxton; 3rd, C. E. Smith. Female—1st and 2nd, A. G. H. Luxton; 3rd, C. E. Smith.
Rouen Ducks.—Male—1st and 2nd, W. Main. Female—1st and 2nd, W. Main.
Aylesbury Ducks.—Male—1st and 2nd, A. Bogue; 3rd, R. B. Millard. Female—1st, A. Bogue.
Pekin Ducks.—Male—1st and 2nd—A. Bogue; 3rd, J. E. Meyer. Female—1st, A. Bogue; 2nd, J. E. Meyer; 3rd, W. Main.
Cayuga Ducks.—Male—1st, W. Hodgson; 2nd, G. Bogue; 3rd, E. J. Howitt. Female—1st, G. Bogue; 2nd, E. J. Howitt; 3rd, C. E. Smith.

The Exhibit of Fruit.

Specially Reported for "Farming."

The exhibit of fruit was one of the most attractive sights of the fair, and far surpassed any display of fruit ever seen in Toronto. It was much to be regretted that the bare upper spaces of the building in which the displays were placed had not been decorated to correspond with the exceedingly handsome appearance of the tables below.

Exhibits of the Fruit Experiment Stations.

A large part of the exhibit was composed of the displays made by the different fruit experiment stations. The Prince Edward station (Mr. W. H. Dempsey, Treton) had a magnificent collection of apples, over 130 different hardy varieties being shown, all correctly named, and arranged alphabetically for easy identification. These varieties have all been collected and tested by Mr. Dempsey or by his father, who was one of the most careful fruit-growers Ontario has known. The St. Lawrence station (Harold Jones, Maitland) also had a fine display of apples. The Simcoe station (G. C. Caston, Craighurst) was represented by a fine collection of apples of sorts that do well in Northern Ontario. The coloring of these apples was not so rich and varied as that of those grown in more southern districts, but in flavor and texture they were to be very highly commended. It was unfortunate that the time of the fair precluded Mr. Caston from showing in full maturity the fine late apples for which his district is so noted. However, his Alexanders were the largest and finest in the show. One lesson to be learned from a comparison of the exhibits made here is that varieties that ripen as early summer apples in southern counties ripen

as fall apples in the north, and the fall varieties of the south become winter varieties further north. Another fine variety of Mr. Caston's, and one that attracted the attention of fruit growers, was the Hare Pipka, a late fall Russian apple that has proved very useful in northern Ontario.

The Huron station (A. E. Suerrington, Walkerton) was well represented in apples, the specimens being exceedingly fine, the crops they represent also being exceedingly heavy this year. Raspberries are also a specialty with Mr. Sherrington, but he has not had his station established long enough yet to justify him in making a display this year. The South-Western station (W. W. Hilborn, Leamington) had an excellent display of peaches, but only the mid-season specimens could be shown. He had, however, a very fine display of early peaches in glass. The peaches shown by Mr. Hilborn were all A1 in quality, and the district represented by him has had an exceptionally heavy crop this season, a crop also exceedingly fine in flavor and texture. Mr. Hilborn's own peach orchards exceed 100 acres, and many of his neighbors have equally large plantations. The Essex peach-growers are exceedingly careful as to the quality of their fruit, and yellows are almost unknown with them, a diseased tree being destroyed the very moment its disease is detected.

The East Central station (R. L. Huggard, Whitby) was represented by a good collection of apples and a very choice collection of pears. The season, however, has been very dry this year, and the pears are not, in Mr. Huggard's opinion, up to the average. The Wentworth station (Murray Pettit, Winona) had one of the most attractive and interesting exhibits of the whole fair. It comprised over 130 varieties of grapes, all truly named, and arranged alphabetically, so that visitors could use the collection for identification purposes if they so desired. Connoisseurs in fruit-growing deemed Mr. Pettit's collection exceedingly meritorious. The Halton sub-station (E. B. Stevenson, Freeman) had a very attractive display of strawberries in glass, comprising all the leading varieties and several choice new varieties. The berries were shown in their fruiting clusters, and attracted much attention from lovers of this favorite fruit-bearing plant. The Burlington station (A. W. Peart) had a similar display—and an equally attractive one—of blackberries and raspberries. This exhibit was also arranged to furnish a means of identification to those who desired to make use of it for that purpose.

The Georgian Bay station (John G. Mitchell, Clarksburg) had a display of plums so fine that it was evident that the reputation of the district as a plum-bearing area is founded on merit. Each specimen was plainly labeled.

Lastly, Mr. Linus Woolverton, of Grimsby, the secretary of the association, and one of the members of the Board of Control, had a very large collection in glass of both small and large fruits, all grown and tested by himself, and all correctly labeled for identification purposes. The small fruits were all shown in growing clusters, and the large fruits were shown so as to retain their beautiful natural colors. Mr. Woolverton's display of cherries was certainly one of the sights of the exhibition.

Honor to whom honor is due.

The above displays were all under the general charge of Mr. L. Woolverton, the secretary of the Ontario Fruit-Growers' Association, and Mr. H. L. Hutt, horticulturist of the Ontario Agricultural College, and inspector of the Ontario Fruit Experiment Stations, and too much credit can hardly be given these gentlemen for their part in making the display a success. The only criticism we have to offer is that the educational value of the exhibit was likely to be less than it ought to be, for lack of sufficient available information. We would suggest that, if a similar display be made next year, a short, concise description of the principal features of the exhibit be printed beforehand, so framed that by referring to it a visitor could follow and study the various features of the exhibit easily. In this way he would be able to take away with him a much better and more useful impression of the exhibit than otherwise would be possible.

Messrs. Morris, Stone & Wellington's Exhibit.

One of the most striking and most attractive exhibits in the fruit building was that made by Messrs. Morris, Stone & Wellington, the proprietors of the well-known Fonthill Nurseries. This exhibit consisted of a display of over 300 distinct varieties of hardy apples, mostly new to Ontario, all grown and tested by themselves on their own grounds, every one of which they carry in stock,

and are able to supply to customers, if desired to do so. This exhibit is believed to be the largest ever made on the continent by any one concern. Next year the firm hope to be able to make a larger display, as their specimen orchard contains over 700 distinct varieties. The exhibit occupied the whole of a table 45 inches wide by 50 feet long. The specimens varied in size all the way from a little toy apple (the Scheideken), not larger than a small cherry or mountain-ash berry, to the mammoth Zugoff, measuring 18 inches in circumference. All the varieties shown are believed to be hardy and suited to our climate, many of them being tested Russians. Another striking display was that made by the Oakville Fruit-Growers' Association.

Private Exhibits.

The displays made by private exhibitors were, taken on the whole, equally meritorious with any of those above mentioned. The display of pears was the finest ever made in the history of the fair, and would be hard to beat anywhere. The display of grapes comprised nearly 500 different exhibits, and was of the most attractive and mouth-watering character possible. The display of apples was also exceedingly fine and varied, the large shiny, rich-colored fruit calling forth remarks of praise and astonishment from every passing sight-seer. The display of peaches was also excellent.

The Dairy Exhibit.

Specially reported for "Farming."

The total number of entries in the Dairy department was larger than last year. There were not so many entries from the outside provinces, but there was an increase of entries from Ontario. The number of entries according to provinces were as follows: Ontario, 321; Quebec, 25; Manitoba, 22; and Prince Edward Island, 7. Ontario makers won all the prizes but one sixth prize, which went to Prince Edward Island.

The average quality of the cheese shown was a little higher than last year, and there was not so wide a difference between the best and poorest cheese as there usually is. A few exhibits had a very bad flavor, and the August cheese, as a whole, was lacking somewhat in flavor. This was no doubt due to the very dry hot weather of the first half of August, during which the pastures dried up, so that the milk would not make cheese of good flavor. The June and July makes were a little off flavor, due, no doubt, to the hot season and the difficulty of keeping the cheese without good cold storage accommodation.

The Quebec cheese were not as well made this year as last. There was, however, a great improvement in the Manitoba cheese. One Manitoba exhibit, consisting of three August cheese, had two cheese in it so good that had the third cheese been equally good the exhibit would have taken first place, but as the third cheese was poor it lost all chance of a prize. The Prince Edward Island cheese was fair.

The entries in creamery butter were three times as numerous as in other years, and they were of exceptionally good quality, the scoring running from 98 down to 87½ points, which is very good, and speaks well for our buttermakers. If the creamery butter had a fault it was that it was colored just a trifle too highly, and that a little more salt was used than was necessary.

The dairy butter was about the same in quantity and quality as that shown in other years—the scoring was remarkably even, running from 97 down to 94½ points.

The accommodation for the dairy products was not all that could be wished for, nor such as the dairy industry of the province is entitled to expect at the hands of the Toronto Industrial Association. The building in which the exhibit was held was in an out-of-the-way place, and hard to find. An industry that brings into the country the sum of \$22,000,000, is deserving of better treatment. The space assigned to the dairy exhibit should be well lighted and well ventilated, and provided with proper cold storage facilities. The dairy associations of the province should take this matter in hand, and co-operate with the Fair Board to secure a building that would in every way be suited to the needs of the case. The building should also contain space enough to give ample room for the showing of dairy appliances, and it would be to the interest of the industry if the united associations would endeavor to secure as complete and as large an exhibit of these appliances as possible.

The Exhibit in the Agricultural Hall.

Specially reported for "Farming."

The exhibit in the Agricultural Hall was an exceedingly interesting one. The grains and grasses shown were exceptionally good; so also were the roots. Mammoth turnips and mangolds of various kinds attracted a good share of the attention of every visitor, enormous cabbage and cauliflower heads met his wandering eye everywhere, and splendid specimens of vegetables were to be seen on every hand. A very large purple egg-plant fruit attracted the attention and admiration of nearly everyone passing it.

The Eastern Manitoulin Agricultural Society had a splendid exhibit of the agricultural products of the island. Samples of oats, peas, wheat, rye, and corn were shown, together with a good variety of vegetables and a number of varieties of apples, etc.

Mention should also be made of the exhibit shown from the Lake Temiscamingue district. This is a new district opening up for colonization, which is now easy of access by rail and boat, and which promises to be a good agricultural country. Grains grown in this district were shown in the sheaf and in bottles—wheat, oats, peas, timothy, etc., and along with these a very nice collection of vegetables and samples of the timber trees.

The centre of attraction in the Agricultural Hall was the exhibit of the Dominion Experimental Farms. This exhibit was displayed within and on the outside of a pavilion which was situated in the centre of the building. Around the outside of the pavilion were displayed a number of large shields on which were placed sample heads of a great many cross-bred grains. These cross-bred grains are a result of the work of Dr. Wm. Saunders, director of the Experimental Farms, who for some time back has been conducting an extensive series of experiments in hybridizing grains. Over 200 varieties of these grains were shown in the straw, which aided materially in the decoration of the exhibit, and over 100 varieties of grain were shown in bottles. Besides these, there was a good exhibit of different varieties of roots, and specimens of new and promising Russian apples, etc.; and last, but not least, a splendid exhibit of apples, plums, pears, peaches, etc., from the Experimental Farm at Agassiz, B.C. The whole exhibit was an instructive one, and Mr. W. H. Hay, the secretary of the Farms, and Mr. Fixter, the farm foreman of the Ottawa Experimental Farm, were kept busy answering the numerous questions that poured in upon them in a steady stream from morning till night. This exhibit will do much towards letting farmers know what is being done at these farms; but everyone interested in the work and desiring further information about it should at once make application to Dr. William Saunders, Director Central Experimental Farm, Ottawa, for bulletins and reports. The work of the Government farms is intended for the benefit of farmers, and the Government wishes it to be understood that any farmer can have the reports merely for the asking.

The exhibit in the Agricultural Hall was certainly one of the most attractive features of the whole exhibition. The products shown were displayed in the most pleasing manner; and the upper spaces of the building were most handsomely decorated with flags and streamers. The whole display reflected great credit on the energy and taste of the director in charge, Mr. S. E. Briggs, of The Steele-Briggs Co., Toronto.

The Honey Exhibit.

Specially reported for "Farming."

The number of entries this year in the honey exhibit was larger than in other years, but the stock to sell was not so large, neither is the stock to sell throughout the country so large as usual. While this is true, the quality of the honey shown was extra good, and a very fair sample of this year's product throughout the country generally.

A great deal of taste was shown by the different exhibitors in the display of their exhibits. This was, of course, to their interest, as display counted in winning a prize.

The exhibits as displayed could not fail to give the public a wider knowledge of the different kinds of honey, and the forms in which honey is produced; for it was shown in the comb and also in the granular and liquid forms, and different sorts of honey as made from different kinds of food were shown side by side; the dark-colored product made from buckwheat contrasting strongly with the clear, light colored article made from the nectar of spring and summer blossoms.

That the public were interested in the exhibit is evidenced by the great number of enquiring visitors who found their way to the hidden retreat under the grand stand where the

products of the busy bee were stored. The exhibiting bee-keepers however, were extremely dissatisfied with the accommodation given to them by the fair managers, and they hope that in another year there will be suitable space prepared for so important and interesting an exhibit as this always is.

Among the exhibitors were J. B. Hall, of Woodstock; Wm. Goodger, also of Woodstock; and Goold, Shapley & Muir, of Brantford. The exhibit of the last-named firm was under the charge of Mr. R. F. Holtermann, president of the Ontario Bee-keepers' Association, and certainly constituted a most strikingly handsome display.

The Good Roads Exhibit.

Specially reported for "Farming."

A new departure at the Exhibition at Toronto, and one which, in view of the interest now being taken in good roads, became particularly instructive, was the exhibit of roadmaking machinery, under the patronage of the Ontario Good Roads Association. All varieties of machines were represented—plows, drag scrapers, wheel scrapers, graders, steam and horse rollers, stone crushers, etc. The last mentioned, the stone crushers, formed a particularly interesting feature of the display, the rapidity and completeness with which the stone was broken, screened, and separated into the various sizes ready for use on the road being a revelation to many, and forming a striking contrast to the old method of hand-breaking, both in point of workmanship and economy.

All the machinery was shown in operation. Short sections of road were made each day, under the direction of the Provincial Highway Commissioner, A. W. Campbell, C.E. The roadway was formed by the use of graders, the stone from the crushers applied, and all thoroughly consolidated by the rollers. On the second Wednesday of the Fair the principal test of machinery was made, among the distinguished visitors then present being Lord and Lady Aberdeen.

Several deputations of councillors attended during the progress of the Fair, with a view to examining the different machines and reporting upon them. An excellent opportunity was thus afforded them to see the machines in operation, see the work they could do, and how it should be done, and compare the different makes, and choose the kind most adapted to their needs.

Among the impressions which the visitor received from the display were these: That machinery is absolutely necessary in economical and efficient road-making, and must soon find its way into more general use; that all the machines exhibited were good and useful, but that some were more adapted and others less adapted than their fellows to the requirements of different localities; that exhibitions of this kind enable municipalities to gain information regarding the special machines they should use more cheaply and easily than they could otherwise possibly obtain it; that, as a means of teaching the construction of roads, and of raising the standard of roads, they should have a very prominent place, and undoubtedly will be extensively patronized by manufacturers and the public in succeeding years.

Among the exhibitors present were the Bear Bridge Co., Doon; Copp Bros., Hamilton; H. A. Brownell, London, Ont., representing the Western Reversible Wheel Scraper Co., Aurora, Ohio; J. C. Steelo, Thorntown; Waterous & Co., Brantford; and the Sawyer-Massey Co., Hamilton. Samples of trap rock were shown by the Powell-Mitchell Co., Marquette, Mich. Captain Shepard, of Queenston, representing the Good Roads Association, was at all times on the ground to give information to visitors and distribute road literature.

Classes for the Dairy test at Guelph.—We have received from Mr. J. W. Wheaton, secretary of the Western Dairymen's Association, the following note: "There seems to be an impression among some stockmen that there will be a separate class for three-year-olds in the dairy test to be held in connection with the Fat Stock and Dairy Show at Guelph, on December 8th, 9th, and 10th. I desire to correct this wrong impression. There will be no classes excepting those mentioned in the prize list, which are as follows: One class in each breed (Shorthorns, Ayrshires, Holsteins, Jerseys or Guernseys, and Grades) for all cows 36 months and over, and another in each breed for all cows under 36 months."

Honor the Right Man.—In our account of the Dairymen's Association of Western Ontario we inadvertently omitted to make mention of the valuable work done by Mr. John Geary, of London, in connection with that organization. Mr. Geary was the prime mover in the forward step taken a few years ago when the association determined to appoint a permanent secretary to devote his whole time to the work of the association; and the subsequent success of the association due to that movement is, therefore, nearly altogether owing to him. A part of Mr. Geary's policy was the starting of a dairy paper which would be the official organ of the association. This part of the scheme, however, was afterwards abandoned.

THE WESTERN FAIR, LONDON.

The Western Fair Association are to be congratulated upon the success of this year's exhibition, and upon the fine new stock buildings which they have erected upon their grounds. Although their exhibition was held during the same week as the one at Montreal, there was a very large show of live stock, and the commodious new buildings were not large enough to accommodate all the cattle, sheep, and pigs that were present for exhibition. Quite a large number of cattle had to be sent across the grounds to the horse stables, although these were already well filled. A temporary shed was erected for some of the hogs, but the accommodation was still insufficient, and pens were made along one side of the building, and a large tent erected for the remaining sheep and swine. There was also a very large exhibit of farm implements and machinery, and a good display of wagons and carriages, and also of wind-mills. The display in the main building and in the dairy, poultry, horticultural, and agricultural buildings was likewise a credit to the association and to its energetic secretary, Mr. Thos. A. Browne. Taking it all in all, the Western Fair this year was the most successful exhibition ever held in Western Ontario.

Horses.

Specially reported for "Farming."

The tendency to improvement in the horse markets, though not so pronounced as those interested in breeding would like to see it, is, nevertheless, having an encouraging effect in the country, if we may judge by the better display of horses at the London Fair. The increase in numbers was gratifying, and it is to be hoped that another year the addition to the list may be still more satisfactory.

HEAVY DRAUGHT HORSES—IMPORTED

CLYDESDALES.—There was a better exhibit of these than there has been for some time. The aged stallion class was fairly good. The red ribbon was sent to Charles Beam, Brinsley, R. Shaw-Wood being next, and James Henderson, Wellburn, third. Three-year-old stallions though only two in number were a better class. Geo. Colbert, Hdernton, had the winner, with John Bush, Sebringville, next. John Oliver, Duncrief, had no opposition for two-year-olds, but his entry was well worthy of the prize. There were no yearling stallions out. Mares with foal at foot, or which had evidently had a foal this year, were a large class of good, serviceable animals, some of which had evidently been brought in from the fields, as they were not fitted for showing. To a blocky mare in good trim, shown by E. W. Charlton, Duncrief, went first, a big, rangy mare of V. Ficht's being placed next, while S. J. Prouse's brood mare was third. V. Ficht had two foals good enough to win first and second, S. J. Prouse's entry being third. The last-mentioned exhibitor also won for three-year-old fillies, and a good one she was. V. Ficht was successful in winning on yearlings and two-year-old fillies. J. W. Robinson, St. Mary's, had the only team entered, but they were a good pair. The aged mare shown by Mr. Charlton got the diploma for mares. There was but a single Shire entered, the three-year-old stallion, Kilburn, shown by Berry & Geiger, Hensall, which attracted so much attention at the Toronto show. This stallion was allowed to be shown in the imported Clydesdale class for the diploma, and won it.

Judge.—B. McGregor, Brucefield.



Mr. Thos. A. Browne, London.

Secretary of the Western Fair Association; also of the Ontario Poultry Association.

CANADIAN-BRED HEAVY DRAUGHT HORSES.—Geo. Taylor, Kippen, had the best stallion in this class, a two-year-old, which won the diploma for stallion any age. John A. Mason, Norwich, was first in the aged class, beating Alex. Holmes' King Craft. Mr. Mason's horse also won the special prize given by the Clydesdale Horse Association of Canada for the best Canadian-bred stallion recorded in the Clydesdale Studbook of Canada, not having an imported mare on the side of the dam. Three brood mares with foals competed for honors. W. M. Fauld's Muncy was first, with Hider & Parkin, Oxford Centre, second. The prizes for foals went to the same exhibitors in the same order. Four good two-year-old fillies were out. E. W. Charlton's filly came first, with R. Shaw-Wood's next; a smaller one, but in very good condition, belonging to Chas. Beam, Brinsley, being third. As usual, Hider & Parkin won several prizes in this class. J. W. Robinson repeated his victory in the imported class for teams by winning here too. They are a particularly good pair. Geo. Paterson, Tavistock, had a strong little team, which won second. W. M. Fauld's aged mare won the diploma for mares. Other prize-winners were: G. Duffield, G. Taylor, and Donald Stewart.

AGRICULTURAL AND GENERAL PURPOSE HORSES.—This was a very mixed class. Five teams competed, and, taken as different types, they were a fairly satisfactory lot. Alex. Cameron, Alvington, secured the red ticket, with Wesley Kent, Youngsville, second. There were four brood mares out. First went to Wm. Fisher, Benn Miller, and second to Donald Stewart, Ivan. Hider & Parkin were the only exhibitors of three-year-olds, and Simon Campbell, Farquhar, of yearlings. There were four two-year-olds. A good entry of Wm. Moore's, Fernhill, secured first, and a pretty thing shown by R. Shaw-Wood, London, and.

THOROUGHBREDS.—But few entries had been made in this class. In the aged class W. J. Thompson, Hamilton, showed the well-known King Bob, which won third in Toronto this year, and secured first place with him. L. Meredith, London, was second, and H. & B. Hulse, Toronto, third. J. N. Sage, Nilestown, was the only other exhibitor who won anything. He had a good brood mare and a foal, and a yearling stallion.

Judge.—S. B. Fuller, Woodstock.

STANDARD-BRED TROTTERS.—There were only three standard-bred trotting stallions present, all of which were entered in the aged class. Randall Leam, Aylmer, got first-prize money; John Sharon, Woodstock, was second; and J. E. Hanham, St. Marys, third; the records for speed of the three horses corresponding to the order in which they were placed.

HACKNEYS.—There were only three entries of Hackneys, two of stallions and one of mares, all made by A. G. Bowker, Woodstock. To The Shah went first in his class, and also the special prize given by the Canadian Hackney Horse Society for the best Hackney stallion, of any age, recorded in the Canadian Hackney Studbook. Only two high-steppers answered the call. They were shown by O'Neil & Co., and L. Meredith, both of London.

ROADSTERS.—This was a good class, with entries in every section. There were fifteen entries in the section for single roadsters (gelding or mare), several of them being animals possessed of good speed and nice conformation. The winners in this section were Henry Dreany, London; N. Zavitz, Fernhill; and A. C. Macdougall, Poplar Hill. In a strong class of brood mares J. B. Cowie, on Queensville, had the winner, and he had a very nice yearling which won in her class, and got the diploma as well for mares. E. McClurg, Ivan; H. McClurg, Falkirk; S. B. Cole, Woodstock; P. Farrell, Woodstock; J. N. Sage, Nilestown; and Wallace German, Wellburn, were some of the exhibitors who won prizes. Some good pairs contested for the prizes offered, which were awarded to C. P. Geary, St. Thomas; P. Irving, Woodstock; and T. J. Thornton, Ingersoll. Other prize winners were Dr. Mahon, Geo. Neily, R. Miners, C. Rosser, A. Harkness, and A. C. McAlpin.

Judges.—E. A. Blackwell, Glencoe; W. J. Hinman, V.S., Winnipeg.

CARRIAGE HORSES.—Carriage horses and roadsters have been, as a rule, two of the largest classes shown at London Exhibition for some time past. This year again they were present in good numbers in both classes. Farmers in the neighborhood of London have had the opportunity of the services of good coach horses and roadster sires, and the well informed have taken advantage of it.

Among those who won prizes on their carriage stallions at the show was James McCartney, Thamesford, whose German coach horse, Graf Bremer, could not be denied first place in the aged class. David Carroll, Ealing, and Wm. Golding, Birt, secured the other two prizes for aged stallions. R. S. Fulton, Brownsville, showed a yearling stallion, which was the only one in its class. The judges awarded the sweepstakes for stallions to Graf Bremer. Brood mares were a nice class,

especially the first and second prize ones. The prizes for foals went to the colts of the same mares in reverse order.

The geldings and fillies shown were, many of them, of a very good stamp, and prove that all the best have not yet left the country. Prizes were given for matched pairs 16 hands and over and 15½ and under 16 hands. Adam Beck secured first for the former, and T. D. Hodgins, both of London, first for the latter section. The latter had also the 1st prize single carriage horse, all of them a very promising lot. G. W. Kennedy's mare, which won in the aged class, obtained the diploma for females. Other prize-winners were: T. Hardy Shore, C. Guest, P. Farrell, L. Hankinson, W. H. Guest, G. Butler & Son, W. Collins, G. Thompson, and R. R. McKellar.

Judges.—J. S. Coppin, Mitchell; T. Charlton, Duncrief.

COACH HORSES.—Four coach stallions represented the breed. S. P. Thompson, Woodstock, had Kaiser Wilhelm forward, which had won the previous week in Toronto, first in his class and sweepstakes, beating the well-known Ludwig. He was placed first, with the entry of the J. P. Fisher Horse Co., Brussels, second, Willis & Steinhazen, Dashwood, being third with Pasha.

SADDLE HORSES AND HUNTERS.—This was not a large class. Adam Beck won first and second on saddle horses, with R. Chambers, Woodstock, third. Mr. Beck also won first and second on heavy-weight hunters, and second on light-weight hunters, as well as the prize for high jumping. R. Chambers was first for light-weight hunters, and J. N. Sage, Nilestown, third.

PONIES.—This class, which always excites great interest among the young people, as well as among those of more mature age, was pretty well filled, considering that only two prizes were offered in each section. B. Jackson, J. B. Gerlach, and Col. Peters, all of London; Geo. Dobie, Glencoe, and D. W. Karn, Woodstock, were those who won red tickets, the latter for a pair of ponies. Other prize winners were: Alex. Robertson, B. Thompson, G. Dobie, N. Williams, and Dr. McWilliams.

Judge.—S. B. Fuller, Woodstock.

Cattle.

Specially reported for "Farming."

The number of cattle shown was greatly in excess of other years. In this year's exhibitions, both at London and Toronto, a very marked improvement was noticed in the number of the representatives of the dairy breeds, as compared with that of the beef breeds. The Shorthorns are usually out in greatest number, but this year, at Toronto, the Jersey entries were only some ten below those of the Shorthorns, while at London they were considerably over a half more, there being almost one hundred head of Jerseys on the grounds. In point of numbers, the Ayrshires stood third at Toronto of all the cattle breeds, and second at London; the Holsteins were fourth at Toronto, and about fifth at London. The rest of the breeds were well represented at London, both in number and quality.

SHORTHORNS.—Something like sixty representatives of this breed were upon the grounds. In the section for bulls three years old and upwards there were four entries, and first was easily awarded to H. & W. Smith's Abbotsford; second place was won by the roan bull, Nominee, owned by Capt. T. E. Robson, Hderston; and third went to T. Douglas & Son's Young Abbotsburn's Heir. Only three two-year-olds faced the judge. J. S. Smith's Caihness, a well-proportioned, even bull, that won third place at Toronto, was a clear first. Second and third went to George Dickie, Hyde Park, for Clinton Victor and Red Gunho. In the yearling section James Yule's Grand Gloster won first, and Duke, bred by John Davison and exhibited by W. Duck, was placed second, though he won first at Toronto. Third place went to Simmons & Quirie's Defiance. The calf section was a strong one, there being no less than nine competitors, and all very well brought out. First place went to H. & W. Smith's Royal Standard, a fine animal, of good handling qualities, but inclined to be a little too strong in the shoulder. Second place went to a very nice roan of Capt. Robson's, and third to a rangy roan, one of three shown by T. Douglas & Son. The diploma for best bull went to Abbotsford. The ring of cows four years old and over contained six animals, two of them being full sisters and out of the same cow as Abbotsford. First went to Simmons & Quirie's Mysie 41st, a ten-year-old cow, yet well preserved, well brought out, and, in spite of her years a very sweet cow. Second place went to H. & W. Smith's roan, Vanity. Many good judges would have reversed these two awards. Third went to Morgan & Muxtow's White Rose. In three-year-olds only three animals came out, but all were good. First place was easily won by A. J. Watson's Ivy Leaf, second went to T. E. Robson's Tulip Duchess, and third to Morgan & Muxtow's Mary Ann. Two-year-olds were an extra good section of only four entries. Simmons & Quirie's Daisy of Strathallan 12th, second at Toronto, was here placed first, with H. & W. Smith's Gowan second, and T. E. Rob-

son's Princess Lorne third. Yearling heifers were a capital section with six entries. First place went to Simmons & Quirie for a neat red heifer, Daisy of Strathallan 14th, closely followed by T. E. Robson's Mysie's Rose and H. & W. Smith's Freida for second and third places. H. K. Fairbairn had a very nice red heifer, who, many thought, would have come in for, at least, third place. Heifer calves were a splendid bunch of even beauties. Again the red ticket went to Simmons & Quirie for Elvira 21st, the blue to A. J. Watson for Princess Josephine, followed by H. & W. Smith's Frantic, for the yellow one. Best female of any age went to Simmons & Quirie for Daisy of Strathallan 14th. In the herd prize H. & W. Smith were easily first.

HEREFORDS.—There were three herds shown. Fleming & Co., Weston, had a very nice lot present, and their handsome representative of the breed, Young Pinkham, again won first in his class, and also carried off the sweepstakes for best bull of any age. Lady Fenn 7th won first in her section and sweepstakes. This herd also carried off the herd prize. Alfred Stone had also a number of nice animals, forward; his bull calves were real good animals, and secured first and second places. To this herd came the diploma for best four calves. The F. W. Stone estate showed a number of very fine animals.

AUERDEEN-ANGUS.—Wm. Stewart & Son, Lucasville, showed only part of their excellent herd, the rest being at Montreal, and secured first and third for two-year-old bulls with Harry of Willow Grove and Farmer of Willow Grove; also first for aged cows, and first for a nice heifer calf. Walter Hall, Washington, had a good bunch of cattle present, headed by the Toronto sweepstakes bull, which again swept the ring for best in his section and of any age. First for bull calf fell to him for a very neat animal. Mr. Hall won a large number of the first awards and sweepstakes for best cow and both herd prizes. James Buchanan had a number of very good cattle present, but they were not fitted for showing in the ring, and his aged bull, Lord Forrest, who had never before been beaten in the show ring, had to take second place on account of this. Hiram Jones, Oak Lodge, won first for yearling bull, and George C. Boulton took third for aged cows with Heather Blossom.

GALLOWAYS.—The only herd to the front was the well known one of A. M. & R. Shaw, Brantford, which was awarded first place in all the sections, and second for yearling and two-year-old heifers and three-year-old cow.

AYRSHIRES.—There was a very good showing of this breed, about eighty animals being on the grounds, and they were in very good shape. In the section for aged bulls, 1st place was won by Steacy's Carlyle of Lessnesock, and later he got the diploma for best bull of any age. In the two-year-old section four animals were brought out, Wm. Stewart & Son's Highland Chief, 1st at Toronto, was again placed 1st, with W. M. & J. C. Smith's Richard B. in 2nd place. In the yearling class eight animals came forward. First place was given to a very neat animal of Kains Bros. and 2nd to Steacy's Sensation, of Maple Grove. The section for bull calves brought out the largest ring of this breed. First went to W. M. & J. C. Smith, and to Kains Bros., and 3rd to R. G. Steacy. The female classes of Ayrshires at London are always large and strong. In the aged cow section there were twelve entries, making a strong ring of useful cows; 1st, 2nd, and 3rd places were given to R. G. Steacy. Twelve splendid animals lined up for 1st place in the three-year-old cow section. It was deservedly won by Wylie 2nd of Lessnesock, who was 1st and sweepstakes at Toronto, and was also awarded the sweepstakes at London. Two-year-old heifers were a large, strong class of twelve entries. First place went to Wm. Stewart & Son's Maggie Lauder. In yearling heifers, W. Nichol won 1st with a very well built and typical animal. The calf section was larger than at Toronto, and a good strong one throughout; 1st and 2nd places went to Wm. Stewart & Son.

HOLSTEINS.—There were only two exhibitors of the black and whites, but both put forward good herds. All the sections were not filled. R. S. Stevenson, Ancaster, won sweepstakes for best bull and best female. He got a good share of the red tickets, and the silver medal for best herd and diploma for best four calves went to him. A. & G. Rice, Curries, secured a number of first awards. They had a number of very useful animals in the show ring.

JERSEYS.—This was the banner breed of the show in point of numbers, and it attracted a great deal of admiration from the gentle sex. Messrs. B. H. Bull & Son, of Brampton, brought out their herd in good shape, but theirs was the only herd shown at Toronto that exhibited at London. There were over a dozen other breeders present, among whom should be mentioned chiefly Humpidge & Laidlaw, whose excellent animals won many of the coveted tickets. Col. John Peters, John Moore, E. Edmunds, John O'Brien, R. Gibson, and R. B. Smith, were also prize winners. All the sections for bulls were well filled, but the largest section was that for bull calves. The sweepstakes bull was Prince Frank, owned by Humpidge & Laidlaw. The cow classes were very large. Eleven aged

cows of evident good milking qualities faced the judge, and first place was given to a grand cow owned by Humpidge & Laidlaw. There were again eleven in the two-year-old class, and first place went to B. H. Bull & Son's Sunbeam of Brampton. In the yearling heifer class there were again eleven capital entries, first going to a very promising animal shown by R. Gibson. In the heifer class the competition was very keen, there being no less than thirteen entries. First went to W. T. Elliott, of Hamilton, for a very sweet heifer. Humpidge & Laidlaw received the award for best female and the herd prize, while that for best four calves went to B. H. Bull & Son.

GUERNSEYS.—There were only two exhibitors of this breed, so W. H. & C. H. McNish's well-known herd had it very much their own way, although Alex. Wallace, who had only one entry, won 1st place in the aged bull class, and sweepstakes for best bull. The Lyn herd won 2nd for aged bull; 1st for yearling and two-year-old; 1st and 2nd for bull calf; 1st, 2nd, and 3rd for cow four years old; the same for three-year-olds, yearlings, and heifer calves; and 1st and 2nd for two-year-old heifers. The sweepstakes for best cow went to the Lyn herd, all the two herd prizes.

GRADES.—A goodly number of grades were present. Among them were a number of Jerseys, very fair indeed, but it looked as though they were hardly noticed. If dairy grades are to be shown successfully they should have a class by themselves, or else be judged for dairy points. J. Yule, Elder's Mills, had some very choice animals present, and carried off the diploma for best female. Messrs. J. Rennie, Wick; H. K. Fairbairn, Theford; and Frank Whetter, Pottersburg, were also prize winners.

FAT CATTLE.—A fair number of these were present, and the competition was strong. J. Rennie, Wick, secured first place for a well-formed thick-fleshed animal in the class for cows under four years old. He also won first place for a yearling steer and a steer calf. J. Yule won first place in the four-year-old class. H. & W. Smith, Hay; J. Oke & Sons, Alvington; T. Douglas & Sons, Strathroy; Frank Whetter, R. Whetter, Pottersburg; and W. J. Thompson, Hamilton, were also prize winners.

Sheep.

Specially reported for "Farming."

The sheep exhibit was much larger than had been expected, and it was found necessary to erect a tent to accommodate the overflow. Not all the exhibitors at Toronto were present, as some had gone to Montreal, but enough had come to make an excellent display, and they were largely reinforced by local exhibitors and others from a distance.

LINCOLNS.—These were shown by Gibson & Walker and T. E. Robson, Ilderton, as at Toronto, but with only part of the flock of the former present. The first-named exhibitors won the larger number of prizes.

Judge.—E. Parkinson, Erasmos.

COTSWOLDS.—John Park, Burgessville, secured the greater amount of the prize money awarded in this class. Heber Rawlings & Son, Ravenswood, did very well, as did T. Hardy Shore, Glanworth, who met his opponents here for the first time, the latter winning first both on ram and ewe lambs, and first on pen of five lambs, while the former carried off first for pen of five yearlings. Robt. Morgan, Kerwood, and Malcolm McArthur, Lobo, were also exhibitors, the first named being third on a good pair of shearing ewes.

Judge.—W. G. Laidlaw, Wilton Grove.

LEICESTERS.—There were three exhibitors of Leicesters—James S. Smith, Maple Lodge; Whitelaw Bros., Guelph (both of whom had come fresh from their winnings in Toronto); and John Laidlaw, Wilton Grove, who had a few head in the pens. The prizes were pretty equally divided between the two first-named firms, Mr. Smith winning the flock prize and the diplomas for rams and ewes.

Judge.—J. C. Snell, Snelgrove.

OXFORD DOWNS.—With the exception of a few head which were entered by Andrew Elliott, Pond Mills, Peter Arkell, Teeswater, had no competition in this class. Mr. Elliott had, among other entries, an excellent ram lamb, which won second.

SHROPSHIRE.—As John Campbell, Woodville, was present with his herd, which had carried everything pretty well before them in Toronto, it was expected that he would do equally well here, and the result proved the prediction to be true, and his prize-winners were even a little better than there, as will be seen by a comparison of the prize list. D. G. Hanmer & Son, Mt. Vernon, were, however, well up, and not a few thought that they should have won first on ewe lambs. As it was, they won the special premium donated by the American Shropshire Registry Association for flock of four lambs bred and owned by the exhibitor. W. H. Beattie, Wilton Grove, showed his Toronto flock, reinforced with others, and cap-

tured third prize with his aged rams. James Cooper & Son, Kippen, had a lot of sheep of good quality present, and won fourth for aged rams and aged ewes. R. Gibson, Delaware, and W. E. Wright, Glanworth, also exhibited, the former being 3rd for aged rams.

Judge.—T. Whitesides, Innerkip.

SOUTHDOGS.—John Jackson, Abingdon, and George Baker, Simcoe, did not bring their flocks to London, and so A. Teifer & Son, Paris, and T. C. Douglas, Galt, were left to fight it out between themselves. The former won the largest amount of prize money, but the latter won the diplomas for rams and ewes, as well as first for pen of five yearlings.

DORSET HORNED SHEEP.—R. H. Harding, Thorndale, had very slight competition in this class. His sheep, however, well deserved their success. R. Shaw-Wood, London, won a few prizes.

Judge.—J. C. Snell, Snelgrove.

MERINOS.—Both pen prizes for Merinos were sent to the flock of W. M. & J. C. Smith, Fairfield Plains, who were the only exhibitors.

FAT SHEEP.—John Laidlaw, Wilton Grove, was judge of fat sheep, and placed the tickets as follows: Two fat wethers—1st, W. H. Beattie, Wilton Grove; 2nd, Gibson & Walker, Elderton. Two fat ewes—1st, D. G. Hamner & Son, Mount Vernon; 2nd, John Campbell, Woodville. Six fat sheep for shipping—1st, W. H. Beattie.

Swine.

Specially reported for "Farming."

The new live stock building proved insufficient to accommodate all the swine, and some were to be found in a small shed and some hastily constructed pens outside.

YORKSHIRES.—J. E. Brethour, Burford, had an excellent display of these large white pigs, and may be said to have swept the class. J. Featherston, Streetsville, had only a small exhibit, as his best pigs had gone to the Montreal Exhibition. J. Acland, Delaware, won third on sows under the year, and J. Hoard & Son, Parkhill, second on boars under six months.

Judge.—T. Whitesides, Innerkip.

TAMWORTHS.—J. C. Nichol, Hubrey, was a prominent exhibitor in this class, winning the bronze medal for sow and four of her offspring, first for boars under the year, first for sow under six months, with several second and third prizes. W. T. Elliott, Hamilton, won with aged boars as he did in Toronto, and was also first for sows under the year. David Carroll, Ealing, won the herd prize, and Mrs. A. Hall, Lambeth, first for aged sows. J. Hoard & Son, Parkhill, secured first for boars under six months, and other prizes. C. Fabner, Crediton, also got a share of the prize money.

Judge.—S. Butterfield, Windsor.

CHESTER WHITES.—There was not such a large number of Chester Whites shown as we have sometimes seen. R. H. Harding, Thorndale, had some well-bred ones, and won, among other prizes, first for the pen and the medal for sow and four of her offspring. F. Row, Belmont, had two choice youngsters, a bar and a sow, which headed their classes. W. M. & J. C. Smith, Fairfield Plains, had the winning aged sow, and W. E. Wright, Glanworth, the second prize young boar under six months.

Judge.—T. Whitesides, Innerkip.

DUROC-JERSEYS.—Tape Bros., Ridgetown, were very strong in this class, their only opponent being Christian Fabner, Crediton, who had but a small entry of six head.

Judge.—S. Butterfield, Windsor.

POLAND CHINAS.—W. M. & J. C. Smith, Fairfield Plains; Meredith & Dunlop, Thorncliffe; Wesley W. Fisher, Benmiller; and C. Fabner, Crediton, were the four who had Poland Chinas present. The two latter did not secure any of the prizes, the greater amount of which went to the first mentioned exhibitors, with Messrs. Meredith & Dunlop a good second.

Judge.—S. Butterfield, Windsor.

BERKSHIRES.—The show of Berkshires was larger than of the other breeds. T. A. Cox, Brantford, was the strongest exhibitor in the class. He won first on aged boars with the yearling purchased from J. G. Snell in Toronto, where it also won first. He was particularly strong in sows. Wm. McAllister had several head, including the first-prize boar under the year, which he had bought in Toronto, where it won in its class. His pigs were a good smooth lot. Malcolm McArthur, Lobo, won prizes on both of his two entries. John Acland, Delaware, and Geo. Hill, Delaware, were also prize winners. Christian Fabner, Crediton, had one entry.

Judge.—Thos. Teasdale, Concord.

SUFFOLKS.—As will be seen by the prize list, J. Featherston had it nearly all his own way with Suffolks, J. Hoard & Son, Parkhill, not being out in strong force.

Judge.—S. Butterfield, Windsor.

FSSEX.—Only two pairs of this breed were shown, both by J. Featherston, Streetsville, to whom first and second prizes were sent.

Poultry.

Specially reported for "Farming."

The poultry display was a grand success. The association have erected a new building to take the place of the one destroyed by fire last year. It is large, well ventilated, and well lighted. The coops are built after the fashion of those belonging to the Ontario Poultry Association, with the exception that they are placed permanently in the building.

The genial and obliging superintendent, Mr. John Saunders, London, was again in command, and everything passed off pleasantly and well. The birds were all carefully looked after.

Light Brahmas were rather small classes for London, and the quality was not as good as usual. Dark Brahmas were very good, the Toronto winners winning here.

Cochins were very nice classes indeed. In Buffs honors were divided between Mr. Geo. G. McCormick, London, and Dr. A. W. Bell, Toronto, while the latter did well in Partridge. Messrs. McNeil and Millard, London, showed some nice White and Black.

Leghorns were out in force, and the quality was of a high order.

Minorcas were rather small classes, but the quality was of the usual high order seen at London. The Rev. W. E. Scott, Ridgetown, won the bulk of the premiums.

Burred Plymouth Rocks were very nice birds indeed, particularly the winners. Whites were rather small in numbers.

Turkeys, geese, and ducks made very large entries, and the quality was much above the average. For the first time in a Canadian show I noticed some English gray-back geese. They should be cultivated more, as they mature early and take on flesh rapidly.

An interested spectator on Thursday of the second week was President Mills, of the Ontario Agricultural College, Guelph. The president is taking a lively interest in the poultry interests of the country, which promises well for the future of the poultry industry.

There were several incubators and brooders on exhibition, and these always attracted a crowd of sight-seers.

The Dairy Display.

Specially Reported for "Farming."

The new dairy building is a credit to the association, and the cold storage facilities for the butter met with the hearty approval of the exhibitors. The building was very well filled with exhibits. The number of entries of dairy butter was greatly in excess of last year's entries; the quality on the whole was good, but the range between the poorest and the best was quite wide. The entry of creamery butter was somewhat larger than last year, and the quality very good.

In the cheese classes there were in all 213 cheese; of these 95 were white, the rest were colored. The exhibit was, perhaps, not quite up to that of last year in point of numbers; but there was, however, a great improvement in the finish of the cheese. The quality was good, but there was a little lack of flavor, due, no doubt, to the season. J. S. Pearce & Co., London, had a very useful exhibit of dairy appliances in one part of the building. They showed a splendid line of hand cream separators at prices within reach of the dairy farmer.

The Collection of Fruit.

Owing to the early season the display of fruit was one of the best ever exhibited at the Western Fair. The display of fall apples was very good, and the many highly colored varieties attracted a great deal of attention. There was a large collection of Pippins, and the winter apples were out in force. There was a superb collection of pears and plums.

Vegetables and Grain.

The Agricultural Hall was well filled. Splendid exhibits of vegetables and roots occupied the space on the sides. There were some very large mangolds shown, but the turnips were nothing extra. The grain entries were not as satisfactory as they have been other years. The exhibit of wheat was only fair; barley was extra good, but oats were a light sample this year. The exhibit of Dent corns was not as good as might have been expected, as there promises to be an excellent crop of corn this year. The exhibit of Flint corn, however, was all that could be desired.

Honey Exhibit.

The space in the centre of the Agricultural Hall was occupied by the honey exhibit. Splendid exhibits of honey in the comb, in the liquid, and in the granular form were made by John Miller, London; William Coleman, Birt; and John Newton, Thamesford. Smaller exhibits were made by W. A. Chrysler, of Chatham, and Mr. Atkins, of St. Marys.

THE QUEBEC PROVINCIAL EXHIBITION.

Specially Reported for Farming.

The fifth Provincial Exhibition of the Province of Quebec was held at the grounds of the Montreal Exposition Company, near Mile End, Montreal, from September 11 to September 19. The grounds are situated near the base of the mountain, adjoining part of "Mountain Park." The main building was burned down early in August, and the new substitute was hurriedly built in three weeks by the directors. The loss was considerable, and detracted from the success of the fair, because many former exhibitors did not find space in the new building. The Exposition Company is formed on a sound financial basis, and own the grounds and buildings. They have not the active support of the City of Montreal which is accorded to the officers and directors of the Toronto show by the city fathers and citizens of Toronto. The support of the citizens is much needed, and must be obtained before the exhibition can be made the success it should be.

The exhibit of horses was fair, that of cattle, sheep, and swine good. The poultry exhibit was excellent. Manufactures and arts were below par, and there were few exhibits of farm machinery, though several manufacturers showed specimens of their products. The show in front of the grand stand was good in some respects, but was not largely patronized by the public. The fancy drill and riding of the Royal Canadian Dragoons was much admired. There were numerous side shows and merry-go-rounds, a wild beast and a wild west show, big snakes, and other attractions too numerous to mention—some good,

and others scarcely suitable for adoption by the managers of a Sunday school picnic.

Horses.

Clydes were out in force. D. & O. Sorby, Guelph, had *Grandeur*, considered by many good judges to be the best Clyde in Canada, and all the rest of their lot from the Toronto show. James I. Davidson & Son, Balsam, and Robert Ness, Howick, had good animals. D. & O. Sorby won the medal for best Clyde bred in Canada.

In the *Heavy Draught* class Dr. Craik got first for three-year-old filly, first and second for mares, and first for a span. Watt Bros., St. Louis Station, got first for a two-year-old filly. In the light class McGerrige Bros., Ormstown, had some good ones, and the team prize went to John McClery, Allan's Corners.

There were no *Suffolks* and no *Shires* shown.

Percherons were not so well represented as they have been in years past. First prize and medal went to Thomas Dobbie, Lachute. First for three-year-old went to Deaf and Dumb Institute, Mile-End, Montreal. The Institute also won for best mare and first for a span of b'acks. First prize for *Percheron* bred in Canada was won by Joseph Beaubien, Outremont.

In *Thoroughbreds* there was a good string from the stables of J. P. Dawes, Lachine, Que. This lot was headed by Redfellow, winner of the first prize medal, a 16 hands bay, by Longfellow, by imported *Laington*.

Waterproof, the two-year-old, was a most promising entry, but was injured by a kick, breaking his face bone. The three-year-old filly, Rapid Belle, 15.3, was winner of the Queen's plate for 1896 for the province of Quebec. She is a rangy bay with white blaze on face and a very little white on her feet. She has good quarters and powerful muscular thighs. She is the oldest of the fillies by Redfellow. The two-year-old, St. Lawrence Belle, is very promising; her long quarters and hocks, well let down, indicate speed. The whole of this lot are in charge of Harry Maunder, stud-groom for Mr. Dawes, who brought them out in good shape. J. Newman, Lachine, was first for a fine big mare, and also first for her foal. She won the sweepstakes.

In the *Standard Bred Trotters* J. P. Dawes had also a winner in Pachelet, 2.32, sire Epaulet, 2.19, dam Mary Patchen, a granddaughter of G. M. Patchen. Pachelet is a well-formed bay and a good actor in harness. The Trappist Fathers of Oka got second place in this class. D. & J. Greig, Allan's Corners, Que., had a yearling filly and a mare and foal that were good enough to win. The yearling is by Pure Wilkes. Geo. Jordan, Montreal, of Dominion stables, had the winning three-year-old.



Mr. S. C. Stevenson, Montreal,
Manager and Secretary of the Montreal Exposition Company.

In *Hackneys* Mr. Cochrane's Hillhurst Farm lot got all the honors. The pick of the lot was the colt, Barthorpe Performer, a dark chestnut with three black and white hoof-heads. He is half-brother to Langton Performer, being by Garton Duke of Connaught. He is a wonderful goer, has a neat head, neck not over long, good back and very well sprung ribs, though not very deep. He has a fine, lofty stride and good hock action. If he continues to improve he will be more than noticed at the next New York show. In the female classes Princess Dagmar was a clear first, holding the same position she won at Toronto. The other prizes nearly all went to Hillhurst Farm. A yearling colt, out of the celebrated mare, Miss Baker, and by Hayton Shales, took the eye of Hackney experts.

In the *Roadsters* there were some good ones. The special gold medal for the best roadster, horse or mare, over 15½ hands, went to T. D. Buzzel & Co., Montreal, for a chestnut mare with white hind feet, bred near Waterloo, Ont. She has beautiful lines, and a record of 2.33. Mr. Buzzel had twenty-six horses on the ground, most of them high steppers, saddle and carriage horses. He is partial to a dash of the thoroughbred in his stock, and prefers his harness horses bred from half-bred mares of a coaching type crossed with good Hambletonian sires. He thinks this a better cross and more likely to give good staying powers than the thoroughbred cross on the standard-bred mare. His mare, Red Silk, got first in the light carriage class. Elmira Girl came in as a 15-hand cob mare. She is a well-rounded bay with three black and white feet, got by O.K., out of a mare by Chicago Volunteer. Rock Farm Beauty is a track mare by Clonmore. She can show a 2.34 gait and is of the bluest trotting blood, closely related to Maud S. My Beauty is a cob of the old French type, bred on both sides from the importations made in the days of the old régime. Pretender is an Irish-looking dark gray, sleepy on the halter but lively in harness.

In *French Coachers* Robert Ness had an outstanding winner.

In *Hunters* B. J. Coghlin, Montreal, had the winners in the heavy weight class. The bay mare Hazeldean, 16 hands, five years old, by Inspector, is an upstanding mare with short back and powerful quarters. The imported brown gelding, Sarsfield, is a big horse with deep chest and high withers. The brown gelding, Kidare, five years, bred by John Carter, Guelph, is by the celebrated Iconoclast. He looks like the making of a useful hunter.

The *French Canadian class* was not as largely represented as one could wish. A studbook has been formed under the management of Dr. Couture, of Quebec, and all horses shown had to be registered. The animal that was nearest the type of the old French horses was too late to be shown in the class, or was not of the pure breed, but very much like the splendid teams that were brought to Western Canada thirty years ago—thick, chunky, muscular horses, with short legs and good action. The winner in the Canadian class was the black horse, Brilliant, bred in Yarenes. He is neat but not big, with clean legs, good head and eye. Has been a winner of many prizes, and is now owned by E. Boucher, St. Madeline, St. Hyacinthe.

In *Ponies* most of the prizes went to R. T. McGibbon, Montreal, who had a well brought out lot.

The judging was very satisfactory. In *Hackneys* and in the heavy draughts it was well done by Alex. Galbraith, Janesville, Wis., U.S., the secretary of the American Clydesdale Studbook, while the light horses were judged by Dr. Grenside, V.S., formerly professor in the Agricultural College at Guelph, now of Mount Morris, N.Y.

Cattle.

In the beef breeds many of the winners at Toronto were shown, and amongst them there was considerable change in the prize list. James Leask, Greenbank, got nearly all the *Grade* prizes, and won the gold medal for best five beef cattle for export.

In *Short horns*, J. & W. Russell, Richmond Hill; James I. Davidson & Son, Balsam; and J. & J. Crerar, Shakespear, won the herd prizes in the order named. J. & J. Crerar won for aged bull, James Leask for two-year-old, R. & S. Nicholson for yearling, and James I. Davidson & Son for calf.

Herefords were represented by H. D. Smith, Compton, who got first and second for herd, with D. M. Wilson, Moe's River, third.

Polled Angus men had part of the Toronto exhibit down with the herd of W. W. Ogilvie, Lachine Rapids, added. This latter herd contains many of the animals formerly owned by Dr. Craik, Montreal, some of the choicest blood ever brought from Scotland. James Bowman, Guelph, was first for best herd; D. M. Wilson second; and W. W. Ogilvie, Lachine Rapids, third. For young herds R. E. Pope, Cookshire, was first, and Wm. Stewart & Son, Lucasville, Ont., second. In this class there was some grumbling because a dehorned cow got a place in the prize list.

Galloways were shown by D. McCrae, Guelph, and John Sibbald, Annan. The latter lost a point for his yearling bull, but gained first for his aged cow. The first herd prize went to D. McCrae. The judge, Ervin J. Bruce, Ostego county, New York, reported: "I find this herd show the best breeding of any herd I have ever judged."

There were no prizes offered for *Devons*, but W. J. Rudd showed his herd from Eden Mills, Ont.

Ayrshires.—The feature in the show of cattle at Montreal is Ayrshires. Nowhere on this continent can so many first-class animals of this breed be brought together. This year there was a fine lot out; not so many as last year but of excellent quality. The judging in the dairy breeds was done by F. S. Peer, of Mount Morris, N.Y. The veteran prize winning cow, Nellie Osborne, owned by D. Drummond, Petite Cote, was again first. This beautiful cow carries her years well, and her son, Silver King, again headed his class, and won also for best bull of any age. His get and near relatives took most of the prizes in the younger classes. In the herd prizes, D. McLachlan, Petite Cote, was first, D. Drummond, Petite Cote, second; Dawes & Co., Lachine, third, followed by James Johnston, Como; James Drummond, Petite Cote; R. Robertson, Compton; and W. Wylie, Howick, Que. For young herd bred by the exhibitor, and all to be under two years old, D. Drummond was first, R. Robertson, second, and James Drummond, third. In two-year-old bulls Wm. Wylie had first and second. Lord Stirling, out of Lady Stirling, by Silver King, was first in this class. For yearling bull R. Robertson was thought to have a clear winner in Matchless, dam Nellie Osborne, sire, Glencairn, but he had to be content with second place, first ticket going to John Hcwden, St. Louis de Gonzague, Que. D. Drummond had first for bull calf by Glencairn. For young calves under six months, both in the male and female classes, D. Benning, Williamstown, Ont., swept the lot, taking first, second, and third in one section, and first, second, and fourth in the other. For three-year-old cow Dawes & Co., Lachine, were first with Tina 11. of Nether Craig (imp.), bred by John Cochrane, Kilmarnock. They had also second for cow, Tibbie of Fulton, and second for her bull calf by Rosewood. In two-year-old heifers, D. Drummond had first and third for Baby Ruth and Laura of Burnside, both daughters of Silver King; and another year younger got second place in her class. Jas. Johnston, Robertson Farm, Como, got first for yearling heifer Forget-me-not, by the Barrcheskie bull Prince Henry, out of Brown Berry (imp.) He had also second for heifer calf out of Katie of Robertson, bred by exhibitor. Jas. Drummond, Park Hill Farm, Petite Cote, had a prize for the three-year-old cow, Lily of Hardinstone and, bred by himself, and won several other prizes.

Canadian Cattle, for which a herdbook has been established, made a good show. They are native Canadians, bred from importations from Normandy and Brittany in the early days. They are brown-black in color, of a Jersey type, and are good milkers. Arsene Denis, St. Norbert, won both for exhibitors' herd and for breeders' young herd, with M. Demers, St. Eustache, second.

In the class for *Jerseys or Alderneys*, J. H. Smith & Co., Highfield, Ont., and Wm. Rolph, Markham, Ont., were exhibitors, and won the herd prizes. For young herd bred by exhibitor W. A. Reburn & Co., St. Anne de Bellevue, came first, and R. H. Pope, Cookshire, Que., third. Wm. Wicks, New Toronto, Ont., won the medal for best bull with a yearling, while J. H. Smith had the best cow.

Guernseys made a fine display. Hon. Sydney Fisher, M.P., the new Minister of Agriculture at Ottawa, won first for breeders' young herd. It contained first-prize bull calf, first-prize yearling heifer, and second and third prize heifer calves. J. N. Greenshields, Isaleigh Grange Farm, Danville, Que., was first for aged herd, with Wm. Butler & Son, Dereham Centre, Ont., second.

Normandy Cattle were shown by Joseph Beaubien, Outremont, Que.

In the above dairy classes the great bulk of the exhibits were from the Province of Quebec, but for *Holsteins* there was only one entry from the Province, the winners coming from Ontario, as follows: A. Hoover, jr., Emery, Ont., first for herd; G. W. Clemons, St. George, Ont., second; and C. J. Gilroy & Son, Glen Buell, third.

Sheep.

The sheep classes were judged by experts, who began scoring without any proper scoring cards. The result was that in *Cotswolds*, in the aged ram class, the sheep were out about an hour and a half before the decision could be made. Then a blocky, square, under-sized sheep got first, that was too small to be chosen by an ordinary breeder. There was a good deal of growling from the sheep men, and afterwards things went faster and better. C. T. Garbutt, Claremont, was first for pen, with Chas. Robinson, Odelltown, first for ram lamb and first for Quebec-bred pen. There were a number of well-bred *Cotswolds* shown from Quebec, but they were not in show

shape, not nearly in what would be thought good breeding condition in Ontario.

Lincolns were well represented by Gibson & Walker, Denfield, Ont. C. Ouimet, St. Francois de Salles, Que., got first for aged ram, and first for pen bred in the Province of Quebec.

In *Leicesters*, John Kelly showed his flock, and got the honors, D. Baxter, North Georgetown, Quebec, getting second place, and H. Lamarche, St. Esprit, third.

In *Oxford Downs*, Smith Evans, Gourlock, Ont., got the prizes, the only other exhibitor being E. C. Brosseau, with one ram lamb.

Shropshires made a good show. Hillhurst Farm had the best of the prizes, with Isaleigh Grange Farm a close second. F. S. Wetherall, Cookshire, Que., had first for ram lamb. Robert Roy, Ormstown, Albert Cartier, St. Paul l'Hermitte, Que., and the Trappist Monks, of Oka, had also some good Shropshires.

Southdowns were shown by John Jackson & Sons, Abingdon, and R. Shaw & Son, Glanford Station, and the Quebec pen was won by Guy Carr, of Compton.

Marinos were only shown by R. Shaw & Son, while the Hillhurst Farm had the best *Dorset Horns* on the ground.

Swine.

The most of the prizes went to Ontario stock in this department. The judging was done by James Main, of Milton.

Improved Yorkshires were a fine class, and had a lot of Quebec winners—J. H. Lloyd, St. Lin; J. H. Greenshields, and Frere Augustin College, St. Laurent. Jos. Feathers, one, M. P., Streetsville, got the lion's share with a lot of splendid animals. He also got most of the prizes in the grouped classes for Large Yorkshires, Victorias, Essex, and other large breeds. Samuel Mann, Terrebonne, Que., had a fine sow in this class for which he got a prize.

For *Chester Whites* H. George & Sons, W. Butler & Sons, Dereham Centre; and D. DeCourcy, Bornholm, all had very good animals, and pretty well divided the prizes. A. Blunt & Son, Krowlton, and A. C. Brosseau, Brousseau Station, got first and second for pen bred in Quebec.

Duroc Jerseys were championed by W. & H. Jones, Mount Elgin, Ont., W. Butler & Sons, and H. George & Sons.

In *Poland Chinas* W. H. Jones, Mount Elgin, was the only exhibitor, and H. George & Sons, Crampton, had a like distinction in *Tanworths*.

In *Berkshires* George Green, Fairview, had the best of it. For the Quebec-bred pen A. Muir, Huntington, Que., was first. Albert F. Dawes, Lachine, and R. J. McNeil, Ormstown, had also good animals. J. H. Lloyd, St. Lin, Que., got second for a young boar, and Ed. Kenny, St. Vincent de Paul, Que., got third for an old one.

Suffolks were shown by Robert Dorsey, Burnhamthorpe, and Jos. Featherstone, M. P., Streetsville.

Poultry.

Poultry were out in force. William Main, Milton, C. J. Daniels, and H. B. Donovan, Toronto, were from the west. Oldrieve & Wilkinson and W. H. Reid, of Kingston, also Wm. Osborne, A. W. Garrett, and Cossitt & Co., Bruckville, were large exhibitors from eastern Ontario. The birds from Quebec were many and good, Archie Thompson, Allan's Corners being one of the largest exhibitors. The poultry show was good, and well patronized by the public.

General.

The exhibit of plants and flowers was very creditable. The groups were artistic and beautiful, and the orchids were pretty and unique. One commendable feature was the very large number of plants from the public schools. In the spring pot plants of one variety are issued free to all the scholars who wish to compete. These plants are grown in the schoolrooms, each pupil caring for his own under the direction of the teacher. Some two hundred of these were shown, and prizes were awarded to the best in each school, as well as special prizes for the best in the exhibit.

Roots were a splendid show, and some well known Ontario exhibitors had to be content with minor places in the prize list. There was a very large lot of native-grown tobacco, said to be excellent in quality.

The horticultural department was managed by the Montreal Horticultural Society and the Fruit-Growers' Association of the Province of Quebec, and was one of the best and best-managed departments of the show.

SEPTEMBER MEETINGS.

Gathering of Live Stock Breeders.

HELD TO MEET THE HON. MR. FISHER, MINISTER OF AGRICULTURE FOR THE DOMINION.

DISCUSSION OF QUARANTINE REGULATIONS, RAILROAD RATES, AND QUESTION RELATING TO CANADIAN LIVE STOCK RECORDS.

Over 200 representative farmers and leading stockmen assembled in the tent of Mr. F. W. Hodson, Superintendent of Farmers' Institutes, and secretary of the Dominion Sheep, Swine, and Cattle Breeders' Associations, at the Toronto Industrial Exhibition, Tuesday, Sept. 8th, to meet the Hon. Sidney Fisher, Minister of Agriculture for the Dominion of Canada, and lay before him matters relating to the present quarantine regulations, railroad rates, and the non-acceptance of Canadian live stock records by the United States authorities. The Hon. Mr. Dryden, Minister of Agriculture for Ontario, was also present. The chair was occupied by Mr. John I. Hobson, of Mosborough, president of the Dominion Cattle Breeders' Association.

THE CHAIRMAN'S ADDRESS.

MR. HOBSON, in his opening address, made the following remarks: I have been asked to preside at this meeting, and I have pleasure in doing so. It is held for a double purpose. It is to give our new Minister of Agriculture for the Dominion of Canada an opportunity to meet a number of representative farmers and stockmen, and also to give them an opportunity of making themselves acquainted with the Minister. Secondly, it is to bring before the honorable Minister grievances that we think should be remedied. In the first place, I would say to

Mr. Fisher that it is a matter of great satisfaction to farmers and others who take an interest in agriculture to know that we have at last for Minister of Agriculture at Ottawa a gentleman who is not only a practical farmer, but who is also a man of scholastic attainments; and hence we have every confidence in believing that he will bring about legislation that will be of advantage to the agricultural interests of this country. Whatever different views the farmers of Canada may hold in respect to politics, it is no doubt a good omen to them that the Premier of the Dominion has seen fit to call to the cabinet as Minister of Agriculture a man possessing the undoubted qualifications of Mr. Fisher, and we believe it will be of the greatest benefit to the farmers of this country to have a practical man in charge of the Department of Agriculture in the Dominion Government. I am almost sorry that the honorable the Minister of Agriculture for Ontario is present, as he may think that I am intending to flatter him; but I have no hesitation in saying that it is owing to Mr. Dryden's practical knowledge and the close interest he takes in all matters pertaining to agriculture in our province that a large share of our advantages and of our prosperity as farmers is due. Since he has come into power he has done not a little to raise farming up to a higher level than it was before. When we consider what he has done we are safe in saying that by his efforts millions of dollars have been added to the wealth of our land. When, therefore, we see that we have a gentleman of Mr. Fisher's attainments occupying a similar department in Ottawa, and showing in every way his earnest desire to master the intricacies and details of his department, we may reasonably expect that the same good results will follow as regards the wider field of agriculture in the Dominion of Canada. In common with the many representative

farmers you see here, I deem it a great pleasure, sir, to greet you in this metropolitan city of the west, knowing that you are here to learn the wants and grievances of farmers, so that when you return to your office at Ottawa you may have a better knowledge of how to deal with them.

QUARANTINE REGULATIONS.

I will now, gentlemen, take up those matters which I think it important that we should bring before the Minister of Agriculture. I may say, Mr. Fisher, that the matters which we wish to bring before you are, first, quarantine regulations, second, railroad rates, and, third, questions pertaining to our Canadian live stock records. The matter of quarantine regulations has been pretty fully discussed by the leading stockmen of the Dominion, and I believe that they are pretty thoroughly of the opinion that the quarantine regulations between the United States and Canada should be greatly modified or wiped out altogether. Most of us are well aware that there is a great demand for our stock on the other side, and also that our herds would be benefited by a greater freedom in the importation of thoroughbred stock from there and elsewhere. It is held by those who have gone into the matter fully that there are no infectious diseases either in the United States or in Canada. It is felt, therefore, that the time has come when, if we wish to keep up our herds to that high perfection and worth that have always characterized them in the past, when we have swept the field before us wherever our stock has been shown, we must have recourse to the importation and infusion of new blood, and this without too much difficulty caused by unnecessary regulations. If we are to sustain our high standard of the past we must have greater freedom in the importation of animals, both from the old country and from the United States. The importation of cattle is now simply impossible, owing to our quarantine regulations. What we want is to have these modified. We believe that where an importation is made, and it is ascertained that there is no infectious disease in the locality where the importation comes from, and if on examination the cattle themselves are shown to be free from disease, then these guarantees should be sufficient to satisfy the authorities of our country, and permit the immediate passage of the importation through the quarantine.

TRANSPORTATION AND RECORDS.

Now, secondly, with regard to transportation, I would say that early last spring I was one of a deputation that was appointed to wait upon the railway authorities. We found the G.T.R. very ready to agree to our demands. I regret, however, that I have been informed by one of our prominent shippers that the railway authorities have gone back on their promise and are again giving us trouble.

Thirdly, there is the matter of records. Our live stock records are not accepted on the other side of the line. It is well known that the present records of this country are of a higher standard and of greater value than those of the United States, but notwithstanding this they are not accepted on the other side, and our breeders have to register over here or be shut out of the country. This regulation is, without doubt, an injury to Canadian live stock breeders.

MR. McCRAE'S ADDRESS.

MR. D. McCRAE, Guelph, being called upon, said as follows: In speaking of our quarantine regulations I may say that in the past we used to have a good and mutually profitable trade in purebred cattle with the United States. Then came from the continent of Europe into the United States pleuro-pneumonia. It spread from the Eastern seaboard to the West, and was for a time rampant in Chicago and Cook county, Illinois, and stringent quarantine regulations had to be adopted by us to keep Canadian herds free from it. But our stock, having a clean bill of health, were admitted to the United States, and also to the inland markets of Great Britain. We have, however, lost these markets. Our cattle are now slaughtered at the port

of landing in Britain, and the United States have placed a ninety days' quarantine against us. The United States quarantine results in a loss both to ourselves and to our American neighbors. We have good healthy stock to sell to them, and we also want an interchange of blood, which we may buy either in the United States or in Britain. This change of blood is of advantage to nearly all breeders, and we ask that the quarantine regulations be so modified as to admit into Canada animals from both the United States and Britain, purebred for breeding purposes, with only such restrictions, as may be necessary, and that, on the other hand, our animals be admitted in the same way into the United States. A veterinary surgeon's inspection and certificate that the locality, the herd, and the individual animal are free from disease, with another inspection at the frontier, should, under present conditions, be regarded as sufficient. But, no matter what the regulation is, there should be the means for it to be promptly modified and made more stringent at any time if outbreaks of dangerous diseases should occur.

We have heard a good deal about preferential trade with Britain. If steps are taken in this direction we may very well ask that our live cattle be included in such an arrangement, and that they be allowed free access to the British markets.

Regarding the tuberculin test there is a difference of opinion as to whether or not it is a safe one. Meantime it may be well to dispense with it altogether. The public have been alarmed over much regarding tuberculosis as affecting the public health. Professor Nocard, of France, has shown that there is no danger from eating the cooked flesh of tuberculous animals. There is more danger from milk, but even then the danger occurs only when it is used as a sole food, and there is none to those who use merely a glass or two at a meal. The general public, therefore, have no cause for alarm because this old and common disease has been discovered in Canada.

The most important thing of all, however, is to keep up the high standard and good quality of our pure breeds of cattle. This is a matter closely affecting the wealth and welfare of our country. We must have new blood to do this, and we, therefore, ask that all needless restrictions be swept away, and that every facility be given us to find markets for our surplus animals, and also to bring into our country the animals we wish to buy from our neighbors in the United States.

MR. JOHNSTON'S ADDRESS.

MR. ARTHUR JOHNSTON, of Greenwood, being called upon, said: The railway people have argued that the shippers of live stock have made complaints without cause. On the other hand we have always been sure that we have had to pay excessive rates on shipments, especially on small lots. When business was good we did not complain; but business is now cut up so much, and everything is brought down to such a low, rock bottom basis, that we do not feel like paying a single farthing more than we think is rightly due. One of the principal grievances of shippers of small lots of stock at present is, that if we sell a bull for, say, \$40 we have to pay the half of a second class rate for a man to go with him, whether the man goes or not. I have paid for the man when I have not sent him. While this is a grievance that we feel must very soon be done away with, we also think that the charge on single animals is very greatly in excess of what should be charged for their weight or for the space that they occupy; and we think that these excessive rates ought to be modified. We have argued with the G.T.R. people that they are nearly as much interested in the distribution of these animals as the breeders are, and we believe that if the matter was forcibly pressed upon them by the proper authorities we should be granted the relief that we seek. Mr. Reeves, the general freight agent of the G.T.R., agreed with our opinion regarding the interest that the railways have in the distribution of thoroughbred stock, and stated that at one time the G.T.R. had carried seed potatoes through Canada

without charge. Mr. Reeves is almost as strong in his opinion regarding the matter as Mr. Hobson and myself. He laid the blame on the smaller railways. I do not think that the C.P.R. people received us as cordially as the importance of the question demanded; indeed, in their reception of us they used some slang language, and were decidedly opposed to the views we were advocating. In fact, we were greatly pleased with Mr. Reeves and sadly disappointed with Mr. Boswell, the general freight agent of the C.P.R. Mr. Reeves granted our request regarding the discontinuance of collecting the fare for a man with each shipment; but the very next shipment that I had the same trouble arose, and I wrote Mr. Reeves regarding it. I did not write Mr. Boswell, as I had no hopes of receiving a concession from him. Perhaps the Government can do something with him. I have since received a letter from Mr. Reeves acknowledging that the conditions regarding a man in charge of the shipment should be done away with. The arrangement now in force puts the shipper to the inconvenience of writing to the local passenger agent and asking for the privilege of sending animals without a man in charge, and he has got the right to grant or refuse. I think that an improvement in this matter is necessary.

OPINIONS OF LEADING STOCKMEN.

MR. JAMES RUSSELL, of Richmond Hill, speaking in regard to our live stock records, said: There is no country in the world, I will not except England, or the United States, or any other country, that can show records for live stock as complete as the Dominion of Canada. We have breeders in Canada that can turn out as good animals as Cruickshank ever did.

MR. J. C. SNELL, of Snelgrove, spoke as follows: I think that steps should be taken at once to secure a relaxation of the quarantine regulations, with respect to both the United States and England. It is, however, only the cattle men that are inconvenienced. We have free admittance for sheep and hogs. I do not think, however, that we should be satisfied to accept the same regulations with respect to the United States for cattle that we do for sheep and swine. I should be in favor of a short quarantine both for the United States and for England—a quarantine of at least, say, ten days.

MR. RICHARD GINSON, of Delaware, said: The United States has lately removed the quarantine as regards Mexico. Now, I have thought that we might go to the States and ask them to put us on the same footing as they have put Mexico.

MR. GREGG, secretary of the Breeders' Association in Manitoba, being called upon by the chairman, said: The quarantine matter does not affect us in Manitoba. We bring all our cattle from Ontario. If the quarantine were taken off we might find it more convenient to purchase across the line.

DR. SMITH, V.S., of Toronto, said: We have not got pleuro-pneumonia in this country, and have never had it, except in a few cases of importation where the cattle were at once killed, and the disease quickly stamped out. They had pleuro-pneumonia in the United States, but the American authorities took such active measures against it, that, judging from the reports of experts and from conversations I have had, I believe that no pleuro-pneumonia exists in the United States to-day. Therefore I think quarantine regulations between the United States and Canada might be modified. The only disease that is it necessary to have a quarantine against is pleuro-pneumonia. The other disease, tuberculosis, is in the United States, in England, and everywhere else.

THE CHAIRMAN: In cases of pleuro-pneumonia it is necessary to have a ninety-days quarantine?

DR. SMITH: Regarding pleuro-pneumonia, ninety days is none too long.

PRESIDENT MILLS' ADDRESS.

DR. MILLS, President Ontario Agricultural College, Guelph, said: I quite agree with the remarks of Mr. Russell, that we can raise as fine cattle in this country as anywhere else; but I

also agree with Mr. McCrae, that in order to keep up our standard we must frequently have a change of blood. It seems, therefore, to me that the quarantine difficulty is one that should be speedily remedied.

It also seems to me to be a great grievance that the live stock records of this country, which are admitted by all who know anything about them to be of the highest standard, should not be accepted across the border. There can be no possible reason for this except that interested parties in the United States have sufficient influence with the authorities to make it so.

Regarding cold storage, to which the Minister has, I believe, committed himself to do something, I would like to call his attention to a matter that I happen to know something about. Last year a fruit-exporting association, of which I am president and Mr. Linus Woolverton secretary, decided to send 115 barrels of apples to Australia by the C.P.R. These apples spoiled greatly in transit for lack of cold storage. Such, however, as did get through in a marketable condition commanded a satisfactory price, being sold at \$3.30 per bushel, netting over all about \$2.00 a bushel, when no such price could be obtained for them here. In making arrangements for a cold storage system, I would urge upon the Honorable Minister to bear in mind the interests of the fruit-growers of the country as well as those of the stock-raisers.

HON. MR. DRYDEN'S ADDRESS.

THE HON. MR. DRYDEN, Minister of Agriculture for Ontario, upon rising to speak was greeted with applause. He spoke as follows: I am very much obliged to you, Sir, and to the other gentlemen present, for the kind words which you have said in reference to myself. I may say that if I have been able to do anything to the advantage of the material wealth of the province, and to increase the prosperity of the farmers, I have been simply doing my duty. I would like to say to the Hon. Mr. Fisher that we, who are assembled here, are not playing at politics. We who are here are from different sides of politics, and have come together as business men to deal with matters of business in a business like way. I know the feelings of the stockmen of this country; I know the feelings of the general farmers as well; and they are, all of them, most unanimous in believing that there ought to be some relaxation as regards freight rates. We are getting down to rock bottom in everything, and feel that there are obstacles in our way that must be removed if we are to keep up the standard of our herds. We must also have access to enlarged markets, and if there is a man fifty, or one hundred, or one thousand miles away who wants to buy from us, we must have the means of reaching him. I do not say this for the benefit of the men who have herds to sell. It is because of the indirect benefit that comes to the people as a whole that I feel so strongly as to the need of an enlarged market. It is absolutely necessary if we are to keep up the high standard our herds have attained. And I am not going to take the chance, when I have paid a thousand dollars or so for a bull, of having him slaughtered at the border, because somebody claims that he is not sound as to tuberculosis. I do not know that an animal coming from England is going to do any more harm than one that I get in this country, for we have the disease all around, in England as much as anywhere.

It has been rightly said here that we have as good records in this country as anywhere, but you all know that you cannot get a thoroughbred animal across the line unless you have it recorded in the United States. This is because some one who has been interested in booming their records on that side of the line has been able to get the ear of the authorities there. The result is that we Canadians are shut out from the United States market, or else compelled to record our animals there. This quarantine and this record business should be dealt with at the same time. The questions are intimately connected

International dealings, whenever they take place, must be of advantage to both parties, inasmuch as business must be profitable to be carried on at all.

We have in the present Minister of Agriculture for the Dominion a man who understands all these interests, and I believe that we shall hear from his own lips that he intends dealing with these matters in a way to secure the advantages sought for, and have the obstacles removed that are hindering our progress.

MR. FISHER'S REPLY.

THE HON. MR. FISHER, Minister of Agriculture for the Dominion, being introduced by the chairman, addressed the meeting as follows: I need not tell you, Mr. Chairman and gentlemen, how great a pleasure it gives me to come here at this time to meet men who are engaged in our own business, farming. If the government to which I belong makes any claim for the support of our people, it is that it is going to be a business government. You have said some very flattering things regarding myself, but I am afraid that the fact that I am a farmer will cause more to be expected of me in the position I hold than would be of one who might not be so closely identified with the work of the department.

I have not the advantage of living in your province; I am engaged in farming in the sister Province of Quebec. You have alluded to me as a practical farmer, and I appreciate this as the highest compliment that I could receive at your hands. Mr. Dryden as Minister of Agriculture for Ontario has done a great work in raising the standard of farming throughout his province. I appreciate very highly indeed the standard thus set before me by a practical man; and I understand fully the difficulties that I shall have to meet; but I am also aware that a great deal will be expected of me because I am a farmer myself.

With respect to the questions which you have given expression to, I may say that I am not prepared to give you any definite reply in regard to them to-day. While I am pleased to be myself identified with the interests of farmers and breeders, I am fully aware that there are other interests involved, and other sides to the questions proposed, which must be examined; for I must not forget that I am a member of a government that deals with the whole of the people of Canada, and I do not think that you farmers would wish that I should do anything that is not for the good of the whole country. The authority which the people of Canada have vested in the Dominion Government in many of its departments touches and overlaps provincial rights. This is particularly the case in my own department, which comes into close contact with provincial departments. I feel, however, that I can come into contact with the provincial departments in the matters which you have discussed, and that we shall be able to work together for the interests of those great classes which we are especially appointed to watch over.

The question of quarantine with respect to the United States is one of the utmost importance to stock men and to the country. It seems to have two important bearings. One of these is with regard to the interchange of thoroughbred stock. The free interchange of thoroughbred stock would be of great advantage to both countries. And, in the second place, our stock raisers wish to send their beef cattle into the States, so as to be able to ship their cattle through the States to Great Britain, when such a route would be more advantageous than one through our own ports. We must, however, consult with the other interests that are concerned; and though I, as the especial guardian of the farmers' rights in these matters, must press the interests of the farmer upon the attention of our government as hardly as I can, yet I must as a member of the government regard this matter as an international question, and be prepared to treat it accordingly.

You speak of the excessive railway rates which are imposed

upon cattle. I can sympathize with you. Within the last few months I have had to miss the sale of several animals because the freight rates charged for transportation would have eaten up the profits. The railway corporations are powerful in this country. But though at first sight their interests may appear to be opposed to ours, I trust that I, as a member of the Cabinet, shall be able to show the railway companies that it is in their interest to reduce their rates on live stock and meet the wishes of the breeders.

With respect to tuberculosis, I would say that I have studied this question somewhat. I have myself seen animals slaughtered that were affected with tuberculosis. We should, however, take due precautions against the disease, and be willing to suffer the loss of animals so affected whenever this may be necessary. But I do say that the recent scare was unfounded and unnecessary. I say this, however, not to put the farmers off their guard against thoroughly stamping out the disease, and disinfecting their barns and stables wherever it occurs, so that the disease may be confined to certain localities only.

I trust that in the near future we shall be able to accomplish a satisfactory arrangement of freight rates by a carefully arranged schedule that will do justice alike to the railway stockholder, and to the breeder. But I wish to be understood that the department over which I am in control is anxious to impose only such rules and regulations as will be of advantage to the country as a whole.

I was very glad to hear the words of Mr. Dryden when he stated that "we are not playing at politics here." There are no politics entering into the questions propounded to-day. They affect all alike. We have naturally our own political convictions, and when we are in an election we can air them. But when we come to deal with questions that are going to advance the interests of farmers as a class, let us drop all party differences.

The meeting then closed.

Canadian Horse Breeders' Association.

SEMI-ANNUAL MEETING.

The semi-annual meeting of the Canadian Horse Breeders Association was held in the Albion Hotel, Toronto, on Monday, September 7th. The following members were present: Messrs. A. Smith, vice-president, Toronto; W. G. Bowker, Woodstock; Robert Graham, Claremont; David McCrae, Guelph; H. N. Crossley, Rosseau; James A. Cochrane, Hillhurst, Quebec; Richard Gibson, Delaware; Wm. Wilkie, Toronto; John Holderness, Toronto; Wm. Hendrie, jr., Hamilton; Henry Irving, Winchelsea; A. Johnston, Greenwood; John Gardhouse, Highfield; James I. Davidson, Balsam; and Henry Wade, Toronto, secretary.

In the absence of Mr. Robert Davies, president, Mr. D. McCrae was made chairman, *pro tem*.

The secretary, Mr. Wade, read his annual report, showing a balance of \$62 to the good.

It was moved by Mr. Crossley, seconded by Mr. Wm. Hendrie, that the directors of the Industrial Exhibition be petitioned to have a blacksmith shop placed on the grounds during the exhibition for the convenience of horsemen. Carried.

It was moved by Mr. Hendrie, seconded by Mr. H. N. Crossley, that our representatives endeavor to have the duration of the spring horse show confined to three days instead of four. Carried.

Mr. Wm. Hendrie moved, seconded by Mr. James A. Cochrane, that in the opinion of the Horse Breeders' Association exhibitors should not be asked to have their stock on the Industrial Fair grounds longer than one week. Carried.

A resolution was also carried, of which Messrs. Wm. Wilkie and Wm. Hendrie were the mover and seconder respectively,

complaining of the want of stable accommodation at the Industrial Exhibition.

It was further moved by Mr. H. N. Crossley, and seconded by Mr. A. Johnston, that an amphitheatre for showing horses and cattle should, if possible, be erected by the Industrial Exhibition Association, in order that the public could see the judging comfortably, and that the events should come off as advertised on time. This was carried.

It was also determined that the Executive Committee, consisting of Messrs. Robert Davies, president, Dr. Smith, vice-president, H. N. Crossley, D. McCrae, H. Cargill, R. Beith, M.P., H. Wade, with the addition of Mr. John Macdonald should meet the Hunt Club and interview the Ontario Government as to a continuation of the grant for the Toronto Spring Horse Show.

Canadian Jersey Cattle Breeders' Association.

A meeting of the members of the Canadian Jersey Cattle Breeders' Association was held in the Farmers' Institute tent, on the Fair grounds, Toronto, on September 5th, at 11 a.m. The following members were present: A. Howard McLean, jr., Toronto, president; Capt. Wm. Rolph, Markham; D. Duncan, Don; B. H. Bull, Brampton; Geo. Smith, Grimsby; J. C. Bull, Brampton; A. T. Macartney, Dunnville; J. M. McKay, V.S., Elmbank; J. H. Smith, Highfield; H. M. Dixon, Richview; A. Watt, Elmbank; A. Gregory, Elmbank; and J. S. Noble, Clarkson.

The president occupied the chair, and Capt. Wm. Rolph acted as secretary in the absence of the secretary of the Association.

Many matters of interest to Jersey breeders were up for discussion. It was the feeling of the meeting that the Jersey breeders were entitled to a stronger representation on the Industrial Fair board, and that there should be a better division of the classes in the prize list, inasmuch as the number of entries of Jersey cattle were as many as, if not in excess of, the Shorthorns.

The advisability of having an annual union combination sale of Jersey cattle in Toronto in the spring passed under discussion and met with hearty approval.

The question of milking the cows before showing was brought before the meeting, and the feeling was that they should be milked the evening before not later than 7 p.m.

Some members thought the herds should be shown first instead of last, but the meeting decided it was best to continue the present plan of showing the herd last.

The Holstein-Friesian Association.

A meeting of the executive of the Holstein-Friesian Association was held in the Farmers' Institute tent, Toronto, Tuesday evening, at 8 o'clock. There were present Messrs. H. Bollert, Cassel; R. S. Stevenson, Ancaster; A. C. Hallman, New Dundee; W. G. Ellis, Bedford Park; J. W. Charlton, St.

George; Alfred Rice, Curries; G. A. Gilroy, Glen Ituell; A. Hoover, Emory; G. W. Clemons and W. A. Clemons, St. George; and F. W. Hodson.

The object of the meeting was to make the preliminary arrangements for obtaining an act of incorporation. A committee consisting of the president, secretary, and Messrs. Gilroy and Hoover, was appointed to wait upon the Minister of Agriculture at Ottawa, and see about having a special act passed that would refer to all live stock associations. At present live stock associations that seek incorporation have to come under the General Joint Stock Companies Act.

The Ontario Poultry Association.

A meeting of the directors of the Ontario Poultry Association was held on Wednesday, September 9th, in the offices of the Toronto Industrial Exhibition Association. Present: Allan Bogue and Wm. McNeil, London; T. J. Senior, Hamilton; W. J. Bell, Angus; W. Barber, Toronto; Thomas Rice, Whitby; and D. C. Trew, Lindsay.

The following varieties were added to the prize list: A.O.V. Game Bantams; Sultans; Belgian Hares; Turbits, black and A.O.C.; Magpies, black and A.O.C.; Pheasants; while separate classes were made for Buff Pekin Bantams and white and black Lop-ear Rabbits, solid and A.O.C.

A grant of \$10 was made to the Provincial Fat Stock Show, to be divided as follows: For the heaviest turkey, \$3; heaviest goose, \$3; heaviest pair of ducks, \$2; heaviest pair of chickens, \$2.

The same judges as last year were reappointed, who are to judge the same classes as heretofore. Turkeys, geese, and ducks and all white varieties are to be judged first.

It was resolved to lend the coops of the association to the Eastern Ontario Poultry Association, they to become responsible for their safe return.

The Good Roads Association.

On the afternoon of Tuesday, September 8th, a convention of the Good Roads Association was held in the offices of the Fair Association, Toronto, for the transaction of business. The officers elected were: President, A. Pattullo, M.P.P., Woodstock; 1st vice-president, J. F. Beam, Black Creek; 2nd vice-president, Robert Jelly, Jellyby; 3rd vice-president, J. H. Wooley, Simcoe; secretary-treasurer, K. W. McKay, St. Thomas; executive committee: Captain James Sheppard, Queenston; James Beattie, Campbellton; A. Macdougall, C.E., Toronto; J. C. Judd, Morton; M. Kennedy, Owen Sound; W. S. Campbell, Brantford; E. Kidd, North Gower; A. W. Campbell, C.E., Toronto. The session was taken up largely by short addresses from Hon. John Dryden, Minister of Agriculture for Ontario; Hon. Sidney Fisher, Minister of Agriculture for the Dominion; A. Pattullo, president of the association; and A. W. Campbell, Provincial Instructor in Roadmaking.





FARMING

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IN ALL ITS BRANCHES.

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Matter of any kind for publication must reach us before the 15th of the month preceding date of publication.

W. W. CHAPMAN, Representative for Great Britain and Ireland,

Fitzalan House, Arundel St., Strand, LONDON, ENG.

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Acknowledgment.

The principal papers in this month's issue of FARMING, including Mr. Galbraith's on "Heavy Horses" and "Hackneys"; Professor Craig's on "Sheep Breeding," Mr. Hallman's on "Dairy Cattle," Mr. Harrison's on "Contamination of Milk," Mr. Fraser's on "Raising Hops," Mr. MacMillan's on "Land Drainage," Mr. Rennie's on "Cultivation of the Soil," Mr. Gibson's on "The Farmer's Fertilizer," Captain Sheppard's on "Raising Strawberries," and Mr. Hillhorn's on "Apple Cultivation," were originally prepared by their respective authors to be read at the Farmers' Institute meetings of Ontario, and they will appear in the annual report of the Superintendent of Farmers' Institutes, which will soon be published. They are published in advance in FARMING (with introductions, illustrations, etc.) by the kind permission of the Hon. John Dryden, Minister of Agriculture, and Mr. F. W. Hodson, Superintendent of Farmers' Institutes.

To Our Readers.

Owing to the very large amount of space which we have given to our account of the great fairs, we have been forced to hold over a very considerable amount of matter we should otherwise have published. Our "Stock Notes" and "Questions and Answers" departments have both been largely omitted, and much other good matter that should have been published, although the number of pages we have printed is considerably larger than usual. The fairs, too, and the great pains we have been at to illustrate them, must be our excuse for our being a few days late in our date of publication. We shall strive in future to have FARMING reach its readers promptly on the first of every month. This will necessitate our publication on or about the 25th of the preceding month; but to do this this month was utterly impossible.

Publisher's Desk—Continued.

Western Dairy School.—The Dairy School at Strathroy will reopen November 25th, 1896. An excellent staff of instructors has been secured. The courses of instruction last for only two weeks, thus affording excellent opportunity for farmers' sons and daughters to obtain a good training in either of the two courses, which are (1) buttermaking, milk-testing, and the running of cream separators, and (2) cheesemaking and milk-testing. Instruction and practical work in the butter department will be adapted both to factory and to home dairy practice. Having taken one course, a student may repeat it, or take another course. Courses will begin on the following dates: November 25th, 1896; January 6th, February 3rd, March 3rd, April 7th, 1897. The number of students at any time is limited to thirty, fifteen in each course. Any person over sixteen years of age is eligible for admission. The course is free, excepting a registration fee of \$2, which each student has to pay at the time of entrance. Students may remain for ten weeks without any additional payment. Intending students should apply at once to the Superintendent, Western Dairy School, Strathroy, Ont., for blank application forms.

On Fruit Evaporation.—There is scarcely a reader of FARMING who is not interested to some extent in the subject of the preservation of fruit and vegetables by evaporation. We understand that some valuable information on this subject is contained in The G. H. Grimm Manufacturing Co.'s circular which is advertised in this number. A post card addressed to the company in Montreal will procure a copy.

A Farmers' Commission House.—A great many new ideas are being evolved in trade circles nowadays. One of the best of these, as well as the most valuable to the farmer, is that being introduced by dealers in farm and dairy products. The producers of such products living at a distance from the city are often at a great disadvantage, owing to a lack of marketing facilities. There are, however, produce dealers to be found who will act as agents for the farmer in the handling of the lat-

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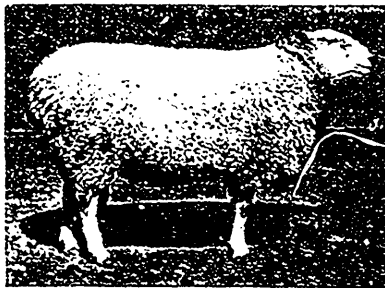
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**40 Ewes and Ewe Lambs
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My flock has won first prize for pen at Toronto every year since 1880; first prize for pen at London, Kingston, Hamilton, Buffalo, Detroit, Montreal, and Ottawa whenever shown, besides scores of other first and second prizes, special prizes, Gold and Silver Medals and Diplomas too numerous for specification; and seven out of twelve first prizes at the World's Fair in 1893; and again won first for pen and other first and second prizes at Toronto in 1896.

All yearling ewes are sired by Royal Chester 742, first prize at Royal, 1893; first at Toronto, 1893; first prize and sweepstakes for best ram of any breed at World's Fair at Chicago, 1893.

This will afford an opportunity for obtaining females of the most excellent breeding from this noted prize-winning flock such as may never again be presented in Canada or elsewhere.

27 No reserve bids. Everything will be sold.

Trains will be met at G.T.R. station, Shakespeare, on the night previous to and on day of sale. For buyers from a distance sheep purchased will be crated and delivered on the cars.

TERMS.—12 months' credit on approved joint notes. Six per cent. discount for cash.

JOHN KELLY,
SHAKESPEARE P.O.
and Station on G.T.R.

Publisher's Desk—Continued.

ter's products. They receive his goods (which may be shipped by rail or boat from any distance) direct from the farm, sell them at the best prices obtainable in the city, and return the result, either in cash or in goods, to their country correspondents. The People's Wholesale Supply Co., whose advertisement appears in another column, deal with the farmers largely on this plan, and farm, dairy, and poultry products, if of the best quality, may be sent to them for sale. From what we know of the firm, we have every confidence in saying that their methods of dealing have made them many friends both in the city and country. We have much pleasure in recommending them to the favorable notice of our readers.

The School Question.—This is a subject which has received a great amount of consideration at the hands of both press and public in Canada during the last two years. Outside of its political connection it stands as an important issue in the lives of parents who have sons and daughters to educate. Shall it be a university course for the professions, or shall it be a shorter and more practical course for every-day business purposes? The latter is receiving increasing attention every day, because better training institutions for business are being developed each succeeding year. Among such schools or colleges which give modern and complete courses of study, and which possess splendid facilities for instructing young people in the methods and customs of business, none occupy a more prominent place than the Central Business College of Toronto. Parents should become informed of the advantages which this school offers, and anyone interested will receive due attention by addressing a postal to the principal, Mr. W. H. Shaw, Yonge and Gerrard streets, Toronto, who will mail his handsome prospectus in return. See his advertisement in this issue.

British Columbia Mines.—Any of our readers desiring to invest in British Columbia gold mines should consult C. F. Clough & Co., the well-known mining brokers, whose advertisement appears in another column. This company has offices in Rossland, B.C., Spokane, Wash., and Toronto. They have special facilities for supplying information regarding mining operations in British Columbia. They are agents for such properties as the Enterprise, Mabel, Wonderful, and Dillie. Their office is with Pellatt & Pellatt, 36 King street east, Toronto.

Stock Notes.

Items concerning conditions of stock, also information as to recent sales, purchases, milk performances, or any other matters that will be of interest to our readers as news freely admitted in these columns. Items describing stock for sale, or anything else of an advertising nature, will be excluded, but are welcome to appear in our advertising columns if desired.

J. OKE & SON, Alvinston, report the sale of four fat steers to McDonald & Co., of St. John, N.B., to go to the St. John Exhibition, and ultimately for the Christmas market.



High Sheriff

Having no further use in my herd for this valuable bull, he is For Sale. A chance worth looking after. Full particulars by addressing

E. B. EDDY, Hull, Que.

THE PUREST AND BEST SALT

That is being offered to the trade in Canada is

Windsor

OUR plant is specially constructed for, and our whole process is capable of, turning out nothing but a salt of the highest possible grade. Our Table, Dairy, and Cheese Salts cannot be equalled for purity, color, and evenness of crystal, while for farm use it will be found that our fine barrel salt and rock salt costs no more and is much superior to other brands.

MANUFACTURERS

WINDSOR SALT WORKS - Windsor, Ont.

TO STOCKMEN AND BREEDERS

LITTLE'S PATENT FLUID
 (NON-POISONOUS)
SHEEP DIP AND CATTLE WASH

For the destruction of Ticks, Lice, Mange, and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc. Removes Scurf, Roughness, and Irritation of the Skin, making the coat soft, glossy, and healthy. The following letters from the Hon. John Dryden, Minister of Agriculture, and other prominent stockmen, should be read and carefully noted by all persons interested in Live Stock:

"MAPLE SHADE" HERDS AND FLOCKS.

BROOKLIN, ONT., Sept. 4th, 1890.

DEAR SIR,—I can not afford to be without your "Little Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested, I have ever tried; it is also an effectual remedy for foul in the feet of Cattle. I can heartily recommend it to all farmers and breeders.

JOHN DRYDEN.

17 Gold, Silver, and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world. Sold in Large Tins at \$1.00. Special terms to Breeders, Ranchmen, and others, requiring large quantities. Ask your nearest druggist to obtain it for you; or write for it, with pamphlets, etc., to

ROBERT WIGHTMAN, Druggist, Owen Sound.

700

Sole Agent for the Dominion.

Better than Gold. A Gold Coin is only worth its face value, and it costs much less to make it. FARMING is not only worth many times its price to the subscriber, but it cost a great deal more to produce it. Try it for three months.

Stock Notes—Continued.

WALTER HALL, Washington, reports the sale of his two-year-old bull, Oxford King, first at Toronto, to Wm. Stewart & Son, Lucasville.

MR. JAMES RENNIE, Wick, has sold his first-prize fat yearling heifer at Toronto and London to Messrs. Gatecliff & Armit, for Christmas.

MR. CHARLES GODARD, of Cobourg, has purchased from E. D. George & Sons, of Putnam, the Chester White pig which was awarded the prize at Toronto for best pig under six months old.

WM. STEWART & SONS, Lucasville, report the sale of the yearling bull, Tom of Willow Grove, first at Toronto in his class, to Mr. Walter Hall, Washington; and another yearling bull, Henry of Willow Grove, first at the Western Fair, London, to W. H. Maize, Dungannon.

MR. HENRY ARKELL, of Arkell, Ont., intends to dispose of some choice Oxford Down sheep by public sale on October 20th. As Mr. Arkell's flock has won many honors at the World's Fair, and at other leading exhibitions, the fact that he is offering a portion of it by auction will, doubtless, attract many buyers.

O.A.C. ANNUAL SALE.—The annual sale of stock at the Ontario Agricultural College never fails to attract attention, inasmuch as it is known that the stock offered is always of the finest strains, and that every care is taken to ensure that none but animals in the soundest and healthiest condition are offered to the public. The sale this year is on October 14th.

SALE OF LEICESTERS.—Mr. John Kelley, the well-known Leicester breeder, having determined not to show any females for a few years, intends to offer by public auction this month a large number of ewes and ewe lambs, with a few rams. The sale will be unreserved, so that a capital opportunity is afforded to lovers of this breed of sheep to obtain some of the choicest blood on the continent. Mr. Kelley's reputation is of such high standing that any animal bought at his sale is sure to bring credit to the flock to which it will be introduced. See advt.

C. T. GARBUTT, Claremont, Ont., writes: We have bought of Robert Jacobs the first pick of one hundred and twenty-five ram lambs, strictly for a stud, and he can be seen at any time. We have just sold one shearling ram and one yearling ewe to S. V. McDowell, Fredonia, Pa.; one shearling ram to John Chick, Attica, N.Y.; one shearling ram to Leonard Bryan, Indiana; one shearling ram to Henry Honey, Brickley, Ont.; one yearling ram to J. W. Brooks, Salina, Ont.; a pair of ewe lambs to Heber Rawlings, Ravenswood; a Berkshire boar to J. G. Snell & Sons; a Berkshire boar to Henry McMurray, Cressville, Ont.

Sale by Auction TUESDAY.....
OCTOBER 20TH 1896

AT FARNHAM FARM, COMMENCING
ARKELL, Ont. AT 2 P.M.

50 Oxford-Down Sheep

Consisting of Rams and Ewes of all ages.

ALSO A FEW SHORTHORN BULLS AND HEIFERS
Terms, 12 months on approved joint notes.

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Heavy
Draught
Mares**

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These mares 1600 to 1800 lbs. Good bone, well-bred, and most suitable to work a farm and breed from.

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Send for free pamphlet on feeding, treatment, etc., and catalogue of foods, etc.

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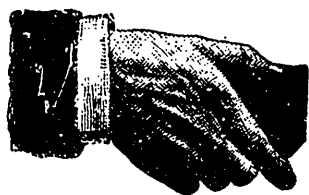
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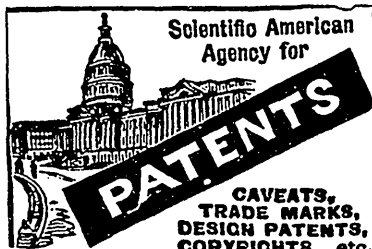
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Dr. Hess' Stock Food, Poultry Pan-a-ce-a, and
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Dr. Hess' Stock Food is a reliable tonic and flesh producer; it expels worms and cleanses the blood. Dr. Hess' Poultry Pan-a-ce-a cures diseases in poultry and makes hens lay; it is not a stimulant, but a reliable tonic. Instant Louse Killer kills lice on all kinds of stock and poultry, fleas on dogs, ticks on sheep; it is a deodorizer and disinfectant, put up in round can, perforated top. These goods were tested at the Toronto Exhibition and awarded the medal; also were awarded the medal at London in '96. Sold by dealers generally, or address,
Dr. Hess & Co., Ashland, O., U.S.A.

**PAGHAM HARBOUR CO.,
Selsey, Chichester, England.**

Flock of 1,000 ewes, winners Southdown Challenge Cup in 1893-4, 1st prize Wool; Jubilee, Royal, and Royal Prize Ram Lambs in 1892-93-94. 24



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High-grade Bone Fertilizers furnish the cheapest and best plant food known. Freeman's Fertilizers furnish just the plant foods needed; they are of the right kinds for each stage of growth, so that there is rapid and healthy growth from germination to maturity.

Lay aside your prejudices, and do that which experiment and experience have determined to be the best.

You can restore the fertility and productiveness of your soil easier, cheaper, quicker, and more lastingly by a liberal use of our high-grade bone fertilizers than by any other known means.

Sixty per cent. more clean and smooth potatoes.

"Used your Potato Manure on potatoes at the rate of about 500 pounds per acre, which were planted on ground that had been sown to oats without manure the year previous, getting at least sixty per cent. more potatoes than where none was used.

"Also used it alongside of stable manure, using about thirty dollars' worth per acre, and about ten dollars' worth of Freeman's Potato Manure per acre, the yield being about the same, but there was a wide difference in quality. Where Potato Manure was used the potatoes were clean and smooth; where stable manure was used they were very scabby.

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Send your address for catalogue, giving the experience of hundreds of our leading farmers and fruit-growers who have used our fertilizers.

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Where?

When choosing a home this important question is frequently asked. There are thousands of acres of land on the line of the Chicago, Milwaukee, and St. Paul Railway in South and North Dakota that are available.

These valuable farms are located in various beautiful rural districts, convenient to churches and schools. Besides being situated where good markets are of easy access, the soil yields an abundant crop each year. While the natural advantages are many and important, the facilities for the transportation of farm products are ample. The climate is healthy, the water good and abundant.

Prices are most favorable for those wishing to secure desirable homes. The outlook is in the direction of a rapid increase in values, thus rendering this a most opportune time to invest. It is evident that no luckier chance has been obtainable in the West than may be had at the present. The advantages of going with the tide, especially when locating in a new country, are of great moment. Now is the time to secure bargains and make a fortune in the West.

Correspond with or call upon W. E. POWELL, General Immigration Agent, 410 Old Colony Building, CHICAGO, ILL., for all information regarding prices and details.

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MENTALLY,
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Settle in a New Land and see that it
Grows with You.

The West ^{needs} People!

IT HAS ROOM AND

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Minnesota, North and South Dakota, Montana, Idaho, Washington, the Red River, Milk, Flathead, and Wenatchee Valleys, and the Kootenai, Trail Creek and Okanogan Mining Regions.

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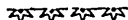
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Special quotations on stocks of any mining company operating in any of the above-named districts cheerfully given.

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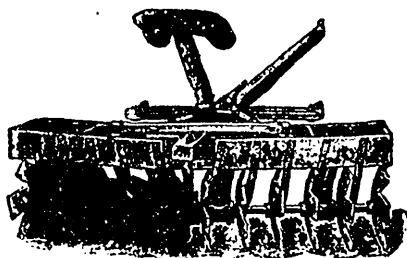
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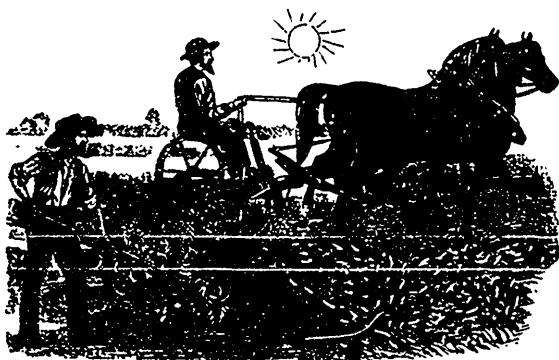
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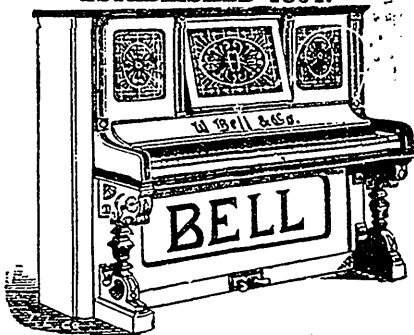
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