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THE GARDNER-PEARSON SHORT-HORN SALE.

In our last issue appeared a resume of the bulls to be sold at the F. A. Gardner, S. J. Pearson, Son & So.'s Shorthorn sale, to be held at the farm of Mr. Gardner, near Streetsville Junction Station (C. P. R.), on Tuesday, March 3rd. Following is a brief synopsis of the breeding of the females, a perusal of which will show anyone familiar with Shorthorn lore that they are an exceptionally well-bred lot, and among them are a number that have won leading honors at several county shows in strong company. Mr. Gardner's offering is as follows: Scotch Thistle (imp.) 43660, by Prince Cruickshank; dam Scotch, by Merry Mason; she is a very large, thick, red cow, eight years old, and a wonderful breeder, a very valuable cow to anyone breeding Shorthorns. Scotch Thistle 2nd 48692 (imp. in dam) is a red fiveyear-old daughter of hers, by the great Missie bull, Luxury; here is a show cow that, if in show condition, would weigh up toward a ton. Scotch Thistle 3rd 81662 is her half-sister, by Gold Mine (imp.); she is a red yearling, a good one. Scotch Thistle 4th 81658 is a red yearling, out of Scotch Thistle 2nd, and got by Gold Mine; another nice, thick heifer. Scotch Thistle 5th 81661 is a red yearling, by Gold Mine, and out of the old cow. Scotch Thistle 6th 81659 is a red-roan junior yearling, by Gold Mine; dam Scotch Thistle 2nd; a splendid lot of this good-doing strain. Mysie Maid 72210 is a red two-year-old Mysie, by Imp. Joy of Morning: a thick, good heifer. Lovely May is a roan two-yearold, by Imp. Scottish Prince; she is a Lovely-bred heifer, and a good one. Indian Lady 4th 81657 is a white yearling, of the same tribe as the Floras; she is by Gold Mine. Others of this strain are a roan yearling and a red yearling, by Gold Mine, and abother by McKay 4th. Cecelia Bud is a white year-old Cecelia, by Imp. Scottish Prince; dam by Imp. British Statesman. Lovely Rose is another white yearling, a Lovely, by Imp. Prince of Archers. Loretta, Vol. 21, is a roan four-year-old, by Imp. Prince Louis; dam by Imp. Scotland's Fame. Hilda Gem is a red yearling, by Imp. Deeside King; dam by Imp. Scottish Prince, an extra good lot of young things that should find ready buyers. The Valley Home Farm consignment of Messrs. S. J. Pearson, Son & Co. are a representative lot of their noted herd. All the heifers old enough will be bred to Royal Luxury 65622, by Royal Diamond 2nd; dam Glosterina 9th (imp.), by Luxury; he is a rare good type of a bull, low-down, thick and even. The females to be sold are: Marchioness 16th 6866=, a red two-year-old, by Royal Scot; dam by Imp. Scotland Fame; is a big, thick heifer. Nonpareil 64th 76865 is a red two-year-old, by Royal Scot. Both these heifers are in calf to Royal Luxury. Rosebud 12th 76868 is a red two-year-old, by Royal Scot, in calf to Royal Luxury. Rosebud 10th, Vol. 20, is a roan four-year-old, by Trout Creek Banff; she has a calf at foot. Rosebud 5th 52289 is a red six-year-old, by Favorite 30955; she is in calf to Royal Diamond. Mina Maid 8th 57721 a roan five-year-old, by Gladstone 36816; soon due to calve to Royal Diamond. Then, there are several of the great dairy strain, the Lady Brants, a strain that is in great demand on account of their heavy-milking qualities, the whole making a choice offering of up-to-date Shorthorns. Catalogues may be secured by writing F. A. Gardner, Britannia P. O., or S. J. Pearson, Son & Co., Meadowvale P. O., Ont.

TRADE TOPIC.

HOW ABOUT YOUR ROOFS ?- Many farmers had to postpone their roofing last spring because by the time the weather was suitable for such work, they found their hands full with the usual preparations for a busy season of plowing and planting. Why not take advantage of your slack time now, and lay your plans for getting new roofs on next Write The Metallic Roofing ('o., Toronto or Winnipeg, whose advertisement you'll find in this paper, and get

QUESTIONS AND ANSWERS. Miscellaneous.

BREEDER OF ALBERT VICTOR

Who was the breeder of the Shorthorn bull, Albert Victor (imp.) =6315= (55250)? Was he a very large bull, and who owned him? A. F. B.

Ans.-He was calved in 1887; bred by S. Campbell, Kinellar, Aberdeenshire; imported by Arthur Johnston, Greenwood, Ont.; owned by H. Cargill & Son, Cargill, Ont. He was a medium-sized, lowset bull; sired by Gravesend, who was a very large bull.

MAKING A STONE ROAD.

As the Township of Grantham has undertaken the construction of better roads leading to our beautiful city, we, as subscribers, would like to see in your paper more reading on that line of work. 1. Where has the tile draining been tried, on or under the roads, and with what success?

2. What would be the best way to construct a stone road after underdraining has been done? J. A. S.

Ans.-We have been pleased to comply with the above requests. In our Feb. 6th issue the subject of tile draining was quite fully treated. The application of stone and gravel has been repeatedly discussed in our Farm Dept., but the following brief directions, especially prepared for us by Mr. A. W. Campbell, Deputy Minister of Public Works, will be of

Road construction is not a matter of one prescription for all cases, if the best results are to be reached at a reasonable cost. The civil engineer has been defined as one who utilizes the powers and resources of nature for the benefit and convenience of man, and there is no field that offers greater variety in this regard, than does road building.

Commencing with an ordinary clay road, the usual plan is to first grade and crown the earth road, providing surface drainage that must carry water to the lowest points of the road, where it is discharged into free outlets. Next lay tile drains as the situation requires. Then roll down the earth sub-grade. Then spread over the earth, and to the required width (usually 7 or 8 feet), a layer of coarse stone. Over this sprinkle a layer of screenings, and roll until it is fairly compact. On this spread a layer of fine stone, not exceeding 11 inches in diameter. Over this spread a layer of screenings, then wet thoroughly, and roll until solid and unyielding. The total depth of stone should be not less than six inches for a clay subsoil, and, if a clay loam, more is needed.

In carrying out the work, local conditions will influence methods. For instance. in place of a first laver coarse stone, a bed of gravel might be used; or quarry stone, averaging a foot in size, might be laid on the flat, corners broken off, and the small pieces wedged into the voids between the stone. The latter can be used only where the drainage is thorough. If a road roller is not available, it is frequently possible to let the newly-graded road settle for a time; and, just before putting on new stone, to lightly restore the surface with a grading machine or split-log drag; afterward keeping the metal raked into place, and the wheel-tracks full, until the road is consolidated by traffic. Scores of variations can be profitably introduced into road construction, suited to varying local conditions, if the builder has a thorough knowledge of the principles of drainage and the materials he is using.

An experienced road superintendent is essential, if good roads are to be built and maintained at a reasonable cost. A capable road superintendent must be a practical man with a knowledge of roadmaking machinery, and having the ability to manage men. Every municipality should engage such a man, and keep him permanently in office, for he can be of more value and is more necessary than is a permanent clerk or treasurer. If an experienced man cannot be found, an active and energetic man should be selected, but the ratepayers must expect for some time that he will gain experience at their expense. No directions as to roadmaking are complete without reference to a permanent and capable road superin-tendent or commissioner.

Elmhurst **Berkshires**

We have a number of choice young boars ready for service. Some imported, others imported in dam—also from imp. sire and dam—which we will price right for quick sale. Write us for what you want.

H. M. VANDERLIP.

Importer and Breeder, CAINSVILLE P. O., BRANT CO.

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I have on hand 75 brood sows of Princess Fame, Cinderella, Clara, Minnie, Lady Frost and Queen Bess strains. My stock boars are true to type and richest breeding. For sale are a large number of sows bred and ready to breed, boars fit for service, and younger ones of both sexes. Pairs and trice not akin. J. W. BOYLE, P. O. Bex 563, Weedsteek, Ont.

CHESTER WHITE HOGS

The largest herd of bacon-type Chester White hogs in Canada Strictly high-class have won highest awards. Young stock of both sexes always on hand. Satisfaction guaranteed.

Glenburn Herd of Yorkshires

Winner of gold medal three years in succession. 6 young boars from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old.

ROBERT CLARKE, 41 Cooper Street, Ottawa, Ont | David Barr, Jr., Box 3, Renfrew, Ont.



Large English Berkshires

for sale from imported stock. Sows with pig and pigs for sale All ages. At reasonable prices. Guarantee satisfaction. Boars and sows delivered at Woodstock station, C. P. R. or G. T. R. C. P. B. or G. T. R.

JOSHUA LAWRENCE. Oxford Center, Ont.

Cedar Lodge Yorkshires

100 head brood sows (imp.) and the product of imp. stock, weighing from 509 to 800 lbs. each. Stock hogs by imp. sires and dams, very large and full of quality. Young stock of both sexes constantly on hand for sale. Pairs not akin. Satisfaction guaranteed.

P. O. COLLINS, Bowesville P.O., Ont. Manotick Sta., C.P.R.

For Sale Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; onoice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigrees and safe delivery guaranteed. Address E. G. GEORGE, Putnam, Ont.

MOUNT PLEASANT MEP D OF TAM-worths AND HOLSTEINS. — For sale: Pigs of either sexes from 6 weeks to 3 years; also 12 bull and heifer calves from 1 week to 1 year old. "Phone is residence. Bertram Hoskin, The Gully P. O.



MONKLAND YORKSHIRES

are the easily fed, quick maturing kind. The sort the farmers want.
All ages for sale. 100 sows bred now.

JAMES WILSON & SONS, FERGUS, ONTARIO



Large White

Am offering at the present time a choice lot of boars ready for service, from imported stock; also young pigs of both sexes, not akin. Prices right, and quality of breeding unexcelled. Write or call on

Newcastle Tamworths and Shorthorns For Sale: 100 pigs, both sexes, all ages. Sows from 10 months to 2 years, bred to Imp. Cholderton Golden Secret, all descendants of Colderion Colden Secret, all descendants of Colderion Colden Secret, all descendants of Colderion Cholden Secret, all descendants of Colderion Cholden Secret, and Sired by a son of Imp. Joy of Morbing.

L. COLWILL, NEW CASTLE, ONL.

MOUNT PLEASANT HERD of Tame right, and quality of breeding unexcelled. Write or call on

H.J. DAVIS, WOODSTOCK, ONT.

Worths and Holsteins. For sale:
Pigs of either sexes, from 6 weeks to 7 months;
and holsteins. For sale:
Pigs of either sexes, from 6 weeks to 7 months;
and holsteins. For sale:
Pigs of either sexes, from 6 weeks to 7 months.

HOSKIN. The Guily P. O.



OAKDALE BERKSHIRES Largest Borkshire herd in Outsele. imported. For sale: Sows bred and reedy to breed, bears roady for service, and younger ones, all ages, richly bred on prinovinning linear true to type. Everything guaranteed or represented. Long distance 'phone. L. E. MORGAM, Milliken P.O., Oo. of York.

Yorkshires and Tamworths —Either breed, any age, both sexes; sows bred and ready to breed. Yorkshires bred from imp sire and dam. Tamworths from Toronto winners. Pairs not akin. As good as the breeds produce.

Schaw Sta. C.P.R.

Morpiston P.O.

Meadowbreek Yorkshires.

Sexes; sows bred and ready to breed. A number of sows old enough to breed, all sired by Imp. Dalmeny Topsman. Everything the breeds produce.

Schaw Sta. C.P.R.

Morpiston P.O.

Morpiston P.O.

ARGE ENGLISH YORKSHIRES.—We have a limited number of choice young pigs for sale, bred from our choicest sows and got by the imported boars, Dalmery Joe 1857 and Broomhouse Beau 18514. Pigs from the latter won all the and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders. JOSEPH FEATHERSTON & SON, STREETSVILLE, ONT.



Boarr fit for service, sows safely in pig, young sows and boars 3 months old, imported in dam.

JOHN MOLEOD.

Importer and breeder, Mitton P. O. and Station. 6. T.R. and C.P.R.

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FAIRVIEW BERKSHIRES Bred from imported and Canadian-bred sires and dams, and bred on prisewinning lines My brood sows are large, choice animals. Young stock of both sexes. Some sows bred to imp. boars. HEMRY MASON, SCARBORO P. O. Street cars pass the deer.

Duroc-Jerseys Boars fit for service. Sows ready to breed. Several sows in pig. also younger ones. Imported Canadian Boy 19997 heads our herd. MAC CAMPBELL & SONS, Harwich, Ont.

Boars fit for service: Boars ready for service: sows ready to breed, and bred; young pigs just weaned and ready to wean. Cotwold and Shropshire rams, yearlings and lambs, registered. GEO. M. SMITH, Harwille, Ont.

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