

Important Clearing Sale Of

60 High-class Shorthorns 60

20 cows with calves at foot. 15 young heifers safely bred. 5 great young bulls—all herd sire material.

THE ENTIRE ELM GROVE HERD

Selling at the farm near

Brampton, Ont., Wednesday, October 23, '18

CAPT. T. E. ROBSON, Auctioneer.
Please mention "The Advocate."

In this offering, which is nearly all pure Scotch or Scotch-topped, are twenty thick, good, young cows each with a calf by her side, and all carrying the strongest of pedigrees. The calves are by such well-known sires as Braemar Champion (imp.), the great Right Sort (imp.), Broadhook's Stamford by Broadhook's Golden Fame (imp.), and others. The families are Butterfly, Broadhooks, Golden Drop, Village Girl, Missie, Clementina, etc. The younger females include a large number of two-year heifers of the same families, the majority of which are well along in calf to the herd sire, Broadhook's Stamford, who is also listed. The young bulls catalogued are also of much the same breeding and include a lot of strong herd sire material. The offering throughout is one of the most attractive of the year, and there is positively no reserve. **MAKE YOUR APPLICATION FOR CATALOGUE EARLY.**

Brampton is only 21 miles from Toronto; G. T. R. and C. P. R. All trains will be met on sale day.

JAS. FALLIS, Prop., Elm Grove Farm, BRAMPTON, ONTARIO

Flintstone Farm

Breeders of

Milking Shorthorn Cattle,
Belgian Draft Horses
Berkshire Swine.

We offer animals that will
raise herds to a level of war-
time efficiency. Bull calves
from \$125 up.

DALTON
Massachusetts

Mardella Shorthorns

Herd headed by The Duke, the great, massive, 4-year-old sire, whose dam has 13,599 lbs. of milk and 474 lbs. of butter-fat in the R.O.P. test. I have at present two exceptionally good young bulls ready for service, and others younger as well as females all ages. Some are full of Scotch breeding, and all are priced to sell. Write or call. **Thos. Graham, R. R. No. 3, Port Perry, Ont.**

Graham's Dairy Shorthorns

I have a choice offering in cows and heifers in calf. Bulls from the heaviest milking strains. Satisfaction guaranteed.

CHARLES GRAHAM - Port Perry, Ont.

GLENFOYLE DUAL - PURPOSE SHORT-HORNS.—Eight bulls from 6 to 14 months. Big kinds, with quality. Also choice selection of females. Those of breeding age bred to College Duke. Prices easy. **Stewart M. Graham, Lindsay, Ont.**

Evergreen Hill R.O.P. Shorthorns

Offering two, ten month bulls by St. Clare; also pure-bred Cotswold lambs, both sexes.

S. W. JACKSON, R. R. 4, Woodstock, Ont.

Brownlee Shorthorns. Offers a choice lot of young bulls, ranging in ages up to nine months, and sired by the Nonpareil bull, Royal Saxon. See these before buying elsewhere. Could also spare a few females. **Douglas Brown, Bright, Ont., R. R. 3, Ayr Station, C. P. R.**

Locharbar Stock Farm

has some choice Scotch and Scotch topped bulls and females of different ages for sale.

D. A. Graham, R. R. No. 4, Parkhill, Ont.

Shorthorns and Shropshires.—We still have a few extra well covered shearing rams. Also a choice lot of ram and ewe lambs. Prices right. We can supply young bulls or heifers, both of which are from high-record dams.

P. CHRISTIE & SON, Port Perry, Ont.

Lake Marie Farm Shorthorns

We have sold nearly all the females we have to spare but still have several good, young bulls of serviceable age all of which are sired by the R.O.P. sire St. Clare. They are priced to sell. We are also pricing a number of registered Dutch Belted cows and heifers.

LAKE MARIE FARMS, KING, ONT.

SIR HENRY PELLATT, Owner

THOS. McVITTIE, Manager.

Imported Scotch Shorthorns.—A dozen very desirable bulls for sale now. Half of these are imported and will head good herds. Females, imported and home-bred. Collynie Ringleader, bred by Mr. Duthie, heads our herd. Another importation of 35 head will be home Sept. 25th. Burlington Jct. is only half mile from farm. **J. A. & H. M. PETTIT, Freeman, Ont.**

Shorthorns Landed Home.—My new importation of 60 head will be at home to visitors June 20th, and includes representatives of the most popular families of the breed. There are 12 yearling bulls, 7 cows with calves at foot, 24 heifers in calf, of such noted strains as Princess Royal, Golden Drop, Broadhooks, Augusta, Miss Ramsden, Wimple, etc. Make your selection early. **GEO. ISAAC (All Railroads, Bell 'Phone) Cobourg, Ont.**

Spring Valley Shorthorns.—Herd of 70 head, straight Scotch, good individuals. Headed by the great show and breeding bull, Sea Gem's Pride 96365, and Nonpareil Ramsden 83422. We have for sale four as good young bulls as we ever had, and a few females. **KYLE BROS., Drumbo, Ont., ('Phone and telegraph via Ayr.)**

SHORTHORNS FOR SALE

Ten bulls, from 8 to 20 months of age, of the good kind. Also must sell about 25 females before winter. They are the prolific kind and all registered and priced at about half their value to move them. Crown Jewel 42nd. still heads this herd. **JOHN ELDER, HENSALL, ONTARIO.**

1854 Maple Lodge Stock Farm 1918

Shorthorns and Leicester sheep; 4 shearling rams and a few lambs on offer. **CHARLOTTE SMITH, (Lucan Crossing one Mile) CLANDEBOYE, R. R. 1, Ont.**

WILLOW BANK STOCK FARM

SHORTHORN CATTLE AND LEICESTER SHEEP. HERD ESTABLISHED 1855—FLOCK 1848 The great show and breeding bull, Browndale =80112 =, by Avondale, heads the herd. Extra choice bulls and heifers to offer. Also a particularly good lot of Leicester rams, mostly from imp. ewes. **JAMES DOUGLAS CALEDONIA, ONTARIO**

NICHOLSON'S SHORTHORNS

We have about a dozen young bulls (ages 8 months and upwards), sired by our herd headers, Best Boy =85552 = and Browndale Winner =106217 =. Write or come and see. **R. and S. Nicholson, Parkhill, Ontario**

FLETCHER'S SHORTHORNS

Our herd of Scotch Shorthorns represents Orange Blossoms, Kilblean Beauties Matchless, Mysies, Missies, Clementinas, etc., and is headed by the Watt-Stamford bull, Victor Stamford =95959 =, a Toronto winner. Present offering—one young bull and several heifers and cows. **GEO. D. FLETCHER, ERIN, R. R. 1, ONT. Erin Station, C.P.R., L.-D. Phone**

PLEASANT VALLEY FARMS

Present offering, 20 young bulls sired by such bulls as (Imp.) Right Sort, (Imp.) Loyal Scot and Belmont Beau; also cows and heifers bred to (Imp.) Newton Grand Champion, some with calves at foot. Inspection invited. **Geo. Amos & Sons (Farm 11 miles east Guelph, C.P.R.) Moffat, Ontario**

CREEKSIDE SCOTCH SHORTHORNS

Herd headed by Gay Monarch 79611; dam Sally 8th imp., and sire, the great Gold Sultan 75411. My present offering of young bulls includes several 7 to 14 months' youngsters, all thick mellow well-grown fellows—reds and roans—and priced right. Can also supply females in most any numbers. **Geo. Ferguson, Elora Station, C.P.R., G. T. R.—Salem, Ont.**

SHORTHORNS, SHROPSHIRE

Four richly-bred Lavinia females for sale. Grand lot of bull calves sired by Lochiel (Imp.) for next fall's business. Also nice young of Shropshire lambs, sired by Miller ram. Come and see them. **Wm. D. Dyer, R. No. 3, Oshawa, Ont. 2½ miles from Brooklin, G. T. R.; 4 miles from Brooklin, C.N.R., or Myrtle, C.P.R.**

Shorthorns

Herd headed by Pride of Escana, a great son of Right Sort. Several bulls and a few females with calves at foot for sale. Herd of over seventy head.

A. G. FARROW (between Toronto and Hamilton), Oakville, Ont.

not be tolerated, as it allows the cylinder teeth to get too close to the concave teeth on one side and correspondingly far away on the other. The distance between the cylinder and concave teeth when properly adjusted is generally not much over an eighth of an inch. It is easily seen that a very little end play will cause cracking on the grain on the one side and allow unsheathed heads to pass through on the other. For the same reason, it is important that all the teeth in both the cylinder and concaves be kept straight. There should always be wrenches in the tool box for straightening any which get out of line.

When the teeth become much worn, more power is required to separate properly, and they will not thresh as clean as new ones. It will always be money well invested to keep good teeth in the machine. It is a difficult matter to keep the teeth right, especially when they are new, and the cylinder and concaves should be constantly watched and all teeth tightened as soon as they show any signs of becoming loose. When a tooth runs loose for any length of time, it wears the hole in which it fits and may make it impossible to keep any tooth straight and tight in that hole hereafter.

On account of the great weight of the cylinder and the high speed at which it runs, it must be kept in very nearly perfect balance if the machine is to run smoothly. Running the cylinder out of balance has a tendency to heat the bearings and to flatten that side of the journal which receives the strain. The vibrations caused by an unbalanced cylinder are felt all over the machine and tend to loosen the entire framework. Putting a few new teeth into a cylinder may throw it out of balance, because the new teeth are heavier than those remaining in the cylinder. This can be remedied in large measure by replacing at one time all old teeth which are worn to any extent. Another way the cylinder may be thrown out of balance is by the loss of some of its teeth.

Rebalancing a cylinder is a rather difficult task, and an inexperienced person can scarcely expect to do it satisfactorily unless he has good tools and shop facilities and some experienced help. A separator owner usually should be able to obtain the services of some one in the neighborhood who has had experience in this work.

The number of teeth to use in the concaves depends on the kind and condition of the grain, the kind of teeth furnished, the speed of the cylinder, and other things peculiar to each make of machine. On account of this the thresherman should follow the instructions on this point which come with his machine. In general, however, he should not use any more teeth than are necessary to thresh the grain from the heads, because the more teeth he uses the greater will be the power required to do the work. Too many teeth break the straw into fine pieces which drop through the straw rack upon the grain pan and conveyor, and make separation and cleaning difficult. In threshing the grain from the heads, increasing the speed of the cylinder has much the same effect as putting in more concave teeth. High speed is likely to crack the grain, however.

As before stated, the speed of the machine depends on the speed of the cylinder, and the cylinder speed cannot be increased more than a few per cent. without impairing the efficiency of the remainder of the machine. Many companies furnish special concaves or teeth for grains which are difficult to thresh. They should always be used if they are available. They make clean work possible without speeding up the machine to the point where it ceases to do efficient separation.

When two concaves full of teeth are necessary, it is generally conceded to be best to place one concave in the rear, and one in front, with a blank between. If the straw is so dry and brittle that it does not feed easily, the cylinder can be given more "draw" by placing the blank in front. If either concave is not completely filled with teeth, placing the one with the fewer teeth in front may be sufficient.

The concaves are generally made of cast iron. They are strong enough to withstand the strain of any amount of grain going through, but if any foreign substance such as a heavy piece of wood or a stone is thrown into the machine it is better for them to break. Then no further damage is done. Such accidents will occur occasionally in spite of the greatest care and precaution, and it is a good practice always to keep on hand