

**More Milk
Without Increasing Ration**

Man, asserting his dominion over all creatures, has converted the cow into a machine to transform her feed into milk. In her natural state the cow gave milk only for a brief period to nourish her offspring, but in her domesticated condition, she must yield milk in abundance nearly the year round. As a big milk supply can be obtained only by giving its equivalent in feed, the tendency has been toward overfeeding, and consequent impaired digestion, etc. Furthermore, the healthy animal wastes a lot of feed through non-digestion—in fact, you can fatten your hogs on the grain that passes through your cows and other stock undigested. Now, considering the tendency to impaired digestion and the natural waste of nutrition, why not avail yourself of "The Dr. Hess Idea," which strengthens digestion. Given in a small dose twice a day,

DR. HESS STOCK TONIC

saves a part of the wasted feed, expels the worms and relieves minor stock ailments. Eighteen years' test has firmly established Dr. Hess Stock Tonic as a necessity to profitable feeding. Every ingredient is recommended by our ablest medical writers. Dr. Hess is himself a graduate of both human and veterinary medicine. An extra quart of milk each week covers the cost.

Our proposition. You get of your dealer a 25 lb. pail of Dr. Hess Stock Tonic at \$2.25 or 100 lbs. at \$7.00. (Duty paid.) Use it all winter and spring. If it doesn't pay you and pay you well, get your money back. Every pound sold on the guarantee. If your dealer cannot supply you, we will.

Free from the 1st to the 10th of each month—Dr. Hess (M. D., D. V. S.) will prescribe for your ailing animals. 96 page Veterinary Book free for the asking. Mention this paper and enclose 2c stamp.

DR. HESS & CLARK
Ashland, Ohio.

DR. HESS POULTRY PAN-A-CE-A. A digestive tonic that helps the hen use more ration for egg production—strengthens and advances young chicks to early maturity—prevents fowl ailments. Costs but a trifle—a penny's worth is enough for thirty fowl per day.

1½ lbs. 35c; 5 lbs. 85c; 12 lbs. \$1.75; 25 lb. pail \$3.50. (Duty Paid.)
Send 2c for Dr. Hess 48 page Poultry Booklet, free.

INSTANT LOUSE KILLER KILLS LICE

Six Shorthorn Bulls must be sold.

Different colors, and their breeding is good enough for any herd. Write me for prices before purchasing.

WM. SMITH, COLUMBUS, ONTARIO

WILLOW BANK STOCK FARM Shorthorns and Leicesters



Herd established 1855, stock 1948, have a special good lot of Shorthorns of either sex of various ages; also a grand lot of Leicester sheep of either sex—a few imported ones to offer.

JAMES DOUGLAS
Caledonia, Ontario.

OAKLAND SHORTHORNS!
We have another lot of young bulls ready for winter and spring trade, out of good breeding dual-purpose cows, and sired by our herd header, Scotch Grey 72692; a fine roan; one of the best bulls in Ontario. Good stock and no big prices. Will also sell cows and heifers; about 50 to select from.

JOHN FLDER & SON HENSALL, ONTARIO

Shorthorns of Show Calibre

Only one bull for sale now, but 13 grand heifers by Mildred's Royal must be sold, as we have no bull to breed them to. Come and see them, or write.

GEO GIER & SON, Grand Valley, Ont.

IMPORTED BULL FOR SALE

Our Green Grove herd of Shorthorns is headed by the two imported bulls Imp Spectator & 5094 and Imp. Roy Bruce & 55038. Present offering: Stock bull Imp Spectator and two choice young bulls, herd headers, fit for service; also good males Geo. O. Fletcher Binkham Ont. Frin Sta C.P.R.

MAPLE LODGE STOCK FARM 1854—1911

Am offering a splendid lot of young Shorthorn bulls for sale now; good colors and choice individuals; several of them from high-class milkers. A few select Leicesters for sale yet.

A. W. SMITH, Maple Lodge, Ontario
Lucan Crossing, G. T. Ry., one mile.

SPRING VALLEY SHORTHORNS

Herd headed by the two imported bulls, Newton Ringleader, =73783=, and Scottish Pride, =36106=. The females are of the best Scotch families. Young stock of both sexes for sale at reasonable prices. Telephone connection.

KYLE BROS., - - Ayr, Ontario

Shorthorns and Swine—Am now offering a very choice lot of cows and heifers, safe in calf, and some choice young bulls for the fall trade; also Berkshire and Yorkshire pigs; showyard material.

ISRAFI GROFF, Falmira Ont.

IMPORTED SHORTHORN BULL

Lord Lieutenant, 50750 for sale or exchange, quite sure and active; young bulls and heifers by him and out of dams direct from imported stock; a racing stallion, rising three years old, no nd, stylish and speedy.

L. K. WEBER, Hawkesville, Ont.
County Waterloo.

10 SHORTHORN BULLS 10

If you are looking for a young bull to head a purebred herd, or one to cross on grade cows to raise first-class steers, I have them to suit all customers at very reasonable prices. They are reds and roans, and one extra good white show calf; ages from 9 to 14 months, nearly all sired by imported bull, and from the best Scotch families of cows. Will be pleased to furnish breeding and prices.

Claremont Stn., C.P.R., 3 miles.
Pickering Stn., G.T.R., 7 miles.

JOHN MILLER, Brougham P.O., Ont.

Shorthorn Bulls—12 to 16 months, reds and roans, Strathallans. A very choice lot of five, considering breeding and extra quality. We offer them at a bargain. The best bunch ever bred at Fairview.

J. & D. J. CAMPBELL, Fairview Farm, WOODVILLE, ONT.

Short horns, Shropshires and Berkshires

—For sale: I have young bulls and heifers, bred for milk production. High-class stock-headers, winners, and covered to the ground. Berkshires, both sexes of breeding age, show stock

W. Wilson, Brickley P.O., Hastings Sta., G.T.R.

High Grove Jerseys & Yorkshires

No better blood in Canada. Present offerings: Choice young sows due to farrow in March. Jerseys, all ages, both sexes.

Arthur H. Tufts, P O Box 111, Tweed Ont

Brampton Jerseys

cows and calves for sale. Production and quality.

Bulls fit for service are getting scarce. Just few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred. Brampton Stockwell the sire. A few good

B H BULL & SON, BRAMPTON ONT,

Stockwood Ayrshires

are coming to the front wherever shown. This herd is now headed by White Hill Free Trader (Imp.) No. 33273, championship bull at Sherbrooke; also headed the 1st prize aged herd. Stock of all ages for sale. Satisfaction guaranteed. D. M. WATT, St. Louis Station, Que. Telephone in house.

Dungannon Ayrshires and Yorkshires—For immediate sale are: Three choice young bulls and a few heifers; also young sows of breeding age, quality and breeding combined

W. H. FURBER, Cobourg, Ont. L.-D. Phone.

Calves

Raise them without milk. Booklet free. CLOUGH & CO., Lennoxville, Que.

CHERRYBANK AYRSHIRES

Imported and Canadian bred, with R. O. P. official records, headed by the renowned champion, Imp. Netball Milkman. Richly-bred females and young bulls for sale.

P.D. McArthur, North Georgetown, Que.

AYRSHIRES FOR SALE

Seven bulls and a few heifers of different ages, sired by Woodrope Comrade, whose first heifer in milk, gave 11,92 lbs. milk, 480 lbs. butterfat in one year. Prices right. H. C. HAMILTON, BOX GROVE, O. ON. Markham, G. T. R.; Locust Hill, C. P. R. Bell phone connection from Markham.



GLENHURST AYRSHIRES

Established over 50 years ago, and ever kept up to a high standard. We can supply females of all ages and young bulls, the result of a lifetime's intelligent breeding: 45 head to select from. Let me know your wants.

JAMES BENNING, Williamstown P.O. Summerstown Sta., Glengarry

HIGH-CLASS AYRSHIRES

If you are wanting a richly-bred young bull out of a 50-lb. a day and over cow, imported or Canadian-bred dam and sire, write me. Females all ages. Prices are easy. D. A. Macfarlane, Kelso, Que.

City View Ayrshires—One very choice bull, 20 months old, four 1911 bulls, all grand individuals, and from R. O. P. ancestors; could spare two or three more cows. Write or phone.

JAS. BEGS, R. R. No. 1, St. Thomas.



STONEHOUSE AYRSHIRES

Are coming to the front wherever shown. Look out for this at the leading exhibitions. Some choice young bulls for sale, as well as cows and heifers.

HECTOR GORDON, Howick, Quebec.

Ayrshires

Bull calves, from 4 months to 9 months, from imported sire and Record of Performance dams. Records 50 to 65 pounds per day

N. Dymont, R. R. No. 2, Hamilton Ont



HILLCREST AYRSHIRES

Bred for production and large tests. Record of Performance work a specialty. Fifth head to select from. Prices right.

FRANK HARRIS Mount Field Ont

Ayrshires and Yorkshires—We have still some good young bulls. Now is the time to buy for the coming season before the best go. We have females any age, and can fill orders for carlots of Ayrshires. Pigs of either sex on hand.

ALEX. HUME & CO., Menie, Ont.

QUESTIONS AND ANSWERS Miscellaneous.

HUNGARIAN BROME GRASS.

What number of pounds per acre should be sown of Hungarian Brome grass?

G. E. G.

Ans.—Hungarian Brome grass (*Bromus inermis*) is known by several names in America, viz.: Austrian Brome, Hungarian Brome, Awnless Brome, and generally speaking, Brome grass. The roots penetrate the soil much like those of twitch or quack grass. It is said to produce about the same amount of hay as timothy, but it is more bulky, and not so marketable. It is essentially a pasture grass. The amount of seed required depends somewhat upon the object in sowing the crop. For pasture, from 15 to 20 lbs. per acre would be a good seeding, and for hay, from 10 to 15 lbs. Sown in combination with other grasses, from 2 to 5 lbs. would be sufficient.

SWELLED LEG.

I have a valuable horse which swells on one of its hind legs. When driven the swelling goes partly out, but not all. I have been feeding him saltpetre three times a week, and tartar emetic once a week. He also has a small, hard lump on the front of the fetlock joint on the same leg. Would you kindly give treatment?

W. T. H.

Ans.—From the meagre description given, it is difficult to diagnose the trouble. It would appear that the animal was hereditarily inclined to rather thick legs, or "stocking," or the swelling may be due to the lump on the fetlock, which may have resulted from injury. Blistering might remove the lump. Purge with 8 drams aloes and 2 drams ginger. Follow up with 1 dram of iodide of potassium twice daily. If this causes a failure in the appetite, reduce the dose to 40 grains. Feed light, and give regular and sufficient exercise.

WARTS—TOP-GRAFTING TREES —SUGAR-CANE—MANGEL SEED.

1. I have a steer with several large warts on shoulder and neck. What is the cause, and how can I remove them?

2. Can apple trees thirty years old or more be successfully grafted to make a satisfactory top?

3. How much sugar-cane seed should be sown per acre for soiling crop?

4. Describe how to grow mangel seed. Would it pay farmers to grow their own seed?

E. B.

Ans.—1. If the warts have a slim base they may be cut with sharp shears, and the wound dressed with caustic, potash, or butter of antimony, applied with a feather carefully, once daily. Sometimes constant application of castor oil is effective in removing them. Some tie a strong thread around the base, which gradually cuts them off. If they are flat, remove with butter of antimony. Any animal is liable to warts, the cause of which is not well known.

2. Cases have been known where very good new tops have been grown on old trees by this method. If the trees are healthy and sound, it would likely turn out all right, provided good care is taken in performing the work, and in after attention. If the trees are in a bad state, scrubby and diseased, it might be more profitable to dig them out and plant young trees.

3. This depends upon whether it is to be sown in drills or broadcast. In drills, 15 to 30 lbs. has given good results, while broadcast, from one to two bushels has been used. There is a wide variation in amount of seed used.

4. Experiments carried on at the Ontario Agricultural College in storing roots for seed, have shown that good results follow keeping them in a cool cellar in loose piles. It is necessary to retard sprouting while in the stored state. Plant the roots in the spring in rows, giving plenty of space for them to grow, say, two feet apart. Give careful cultivation, and when the seed is ripe, collect it and store in a dry, cool place. Under some conditions, it might pay to grow the seed at home. If good, new, pure seed is obtainable from the seedsmen, it is doubtful whether it would pay for the trouble to grow it on the farm. However, home-grown mangel seed has given larger yields at the O. A. C. than imported seed.