

Cows from the ANNANDALE HOLSTEIN HERD

Have won during the past show season at Ottawa first and sweepstakes on cow, first on 3-year-old, first on 2-year-old class. At Guelph (dairy test) first and sweepstakes on cow, first and second in heifers. At Chicago (National) first and sweepstakes on cow, also second-prize cow, second and third on 2-year-olds, second on 1-year-old heifers, and a host of other prizes (different cows at different shows).

Bull calves, 4 months and under only, for sale from great dams and greatest of sires. Buy young if you want them from Annandale Stock Farm.

GEO. RICE, Tillsonburg, Ont.

HOLSTEINS FOR SALE



Four imported and one home-bred bulls, from 8 to 12 months old; also our entire crop of spring bull calves, from week old up.

sired by the grandly-bred imp. bull, Sir Howitje B. Pieterse, whose dam record is over 82 lbs. milk in one day, and from great-producing cows of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 13c. Don't delay if you want one from this herd.

H. E. GEORGE, Crampton, Ont.

WOODBINE HOLSTEINS

Hard headed by Sir Mechthilde Posch, absolutely the best official-backed sire in Canada. Dam Ianthe Jewel Mechthilde, 85.8 pounds butter in seven days. Champion cow of Canada ever all breeds. Sire's dam, Aaltje Posch 4th, holds the world's largest two-day public test record—8.6 pounds butter. Young bulls of the choicest quality for sale.

A. KENNEDY, Ayr, Ont.
Ayr, C.P.R.; Paris, G.T.R.

A FEW HOLSTEIN BULLS

fit for service, for sale at reasonable prices. Choice females, all ages. If you are willing to pay good prices for good stuff, write me.

G. W. CLEMENS, St. George, Ont.

Lyndale Holsteins.

For Sale A number of bull calves from one to four months old, out of Record of Merit cows, and sired by Beryl Wayne Paul Oncordia, whose four nearest dams have official butter records averaging 22 lbs. 11 oss. each. **BROWN BROS., LYN, ONT.**

Centre and Hill View Holsteins

We have four yearling bulls left which we will sell at reduced price to quick buyers; from good producing strains; our own raising. Sold out of females at present. **F. D. EDER, Oxford Centre P. O., Woodstock Station, C. P. R. and G. T. R.**

MAPLE-GROVE HOLSTEIN-FRIESIANS

For Sale: Three bull calves, sired by Lord Wayne Mechthilde Calamity, and all out of Advanced Registry cows. Apply **WALBURN RIVERS, Folden's Corners.**

Maple Glen Holsteins—Three sons of Sir Altra Posch Beet's, whose granddam holds world's largest official record for her age, and grand sire has over 60 tested A. R. O. daughters—the most by any bull on record. Brother of Aeggie Cornucopia. Secure the best. **C. J. GILROY & SON, Glen Buell, Ont.**

Grove Hill Holsteins—Herd contains 55 head, in the advanced registry. Our stock bulls have all been backed up by high records. Present offering: Several young bulls and a few females. **F. R. MALLORY, Frankford P. O. and Stn., C. O. R.**

IMPERIAL STOCK FARM HOLSTEINS

A prizewinning herd of imported, officially tested stock. Bulls of all ages for sale, also a few cows. **W. H. SIMMONS, New Durham, Ontario.**

"GLENARCHY" HOLSTEINS We have for immediate sale several young bulls and a number of young females, that for ideal type and superior quality, backed up by gilt-edged breeding, are unsurpassed. **G. MACINTYRE, Renfrew P. O. and Stn.**

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshire sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock. **THOS. B. CARLAW & SON, Warkworth P. O., Campbellford Stn.**

Holsteins, Tamworths, Oxford & Dorset SHEEP FOR SALE. At present we have 1 young bull, 8 Oxford ram lambs, Dorsets, 1 yearling and 1 aged ram, Tamworths, both sexes. **J. A. Richardson, South March P. O. and Stn.**

HOLSTEINS AND YORKSHIRES

R. HONEY, Brickley, offers for sale a choice lot of young boars fit for service; also sows ready to mate.

HILTON STOCK FARM—Holsteins, Cotswolds and Tamworths—Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. **R. O. MORROW & SON, Hilton P. O., Brighton Tel. and Stn.**

QUESTIONS AND ANSWERS. Miscellaneous.

RELATIONSHIP OF HALF-BROTHERS.

Are two colts sired by the same horse, but out of different dams, any relation? If any, what relation are they?

SUBSCRIBER.

Ans.—What relation would a man be to his half-brother?

MUSHROOMS.

Kindly send anything you have about mushrooms. Have you grown them with slight, say, single-board partition? Does success depend on expensive plant?

G. F. B. P.

Ans.—The best information you can get regarding the growing of mushrooms may be found in a work on "Mushroom Culture," by Wm. Falconer; price, about \$1 [order through this office]. In this connection, however, I may say that mushrooms are one of the most uncertain crops we ever tried to grow. Some years we had an excellent crop, and at other times failed entirely. In most cases, however, we thought the failures were due to poor spawn. It is often very difficult to get good live spawn. When one succeeds in getting a good crop, he should, if possible, save over the spawn of his own growing for successive crops. **H. L. HUTT, Horticulturist, O. A. C., Guelph.**

ROPY MILK.

My customers have been complaining about my milk. They say if they set it away for twelve hours or fifteen hours that the cream is stringy and chunky, and that they cannot get it to mix with the milk or dissolve in their tea, although the milk is perfectly sweet. I find upon setting up samples, say a quart or two, that what they say is true. My cattle are in good order, apparently in good health, on good pasture, supplied with good water, with salt at their disposal nearly every day.

Ans.—The complaint which customers make regarding the milk supplied by subscriber, is evidently due to what is called "ropy" milk. This is generally caused by some form of bacteria, and the remedy is to thoroughly scald and clean every pail, can, dish, etc., which comes in contact with the milk. This is the only way to get rid of this trouble. It may be coming from some one particular cow, and I would advise setting the milk from each cow separately until all the herd has been gone over, and thus see if it can be located with any one cow, but it is altogether likely that the trouble is to be found in the pails, cans, etc. **H. H. DEAN.**

FILTER FOR HOUSE WATER SUPPLY.

Some four or five years ago I had a well drilled about 116 feet, have a plentiful supply of water, but the water is never perfectly clear. I had a sample analyzed by my physician, who said it contained nothing but a little fine quicksand. We are using water for the house, and would like to know if we could arrange a convenient and inexpensive way of filtering a sufficient quantity for use in the house. We have room for tank in cellar, if that would be suitable, or could be placed underground.

A READER.

Ans.—The water in this instance may contain very fine particles of clay. It would be very difficult to clear this by filtering. If it is quicksand, then filtering will likely clear it. If a drop of the water were examined under a small microscope, the nature of the substance in suspension could easily be determined. I cannot estimate exactly what quantity of water would be required per day for the house, but I shall assume 100 gallons. For this amount, the filter basin would require to have a surface of one and a half square feet, and should be seven feet deep. The amount of water that will pass through the filter per day will depend upon, first, character of the filter; second, the surface area of the filter, and, third, the depth of the water over the filter. A depth of three feet of water over the filter should furnish sufficient head to force the water through the filter. As to the filter itself, on the bottom should be laid a line of two-inch tile connecting with the iron pipe that leads to the clear water basin; over the tile, one foot in depth of broken stone should be laid; over that, one foot of coarse gravel, then one foot of fine gravel, then

from one foot to two feet of medium sand. Care should be taken to have the material of these distinct layers all of uniform grade. Each grade should be sifted, and the finer as well as the coarser grades removed. Any lack of uniformity in the size of the particles composing each layer will interfere seriously with the permeability. The total depth of filter should be from four to five feet, making seven or eight feet in depth over the whole basin. The top layer of sand will likely catch most, if not all, of the quicksand, which is removed from the water. Thus this quicksand will gradually accumulate in the top layer, and in time lessen its permeability, so that the filter will draw more and more slowly. It will, therefore, be necessary occasionally to renew a part or all of the top layer of sand. The old layer should be scraped off and fresh sand put in its place. It is advisable to have a separate basin for the clear water, even if it is only a small one, for in event of an unusually large demand, the filter may not be able to supply water fast enough, and in any event the filter does better work when allowed to work slowly and uniformly. The clear-water basin may stand with its bottom at the same level as that of the filter, and, of course, it should be as high as the filter. **J. B. REYNOLDS, Ontario Agricultural College.**

WATER PIPE NOT WORKING.

I use a windmill for pumping water into a tank in the barn to supply the stables and house with water. I have always used a wooden tank until about three weeks ago. If the tank got empty and we started the mill to pump, we could get water at any place we wanted it right away. About three weeks ago, I put in a new steel tank, right in the same place where the wooden tank was. We cannot get water until the tank is one-third full. I feel satisfied that it is air in the pipes. Why should air stop the water since I put the steel tank in, when it did not with the wooden one, and how will I remedy it?

A SUBSCRIBER.

Ans.—It is evident that the air which was allowed to fill the pipe while the tank was being changed has not yet all been removed; or, which is more likely, that some obstruction has got into the pipe, partially blocking it. The latter would account for checking the rate of flow from the tank, and would allow air to remain in the pipe, and thus would lessen the pressure, which would account for the failure to flow until the tank is partially filled. Certainly, if the pipe were in the same condition as before, it would act the same under the same head. It would be well to examine the pipe and remove the obstruction which is very likely there. **J. B. REYNOLDS, Ontario Agricultural College.**

MENTAL GEOGRAPHY.

The largest river is Time.
The deepest ocean is Death.
The region where no living thing hath habitation is called Yesterday.
The most highly civilized country is To-day.
The highest mountain is called Success.
Few reach the top save those who watch sharply for the passing of the spirit of the mountain Opportunity who carries upward all those that seize hold upon him.
The region where no man hath ever set foot is called To-morrow.
The greatest desert is called Life, and it hath many oases. These are called Hope, and Ambition, and Love, and Charity, and Home. And of them all the last is the most beautiful. Besides these are many others smaller in extent, whence the traveller obtaineth refreshment during the weary journey through Life.—Exchange.

The gift of Jesus to mankind has been His faith in the never-failing presence of an infinite love. He, first of all human beings, rose to the perfect and un-failing confidence.—James Freeman Clarke



R. R. NESS, JR., HOWICK, QUE., P.O. AND STATION.

Lump Jaw
The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durably bound, indexed and illustrated. Write us for a free copy. **FLEMING BROS., Chemists, 45 Church Street, Toronto, Ontario**

HIGHGROVE JERSEY HERD.

Our present offering is a few choice heifer calves from 2 to 8 months old, which, considering quality, will be sold reasonable. **ROBT. TUFTS & SON, Tweed P.O. & Sta.**

Brampton Jersey Herd—We have now for immediate sale 10 bulls, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars, address, **B. H. BULL & SON, Phone 68, Brampton, Ont.**

Pine Ridge Jerseys—Present offering: Some good young cows and a choice lot of heifers, all ages, from 4 months up; also some good Cotswold sheep (registered). **WILLIAM WILLIS, Newmarket, Ont.**

AYRSHIRES

The famous Reford Herd at St. Anne de Bellevue, Que., now owned by Sir William C. Macdonald.

Several yearling bulls for sale; also a number of bull calves, quality and appearance extra good, bred from the best milking strains, noted for robust constitution and large teats. For particulars apply to **MACDONALD COLLEGE, St. Anne de Bellevue, Quebec.**

BARREN COW CURE

makes animals breed. Abortive Cow Cure prevents animals aborting. Cures guaranteed or money refunded. **L. F. BELLECK, Morrisburg, Ont.**

AYRSHIRES—Choice stock of either sex, different ages, for sale. Prices reasonable. For particulars apply to **N. DYMENT, Hickory Hill Stock Farm, Dundas Stn. & Tel. Gt. Mississauga, Ont.**

Maple Cliff Dairy and Stock Farm—Breeder of Clydesdale Horses, Ayrshire Cattle, Berkshire and Tamworth Pigs. Young stock for sale at all times. **R. REID & CO., Hintonburg, Ont. Farm adjacent Central Experimental Farm.**

Ayrshires and Yorkshires

We always have on hand choice animals of above breeds, of any desired age. Prices reasonable. Write us before buying. Intending purchasers met at Hoard's. Alex. Hume & Co., Menie P. O.

SPRING BURN STOCK FARM, North Williamsburg, Ont. H. J. WHITTAKER & SONS, Prop. Breeders of Pure-bred Ayrshire Cattle, Oxford Down Sheep, Berkshire Pigs and Buff Orpington Fowls. Young stock for sale. Eggs for hatching, \$1 for 13, and \$4 per 100.

HIGH-CLASS AYRSHIRE CATTLE

Bulls and heifer calves, two to nine months old, cows and heifers all ages. Prizewinners from this herd include Tom Brown and White Floss, sweepstakes at Chicago. **DAVID BENNING & SON, Glenhurst, Williamstown, Ont.**

Select Ayrshire Bulls—A right good one, 18 months old. Four choice last Aug. and Sept. calves. Special low price on five March and one May calves. **W. W. BALLANTYNE, Neidpath Farm, Stratford, Ont.**

Wardens Ayrshires We are offering young bulls from 1 to 2 years old; also a choice lot of spring calves from deep milking dams. Sired by White Prince of Menie No 1825; bred by A. Hume, Menie. **F. W. TAYLOR, Wellman's Corners, Hoard's Stn., G. T. R.**

STOCKWOOD AYRSHIRES FOR SALE

Have some nice February calves for \$30 each, out of heavy milking dams. Sire Pearl Stone of Glenora; also some nice young cows and heifers. **D. M. WATT, Allan's Corners, Que.**

Burnside Ayrshires

Imported and Canadian-bred. Prizewinners at all the leading shows. I hold the award of merit given by the Bd. of Dir. of World's Fair, St. Louis, to the breeder of largest number of prizewinning Ayrshires at said Exposition. Females of all ages for sale, imported and Canadian-bred.