

## HARMONICA

## The Brass Band Harmonica

is one of the finest instruments made in the world to-day. Extra full tone, and beautifully finished. Packed in an elegant folding pocket case.

## The Mariner's Compass

is two inches in diameter, nickel plated, ring attachment for chain, and in general appearance resembles a watch. A very useful article, for when you want it you want it badly.

**A Three-inch Reading Glass** with a powerful lens, nickel mounted, and handsomely finished. Very useful in every home.

Fill out the following blank and return to us with \$1.50, and name your choice of Premiums:

## LISTEN!

While they last we will give you your choice of any **TWO** of these premiums for sending us **ONE** new subscriber to The Farmer's Advocate and Home Magazine (not your own name) at \$1.50 per year. **ONE** of these magnificent premiums would amply repay you for your trouble in securing a new name, but we are actually offering you your

## COMPASS

## Choice of Any Two.

The supply is limited, so if you want to be sure of getting your choice you must hurry. "A word to the wise is sufficient."

## READING GLASS

CUT OUT AND RETURN TO US.

New Subscriber.....Date.....  
P. O.....Prov.....Am't.....  
Sent by.....P. O.....  
Premiums desired.....

## TUBULARS WRING GOLD FROM MILK

Tubular butter brings 25 to 35 cents. Cream is worth only one cent for stock food. Yet many farmers have no separator—only half skim their milk by setting—lose 24 cents on cream fed to stock—and wonder why dairymen don't pay. **Tubulars stop this loss.**

**Tubulars get the last drop of cream out of the milk—make big profits.** Tubulars are the only modern separators. Notice the low can and enclosed gears. Write for catalog S 193.

THE SHARPLES SEPARATOR CO., WEST CHESTER, PA.  
TORONTO, CAN. CHICAGO, ILL.

**Sharple's**  
**TUBULAR**  
CREAM SEPARATORS

J. A. LATTIMER, box 16, Woodstock, Ont.

BREEDER OF

## Clydesdales and Shorthorns

Has now to offer some good young bulls, sired by Imp. Bapton Chancellor. Speak quick if in need of such, as they will soon go at the price asked.

## ABERDEEN-ANGUS



Females; all ages, with calves at foot and safe in calf again. All bred by the leading sires and dams. Correspondence invited.

**GEO. DAVIS & SONS,**  
Glenora Stock Farm,  
Alton P.O. and Station, C.P.R.

**Four Aberdeen-Angus Bulls**—Two herd-headers and two useful bulls to use on grade cows. **Barred Rock eggs** at \$4.00 per 100.

**JAMES BOWMAN, Elm Park, Guelph Ontario.**  
Here's **Two Durham bulls**, 2 years old, and a snap: one 18 months, two sired by a Royal Sailor bull that would weigh 2,300 lbs., and one by an imported sire. For quick sale \$75 each. **Barred Rock eggs**, 5 settings for \$2. An imported Shoemaker and several home-bred roosters used in flock.

**W. R. BOWMAN, Mt. Forest, Ontario.**  
**Aberdeen-Angus bull** for sale, Black Diamond, No. 826, 3 years old, this spring. A good individual and extra stock-getter; has never been beaten in show-ring. Price reasonable. Also one Chester White boar, old enough for service.

**A. G. SPAFFORD, Compton, Que.**

**Angus Cattle for Sale**—Our present offering: Three young bulls and a few females of the best strains. Prices very reasonable.

**J. W. BURT, Coningsby P.O., Erin station, C.P.R.**

## BROXWOOD HEREFORDS.

A few choice bull calves from my imported stock.

R. J. PENHALL, NOBER P. O., ONT.

## FIVE NICE, SMOOTH HEREFORD BULLS FOR SALE.

Two about 16 months and three from 8 to 10 months old. Priced right to do business.

**W. BENNETT,**  
Box 428, Chatham, Ont.

## THE SUNNYSIDE HEREFORDS

Twelve high-class bull calves and 4 yearling and 2-year-old bull, we will place at a price that will move them quick. Some choice cows and heifers are yet left for sale. Address: **A. F. O'NEIL, Maple Grove P.O. or M. H. O'NEIL, Southgate P.O.**

**FOREST VIEW FARM HEREFORDS**  
Four bulls from 8 to 12 months old; prizewinners and from prizewinning stock. Several heifers bred on the same lines; choice individuals for sale. **JOHN A. GOVENLOCK, Forest Sta. and P.O.**

**HEREFORDS**—We are now offering a few thick, smooth young bulls and a number of females—a low-down, even, beefy lot. If in want of something extra good, correspond with us. We can please you. **J. A. LOYER, Coldwater P.O. and Sta.**

## QUESTIONS AND ANSWERS. Miscellaneous.

## CEMENT CONCRETE FOR WALL.

I am about to build a concrete wall, 110 feet long and 9 feet high, for barn basement. What cement is best to use, and in what proportions should the gravel and cement be mixed? What thickness should the wall be made, and how many barrels of Portland cement will it take to build such a wall? Please give all information you can.

S. A. K.

Ans.—Ordinary good gravel in making cement concrete is used in the proportion, by measure, of nine to twelve parts of gravel to one of Portland cement. It would be very unwise for us, if we knew, to say which brand of cement is best. Concrete walls for barn foundations are usually made one foot in thickness. Where field stone, not too large, can be got, it is well to imbed as many as possible in the wall, but so as not to come within an inch of either face, as thereby cement and gravel both are saved. The wall you purpose building would require from 27 to 30 barrels of Portland cement.

T. B.

## FERTILIZING PROPERTIES OF NITRATE, COMMERCIAL POTASH AND ASHES.

Will you kindly give, through your "Questions and Answers" department, the relative fertilizing properties, per cwt., of sodium nitrate, potash (of commerce), wood ashes and coal ashes?

M. B.

Ans.—Comparing the fertilizing properties of sodium nitrate and potash is much like comparing the nutritive properties of salt and sugar. Sodium nitrate is a nitrogenous fertilizer. As such, it promotes stem and leaf growth, and imparts a healthy green color to the leaves. Potash, contained in sulphate of potash, muriate of potash, kainite, wood ashes, etc., is just as essential as nitrogen, but has somewhat different functions. It seems to be essential in the formation and transference of starch in plants, and thus, indirectly, in sugar production. It plays an important part in the development of wood structure, and of the fleshy portions of fruit. It is also, in part, a neutralizer of plant acids. There are two ways of valuing fertilizers. One is the commercial valuation, i. e., the price per unit of value at which the various fertilizers can be purchased in the market. There is also the agricultural value, i. e., the price at which we can afford to purchase these and make a profit out of their use. The agricultural value depends largely upon circumstances. The agricultural value of nitrogen is usually less than the commercial value, for the reason that on a soil well supplied with the other elements of fertility, legumes may be grown to gather nitrogen from the air, thus procuring it very much more cheaply than it can be bought in commercial forms. If all the nitrogen sold in the form of crops and animal produce cost us as much as the estimated valuation of nitrogen in commercial fertilizers, we would soon go out of business, unless prices for our produce were greatly advanced. We will answer the question, however, according to commercial valuations, as this is about the only stable basis of comparison. Nitrate of soda carries about 16 per cent. of nitrogen, worth 15c. or 16c. a pound. It is thus worth about \$2.40 to \$2.50 per cwt. Muriate of potash and high-grade sulphate of potash contain about 50 per cent. of potash, worth from 4½c. to 5c. a pound, sulphate being rather the more valuable of the two. This figures out to about \$2.25 per cwt. for the muriate, and about \$2.50 for high-grade sulphate. Kainite, as purchased on the market, will run about 12 to 13 per cent. potash, worth, say, 60c. Dry hardwood ashes, unleached, will run 6 to 8 per cent. potash, and between 1 and 2 per cent. phosphoric acid, and would be worth in the neighborhood of 45c. a cwt. Leached ashes would contain practically as much phosphoric acid, but rather less than half the amount of potash, and might be valued about half the price of the unleached. Coal ashes have no fertilizing value to speak of.

## Standing Offer



Good always, everywhere. \$100 Reward, for any lameness, curb, splint, founder, distemper, etc., (where cure is possible) that is not cured by

## TUTTLE'S ELIXIR

Greatest horse remedy in the world. Tuttle's Family Elixir invaluable for human bruises, pains, rheumatism, etc. Send for free 100 page book, "Veterinary Experience." The perfect horseman's guide. Every disease symptom and its treatment.

TUTTLE'S ELIXIR CO.

66 Beverly Street, Boston, Mass.  
Canadian Branch, 32 St. Gabriel St., Montreal, Quebec.

## EASY MONEY AT HOME

Raising canaries. More profitable than chickens. All indoors. You'll get \$5.00 to \$5.00 each for young singers. Experience unnecessary. To get you interested quickly we send COTTAM BIRD BOOK (thousands sold at 25c.) and two canes.

## BIRD BREAD 10 CENTS.

and "CANARY vs. CHICKENS," showing how to make money with canaries. All for 25c. stamps or coin. Address COTTAM BIRD SEED, 38 St., London, Ont.

## GEO. D. FLETCHER,

Breeder of Scotch Shorthorn Cattle, Yorkshire Pigs,

and S.-C. White Leghorn fowl. Herd headed by the Duthie-bred bull (imp.) Joy of Morning—winner of first prize at Dominion Exhibition, Toronto, 1903. Young stock for sale. Eggs for hatching 75c. per setting.

Binkham P. O., Ont. Erin Station and Telegraph

## Shorthorns, Cotswolds and Berkshires.



For sale: 4 yearling bulls, cows, heifers and young calves. Orders booked for Cotswolds and Berkshires.

**CHAS. E. BONNYCASTLE,**  
P. O. and Stn. Campbellford, Ont.

## SHORTHORNS AND SHROPSHIRE

Have sold all the sheep we can spare at present, but have a few Shorthorn heifers. No fancy prices asked for quick sales.

**T. H. MEDCRAFT & SON, Sparta P.O., St. Thomas station.** Long-distance telephone.



**ROCK SALT** for horses and cattle, in ton and car lots. Toronto Salt Works, Toronto.

## Shorthorns FOR SALE

Two red bull calves; 6 heifers, sired by that grand bull sire of unbeaten Fair Queen and sister, Queen Ideal. First prize senior heifer calf at the International, 1904. Also first prize and junior champion, and reserve grand champion at Winnipeg, 1905.

**M. H. FAIRBAIN,** - Thorndale, Ont.

## SHORTHORNS, LINCOLNS &amp; OXFORD DOWNS

Herds headed by imp. Royal Prince and imp. Abbotsford Star. For sale: Nine bulls, six months to one year, three from imp. dams and imp. sires; also females. Oxford Down sheep and Barred Rock cockerels. **John McFarlane & W. M. Ford, Dutton, Ont., Elgin County.**

## SHORTHORNS AND LEICESTERS.

4 extra choice young bulls ready for service & also bull calves, all from imp. sires. Leicester ewes and lambs of both sexes for sale. Address

**W. A. DOUGLAS,**  
Caledonia Station, Tuscarora P.O.

**Scotch-bred Shorthorns** Four young bulls sired for service; also several cows and heifers in calf to Good Morning (imp.), now heading the herd, at low prices. **L. K. WEBER, Hawkeville P. O.**

**Shorthorn Bulls**—Imp. Scottish Peer—40224—4 years old, sure, and a good sire. Also 3 excellent young bulls of his get, and an 8-year-old Clyde stallion. Come and see, or address

**JAMES SNELL, Clinton, Ont.**

**Shorthorns** Have several good ones for sale between 5 and 10 months old. Also a few heifers at very reasonable prices, bred to sons of Imp. Royal Sailor and imp. Wanderer's Last. **J. R. McCallum & Sons, Iona Stn., Ont.**

## SHORTHORNS AND DORSETS

We are offering at living prices two 2-year-old and two 1-year-old heifers, a couple of young bulls and the stock bull, White Count 57871. The offering is a lot of good stuff and in good condition. Also a few H. red Dorsets.

**D. BARTLETT & SONS, Smithville P.O. and Sta.**

**MAPLE LEAF STOCK FARM**  
4 Choice Young Bulls for Sale. Also some cows and heifers, and prizewinning Berkshire pigs. Terms reasonable.

**ISAAC GROFF, Ains P.O. & Stn., C.T.R.**

When Writing Please Mention this Paper