

Questions and Answers.

Miscellaneous.

[Silage Freezing—Strength of Wire.

1. A speaker at our Seed Fair made the statement that even in the coldest sections the silage in a silo never freezes except from the top, and if the edge is kept considerably lower than the center, the silage can be taken out without being frozen, except a little on top. I, on the contrary, am of the opinion that especially in the colder parts of the Province a circle of silage freezes all around the silo, extending from top to bottom, and cannot be prevented by the above method from so doing. Can said speaker's statement be demonstrated to be true?

2. Suppose two sets of whiffletrees are joined by a wire encircling them and force applied, does the wire have the resistance of two strands or one?

J. R. F.

Ans.—1. In cold climates, silage may freeze a little around the outside before it is touched. Most of the freezing is due to improper methods of taking out the silage. Keep the center always high and the edges low, and much less loss will result.

2. Of one, at the weakest point.

Shafting and Pulleys.

I am using a four-horse-power gasoline engine for threshing and crushing grain, using a 14-inch pulley on the engine and a 6-inch pulley on the cylinder, and by running the engine at about 350 revolutions per minute, that gives the cylinder about 900 revolutions per minute, which is about right. I want to put the thresher on the left and connect to a shaft. Now, if I connect the engine to a six-inch pulley on shaft, and a 14-inch pulley on shaft to drive cylinder, will that give the cylinder the same number of revolutions per minute as if connected direct to engine. I want to drive a pump-jack from same shaft. What size pulley will I use? Would 14-inch pipe inside measure do for shafting, as I have it, and boxes to suit? Is 12 feet too long for a shaft, a pulley at each end without a box in center? W. W.

Ans.—With a 14-inch pulley on the engine and 6-inch on the shaft, the shaft would turn at the same rate as the cylinder now does, which you say is about 900. Hence, if you use a 14-inch on the shaft and 6-inch on the cylinder, the latter would run 2,100 revolutions per minute. There are two ways by which you can get the cylinder to run at the same rate as now. First, use 14-inch on engine to drive 6-inch on shaft, then use 6-inch on shaft to drive 6-inch on cylinder. Second, use 14-inch on engine to drive 14-inch on shaft, and 14-inch on shaft to drive 6-inch on cylinder.

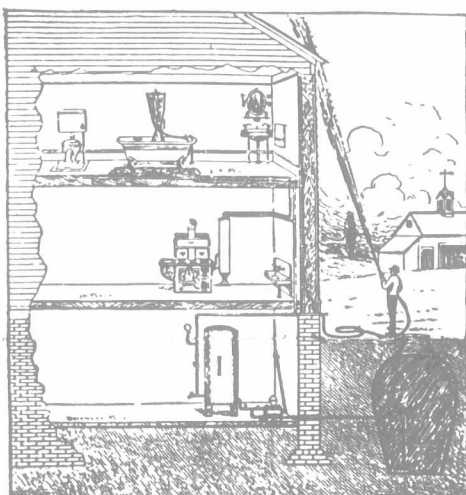
Regarding pump-jack, we must first decide at what rate a pump should run. Perhaps 60 strokes a minute, that is 1 per second, would be about right. Now, if you use 14-inch on engine to drive 6-inch on shaft, then you have a speed of 900 revolutions per minute on the shaft, and it would be very difficult to cut this speed down to 60 strokes per minute. The pulley on the shaft would have to be very small, and that on the jack very large. If, however, your shaft runs at the same speed as the engine, that is 350 revolutions per minute, and if there is no gear in the jack, then the pulley on the shaft to run the jack should be one-sixth as large as that on the jack, e. g., if your jack pulley is 12 inches in diameter, that on the shaft to run it should be 2 inches in diameter. While 60 strokes per minute is possibly about right for pumping, yet you could run as high as 120 per minute all right. For this speed, if the shaft runs at the same rate as the engine, and there is no gear in the jack, then the pulley on the shaft should be one-third as large as that on the jack.

Regarding the 14-inch pipe I am somewhat doubtful of this being satisfactory for shafting, there would probably be too much twist and spring to it.

W. H. D.

"I have been thinking it over, and I have concluded that two can live as cheaply as one, and so—"

"So have I; and that being the case, you and I will continue to be two instead of becoming one."



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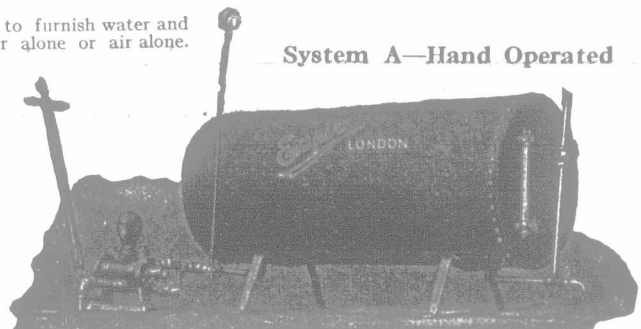
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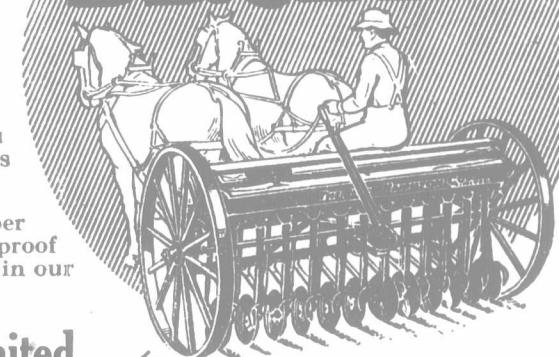
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Head headed by Imp. Loyal Scot. Have for sale, 10 high-class young bulls of herd heading quality and several of the milking type. Also females of the leading families. Consult us before buying. **GEO. AMOS & SONS, MOFFAT, ONTARIO** Farm 11 miles east of Guelph; C.P.R. 1/2 mile from station.

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For Sale—"Lynnore Duke," age 1 year and 9 months—from imported stock—highly bred.

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For Sale—Boars and sows, 9 months, 4 months and 3 months, from choice Imported English Stock.

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SHORTHORNS

6 bulls from 9 to 16 months including a high-class herd header dam from an Imp. English Duchess cow; dams are good milkers, priced very low to clear them out before spring, also a few females.

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Shorthorns For Sale

The Brant County Shorthorn Club offers for sale bulls and heifers of all ages, of the best breeding either singly or in car lots. For information address the Secretary, **James Douglas, Pres. Geo. L. Telfer, Sec. Caledonia Paris, R.R. No. 2**

Cedarsprings Shorthorns and Tamworths

Present offering: 1 young bull out of heifer that in five months R.O.P. Test has given 4,000 lbs.; another just as well bred, both sired by a son of a 60-lb. cow. Tamworth specialty, young sows bred.

J. M. McCallum

Shakespeare, P. O., and Station

1854--Maple Lodge Stock Farm--1915 We have now for sale one red bull, 18 months, a typical dual-purpose Shorthorn and a red good animal. A full sister is now in R.O.P. test, making very creditable record. Two others, good ones, about one year. **(Miss) G. Smith, Clondeboye, R.R. 1, Ont.** Loran Crossing one mile east of farm.

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Head headed by the two great breeding bulls, Newton Ringleader (Imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex. **KYLE BROS., DRUMBO, ONTARIO** Phone and Telegraph via Ayr.

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