

ends of each, which are run through two iron block castings (2 x 4) with two parallel holes through them. The bands can be slackened or tightened with nuts as required. They are in two parts, 25 feet each, with 4 ends. The silo was painted on the outside only, and covered with a shingle roof, as it stands in the yard a short distance from the stable door.

Since the above was written we have seen an improvement on the cast-iron blocks through which the ends of the round bands go, for holding and tightening or slackening the silo, viz., two sound 4 in. by 4 in. oak scantlings, on opposite sides, extending from top to bottom. Holes are bored through these with a little slant, and with a good metal washer under the nut a very secure job was made.]

LIMING GRASS LAND.

P. G. MILLS, King's Co., N.B.:—"Please give information, through the columns of your valuable paper, as to the proper time to apply lime to clay soils for grass, what quantity to sow per acre, and best method of application?"

[For grass land, early spring or autumn—in the form of a top dressing—are the best seasons to apply lime. Care should be taken to have the material thoroughly slaked to a fine powder, and to spread it evenly. From 40 to 60 bushels per acre is a good dressing. It may be applied with a fertilizer sower or from a wagon, cart, or stone-boat, by means of a shovel in the hands of a careful man.]

HARVESTING AND CURING TOBACCO.

J. H. LUDDE, Minn., U.S.A.:—"Please publish in your valuable paper, the FARMER'S ADVOCATE, the process of harvesting and curing tobacco preparatory to manufacture?"

[There are two methods of harvesting: cutting down the whole plant or gathering the leaves singly. The former has been practiced for a long time by tobacco-growers, but the latter is regarded the more scientific method and has grown in favor. The first plan is the easier and permits of quicker handling, but the leaves have to be assorted afterwards; while the latter permits the sorting of the leaves in the first operation, and the development of a greater number of mature leaves. After the plant is wilted and becomes pliant and in good condition to handle without breaking, it should be strung on sticks in small bunches of leaves tied so that the blades hang downwards. Some tobacco-growers hold the opinion that the plants should be harvested without wilting at all, stringing on the stick as soon as cut, and carrying them immediately to the tobacco barn. The reason for this is that often at the time of cutting the ground is hot and the plant becomes very warm and quickly sunburnt. When hung on the stick, which is about four and a half feet long, six or eight large plants is the usual number. These are carried to the barn on a wagon having high sides upon which the ends of the sticks rest. The process of curing now commences. No matter how fine the plants may be, or how large the production, an error in curing is sufficient to largely destroy the work of the season. The tobacco barn should be built with windows and doors sufficient to insure a free current of air. The barn should be high enough to permit three rows of plants being hung one above the other, say 16 or 18 feet from floor to roof. This should be left open at ends and sides to admit the drying winds and heat, but in a wet time the doors will need to be closed and artificial heat applied, best by flues or radiators. After the tobacco is thoroughly cured, it should be packed to keep it moist and fresh. This is done by a man on his hands and knees, laying the tobacco in two rows. It may remain in this form until ready to send to the factory, when it is packed firmly into bales or boxes. It is sometimes left under pressure for a considerable time before being manufactured.]

LEAKING WATER-TANK.

CLODHOOPER, York Co., Ont.:—"Please inform me in your next issue how best to stop a leakage in a wooden water-tank, made of 2 x 4 pine scantling, except the bottom, which is 1 1/2 inches thick?"

[It is one thing to stop a leak in a water-tank and another thing to keep it stopped, especially with a bottom as thin as the one in question. Two inches at least is light enough, especially for the bottom of a tank that frequently has to be driven over very uneven surfaces, as in the case of threshing engine tanks. If the leaks occur along the cracks, they may be temporarily stopped by allowing the tank to dry, bottom side up, for a few days, then stuff the openings with strips of old sack thoroughly saturated with tar or hot pitch, then pour pitch over the place on the inside. If oakum or tow can be obtained from a flax mill, or by fraying out an old rope, it will answer better than strips of sack. It must, however, be saturated with tar to remain watertight.]

FALL PASTURING MAMMOTH CLOVER—MEASURING OF CATTLE FOR WEIGHT.

FARMER, Perth Co., Ont.:—"I have a good catch of Mammoth clover, and intend plowing it down for fertilizing purposes next May or June. Would it be advisable to have same eaten off closely or even moderately this fall? 2. I would like to learn a rule for determining the weights of live cattle by measurement?"

[1. Mammoth clover being somewhat tender, it would be unwise to pasture it closely this fall. A moderate grazing, however, should do no harm, provided it be not continued late in the season.

The roots should be well protected with top at the end of the growing season. 2. With regard to the weight of cattle by measurement, it may be taken as a rule that each cubic foot of living carcass is equal to 42 pounds (3 stone). The length of an animal is taken straight along the back, from the square of the shoulder to the square of the buttock, and the girth immediately behind the shoulder. Rule.—Girth squared, multiplied by 10 lengths, divided by 21, gives weight in stones, which, multiplied by 14, gives the weight in pounds. Measure in feet. This rule is simply approximate, and varies with the condition of the animal. It is for an animal in moderate beef condition.]

YOUNG PIGS.

SUBSCRIBER, Quebec:—"1. Would you be good enough to answer the following through the next issue of the ADVOCATE? We have two boar pigs over three months old; they have not shown yet except on one side. Can anything be done to bring the other testicle down? Does leaving the pig half complete cause the meat to be strong, and at what age does the meat of a young boar begin to get strong? 2. I saw a litter of pigs a few days ago that had been farrowed with small bladderlike protrusions on their foreheads. What is the cause of this?"

[1. The best treatment for the young boars is to make pork of them as early as possible, as nothing can be done to cause the invisible organ to descend, and the meat of a half boar, like a complete one, becomes rank at an early age, some say at four months old. 2. With regard to the litter of pigs with small bladderlike protrusions on their foreheads, this must be due to the want of development of the bones of the head. More bone will be deposited as they grow, and this condition will pass away. Give the sow some ground bones, and feed plenty of ashes; if this is not available a small quantity of limewater every day would be of service.]

LIVE STOCK MARKETS.

Toronto Markets.

The cattle trade has been moderately active during the last week; supply of beasts larger than usual, 85 loads on the market to-day. A large number of bulls were on sale, at improved rates. Fat export beasts were more enquired for; the best made 4 1/2c. per lb. The number of sheep and lambs was also larger, 1,200 on the market; all cleared up before noon. A few more exporters wanted. The Buffalo buyer, Mr. Sharp-miller, took all on offer, and will take good fat lambs for the next few weeks. About 1,200 hogs on sale; prices steady.

Export Cattle.—Trade generally was more brisk for really choice exporters. About 100 head of cattle were on sale, at improved rates. Some Polled Angus were on the market for shipment to the Old Country. Dealers were operating slowly on lower cables from Glasgow. Prices ruled from 3 1/2c. to 4c. per lb. The best sale of the day was 4c., and 1/2 over on the deal. The exporters are more cheerful. The last two shipments made money. Space was eagerly enquired for, as there is a large number of cattle ready for export from this market.

Butchers' Cattle.—Trade somewhat easier; the ruling figures, 3 1/2c. to 3c., being paid for pick of load. Some of the inferior cattle went lower than 2c., and were hard to sell at that price. Choice butchers' stock always sells, but common, poor quality should not be sent here. About twenty carloads were shipped to Montreal by C. P. R. One carload, 22 cattle, weighing 20 lbs. each, sold at 4c. per lb.; one load, 20 cattle, 24,300 lbs. average 1,241 lbs., sold at 4c.; one load, 22 cattle, 29,510 lbs., sold at \$3.75 per cwt.; one load, 21 cattle, 1,300 lbs. average, sold for \$4.25 per cwt., the best sale of the day. One carload sold for \$28 per head.

Bulls.—Steady; some good shippers changed hands at 3c. A few good ones wanted at 3 1/2c. would be paid for choice.

Sheep and Lambs.—Two nice bunches of lambs were taken for the Buffalo market by Mr. Sharp-miller. Lambs were firmer, at 4c. per lb. Some were sold at \$2.50 to \$3.00 per head. This was paid for extra quality. Good exporters wanted; a large number required for the New York market. Butchers' sheep not in demand. The exporters say that a much better trade could be worked up if there was not so much friction between the two Governments, and that the old plan of making the entry values on the basis of what the lambs and sheep are worth on the market where sold, and not as now—placing the values on the basis of what the lambs are worth on the Canadian market.

Cattle.—About 100 taken for the Buffalo market. No change in price from last quotation. Choice veals will fetch \$6 per head. There is no doubt this trade is somewhat hampered by the want of an official veterinary inspector. Both buyer and seller demur at paying inspection fees, as they consider if the U. S. authorities admit only by certificates, the Government should provide an officer for inspection free.

Milk Cows.—Not many on offer; all sold by noon. Good cows fetch \$30 to \$35 per head; 1,000 on the market, including a very fine lot of Tamworth-Berkshire grades. Although these improved grades do not fetch any fancy price, they always reach the top, and are first choice for packers. A great improvement is to be noticed from year to year in the quality of the hogs offered. Scrubs come in, but are not so numerous as in former years. Prices steady; choice sangers sold at 4 1/2c. per lb.; light, \$4 to \$4.15 per cwt.; thick fat, \$3.20 to \$3.25.

The inspection of hogs made by the Government inspectors at the scales before weighing is very close, and their decision final, salesmen having no appeal therefrom. Dressed Hogs.—Only one or two loads on offer; values quoted at \$5 to \$5.25 per cwt.; a fair demand; prices steady for next week. The exports this season have so far exceeded any previous year, with a good enquiry for hams and bacon. Eggs.—The egg season is opening early in England this year. Already 2,250 cases of Canadian eggs have arrived at Liverpool. At the same period last year only 75 cases had arrived. A large contract has been made for delivery in November at 6s. 3d. per long hundred, twelve dozen; about \$1.50 per 100. Receipts are just about ample for demand. Dealers are just getting their surplus stock fairly well cleared up. Prices hold at 9c. for strictly fresh laid.

Cheese.—England imports annually considerably over 2,000,000 cwt. of cheese. In 1895, Canada sent 1,150,018 cwt., or more than half; the United States, 500,000 cwt., less than one-fourth; Holland, 305,290 cwt., or about one-seventh; and Australia 32,750 cwt., or one twenty-third part. The local demand is light, but a good clean-up at the warehouses took place last week, leaving the market firmer, at 8c. to 8 1/2c. being quoted for new cheese.

Butter.—The choicest grades of dairy butter in pound prints are in good demand, and for such top price of the market is paid, 18c. to 20c. per pound. Medium and low grade butter is plentiful, for which 11c. to 13c. is about the price.

Poultry.—Turkeys are scarce. Good chickens are quoted at 50c. to 60c. per pair. Ducks were in good supply, and best quality fetched 60c. to 80c. per pair.

Grain Market.—On the street market 200 bushels sold at 66c. to 68 1/2c. per bushel. There were 400 bushels of oats sold, at 20c. for new and 22c. for old.

Hay.—About fifteen loads of hay sold, at \$13 to \$14 for new and \$14 to \$15 for old.

Straw.—Bundled straw sold at \$10 to \$11; only four loads on the market. One load of loose straw sold at \$6. Farmers complain of drought east of Toronto.

Montreal Markets.

The rapid advance in prices in the British markets has not been of long duration, but it has, nevertheless, caused quite a firm feeling to prevail in our own local markets. Notwithstanding the fact that there were close on two hundred more cattle on the market this morning than is usually offered, at the close up very few remained unsold, and these were of the inferior grades.

Export Cattle were not wanted in any numbers, but a few were taken to fill space, for which from 3 1/2c. to 3 3/4c. per lb. was paid, and in one or two instances for a very choice beast 4c. was obtained.

Butchers' Cattle.—The demand has been very steady on most of the markets lately, and all offerings of really good stock do not remain long unsold. To-day was no exception to the rule. Considerable of this is, of course, due to the cooler weather that has prevailed of late, which has caused a much increased demand from butchers. As high as 3 1/2c. per lb. was paid for choice butcher beef, but was an outside figure for something very fine. Good beef was obtainable at from 3 1/2c. to 3 3/4c. per lb., and very fair to medium from 2 1/2c. to 3c. per lb.

Small Meats are selling well, sheep and lambs especially meeting with a very good demand, the offerings invariably being absorbed early in the day. All told, there were only 750 sheep, lambs, and calves offered to-day, 250 of each; about half of the former being taken for export, at from 3c. to 3 1/2c. per lb., the culls going to the butchers, at 2 1/2c. to 3c. per lb. Lambs were strong and up fully half a dollar each, some of the best making \$4 each, the range being from \$2.75 to \$3.75, as to size and quality. Calves sold fairly well, at \$2 to \$3 each.

Live Hogs.—There is very little change to note in this line. Receipts in the yards continue light, seldom going over 300 on a market. Thick fats rule very low in proportion to light bacon hogs, the former rarely making over \$3.50 to \$3.60 per cwt., while the latter sell readily around \$4 per cwt.; 250 last Monday, averaging 177 lbs., making \$4.25 per cwt. off the cars, or about 4c. in the yards. The light bacon hog is the hog that is wanted.

Hides and Skins.—The hide market is in a very unsatisfactory condition, both from local and outside sources, at writing, at home the demand from tanners being almost nil, some of the houses actually threatening to close for a period, and the big drop that has taken place in U. S. markets, where they have dropped 1 1/2c. per lb. in almost as many weeks. Although, at writing, dealers on spot have not reduced beef hides from the last half cent per lb. decline, it is more than likely that there will be another drop of one half cent before you go to press. Lamb skins will be advanced 5c. on the first of the month, to 45c. each. Green salted hides, 55 lbs. and down, each: No. 1, 5 1/2c. per lb.; No. 2, 4 1/2c. per lb.; No. 3, 3 1/2c. per lb. Heavy steer hides, 60 lbs. and up: No. 1, 5 1/2c. per lb.; No. 2, 4 1/2c. per lb.; No. 3, 3 1/2c. per lb. Calf skins, No. 1, 6c.; Calf skins, No. 2, 4c. Lamb skins 40c. each.

The British Markets.

The recent sharp advance in cattle has not been maintained, values each week receding until to-day's cables were only quoted at 5 1/2c. (11 1/2c. for best United States cattle; 10 1/2c. for choice Canadian). Sheep were also weaker, and quoted at 10c. to 11c. per lb. (These quotations are for dressed beef, sinking the offal.)

Shipments last week from this port were 4,941 cattle, 3,576 sheep, and 238 horses, against 3,531 cattle, 3,206 sheep, and 182 horses for the previous week, the total shipments to date being 56,444 cattle, 34,758 sheep, and 6,300 horses. The offerings this week at ports named in Great Britain include all shipments from United States and Canadian ports:

	Cattle.	Sheep.	Gra. of Beef.
London.....	3,093	2,432	2,014
Liverpool.....	5,408	3,598	16,177
Glasgow.....	1,549	1,611
Southampton.....	2,200
Bristol.....	443	535
	10,493	8,176	20,391

Canadian Horses in Glasgow.

A sale of horses, both from Canada and the United States, by Messrs. Macdonald, Fraser & Co., at Glasgow, was held recently, when there were over 60 animals on offer. Those presented were consigned by some of the largest exporters to Toronto, Montreal, Philadelphia, and Chicago. The animals exposed consisted of a nice selection of matching and carriage horses, suitable for either private or posting purposes, while a few of a heavier class on offer were fitted for farm and cart or lorry work. There were also a number of very superior animals catalogued, principally trotters, some with good records. The entire offerings showed well, exhibiting plenty of style and action, many being horses with good bone and substance. There was a good attendance of buyers from various parts of Scotland and England; but as the season was well advanced no improvement was recorded in prices. Thick-set horses for commercial purposes were in most demand, and made good prices. The highest values were recorded for the trotters, two cob mares from Messrs. Macchattie Brothers, Chicago, 6 years old, and 15.2 hands high and 14.2 hands high, realized 55 gs. and 50 gs. respectively. A chestnut cob, 7 years old and 15 hands high, shipped by Mr. George Watson, Indiana, was withdrawn at 56 gs. Mr. Weber, Philadelphia, had on offer the trotting stallion, Forrest Wilkes, said to be the fastest imported into this country, which changed hands at 51 gs. The brown prize mare, Dorcas, 8 years old, 15.2 hands high, bought for 46 gs., while the other trotters were sold from 23 gs. up. Matching and carriage horses, 4 to 7 years old, and 15.1 to 16.1 hands high, realized from 17 to 22 gs.; matching cobs, 4 to 7 years old, 14.2 to 15.2 hands high, 15 to 35 gs.; cart horses, 6 and 7 years old, 15 to 20 1/2 gs.; and vanners, 20 1/2 to 21 1/2 gs. each.

Gossip.

Mr. Geo. N. Harris, of Lynden, Ont., is offering for sale in our advertising columns young registered Berkshires and Southdown sheep at rock-bottom prices. The Berkshire herd includes a sow bred by Col. J. Blandy Jenkins, Kingston House, Eng., and Cressman's Orkney—3220—sired by Dorset Chieftain (imp.)—1561—. The stock boar in use is Cressman's Dundee—2977—, also bred by Col. J. B. Jenkins. The Southdowns were founded from the flock of the late Thomas Wilkinson, a well-known breeder of the past, while others of the flock were purchased from the late Mr. Burgess, of Burgessville, Ont. The lambs are an even, nice-qualified lot, sired by a couple of shearing rams bred from Mr. Douglas's (of Galt) choice imported ram.

A reward of £1,000 is now being offered by Messrs. Sanders & Co., orchid importers, St. Alban's, for a growing plant of the *Cypripedium Fairieanum*, "the lost orchid." It is in Calcutta that the reward is being offered. For nearly forty years this prettiest of all the "lady's slipper" variety of plant has eluded the search of the Argus-eyed professional collectors.