

day after the conclusion of the sale. The matter of providing keep is provided by the Auction Mart Co.

I should like to see further views from agriculturists on this most important and interesting matter, which, on its own merits of trafficking live stock, is worthy of further discussion and thought, as a farmer wishing to dispose periodically of his surplus stock, has, on present methods, simply to take what he is offered, whether it is fair market value or not, and a butcher or dealer has to take practically whatever he can get, without any choice on his own part. How much better it would be to attend an auction mart, say weekly, and have plenty of scope to suit his own taste and convenience as to purchase.

York Co., Ont.

WM. OGLE.

Our Scottish Letter.

This letter is being written as we sail down the Clyde—in some respects the most wonderful waterway in the world. Owing nothing at all to natural advantages as a stream, it has through the enterprise of the citizens of Glasgow and neighboring towns been made into one of the famous rivers. When one contrasts it with the St. Lawrence, the Mississippi or other great natural waterways he is naturally filled with contempt. To call it a river when they are in the mind's eye excites the laughter and awakens the sarcasm of the American visitor. The Clyde can, however afford to smile. He laughs best who laughs last and certainly the last laugh in this case is with those who know what an insignificant Scots stream has been made. Lining both sides of the narrow waterway as we sail away from Glasgow are miles of quays, whereat are loaded first the small coaster, next the Clyde-fleet of pleasure steamers, then the channel steamers trading to Scotch, English and Irish ports, and next the great liners loading cargo and embarking passengers for all ends of the earth, the furthest down and very largest being the Holt blue-funnelled liners for Australian ports. These are so large that they only load part cargo at Glasgow and go to Liverpool to fill up. The largest steamers sailing out of the Clyde direct are the four Anchor liners which maintain the Atlantic ferry between Glasgow and New York. Next to them in size, and loading and embarking a little further up the river are the Canadian liners of the Allan and Donaldson fleets. During the summer months these are well known to Scots of rural ways, as they weekly carry hundreds of the flower of our youth to Canada, as well as hundreds of Clydesdale horses.

After we leave the loading berths of the steamers, begin at one of the shipping yards. The furthest up the river now is Henderson's at the mouth of the Kelvin, where the Anchor liners are built. A little way further down on the opposite side is Fairfield, where the late Sir William Pearce built the Atlantic flyers beginning with the Arizona, then the Alaska, next the Oregon, which bit by bit lowered the Atlantic record, and when we get about half way down the river we come to Clydebank, and find the berth where the Lusitania was built, now occupied by the framework of the biggest ocean leviathan yet planned, the Aquitania also for the Cunard line. Further up the river but a little way below Fairfield is Linkhouse, where the Stevens have built many an Allan liner, including the first turbine that ever crossed the Atlantic, the Victorian. Naturally with such a record a Scotchman feels rather proud of his little river, and this month he is especially elated. One hundred years ago, on the 13th of August, Henry Bell placed upon the Clyde the first regular trading vessel propelled by steam, and on the 31st we hold high holiday on the Clyde to commemorate the advent of the Comet. We have just passed the monument to this enterprising man, which occupies a prominent site on the river which he helped to immortalize. Further down we come to Greenock, where was born James Watt, the inventor of the steam engine. It is curious to read that Watt was sceptical of the success of Bell's venture, not quite seeing how his engine could be adapted to marine propulsion. Bell showed that it could be and placed the first steam trading vessel on European waters and established the fact. On 31st we will endeavor to realize what it means, when we endeavor in imagination to place the Comet alongside the Aquitania. If the Comet had not sailed the Aquitania had never been planned.

CLYDESDALE SHIPMENTS—ADVICE TO SYNDICATES.

Agriculture must now claim attention. Last Saturday, August 17th, 115 head of Clydesdales were shipped to Canada and up to date we have only shipped 100 less than we shipped in the same period of the record year 1911. The quality of the exports is decidedly higher than it has been. There are fewer medium-quality animals being shipped and a much greater quantity of high-class horses and mares. In several of the lots are Highland-Society, Glasgow and Aberdeen winners. The Cawdor-cup mare for the season, Harviestoun Baroness, is to be shipped from London by the

Atlantic Transport line this week. She goes to Mr. Fairbairn, New Jersey. Mr. Hassard got away Macaroon, the Cawdor cup winner for 1911, and last week's shipments had Garty Bonus for Mr. Sinton, and Lord Gleniffer for Tom Graham, Claremont.

Some complaint has reached this side concerning the class of horses sometimes shipped. But this is a matter in the hands of Canadians. They buy such horses as are indicated with their eyes open. They could very easily learn the truth about them, and importers generally pay for such horses just about what they are worth. If anyone is to be pitied in connection with such transactions it is the unfortunate purchasers in Canada. There can be nothing more galling than to find that a horse purchased by a farmers' syndicate will not get stock. Farmers may rest assured that the importer never buys a horse of that kind without knowing his reputation, and except because he can be purchased cheaply such a horse would never leave this country. No Scotsman is engaged in dumping horses on the Canadian market, and our advice would be that syndicates should deal sharply with those who sell such horses to them. They need not be afraid to hit the importer. He never takes a bad-doing horse to Canada except at a bad-doing horse's price. And when he takes such a horse he means to "do" somebody with him, as he can never make revenue out of him in any other way.

REGISTRATION OF STALLIONS.

The Board of Agriculture and Fisheries is making substantial headway with its registration scheme for entire horses. The system is new to this country and we do not take readily to new departures. But a thing which is intrinsically good must ultimately prevail, and this appears to be happening in the case in point. The number of entire horses entered on the Register in 1911 was 312. Of these 105 were Thoroughbreds, 96 were Shires, and 23 were Clydesdales. This year 613 were registered, of which 162 were Thoroughbreds, 215 were Shires, and 48 were Clydes. Since the scheme was inaugurated the new Board of Agriculture for Scotland has come into being, and no one knows what its policy is to be in this connection. For one thing it is most desirable that the policy of both Boards should be uniform, that the standard of soundness adopted should be alike in both Boards, otherwise a horse might be classed sound in Scotland and unsound in England. That would not do, and there would be no end of trouble with horses doing duty in the border counties. Some of us have all along been opposed to the policy of having two Boards in this island, but our opinions have been over-ruled, and we must now make the best of an arrangement which may do some good, but has within itself the possibility of very considerable ill.

FOOT-AND-MOUTH CONTAGION ELUSIVE.

Current experiences with foot-and-mouth disease imported from Ireland do not tend to increase admiration for dual boards having control of agricultural affairs. The Irish Department is a well-equipped force, yet after two months wrestling it has failed to get the better of the outbreak which began in the end of June. The punishment meted out to those who failed to notify the first outbreak scarcely seemed to meet the fault, and at date there are reports of new outbreaks all in more or less close proximity to the seat of the first ascertained outbreak at Swords. The Irish authorities are now in a somewhat feverish state of anxiety to adopt stringent measures. Had they done this at the outset in all likelihood they would now have obtained the mastery of the disease. What impresses one is the isolated character of the outbreaks. Individual animals here and there are affected; they are at once pounced upon, and the utmost precautions are taken to avoid the spreading of contagion. When it is next heard of the case again appears to be isolated. No connection can be established between the two cases, and the search for causes again proves fruitless. This is the most disheartening feature of these outbreaks. In no single case has the source of contagion been traced. Only in the Edinburgh case of more than two years ago was there something like good cause shown for suspecting imported straw as the agent. What is known is that the disease breaks out and then is stamped out. The suspicion in many minds is that the human agent is more of a medium than many suspect. It is a melancholy feature of the Irish outbreak that one of the men employed in butchering the affected animals has contracted the disease. No price can be too high to pay for the extinction of such a wasting disorder.

NATURAL MILK UNADULTERATED.

We have been having somewhat lively times with the problems of a milk standard. A full bench of our Court of Session (the Supreme Court in Scotland, with seven judges), has decided that a man is not in breach of the regulations who sells milk, no matter how poor the quality,

as the cows give it. What a milk seller has to prove is that he sells milk as he gets it from the cow, without tampering with it in any way whatever. Some of the judges were inclined to take up the position that this could only be proved by disinterested evidence, and the question arose whether under such conditions it could be proved at all. Unless the evidence of those working about the cows was to be admitted, where could evidence worthy of the name be found? Therefore the courts have held that evidence from such persons is sufficient, provided always regard has been had to some sense in cross-examining witnesses for credibility. After all is said a false witness can never tell a consistent story, and it ought to be the aim of an attorney not to harass a witness but to see whether his or her story always comes out the same way under trial. An absolute standard for milk has much to recommend it, but so long as we have no such standard we must be content with a presumptive standard sanely administered.

FERTILIZER PURCHASES.

Manuring problems have not yet assumed the importance with Canadians that they hold here. It will be of interest to them to know that in a recent case a farmer has recovered damages from a firm of manure sellers because he was supplied with manures otherwise compounded than he had contracted for. What he got was no doubt worth its price, but it was not what he bargained for, and the courts have decided that the merchants who supplied what the farmer did not ask for are responsible for the deficiency in his crop caused by this breach of contract on their part. This decision will appeal to men as in harmony with equity. Farmers have themselves largely to blame for their losses in this line. They purchase manures on the sellers' advice—a very unwise course. They should themselves best know what is wanted for their soil.

SCOTLAND YET.

THE FARM.

Pumps.

Editor "The Farmer's Advocate":

There is probably no mechanical device on the farm as constantly out of good working condition as the farm pump. It is seldom entirely useless, and just about as seldom at the acme of efficiency. This is more particularly true of the wooden "variety"; yet there is no better hand pump made than the same old wooden one, when kept in proper repair. This usually means the adding of a new leather to the bucket whenever the stroke fails to throw a sufficient stream. Slitting the leather, allowing it to spread out more, will often produce the desired result for a time. If the cylinder (in which the bucket works) becomes very much worn the new leather may fail to fill the space properly, so it is wise to get a new cylinder put in, but this does not often occur. There is usually but one valve in a hand pump (besides the valve in the bucket) and this seldom gets out of order. Sometimes a small stone or stick will be sucked up and lodged under it to prevent which the inlet should be covered with galvanized screening and the top securely nailed on to prevent thoughtless boys from dropping stones in above. If the pump fails to throw any water, pour in a pailful at the top and work the handle. If it "holds" then you know there is a slow leak somewhere below the bucket, probably at the lower valve or one of the joints. If it fails to hold, then you know there is a large obstruction in the bucket valve—probably a frog. If by pumping the water remains stationary in the pump you know the lower valve is not in order, or there is a big leak somewhere below the bucket. If the water disappears entirely and there is not much in the well, then you know that both valves leak rapidly. Pull out the bucket and repair it, but if the trouble is due to a small leak below the cylinder it may often be remedied by driving the joints together on top with a sledge. If in the lower valve, then the pump will have to be raised. However, if the pump be properly protected above and below as indicated, and used only for household purposes, these troubles will seldom occur. It is only when used constantly for watering a large stock that these difficulties arise. In this locality it is common to use windmills for the stock watering, attaching them to an iron pump, which can be changed to hand work whenever desired. But though a very reliable and efficient pump for this purpose, it is (owing to the small cylinder) too slow and hard for hand use. If one is not using a drilled well and does not need to force the water anywhere, a much cheaper and better arrangement is to use an iron lift pump made by attaching an iron or brass cylinder to a sufficient length of galvanized iron piping (inch and one-quarter is a good size). The cylinder may be placed at end of the piping and in bottom of the well, or one-half or one-third of the way down, but I prefer the bottom, because it does away