Our Scottish Letter.

The transition stage in Scottish agriculture through which we are at present passing is trying many usuages and methods which had become hoary and venerable. The keenness of competition is driving the poetry out of agricultural life, and amongst the time-honored institutions about to pass away is the milkmaid. In the south the milkmaid is unknown, and the milkman has taken her place, but in not a few districts both milkman and milkmaid are awanting. In this stress, men's eyes are naturally being turned to mechanical milkers. and several of these are on the market. Two were on trial at the recent show of the Royal at York, but the jurors declared that neither had sufficiency of merit to warrant an award being made. This is much to be regretted, as both are ingenious, and one patented by Mr. Wm. Murchland, Kilmarnock, is in constant use on farms in the west and southwest of Scotland. It extracts the milk from the teat by steady suction, and is thus devoid of the pulsating movement which accompanies the operations of the calf. This machine was awarded first prize a few years ago after an exhaustive trial by the Highland and Agricultural Society, and there can be no doubt in the mind of anyone who reads the reports of the jurors that relatively the decision was sound. Whether the absence of an award at the Royal, York, contradicts this is not known, but I should think it does not, for this reason: Avowedly, the Highland award was a decision on the relative merits of the competing machines, whereas the award at the Royal appears to have proceeded on the assumption that the judges were to make an award based, not on relative, but on absolute merit. The competing machines both in the Highland and the Royal trials had an extremely ingenious pulsating motion in the teat-cup which gives very much the same result as the intermittent suckling of the calf. Unfortunately, to obtain this motion somewhat intricate machinery is necessary, and while this is ingeniously contrived, it also makes it difficult to thoroughly clean the milking apparatus and tubes, and consequently the milk drawn by this pulsating machine was found to be of indifferent keeping quality. What really condemns these machines is the difficulty of keeping the mechanism clean, and although they embody an idea, until this difficulty be overcome they are not likely to prove an unqualified success

Sheep-shearing by machinery has been fairly well established as a feasible idea, and there were two trials of such machinery at York. Both awards went to one house, the classification being for machines wrought by hand or foot and machines wrought by mechanical power. Such mechanism is likely to be pretty well known in Canada, and need not be written about in detail. So far no one has succeeded in applying the new electric-motive power to purposes of agriculture. Judging by what was seen at York, this is largely due to the fact that too many things are being attempted at first, and consequently the machines are frightfully clumsy. One such was on show at York, but it was so ungainly and unwieldy that it is far removed from the arena of commercial success. After all, there is no pressing need for undue haste in the application of electric-motive power to purposes of agriculture. The motor-car is very far from being a commercial success, and while no doubt the day is coming when the quick-acting economical motive the slower going men who wait until they are able to see such power spelling success in a commercial sense will be the first to give it undivided support. A fatal blunder has been made by several agricultural engineers in placing new machines on the market embodying excellent ideas, but by no means matured, and so they have greatly retarded the genuine triumph of such inventions. There is luck in leisure here, as well as elsewhere, and the wise man hastens slowly.

Sheep breeders from all quarters held an international conference in York during the show. They consulted regarding many points of interest to their calling, their great idea being to do something to prevent fraud in connection with the sale and exportation of sheep. Some foreign and colonial speakers indicated a fear that a buyer did not always get the animal he purchased, and the problem was to discover some way in which fraud of this kind might be prevented. This is equivalent to the older are the an include man, and the goal map he is day, by a militarization in the other decrease in the problem was a honest man, and the goal map he is day, by a militarization they cannot be decreased from the first according to the first and the same in the other and the same in the other according to the map in the first according to the first accor

Economical Horse Raising for Farmers.

The economic farmer who has sufficient work to do to justify him in keeping horses for that purpose is the man who can raise horses most economically. and with him the colt is a by-product, a net profit in the transaction. If a farmer has work for four horses, he can afford to keep five mares; or for two, he can keep three. Let them be good useful animals, of whatever breed, free from inheritable blemises. and of good disposition. He should mate these with the best sires of the same breed in the vicinity. and should go to the trouble in connection with his neighbors of securing, either by forming a horse company or some other way, the services of a suitable horse in that neighborhood. He can use his mares right up to the time of foaling, provided they are put at ordinary farm work. They are then entitled to a couple of weeks' rest and can then be used during the summer at ordinary farm work. and with proper care he can grow the kind of a horse that farmers require. If any one fails to produce a colt in the spring, he can breed her for a fall colt. and in this way soon stock and overstock his farm, with the kind of horses which the markets require. A good colt, well bred and well cared for, is salable at any time.

There are other farmers who are willing to buy these colts and growthem, for the very good reason that they can buy them cheaper than they can produce them. These are farmers that have a large amount of pasture, especially blue grass pasture, and are better prepared for grazing colts than

growing them.

When the colt is coming three years old it should be sold, underordinary circumstances, to the farmer who is mainly engaged in growing grain or for any reason wants young horses to work. These men keep them until they are ready to go to the city market, and can sell them at considerable advance on their cost.

The economical breeding and growing of horses is, therefore, the work of three or four different men. One man raises them as a by-product of his mares, another grows them for the consumption of his waste pasture, and the work is finished by the man who has light work for them to do and thus gets a profit on his work horses by reason of the advance in the price. This is the way horses are grown in France, to a great extent in Great Britain, and, in fact, in every other country. It is the way the business naturally develops—a sort of division of labor.

If any of our more wealthy readers see great profits in keeping brood mares for the sole profit of raising a colt, we ask them to do a little figuring. They can make their own figures, only they must not allow their imagination to run away with them. Make their figures honestly and they will soon convince themselves that we have in the above pointed out the only economic way of breeding and growing horses.—Drovers' Journal.

Swinelets.

The time to think about protecting pigs from a cannibalistic mother is a couple of months before they are born.

The pig is not half so filthy in its habits as man thinks it is, and to that fact the filthiness so often seen is largely due.

The too handy corn crib, with its abundant and cheap contents, often makes the sow so fond of her pigs that she devours them.

The properly fed sow is nearly always healthy.

barring contagion or epidemic disease, and the healthy sow has no appetite for her own pigs. If pigs were lost through any mistake or neglect last spring, recall the circumstance with a view to

avoiding the mistake next spring.

The pig is a slow, sluggish, quiet fellow, and should not be hurried; not even in his eating, by reason of the very uncomfortable quarters he has

What to feed, and how to feed, are important questions, but when to feed is equally important, and the when should be at the very same hour every day.

Foul, stagmant water, the leakings from stable or hog yards are sources of worms in hogs. The purer the water given them the less worms in hogs. Mildly laxative, cooling, soothing, non-fattening foods given to the brood sow before the arrival

of her little ones will make her love them enough so that she will not desire to eat them. The man who thinks the hog the nastiest is generally the one who changes its bed the most

The man who thinks the hog the nastiest is generally the one who changes its bed the most seldom. The clean horse must have a fresh bed every day; the dirty hog often has to be thankful if it gets a clean bed once a month.

It will pay to save all the pigs possible in the spring, and to do that care well for the mothers a month or two before the little fellows arrive. Give the mothers milk-producing, not fattening, food; the mothers milk-producing, not fattening, food; there is made into a thick mush with clover-hay tea, or chorally ground oats prepared the same way, we have sent up and a little oil meal scattered on it is also good.

restion with some Canadian farmers bushed of wheat cheaper with a parties a bushed of wheat cheaper with the points of butter. The writer will rost more to produce the first and the first parties of butter; and the worth more at the worth more at the worth was a partie of they have

A Good Quality in a Boar, Size Without Coarseness.

One of the most important points to be arrived at in the selection of a boar is that he shall have as much size as it is possible to obtain without any tendency to coarseness. It is not always easy to secure an ideal sire in this respect, because as hogs increase in size they are much disposed to the development of a certain amount of coarseness, es pecially in the head and shoulders. The special aim of the breeder should be to correct this, because the most valuable parts of the pig lie to the back of its shoulders, and the better proportioned a pig is "behind the saddle" the more fully will he comply with the present day requirements of bacon curers, and the better price he and his progeny will fetch when sent to market. While it is essential to have a comparatively small head in the case of a boar, care must be taken to avoid effeminacy in this direction, as there is nothing more indicative of inbreeding or lack of constitution than a thin, narrow head with a weak snout. Farmers' Ga

The Government Whitewash.

The enduring whitewash used in all departments of the United States Government where such a preparation is needed is thus made:

Take a half bushel of unslaked lime, slake it with boiling water, cover during the process to keep in steam, strain the liquid through a fine sieve or strainer, and add to it a peck of salt, previously dissolved in warm water: three pounds of ground rice boiled to a thin paste and stirred in while hot; half a pound Spanish whiting and one pound of glue, previously dissolved by soaking in cold water, and then hanging over in a small pot hung in a larger one filled with water. Add five gallons of hot water to the mixture, stir well and let it stand a few days covered from dirt. It should be applied hot, for which purpose it can be kept in a portable

The east end of the President's house in Washington is embellished by this brilliant whitewash, and it is used by the Government to whitewash lighthouses. A pint of this mixture, if properly applied, will cover a square yard, and will be almost as serviceable as paint for wood, brick or stone, and is much cheaper than the cheapest paint.

Buckwheat --- Quantity of Seed and Time to Sow.

To the Editor FARMER'S ADVOCATE:

Sir, Some time ago I noticed an enquiry regarding the growing and management of buckwheat, and your answer quite differs with our experience in this section. We find that we have better success on the average sowing the last week in June, and one very successful grower says he would not sow his buckwheat before the 4th July if his ground was ready ever so long before. Another difference, we sow only two pecks to the acre if our ground is in good condition. We find that ground plowed in the fall, in the spring harrowed and disked, plowed harrowed and again disked, again well plowed to kill all quack and thistles, thoroughly and fine harrowed, gives the proper tilth for a successful crop. The straw we throw loosely on the barnyard to be tramped into manure during the early winter, quite a quantity of forage being taken out of it by the cattle. We sold ours two seasons ago at 42c., and the past season it was worth 50c. We get usually 20 to 30 bushels to of 50 bushels per acre from 2 pecks sowing.

Addington Co., Ont. W. J. Shaxnon,

Jerseys as Butter Producers. In the annual report of the English Jersey Cattle Society for last year, just published, an interesting summary is given of the results of the butter tests made at the leading shows under the auspices of the Society during the season. The returns given show that the average yield of milk per cow of the 136 animals publicly tested during the year worked out to 31 lbs. 25 ozs., at an average of 106 days in milk, or a fraction over 3 gallons per day. average daily yield of butter per cow was 1 lb. 11 ozs., so that the butter ratio for the 136 cows tested worked out to 1 lb. of butter for every 18,22 lbs. of milk. The best daily yield of butter given by any of the cows tested during the year was 3 lbs, 6^3_4 ozs. which was produced by the cow Sundew 4th, the property of Lord Braybrooke, at the great annual outter tests held in conjunction with the Tring Agricultural Society's Show. Another cow at the same show gave a yield of 31bs. 4, ozs. of butter in the 24 hours over which the test extended.

Dr. Saunders, Director of the Canadian Experimental Farms, has gone to Paris to examine the horticultural exhibits as to their fitness for the Glasgow Exhibition next year. He will also, by invitation, represent Canada at the British Association meeting at Bradford in September, and take the opportunity to visit experimental stations in Great Britain and France, with which he has long been in correspondence since his appointment, but has not visited for fourteen years.