will probably tell you that horse-breeding is a lottery, but if he is an honest man he must admit that the comparison is very unfair to the lottery, there being nothing but blanks in his.

There is another kind of lottery which, however,

has some prizes, and this is the breeding of a mare of unknown blood to a stallion which seems to suit her in class, and good of his kind. He must, of course, be sound and pedigreed, and the longer the pedigree the better. The number of prizes in this lottery will depend on the skill of the individual breeder in the selection of the sire and in the general management of his stock.

Lastly comes the breeding of horses "in line." Some of the fillies in the preceding example have shown a distinct advance in the direction desired, and by patiently building on these and culling out the others we advance steadily to a point at which our mares are pedigreed, for all practical purposes of the breeder. I do not wish to be understood as advising the breeder to use or keep entire his colts, but he has at his command all the information that a pedigree can supply; and the only practical value of a pedigree lies in its record of so many generations of line breeding.

Unfortunately, too many breeders are impatient of results. They will admit that it took them years to evolve from their native cattle the fine herd that they now own, and that it was only accomplished by cross after cross of pure-bred bulls. But when they breed an under-bred mare to a pedigreed stallion they expect in the first generation a valuable, high-class colt. They are prone to forget that a filly which only shows a slight improvement over her dam may turn out to be a valuable brood mare when mated with a stallion of the same breed.

The chief difficulty in line breeding lies in the uncertainty as to what stallion may be in the district in any year. I think a small combination of breeders in any district would be sufficient to attract or retain a satisfactory stallion, but if this is impossible it remains to send the mare to the stallion to be bred or to leave her barren for the year. To breed her to a stallion which the owner of the mare believes to be unsuited to her is only to throw away service fee and feed, for although the prices obtainable for good horses are on the rise, the poor ones are still almost unsalable.

I would like to suggest in passing that it would be a good thing to have payments for insured mares fall due soon after harvest. This would be, I think, a satisfactory time for farmers to make these payments, and would cause less grumbling then than in February or March. It would also relieve the stallion-owner of the risks of the overloading of insured mares, and of plunging them through deep snow; and, while making the breeder more careful, would enable the owner of the stallion to give a lower insurance rate. At present the

careful farmer pays for the careless one.

For the last few years the market for light delivery horses has been glutted with ranch-bred horses, and some few of these are used as saddle horses by those who are not very particular as to their mount. They range in price from \$13 to \$30, an occasional one going a little higher, while a good-sized farm-bred saddler would in any of these years bring \$125 and over; but as farmers will not raise these, a purchaser who wants anything better than a broncho has to get it from Ontario. These horses can only be bred from a Thoroughbred stallion, for although pulling the mane and cutting the tail of a trotting horse may accentuate the size of his head and the crookedness of his hind legs, it cannot diminish the roughness of his pa

Why is it that Ontario supplies practically the whole of our demand for work horses? We should have an advantage of about \$50 over the Ontario breeder in our own market, when freight and profit are taken into consideration. Why do not farmers at any rate supply themselves from the surplus of their neighbors? This is, I think, partly because a farmer does not care to be indebted to a brother farmer in the absence of ready money, whereas he willingly gives a note to a dealer. Surely the advantage is mutual, and each party gains by this deal! It is also, I think, partly due to farmers raising very few really heavy horses, and also because the average farmer very seldom has his colts really fit to sell till fall, when the demand has

As I am afraid that I am trespassing on your valuable space, I will venture a few suggestions in conclusion. We may expect to find a market for our colts if we breed the heaviest of our heavy mares to good heavy pedigreed stallions. Your district will be favored indeed when it becomes necessary for you to decide between the rival merits necessary for you to decide between the rival merits of the Clyde and Shire. Middle-weight mares, if of good quality (a very large "if") may be bred with advantage to a good Hackney, or if they are lacking in quality they will be better bred to a Thoroughbred. The small mares I should be inclined to leave alone. It is unnecessary, I should think, to incist once more on soundness in both sire and dam insist once more on soundness in both sire and dam, but we must not forget that size, substance and action are worth dollars in every line. As the time for selling approaches, put your colts in a condition fit for sale, and if you get a fair offer at home let the foreign markets look out for themselves. It should be quite possible to induce the secretary of one's district agricultural society, for a slight consideration, to keep a list of the colts that are for sale in the district. The breeder could supply the details showing whether his colts were heavy or light, and from this a dealer could find out where he could get a carload without traveling thirty or

forty miles between each purchase. You cannot expect the dealer to come before the colts are there. Try to combine with your neighbors to guarantee, twenty mares to a suitable stallion, and a small advertisement will, I think, bring many satis-

factory replies. Lastly, remember that the Horse Breeders' Association was formed to further the interests of breeders, and that any suggestions along the line of improvement in breeding or selling facilities will be welcomed by the Association, and all assistance in their power given. We must not forget, however, that an association supported as it is without Government grant and without salaried officers is apt to lose enthusiasm in the face of half-hearted support of those for whom it works. Are you a member, or are you confiding your interests to the care of everybody else? W. L. PUXLEY,
Secretary Horse Breeders' Association.

Winnipeg.

Thoroughbred or Hackney?

[From the English Live Stock Journal.] We notice that the Canadian Minister of Agriculture has embodied in his annual report a live stock report from the pen of Dr. McEachran, and as the latter document is thereby invested with the importance of being an official document, it may be accepted as representing the opinions of the Gov-ernment of the Dominion. It is, therefore, interesting to note how the Canadian report coincides with that recently issued by the American Department of Agriculture at Washington when referring to the high-class harness horse. Apropos of these, it is stated that "to find a ready sale they must have good knee and hock action, and be prompt in their movements—a class hitherto difficult to find in Canada." Such a statement can only be accepted as a very significant hint to horse-breeders of the Dominion when we find such observations in the report as "Horse-breeding can be made profitable there need be no doubt. That branch of stockraising has seen its worst day. The scarcity of good horses for all purposes is very much felt in all populous centers and large cities." Yet we learn a few lines further on that "Canadian farmers will have no difficulty in realizing handsome profits on their horses, which are well known and appreciated in Britain." In fact, the report, which is written in an extremely optimistic vein, proves mainly three things: First, that the horse business in Canada is looking up; second, that by the exercise of a little trouble the breeders in that part of the world can greatly improve their stock; and, thirdly, that though Canadian horses are by no means as good as they ought to be, there is a considerable market for them in this country. Of course, the latter fact is one that has been known to exist for a long time, but it is all the same not very complimentary to ourselves to learn from a Canadian minister that we are ready to purchase animals that the producers do not praise very highly. It is to be hoped, however, that the Canadians will set to work in earnest to improve their harness horses, and this object can readily be achieved by the introduction of Hackney blood, which will ensure bone, substance, bottom and action in the foals. The report of Dr. McEachran suggests that Thoroughbred and heavy draft crosses are the most profitable, but it is extremely difficult to reconcile this advice with a desire to produce the "good knee and hock action" to which he refers. In the matter of advice, therefore, there can be no doubt that the American report, which bluntly and truthfully asserts that the introduction of "blood" is opposed to the production of action, is far sounder than that of his Canadian brother official, and we trust, therefore, that our countrymen of the Dominion will not be influenced by him into attempting to get high-actioned horses by a method which will render the attainment of their bject impossible.

Some New Features at the Winnipeg Industrial.

One of the principal new features at the Winnipeg Industrial this year will be the special Dominion building, which is to be erected for the purpose of displaying exhibits from all the provinces. The Dominion Government will defray about \$1,000 of the expenses, while a large British Columbia lumber company will supply all the lumber, and the Canadian Pacific will do their share by giving free carriage for the material. In this building will be arranged magnificent displays from the Government Experimental Farms of Manitoba, the Northwest Termitonics and British Columbia, including west Territories and British Columbia, including a great fruit exhibit from the latter province. Mineral exhibits from Northwestern Ontario and from British Columbia will also be in evidence. It is also expected the Eastern Provinces of Canada will take advantage of the opportunity here offered to make displays of their natural products, etc. Space will also be afforded for holding meetings, and doubtless the Farmers' Institutes, live stock breeders' associations, and other kindred associations will unite in holding one or two meetings, securing the services of some of the noted agriculturists that are sure to be in attendance at the fair.

Among other improvements decided upon by the Exhibition Association is the doubling the area of the agricultural implement hall by the addition of another 32 feet in width throughout its entire length of 300 feet.

The Board has been fortunate in securing a list of entirely new and high-class attractions.

For Sheep Extension.

The fact that fifteen-twentieths of the population of Canada is agricultural has an important bearing on the position of animal husbandry. Large demand for meats and discriminating demand both depend on the existence of large industrial classes and on the existence of a moneyed and luxurious class. As we have not either of these to any extent in Canada, the local market for meats is not a very good one; at least, it is only good when foreign demand has exhausted or partially exhausted the supply. A check in foreign demand in any winter leaves the farmers with beef to be sold at less than the price of food consumed by the animal. Our pork market is practically foreign exclusively. Butchers' prices for lambs and sheep run at about from three to five cents a pound dressed weight, except in the case of a very limited number of early spring lambs. It seems like a sacrifice to sell lambs that will dress from sixty to seventy-five pounds at two and a half or three dollars, as many are every fall, and it is not strange that the sheep industry is tentative, small, and wholly a corner industry on Canadian farms, compared to what it might be in the light of natural advantages and fitness for mutton production. Though local markets are not encouraging, the fact remains that the amelioration of the conditions depends on still greater production. The success of individuals depends on the fullness with which they appreciate and lend themselves to the prime movement of their time. The characteristic stage of development of our country is at present agriof development of our country is at present agricultural, and it is through the products of that art that we are to be enabled to take the position among competitors in the world's supply markets for which our capacities and resources fit us.

That our sheep business has not attained any large proportions is shown from the general man-Most of our stock is sold as lambs in the fall, only half matured, half fat, and with the least expenditure of labor possible in their production; and, as has been noticed before, the price is very low at this time. It would probably be impossible to pick up without great difficulty in any part of Ontario a carload of export yearling weth-

There is no branch of sheep husbandry to which we are not well adapted, whether it be the rearing of hothouse lamb, fall lambs, ten or twelve months' old mutton or breeding stock of the highest type. The capacity to do this depends on general conditions that Canada possesses in a high degree. The condition of fertility goes without question. Even though parts of the country are below average fertility, the voracious and industrious qualities of the sheep counteract any lessening of profit on this account. There is one feature in favor of all temperate countries that makes the feeding of animals a wholly satisfactory business, and this is climate. Excessive cold or excessive heat is not conducive to the highest physical development. The cold of the Arctics checks growth; the heat of the Tropics is opposed to the the Tropics is opposed to the laying on of flesh. The warmth and scantiness of torrid climes is not uncongenial to the fine coated Merino-rather, the fine wool is the product of such conditions—but the Merino is not a good mutton sheep. A grosser appetite and a lustier growth belong to cooler as well as more product compare with England in regard to these advancompare with England in regard to these advantages, as the climate is moderately cool in the latter country all the year round. Our animals, however, certainly have the capacity for growth begotten of an eager appetite. The value of this cannot be overestimated. It is a very crude idea of excellence in a meat animal that it exists on next to pothing as anyious sellence comparings represent. nothing, as anxious sellers sometimes represent them. Out of nothing comes nothing. If you want to get flesh on an animal you must furnish the organism with materials with which to build that flesh up.

Our conditions of soil, climate and animal constitution being assured, there is everything to be hoped from a large extension of sheep husbandry. Instead of supplying only fall grass lambs, we should have larger enterprises in the lamb-feeding business through the winter. It has been demonstrated that a pound of mutton can be produced more cheaply than a pound of beef, and with much less labor; and there is no doubt but that if good lambs at a year or ten months old, weighing from 120 to 140 pounds, could be got in car lots for export, the price would be raised. They should be worth five or six dollars a hundred. The lamb-feeding business in the United States has reached large proportions, and generally yields good profits. We should be getting a piece of that trade at Buffalo and other points. Our food is perhaps not as cheap as their corn, but our mutton stock is far superior, and we should get the margin that always goes to the best article. The duty does not stop our lambs:

it should not stop our yearlings.

What has been said of our mutton stock applies with equal force to our breeding stock. It will be some time before Canada mutton rams lose favor on the other side of the line. Our stock is lusty, and of good size and constitution. It is free from external and internal parasites, and generally of good breed type, from the growing powers of discrimination and selection of Canadian shepherds. Let us have more sheep. J. McCaig.

Peterboro Co., Ont.