

by drugs and pampered by soft feed so as to approach the form of a draught horse. Such horses never fail, unless the mare is unusually vigorous, to get puny and rickety colts. While instances of this abound, yet not less infrequent are worse results obtained through mating animals of such opposed types, that common sense without a tincture of "horsey" knowledge would immediately ridicule the action. There is beyond dispute a dearth of high class draught brood mares through the country, yet if even these were kept in their spheres, and the lighter mares as rigidly within theirs, a great improvement in our marketable horses would at once result.

Another important matter that has a striking influence on the size and substance of our horses is the indifferent care that is in too many cases given to the brood mares. A brood mare nursing a lusty colt has a heavy extra tax put upon her system, and to sustain her so that the colt may go right ahead she must have something more than grass or dry hay. She cannot do a hard day's work and at the same time fully do her maternal duty by her colt. When on pasture she should have green fodders and bran, and if in the stable, milk stimulating foods, such as clover hay, or ensilage, bran or chopped oats. After the mare has dropped her foal there need be no fear of keeping her in too high a condition.

All the above observances will amount to naught if the colt is not given every comfort and fed as strongly as is compatible with health. It should be taken early under guidance and taught to relish a mess of chopped oats or of bran before it has left its mother. There is a great variety of advice in the opinions of breeders in regard to the time of weaning foals, some advocating six months, or even earlier, as the best time, and others following the practice of letting them run with their dam until within a couple of months of the next parturition. As long as the mare's flow of milk is good, and she can be spared from farm work, it is sound policy to let the colt run with her, for there is nothing so nourishing and growth producing in the case of young animals as the milk of the dam. The time of foaling is also a consideration that has an effect on the after-growth of the foal. A fall colt in comfortable quarters (and there is the rub in rearing fall colts), will make more rapid progress and attain to a greater size than a spring colt, as both the dam and the colt may be better attended to during the winter season. The fact also is well known, that nothing will more surely and markedly affect a colt in his growth than the slightest check at weaning time. This is fully provided for in the case of the fall colt, as it goes right ahead at weaning time on pasture.

Undoubtedly, climate and soil strongly affect the bone, muscle, and growth of a colt, but these are less influential than any of the others we have mentioned.

#### Better Days for the Farmer.

Better days are coming for the Canadian farmer, or we do not read aright the signs of the times. We do not make this statement on the principle actuating the little boy, who, going through the bush at night, whistles to keep his courage up. It is based upon various indications which are given below.

The shortage in the crop in many countries of the world will bring advantage to this country where the crop is fairly good. In the United States the grain crop is below that of several years past. The corn crop is not more than seventy-five per cent., which means a serious deficiency of this cereal, both for purposes of export and feeding, as compared with former years. Winter and spring wheat are both below the average, and the oat crop is the poorest harvested in

that country for many years, and the same is true over large areas in the potato crop. The shortage is not confined to the United States only, but extends to many countries in Europe, including Great Britain. Owing to an excessive rainfall much damage resulted to the growing crops at a critical period.

For reasons that are not very clear there is also a decline in recent years in the growth of Indian wheat. The crop of 1890 there is less than that of some previous years in acreage and also in yield. The diminished yield is owing to a shortage of the rainfall in winter, but the reasons of a somewhat diminished acreage are not so clear. It may be that the Indian Ryot is also becoming tired of furnishing supplies to the eaters of other countries at prices discouragingly low.

The tide of production appears to have turned. The cycle of the years of plenty has apparently ended for the present, but it is to be hoped that this cycle will not be followed by one of great scarcity. During recent years the agricultural productions of many countries in cereals have been so abundant that the handling of them, even at rates so low, was not a very remunerative business. It is almost certain now, however, that all the old stores, some of them savoring of musty age, will be brought into requisition this year and next in consequence of the shortage.

The result that is almost certain to follow is an advance in price. A marked advance, however, is not probable, since the crops are not short in all the world. For instance, although the winter wheat is in many countries rather under the average, in others, as in Manitoba, the crop is large. With facilities for transit such as the world now possesses, prices become so equalized that any marked advance is not probable in any one country, unless all countries of the world were short in the production of that cereal. Enormous prices, however, are not advantageous in the end. It is prices that are fairly remunerative that are most to be desired, and these we expect are at hand for the farmer in Canada. The general shortage in several countries cannot but make prices firmer, and as our country has this year again a fair crop, we are in a position to profit by the advance. Ontario has been favored this year with a most excellent crop of hay, most of which has been harvested in a very excellent condition. May our farmers make the best possible use of this vantage ground in carrying on the operations of winter feeding. Hay is cheap and can therefore be fed to good advantage.

Compared with other industries in the country the live stock industry of Canada is superlatively great. Let us make it greater by feeding our cereal and fodder products to stores fattened at home.

The insertion of the following table of Canada's exports for 1889 should carry its own moral:

Products of the mine .....	\$ 4,419,170
Products of the fisheries .....	7,212,208
Products of the forest .....	23,043,007
Animals and their produce .....	23,894,707
Agricultural products .....	13,414,111
Manufactures .....	4,434,949
All other .....	5,854,304
Total .....	\$80,272,456

By this table we are informed that the great industry of our country at the present time is the rearing and exporting of domestic animals and their produce. No other industry of the country even approaches it in magnitude, save that of lumber, and while the latter is sure to decrease, the former is just as sure to increase, and should, therefore, receive closest attention at the hands of the farmer as to the best methods of conducting it.

It may be said, if prices of cereals improve, should we not sell them direct as a consequence. We answer no, so far as coarse grains are concerned, unless the prices for them become abnormally high, as if prices of foods and fodders become firmer over a continent, the prices of the meat grown from these will become firmer also. That the prices of meat will advance somewhat is therefore probable, but the advance may not be very much. Lands lying south of the equator are prolific in their production of cattle and sheep, and in the dead form at least they find their way to the markets of Great Britain. This much is assured already, that the prices of stores are stiffer now than they were a year ago, and many of them are now in the hands of cattle exporters, notwithstanding that those gentlemen say that they lost heavily in the shipping trade last year.

Let our farmers then feel encouraged. Let them produce more and better of all classes of live stock. Let them grow better crops of grain and fodder, and feed these to the stock. Let them build silos, and produce more cheese and more and better butter. Let them give their sons a better education in preparing them for their future life work, and let them seek and obtain better market relations, and they cannot fail to become materially strong. All this they can do, and do it easily, if they will.

#### A Horse-Breeding Experiment.

Hon. M. H. Cochrane, well-known as one of the most extensive breeders and importers of live stock in America, says the *Breeder's Gazette*, is conducting an experiment at his Hillhurst farm, Canada, which will be of great interest to horsemen. He has for many years been impressed with the wearing qualities, fine action and finish of the English Hackney, and is the owner of some costly specimens of this famous British breed. He has during the past few years also acquired by purchase a choice collection of American-bred trotting brood mares and stallions, and he now proposes to interbreed these to a limited extent, with a view to determining what sort of a cross will result from an admixture of the two bloods. In fact, his attention was turned to this point several years ago, and he has already a few cross-breeds which certainly afford good ground for the belief that the "nick" will be a success, so far at least as the production of a thoroughly useful driving horse is concerned. Just how much speed can be attained is of course an open question, but that a long-distance trotter can be evolved by this method seems entirely within the range of probability. The two chief trotting-bred sires in service are Floren, by Piedmont, out of Flower Girl (own sister to Manzanita, 2:16, and Wildflower, 2:21), by Electioneer, and Aubrey, by Epaulet, 2:19, dam Bonnie by Kentucky Prince; second dam Bonnie Lassie by Rysdyk's Hambletonian. A track has just been provided at the farm with a view towards developing somewhat the youngsters in the stud, and it seems probable that ere long Hillhurst will acquire quite as much prominence as a horse-breeding establishment as it has so long enjoyed as a headquarters for choice cattle.

#### The Dominion Sheep Breeders' Association Meeting.

A meeting of the members of the above society was held Thursday evening, September 18th, in the board room of the Toronto Industrial Association, the vice-president, Mr. Russell, in the chair. Mr. D. McCrae, of Guelph, was the first on the programme with a paper entitled "A Fleecce of Wool," which we give in full in this issue. This was listened to with interest by those present, and when concluded a hearty vote of thanks was accorded Mr. McCrae. A paper was next