The Canadian Horse Eulogized.

Professor A. S. Alexander, of Wisconsin Agricultural College, has issued a bulletin upon the "Principles and Practices of Horse-breeding," and to emphasize the importance of sticking to a given type, cites the instance of Canadian horse-breeders and what they have accomplished. The comment is pertinent at the present time, when there seems to be no little inclination to try some different breed to the one in most general use in the community. The doctor's remarks are as follows:

"The success achieved in the breeding of Clydesdale horses in Canada serves as a good example of what can be accomplished by persistency and expert selection. The Scottish element of the Dominion's population has been partial to the Clydesdale breed and conversant with its good qualities and utility, hence imported Clydesdale stallions of the best character have been largely employed in the breeding operations of that country since the year 1842. Practically speaking, no alien crosses have been made, and the average farmer has been capable of selecting suitable mares, and of adequately developing their progeny. The result is that Canada has but one type of draft horses, and it is a good one, showing, to a high degree of excellence, all of the breed characteristics of the pure-bred Clydesdale. This fact becomes evident, and is interesting to one who stands on a street corner in Toronto and watches the team horses as they pass. That they are largely uniform in type, color, conformation, weight and action, is most striking, and speaks well for the intelligence and enterprise of Canadian horse-breeders. The same thing is true, to an even greater degree, in Scotland, where the Clydesdale breed predominates and has been developed to a high state of purity, breed character and utility. On the contrary, if we examine the average team horses of Milwaukee or Chicago, we shall see every possible type and character represented, and plain evidences of mixed breeding, careless selection and incomplete nutrition."

The above aptly describes the situation, and it is only because we have occasionally mixed the blood of lighter breeds with some of our heavier stock, with the expectation of getting a farm horse, that we have not attained to a higher standard.

Comparison of Alfalfa and Timothy for Horses.

Professor L. A. Melville, Utah Experiment Station, is quoted as follows in an American exchange:

In comparing alfalfa and timothy as roughage for horses, the results of six tests, under varying conditions of work, show that it is not so difficult to maintain the weight of horses on alfalfa as on timothy.

The appearance of the horses in every comparison of alfalfa and timothy was in favor of the alfalfa-fed horse.

No ill results were noted on the health of the horses by long-continued alfalfa feeding.

Attacks of colic and other digestive disorders can be prevented by a judicious system of feeding. The amount of hay fed on most farms could be reduced at least one-half.

Twenty pounds of alfalfa a day maintain the weight of horses weighing nearly 1,400 pounds when at rest. At heavy work, 32.62 pounds of alfalfa a day was barely sufficient to maintain the weight of the same horses.

It is evident that there is a tendency to use all of the protein when horses are fed timothy, and no apparent waste of nitrogen when fed alfalfa.

Musty hay of any kind should not be fed to horses if it can be avoided. But if it must be fed, shake out all the dust possible and moisten the hay.

Riding Astride.

A writer in the Nursing Times, an English publication, says: "It is stated that one of our royal princesses is to learn to ride astride, and thus avoid not only the dangers of a throw and consequent dragging, but also the undeniable risk of one-sided development. For many years medical men have advised the cross-saddle for young girls, but convention has forbidden this rational mode to those of older years. Recently, however, a horsewoman has dared here and there to hunt in masculine fashion, and one such pioneer was seen in the sacred Row the other day. I learn from one of the fashionable habit makers that he receives about half a dozen orders each season for the divided cross-saddle skirts."

On the well-organized horse-breeding farm, when the weather is not fit for other work, the men get the colts up and halter-break them. If more of this work were done, some of the exhibition animals would display themselves to better advantage.

STOCK.

Sawdust as Bedding.

On not a few farms, particularly those devoted to dairying, it is a difficult matter to maintain a sufficient supply of bedding. Very often the number of animals is about the limit of the stock-carrying capacity of the farm, and a proportion of the spring-grain straw would fain be used for feeding, and the problem that haunts the stockman's mind is how to construct a stable that will keep the animals clean with a minimum of bedding. Frequently they are not kept so clean as they should be, nor is the valuable liquid manure all absorbed.

Stockmen who are liable to be short of bedding might well consider whether they could not make use of sawdust. There are farmers in Ontario and the Maritime Provinces who could, within a few miles from home, get all they wanted at a nominal price. These will be interested in some tests of bedding materials at the Maryland Experiment Station, where it was found that under similar conditions of floors and gutters, 11 lbs. of sawdust per day kept the cows as clean as 24 lbs. of uncut wheat straw; or, in other terms, about the same bulk of each was required.

From some absorption tests made in the laboratory, the following estimated results were obtained with cut wheat straw, uncut wheat straw, sawdust and shavings:

ABSORPTIVE PROPERTIES AND RELATIVE COST.

Material.	Water absorbed per pound of bedding.	Lbs. of bedding required to absorb the liquid manure from 1 cow for 24 hrs.	Yearly cost for cow stabled 24 hours per day.
	Lbs.	Lbs.	
Cut wheat straw.....	2.0	5.0	$4.82
Uncut wheat straw	2.0	5.0	4.15
Sawdust	0.8	12.5	.45
Shavings	2.2	4.4	4.81

Valuations are: Uncut straw, $5.00 ton; cut straw, $6.00 ton; sawdust, 20 cents per ton, and shavings, $6.60 per ton. The sawdust was purchased from a near-by mill. It might have been more fair to consider the cost of hauling, which was 50 cents per load. This could have been added to the assumed price of 20 cents a ton, and still made the sawdust by far the cheapest bedding used. Sawdust was ideal for the purpose, and the conclusion was evident that wherever obtainable it could be profitably used for bedding. It kept the cows cleaner than anything else tried, stayed in place better, and was free from dust. Shavings also gave excellent satisfaction, being preferred to straw.

On light sandy soils it is sometimes objected that sawdust litter does not decay soon enough, and keeps the soils too loose, but this objection would not be very general. Indeed, on most farms its use would mean the addition of so much extra vegetable matter to the soil, and the saving of more urine—two distinct gains. Sawdust manure is easily spread, and it is foolish to allow any of this bedding material to go to waste in piles or streams, as we often see. If a man does not require to use sawdust alone, so much the better; let him get what he needs, and use it to supplement the supply of straw. Now is the time to think of these things, and make arrangements for any supplies of this kind that may be required.

It might be added, in conclusion, that in the series of experiments above referred to it required a slightly greater weight of cut than of uncut straw to keep the animals clean, though the absorptive properties per pound were exactly the same. In other words, if the object were to soak up all the liquid, one was as valuable as the other, but if the object was merely to keep the cattle clean with a minimum of litter, there was a loss (apart from the cost of the work) in cutting. This result, we confess, comes as somewhat of a surprise to us, as it will no doubt to many others who have thought they found it economical to cut the straw. Subsequent experiments in stables may point differently, especially in regard to the relative economy of cut and uncut straw as absorbents, for it is hard to believe that, whatever might be its value for keeping stock clean, a loose wisp of straw would soak up urine so thoroughly as the closer-lying chaff. It is, however, doubtless true that in using fine litter we employ a greater relative weight than we suppose.

Rock vs. Barrel Salt.

The question is frequently asked whether rock salt is better than barrel salt for stock, and how the two compare in price? In conversation, recently, with a representative of the Dominion Salt Agency, which handles the bulk of the Canadian output, a member of our staff made some enquiries on the above points. In the first place, we were informed that the rock salt sold in this country is imported from England, the Canadian deposits being, on account of their great depth, or for some other reason, not mined. English rock salt is handled, however, by the above agency for the convenience of their trade, but the wholesale price of it is nearly double that of the cheap grades of the granular product, the comparison of prices being somewhere about $15 per ton for rock salt, as against $8.00 for barrel salt, freight rates cause the prices to vary in different localities.

The saline properties of each are practically the same, the difference, if anything, being in favor of barrel salt. Either consists of almost pure sodium chloride, and a pound of one will "go" as far as a pound of the other. Salt is too cheap an article to adulterate. The only thing that can be done is to send it out a little wet, and this gives itself away. "People have queer ideas," our informant added, "about the purity of salt. Some of the English salt that comes across as ballast in the holds of vessels, and in one way or another gets colored, is thought to be 'strong' salt, while many a purchaser will shake his head at the pure white article fresh from the refinery." Yet some of these sceptics have their laugh at the city-market housewife who thinks maple syrup cannot be pure unless it is black.

The advantage claimed for rock salt by stockmen is that it is convenient and can be left before the animals to be taken ad libitum, thus ensuring a regular supply in just the proper quantity. But barrel salt may be provided in the same way, by having a little box in the corner of the manger, high enough to be just nicely within reach of the animal's tongue. Or, if it be wished, a man could give his stock in their feed what experience taught him was nearly enough salt, and keep a lump of rock salt in front of them so they could help themselves to it if they wished. Certainly a herdsman will be sparing of rock salt who is aware that it costs nearly double the price per unit of saline value.

Drumburle Chief (Imp.) [5318].

Two-year-old Clydesdale stallion. Third at Toronto Exhibition and first in a strong class at the Central Canada, Ottawa, Dec. Imported by Smith & Richardson, Columbus, Ont. (See Gossip.)