

quality of the product, and, above all, assures against loss by lack of rainfall or the ill distribution thereof through the season of growth. The admirable crop reports issued by the United States Government show conclusively that the average production of wheat per acre on the irrigated areas of Montana and Colorado is fifty per cent. more than in the States of Illinois, Iowa and Indiana—three of the best natural wheat producers in the Union. And the judges at the shows in the Western States find it necessary to place samples of wheat grown on irrigated land in a separate class, because in nine cases out of ten the grain grown under natural conditions would have no chance whatever in open competition. Furthermore, irrigation provides a fertilizing agent. The alluvial matter carried in suspension by the waters of the western rivers during spring and early summer are deposited on the soil, so that its grain-producing power is annually renewed. So it happens that in countries such as Colorado, where irrigation has been practiced for many years, wheat crop after wheat crop has been taken off the same field without any material reduction in the yield. . . . Finally, it should be remembered that the glacier-fed streams of the Albertan foothills afford an inexhaustible water supply for the irrigation systems of the future, and that since both the land and the water rights are owned by the Federal authority, the working out of comprehensive schemes will be greatly facilitated.

Stock Meeting.

THE INCORPORATION OF THE ASSOCIATION IS DISCUSSED.

A meeting of the Executive Committee of the Medicine Hat Stock-growers' Association was held in Secretary Bray's office recently. Owing to various circumstances there was not a very large attendance present. Those present were: Messrs. A. J. Day, J. D. McGregor, John Ellis, J. H. G. Bray, F. G. Forster, and A. E. Phillips. In the absence of W. T. Finlay, M.L.A., and the vice-presidents, F. G. Forster was appointed chairman. The secretary read the minutes of the last executive meeting, and they were adopted. The object in calling the meeting was to discuss the advisability of having the Medicine Hat Stock-growers' Association incorporated, and put upon a more businesslike basis, and its usefulness extended and broadened out. It is recognized by the members of the association that much of the stock business in the Northwest is centering around Medicine Hat, and the members of the executive thought that the Medicine Hat Association should seek enlarged powers, and get into a position to be of more service to its members. For an hour the matter was discussed by those present, and while they did not consider the meeting large enough to take any definite steps, it was decided to keep the movement alive, and on motion of Messrs. McGregor and Ellis, a committee of Messrs. A. J. Day, A. E. Phillips and Abner Wilson was appointed to collect information and draft a set of by-laws suitable to a large association, and arrange something definite to be placed before a subsequent meeting. Messrs. Day and Wilson have had considerable connection with live-stock associations in the States, and their experience should be of service on the committee.—[Medicine Hat News.]

Condiment for Swine.

Theo. Louis, of Wisconsin, recommends the following for swine confined and heavily fed: "Take six bushels of corn-cob charcoal, or three bushels of common charcoal, eight pounds of salt, two quarts of air-slaked lime, one bushel of wood ashes; break the charcoal well down with shovel or other implement, and thoroughly mix. Then take one and a quarter pounds of copperas and dissolve in hot water, and with an ordinary watering pot sprinkle over the whole mass, and then again mix thoroughly. Put this mixture into the self-feeding boxes, and place where hogs of all ages can eat of their contents at pleasure."

Following is the result of an experiment with pigs living on corn meal, with or without bone meal and hardwood ashes in addition.—Wisconsin Station:

	When bone meal was fed.	When ashes was fed.	When neither was fed.
Corn meal required to produce 100 lbs. of gain	487	491	629
Average breaking strength of thigh bones, lbs.	680	581	301
Average ash in thigh bone, grams	166	150	107

Blackfalds, Alta., creamery sheet for week ending Nov. 7th, 1904, shows a total of 430 pounds butter from twenty-five patrons. Prices are good, and the creamery turn their factory through the winter.

Horses.

Stock Food Adulterants.

Prof. W. A. Henry, Wisconsin Agricultural College, speaking to a meeting of farmers a short time ago on stock foods, said:

"We have already referred to unground weed seeds in bran. Often they are ground and introduced into the bran. They may possess considerable feeding value, but bran should not be called pure bran in which such material is found. Another class of adulterants may be illustrated by the oat hulls and other by-products from the oatmeal factories. With the large increase in the use of oatmeal for human food, great quantities of oat hulls—hundreds of train loads—result annually. Then the oat grains are carefully cleaned at the mills, and the fine pencil of hairs found at the end of the grain is removed, and these hairs constitute the major portion of a material known as oat dust. Finally, there are particles of the oat grain itself possessing considerable nutriment not used in the manufacture of human foods, which go in with the waste. These materials, separately and variously intermixed, are properly enough placed on the market for the feeding of live stock. Sold for what they are, no one should find fault with them.

"There is a tendency, however, with feed dealers and others, to mix oat hulls and other by-products of the oatmeal factories with higher-priced feeding stuffs, and get as much as possible for the mixture. In the worst cases, oat hulls are added to cornmeal, and the mixture sold for ground corn and oats. The unsuspecting buyer, taking some of the material in his hand, sees the oat hulls and supposes, of course, that the kernels, which naturally go with the hulls, are likewise present. The deception is a rank fraud, and the selling of such material is contrary to the Wisconsin feeding-stuffs law. A still lower grade of adulterating material is made by grinding up cornstalks. There has come about the use of corn pith for various purposes. The portion of the stalk remaining after the removal of the pith, consisting mostly of the shell of the stalk, together with the leaves and husk, is ground to a fine dust-like powder, sometimes called 'Marsden Feed.' Great things have been claimed for this material, but it cannot have a very high feeding value, and should never rank with concentrated feeding stuffs. This material, of a yellowish-brown color and dust-like, is sometimes used for adulterating stock foods. One sample of dried brewers' grains from Illinois shows this material mixed with it as an adulterant.

"Another adulterant consists of ground-up corn-cobs. In the recent issue of the trade journal name, 'Flour and Feed,' the statement is made that a corn-cob meal factory in Indiana runs night and day. This factory grinds up corn-cobs into a meal-like substance, evidently for the sole purpose of selling it to feed dealers for adulterating feeding stuffs."

Value of Feeding for Sale.

In view of the strong possibility that a horse sale will be held in Calgary next March, it would be advisable for all who intend to offer animals for sale to have them in good condition by beginning at an early date to feed for that purpose.

Range horses in general are in excellent condition at present, and as fodder is cheap, special systematic feeding is advisable, not only to retain flesh that exists, but increase it. To anyone who has carefully noted what a great difference in price from 50 to 100 pounds of flesh makes at sale time, it is not necessary to suggest preparatory feeding.

There are many records, especially among draft horses, where 200 pounds of additional flesh have almost doubled a horse's selling price. Instances are quite common where full-grown teams in poor condition were considered altogether too light for city dray purposes, when a few months later, after being fitted by some dealer, these same teams were readily purchased at a high figure for the very same work. It is the last few pounds for which the high price is paid.

The Thoroughbred.

The season for running races is now over, and most of the horses have been retired to winter quarters. In the States some of the owners have made enormous sums out of the season's campaign. At the head of the list of money winners is Mr. J. B. Haggin, a well-known breeder and owner, who has \$99,007.50 to his credit, but Mr. W. C. Whitney is a close second, with \$97,975. Two other owners won over \$75,000, and forty-five made over \$10,000 in stakes with their horses during the season. The largest individual winner of the year was Africander, a three-year-old, owned by Deimel & Dyer. Hermis, the winner of the Brighton cup on October 20th is the bright star in the jockeys' firmament, but McChesney is also a brilliant luminary.

The Horse's Coat.

The general appearance and comfort of a horse is greatly influenced by his coat. A well-groomed horse, like a well-dressed man or woman, is pleasant to look upon. The coat of a horse, to a great extent, gives evidence of care or neglect. While a nice, fine, silky, glossy coat adds much to the general appearance of a horse, it requires a great deal of attention to keep it thus, especially during the late fall and winter months. Some horses have, naturally, much shorter and finer coats than others, and while good breeding has some influence in this respect, we frequently notice a vast difference in animals of the same breeding. Why this is we cannot determine, and simply are compelled to accept it as a fact. The age of the animal has an influence; we notice that it is not usually possible to keep the coat of young or very old animals in as fine a condition as those of animals between adulthood and old age. Horses under five years or over twenty, do not usually give the same returns for care and attention, as regards coat, as do those between these ages. In the former case it may be that the more or less general fevered state of the system consequent upon dentition has an influence upon the coat, and in the latter case we are probably justified in assuming that the general vitality of the animal is more or less impaired, and the coat, as well as other parts of the anatomy, evidence the decrease of vitality. We frequently hear people say that they do not like grey or white horses, because they are so hard to keep clean. A grey horse is no harder to keep clean than a dark-colored one, but stains or dirt show much more plainly, and it requires more attention to make him look clean. We often notice, when a team consists of a grey and a dark-colored horse, and when care is taken to have them look well, that on close examination the grey has a finer, shorter and cleaner coat than his mate, from the fact that stains, etc., show so plainly on him that he receives more grooming. During the summer months there's little trouble experienced in keeping a horse's coat nice, but as the weather becomes cold in the fall, nature demands that the horse be clothed accordingly, and there is a strong tendency to growth of hair, and we may say that the coat loses its gloss in proportion to the length of hair. In order, then, that we may retain the required gloss, we must take what measures we can to prevent this growth. In order to do this, we must, in addition to thorough and regular grooming, avoid unnecessary exposure, and when exposure is necessary, provide artificial protection when the animal is not in motion. As regards grooming, a horse should be thoroughly groomed twice daily; not merely the external surface of the coat brushed and rubbed, but the hair agitated thoroughly to the roots by working the comb or brush both with and against the grain of the hair, in order to remove dust, dandruff, etc., and thereby prevent any occlusion of the openings of the sweat glands, and keep the coat free from dust. Whenever a horse has been driven, ridden or worked hard enough to produce perspiration, it would be better to rub him until dry. This is the way in which race-horses are used, and a well-cared-for race-horse certainly presents a perfect coat. This, however, is not practicable in the ordinary stable. It would require more help than the average horse-owner can afford or is willing to keep. The next best thing to do is to clothe him warmly, place him in a comfortable stall, excluded from drafts, and when his blanket has become moist from the perspiration, remove it and supply a dry one. When he is thoroughly dry, a good grooming will remove the dried perspiration, free the matted hair, and remove all dust and dirt. Of course, horses must not be left out in the fields or paddocks at nights when the weather is liable to be cold, if we wish to preserve short coats. The advisability of wearing clothing in the stable is open to discussion, but if the stable be not very comfortable, we think blankets should be worn, and even in warm stables we think light clothing should be worn, as it prevents dust from entering the coat. In all cases in cold weather, when the animal is not in action, whether standing in the stable or standing outside in harness, his body should be clothed sufficiently to protect him from the wind and cold, and when it is necessary to drive or work a horse in a rain or snow storm, it is better he should be covered with a waterproof covering, in order to keep the skin dry and warm. Cold and dampness stimulates the growth of hair, in order to protect the skin; hence, when we are particular about the coat we must, as far as possible, avoid this stimulation. When horses are being used for slow work not demanding sufficient exercise to tend to perspiration, in very cold, though dry weather, it is wise to wear blankets under the harness to protect the skin. In most cases, when reasonable care is exercised on the lines above mentioned, we will succeed in maintaining a short, sleek coat on our horses, but there are exceptions. As stated, age has an influence, and there are certain individuals that from some unaccountable reason or predisposition, will grow a long coat, notwithstanding

the most careful that during the season, that in the attention and care, til it very strongly cared-for water spa ever saw on a fall with this horse. with this or some and, of course, all cases, if we insist to clip.

Trotting and

By reducing the the first of the tw lished her claim to tion or dispute, and where none will ass Major Delmar seem 2.00, and Cresceus any serious inroads clusive circle. C. Lou Dillon, but to the credit of develo was one of the mos cate. At a jog she at her best she is the light-horse wor Throughout the Alert and Dan Patc mile record, which This was Star Po Last year Dan Pat August 19th succee 1.59. This record when Prince Alert t and with the aid c clipped two seconds championship was October 22nd Patc worked in harness awaiting them in 19 interesting struggle they are confident pacing records can l

Horseshoe

At Edmonton th trict recently held the City Council to street for a winter

The Royal and

Postponed from deference to the exh a time are doubly in New Westminster presented a report members, which wa in spite of many h had been a success few outstandings w right side of the would be the result

Election of offic President, being re ing the Manager, v ager local branch take charge of the the prize-list was suggested. These record for itself, fat-stock and stallio course in live-stock week of March, 190 upon without con con, but while som delay, the majority O.A.C. bee-lecturer way" at once. some help, and the as well as Victoria forward this most in its efforts at gi agricultural lines, reason for the exis manager announced promised to provi competition at the the first Tuesday in

I have recently vest in oil well pr ber plantation. I that were sure to I was afraid. Oil elasta that I could vest. I would ra {Furrows, in Home