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AND N.-W. T.

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Fair Boards, Encourage the Breeder!

In these times of good prices for live stock at auction and private treaty, it is worthy of note that at the fairs there is almost a total lack of recognition of the work of the breeder.

The breeding of high-class live stock is an art—yes, even a science—and calls for the exercise of brain power to a greater degree than any other line of work in agriculture. As the permanence of the live-stock industry depends altogether on the ability of the breeder to produce what the markets demand, it is only fitting that that person should be encouraged, especially by our fair boards. Students of live-stock lore recognize the work done by Cruickshank, Bates, Booth, Duthie, and others for the Shorthorn breed; by Watson, McCombie and others for the Aberdeen-Angus; by Tudge and others for the whitefaces; in fact, the roll of fame in the Old World stock-breeding circles is growing.

The need to-day in Canada is for more breeders of live stock, and when we say breeders we use the word in the fullest sense of the term. Dealers we have, men who deserve credit for their enterprise and what they have done for the pure breeds of live stock this side of the water, but the fact remains that the work and name of the breeder will endure long after that of the dealer is forgotten.

Our large fair associations could well afford to take the matter into consideration, and in their prize-list classes give added money or some tangible form of recognition to the exhibitor if he is also the breeder of a winning animal. The multiplication of sections or special classes at some of our fairs, with a view to helping the small breeder, has failed to accomplish the desired end, and we submit that fewer sections, with a greater number of prizes, be substituted; added money, say an addition of 10 or 20 per cent. of the prizes offered, being given to the exhibitor, who is also the breeder of the winning animal or animals. By this method, time would be saved in the judging, the value of a prize would, in the eyes of the public, be greatly increased, and the interest of the public maintained in the ring competitions, thus more strongly focussing the attention of fair visitors on the live stock. That done, the educational work of the fair will be to a great degree accomplished and improved live stock popularized.

Start Slowly and Avoid Delays.

The great thing for the farmer to consider at seeding time is his motive power in the form of horseflesh. He needs to have plenty of it and that of the right kind. Possessing all these things, it is absolutely necessary that proper care be taken of the horses at the opening of the season. Many owners begin to get their horses into shape, to use the common term, as seeding time approaches, and in doing so feed grain heavily, and if a storm should delay the work, either at the start or soon after, many horses, especially the easy keepers, are apt to go down, and, in many cases, out, with the disease technically known as azoturia, and often termed "spinal disease (paralysis)" by the farmer. The best preventive is to slack up on the feed in case of storm which may mean cessation of work for a week, and use plenty of bran and a tablespoonful of saltpetre or two tablespoonfuls of Glauber salts once or twice a week during the time laid off work. When again working, stop all drugging, unless under your veterinarian's directions. "Whip," in the April 5th issue, has given a good many suggestions to our readers which may well be carried out. A very useful and paying thing, especially during a hot spell, is to take out a barrel with some water for the horses to the field, and give them the opportunity to drink during the forenoon or afternoon. The shoulders should receive special attention. An occasional bathing with salt and water will be beneficial. Some horsemen use tannic acid, 1 dram to the quart of water, for that purpose. When first hitching, care should be taken that the principles of draft are observed in the way of the relative positions of the hames, tugs, and point of attachment to the implement used. The machinery needs to be thoroughly oiled before using, especially if new; plenty of oil should be used, and all parts should be seen to be in place. When implements are not working right, the draft is much increased.

Bran Should be a Staple Food.

One of the tendencies shown nowadays by the man wishing to be progressive is the being on the lookout for new grains and forage crops that will promise larger yields than the old standard varieties. While this ambition is a laudable one, and is ably assisted by the various experiment stations, the feeder and farmer in the enthusiasm over new feeds is apt to overlook some of the older kinds that cannot be surpassed.

Bran is a feed too often overlooked and underestimated, especially by Western people, and it is unfortunate that such is the case. If it were feasible, it would be of great benefit to Western agriculture if all the bran produced from wheat grown in the West were fed in the West, instead of being shipped east. No feed of the grains is more valuable for the growth of bone and muscle in young stock or for the production of milk, and yet many seem to consider it as little better than sawdust. Bran is not only valuable as a nutrient, but as a corrective and laxative for animals, and is a most valuable adjunct fed along with other grain. In the feeding of horses, bran added to oats in the proportion of one quart of the former to three of the latter will be found very useful and profitable. For young live stock, colts, calves, lambs, etc., bran is an essential to profitable raising, and should be bought by the ton, in place of by the sack. The stocker can be wintered better by the addition of bran to the straw ration than it can be without, and the touch of that animal will be much improved by this addition to its diet.

The practical man knows the feeding value of bran, and is backed up in that opinion by the feeding tests and analyses of the animal husbandman and agricultural chemist. Henry says that "the inner surface of the bran flakes is made of the aleurone layer of the wheat grain, which is very rich in protein, and in addition carries some starch." Bran contains, also, mineral matter, and when fed with another grain will prevent stock stalling, because it is slowly digested, as the will do on a single grain ration.

By allowing the feed to be digested out of the economy instead of forcing it home, we are parties to a far more efficient form of feeding, which is well known to all who have observed the results. It is well known that the more slowly the feed is digested, the more it is absorbed, and the more the animal gains in weight.

Judging a Horse's Age by His Teeth.

Dentition in the horse is more regular than in other animals. Still, it is liable to variations; and while deviations from certain rules are not common, we must recognize the fact that they occur, and even in a young horse the age cannot always be positively determined by the appearance of his teeth. In order that a person may become tolerably expert in judging the age of horses, it is necessary for him to pay particular attention to the appearances of the mouth at different ages. He should carefully examine the teeth of animals whose age he knows, and observe the general and special appearances and compare mouths of different ages. He must also note the differences that frequently exist in mouths of the same age; for while, as already stated, dentition is tolerably regular, it is not at all uncommon to observe several months' difference in dentition, especially in horses under five years. The student must not depend upon charts or lectures—he must have actual experience, and be able to recognize in the actual mouth what he has read, or been taught to expect. Some people profess to be able to tell definitely a horse's age until he is thirty or over, but experience teaches us that such is not possible, and that the most expert can only arrive at an approximate idea after the animal is well up in the teens, and to a certain extent it is guesswork after nine years. After that age the differences looked for year after year become harder to distinguish, and are not as regularly present as in younger animals. Still, the changes appear with sufficient regularity to enable a person who has given the subject considerable study to avoid grave mistakes.

The horse has two sets of teeth, viz., the temporary or milk teeth and the permanent or horse teeth. The temporary teeth differ from the permanent in being much whiter in color, much more constricted at the neck, and smoother from side to side, there being an absence of that depression or furrow noticed extending the whole length of the visible tooth in the permanent. The adult male animal has 40 teeth, classified as follows: 12 incisors, 4 canine or bridle teeth, and 24 molars. The female, with rare exceptions, has only 36, the canine teeth usually being absent. The incisors number six in each jaw; the pair in the center is called the central; the pair, one on each side of these, is called the lateral; and the pair, one on each side of these, is called the corner teeth. In male animals the canine teeth are seen in the interdental space (the space between the corner incisor and the first molar in each row); a small space exists between the corner and canine teeth. The molars are arranged in four rows, one on each side of each jaw, and are numbered 1st, 2nd, 3rd, 4th, 5th and 6th from before backwards. At birth the colt sometimes has four temporary incisors, the central pair in each jaw, but usually these do not appear for about 14 days, the laterals at about 9 weeks, and the corners at about 9 months. He always has 12 molars at birth, Nos. 1, 2 and 3 in each row, and he never gets any more temporary molars. At one year old the first permanent molar (which is No. 4) should be well up and in wear. At two years the second (No. 5) should be present. At three years Nos. 1 and 2 (temporary) should be shed and replaced by permanent ones, which should be well up; and at four years, No. 3 (temporary) should be shed and replaced by a permanent one, and No. 6 should be seen well up and in wear. Hence, at four years old a colt should have a full set of permanent molars, and until this age is reached the appearance of these teeth will aid in determining age when any doubt exists. After about nine months old, at which time he has a full mouth of temporary incisors, no change takes place in these teeth, except that they become larger and the wearing surface gradually wears down and the hollows become less marked, until he reaches about 2½ years; between this age and three years the central temporary teeth are shed and replaced by permanent ones; between 3½ and 4 years the laterals are shed and replaced by permanent ones; and between 4½ and 5 years the corner teeth are shed and replaced by permanent ones, and the canine teeth appear in males. Hence, a horse should have a full mouth at five years.

The permanent incisors are wide from side to side and shallow from before backwards, and the external surface of each presents a groove running the whole length of the tooth, the bearing surface shows a thin rim of a hard white substance called enamel, outside; internal to this is a portion of a darker substance called dentine, internal to which is a second ring of enamel, and within this is a hollow which shows a substance which becomes dark and is known as the mark. At six years the marks should be worn out of the central lower incisors and the bearing surface of the teeth almost level. At seven years the marks have disappeared in the laterals; and at eight years in the corners. At nine years the table or bearing surfaces of all the lower incisors should be level and ready, if a side view be taken, with the teeth shut, a hollow will be noticed near the outer edge of the upper corner incisors, forming