

LIVE STOCK.

Prizes for Breeding. II.

Text of an address given by Prof. H. S. Arkell, B.S.A., at a meeting of the Eastern Ontario Fairs Association in Ottawa recently.

If our present criterion, in judging a sire, were absolutely or even proportionately dependable, do you think the market returns would continue to report such a scarcity of first-class geldings? If dairy bulls proved as successful sires as their ratings in the show-ring would suggest that they might be, would the average production of our grade dairy cows hover so closely about the 3,000 pounds a year mark, as is indicated on the authority of speakers at our Eastern Ontario Dairymen's Convention? Three thousand four hundred pounds of milk a year is nothing to be particularly proud of. This breeding problem of ours is pretty nearly the despair of college professors, and, what is worse, the fact that it remains unsolved is keeping dollars and cents out of the pockets of our people.

It would be untrue to state that it would be unfortunate for the impression to be entertained that prizewinners in the show-ring have not proven of real value for breeding purposes. Instance after instance could be given of prizewinning animals being the parents of offspring as well or better endowed than themselves to compete for show-ring honors. The record of the deservedly famous Clydesdale stallion MacQueen is a case in point. In his youth he was a great show horse, and it need occasion no jealousy for me to say that, as a successful breeding sire, he has had as yet few equals in Canada. It would be unfair to do other than acknowledge frankly and freely the large contribution made by leading prizewinners in

115 daughters in the Advanced Registry. He was not a show-yard possibility, and, so far as I am aware, was never shown. Paul Beets De Kol was the sire of about 100 daughters in the Advanced Registry, and was never shown. De Kol Burke was the sire of three daughters in the 30-pound list. He is said to have been a regular buffalo.

Take the Clydesdale stallion Cedric, by Prince of Wales. He was only a fair individual, but, as a sire, in the language of the street, had everything trimmed in the United States.

Take imported Sain, a handsome horse, well bred, but without speed. He is one of the best Thoroughbred sires in the stud to-day.

Take Salvator, the fastest record horse which has ever run on the American turf. He was a practical failure as a sire, although at service in one of the best and largest studs in the United States.

Take the record of the Ayrshire cows which have qualified to date in the Canadian Record of Performance. Of the 187 cows which have qualified in all classes, about 50 have been winners of prizes at some exhibition. In the mature class, 24 cows produced 10,000 pounds milk or over; two of these were winners. In the four-year-old class, 10 cows produced 9,000 pounds milk or over; none of these were prizewinners. In the three-year-old class, there were 16 cows produced 8,000 pounds milk or over; five of these were winners. In the two-year-old class, 34 cows produced 7,000 pounds milk or over; nine of these were prizewinners. Of the eight cows which produced 12,000 pounds milk or over, only one was a prizewinner. Two sweepstakes cows qualified with a narrow margin. In one instance, and in one instance only, has a cow holding the highest record in her class proven to be a prizewinner. This cow qualified in the two-year-old class, and is owned in Prince Edward Island. Of the five

bulls which have qualified, only one was noted as a show bull. In addition to the bulls which have qualified, one noted show-yard bull sired three daughters which have qualified. This bull died at ten years old. Another noted show-yard bull sired three daughters which have qualified, and died at seven years old. Of the ten females descended from these show-yard bulls, not one has made a high record.

But I do not want to make my argument depend wholly on illustrations. These serve however, to bear out our contention that the judgment of the show-ring fails as a criterion of breeding utility. I have heard it reported that two successful breeders and exhibitors of dairy cattle have been led, as the result of their experience, to the conclusion that no prize should ever be awarded to a dairy beast under two years old. They don't pan out according to the rating of the show-ring. Nothing has done so much to shake the confidence in the old standards for dairy cattle as has the performance tests at exhibitions and the Record of Performance and Record of Merit tests extending over longer intervals. Few things are doing so much to bring us back to a business basis in estimating as breeders and producers, the varying utility value of different individuals.

(To be continued.)

Bacon Curing Outlook.

"The general outlook in pig-breeding and bacon-curing in the United Kingdom is very hopeful," says L. M. Douglas, in the Highland and Agricultural Society Transactions for 1911, "and there seems reason to suppose that the cloud which has fallen on these two industries is likely now to be lifted, and that the future will have more prosperous times in store for those agriculturists who devote themselves to the breeding and feeding of pigs. No reliance can be placed upon supplies being restored from the United States, or, for that matter, from Canada, and these two great sources may be looked upon as slowly sinking into insignificance. In Denmark, the supply of pigs does not increase in proportion to the great demands from the United Kingdom, which is

profitably used as breeders to produce horses for the trade made possible by the increased use of drivers on the farms and the demand for sound, serviceable delivery horses and drivers which still exists in cities and towns. Undoubtedly, the best type of horse for the farmer to breed is the heavy draft animal, but conditions are such on many farms that the driving mare, or team of them, as the case may be, could be made bring in larger profits by being regularly bred to a stallion of one of the lighter breeds, and one which, by his conformation and quality, gives indications of being able to produce desirable roadsters.

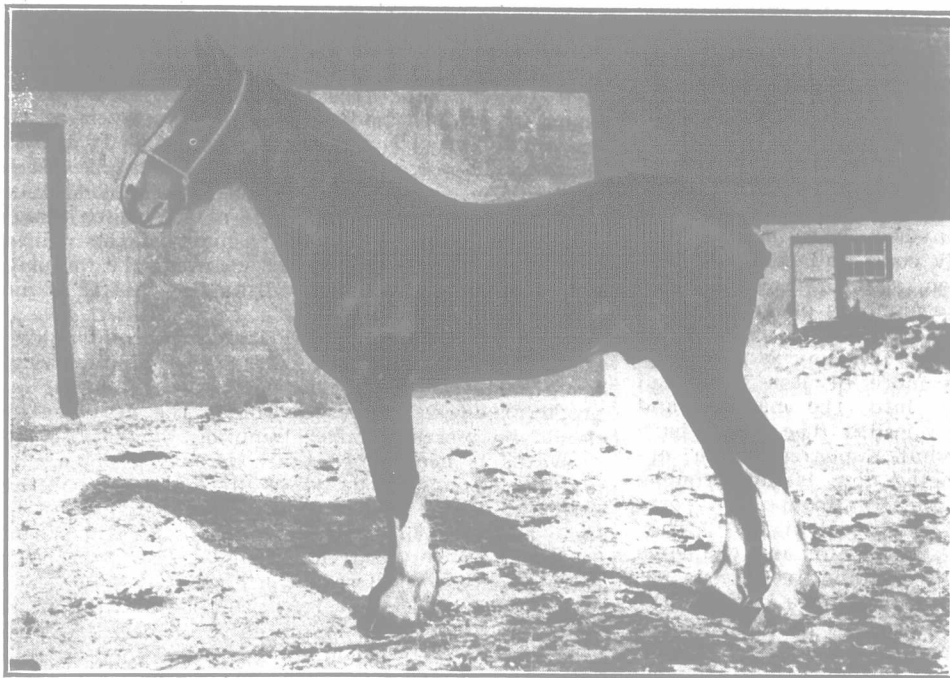
Where Speed Counts.

We like light, quick-moving horses for drilling, harrowing, mowing, raking, binding, weeding, etc. The quick movement gives the machines a certain amount of surplus energy which causes them to do better work than when moving slowly. Our drill men want the quickest-moving team on the farm—one that will pull on the reins and move at command. A quickly-moved harrow will do much better work in making a seed-bed than one that moves slowly. A concrete and pertinent fact came to our notice regarding harrowing. A certain farmer always seemed to have better crops from start to finish than his neighbors, apparently under similar natural conditions. The seed would come up evenly and quickly, and seemed to race to maturity. Being curious to know his methods of seeding, we called on him one day just as he was preparing the seed-bed for a ten-acre plot of fall wheat. He was hitching to the harrows for a final stroke or two. His quickest-moving light team was hitched to a reduced set of harrows that would not lug the team. The team was started off full trot, and the trotting was kept up until a stroke of the harrow had been given lengthwise and crosswise. After drilling, another trotting stroke of the harrows made a veritable garden of the field. This man said: "I would keep a light team on the farm if for no other purpose than to finish my seed-beds." Light horses are better fitted for such work, and pay much better than heavy horses at similar light work which requires speed. This argument, advanced by J. E. Frith, in "The Farmer's Advocate and Home Journal," Winnipeg, serves to show that a light team can be economically used on the farm. While trotting the horses in harrowing will produce a finer seed-bed, we believe that light horses could be induced to walk fast enough to produce the desired effect, and certainly much faster than the drafters. For light, speedy work, most farmers can find a place for the right type of light horse, and the point of speed in preparing a seed-bed is worth testing, if for no other reason than the saving of time so valuable during the seeding.

Horses' Teeth.

I would like to know the number of back teeth a horse has, and the name of each tooth, and at what age it is shed. E. L.

Ans.—The back teeth of a horse, like any other back teeth, are called molars. The adult male animal has 40 teeth, classified as follows: 12 incisors, 4 canine or bridle teeth, and 24 molars. The female usually has only 36, the canine teeth being absent. The molars are arranged in four rows, one on each side of the 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 until about 14 days, the laterals at 9 weeks, and the corners at 9 months. He always has 12 molars at birth, Nos. 1, 2 and 3 in each row. These are all of the 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 in wear. At four years of age a colt should have a full set of permanent molars. From about nine months of age until about 2½ years no great change is noticed in the incisors. Between this age and three years the central temporary teeth are replaced by permanent ones; between 3½ and 4 years the laterals are shed and replaced; and between 4½ and 5 years the corner incisors are shed and permanent ones take their place. Hence, a horse should have a full mouth at five years of age.



Prince Ivory [12442].

First-prize yearling and champion Clydesdale stallion in Canadian-bred class at Guelph and Ottawa Winter Fairs. Bred and exhibited by Smith & Richardson, Columbus, Ont. Sire Black Ivory (imp.), dam Fashion Bell (imp.).

the show-ring toward the improvement of Canadian live stock. But even in the face of this, I still maintain, and I know that many leading breeders support me in the opinion, that the present show-ring standard is not a reliable criterion of breeding utility, and does not do justice to the individuals that are really responsible for the success that is steadily being achieved.

When a boy, I visited a Shorthorn herd out of which many noted prizewinners had appeared. What sort of cows, think you, formed the basis of this herd? According to our standard, they ought to have been models of beef form. They were anything but that. The matrons that rear big, lusty, robust calves can't afford the finish and the style that are to be expected in a two-year-old bullock. These cows were big, roomy, wide-hipped, sparely-fleshed individuals, and the udders that they carried showed that they were of the work-a-day sort. That bunch of cattle gave me the best object-lesson in breeding that I have ever had.

It is just here where, in my opinion, the present show-yard standard falls down. It seems to me a farce to judge breeding stock by practically the same standard according to which judgment is passed on the market classes. To illustrate how far the test of performance and of breeding ability is apart from the awards of the show-ring, I think I can give you a few illuminating illustrations.

Take the record of three famous Holstein bulls: Hengervold De Kol, one of the most remarkable sires known among dairy breeds, was the sire of