

lacking in several cereals, including corn, recommend bran as an excellent supplement to those feeding stuffs which contain proteins of poorer quality.

D. BREESE JONES.

## **P**ROVING Dairy Sires Through Daughters' Records Worth While

The cow-testing association as ordinarily conducted in this country is an organization of about 26 dairy farmers who employ a man to weigh and test the milk and to weigh the feed of each cow one day each month. From the daily records the tester computes the monthly and yearly records of every cow in each member's herd.

For more than 20 years such cow-testing association records have been used in this country to test dairy cows. They are now also being used to test dairy bulls, because production and income records of the daughters of the dairy bull, when compared with the records of their dams, test the bull as certainly as these records of production test the dairy cows.

Two bulls, born the same year in the same State, each had five daughters that completed yearly records in 1925. It was merely a coincidence that in each case the five daughters averaged exactly 350 pounds of butterfat a year when all records were figured to maturity. So far, it would appear that these two bulls were of about equal merit.

The next step in the investigation, however, showed a great difference. In the case of bull No. 1 the five dams had an average butterfat production of 381 pounds, whereas in the case of bull No. 2 the five dams had an average butterfat production of 178 pounds. Bull No. 1 lowered the production of his daughters 8.3 per cent, whereas bull No. 2 raised the production of his daughters 96.6 per cent.

Bull No. 1 was at the head of a herd better than himself. Perhaps he might have improved a poorer herd. Bull No. 2 was at the head of a herd of low-producing dairy cows. He rendered great service by almost doubling the average yearly butterfat production. Doubtless he would have improved a much better herd. It is not the records of the dams alone or the records of the daughters alone, but the records of daughters in comparison with those of their dams that make the story complete and valuable.

### Sires That Win

Cow-testing records show that some purebred sires are fit to head high-producing dairy herds, that some are able to improve the average herd, and that some should never be placed at the head of any herd of dairy cows.

In a study of the records of the daughters of 100 purebred bulls in cow-testing association herds, it was found that approximately one-third of the bulls lowered production, that one-third raised production very slowly, and that the big production gains came from the other third.

To prevent inbreeding, almost all dairy bulls, regardless of their breeding, are sent to the butcher after they have been in the herd two years. This practice is robbing the dairy industry of tens of thousands of good bulls every year.

According to the 1920 census, only one-fourth of our dairy bulls were purebred. As has already been stated, cow-testing figures indicate that only about two-thirds of these are increasing production in our dairy herds. Correspondence with the owners of these herds shows that only about one-fifth of the high-class bulls are kept until the daughters prove their worth.

No one will complain because scrub and grade bulls are sent to the block at an early age, or because the purebred bulls that lower production are doomed to an early death. It is better that these bulls should go than stay, because from them no improvement can be expected.

It is unfortunate, however, that the good bulls, those that are capable of making great improvement in dairy herds, should be sent to the butcher along with the mediocre bulls and the scrubs.

### One Every Eight Minutes

A careful estimate has shown that really high-class bulls are going to the butcher at the rate of about one every eight minutes from daylight to dark, every day in the year. How to stop this great slaughter and keep these bulls for a lifetime of service is one of the greatest problems in dairying to-day.

The cow-testing records are proving hundreds of dairy bulls, but very few of these are still alive when the results are available. As it is not worth while to prove dead bulls, some system of exchange should be started at once in order that well-bred bulls may be kept until the daughters have demonstrated their sire's true value. Eventually thousands of living bulls will be proved through the records of their daughters. From the extensive use of such purebred dairy sires a very great improvement in our dairy herds may be expected.

J. C. McDOWELL.

**PUREBRED Livestock Markets** Millions of dollars each year are expended for breeding stock to improve the herds and flocks throughout the Nation. Records show that during the past century prices of purebred livestock have soared to remarkable heights in some years and then in a short time have fallen to discouragingly low levels. The only market guide available before 1922 to either producer or buyer was the publication of a comparatively few auction-sale prices in breed and agricultural publications.

That such reports should fail to serve as a real index of the market for purebreds was inevitable because only a part of the auction sale transfers were published. Furthermore, auction sales have always represented only a very small percentage of the number of animals that changed hands, as shown by the transfers of ownership appearing on the books of the breed record associations. Hence the bulk of sales, which furnish the only legitimate basis for market quotations, were disposed of at private treaty and such sales were almost never published. Under such circumstances it was impossible for either the present or the prospective breeder to gain even a fair idea of the real level of prices.