Horse Mangers.

Many styles of horse mangers are in use, many of them are not very desirable when we consider the dangers associated with their use. The rack in front and above the horse's head is convenient to fill from the loft, but hard on the eyes and lungs of the horse, and most inconvenient when a person desires to sprinkle the hay to settle any dust, then there is the chute or box with opening in lowet end, and also the ordinary mangers about two feet wide and the same in depth, which are made with tight bottoms, slatted bottoms, and with slanting bottoms with one-inch space opening at lower edge—some of these slanting towards the stall, and some towards the feed aisle. There are none which will give as great all-round satisfaction as the latter, both in saving feed and the horse's health.

Let the bottom be tight, with eight to ten inches of fall towards the feed aisle, and have a one-inch space in the front board at lower edge of manger. The dust and chaff naturally seek the lower part, and gradually work their way back into feed passage along with any oats or chop, which are always spilled more or less. This can be shovelled up, and it makes first-rate feed for cattle, or, better still, to scatter on floor of henhouse, where there will be nothing wasted, as the hens are very fond of clover leaves, dead grasshoppers, crickets, etc..

If the manger is slatted bottom, or slanting towards the stall, refuse passes into stall with litter and on to the manure heap, where it is lost for food purposes. When tight bottom is used, the horse is constantly rumaging through the trash in search of stray grains, filling his lungs with dust and his stomach with indigestible substances, much to the disadvantage of himself and his owner. Besides, the search if often begun before the hay is eaten, and in this way the habit formed of rolling hay out of the manger, where it is tramped upon and wasted. J. R. H.

English Breeders Pay High Fees.

That English breeders appreciate the mistake that was made when they allowed the Thoroughbred, Flying Fox, to be sold and taken to France, is evident from the statement of an English writer, who says :

"The number of English mares that are sent every season to Flying Fox compensates in some measure for the loss the British stud sustained by the expatriation. Credit must be given to those breeders who have been enterprising enough to secure nominations to him at his enormous fee of 600 guineas. Not that there has been any lack of English applications for service. The horse's success has been so phenomenal that M. Blanc would probably have had no difficulty in doubling the number of mares from this country that have been subscribed for this year. I mentioned last week that Major Platt's Primrose had foaled a filly by Flying Fox, and that his mares Sea Air and Surprise-Me-Not had been sent on a visit to Mr. Blanc's horse. I learn now that Mr. R. A. Brice's Hampton mare, Lady Rayleigh, has foaled in France, where she is on a visit to the Son of Orme. The announcement is made, too, that the nomination secured by the King to Flying Fox this season will be filled by the young mare, Nadejda, who was a woeful disappointment when in training, but may make amends at the stud. She is a full sister to Persimmon, Diamond Jubilee and Florizel II., and mating her with Flying Fox is rather a daring experiment in inbreeding.

STOCK.

Condimental Foods.

Bulletin 184 of the New Jersey Agricultural Experiment Station deals with condimental foods and condition powders. The conclusions of this bulletin are as follows :

A consideration of above data, together with the feeding experiments conducted at various experiment stations, leads to the following general conclusions :

1. A loss of appetite or a run-down condition, induced by overwork or insufficient feed, may often be remedied by the use of a stimulating or tonic food, the ingredients for making which the feeder should always keep at hand. In the majority of cases simply a change of food will bring about the desired effect, but when this is ineffective, a liberal use of common salt in the ration will generally prove beneficial. In the case of horses, the use of linseed meal will be frequently found of marked benefit as a laxative.

2. The brand name of a condimental food is no certain indication that it is effective for the animal specified.

3. The claims of the manufacturers of condimental foods, when not preposterous, are exaggerated and misleading. No one feed, however skillfully compounded, can serve as a remedy for all the ailments of all classes of live stock.

4. Instead of being prepared according to scientific formulas, as claimed, many condimental foods are heterogeneous mixtures, with little regard to the requirements of the animal, and in certain cases the drugs used have a counteracting effect on each other.

5. Even where effective drugs have been used, the amount of the mixture to be given to the animal, according to the instructions of the manufacturer, is generally so small that no possible benefit can be expected from its use.

6. Assuming that the condimental foods are scientifically-prepared mixtures of useful and effective ingredients, and their use as directed would confer upon the animals the benefits claimed, their excessive cost would prohibit their use by the careful and economical feeder. Such ingredients which they contain, and which might be a benefit, any feeder can obtain and mix for himself at from one-tenth to one-twentieth the cost of the prepared foods. He would have the added advantage of knowing just what drugs he was administering to his animals, and could give them such quantities of the needed medicines as veterinary experience has shown to be necessary.

Beefing the Dairy Breeds.

While on the lecture platform the question has been asked me on several occasions, "Do not heavy milkers of the dairy breeds fatten well and make good beef?" My reply has usually been to this effect : "No cow can be a heavy milker unless she is a good feeder and has the power of assimilation highly developed. It stands to reason that when a heavy milker and good feeder is dried off, she will still be able to assimilate her feed, and if it is not used in making milk it goes on her carcass, though not of necessity on her back. We all know by practical experience that, as a rule, a cow of the dairy breed, who is a heavy milker, will fatten readily when she is dry. We have to stint her in her feed or she will be hog fat at calving time ; therefore, such a cow will fatten readily, and, consequently, at a low cost of feed per pound of gain ; yet if she is of the dairy breed, she will not be as profitable for the block as one of the beef breed. I am not a dual-purpose fiend. I believe that all the improved breeds have a specific purpose to perform, and that no one of them can most profitably fill all the purposes for which the bovine race is used. Therefore, for beef purposes, let us use one of the breeds especially adapted to that purpose, by years of careful selection, feeding and coupling, and for dairy purposes one of the breeds especially bred for that purpose."

If pressed further to give reasons why a fat cow or steer of the dairy breeds is not as profitable for the block as one of the beef breeds, my answer has been to this effect : "Because the fat is not evenly distributed, nor in the right place to make the carcass sell at the highest price. There is too much fat internally, and, consequently, there is too much offal. Speaking for the Jersey breed, I know the fat is too yellow."

It was fortunate for me that the answer apparently satisfied the audience, for this was about the limit of my knowledge, and had I been pressed for further and more detailed information, I would have been obliged to plead, "I am not a butcher, nor the son of a butcher."

But a bulletin recently issued by the Iowa Experiment Station on this subject, exhausts every phase of the case, namely, the related profits in beef production in animals of the beef and dairy breeds, and their profitableness from the standpoint of the slaughterer or packer.

The experiment extended over one year. The steers consisted of two high-grade Herefords, average age 16 months ; two pure-bred Angus, average age 18 months; two pure-bred Holsteins, average age 24 months ; and two pure-bred Jerseys, average age 18 months. Each of them was believed to be a fair type of the breed they represented. The animals were fed in the stable, and not put out to pasture at any time. Each was fed the same composition of food and fodder, but not the same quantity, which was regulated by appetite and digestion. They were fed hay, sorghum, bran, oil meal and gluten meal.

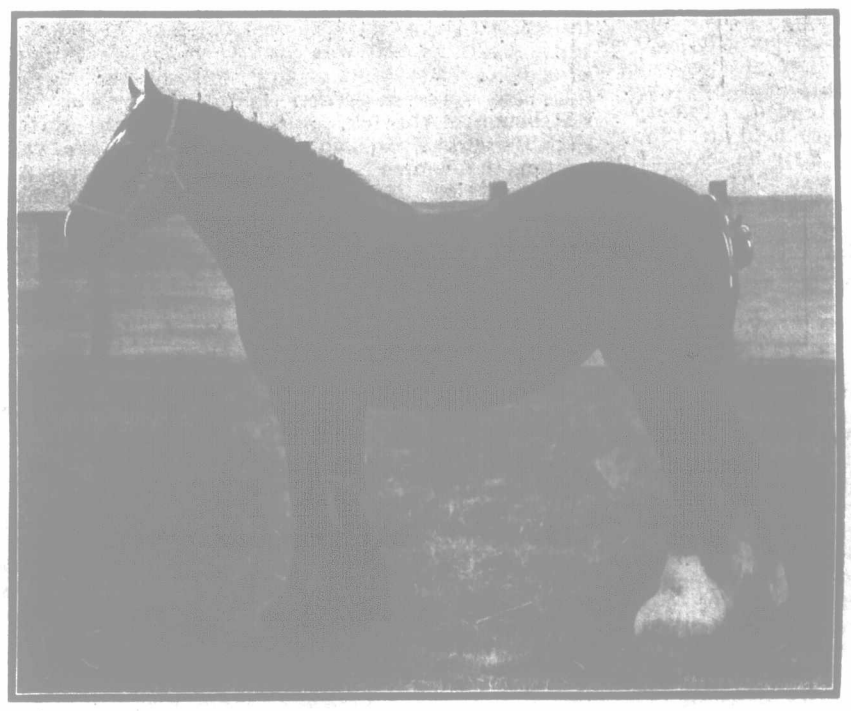
The greatest gain in weight was made by the Holstein—677 pounds—at a cost of feed of $48.23 ; next came the two Herefords, who averaged 644 pounds, at a cost of $48.93 ; the average gain of the two Angus was 568 pounds, cost $45.60 ; and the two Jerseys averaged 518.5 pounds, at a cost of $42.13.

Average grain required per pound of gain per steer : Holstein, 8.21 pounds, Hereford 8.76 pounds, Angus 9.18 pounds, Jersey 9.24 pounds. Roughage and hay was in about the same proportion.

Cost per pound of gain in live weight : Holstein, .0712 cents, Hereford .076 cents, Angus .0802 cents, and Jersey .0812. By this it will be seen that the Holsteins made the greatest gain in live weight at the least cost, next the Hereford, then the Angus, and lastly the Jersey. From the standpoint of fattening at the least cost, one of the dairy breeds—the Holstein—proved itself pro-eminent.

But when the test of the block is applied the beef breeds assert their superiority. The percentage of dressed weight in the slaughter test was as follows : Angus 62.6, Hereford 60.8, Holstein 58.9, and that of the Jersey steers is not given.

The average live weight and beef per steer per breed was as follows : Hereford, live weight, 1,329 pounds ; beef, 784.5 pounds. Jersey, live weight, 1,141 pounds ; beef, 614 pounds. Holstein, live weight, 1,203 pounds ; beef, 687.5 pounds. Angus, live weight, 1,233 pounds ; beef, 751 pounds.



Dunsmore Fuchsia.

Two year-old Shire filly. Winner of female championship of the breed, Royal Show, England, 1905. Owned by Sir P. A. Muntz.

When the tallow is weighed it is easily seen where the Jersey steers put their fat, as they average 113.50 pounds of tallow, to 83 pounds of the Herefords, 64.5 of the Angus, and only 45 pounds for the Holstein. The carcasses were cut up by an expert of 20 years' standing, from the Chicago market, and the prices were fixed by him on the different cuts. Here is where the dairy breeds as beefing animals fail, as the prices for different cuts are governed "by the demand of the consumer, as expressed through the slaughterers." The gains in weight of the dairy breeds were not distributed on the body in such a way as to command the highest price, hence we find that the rib portion of the dairy breed is valued at retail at 2 cents a pound less than that of the beef breeds, and the loins at from 2 to 3 cents less. The dairy breeds carried only 25.88 per cent. weight in the valuable cuts, while the beef breeds carried 26.82 per cent.

The wholesale price of each breed was fixed as follows : Herefords 5 cents per pound, Angus 4¼ cents, Holstein 3.85 cents, and Jersey 3.65 cents.

From what has been stated it will be seen that the quality of the meat, how it is distributed on the body, and the percentage of dressed weight are all factors which have to be counted.

The summary concludes as follows :

Dairy type steers show a considerably higher percentage of offal, and a lower dressing percentage.

Dairy type steers carry higher percentage of fat on internal organs, thereby increasing the total weight of cheap parts.

Beef-type steers carry higher percentage of valuable cuts.

Beef-type steers furnish heavier, thicker cuts ; they are more evenly and neatly covered with outside fat, show superior marbling in flesh, are of a clearer white color in fat, and a brighter red in the lean meat ; but there is little difference in fineness of grain.

The low price paid for dairy steers may be due partially to prejudice, and to the greater expense of carrying and selling the low-grade carcasses ; but it is chiefly due to an actual inferiority in the carcasses.

It is neither profitable nor desirable to feed steers of dairy type for beef purposes. They are unsatisfactory to the consumer because they do not furnish thick and well-marbled cuts ; they are unsatisfactory to the butcher because they furnish low-grade carcasses which are difficult to dispose of, and they are decidedly unsatisfactory to the feeder because they yield him little or no profit, and both breeder and feeder waste their time in producing such a type of steer for beef purposes.

VALANCEY E. FULLER.