

animals are kept in an unnatural or artificial manner, and when they are pampered or overfed. An excessive amount of fat deposited in early life around the ovaries is a very common cause of infertility amongst the most valuable of our improved breeds of cattle and also of pigs. Want of exercise also operates injuriously somewhat in the same way as excess of nutritive food, and is especially prejudicial amongst male animals. Cooped up in small places, or secured in a narrow standing, hundreds of young cows and bulls lose muscular vigour and procreative power. Very commendable was the old plan of working bulls and cows that were doubtful breeders in the plough or at other such labour. A liberal allowance of cake and corn, and even a continuous full supply of vetches, are apt to interfere with the bull's capabilities. Many young bulls are damaged by being used before they are fit. Even a well-grown Shorthorn should not be used for service until he has reached fifteen months old; and if he can be spared for three or four months longer, his calves will be more vigorous and he will be more likely longer to retain his usefulness, and will certainly be less liable to get strained and spoilt in the symmetry of his shoulders.

Between the structure and appearance of an animal and its adaptation for breeding, there are usually marked relations. Thus a bull with a cow's head, weak loins, lack of muscular appearance, and want of mane, crest, and male development, will seldom prove a certain stock-getter. Conversely, a cow with a bull's head, coarse horns, thick, heavy neck and forehead, of little profit for the dairy, and especially if she bellows hoarsely like a bull, will certainly prove a capricious and doubtful breeder. Amongst other creatures like results are observable. It may be assumed as a tolerably general rule that when an animal acquires the characters usually peculiar to the opposite sex it will seldom breed. Thus old hens, when they cease to lay, crow and fight, and often have the tail hackle feathers which are the peculiar adornment of the male; old ducks assume the drake's plumage; on the other hand, capons or even cocks which have been long confined in a dark place, or have lost their virility, do not crow, but will sit on eggs and tend chickens almost like a hen. There is a very close relation in all the higher animals between the processes of reproduction and lactation; the secretion of milk is, of course, the natural provision for the young animal during the earlier stages of growth. In all breeds of cattle, and in all individuals where there is a well-developed milk gland, and where after calving a bountiful supply of milk is obtained, there is in the majority of cases abundant fertility. Conversely, cows with little undeveloped bags and teats like a ewe's, that even if once they have a calf are unable to rear it, are generally shy breeders. Perhaps it is well that it should be so, for there can be little profit

or advantage in propagating milk-cows that belie their name.

Like so many other good and bad qualities, fertility and infertility are notably hereditary. For this cause mainly, certain families of Shorthorns, for example, have rapidly increased and multiplied, whilst some have entirely, and others pretty nearly died out. From frequently recurring abortion, the generative organs of cows are apt to get into an abnormal condition, and it becomes difficult, often impossible, to get live calves. More frequently than is suspected, cows fail to breed owing to their retaining in the uterus the remains of an embryo that has died from accident, injury, or other such cause. In such case a bad cold, inflammation of the udder, an attack of hoven, violent over-exertion, or the like, will cause the death of the calf "in utero." Instead of being expelled it is retained, usually becomes mummified, the cow thrives well enough, but does not exhibit any periods of œstrum, and of course does not breed. Even by injections, introduction of the hand, or such means, it is difficult to get away such impediments to further breeding.

Cows that are somewhat capricious breeders are often rendered worse by their being put to the bull too soon after calving. It is always well to allow one period of œstrum to pass before attempting to have the cow again in calf. When from irritability, very hot weather, or other causes, cows come to œstrum at irregular intervals, they should not have access to the bull. For at least one day after service it is desirable to keep the cows tied up or in a yard by themselves, so that they shall not annoy themselves or their fellows. Pregnant cows jumping, as they often do upon another in œstrum, left with them in the fields, are very apt to slip calf, to have deformed calves, or to be inflicted with false presentations. Cows that have turned repeatedly from their service should be allowed to miss one or two periods of œstrum, put to the bull as œstrum of going off, and paired if possible with a young vigorous male. Cows, like mares, will sometimes breed with one bull rather than with another. They appear to take their likes and dislikes; and it is accordingly always wise if the cow appears uncertain with one bull to send her to another. Almost hopeless subjects have sometimes been got to breed when served during the same œstrum by two or more bulls. It is generally considered that cows are more certain to hold when served as late as possible in the period of œstrum.—*North British Agriculturist*.

DISEASE AMONG HORSES IN NEW YORK.—A disease, which has excited some alarm, has for some time prevailed among the horses in New York, affecting chiefly those employed in the street cars. By some it is considered contagious; but others attribute the disease to improper feeding.

The Dairy.

Talk With Farmers.

DAIRY FARMING.

I met a very intelligent person a few days ago, from the cradle of the cheese factory system in Canada. He was looking for meadow land; and after we had talked "land" of all kinds, and discussed the peculiarities of drainage in his county, I said:

"Are you one of the dairy farmers? or do you depend on grain?"

"Well, I run thirty cows of my own, and have a cheese factory besides. I work the milk of one hundred and forty cows besides my own."

"How do you manage for labour?"

"I have four sons who can milk, and we keep one hired man, and so get along pretty well. I attend altogether to the cheese factory myself."

"Do you find it pay?"

"Yes, it pays well, and is a good business."

"How much cheese do you get to the gallon of milk?" I asked this question thinking to get somewhere about the usual answer; but I was rather deceived, for my friend at once rushed into statistics, and gave me such a list of figures and decimal parts that without the aid of stenography I could not commit them to paper. It was quite clear to me, however, that he thoroughly understood his business, and I rather backed out from decimal quotations, and referred to prices. Here, however, he was equally diffuse and particular. He had obtained all the top prices of the season, finally winding up with thirteen cents and some decimals, per lb., for his last lot marketed.

"What kind of cows do you prefer?"

"The common Canada cow, crossed with the Devon or Ayrshire. I prefer the Devon, as they are hardier."

"Do you sell off every year, or do you keep your cows through the winter?"

"I find it best to keep the cows; for when I bought a new stock every spring I used to get kickers and all the refuse which every one else wished to get rid of. So now I keep on the best all the time, and only part with those which do not please me."

"What do you do with the calves?"

"I breed up all I can, and all the heifer calves. I give them milk for a month, and then they do very well with plenty of fresh whey; but of course the whey is given them fresh, and fresh at every meal. It pays well to raise the calves, as I am sure of good ones to keep up my stock."

"What presses do you use?"

"Screw presses. I find they answer best,