DAIRY.

Dairy Notes.

Have the byre clean, and have the cow clean, or you can't get clean milk. Lime and whitewash for walls and posts are good.

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After a little manipulation of the teats and udders, the milk is ready to "come down." Then is the time to take it, and do not delay.

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No definite rule can be given as to how the teats should be handled in milking, as cows differ, and hands differ so much, but be sure of one thing—please the cow if possible.

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There should always be a friendly feeling between the cow and the milker, and milkers should not be changed, if it can be avoided.

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Always milk a cow in the same manner, at about the same time and speed. Any change will tend to irritate and excite her.

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Always milk in the same order, and at the same time of day.

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When it comes a cow's turn to be milked, she knows it, and expects it, and wants to be milked.

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If you disappoint a cow, and milk half an hour late, the chances are that you will get less and poorer milk than if you milked at the proper time.

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Always milk the cow dry before leaving her, but do not continue stripping after the milk is all drawn.

The Jersey as a Farmer's Cow.

A correspondent of the London, England, Live-stock Journal writes:

With all the strong points which belong undisputedly to Channel Island cattle, they are still regarded by many as merely a fancy breed, fit only to grace the sheltered slopes of a gentleman's park, or to supply the dairy of the luxurious with rich cream and, choi e butter. In fact, it would scarcely be putting the case too strongly to say that there exists a widespread prejudice against them amongst tenant-farmers. Now, before saying a word with the object of removing this prejudice, it may be well to disclaim at starting any idea of representing this special purpose race of cattle as being likely to become anything else. Unlike the Shorthorn, they can never, in the nature of things, become the leading national breed, simply because their sphere of usefulness is strictly limited. The writer, however, is convinced that if their capabilities were better known by our agriculturists, that sphere might be considerably enlarged, with considerable advantage to the community. Amongst other fallacies which tell against their reputation for utility is that very common one, which has often been exploded, but still survives in many people's minds, viz., that the Jerseys are not sufficiently hardy for the English climate. Of course, if there were any truth in this objection it would be absolutely fatal, for we do not want exotics which require coddling to keep them alive. To begin with the writer's own experience on this point: I once had a large herd of Jerseys, some of them purchased direct from the Island. The herd was established and built up on a warm upland farm in the Midland Counties, but on removing to a cold, foggy valley with clay soil, in Surrey, I was assured that if I persisted in taking my Jerseys there they would die of lung disease, or, if not so bad as that, the yield of milk must greatly suffer. I persisted, however, against my friends' advice, albeit with some misgivings, in taking them with me, and ran them over the hundred miles' journey in a special train. The buildings, it is only fair to say, were excellent, and as the soil "poached" a good deal in winter, they had to be housed for some months. During six years there was not a single case of lung disease, and the milk yield was quite equal to that obtained at the old farm.

The history of the late Mr. Dauncey's herd is a thrice-told tale, and most breeders know that on his cold clay farm in Bucks he kept Jerseys in a perfectly natural state with the greatest success from the dairy point of view. The animals there were never housed at all, winter or summer, the only shelter afforded being that of the fir plantations bounding the fields. They became as hardy and robust as Ayrshires, while their dairy properties are still highly prized in their descendants.

There is a farm in Sussex of about 120 acres of so poor and cold a nature that it was let some years ago for £14 per annum, or 2s. 4d. per acre. The owner took it in hand and started Jersey breeding, with the following surprising results: The average of each cow's yield of butter gradually rose to 400 pounds per annum; the herd was perfectly healthy, and many prizes were won in the show-yard.

Many more such instances might easily be quoted, but these are sufficient to disprove any charge which may be brought against Channel Island cattle of being naturally tender in constitution. The fact is that, if rationally treated after importation, they soon become acclimatized, and their offspring will require no more care than should be given to any breed of cattle in this fickle climate. This may properly be called a negative recommendation, but others of a more positive nature are not wanting. It must be understood that what is now being said refers entirely to the practical business side of the question, quite irrespective of fancy points and beauty of form, which are different matters altogether. The farmer who uses Jerseys for dairy purposes may ignore pedigree and recognized "show" points, and should select animals of the old Dauncey type. He will find that such will yield milk of which eight quarts will make a pound of butter, against the twelve quarts required of Shorthorn milk to do the same thing. Carefully-selected cows will give him 600 or 700 gallons in the year, and its value is generally worth 3d. per gallon more than the produce of general-purpose cows. It is, therefore, by no means uncommon for a good Jersey to yield a gross annual return of £30, and I maintain that with skillful selection and management this can easily be reached and sometimes considerably exceeded.

I hold no brief to advocate the claims of these animals to the farmer's attention, but in these days of cheapness and low prices I feel sure that they should be represented in every dairy herd, whether butter is made or milk sold.

Constitution in Cows.

This is the element that produces endurance under great strain of any sort—in the race-horse under the strain of terrific speed, in the milch cow under the strain of enormous production. Under the strain of a severe climate it is called hardiness. The presence or absence of this element is specially manifest in the growth and development of the young of the different breeds. Observe the calves of two different breeds. Of the one they live and grow without special care or attention; of the other, they perish easily if they do not have the best of care. The difference is simply in constitutional vigor or vital force, born in the calves of the one and not born in the calves of the other. This differen e continues throughout the lives of these animals. It may not be manifest so conspicuously in after life, yet it affects all their relations to their food, care and productions. In what does it consist? Is it in possessing what is sometimes called the nervous temperament? Not unfrequently we find the offspring of breeds that lay especial claim to this temperament especially lacking in the ability to live and rapidly develop without especial care. It is a secret force hidden in the race, in the breed, and in the animal. Perhaps it may be properly called the vital temperament. The bulls of the Holstein-Friesian breed possess this vital force or temperament more strongly than those of any other improved dairy breed. The breeders in Holland and Friesland have always avoided in-and-inbreeding. In proof that this breed has maintained a high standard of vital force, we point to its use in almost every climate, including that of Northern Russia, nearly up to the Arctic Circle. Here in America it is as hardy as our native cattle. Its calves are raised without difficulty. Taken from their dams at three days old, and reasonably fed on skim milk and a little oil meal, they grow like weeds. Given plenty of food, no matter if much of it is roughage, they develop rapidly. The heifers usually drop their calves at about two years old, and henceforward are profitable to their owners. G. W. CLEMONS.

Individuality in Dairy Cattle.

Everywhere in the animal kingdom we notice that some individuals are much superior to the average of the species. If it were not so, there would be no improved breeds of live stock. In dairy cattle, individuality counts for a good deal. And yet some men persist in thinking that one cow is as good as another, or, at least, their methods would indicate this. This is a great mistake. Dairy cows, even of the same breed, differ as greatly in milk-yielding capacity as do Standard-bred trotters, for example, in their capacity for speed.

There are hundreds and hundreds of cows kept for dairy purposes in this country which do not yield sufficient to pay for the feed which they consume. For they consume as much feed as do the profitable ones, and require as much time and care in milking. There was a time when a dairy cow was not expected to give milk for more than six months in the year, but with the present high prices for labor and feed this condition of affairs can no longer profitably exist. The lactation period should be at least nine months. The amount of milk a cow should produce to be profitable is variously stated at from 5,000 to 6,000 pounds annually, or sufficient to yield from 200 to 240 pounds of butter-fat. This would vary, of course, with the locality, price of labor, feed, etc. However, it is safe to say that a cow which, with reasonably good care, does not produce the lesser of these amounts is not a profitable animal. Yet, how large a percentage of so-called dairy cows will stand this test?

In order to determine accurately a cow's usefulness as a dairy animal, it is well to weigh one day's milk every week or ten days during the lactation period. At the same time, a sample should be taken for testing. The time of freshening should also be noted, in order to determine the length of the lactation period. A good plan is to keep a book account with each cow, charging her with cost of feed consumed and labor expended, and crediting her with value of milk and calf. In this way, it will not be difficult to pick out the non-paying individuals

There is only one place for the unprofitable dairy cow, and that is the block. The time to cull is at the end of the second lactation period. By this time a cow will have proved her worth or worthlessness as a milker. She will have less free board, and will make better steak than if kept longer. Not only in the case of the dairy cow is individuality to be considered, but in that of the dairy bull as well. It is even more important in his case, since he is one-half the herd in the matter of progeny. The best dairy herds are built up by raising the best heifer calves from one's own cows.

The dairy bull should, of course, be a pure-bred animal, since such a one will more surely transmit his own characteristics and those of his ancestors to his offspring. And one of the principal things his pedigree should show is good mil' ing qualities in the females.

However, it is not enough that he be pure-bred. He must be a good individual to insure his getting good calves. Someone has said in substance that no scrub is so harmful as a pure-bred scrub. This is certainly true in the case of the dairy bull. For a pure-bred, as before stated, is more prepotent than an animal of nondescript breed, and bad qualities are even more li' ely to be transmitted than good ones.

Appearances are sometimes deceiving, and only time will tell what a bull is really worth. However, a great deal can be accomplished by good judgment in selecting the animal which is to head the herd. Above all, look for constitution. Nothing is so detrimental in a dairy herd as lack of vitality. Due to the artificial conditions under which dairy cows are often kept, diseases are so numerous and of such variety that constitutional vigor is most essential in order that the germs may not obtain a foothold.—[Iowa Agriculturist.

Investigating Preservatives.

The Dairy Department, under Prof. H. H. Dean, of the Ontario Agricultural College, has under way a comprehensive series of experiments with preservatives in milk and butter, but which will not be completed till the latter part of the year. Some thirty or forty boxes of the experimental butter will be scored by experts in the trade. The following different preservatives are under test: Borax, boracic acid, salicylic acid, sodium fluoride, and five commercial preservatives sold under various trade names. These commercial preservatives are being analyzed in the chemical laboratory to determine their composition. About all that could be said thus far is that these preservatives add to the keeping qualities of butter. The demand in the British market for a mild-flavored, lightly-salted (and in some cases saltless) butter has accentuated the call for a safe preservative.