THE DAIRY.

ABOUT JERSEY COWS.

RURAL EDITOR,—Will you please answer a question or two.

1. What is the average price of a Jersey cow?
2. What is the average yield of butter?
3. Would you advise a common farmer to get a Jersey cow? JOSEPH GOODWIN.

[It would be very difficult to state the average price of Jersey cows in this country as the figures realized have been altogether fancy ones. As butter-makers Jerseys are unequalled; but all things taken into consideration, it is doubtful whether they are as profitable for the ordinary farmer as common or grade cattle. The advisability of our correspondent getting a Jersey cow will greatly depend upon the purpose for which he requires it. If for general use on a farm then we say, no. But if he wishes to start a herd of high-priced cattle to breed for sale, then he must follow his own inclination. Perhaps some of our readers who know will give the average butter yield of a Jersey cow.]

ODOURS ABSORBED BY MILK

Experienced butter makers are aware of the absorptive qualities of milk, and guard against injury from this source, never permitting milk to remain for a longer time than is absolutely necessary in an atmosphere laden with odours that are likely to impart a disagreeable flavour to the cream or butter to be made from it. But it is to be feared that far too many farmers who do not make a specialty of dairying are careless in this matter, and frequently have the freshly drawn milk standing in the stable or barn for some little time after milking, where it is exposed to the odours that are always prevalent in such places. When the milk is taken to the house and set for the cream to rise, it is also frequently placed in cellars where there are vegetables, or in rooms from which the odours from the kitchen are not rigorously excluded, as they should always be.

We will not say that a fair quality of butter cannot be made by those who have not at command all the modern appliances; but we do say that a first-class article cannot be produced from milk exposed to an atmosphere laden with foul odours of any kind. Outside of the best dairy regions, or where butter and cheese are specialties of the farmer, it is very difficult to find a really good article of butter: and in proof of the truth of this, we have only to examine that which is taken in trade at country stores and groceries, or is gathered by peddlers and small dealers throughout the country. We know that it is very difficult to convince the ordinary farmer's wife that the butter she is making from week to week is not really "quite good," although she may admit that her milk room is often invaded by fumes emanating from cooking meat and vegetables in the kitchen, and that in the press of work she cannot always skim the milk or churn quite as often or regularly as she would like to, but even with these irregularities in the way, she is inclined to think that there are no good reasons for considering her butter anything less than first-class.

Upon this subject of the absorption by milk of various volatile substances, Dr. Dougall, of Glasgow, has recently published an excellent paper, a synopsis of which was given in the *Scientific*. To test the absorptive powers, Dr. Dougall enclosed in a jar a portion of certain substances giving off emanations, together with a uniform quantity of milk, for a period of eight hours. At the end of this time some of the milk was drawn by means of a pipette from the lowest stratum of the vessel exposed in the jar, with the following results: Milk exposed to turpentine, onions,, tobacco smoke, creosote, and parffiane oil smelled very strong of these substances. Putrid fish gave the milk a very bad odour. Coal gas, cabbage somewhat decayed, stale cheese, and assafœtida gave the milk a distinct odour, while ammonia, camphor, and chloroform only imparted a moderate odour.

From this experiment it would appear that the milk absorbed the emanations of all the substances to which it had been exposed, and, further, that all the specimens examined retained their distinctive odours for fully fourteen hours after their removal from the glass jar in which they had been exposed. According to Dr. Dougall, cream may be regarded as acting in much the same manner as milk; for while it contains less water than milk, it has special qualities of its own, which may perhaps make it even more liable to retain offensive and dangerous emanations than the parent fluid itself.

Abundant evidence has, however, been given to show that far more care is needed in connection with the storage of milk than has heretofore been regarded as necessary, especially where milk and cream are kept in apartments or wards occupied by sick persons. If the emanations to which the milk is exposed are of a diseased and dangerous quality, it is all but impossible that the sample can remain free from offensive and dangerous properties, and it should become an invariable rule to keep as little milk as possible in sick rooms, and never to allow a supply which has thus been exposed to unwholesome emanations to be used as food. Prof L. B. Arnold, referring to this subject of absorption in his "American Dairying," says: "The influence of the air upon milk is not confined to the absorption of the spores which produce acidity. Spores of every other kind are taken in as well. Nor does the absorptive power of milk end with absorbing living germs. It takes in odours as freely as infectious germs. It is a fact which cannot be too strongly impressed upon the mind of every one connected with the care of milk or the manufacture of milk products that milk takes in every odour as well as the seeds of every ferment that blows over its surface."

All liquids, however, have absorbent powers, and if pure water is left standing in a vitiated atmosphere, it will soon show by its taste and smell that it has absorbed foreign substances. But milk, as Prof. Arnold says, being full of oily matter, and holding albuminoids and sugar in solution, offers to every species of ferment just what is most desirable for it to flourish in. Every odour that comes in contact with milk is grasped and taken in at once, and its grasp is never slackened.

WHEN THE COWS COME HOME.

Every afternoon I go down to see the cows come home. From the meadow to the milking, they come in rambling haste. Way down the shady lane a puff of dust arises. The cloud deepens until the view is closed. "The cows are coming home," calls some one. From the rolling dust emerges the horns, the head, the flanks of a Jersey. One after another the cloud gives them forth, embodying them rapidly until the herd stands revealed. Up the lane they come trooping, the dust cloud hanging about their flanks and still enveloping the centaur who speaks from the unseen with his pistol-like whip and hurries them on. A charming sight it is! Tudora, stately queen of the herd, leads the way. With head uplifted and swinging pace she wheels into the wide gate, the aroma of the clover hanging all about her and the peace of the meadow beaming in her eyes. After her the herd—Jerseys all and every one a jewel—pressing in slow tumult through the gate, bringing in their rich udders the essence of the rifled pastures, as honey bees bring home the stolen sweets of the flowers. Once in the open lot the herd disperses and each cow wends her way to her special stall.

Then begins the milking. Osceola, a coloured man of great dignity and reserve, with his hair done up in cotton string curl papers, is in charge of the herd. For fourteen years he has been trusted and found worthy. He has his assistants who place the huge milk cans, each with the strainer, at convenient intervals through the barn. The assistants then with cans of clear water wash the dusty udders and respectfully retire. Then Osceola's time has come. Adjusting his white apron he leaves the crowd, whose questions he has been answering with caution and hauteur, and seats himself by the side of the first cow in the first row.

Milk! Well, I just wish you could see him! With two sinewy hands and a rotary motion, the head thrown back, the foot beating time, and the milk fairly hissing into the pail, in two big streams. Three minutes to the cow, and with fine energy and abstraction he moves from one stall to another, filling the big milk cans as he goes. Picking out half a dozen favourite cows he milked thirteen and a half gallons in fifteen minutes, on a test, and somehow or other left the impression that he hadn't half done his best. From 100 to 110 gallons is a day's milking, and it is cow's milk, too, and not milkman's milk.—*H. W. Grady in Atlanta Constitution.*

HOW TO MAKE GOOD MILKERS.

No matter what breed you have, something further is necessary in order to reach the best success in raising good milkers. Good blood, whether Short Horn, Jersey, Devon, Ayrshire, grade or native, is not everything, but lies at the foundation: something cannot come from nothing. Treatment in raising a milker should be somewhat different from that in raising a beef animal, or an animal for labour. Begin as soon as the calf is a day old; see that it has sufficient to eat, and is kindly treated and regularly attended to. Never pamper or overfeed, but give it good, generous food, to cause a regular, early and steady growth. Accustom it to be handled, but not to such an extent as to acquire objectionable habits as a cow, but rather to be fond of the presence of the keeper. Kindness helps to create a quiet disposition, so important in a dairy cow, and this education must begin when the calf is young. Any habits acquired when young are apt to cling to the cow when grown.

For a milker I would have a heifer come in at two years old. She is then old enough to become a cow. I would not, as a rule, allow her to go farrow, but milk her up to within a few weeks of calving, even if I did not obtain but little at a milking. A cow thus trained will give more milk and be more likely to hold out long in milk, if her after-care is judicious and liberal, as it should be. Such treatment tends to form the habit of giving milk, and as we know, habit is a sort of second nature. Couple the heifer with an older bull, one, two or three years older than she is, is preferable to a yearling, and better stock is likely to come from such. After the heifer has come in her feed should be regular and liberal. Good clover hay is the best of all, but we all may not have this for stall feed; then we must make up for what is lacking in some concentrated feed, such as oatmeal, shorts, oilmeal or the like; but great care and good judgment must be used not to overfeed or crowd, as the future cow may be ruined. Undue forcing shortens the useful life of the cow very rapidly.—*W. H. White in Country Gentleman.*