

tions in giving birth to the calf. If, upon careful examination, I find such to be the case, I at once call in an experienced man. I consider the organs of generation much too delicate to be touched by any but competent hands.

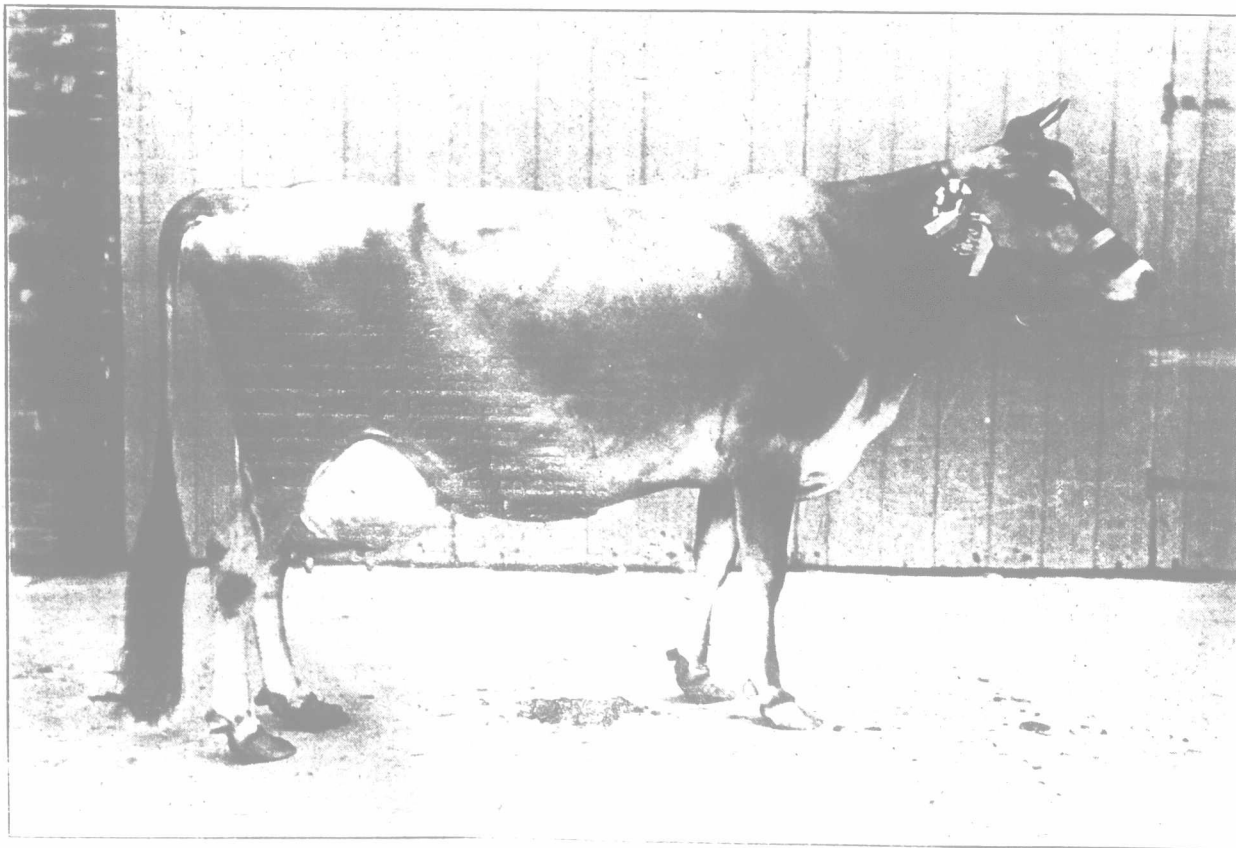
The cow is by nature an affectionate animal, and usually much attached to her young. In some cases, however, especially when a young cow has had great difficulty in giving birth to her calf, she is quite the reverse. She kicks viciously at her calf's first attempt to suck, and glares around at her owner with defiance in her eye. This condition arises usually from nervousness and excitement. I find it advisable, at this juncture, to remove the calf at once, and with a drink of water and a bran mash endeavor to soothe Bossy's agitated nerves. If the cow is restless and kicks a great deal while being milked, it is a good plan to double up a fore leg and tie it. After the second or third milking this is seldom necessary. When a cow is restless, kicks and blows only aggravate the trouble. Sometimes the teats of a young cow are sore and tender, causing her to flinch from the pressure of a hand. A lotion of two parts each of glycerine and water to one part of carbolic acid, applied several times daily, is very soothing.

In ordinary cases, where the cow has a natural affection for her progeny, I leave it with her twenty-four hours, and then remove it to a different stable, and quite out of her hearing. About one hour after calving, I give the cow a dose of Epsom salts in a pail of water, and, a little later, a bran mash.

It not infrequently happens that the afterbirth is retained longer than it should be. I have found that several doses of flaxseed shortly before freshening is a great preventative of this trouble, but is not always effective. Often a dose of twenty drops of carbolic acid in three quarts of water, administered on five successive days, will remove the trouble. If this, too, proves unsuccessful, I conclude that the afterbirth has become fastened to the animal during the last months of gestation, and I employ a veterinarian to remove it.

For two days after the calf is removed I milk the cow's udder only partially dry, and am careful that she gets only laxative food and daily exercise. These precautions have successfully warded off the dreaded milk fever from my herd.

If the cow is a large milk producer, her udder at calving time will be more or less swollen and inflamed. A gentle manipulation of the udder and a little sweet oil carefully rubbed in, will sometimes be all that is necessary to restore normal conditions. But, in some cases a section of the udder becomes hard, sore and difficult to milk, and the cow has what is known as mammitis or caked udder. Cold drafts and a constipating food are often responsible for this trouble. On noting this condition, I immediately get a pail of water, as hot as can be borne, and, with cloths wrung out of it, foment the affected portion of the udder. I purge her with one pound Epsom salts and one ounce ginger, followed up by two drams nitrate of potash, three times daily for three days. Rubbing with camphorated oil is also a help. Regular milking and proper feed will do much to prevent a recurrence of this trouble. THOS. KERR, Prescott Co., Ont.



Jersey cow; second in class, Canadian Dairy Show, 1911.

### Paraffining Popular in the States

Dairy Commissioner Ruddick, who pioneered in Canada the idea of paraffining cheese, and who has had the satisfaction of seeing the practice adopted extensively in the case of cheese going into storage in Montreal, will read with interest, Circular 181, just issued by the U. S. Bureau of Animal Industry, discussing the methods and results of paraffining cheese. A press notice of this bulletin states that nearly all cheese of Cheddar type made in the United States is paraffined before it reaches the public. Yet it is not more than six years, says the circular in question, since it became a general practice, and less than ten since paraffining to protect from loss of weight was first brought to the attention of cheese handlers.

At first the process was in order to improve the appearance, but when it was found that the protecting coat of paraffin to a great extent prevented the considerable loss of weight by evaporation, it became the usual treatment. It is now regarded as an effective way of preventing losses in weight and the growth of mold. The authors state that from one to ten seconds in a paraffin bath, at 220 degrees F., is sufficient; that treatment on the third day after coming from the press gives the best results; and that cheese should not be allowed to remain in a warm curing room for more than one day after paraffining.

### POULTRY.

#### Some Findings of a Poultry Amateur.

My initial steps in poultry-raising were due to necessity, rather than choice. I have always believed that one of the most admirable topics for morning discussion was that supplied by a fresh egg, with due emphasis upon the adjective. Circumstances made it necessary that I either drop out of such discussions, or personally attend to the presence of the subject. I chose the latter; that is, I decided to add the management of a farm flock to my other duties. Hitherto I had limited my labors in the poultry-yard to those of cleaning the henhouse—that, only after I had exhausted every excuse for not doing so; then, only in a spirit of bitter complaint. Which actions were neither logical nor industrious.

These being the conditions, then, my apology for setting down my subsequent experiences is that, whether it be aeroplanes or dairy cows, I have always delighted to hear or read of the successes and failures of the common or garden variety of amateur. Their humility only adds to their realism.

Four years ago the farm flock consisted of some forty hens, half of which were Silver-laced Wyandottes, the other half being Barred Rocks and White Wyandottes. The majority of them were pure-bred, had unlimited food and range at their disposal, and were, therefore, a well-conditioned lot of fowl. They had usually begun laying about the middle of January. A friend told me that the White Wyandotte was the only fowl for use in these civilized times. It subsequently developed that he had some birds to sell. After

having listened to his eulogies so attentively, I felt that the only thing I could do, in common courtesy, was to buy one from him. Having done so, I placed the object of controversy on his hat-tem of forty, placing no restrictions on him whatever. During April and May I learned first-hand a great deal of what I had heard of sitting hens and their attributes. The pullets which I raised were a mixed lot, Wyandotte type, in color all the way from black to white, with the latter color predominating. These pullets began laying during the first two weeks of January.

By this time I had begun to take sufficient interest in the game to attend carefully to every detail of feeding, as outlined by poultry authorities. The question of fresh air did not trouble me at all, for I reckoned it as synonymous to cold air, which latter I strove to exclude with truly heroic efforts. That spring I mated fifteen of what I supposed to be the nearest approach to White Wyandotte hens with a good cock bird whose outstand in good quality was his vigor. My experiences during April and May were rather less strenuous than those of the preceding year. Also, I had eggs of high fertility and vigorous, hearty chicks, mostly white, but with a number of dark-feathered, and a few very fair specimens of Silver-laced Wyandottes. Some of these pullets began laying about the 25th of December. Being gratified by even this slightest gain, I marked these early layers, and in the spring mated them with a cock from what I knew to be an early-laying strain. This bird, like his predecessor, I chose for his vigor, largely, and consequently I was again successful in getting high-testing eggs, and chickens that died only through the machinations of hawks, cats and other untoward acts of Providence. However, although they hatched, as in the previous years, during the first week in May, they laid their first eggs very little earlier than did their parents. Nevertheless, a much larger number were laying by December 20th than did so in the previous year.

Twelve of the most vigorous of these early layers were mated the next spring with a cock bird from the same early-laying strain as his predecessor of the year before. The eggs were hatched in an old Cyphers incubator—the father of all incubators, I think. Not even now can I explain how I got ninety-five chicks from one hundred and twelve eggs. Probably fool's luck and vigorous stock might explain, for I had never spoken to an incubator before. These chicks were raised in a brooder, and some eighty of them reached maturity. These were subjected, however, to a radical change in their feeding, for, in attempting to make the first part of their existence as nearly automatic as possible, I made use of large, homemade, self-feeding hoppers and drinking fountains. Hitherto I had fed the youngsters largely on soft food—shorts, corn meal, oat provender and skim milk. This lot were fed on wheat alone and cracked corn, and often on wheat alone, with all the skim milk they could drink. They ate no moist food until the month of August, when they received one feed daily. These chickens developed much more rapidly than any of the previous lots. A number of them had commenced laying by December 1st.

Having read a great deal of the wonderful effects of fresh air, however cold, upon the fowl, I resolved to give these fowl a taste of what everyone considered most inhumane treatment. Their pen consisted of a room in one corner of a large shed facing the north, and, no matter what the weather, they were obliged to hunt their living amongst the litter of that shed during the winter. In passing, it might be mentioned that beyond an occasional black wing or tail-feather, these fowl were now of fair White Wyandotte type.

The earliest layers were again chosen from this lot and mated with a cock bird from the same strain as those used before. The eggs were hatched in an incubator, and the chicks given to the broody hens—twenty to each hen. This hatch came off on the 28th day of April. For whatever reason, I obtained very much better results from these naturally-brooded chicks than from those of the previous year, raised in a brooder. These chicks were fed entirely upon dry foods, of which meat was the main constituent. The latter was kept constantly before them in large, self-feeding hoppers. They received skim milk twice each day, and water was kept before them in large fountains. Their play-ground was the world at large.

The beneficial results of even this crude system of selection had been apparent to me very soon after I had begun it. The generation last described, which was the flock raised during the last summer, have shown, however, a wonderful advance in early-laying proclivities. A number of these pullets were laying on October 18th, and a still larger number have commenced operations at the date of this writing, October 29th.

Aside from the direct influence of selection and the use of male birds of strains having the characteristics required, this pronounced gain in my