

The advantages to the hired man would be that he would have a home, and would pride himself in taking care of it and making it comfortable, whereas a seven months' man will have to go from place to place, and soon he becomes restless and his winters spent in idleness spoil him. New and unknown men keep coming into a community, if hired only seven months, and many are doubtful characters, whereas if married and hired by the year they become known and feel a greater interest in remaining in one place. Those hired for short terms leave for the towns and cities, and the hired girls do the same, and generally the latter do not return. If the standing of the hired help can be raised by building a small, snug house for them, then by all means let it be done. The children from this industrious class are far ahead of the imported article, which in many instances are useless.

Breeding up a Herd.

The experience of Cornell University in building up a dairy herd was cited. Only a few years ago, from a mixture of grade cows of different breeds, the average quantity of milk for the milking season was about 3,000 lbs. From the progeny of these cows, by mating with suitable sires, the average has been raised to over 7,000 lbs. of milk, the highest cow giving over 13,000 lbs. during the milking season. There is a good deal in training a dairy cow to milk. After the calf intended for dairy purposes is dropped, give her bone and muscle-forming foods that will keep her growing nicely, but not fatten. Have her drop her first calf rising two years old, and then aim to have her calve the next time some 16 months after, so as to educate her to milk a long period. Most six or seven-month cows were trained the first year or so to milk about that period, and they never forgot it. If a heifer does not do well the second year, fit her for the butcher right away.

A gentleman, at Innerkip, who had been weighing the milk of the individual cows of his herd this summer, found that one cow gave him a return of \$70, while one or two others only paid him \$25. He was sending the latter to the butcher.

Experimental Work.

C. A. Zavitz, B. S. A., Agricultural College, Guelph: "We have obtained different varieties of grain from over Ontario, and also leading varieties from nearly all the countries of the world which possess climatic conditions somewhat similar to our own. After these varieties are obtained they are grown upon plots, situated side by side, for a number of years in succession. The plot work is conducted with the greatest care and system. Exactness in all details is exercised throughout. The varieties of a certain class of grain are grown upon soil which is quite uniform in character, and the seed is all sown upon the same day when possible to have this done.

"In five years' experience, with one hundred and ninety-one varieties of grain grown side by side, we have obtained very reliable and very satisfactory results. In nearly all classes of grain we have obtained foreign varieties which have given considerably larger yields per acre than the very best Ontario varieties. Among the eighty-one varieties of oats grown for five years in succession, there were fourteen foreign varieties which surpass the best Ontario oat in yield of grain. There were eight varieties of barley which gave a larger yield of grain than the common six-rowed variety of Ontario. In spring wheat and peas, the most satisfactory results were obtained from the foreign varieties.

"A few of the best varieties of each class of grain are distributed annually to ex-students of the College, and to other farmers throughout Ontario. A regular system of co-operative work is thus established. This is conducted through the Agricultural Experimental Union, and is in perfect harmony with the experimental work at the College. In 1894, there were 1,704 plots in the Experimental Department of the College, and no less than 1,340 farmers throughout Ontario were conducting co-operative tests in agriculture. This is, perhaps, the largest and most systematic system of co-operative agricultural experiments that can be found at the present time.

"Mr. Zavitz dwelt specially upon the practical results which have been obtained from the experimental work at the College, in conjunction with the co-operative work over Ontario."

Small Farms.

A young, thoughtful farmer gave it as his opinion, backed up by good, sound arguments, that small farms were more profitable and far more satisfactory than large ones. They require less hired help, are under full control, every foot can be farmed and kept clean, and special lines of farming mastered. Large farms require too much hired help, and some parts are frequently neglected.

The Manitoba Central Institute and the Freights Commission.

James Elder, President of the Manitoba Central Farmers' Institute, assisted by R. E. A. Leech, Secretary, appeared, on behalf of the Institute, before the Freight Rates Commissioners on Monday, the 20th of January. He stated that the reasons why the Institute was not more prominent in prosecuting the case were (1st) that the matter had been undertaken so nobly and elaborately by the Manitoba Government and the Winnipeg Board of Trade; (2nd) these gentlemen had the means of ascertaining the facts much more accurately than the Institute, and, moreover, they were much more capable of performing the task; (3rd) besides,

the funds at the command of the Institute were quite too limited to undertake such a work. At the same time, the Institute having been instrumental in having the enquiry instituted, they felt it to be their duty to appear. He pointed out the fact that British Columbia shingles were carried through the Province and sold at outlying points in Ontario for a less price than they are sold for in Manitoba. However, it has been found upon enquiry that the C. P. R. was not all to blame for this condition of things, much of this difference being caused by the wholesale dealers selling at a lower price to their customers in Ontario than to those in Manitoba. He said that the Institute had no desire to convict the C. P. R. of sins of which they were not guilty, and if, in some cases, they were not so bad as had been supposed, it was well that the farmers should know it. While admitting that in some cases the C. P. R. had been blamed more than was their due, still, in the main, their rates were oppressive. He showed that the rates charged for shipping thoroughbred animals from one part of the Province to another, or from this Province to the Territories, were out of proportion to those charged on the same class of stock carried through Manitoba to the Coast. He also took exception to the passenger rates charged on the different lines throughout this Province, as compared with those charged on the Intercolonial. Exception was also taken to the classification of freight. Figures were presented in support of all the points noted.

DAIRY.

Western Buttermakers take "F. J. S." to Task.

In a late issue of the *ADVOCATE* we find an article under the title of "Cream," containing some marvelous assertions which are new to us, and upon which you ask the testimony of parties making unexceptionable butter while feeding turnips. Whether there was anything objectionable in our butter, or not, we will leave to the consumer to decide, and simply give our experience in connection with the feeding of turnips to dairy cows, and the testimony of the dealers who handled it. In the summer of 1892 we were favored with a fine crop of turnips (purple-top swedes) which we fed to our cows the following winter, the ration being one heaped patent pail once a day to each cow, fed just before milking at night. That winter we sent our first shipment of butter to Winnipeg, to the firm of J. Y. Griffin & Co., commission men, who wrote us saying they could handle such butter in unlimited quantities. But in the meantime we had received a letter from the gentleman (a retail grocer in Winnipeg) who had purchased the shipment sent to Griffin, stating that it was the finest lot of butter he had seen in the country, and asked for all we could make. We sent him all we made all winter, and did not receive a single complaint concerning the flavor, and we fed the turnips until spring. And what is more, after the turnips were all gone and the cows getting nothing but some crushed grain and bran, with hay, we fancied the butter was not so sweet as when they were having the turnips.

Again, under the heading of "Carelessness and lack of knowledge," "F. J. S." says it may be that some do not know that twenty-four hours for shallow pans is sufficient for summer setting, twelve hours to be added for winter setting. He is quite correct in that statement, as we did not know it. But we do know that if we skimmed our milk at the time specified, that the calves, pigs, etc., would get more of our butter than we have any intention of feeding them while it will bring us more than 15 cents per pound. The only instances in which we have had all the cream rise in the time stated by "F. J. S." was either when it was so cold that the milk froze solid, or so hot that it was thick in less than 24 hours. At present, since the very cold weather set in, we have just five milkings set, and it is usually as sweet as a nut when skimmed. Should any of it turn sour before its turn comes, then we skim it, and then only do we get all of the cream, as there is certain to be a small quantity rise when the milk is skimmed while it is yet sweet.

"F. J. S." also speaks of the kitchen as an improper place for the "cream" to be kept. Now, I think that he should recollect that there are "kitchens and kitchens." If he has only seen one variety, and it unfit for cream to be kept in, then he has our sympathy. We have been in the country over ten years, have visited a good many farmers' homes, and have not seen any place more suitable for the keeping of milk and cream, during our severe winter weather, than a clean, well-ventilated kitchen (but a clean kitchen is not one in which dogs, cats, and smokers are predominant), and we are thoroughly convinced from our past experience that the few odors arising from cooking in such a kitchen have very little effect on the milk or cream, as it takes a strong odor to effect either one, providing they are kept scrupulously clean, and all the vessels, cupboards, etc., as sweet as water, ashes and baking soda will make them. Oh, no; the kitchen is responsible for a very small percentage of the bad butter in our country to-day. A good deal of it is caused through lack of knowledge, but I believe the larger proportion is due to carelessness. Now, who is responsible for this? Our farmers' wives, as a rule, are not careless house-

keepers. What, then, is the reason that we have so much inferior butter? Simply because it does not pay to make a first-class article, if it is to be taken to a country store where all kinds bring the same price. We have seen farmers selling first-class butter (that would have brought 25 cents in Winnipeg) in some of our country stores for 15 cents, and then taking trade for it, at a price from twice to four times what they would have to pay in the city. Other brands of butter brought into the same store, that were fit for nothing but soap-grease, brought the same price as the first-class article. The merchant, when spoken to about the injustice of such dealing, admitted that it was not fair, and he could not help it; that in case of a good customer bringing in a few pounds of poor butter, if he paid them less than he gave other people, they would just get mad and go to some of the other stores in town. So you see the farmer's wife that makes the best butter is the loser, as she has all her extra work and care for nothing, as any one who has made good and poor butter will admit that it is much easier to make the poor article. Now, why do farmers that make good butter endure such a condition of affairs, and still take their produce to country stores where they will not get value. True, they do plenty of grumbling; but why do they not act? Why do they not send their own butter to a good commission firm, or a retail dealer in the city (instead of having the merchants do it for them), and thus save the merchant's profits, and receive a cash price according to the quality of their produce? We know farmers with herds of from ten to twenty cows, dealing their butter out at the stores for fifteen cents, when they might just as well have eighteen or twenty cents if they sent it to the city. Butter is a cash article, if properly made and handled, but if not properly made, then it had better be taken to the stores where they do not appreciate good butter. Such is the advice of the buttermaker of—

SUNNY MEAD DAIRY,
Shellmouth, Man.

Western Ontario Dairymen's Association.

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Grasses and Clovers.—Prof. Fletcher, Ottawa, spoke of corn as being the best dry weather plant, which, if given constant shallow cultivation throughout even the driest season, a very large amount of valuable cow food could be obtained. As a pasture or hay mixture the following was recommended: Timothy, 6 lbs.; Meadow Fescue, 4 lbs.; Orchard Grass, 2 lbs.; Red Top, 1 lb.; June Grass, 1 lb.; sown in the spring with 2 lbs. each of Red, White, Alsike and Lucerne Clovers. This is an inexpensive mixture, and will provide green pasture all through the summer season.

Swine Breeding and Feeding.—Mr. C. H. Everett, president of the Wisconsin Dairy Association, who has made a success of raising pigs on a dairy farm, made many good points. It is his practice to use only pure-bred stock, his favorites being Poland-Chinas. There is always an opportunity of selling a few choice animals for breeding purposes, and he has found that pure-bred hogs yield more pork for their feed than do scrubs or mongrels. A sow that has proven herself a reliable breeder of large, uniform litters, and a good milker, should be kept just as long as she is useful, and not too mischievous. Much care should be exercised in selecting a sire. The speaker recommended fine bone, which can be strengthened by proper feeding. To illustrate this, the results of an experiment were given, in which hogs of the same age and breed were divided into three groups and fed. No. 1, on corn and water; No. 2, on corn, water and wood ashes; No. 3, skim milk and corn. A thigh bone was taken from each lot and subjected to pressure sufficient to break it. No. 1 snapped with 300 lbs.; No. 2 with 700 lbs., and No. 3 did not give way until 1,200 lbs. force was exerted upon it. It is important to remember that a sow carrying a litter of pigs requires a nutritious diet to supply the protein of the young lean bodies growing within her. A good ration for her is skim milk, wheat, shorts and water, with roots, sugar beets preferred, once a week, increased to three times as farrowing approaches, to keep the system cool. Ice water should never be given, but warm slop always, but never boiled. Whole oats fed on clean earth or floor provide suitable nourishment and exercise. Dry brood sows should be fed once daily, at noon, some distance from the sleeping pen. Permanent hog houses are not desirable, according to Mr. Everett, as disease germs once introduced are very hard to eradicate from them. They are also expensive. Mr. Everett's plan is to have single board pens eight feet square lined with tar paper and battened on the outside. The sides form the roof. Floors are unnecessary where the ground is dry. The pens are movable, so that they can be hauled to clover fields in summer and back to the yards to answer as sleeping pens in the winter. The door, which is only present in the winter season, swings from the top, so that it is always shut except when an animal is passing through. Each pen is given as many pigs as can be accommodated, which also has a considerable yard space. The feeding troughs are always at the far end from the pen. Another practice in Wisconsin, varying from Canadian methods, is that of allowing the pigs to wean themselves, which usually occurs at from nine to twelve weeks old. This is to avoid any set-back to the young pigs by weaning. The sow is so well fed all the time that she does not fail in condition. The following hog medicine was recommended: Five bushels of charcoal broken