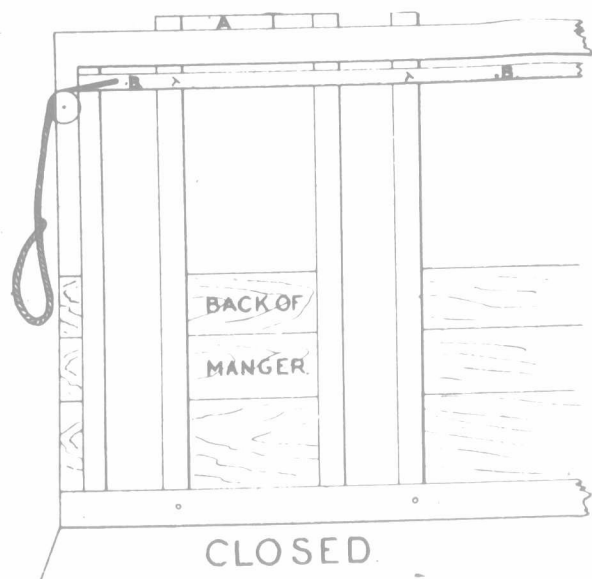


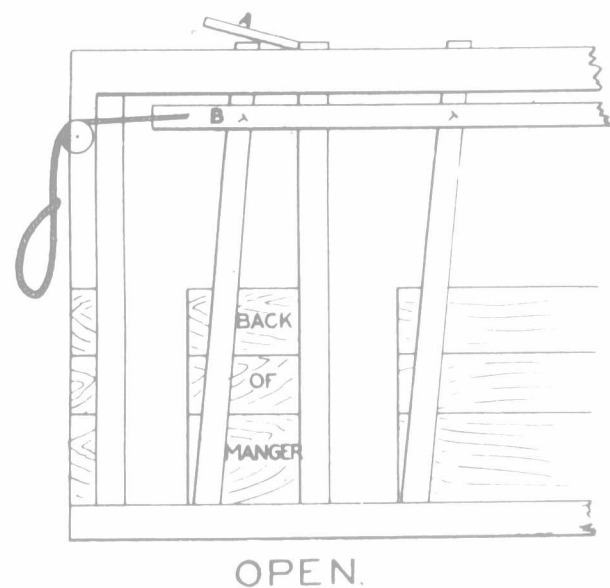
Stanchions.

To the Editor "Farmer's Advocate":

No dairy is complete without some convenient device for operating the stanchions (or bales). I have been using a device for a number of years that is sim-



ple, durable, and has given good satisfaction, and is as seen in the following diagrams. It will close from one to twenty cows by pulling on the rope, and they may be liberated by raising (Fig. A.), so that the stanchion may pass back under it. All the movable uprights are joined together by two strips under the top of the bales, and parallel with it, one on each side



of the uprights, and are fastened together by putting a block between and held with a bolt, as seen in Fig. B. Each of the uprights are joined to this by an iron pin, with a keyhole in it, and a leather key placed therein to keep it from working out. This pin may be taken out if one cow is desired to be let out, and if all but one the pin may be removed and a block placed behind the upright to hold it closed. A. DERRICK.
Lanark Co., Ont.

Tested His Cows.

To the Editor "Farmer's Advocate":

After reading the numerous milk tests in your valuable paper, I determined to test our cows again, having done so several times in the past, and it becomes a matter of great interest when we demonstrate in a practical way for ourselves.

I might state we have no high class testing apparatus, nothing save scales and churn, and I can assure you there is no better method for the average farmer in making such tests.

Our herd of cows is composed chiefly of grade Jerseys, some fresh milkers, and others nearly dry.

The following is the result: Weighed 285 lbs. milk, separated the cream and gave it time to ripen, when churned we had 15 lbs. 4 ozs. of butter; 18 42-61 lbs. of milk made a pound of butter.

We tested a well-bred Jersey cow, that had been milking fifty days, and from 89 lbs. of milk, churned without separation, we got 5 lbs. 1 oz. of butter; in this case 17 47-81 lbs. of milk made a pound of butter. We also tested a grade Jersey, that had her first calf on August 20th, 1903, and due to come in again May 17th. At present this cow is giving from 14 to 15 lbs. of milk per day, and from 77 lbs. of milk churned we got 4 lbs. 7 ozs. of butter. In this case it required but 17 25-71 lbs. of milk to make a pound of butter.

I might say we were agreeably surprised at the result in all cases, as some ten years ago it required over 30 lbs. of milk to make a pound of butter.

The above figures were obtained without extra feeding, and it demonstrates to me that rich milk is not due to rich feed to the extent that most farmers believe. We had a great deal about weeding out the unprofitable cows. Now my advice would be, be very careful in weeding, as the average farmer would most

likely weed out the best cow in his herd; I certainly would have done so myself some time ago. By all means give all cows the same conditions, feed, etc., then test thoroughly; then you are in a position to know which cows are best suited to your own special purpose. NEWTON L. FORSTER.
Halton Co., Ont.

Quiet Heifers.

Every dairyman knows that it pays well to be on intimate terms with all his animals, young and old. "But," says one, "there is other work to do besides petting the calves." True, and yet it often pays to drop some of the other work and handle these developing animals. Groom them, and convince them that you are their best friend. Manipulate the udder frequently, and go through the motions of milking. This may help to develop the udder and familiarize the animal with the process, and soon she enjoys it, and expects you to thus handle her. How often do I hear people ask, how can I cure a kicking cow? If you bought her, sell her again as soon as you can. If your heifer or cow kicks, you are to blame, and not the animal. In fact, you have no business to have a kicking cow. The heifer's udder for a few days after calving is swollen and inflamed, she is nervous and excited. She has entered, to her, a new world. If you have handled her and fully gained her confidence previously, she will now look upon you as "a friend in need," and if you approach her gently, speaking to her kindly, first rubbing the udder, and then drawing the milk very gently, using plenty of time and patience, she will feel the great relief, and not only have full confidence in you, but transfer to you her maternal affections, and ere long she would suffer torture ere she would lift a foot. This is not preaching. Every animal in my stable was raised on my place, and I can go in and set the pail under any one, from the seventeen-year-old to the eighteen-months-old that had a calf but a few weeks ago, and sit on my stool and finish milking, and not a foot will be lifted. It pays in more ways than one to be on intimate and friendly terms with our animals.—[Farmer's Sentinel.

Ayrshire Breeders' Annual Meeting.

At the seventh annual meeting of the Ayrshire Cattle Breeders' Association, held at Montreal, Feb. 10, Senator Owens presiding, a resolution was passed in favor of the nationalization of the association and its records, and the removal of their offices from Toronto to Ottawa. Senator Owens, Robert Ness and J. G. Clark were appointed a committee to meet F. W. Hodson, Dominion Live-stock Commissioner, and make the necessary arrangements. The clause in favor of the nationalization of the records followed a lively discussion, suggested by an address from Mr. Hodson. A scale of points for the Ayrshire breed was adopted, on recommendation of Daniel Drummond, who also read a valuable paper on advanced registry. As a result \$250 was appropriated to promote advancement along these lines, under the direction of the President and Vice-President. Fifty dollars was subscribed towards each of the Winter Fairs at Ottawa, Guelph and Amherst. Secretary Wade announced a greater registration last year than heretofore.

The following officers were elected: Hon. President, F. W. Hodson, Ottawa; President, Alex. Hume, Menie; Vice-President, Robert Hunter, Maxville; Registrar, J. W. Nimmo, Provincial Vice-Presidents: Ontario, Alex. Clark, Brinston's Corners; Quebec, Robert Ness, Howick; British Columbia, A. C. Wells, Sardis; New Brunswick, M. H. Parlee, Sussex; Prince Edward Is. Land, James Eaton, Charlottetown; Nova Scotia, C. A. Archibald, Truro; Assiniboia, J. C. Pope, Regina. The directors for Ontario and Quebec, the executive committee and the revising committee were re-elected.

GARDEN AND ORCHARD.

Mushroom Culture.

Mushroom culture is not so general in the United States and Canada as in European countries, especially in France and England. In these countries there is a well-established and thriving industry. Particularly is this so in France. The quality of mushrooms passing through the central market of Paris in 1901, was 9,680,000 pounds, the mean price of which was 21 cents per pound. The demand continues throughout the entire year, but reaches its maximum during the months of January to May, inclusive. On the American market the prices are variable. The average price is about 30 cents per pound, but runs from that up to 75 cents, and even higher at special seasons and for special occasions. In some cities and towns there is always a good demand, while in others they may be sold only to special customers, but popular appreciation is rapidly increasing, and there is apparently good prospects for a fair market at fair prices in a not distant future.

Commercial mushroom growing in Canada, so far, has seen many more failures than successes. An intelligent study of esse

little experience, a suitable place, and constant watchful care of the beds during the spawning and growing periods, are demanded. Most failures may be traced to spoor spawn, too high a temperature either at the time of spawning or later, or to the liberal use of water.

The most essential factor, perhaps, is that of temperature. Mushrooms cannot be depended upon to succeed in a temperature of less than 50 degrees F., or greater than 63 degrees F. The proper temperature ranges from 55 to 58 degrees F. A second important factor is that of moisture. Some cellar or cave where it is possible to maintain a fairly moist condition of atmosphere, and sufficient ventilation, as to cause a gradual evaporation, suits them best. Cold is less injurious than heat, and in consequence, the use of greenhouses, which heat up rapidly on warm days, is less satisfactory as a rule, although good results are oftentimes obtained during the fall and winter months.

Obtain good, rich, fresh stable manure. Do not remove the straw or litter used for bedding, unless it be very coarse. Pile it in a heap three feet deep, tramp well and moisten thoroughly, but do not drench. Fork it over in the course of four or five days, and firm again. Repeat the operation in from seven to ten days, and if dried out, moisten again. In from fifteen to twenty-one days the temperature will begin to fall, and the manure will be ready for the beds. When sawdust and shavings are used for litter, the composting will require a somewhat longer period. The manure is ready when nearly all objectionable odors are lost and a sweet fermentation, as growers term it, has begun.

There are two general types of mushroom beds: the English or flat bed, and the ridge or French type. The flat bed may utilize the entire floor space, or be arranged in tiers or shelves. The manure in these should be from eight to ten inches deep. The ridge beds enable one to get a greater surface space in a given area than a flat bed. They should be two feet wide at the base, and taper to an apex not more than eighteen or twenty inches high when compressed and cased. In many cases the manure is made up in the form of bed desired, and immediately compressed, to prevent drying out and burning when the secondary fermentation takes place.

The temperature at the time the beds are prepared will usually be too high for spawning, but in a few days will fall to 70° to 75° F. At this temperature spawning may take place, but under absolutely no circumstances should a bed be spawned at a temperature greater than 80° F. If brick spawn, which may be secured from seed merchants, is used, break the bricks into pieces about two inches square, and insert them from one to two inches below the surface and about ten inches apart, then compress the bed into final shape. If the beds dry out in the course of a couple of weeks, water may be applied in the form of spray. Water in quantity at any time will cause the young spawn to damp off.

Examine the beds in the course of a couple of weeks after spawning, and if the spawn is found "running," the beds may be cased with loam. Casing consists in applying a layer of loam from one to one and one-half inches deep to the surface of the bed. This loam should be screened of pebbles, lumps and trash. Neither heavy clay nor sandy loam should be used. When applied it should be barely moist, and subsequent waterings should consist of mere sprinklings to prevent drying out of the bed. When the mushrooms begin to appear, a light sprinkling may be given once or twice a week, always given after the mushrooms are gathered and the loam disturbed by the removal of mushrooms should always receive a light sprinkling.

When the bed is in full bearing, the mushrooms should be gathered at least once in two days. Little gain in weight occurs after the veil begins to break, so the mushrooms should not be left after this time. All old or defective ones should be cleaned out every day. In picking, grasp the mushroom by the cap and stem, twisting it to remove it easily from the soil. Add a little fresh loam if a hole is made. Cut off the stems, and sort and clean. Ship in two-pound or slightly larger, attractive baskets or boxes.

It usually requires about eight weeks for a bed to come into bearing, and the period of production ranges up to four or five months. A profitable bed will yield anywhere from half a pound or two pounds per square foot. When a bed has ceased to bear, it should be every particle removed. The manure has become exhausted with reference to mushroom-growing, and may harbor the diseases or the enemies of the mushroom. The house should then be sprayed or fumigated, the shelves, if they be used, white-washed, and every part thoroughly cleaned. Another crop may then follow immediately. J.

Mr. Jas. K. Dils, Haldimand, Ont., says: I am farming on a small scale only, as yet, but have regained several times over the subscription price of the "Farmer's Advocate" from following information gleaned from its columns, and were I farming more largely, it would be simply invaluable.