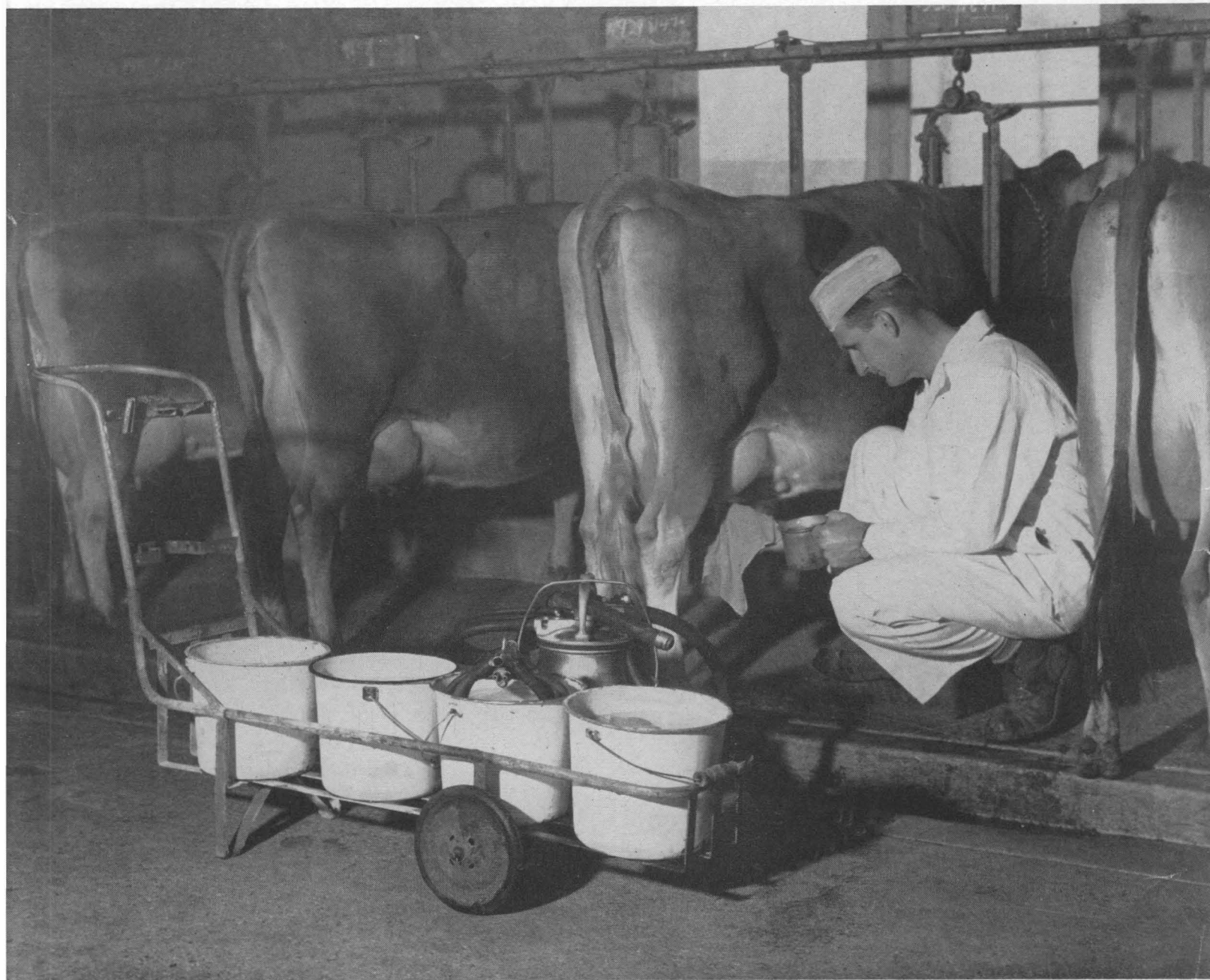


# A Milking Procedure

*for the Dairy Herd*



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# A Milking Procedure for the Dairy Herd

A dairy herd, to be profitable, must be well-bred, well-fed, and well-managed. No one phase of the dairy business will get the job done alone. There are dairymen in Texas who have well-bred cows but are losing milk production because of poor feeding. There are others who do a good job of feeding but let poor management cut their profits. Many dairymen could increase their production, and thereby their profits, by adopting and following a good milking procedure.

*Get More Milk! Do A Better Job!  
Save Time!*

Not many proposals for doing a better job require less work or take less time than previous practices.

The milking procedure outlined here should do these three things:

1. Enable you to produce more milk from your cows.
2. Produce cleaner milk and reduce the chances of spreading mastitis.
3. Milk your cows in less time—saving labor.

While the steps illustrated may at first appear to take more time, they soon become routine. The prompt "let-down" of milk by the cow permits a quick and thorough milk-out which, when followed by "machine stripping," completes the job in less total time per cow.

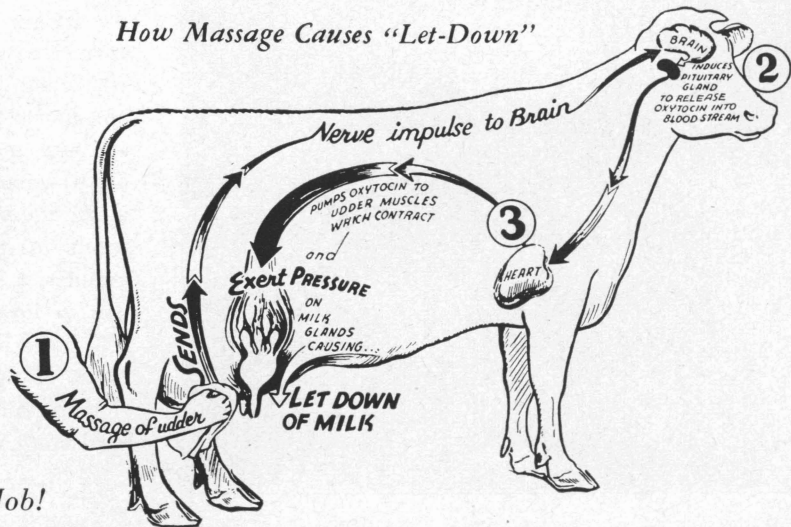
Some dairymen have saved an average of a minute per cow at milking. On 30 cows, milked twice daily, that adds to one hour per day.

## *Causing "Let-Down" of Milk*

A thorough job of milking requires team work on the part of the cow and the attendant. A cow must "let-down" her milk completely or the normal amount cannot be obtained in a reasonable time. Thus, securing a "let-down," or cooperation of the cow, is the first essential of a good milking procedure.

It has been found that milk "let-down" can be quickly obtained by wiping and massaging the udder

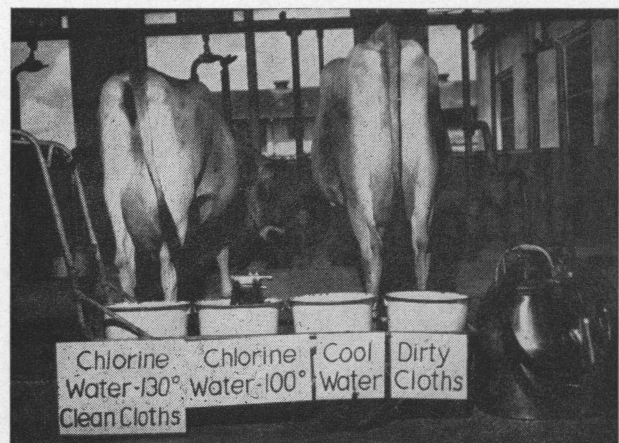
*How Massage Causes "Let-Down"*



with a cloth wrung from warm water. The illustration above shows what takes place when a cow becomes "stimulated" by massaging her udder. To have a normal "let-down" a cow must not be frightened or disturbed in any way. A quiet, comfortable environment is necessary for good milking.

## *Getting Ready for the Job*

Four buckets are required for this procedure, and a cart similar to the one shown in the picture below is very convenient. White porcelain pails are preferred because chlorine water causes a rapid deterioration of ordinary tin pails. At least one clean cloth for each cow to be milked is placed in the hot chlorine water. The cloths should be at least 14 inches square made of heavy material such as toweling or heavy domestic.



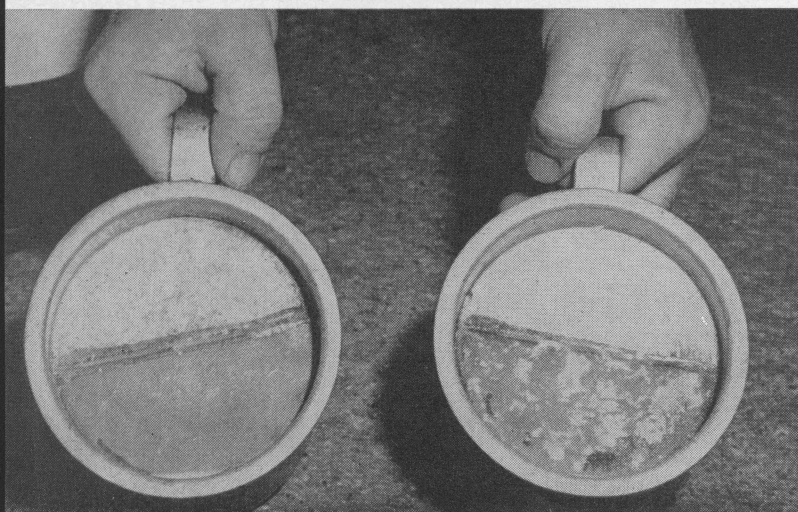
# Here Are The Steps . . . . .



**Step 1.** Wash each udder with a separate cloth taken from a bucket of hot chlorine water (Chlorine—200 parts per million—temperature 130° F.). The hot, moist cloth resembles a calf's warm, moist mouth and the massage of the udder stimulates the "let-down" of milk. The "let-down" is caused by pressure inside the udder of the cow which is developed as the result of proper stimulation and lasts about five minutes. A separate cloth and chlorine water are effective in lowering the bacteria count in the milk and reducing the spread of mastitis. Remember that the effect of the chlorine is quickly destroyed if a dirty cloth is dipped back into the chlorine water. Place used cloth in the dirty cloth pail.



**Step 2.** Use strip cup. Milk one or two streams from each quarter and examine for lumps, shreds, or off-colored milk that may indicate mastitis. Recent research has revealed that this step is even more effective than Step 1 in stimulating a good "let-down" of milk in the udder.



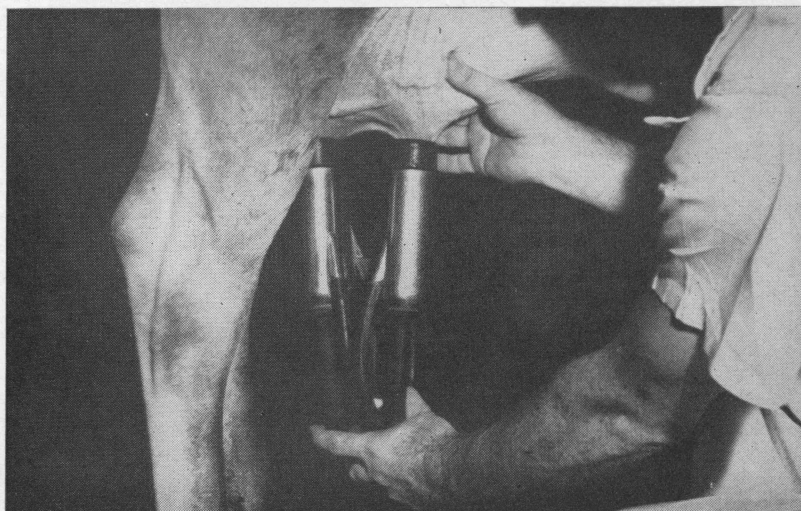
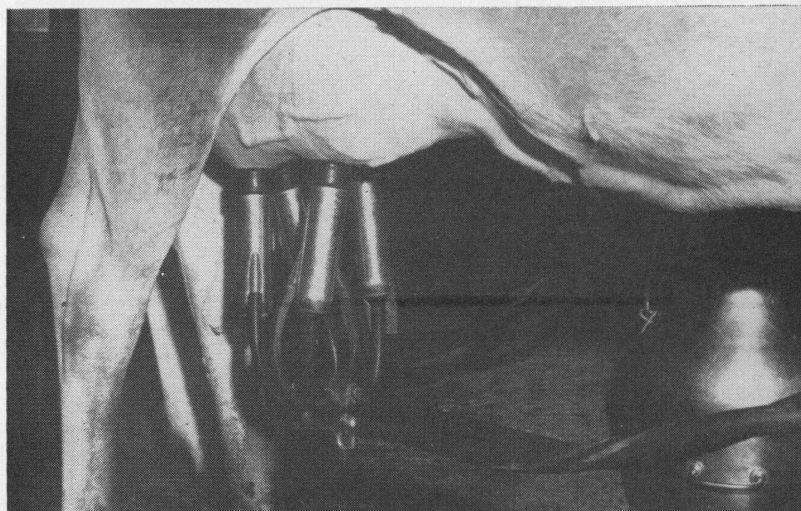
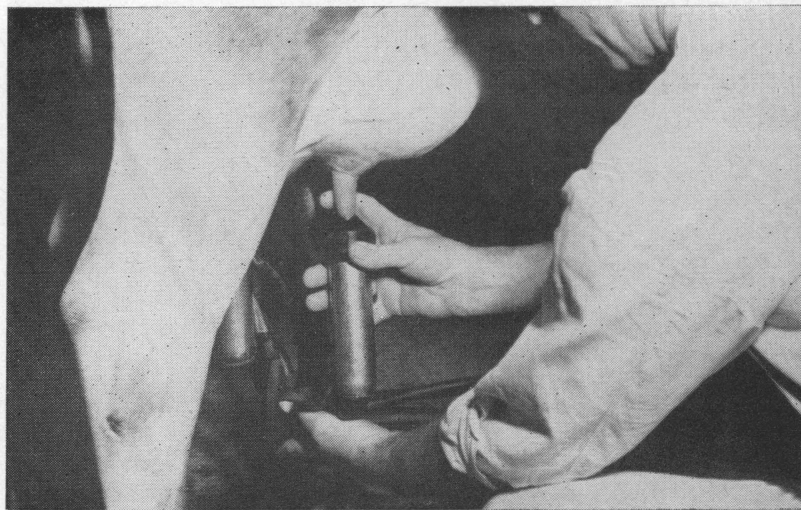
**Step 3.** The strip cup on the right shows some of the typical lumps and shreds associated with chronic mastitis. The cup on the left was used on a healthy udder. Cases detected in this manner should be treated immediately, and the cows should be removed from the milking herd until they have recovered.

**Step 4.** Put the machine on as soon as possible after completing Steps 1 and 2. A delay of several minutes will result in milking with a weaker "let-down" which means slower milking and less milk.

**Step 5.** Prepare each cow for milking by repeating steps 1 and 2. The timing of these two steps should be such that they will not be performed too far in advance of Step 4.

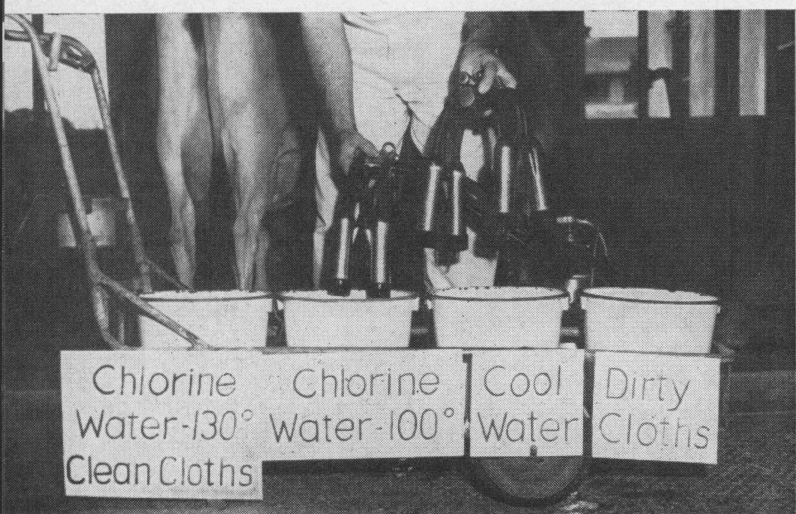
**Step 6.** Return to the cow within 2½ to 3 minutes after putting on the machine. After becoming accustomed to this method of milking, the average cow will milk out in 3 to 3½ minutes. The teat cups in the picture have begun to "crawl up," indicating that the udder is nearly dry. If left too long in this position, the machine can cause udder injury that may result in mastitis. Actually, there is no vacuum inside the udder as long as the milk flows freely; but when the teat cups crawl up and shut off the milk flow from the udder cistern into the teat, the teat walls are rubbed together with every pulsation. Returning promptly to the cow helps to train her to milk rapidly.

**Step 7.** Machine strip by holding down on the teat cups and gently massaging the udder downward. Because machine stripping is done while the pressure is still in the udder, it is probably more efficient than hand stripping. Of course, if the cow has not been properly trained and prepared, the "let-down" pressure is not in the udder when it is needed. Remove the machine as soon as the cow is dry. Most cows will be dry after 20 seconds of machine stripping.

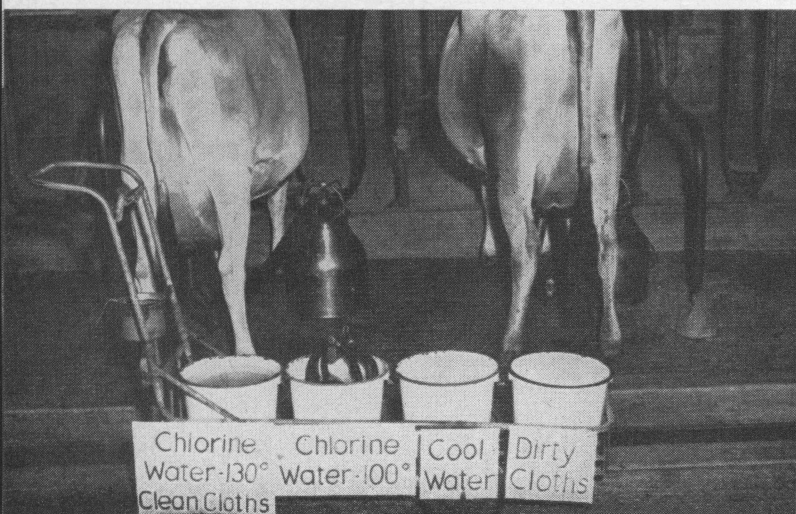




**Step 8.** Drop the teat cups, which were removed from the cow, into the bucket of cool water. Remove the machine hose from the claw and attach to the set of cups in the warm chlorine water.

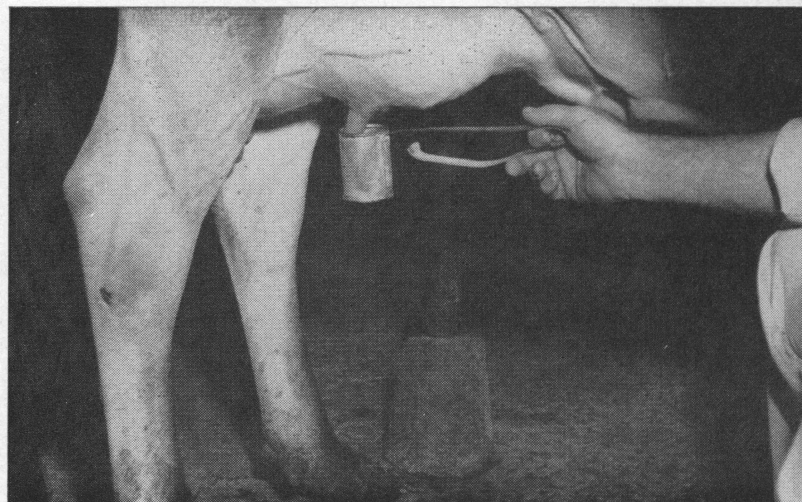


**Step 9.** Lift the clean cups from the pail with right hand and transfer the used cups from the cool water to the warm chlorine water with the left. The used teat cups were placed in the cool water first to remove the milk clinging to the rubber before transferring to the chlorine pail, because milk destroys the germ-killing action of chlorine.



**Step 10.** Leave the teat cups to soak in a bucket of water containing 200 ppm of chlorine. To permit soaking of teat cups, an extra set of cups, claw and pulsator is needed for each two machine units. This practice is strongly recommended in herds where mastitis is a problem. Laboratory tests at the College indicated that just dipping the cups in chlorine water was not effective in preventing the spread of mastitis. It should be remembered that the cow usually will be shedding the mastitis organisms into her milk before the case has developed to the point that the milk appears abnormal on the strip cup.

**Step 11.** Dip the teats of the cow just finished in a small cup of chlorine water to remove the drop of milk on the end of the teat. Discard the water in the cup. Experience indicates that this operation cannot replace Steps 8, 9 and 10 in controlling mastitis.



The services of a competent veterinarian should be employed to treat cases of mastitis and to make other tests for the disease. He is equipped to make more accurate diagnoses than can be made with a strip cup. The principal advantage the strip cup has over other methods used to detect mastitis is that it can be used at every milking.

*These additional steps will be of help in developing a good milking procedure:*

- Milk each cow completely dry. Learn to "machine strip" properly. It saves time and does a better job.
- Adapt steps to milking parlor operation.
- Train heifers to milk properly. Moving heifers into the milking herd two or three weeks before they freshen will help to train them properly for good milking.
- Develop a plan to handle problem cows so the regular milking procedure will not be upset.
- Balance the equipment and help. One person handling two single units works well under ideal conditions.
- Operate and maintain the milking machine according to the manufacturer's directions.

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