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Farm Dairying

I.—The Dairy Farm

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By LAURA ROSE,
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The first farmer was the first man, and all historic nobility rests on possession and use of land.

In the selection of land for a dairy farm some essential points must be considered. If a choice of soil is to be had a rich clay loam, easily drained, is the most preferable. Rough, cheap land is often used to advantage for pasture purposes, but more and more intensive farming becoming popular, even to the extent of having a cow to each acre of land.

There must be a plentiful supply of good water all the year, and it should be convenient.

Another necessary consideration is a good market near at hand or convenient transportation facilities. The importance of good roads is no small consideration.

To be a successful dairyman a man must first be a successful farmer. He

the stable stirred and uniform. The outlet flues or ventilators must extend to the top of the roof. Up to the present time the King system of ventilation or a modification of it is perhaps one of the best. Details of it may be had from any agricultural college.

It is probably not advisable to allow the temperature of the stable to fall much below 40 degrees in the coldest weather, but in no case should a high temperature be maintained at the expense of ventilation. If the air of the stable is dry cattle can stand quite a low temperature without discomfort. Too warm and badly ventilated quarters are largely responsible for the prevalence of tuberculosis. On the other hand, a low enough temperature to cause the cows to chill will quickly be shown in a decreased milk flow. Cows exposed to extreme cold require more grain food and give a smaller yield of milk.

Cement Floor the Best.

The best floor is made of cement. It is sanitary, durable and easily kept clean. If bedding is scarce and the floor very cold it is advisable to have a plank platform for the cows to lie on, otherwise rheumatism may develop. This wooden floor must be taken up occasionally and the stalls well cleaned. Many a valuable cow is lost by allowing her to lie on a damp, cold floor with probably a draft on her hind quarters. Inflammation of the udder is the result.

There are many contrivances for fastening the cows in the stall. Do not be cruel enough to have the rigid stanchion. The swinging stanchion is being installed in many stables and is greatly liked. The upright iron bar with the sliding ring and chain is, in the opinion of many, the easiest and best kind of tie. A later form of chain tie which is an improvement on the old style calls for a bar on each side of the stall and a ring on each bar, with a chain on each ring. These two chains are joined in the center by a ring to which is attached the chain which goes around the cow's neck. The bars are short and should be placed with their lower end about eighteen inches from the floor. The side chains should be slack enough so that when not attached to the cow the center will hang eight or ten inches from the floor. This tie gives more liberty than the stanchion and does not interfere with the cow when rising.

The basement stable is losing favor, as it is hard to build one and avoid dampness and darkness—two enemies to health.

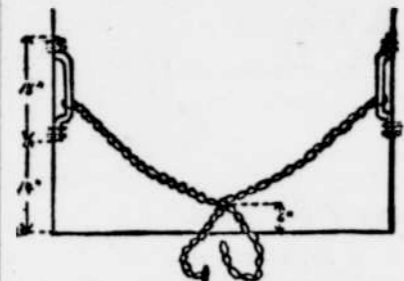
The Ideal Stable.

The ideal cow stable is one without storage loft or cellar and where no other animals are housed. Such a building is expensive and involves more labor in caring for the stock.

In building a new stable every contrivance to save labor that can be afforded should be installed. Spend time and money in visiting new barns and studying plans. A wise planning means less hired help and more satisfaction in doing the work. Have doors and passages arranged to save steps.

A convenient way of bringing the water into the stable and watering the cows, a wide feed passage, a good gutter, mangers easy to keep clean, modern litter carriers, manure shed with cement floor, silo, feed bins and root cellar handy are points to note.

A stable should be whitewashed inside at least every fall. The lime dis-



A HUMANE AND MUCH APPROVED OF COW TIE.

must understand soil conditions and the growing of crops. In other words, he must have a good farm well farmed, as well as a good herd well cared for.

Rundown Farms Made Profitable.

Every crop grown on the farm has a value as a fertilizer and when sold permanently removes that amount of fertilizing matter from the farm. Very often an intelligent, industrious man makes a profitable investment by buying a rundown farm at a low figure and stocking it with dairy cattle. By returning the manure in good condition to the land he makes the exhausted soil become rich and raise good crops in a few years.

A study of the following table explains why poor, run-out farms are built up by dairying. The figures show the amount of money received for the products sold and the value of the fertilizing constituents removed from the farm, based on nitrogen being worth 12 cents per pound, phosphoric acid 4½ cents and potash 4½ cents.

	Manu- rial value.
One ton mixed hay.....	\$12.00 \$5.50
One ton wheat at \$1 per bushel	33.33 6.50
One ton live cattle at 6 cents per pound.....	120.00 7.50
One ton whole milk at \$1.25 per 100 pounds.....	25.00 1.50
One ton butter at 30 cents per pound.....	600.00 .25

I heard an old Scotchman, who proved it true, say many times there were only two things for which a farmer should mortgage his farm—first, to drain the land properly so as to raise good crops, for prosperity cannot rise from wet, cold soil—the land must be drained; second, to build good barns in which to house the stock and crops. These two conditions, rightly managed, will erect a fine home and make a comfortable bank account.

"Let There Be Light."

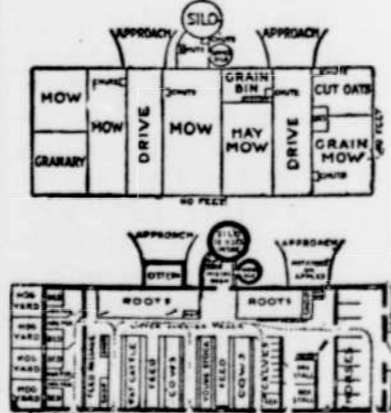
I wish space permitted a lengthy discussion on the construction of the cow stable. It does seem to me that the health of the cows and the purity of the milk depend greatly on the stable. Four things are of prime importance—sunlight, pure air, tight, dry floors and the comfort of the animals.

The first recorded utterance of God is, "Let there be light," and further it is stated, "God saw the light that it was good." The Creator of all things knew that light was good. We know it is good. Then why shut it out of our cow stables? Did you ever see a stable without a window? I have seen many.

Fifteen minutes of direct sunshine bring death to most of the disease germs. When we have such a powerful disinfectant free let us use it abundantly. Have plenty of windows in the stable. Let the sunlight get directly in on all sides if possible. Many have the windows hinged on the lower side and have them open inward from the top. This prevents a direct draft on the cows. Keep the windows free from cobwebs and wash them off occasionally.

It is easier to regulate the light than it is to ventilate properly. If we wish animals to remain healthy they must have pure air to breathe. This means that the foul air from the lungs and odors from food and excretions must escape and be replaced by fresh air. Thousands of animals are yearly becoming affected with tuberculosis, due to insanitary conditions. Effective ventilation is of infinitely greater value than tuberculin. The first prevents the disease; the other only reveals its presence. There should be at least 500 cubic feet of air space for each cow.

Means of letting the air into the stable at or near the ceiling will usually prove best. The air taken in will, by reason of being cold, tend to fall to the floor and thus produce air movements which will keep the air within



MODEL BARN PLAN.

infests and sweetens and brightens every corner and adds to the self respect of the farmer. Whitewash well strained is quickly applied with a small force spray pump or may be put on with a broom.

Whitewash For Outside of Building.
 Slake in boiling water half a bushel of lime. Strain so as to remove all sediment. Add two pounds of sulphate of zinc, a pound of common salt and half a pound of whiting thoroughly dissolved. Mix to proper consistency with skim milk and apply hot.

This is much cheaper than paint and gives the buildings and fences a very attractive appearance.

Disinfectants For Stalls, Gutters, Etc.
 No. 1.—Four pounds powdered blue-stone (sulphate of copper), four pounds of fresh lime, forty gallons of water. Use as a spray.

No. 2.—Whitewash walls, ceilings, etc., with an ordinary lime wash to which has been added a quarter of a pound of chloride of lime to the gallon.

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