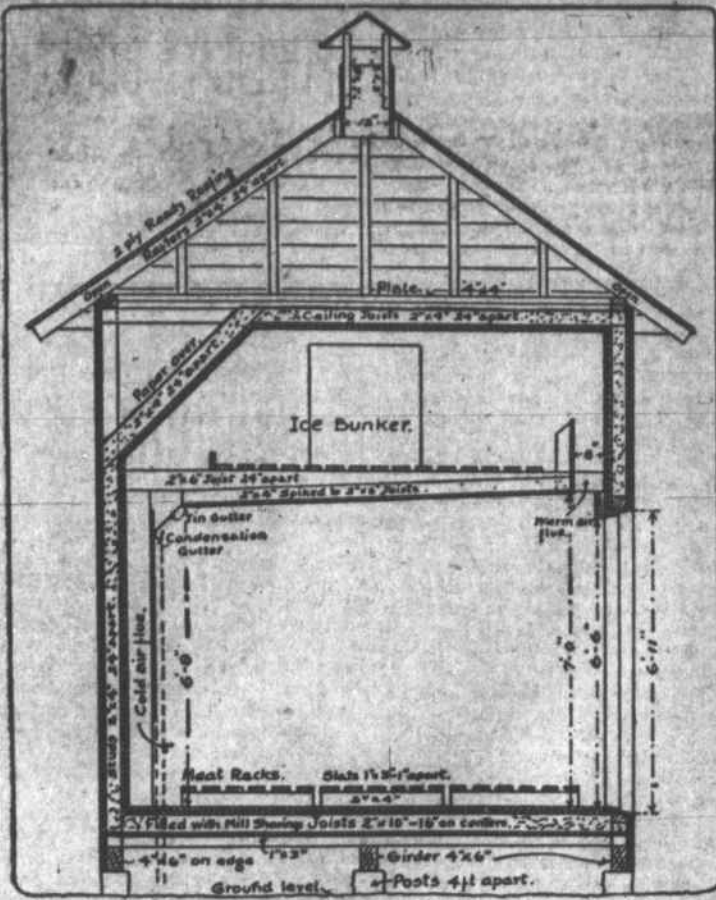


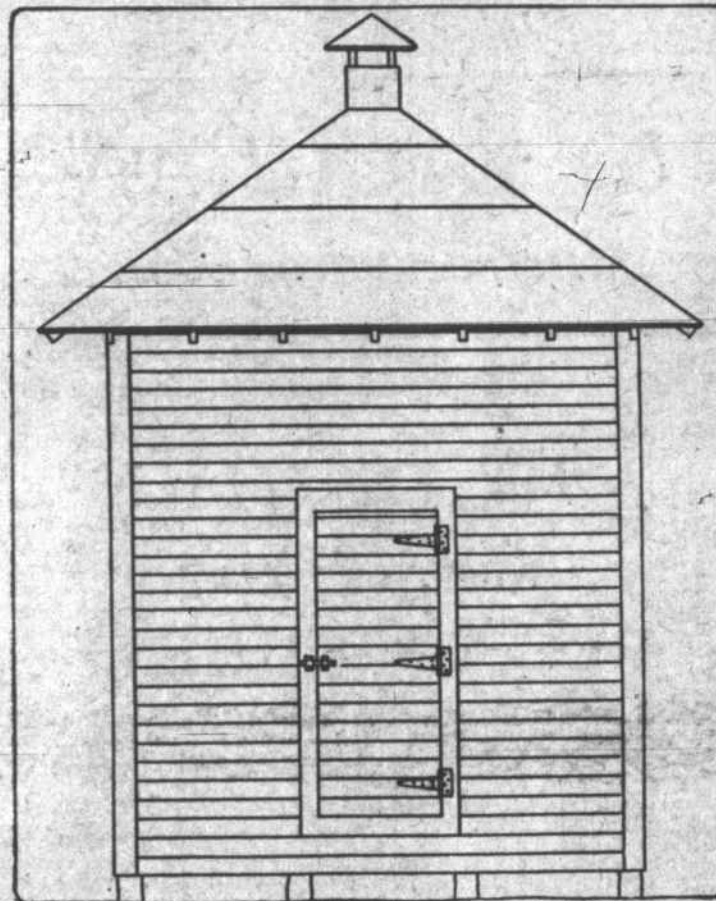
**BUILDING MEAT-CURING HOUSES ON FARM**



Section Through Box.

Prepared by the United States Department of Agriculture.)  
An experimental meat-curing house built in southern Georgia last year from plans supplied by the United States department of agriculture proved so successful that additional sets of plans have been distributed among individuals who profess their willingness to build from them and to report upon their results. Georgia imports a great part of the meat that she consumes, and for this the difficulty in curing meat in a climate which makes the process much of a gamble is held responsible. It is believed that if satisfactory meat-curing houses could be erected throughout the South it would be a great incentive for farmers to raise their own meat, which in turn would lead to their producing other food supplies, and a more

diversified form of agriculture. In the experimental curing house a test was made last winter in which the estimated cost of curing the meat was not over three-fourths of a cent a pound, including the cost of the ice. All meat cured in dry salt kept perfectly, but five hams and shoulders cured by the brine method puffed in five days after being hung up. The plans called for a building 12 by 12 feet in size, but this is somewhat larger than would ordinarily be required, and a building 9 by 9 feet was erected. Buildings of the larger size, however, it is thought, can be operated successfully on a co-operative basis. The planter on whose farm it was constructed could do the curing for his neighbors and take his pay in meat, as millers still do in some sections in grain.



Front Elevation.

**TESTING FOR SOIL REACTION**

Easy to Determine Whether Soil is Acid or Alkaline by Means of Litmus Paper Test.

(By DR. CHARLES K. FRANCIS, Chemist, Experiment Station, Oklahoma Agricultural College.)

The natural reaction of fertile soil should be slightly alkaline. Acid soils do not produce well. It is an easy matter to determine whether a given soil is acid or alkaline by means of the litmus paper test. Litmus paper may be purchased at a drug store in two colors, red and blue, and should be of good, strong color. To apply the test it is necessary to knead a handful of the soil into a ball with the aid of a small quantity of rainwater. (Do not use wellwater.) Break open the ball and place a piece of red paper between the halves so that one-third of the length will remain uncovered. Press the two portions together and set aside. Repeat this with another portion of the same soil, but insert a piece of the blue litmus paper. Examine the test papers at the end of an hour, or after standing overnight, and note if they have changed color. If the red paper has become blue, the soil is alkaline; but if the blue paper has changed to pink or red, the soil is acid.

**Don't Overlook Chickens.**

The farmer or any other person that has the room, who fails to keep a flock of hens is making a mistake. Besides the "home consumption" part of the program, the chickens and eggs are excellent products for the market and are always in demand.

**Duck-Raising Equipment.**

It is not necessary to have an elaborate equipment for duck raising, but it is very important to have the plant laid out in such a manner that there will be no waste of labor.

**LICE ON CATTLE AND COLTS**

Watch Animals Closely When Put in Stables This Winter—Worms Also Do Much Injury.

(By DR. CHARLES K. FRANCIS, Chemist, Experiment Station, Oklahoma Agricultural College.)

Usually no attention is given to lice on cattle and colts until they have done enough harm to be noticed in the condition of the animals. When these animals are put in the barns this winter watch them closely and kill the lice if they appear before they seriously check the growth of the stock. There is no better time to kill ticks than October and November. One killed now means less eggs to hatch ticks in the spring. Worms do most injury when the stock is in dry lots and during the winter. It is a good plan to regularly feed some worm medicine at intervals during the winter. Prevention, or at least early destruction, is better than building up the animals after they have been pulled down by worms.

**Indication of Production.**

The activity of a bird, is a very good indication of production. The high producer must have more to eat of everything that a hen requires for production, consequently she is the first down in the morning and the last to roost at night. She will range farther and is always looking for something to eat.

**Millet Seed for Poultry.**

Millet seed is not only an excellent poultry food, but, being very small there is nothing better to scatter in the litter as an inducement for the fowls to get the exercise they require. Throw a handful in deep litter in the morning and it will keep the fowls busy and active.

**Progress of Fruit Industry.**

The development of the fruit industry in the Texas Panhandle has made wonderful progress. Few people realize its magnitude.

**LIVE-STOCK-FRUIT-DAIRYING-GARDENING-FIELD CROPS-SILOS-PIGS**

**FARM AND FIELD**

TOLD IN AN INTERESTING MANNER EXPRESSLY FOR OUR READERS

**BEST DOG FOR SHEEP FLOCK**

Rattle-Brained Cur Is Much Out of Place—Collie Is Most Excellent for Herding Purposes.

The rattle-brained cur is as much out of place in the flock as the man of hasty temper, cruelty, thoughtlessness and disinclination or lack of natural talent for his work. The dog should be born to sheep tending and should be early accustomed to sheep and trained in their care. Many years ago it was a practice in Texas to take a puppy from its dam before the eyes had opened and place it with a ewe, let her nurse it and allow the puppy to grow up with



Splendid Sheep Dog.

the sheep and be with them night and day. Then the dog would become the natural defender of the flock against all dangers and foes, stay with them all of the time and possess their confidence. It was also stated that a dog so raised would bring in the flock at a given hour, when accustomed to be fed at that time. Sheep know a strange dog instantly. The dog to work among them must not be strange to the sheep in any way, must have their confidence and command their respect and be able to "boss" them when that becomes necessary. The collie is the dog for such service. Sheep herding has been the work of the breed for generations and to tend sheep is a hereditary tendency in the well-bred collie. No dog bred and born otherwise is worth raising for work among sheep and it is waste of time to train a wrong dog for such work.—American Sheep Breeder.

**HORSES IN UNITED STATES**

According to Estimate of Department of Agriculture There Were 21,195,000 on January 1.

The United States department of agriculture estimates the number of horses in the United States on January 1st of each year, except 1910, when the April census figures are used, as follows: 1916, 19,833,000; 1911, 20,277,000; 1912, 20,509,000; 1913, 20,557,000; 1914, 20,562,000; 1915, 21,195,000.

In spite of automobiles and everything else it can be seen that the horse is gradually gaining in numbers. In spite of the heavy exportation of horses on account of the war, the total amount available is so great that the exports are not materially reducing the supply. It is doubtful also if the war will affect American horse-raising very greatly. In the western fighting everything appears to be trench warfare, where cavalry is of little use and the slaughter of artillery horses must be moderate, while on the eastern front Russia has millions of horses and would not need to call on America, even if shipments would be possible. One of the ways America is hardest hit is in the supply of imported draft stallions.

**VENTILATION FOR THE BARN**

All Stables Should Be Fairly lofty, Because Horses Need Abundance of Good Fresh Air.

The horse is very susceptible to cold, and the horses that are stabled when not being worked or exercised feel the changes of weather quite as readily as do those enjoying a more free life.

All stables should be fairly lofty, because horses need plenty of fresh air, and this can only be properly given during intense cold when ventilation can be given above the heads of the animals so far as elevation is concerned, the position of the ventilators mattering little so long as they are at a good height and placed with judgment.

The stable should feel cozy upon going in, but not stuffy, otherwise the horses will feel chilly upon coming out.

**Autumn Care of Colts.**

Look out for the weanlings and colts as cold weather approaches. Be sure that they go into winter quarters in the pink of condition, for there is where the profit comes in.

**Keep Sows in Condition.**

It is not wise to allow young sows to become too fat, as they never make as good breeders as those with more development of muscle.

**Most Prolific Sow.**

Select sows from good-sized litters. The sow that carries good length and depth of body generally proves the most prolific. Quality should not be overlooked, but in the search for quality, do not sacrifice substance, nor select delicate animals.

**Provide Shelter for Pigs.**

Cold, rainy spells may come any day now. You may save trouble with the pigs by providing a well-bedded shelter for them instead of letting them get along as best they can.

**RABBITS AS ORCHARD PESTS**

Department of Agriculture Recommends Wash to Be Applied to Trunks of Trees With Brush.

In the sections of the United States where heavy snow abounds in winter, rabbits, especially jack rabbits, become a serious pest in young orchards, by girdling the trees just above the snow line. Various methods of protecting trees have been used with more or less success, particularly that of wrapping the trees with thin sheets of wood made for the purpose, or collie wire wrappers.

The United States department of agriculture recommends the following



Apple Tree Wrapped With Paper to Protect Against Rabbits.

wash to be applied to the tree trunks with a brush:

Unslaked lime, 20 pounds; flowers of sulphur, 15 pounds; water, 50 gallons.

"This wash has been used successfully," says Prof. W. L. Burnett of the Colorado Agricultural college. "When trees have been girdled, the gnawed surface must be covered at once, before the wind and sun have access to the wound. The injured parts may be painted or covered with grafting wax. As a rule, trees treated in this manner, in the spring will grow new bark. In cases of severe girdling, the method of bridge grafting may be used, this operation being a simple one for a nurseryman familiar with the process of grafting."

**CARING FOR PLANTED TREES**

Large Amount of Foliage Requires More Food Material Than Broken Root System Can Supply.

When the trees are taken from the nursery row, a large part of the root system is left in the ground; the equilibrium between the roots and the top of the tree is thus disturbed, and it is obvious that a part of the top should also be removed. Should the top be left unpruned, transpiration will take place too rapidly. The large amount of foliage requires more water and food material than the short root system can supply.

Trees which have not been cut back will often start growing too vigorously only to die when the food and water which is stored in the plant, or which is easily available, is exhausted. All branches and torn roots should be cut back to healthy tissue, leaving smooth cuts that will readily heal. Long, straggly roots should be shortened, and any masses or tangled roots should be shortened and thinned.—Nebraska Station.

**WRAP LATE AUTUMN APPLES**

Arranged in Layers in Barrels and Boxes and Placed in Dry, Cool Place Will Keep Nicely.

(By M. COVERDELL.) Late autumn apples can be wrapped in this paper, arranged in layers in barrels and boxes, set in a cool, dry place and kept till the following spring, their flavor being enhanced by the storage and close confinement. This is especially commendable where one is short on the winter varieties, or the autumn fruit can be used and the more valuable winter fruit be marketed. Only smooth, sound fruit should thus be stored, and one should make frequent inspection of the supply to see that no deterioration has set in, as this class of fruit spoils very quickly, contamination spreading very rapidly, once it begins.

**Safest Orchard Planting.**

A western horticulturist, who has had a very extensive experience in orchard planting, says that he makes it a practice when planting a large orchard, to follow his planters and try to pull up the trees. When a sharp jerk falls to loosen a tree, it is set firmly on the ground. But if the soil cracks or the tree pulls out, then it must be reset and the soil packed down as firmly as it should have been in the first place.

**In the Fall of the Year.**

Time spent in clearing up an orchard in the fall of the year will be amply rewarded with better and cleaner fruit the next season.

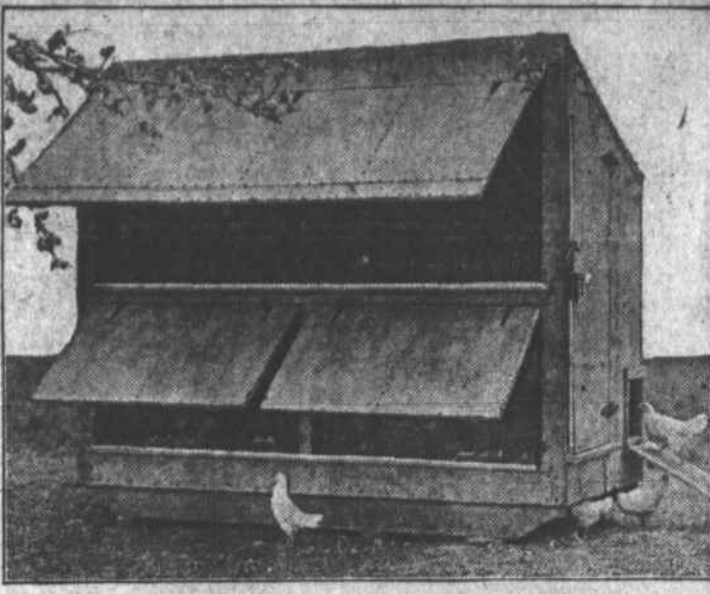
**Fertilizer Is Needed.**

Fruit trees take something out of the soil. Do you ever put anything back? Time you did.

**Success With Strawberries.**

Frequent tillage the first season is one of the secrets of successful strawberry growing.

**BEST ARRANGEMENT OF POULTRY HOUSES**



Open-Front Roosting House—Usually Very Comfortable During Hot Weather, the Front Being Arranged in Such Manner as to Keep Out the Wet.

Sunshine is absolutely necessary for the health and vigor of the laying hen. Low windows should be set so that the sun will shine into every part of the house during some part of the day. Roosts should be placed on a level and not too high, as the hens are apt to injure themselves either by crowding, falling or flying against a projection about the house. Keep the windows in the poultry house clean. Rub them repeatedly with old newspapers. Sunshine is the greatest of tonics.

Poultry keepers may easily reduce the percentage of dirty or soiled eggs and losses entailed to insignificant figures.

First, an ample number of nests is, of course, necessary, but an ample number means no more than, and probably not as many, as are usually directed by poultry writers. Laying houses are, as a rule, provided with a sufficient number, but where the keeper falls down is in failing to supply enough nesting material and floor litter.

**POULTRY CARE DURING FALL**

Much of Success in Winter Depends on Attention Given to the Fowls in Autumn Season.

The success of poultry during the winter depends largely on the care they receive during the autumn.

If your hens do not molt early they will not be profitable winter layers, writes Mrs. W. M. Jeans of High Hill, Mo., in Farm Progress. I find it profitable to feed three table-spoonfuls of sulphur in one gallon of soaked corn; this is enough for about thirty hens. I feed this twice daily for two days. This has to be fed at a dry time, or keep the hens confined in a dry-house for three or four days and feed the first two days.

About thirty days after I use this feed I call out all my hens that have not molted and market and keep only my best hens and early-hatched pullets. The henhouse should be thoroughly cleaned and painted or sprayed with some good disinfectant. The chickens should be either well sprayed or dipped. I use a good stock dip. I find this keeps off disease and mites.

Hens should be fed a well-balanced ration at this season and always keep before them a dust-box filled with ashes, in which sprinkle some lime, grit of some kind and plenty of fresh water, and there is no reason why your poultry will not return a good profit.

**BEST PRODUCER MOLTS LATE**

Hens Laying Most Eggs Gets Rid of Feathers Late in Season—Brings Up the Yearly Output.

Cornell experiment station says: "The hen that molts late is the hen that will lay the most eggs for you during the year, despite the belief that the early molter is the great egg producer. It is true, she may lay a few more winter eggs for you, but she is quite likely to shut off laying in the late spring and the summer time, just when the late molter is producing an egg every day and bringing up the yearly output to high figures."

**Avoid Rousy Fowls.**

It is not advisable to breed from a bird which has a severe attack of roup. Hens affected with chronic roup may lay, but the chicks hatched from such eggs are usually unhealthy. These chicks may appear all right for a time, or until they grow up, when in most cases the disease will attack them.

**Hauling Eggs to Market.**

If you haul eggs to town in the wagon, put a good bunch of straw under your case of eggs. You are sure to get broken eggs if you try to haul them set in the bottom of wagon without putting in hay or straw to take off part of the jar.

**Would Cull More Closely.**

Were the general farmer obliged to purchase in the market for one year the grain fed to his poultry, it is safe to estimate that the flock he winters thereafter would be about one-half the size it formerly was.

**Geese Are Pugnacious.**

Most geese are of a pugnacious nature and cannot be kept with other poultry.

**Two Poultry Essentials.**

Provide plenty of clean drinking water and keep charcoal and grit always at hand.

**Dual Purpose Geese.**

Toulouse geese are profitable for either market or breeding purposes.

Obviously the nesting material must be clean, or the eggs become soiled by contact, and it must be sufficient in quantity, or the eggs are often broken by dropping upon the hard floor of the nest. In houses where the dropping boards are above the nests, and the custom is to sand the boards, small stones often drop into the nest and breakage results when newly laid eggs fall upon them. The condition of nests should be noticed daily, and the nesting material replenished when necessary. Plenty of nesting materials prevents breakage and insures clean eggs.

An ample and clean litter on the floor is also very essential when an A-1 clean product is sought. Particularly is this true when the hens are allowed outdoors during hot weather. The litter acts as a foot mat for the hens on their way to the nests. Clean eggs bring better prices than dirty ones. If your hens do not produce eggs make up your mind that the management is at fault.

**UTILITY VALUE OF POULTRY**

Farmer Should Aim to Select Fowls for Production of Eggs and Meat—Scrubs Are Unprofitable.

In poultry, as with other live stock, the farmer should be much more concerned in their practical utility value than in their ability to win prizes at the shows.

Prize-winning hens are judged for their beauty of form and plumage, not for their ability to produce eggs or meat abundantly and profitably.

This does not infer that the farmer should breed scrub poultry by any means. He can no more afford to harbor scrub hens than scrub cattle or hogs, but his aim should be to procure purebred fowls that have been bred along utility lines rather than for show purposes only. There are such strains in all the practical breeds and these are the strains that the farmer should procure for his breeding flocks.

The fact that fowls have been bred along practical lines does not indicate that they have lost beauty or breed type, but rather that greater attention has been given to egg production than to the fancy points of the show room, which would be lost to the average poultryman anyway.

It is gratifying to note that the tendency of the times is toward greater utility value in all of the popular breeds. The egg-laying contests have undoubtedly exerted much influence in this direction.

**DIET FOR GROWING CHICKENS**

Supply a Variety of Corn, Oats, Wheat, Bran and Alfalfa Meal—Bone Meal Strengthens.

Growing chickens should not be fed a diet of just one kind of food, say corn, oats or wheat. Mix all three, or either wheat or oats, with the corn, or corn and dry bran, or corn, wheat and alfalfa meal. Always keep plenty of charcoal for the growing chicks to pick at; you can burn and pound up wood for this. If you will provide bone meal for the coming-on flocks you will find that it strengthens the bones. Stout leg bones are signs of healthy young fowls.

**Unprofitable Management.**

The "root-hog-or-die" plan of managing the poultry on the farm never will make many dollars for the owner.

**Unfit for Breeders.**

All birds are not fit for breeders even if they are purebred. Many make the mistake in thinking so.

**Early Fall Feeding.**

Now that bugs and grasshoppers are getting scarce, since the weather has turned cooler, the range ration must be supplemented by grain. Care must be taken not to feed too heavily on the start or we may have some sick birds on our hands. Light feeding at the beginning, gradually increasing the amount as marketing time draws nigh, should be the rule.

**What to Feed.**

Corn and wheat make the ideal ration—old corn being much better for the purpose than new. The latter is apt to cause looseness of the bowels. In the absence of corn, feterita, maize or kafir makes a good substitute. We have fed all with good results.

**Clean Out Feed Trough.**

The stiff old broom is an excellent thing to clean out the feed trough, and this should be done after every feeding.

**Simplify Brooding Problem.**

The brooding problem is immensely simplified by a good, careful hen.

**DAIRY FACTS**

**RIGHT RULES FOR DAIRYMEN**

Wisconsin Agricultural College Gives Out Some Good Advice That Every Farmer Should Follow.

The dairy department of the Wisconsin college of agriculture is urging that the following be posted up in every dairy barn in the state:

Practice the following advice and you will make more dollars in dairying. Others have done it. Why can't you?

Use purebred dairy sires from cows having large and profitable productions of milk and butterfat.

Raise well the heifer calves from cows which for one or more genera-



Purebred Holstein Calf.

tions have made large and profitable productions of milk and butterfat.

Breed heifers at the age of sixteen to twenty months.

Feed heifers liberally and milk regularly.

Do not try to save feed by turning to pasture too early.

Provide plenty of pure, fresh water, shade and protection against flies during hot weather.

Supplement poor pastures with corn silage or green soiling crops like rye, peas, oats, green corn fodder, cabbage and other available feed.

Feed cows daily one pound of grain in winter for every three pounds of milk produced, 25 to 40 pounds of corn silage, and what clover or alfalfa hay they will eat.

Do not turn cows out to remain and suffer in cold, stormy weather.

Allow them to have water which is not colder than that from a deep well twice or three times daily.

Brush cows daily if you can possibly find the time, for it pays better than does grooming of horses, which as a rule is not neglected.

Keep cows in clean, well-lighted, properly-ventilated stables.

Treat cows gently and avoid excitement.

Weigh the milk of each cow at milking time.

Get your neighbors to share with you in owning a Babcock milk tester and test the milk of each cow.

Discard the cow which has failed at the end of the year to pay market price for all the feed she has consumed.

**BABCOCK TEST AND SCALES**

Instruments for Ascertaining Correct Value of Dairy Cow—Output Is Not at All Large.

The Babcock test and scales are instruments for ascertaining the correct value of the dairy cow with reference to her milk and butterfat production. The test is simple, accurate and easily mastered by anyone who will give the matter careful study and attention, taking the necessary time for the work. Those who prefer not to devote the time should join a cow-testing association, for it does not pay to keep unprofitable cows.

A small four-bottle tester with glass-ware and full directions can be secured for about \$5 of any creamery-supply company.

**ESTABLISH THE MILK FLOW**

Best Time Is When Cow Is Fresh and Should Take From Three to Four Weeks—Feed Liberally.

The time to establish the milk flow of the cow is when she is fresh. It should take three to four weeks to bring her to a full flow of milk and to enter a full ration. There is no other time in the period of lactation when care and judicious feeding have a more important bearing upon her year's record.

The dairy cow should be fed liberally, but care should be taken not to overfeed her and carry her beyond her capacity. This works injury not only to her milk function, but to her breeding powers.

**Selling to Private Customers.**

Selling butter to private customers is almost a business by itself. You must have the market close to hand and you must be able to manufacture gilt-edged butter and give proper delivery and be a salesman besides. Really, furnishing butter to private customers might be separated from dairy farming. It is a separate business, but one man can handle both.

**Make a Business of Dairying.**

It does not pay to keep cows for a side issue. Get the best and make dairying a business just like any branch of farm work.

**Unprofitable Dairy Cow.**

The dairy cow that does not yield over 100 pounds of butterfat per year is about as profitable to the owner as a hole in the granary roof.

**Good Buttermaker.**

A good buttermaker deserves a good wage and will get it—from somebody.