

## DETERMINING THE VALUE OF A COW

In conversation with a dairy farmer recently he stated that he did not need scales or tester in weeding out and improving his herd because he knew the cows which filled the milk pail. The facts are that as a rule the cows producing the largest quantities of butter fat are those which produce milk in liberal quantities, says the Kansas Farmer. However, this is by no means a certain guide as to the value of the cow. For example, one cow might fill a tea quart pail night and morning and yield 1.2 pounds of butter fat per day, whereas another cow might fill a ten quart pail three-fourths full night and morning and produce 1.5 pounds of butter fat per day. The difference between the test of the milk and the two cows in this instance would be that the milk of the first tested 3 per cent fat, whereas the milk of the second cow tested 5 per cent fat—not unusual differences between cows. When the milk is not actually weighed the owner might deceive himself also as to the comparative amounts of milk given. This is a crude but nevertheless fairly accurate example of how the cow owner may be fooled unless he uses



Lady Viola, imported from the island of Jersey by J. B. Haggin, ranks among the famous cows of the Jersey breed. She inherits quality and excellence from a splendid line of ancestry. She is the dam of Noble of Oaklands, Viola's Golden Jolly (which sold for \$23,000), and is a fine type of the breed. She is a great butter producer and has three daughters with better records on the island of Jersey.

the scales and test. There is one other point in this connection, and that is the economy with which the two respective amounts of milk are produced. The cow yielding the most butter fat and giving the smallest number of pounds of milk may require more feed in the production of that milk than the cow giving the larger amount. One other point, too, is that one cow may milk more months during the year than the other cow. It is apparent, therefore, that the only accurate way of knowing cow value is by employing accurate means of determining the accurate production and value of the cow's output.

Some lessons taught by the scales and test, are that it is impossible to gauge with any degree of certainty the value of individual cows without their use, and that a cow which is a persistent milker with a fairly high test—although giving but a moderate amount of milk at each milking—generally is the largest yielder.

### Feeding Tankage to Swine.

The use of tankage for swine is a comparatively new thing. The experiment stations of Ohio, Indiana, Iowa and Nebraska have done special work in feeding tankage to swine. At the Nebraska station a combination of about one-half part tankage and ten parts silk corn gave an average daily gain of one and a half pounds per day. Three hundred and twenty-one pounds of this feed were required to make 100 pounds as against 416 pounds of soaked corn for the same gain. At the Ohio station they secured a daily gain of one and a half pounds for tankage fed hogs following steers compared with those not fed tankage. One-third of a pound of tankage was the amount fed.

There is no better food for fattening hogs than corn, but corn alone as an exclusive diet is not desirable. The use of tankage adds greatly to the usefulness of the corn and makes better pork.

### Handling the Bull.

"As a rule the bull hands back to a man on the points of his horns the exact treatment accorded him at the points of the pitchfork prongs," pointedly says Leon Shaw of the Michigan Agricultural college. "The club has no place whatever in the handling of a bull, and the same is also true of boisterous conduct of any kind on the part of the attendant. Quietness and gentleness, but firm treatment are essential to the proper training of the bull. Never undertake to make the animal do anything without accomplishing the same. If there should be any question about the result do not undertake it. The man who is afraid of a bull should not attempt to manage him, as the bull will detect the first evidences of fear and begin to take advantage at once, finally becoming ungovernable. On the other hand, no man should pursue foolishness and expose himself to danger unnecessarily."

### Alfalfa and Silage.

A 1,000 pound cow should be given thirty to thirty-five pounds of silage per day and permitted to eat alfalfa hay at liberty. With this amount of silage such animal will consume seven to ten pounds of alfalfa per day. This will for all practical purposes make a satisfactory and economical milk producing ration. In cold weather for the general good of the cow feed a little grain in the barn. Grain fed is good any time.

## IN THE DAIRY.

A liberal banking of sheds on the north side will prove a boon to the cows when the cold weather comes.

One of the most common mistakes that would be cautious dairymen make is to buy sires that are economical in first cost. These cheap bulls are the most expensive in the long run.

The cow that freshens within the next month is going to be a profitable cow for this season.

Fill the producing cows up on clover hay, or alfalfa hay if you can get it. Instead of fodder or other coarse stuff containing low feed values.

The dairy utensils to be properly clean should be washed as soon as possible after having been used.

Both the milker and his clothes should be clean if the best quality of milk is to be produced.

## THE BREEDING EWES.

Animals Should Be Increasing in Flesh When Mating Time Arrives.

The relation between the nature of the lamb crop and the management of the ewes at the time of mating is closer than is usually supposed, says a sheep grower in Iowa Homestead. When the ewes are overfat at such a time, or when they are on pastures dry and dead, impregnation is less certain than when the opposite conditions prevail. When the ewes are falling in flesh at such a time it becomes even less certain.

The greatest certainty in breeding is attained when the ewes are increasing in flesh. The renovating influence which at such a time comes to the system extends to the generative organs, and this adds not only to the certainty of conception, but it tends to hasten the time for breeding.

When the lambs are weaned the ewes are usually thin in flesh. The better their milking properties the thinner they are likely to be, because of the amount of daily ration that has been converted into milk. If the ewes are then put upon succulent pastures they at once begin to regain the flesh that has been lost. It is when they are thus building up the system that the breeding season comes on. The relation between the quickness or slowness with which it comes is dependent on the character of the food. The



In England the Shropshire is the most popular of the sheep breeds, more of them being fed and marketed than all other mutton breeds combined. Shropshires were tried at the Wisconsin experiment station, and among all the different mutton breeds they were found to be the most profitable for wool and mutton. The Shropshire ram shown was grand champion at the Wisconsin state fair this year.

richer it is in the proper elements of nutrition the squarer will the ewes come in best.

Usually the uncertainty in breeding is greater with ewes one year old than any ever produced lambs than with those that are older. This is owing to the fact, chiefly, that such ewes are liable to carry much flesh, especially if they have been fed on nourishing pastures all through the season. The remedy in this case would be to confine them to pastures succulent and a little lacking in quantity if such could be found as, for instance, young winter rye, where the short growth would force them to do much traveling.

The aim should be to have ewes in good condition at the time for mating. Where they are not they do not produce as many lambs, nor is it likely that the lambs will be so strong. The ewes require more food also to carry them properly through the winter. It is an easier matter to lay flesh on a ewe before she is pregnant than subsequently, when a part of the food is used in sustaining the fetus.

### Put Color in the Butter.

Fall and winter butter made on the farm is naturally white. It is our idea that it should be colored by the use of pure vegetable color to resemble as closely as possible June butter, says Kansas Farmer. Uniformity in butter, both as far as color, salting and flavor are concerned, is always desirable and adds to the market price. There is no harm or deception in the coloring of butter, and to do so is worth as much to the farmer who has a better market to take care of as it is to the creamery. The creamery would be sure to lose its customers if it furnished them with yellow butter in summer and white butter in winter.

### The Sow to Discard.

Pig flesh is more rapidly and cheaply made than any other form of pork, hence feed the sow liberally and stimulate deep milking qualities. Discard any sow that is a poor milker, for poorly nourished pigs will be poor pigs in spite of other good environments.—Farm Journal.

## ROAD RULES.

The roadmakers of our country could copy to advantage the methods used in England, which country is noted for its excellent highways. The English road man has a list of instructions which he follows in the care of the roadways. The principal rules, which will be found useful to the roadmakers of this country, are as follows:

Never allow a hollow, a rut or a puddle to remain on a road, but fill it up at once with chips from the stone heap.

Always use chips for patching and for all repairs during the summer months.

Never put fresh stones on the road if by crosspicking and a thorough use of the rake the surface can be made smooth and kept at the proper strength and section.

Remember that the rake is the most useful tool in your collection and that it should be kept close at hand the whole year round.

Do not spread a large patch of road, but coat the middle or horse track first, and when this has worn in coat each of the sides in turn.

In moderately dry weather and on hard road always pick up the old surface into ridges six inches apart and remove all projecting stones before applying a new coating.

Never shoot stones on the road and crack them where they lie or a smooth surface will be out of the question.

## MEN WITH GUMPTION AND THE LOG DRAG.

All That's Needed to Keep Roads in Good Condition.

Here are some of the things which have been said by various people about the work of the King split log drag on country roads: "The famous split log drags did the work." "The drag is the road maker of the future." "The good results of this process are almost beyond belief." "The split log drag is an evidence of progress." "The King split log drag is the best solution of the good roads problem yet devised." "The split log drag in Lycoming county is the king just now and no mistake." "King's split log drag is transforming Greenville's streets from mudholes to boulevards." "The dragged roads reminded me of the best English roads. They were quite as smooth and dust free."

The last quotation is from a letter from England and refers to the roads about Red Oak, Ia. This page might be filled with similar accounts of benefits from this cheap, homemade road drag. The above items of experience come from Massachusetts, Iowa, New York, Texas, Georgia, Illinois and Pennsylvania. A Nova Scotia paper says of it: "It not only makes the road good, but keeps it so. It gives a straight, smooth, hard, well rounded road that no other means appear to provide."

The strange thing is after more than ten years of proof as to these things that there is any road anywhere to which it can be applied that is not regularly dragged with the King road drag. The trouble is no doubt that the King drag is not patented. Nobody is interested in pushing its manufacture or sale. It costs little and cannot be made to cost any more without spoiling it. If it were so complex as to require a civil engineer to understand it and a bond issue to buy it every county in the nation would be going in debt for it. All it requires is a log, a few bolts, a team of horses and a man with gumption. The latter article is without doubt the thing of greatest wanting.—Farm and Fireside.

## THE CASE OF THE MERCHANT

Why They Need Better Roads—They Spell Prosperity.

To say that the merchants and all other classes of citizens in the towns and cities would be large beneficiaries of the national good roads system is merely to repeat a truism. It could not possibly be otherwise.

The population of the cities creates an ever increasing demand for everything that the farmer can produce as soon as the farmer can supply it. The increased production of every American farm flowing into the towns and cities and through the local channels of commerce, the commission houses and stores into the homes of the people, can only mean increasing prosperity for the merchant, the doctor, the lawyer, the manufacturer, the laborer and all other inhabitants of the city, whatever their calling.

The large increase in the circulation of money, which must necessarily result from the national roads system, spells prosperity for every class of people.—Will T. Withrow in Better Roads.

## WHAT WE'RE HERE FOR.

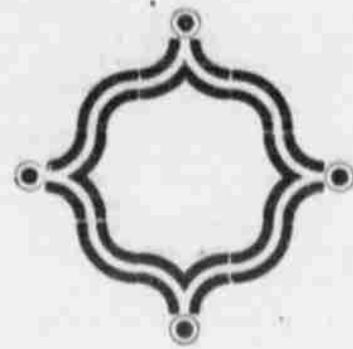
"We strive and struggle; we denounce, complain, cry out at evils; we advance new ideas. We clamor and fight for progress.

"And that is victory, for, after all, the process of evolution is an end in itself. We are here to develop our minds and souls along with our institutions, to carry the flag of civilization a little farther on.

"Don't expect to make a new world tomorrow. Don't think there is any such thing as finality. But—keep a-go!"—Columbus (O.) Citizen.

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