

# THE DISPOSAL OF THE PRODUCE OF THE FARM

There are so many leaks between the farmer's surplus products and the consumer, that the just profits are almost eliminated. Institutes design to educate the farmer into ways of producing larger crops and of better quality, yet no effort is made to instruct him in more economical methods of disposing of his surplus product.

Unless the farmers can co-operate through local elevators and creameries, to handle their surplus products direct to the consumer at the least possible cost, there seems no hope for the future of the farmer, as an independent home owner. I would turn all the institute efforts, from this on, to educate the farmer as to how to get his surplus products to the consumer at the least possible cost. I see no advantage to the individual farmer to raise more, and better crops, if he must continue to allow all the profits to leak into the hands of needless "stand between" as he sells his crops.

Let us be honest and remedy unjust conditions, so those who are here will be glad to stay. Encourage united effort on the part of the farmer so he can retain the just profit he is honestly entitled to.

There are several old sayings that mean about the same thing. "A stitch in time saves nine"; "Don't put off until to-morrow what you should do to-day"; "A bird in hand is worth two in the bush." They all mean that a present opportunity should not be neglected.

Maybe you believe in the advantages of early seeding of small grain. Have you the seed ready? Are all the implements you will use in the operation in readiness to begin as soon as the weather permits?

Maybe you resolved that this year you would let the season get ahead of you. It may be an early or a late spring—no one knows yet. If an early one you will be hustling in the fields and look back upon lots of little things you meant to do before spring work began. If a late spring then every moment will be doubly precious when work does begin.

Are the fences in good repair? If not you will have to stop and chase the stock back when in the midst of rushing field work. You can fix fences before seeding begins. You know it must be done.

Is the plough ready to stick into the soil? Is the disc sharp and in working condition? There are lots of men every spring who never take a tool or implement to the blacksmith shop until they are in a rush to use them. The smith says that he has lots of work ahead—and well, days are lost waiting for a repair job that could and should have been attended to during the winter or long before the thing was needed. Some folks pay no attention to their seed corn until planting time. There's the seeding, ploughing, and field preparation yet—just lots of time before corn planting—so they let it go. Yes, and they are folks who are sometimes rushing around among the neighbors to get some seed corn that will grow. They didn't find out in time that there was no good. Or they send way off and get the seedlings of some seed house—corn too that should not be planted in their latitude. Those folks are always complaining of their "hard luck".

Are the horses hardened for the spring work? How do you expect them to do a full day's work right out in the soft ground on the disc, seeder, or plough when they've been standing idle until spring work began? Look out for sore shoulders or strained muscles if put at it too suddenly.

And that harness—maybe that needs repairing before it can stand the strain. What a loss if you have to stop seeding and wait for your turn at the shop before your harness will hold.

Perhaps you know where some roof leaks. When the spring rains come you will be just "rushed to death" with other work and it must leak until after seeding—no, corn planting—no, haying—harvest—yes, wait until after harvest before you can get a moment's time to fix the roof. But there will be pleasant days before that when the job can be done and the wheels of progress not stopped at all.

Remember that "A stitch in time" saves—maybe nine hundred.

Again and again the question is asked: "What breed of sheep shall I grow?" No one can answer that question definitely. It all depends, and depends upon multitudinous conditions. The type of sheep that should be grown however, can be definitely pointed out. In this country it is one that combines both mutton and wool producing qualities. A sheep is demanded that is well protected and also one that can be converted into mutton. Mutton is a coming food among all classes and the demand for this meat is constantly increasing. One cannot afford to rely upon the wool producing qualities of a sheep alone, but must consider its meat producing qualities as well.

An animal is indicated that is suited to the productivity of the particular soil upon which one is living. The Southdown or the Cheviot may be just exactly the kind of sheep the man in certain parts needs and wants, while it would not do at all for a farmer in another district. There is absolutely no use of trying to raise a big sheep on sparse pasture land. The grazing powers of a sheep are limited; it can walk only about so far every day. The growth of grass on the distance the sheep can cover may be enough to comfortably keep a hundred pound ewe, but altogether too sparse for one weighing twice that amount. The natural productivity of the land will therefore enter into a determination of the size of sheep to grow.

In the Northwest is needed also a sheep that has a good, close, heavy fleece, one that can endure a certain amount of exposure and not forever be troubled with a snotty nose or cold; one also that will not require expensive shelter. Most farmers figure on the fleece's covering the cost of ewe maintenance. This it will not do, if it is light and thin. Desirable sheep also are disease resistant. Sheep that fall readily a prey to worms, parasites, or disease are not profitable to grow. They cannot thrive if constantly irritated and uncomfortable.

These are some of the features to be considered in selecting a breed of sheep. Thus for the Shropshire, Oxford, Delaines and Ramboulllets have probably been the most satisfactory in the Northwest. The Shropshires have sometimes been criticised for not being growthy enough; the Oxford for having too light, fluffy, and open fleeces; the Delaines for being too small and of only fair mutton conformation; the Ramboulllets for being too plain in appearance and too wrinkly.

All of these objections may in some instances hold good; yet wise selection of individuals from any one of these breeds, selection according to one's particular conditions and possibilities will result in satisfaction. Good types are to be found in any of the breeds; the thing for the farmer to do is to get his type clearly in mind, and go forth resolved to satisfy it, no matter in what one of the standard breeds he runs across it.

Half the pleasure of country life lies in the ownership of a good quiet, gentle horse, and every farmer should have one that his wife or daughter can drive. The boys may want the fast horses to "get up and go" when they are on the road. This is a mistake. Hold them steady for all-round farm work. It is not wise to think exclusively of speed; speed is not needed in much of the farm work.

When driving a horse, make it your business. More horses are spoiled by slack drivers than in any other way. Of all fools who drive horses, the ones who rush a horse down hill are the worst. It weakens the tendons and nerves, jars the shoulders, and springs the knees. A man who is in the habit of buying vicious horses when he can buy them cheap, and by proper handling makes good horses of them, says that no horse ever was born balky, but may be made so by the driver.

When you are working in the woods with a team, do not have them sharp-shod, unless it is slippery, as they are liable to inflict bad wounds upon themselves, or perhaps a hemlock for life. In hot weather use little harness as possible. Be sure to see that the collar and harness fit properly. Every horse should have a collar of his own, which should not be used on other horses, as the shoulders are not all of the same shape. Also see that the belly-bands are too tight, as this often causes sores on the top of the neck. Use long whiffletrees, so that the legs do not get bruised or chafed. Every precaution should be taken to have the horse as comfortable as possible while doing his work.

Always keep the stable well ventilated. In summer put screens in doors and windows to keep flies and mosquitoes out. Do not forget that fly-nets or muslin covers are a great comfort to horses when working in fly season. When a pair of horses become accustomed to working together, do not keep changing them around and breaking up the team, as it is hard on both the team and the driver. Never teach your horse to start faster than a walk as it may some time avoid an accident. Nor is it fair when a team is pulling heavily, and one gets behind the other, to make him pull up even, rather stop and give them an even start. Always see that the horses are well shod when travelling on slippery streets or icy roads.

Do not allow your blacksmith to fit your horses' feet to the shoes. See that the shoes are fitted to the feet. By the right kind of shoeing, many defects in a horse may be overcome, but it takes a blacksmith who understands the kind of work.

Horses do not do a farmer's work, or always can be sold to advantage and profit. If you have a horse that has long passed his prime, do not sell him to a hickster. You cannot afford to keep him in his old age, it is far more economical to put him to death by shooting or shooting than to condemn him to several years of beating and semi-starvation in the hands of an ignorant, brutal master.

## DAIRYING

### BEST MANNER OF HANDLING MILCH COWS

How the Calf Should be Brought to Maturity.

METHODS OF FEEDING.

BY LUCIEN A. SWEET.

If the cow is to be used in the dairy and make her owner much profit, she should be a dairy cow. How to rear the calf and handle the heifer, and cow is one of the things that many young men make a failure of. A calf that is raised for a dairy cow should either be raised on skim milk or a limited quantity of whole milk. Many calves have been fattened on a ration when young and taken on the tendency of laying on fat rather than lean consequently they develop into fat, beefy animals rather than well-shaped dairy cows. We usually let the young calf take the milk from the mother cow in the natural way two or three times a day for four days, then put her by herself and let her learn to drink, and when she is able to drink, in small messes two or three times a day about two to two and a half quarts of warm sweet skim milk a day.

Supplement this feed with a little whole milk and oil cake meal as the calf grows older, giving it all the nice clover hay he will eat, but feed this to him at least twice a day, feeding a small amount each feed. If the calf comes in the fall, which is the best time, she will be in good shape to put onto pasture in the spring. The grass of the summer will give the young heifer a good start and by fall she will be in prime condition to winter with but little grain feed. It is always desirable to handle heifers from the time they are calves until they are cows, so as to keep them tame and gentle. The more the cows and heifers are handled the better and more gentle cows they will make. Cows should come to the fall if possible and liberally supplied with nitrogenous feed procured and stored away for the winter's feed. Nothing is more detrimental to the continual milk flow than the change of feed several times during the winter's milking period and the dairyman is obliged to substitute a few bushels of corn for a good liberal feed of the right kind. This will give ways shrink the cow. Plenty of good bedding is also a necessity. If the farmer is slack and does not bed his cows as they should be, as to keep them on the hard plank floor or cold, hard cement, this, also, tends to reduce the flow of milk.

Regularly in milking is another thing that tends to reduce the milk flow; also if the same person can milk the same cows each time, they will do better than when milkers are changed often. Feeding should be regular as well as watering and if water can be warmed the cow will do better work than when obliged to drink ice cold water. Always put our cows in winter condition and do not turn to pasture until the grass has a good start and we turn onto the pasture with care, leading the cows to the pasture each day until they are used to the grass. Grass on land that has been fertilized. A supply of silage or green corn to cut and throw to the cows is desirable when the pastures begin to get short in the fall.

Our cows are salted twice each day in the winter and in the summer salt is provided so they can lick it at will. Care for the details pays better in the dairy business than to let things go as they may.

If the practice of turning cows out during the cold weather could be stopped the increase per day over the state would be at least 50 lbs. a year. Why will farmers turn out their cows in the cold and use up the major portion of their feed for bodily maintenance when it should go for the production of milk?

Make a pet of every cow on the farm. Feed them all liberally of the right kind of feed. Feed regularly and milk regularly. Keep your cows comfortable at all times and you will receive maximum results.

DAIRY NOTES.

It isn't mid-summer yet, so don't compel the cows to stand out in the chill air until late.

About the first place to begin cleaning up is around the cow barn. Most farmers let the manure pile up close to the barn door.

Some windy day this month when the cows are all out just sweep down all the cowbarn and dust. Let the wind blow out the open doors and windows.

## POULTRY

### PERPLEXITIES THAT COME IN REARING CHICKS

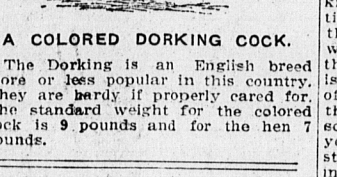
Why More of the Eggs Do Not Prove Productive.

AVOIDANCE OF INBREEDING.

BY F. M. WOOD.

Poultry raising, that part of it which pertains to the little peepers especially, has its troubles. Many of these perplexities and much loss might be avoided by using due foresight. Now is the time to look ahead, keep up the vitality of your breeders by natural food and conditions and clean, comfortable quarters.

The coop occupied by the old hen and early hatched babies must be located in a warm, sheltered place, to enable her to keep them warm enough. In the brooder we find it is better to have a little too much heat than not enough. If they have the chance they will get away from the heat. Then when the temperature falls at night they will work back to the warmth. As the



A COLORED DORKING COCK.

The Dorking is an English breed more or less popular in this country. They are hardy if properly cared for. The standard weight for the colored cock is 9 pounds and for the hen 7 pounds.

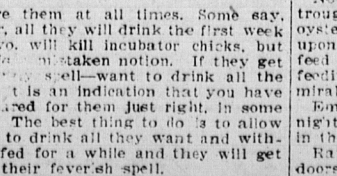
brooder chicks grow older the temperature can be gradually lowered, but the amount of food must be increased. First they must have fresh air. They can't thrive long in a brooder that is not kept clean and where the air is impure.

Many farmers who are feeding stimulants at this season to increase the egg yield will be wondering after a while why the ones that do not hatch and hatch late. It is a fact, as we have demonstrated from experience, that any condition that prevents eggs from hatching surely affects the vitality of those that are hatched.

Raising early chicks is a good deal like sitting up with a sick patient. You don't do to nap on duty. Whether brooded or artificial methods or the old method the same precautions must be taken. They need no feed for at least two days. Feed very little and only on the first ten days. Dry feed saving time and is better for the chicks. Enough room, plenty of warmth, and very little feed the first few days gives the chicks the best start. A good start, then the battle is half won.

Avoid inbreeding, get rid of the birds that show weakened vitality or the least taint of disease. Then hatching will recall the fact that you have highly fertilized eggs and strong, healthy chicks able to endure a few hardships. With weak, puny chicks there is no chance for success.

Keep grit and clean drinking water



BLACK MINORCA COCK.

The Minorca is a heavy layer, ranking second only to the Leghorn. Because of its heavier weight it is preferred by many to other non-setting breeds. The standard weight for the cock is 8 pounds and the hen 6 1/2 pounds.

## CATTLE

### FEEDING STEERS TO KEEP THEM ON THE GAIN

The Idea is to Make Them Grow, Not to Fatten.

POOR JUDGMENT; SMALL PROFITS

CHARLES WILLIAM BURKETT.

I have in mind now a neighbor who, with no little interest and with much skill, had purchased 24 young steers not a great while ago. In due course of time they went into winter quarters, fat, sleek and growing, weighing on an average about 800 pounds. They had been on good pasture and had made steady, regular growth and were in an exceedingly healthy condition.

The feed, however, was such that year on that farm. The owner of the steers was not in a frame of mind to purchase additional forage or concentrated feeds because prices were high. I noticed that these calves were dropping back in weight. Their daily rations were too small. The rough, coarse food did not supply the young steers the kind of nutrients their growing systems required. As a result the body weight was not maintained and the course the steers were following was not to his advantage. I questioned his cattle on the gain, even if he found forage and grain necessary to keep the grass would soon be on an average. They had gone into winter quarters weighing 800 pounds and out to pasture weighing but 700.

This is no isolated case. I know that thousands and tens of thousands of cattle fared no better that year. I know also that that year was no exception; a winter season never comes that this case is not repeated; and this winter my observation convinces me the trouble is greater than ever. Feed is scarce, feed is better, and the number of farm animals per farm greater than the forage production warrants. Go south, go west, look right around if you would verify this assertion. Let stock fall in weight and weeks of feeding will be required to reach again the previous weight. Not only delay in finishing results, but an unnecessary amount of food is required. It calls for double work, double feed, double risk.

This neighbor passed through an experience that was more costly than the first glance indicated. Let us see. A certain amount of food had been required to bring these steers up from 600 to 800 in the first place. During the winter they consumed food sufficient to support life and to meet ordinary functions of daily existence. They went down in weight in striking the 800-pound mark. In a sense, they were exactly where they were when they started before. All the keeping, feeding and trouble was for nothing. The second spring, at pasture found them just where they were the year before. Furthermore, pasture was now required to bring them up to 800, and that required time, so much so that it was late in the fall before these steers were ready for market and the year was over. There would have been the case had they been kept steadily on the gain during the previous winter, although some expense had been necessary to provide an abundance of roughage and concentrated grain food.

This experience taught this neighbor a valuable lesson. To me it was a clear-cut illustration of how poor judgment and stinting of feed may cause small profits. I never look at fattening stock that I do not wonder if the price might not have been increased had every detail of growth been brought out and weighed from start to finish, with an eye ever open to the purpose of keeping the animals steadily on the gain. The waste of beef producers, L. H. Kerck, used to say that he did not fatten cattle, but that he did grow beef. That is the correct notion of beef making. From the very moment the calf is born until it ends its career in the sale yard, it should be kept steadily on the gain.

CLEANLINESS IN THE POULTRY HOUSE.

Sweep down the cowbarn with a broom from the walls and roof for they will attract dust and soon look very unsightly.

Wash the water receptacles occasionally to kill disease germs.

Wash the windows so they will admit the sunshine, for the more sunshine the better for the chickens.

When litter becomes soiled remove it and put in a fresh supply.

## AGRICULTURE

### PLANTING ON DRY AREAS AND THE CROP ROTATION

What to Plough the Grain Land—Disking is Most Important.

EARLY SPRING TREATMENT.

BY C. K. McCLELLAND.

The growing of wheat is the important part of the business of the average western farmer. With many of them, although the fact is to be deplored, it is their only business. To those who are practicing diversification, to those who want to keep up the fertility of their soils by rotations, comes the question of best rotations and how best to fit the land for the next crop. In humid sections wheat can be followed by cowpeas, which can be turned under in fall and land planted in corn in spring. A rotation might then be made up as follows: One year, or more, of wheat followed by cowpeas the same season; these peas to be ploughed under. The second year, corn. The third year, oats, barley or emmer. The fourth year, wheat.

Many farmers, however, would drill wheat in the corn and not attempt the small grains. In the semi-arid region this rotation would in most years be all right, except that it would be impracticable to work in the cowpeas after harvest. Another year would be necessary to include the leguminous crop. Usually, we find it necessary to save the moisture which the cowpeas crop would take up, over until the following year for the corn crop. Our heaviest rainfall is during the summer months, and it follows that this moisture which falls during and after harvest should be conserved for the following crop. Anything that keeps down weeds and prevents evaporation will benefit the subsequent corn crop the same as it would the



A NICE CARRIAGE HORSE.

Experiments have been carried on in Colorado for the development of the carriage horse and an excellent start has been made. The illustration shows one of the mares which has been raised.

what, in the event wheat were to follow.

The practice of listing in summer and then re-listing, that is, double listing in the spring, is a commendable one. It divides the work of ploughing and leaves half to be done the following spring, when men and teams are not so busy. It also conserves that amount of team work on hand, and the high rate of wages prevalent here at and after harvest, is quite an item to postpone, or possibly to avoid altogether.

The listing aids the penetration, retards evaporation and checks weed growth, as does the ploughing; but probably the greatest advantage over the other methods in a very busy season.

If one were expecting to plant oats or barley after wheat, the summer treatment above discussed would be found equally valuable for these crops, although the after treatment would be different.

## SWINE

### TAKING CARE OF THE LITTLE SPRING PIGS

Comfortable Quarters Should be Provided for the Sow.

SOME HINTS FOR MARCH.

The time is approaching when it will be necessary to look after not only the brood sows that are expected to farrow early, but the little pigs that come along when the weather is cold and disagreeable. A little forethought and preparation may mean the saving of a large number of pigs that will represent a considerable value.

Some two weeks before the pigs are expected to arrive, it is well to fix the pen in which the sow is to be when farrowing time comes. It is a good plan to have them accustomed to the place, and get quieted down, as if they were at home. The place should be dry and warm. No wet and dirty straw should be allowed to accumulate in the nest, but should all be sorted out and carried away before the important day arrives.

If the pen is roomy and high between joints it will pay to make a false covering over the nest just high enough to allow the sow to stand under it without touching it with her back. The cold air coming down from above will chill the pigs if the first night is cold. If the enclosure is not excessively large, the breath of the sow will warm it and all will go as well as in June, if the enclosure is large, stand something around her to make it small, so that it can be warm.

Sometimes pigs begin to arrive before we expect them and are ready to leave before we have a device some means to save them. Take a barrel and put into it a little finely cut straw or clover hay, just enough to

cover the bottom an inch or two. Then take a jug and fill it with very warm water, and set in the barrel after you have put it in a handy place near or in the farrowing pen. As fast as the pigs arrive put them in the middle of the bottom, and cover the top of the barrel, if necessary, to keep the water warm. Allow the pigs to remain until they are dry, when they can be put with the mother to get their milk. By taking pains to make them warm and comfortable all will go on well.

Sometimes when pigs are farrowed in a cold place one will crawl away from the mother and the next day will become chilled. They do not show much, if any, signs of life, do not give them up. Put some water in a pail just as hot as one can bear the handle in it, and hold the little pig in it, keeping the nose and ears out. Hold him there until he warms up and revives, after which rub him dry and keep in a warm place until he is strong enough to go back to the mother.

It is always best to give the sow some laxative food a little while before she farrows to prevent the fevered condition that causes her to eat the pigs. Some wheat bran, or a little linseed meal, in the feed will be a good remedy to use as a preventive. Give a little salt in the feed regularly if she has been neglected and is constipated and dives at the pigs, take them away at once and throw her a chunk of old salt pork to appease her, for the time being, and give ten to fifteen-drop doses of tincture of acetone in laxative, sloppy food, every four hours, until she becomes quiet, when the pigs can be returned with safety.

rain which destroyed the effect of the disking, and two days later the entire field was sending great clouds of dust into the air. I am confident that another disking would have prevented this blowing, as it did in the first case. Winter treatment then becomes doubly important, or prevent the injury, which would escape rapidly in periods of high winds.

Upon the above field, which grew in the above way, out early and shocked to save the roughage. The crop over all or a part of a field may be destroyed. The disk has been found to be the best implement to use for checking the blowing of soil. The condition of the soil as left by the treatment with disks seems in some way to prevent, or at least hinder, the blowing. In a moisture conserving experiment I had occasion to disk in February half of a field which had been ploughed the previous July. In August, for six weeks following, the blowing was checked. This field is upland, where the effect of blowing and im-