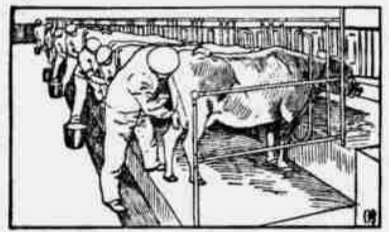




In a recent dairy article the author gave his method of caring for his herd of dairy cows, presumably the fancy herd of a wealthy owner, who was breeding stock for a pastime and who had plenty of money to hire all the help necessary to care for his stock in the way mentioned. His method would keep a mare several men, if the herd was a large one, in the stable from half past 4 in the morning till 6 or later at night. It called for grooming and cleaning three times a day, watering twice and feeding hay and grain six times.

While the farmer cannot perhaps give his cows the attention received by the herd above mentioned, he can have a system of caring for his stock and be regular in carrying it out, and this is the main thing, says a writer in the American Cultivator. Have a time for doing each part of the work in the barn, and do it in its time. If it is necessary to be away at any time during the day and not get back on the exact time by the watch that a certain thing should be done, do it in its regular order as regards other parts of the work.

If it is the custom to feed before milking, do it every time, and do not think that it is just as well sometimes to milk first and then feed. I think this the better way, as the cows stand still to be milked if not eating and reaching for their food, although some



WASHING THE COWS' UDDERS.

cows will not stand to be milked unless they are eating. This is merely force of habit and proves my idea as to regularity. Regularity is the first and most essential thing in caring for stock. As to grooming, it pays to do a certain amount of it.

Dairy cows should be groomed each day. The amount of grooming may depend somewhat on the amount of time the farmer can spare from his other work, but no farmer can afford to wholly neglect it, no matter what his other work. What is worth doing at all is worth doing well, and it is not caring for stock well to neglect to give them at least a slight brushing.

No great amount of time need be spent on them. A man who has never done it will be surprised to see how quickly he can go over a lot of cows with card and brush if done each day or what an improvement it will be to the stock both in looks and condition. Two minutes each to a lot of cows will prove beneficial if the caretaker can give them no more. Be regular about feeding, watering, grooming and milking, and your stock will look well even if you have other work to demand a good part of your time.

But if one has the stock to require one man most of the time to care for them it is better to have one man do the work rather than have two or three do the work up quickly and then all go at something else. A regular man in the barn, with perhaps some help about the milking, is better than two or three part of the time and then no one in the barn through the day.

The illustration, from Kimball's Dairy Farmer, shows the employees of a large New York dairy farm washing the cows' udders just before milking. This and the scientific aeration and bottling of milk with sterilized utensils amid sterilized surroundings are only parts of the entire process. Healthy, tuberculin tested cows, sunny, healthful, dustless, well ventilated, clean, whitewashed stables, absolute cleanliness of milkers' clothes and hands, covered milk pails, proper feed for the cows and pure water are all equally important items. In most of these fine dairies straw is considered as being too dusty for use as bedding; planer shavings are used instead.

Keeping Dairy Cows Clean.
I have a small herd of light colored Jerseys, and they are always clean and free from a thick coat of manure on their thighs, says a writer in Orange Judd Farmer. We brush them down before milking. But the secret of keeping a cow clean is in the stall. No cow should be tied in a stable without a platform, as it would be impossible to keep her clean even if she were clipped. Any farmer can make a platform in his stable out of clay or cement. I like a clay platform with a cement gutter. The platform must not be too long or too short; it must be just right for the length of the cow. Keep the platform well littered with straw. Clean the gutters twice a day, and cows can be kept nice and clean without clipping them.

Give the Calves Sunshine.
Too rich milk should not be fed, and if found not agreeing with the calf in its earliest days reduce the new milk with warm water and do not feed too much at one time. Keep the calves in a bright sunny room, giving them plenty of clean shavings or cut bedding every day, and do not let their bedding get damp. Use air slacked lime occasionally to sweeten the stable floor and use land plaster every day. We allow our calves their freedom in large sunny box stalls where they can caper about to their hearts' content.—H. O. Daniels in New England Home-Steak.

PROFITABLE COWS.

Some Valuable Points on Building Up a Dairy Herd.

The dual purpose cow does not exist. All progressive farming of later days makes the dividing line all the more distinct between the beef and dairy breeds. The farmer has not yet been found who can produce a herd of cattle that shall lead in both dairy and beef products at the same time. I assume that we are aiming to have the best dairy herds and make as much money as we can.

First let me insist that every dairyman shall select the dairy breed that suits him best, taking into consideration, among other things, climate, food he is prepared to furnish, kind of barn he has, market for his milk and his personal taste. Decide and act promptly in the matter.

Get a Good Sire.

Next purchase a pair or trio, and with them lay the foundation of a pure bred herd. If expense makes this impracticable, purchase a registered sire and get a calf from a cow with good record of production. Get the best possible sire of the breed chosen, as he is half the herd.

The next step in grading up a herd is to be sure not to inbreed. When you have heifers old enough to breed, purchase for them another sire.

When the third, fourth or fifth grade has been reached, you will have a profitable herd, which, while it cannot be registered, will show splendid results.

Another step—do not breed any heifer until she is nearly or quite two years old. Breeding heifers too young is the leading cause of every ill bovine flesh is heir to, and the balance may be charged to inbreeding.

Food and Care.

Food and care bestowed upon a herd form an important part in this upbuilding of the herd. Cruelty and profanity may largely counteract the effect of a proper amount of protein, an unbalanced temper spoil the result of a balanced ration, and comfortable quarters are needed as much as proper food.

Poor and unprofitable cows should be picked out and disposed of, the safest process being to weigh the milk and test for butter fat. One thing more—we must look well to the health of the herd. We can buy healthy cattle and largely keep them so if we will supply pure air and sunshine as well as food and water.

Success in building up a dairy herd will depend largely upon the love and interest you put into the work, combined with talent, skill and energy.—Rev. E. F. Pember Before Maine Dairy-men's Association.

DAIRY WISDOM.

Remember there will be no advancement, no upgrading, unless you have secured the best bred, most prepotent animal at the head of your herd that is obtainable. Improvement only comes through the superior qualities of the males used.

Have a wrench, a screwdriver and a small hammer just for use around the separator and other buttermaking machinery and never use them for any other purpose.

Just because it's colder and you may not be able to smell the odors from the cream separator so plainly, don't imagine that it doesn't need just as careful cleaning.

Because the cow falls off in milk it does not always follow that she is sick. There may be something wrong with her feed. Look into that. Often it is the man and not the cow at all.

Do not under any circumstances feed hay or fodder while milking.

The filthy cow stable makes itself known in the flavor of the milk.

Manage your cows so you can know where a shrinkage takes place.

It is not always necessary to buy expensive stock to improve your dairy.

Exposure to storms and cold causes a shrinkage that cannot be fully restored.

Expensive barns and stables are not necessary for the production of sanitary milk. Common sense, cleanliness and quick cooling are the three main points.

Some people salt the cows as they make good resolutions—only occasionally. Do it regularly and do it well.—Kimball's Dairy Farmer.

In some cases where cows have been milking for a long time there is some difficulty in churning. The addition of one or two fresh cows in the milking herd will often overcome the difficulty.—Farm Journal.

The best way to bring cream to the proper temperature is by putting the cream can into a pail or tank of very warm water. Stir gently until the cream is of the proper temperature. Never churn in a cold room. The butter will be cheesy if you do. The churning room should be about the temperature of the cream.

Salt thoroughly rubbed around on the inside of the churn after it has been rinsed with hot water is a first rate thing to make it clean and sweet. Rinse the salt out with water.

Dry cows should be fed so as not to take on much flesh. Keep them in model condition, and they will yield better.

It is only by testing cows that the dairyman can tell whether they are yielding a profit or making a loss. It is the only way by which he can with absolute certainty weed the nonpaying animals from his herd.

The faculty of appropriation is developed and fixed in the individual cow by usage and habit. No cow is good enough to yield her owner a large profit under poor care and ill treatment.

Many a cow that is good at chewing grass and licking up cornmeal and bran is poor on the udder business.

CARE OF THE LAMBS.

How to Raise One by Hand—Treatment For Various Ills.

In case you are compelled to raise a lamb by hand a few suggestions may prove helpful. If possible, try to get ewe's milk for the first four or five days until the little stomach begins to do its work. Some strong milking ewe in the flock may spare a little milk for a few days. It is better to let the lamb live on short rations than start it off on cow's milk. When you start cow's milk, either choose a cow that gives thin milk or dilute the milk about one-half with water and add about a teaspoonful of milk sugar to a pint of milk. Now, be careful not to overfeed the lamb during the first two weeks. I am sure this causes more loss than anything else. Give the lamb about half a cupful every hour and keep this up as far as possible through the night for the first week.

During the second week increase the feed and give it every three hours. In three weeks you may feed it three times a day. Just as soon as possible teach the lamb to eat bran and meal and feed it on these once a day until one month old and then let it have what it will eat. If you have several lambs to feed, it will pay you to teach them to drink from a pan, as nipples are a nuisance. Keep your bottles and pans clean and never give the milk when cold. It is a very difficult thing to raise lambs by hand and keep them growing, but some persons seem to be skilled in this. I have often noticed that just one person in the family can raise lambs by hand. I have noted with interest that it is generally the one that does not mind taking some pains with the lambs. Many a dollar can be saved by saving all the orphan lambs.

In the sheep shed you should provide a creep for the lambs and always keep some fresh clover hay in the racks within the creeps and let them have bran and meal just as they want it. Use a little salt to make it palatable. It is wonderful to see how soon they begin to eat and how much. You want to work every pound on these lambs that you can, for a pound of lamb will bring you about twice as much as the grain it will require to produce it. You can turn your grain into money faster this way than any way I know.

When the Lamb is Ill.

Lambs are subject to many troubles, but there are two which will be met with so often among thriving, growing lambs that I must stop to mention them and tell how to act, for many a fine lamb is lost by not knowing just what to do.

The first is colic. When you find a lamb much inflated and showing great uneasiness, getting up and lying down frequently, you may be sure it has colic. The best treatment is to give an enema of soapuds and administer a dose of ginger, one dram, either one dram and warm water four ounces.

The second is impaction of the fourth stomach. This is due to the curdling of the milk in this fourth stomach on account of overfeeding and is often visited upon the best lamb in the flock. Quick breathing and intense suffering, accompanied with great languor, are symptoms. You must act with dispatch.

Administer a good dose of soda bicarbonate to dissolve this mass of milk and follow this with a heavy dose of linseed oil.—Professor Arbuckle in American Sheep Breeder.

A Good Start Necessary.

I know one man who this winter lost half his breeding ewes and every lamb—didn't raise a single one—just because he failed to properly feed and care for them, says a well known Ohio breeder. They were allowed to get very poor at the beginning of winter, and it was a losing fight all winter long. A good start is of the greatest value in wintering sheep. "Well summered is half wintered" is truer of no other stock.

THE SWINEHERD

Clean pork depends on more than the packing.

Plenty of pasture is good for the sow, says Kimball's Dairy Farmer, but that does not mean that she must rustle for a living.

The pigs that have been well fed from the start are fattening easier than those that were stunted.

Feed the little fellows in a separate low rough fenced so they can get to it, but so the mother cannot.

Whatever variety or type of hog is selected, the early and rapid feeding method is by far the most economical and profitable.

Fresh clean water should be given to the hogs every day to drink; also a good allowance of roots should be given them daily.

Every five days give the brood sows exercise in the open air. Scatter a little shelled corn on the ground to encourage them to move around.

Look out for drafts of icy wind under the floors.

Do not attempt to keep a number of brood sows in the same pen. As they grow heavy, separate them. Crowding may cause abortion.

If you are troubled with lice on the hogs, use kerosene emulsion. Spray the hogs and spray the pen.

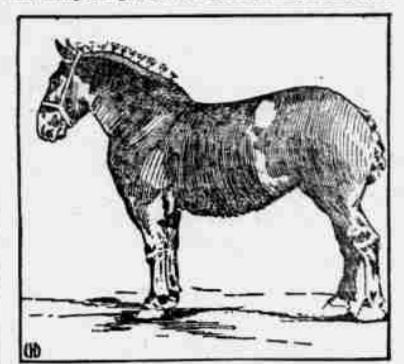
In order to make a success of hog raising every animal must be attentively watched and every small detail of the business carefully attended to.—Farm Journal.

Mr. W. B. Kerlin of Whiteland, Ind., says that the chief reason why sows will not allow pigs to suck is that many have sharp teeth and hurt when sucking and so are driven away. He says the remedy for this is a simple one, and that is to break off the sharp teeth of the pigs and the trouble ends.

RAISING THE DRAFT HORSE

Draft horses are raised for the purpose of drawing heavy loads. To produce the ideal draft horse we seek to combine as much bone, muscle, weight and action as possible with a smooth, well proportioned conformation. To secure this in its perfection there must be no check in the colt's early growth and development. Whether drafter or trotter, the first year's development is all important, and the draft colt should be pushed till it is two years old to attain its best development.

To begin with, we must have the right inheritance of the qualities we hope to produce. The colt must be bred right. But the richest inheritance of prize winning blood may be neglected or improper feed and care produce an ill shapen plug, fit for no special purpose whatever. To attain the development to which the colt's inheritance entitles it, it must be kept growing from the start.



A PERCHERON CHAMPION.

[Iolanthe, champion Percheron mare at International live stock exposition, 1906.]

The draft colt should not be weaned until he is about seven months old, and by that time he should be eating so well that he will not be noticeably affected by the loss of his dam's milk.

Method Used After Weaning.
It is after the colt is weaned that many breeders fall in their management. The mare's milk will usually keep the colt growing fairly well on good pasture, and it is usually the second period—after the colt is weaned—that its development is checked by the breeder's negligence. This is the critical time. During this time it should have everything that is good for a colt to eat. Don't try to economize now. Feed it all the oats, bran and shelled corn it will consume. If you haven't oats, make the bran portion liberal. Feed plenty of bright tame hay, good green alfalfa preferred, but cut out the prairie hay for your colts. It is a worthless ration for a growing colt and should be avoided if possible. Prairie grass during the latter end of the grazing season and prairie hay during the winter are very productive of worms in colts. During this period of the colt's life it is peculiarly liable to these pests. Before I had tame hay pastures for late grazing and tame hay for winter I lost a few colts from this cause before I understood it. I soon learned that a teaspoon full of turpentine per colt scattered over their feed for a few days was a wise precaution. It rid them of intestinal worms almost immediately. I have never found any hay for a growing colt that was equal to alfalfa.

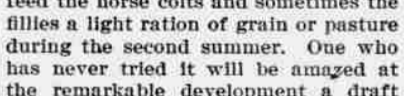
The Second Year.

With careful feed and attention the first winter the smaller breeds of horses, like the trotters, will usually attain to a proper degree of development without a great deal of extra attention thereafter. But I have found that it pays well to push the development of my draft colts during the second year. It has been my practice to feed the horse colts and sometimes the fillies a light ration of grain or pasture during the second summer. One who has never tried it will be amazed at the remarkable development a draft colt will show in one summer with a very small grain ration on good pasture. I suppose oats would be recommended for this purpose by the authorities on feeding, but I have had very satisfactory results with corn alone.

The colt or yearling may become unthrifty with the best of feed and care unless it is kept free from lice. A tablespoonful per colt of sulphur mixed with its feed and fed alternately once every other day will quickly rid the colt of lice.—J. W. Robison, Eldorado, Kan., Before Kansas Draft Horse Breeders' Association.

Restraining a Horse.

An old horseman gave me his way of restraining a fractious horse which answers the purpose in good shape, says a writer in American Cultivator. It is a strap from the foreleg a little above the knee to the halter and fastened with buckles at each end. The strap is two feet long or about right to hold the head nearly level. The contrivance makes unruly action very difficult and unpleasant for the horse, and he finally learns to behave without its aid.



Before Farrowing Time.

At least two weeks before farrowing time our sows are given individual pens in order that they may become acquainted with their new homes and thus be quieter and more peaceable when the time to farrow arrives, says a Michigan breeder. We always endeavor to keep our sows as quiet and tractable as possible. Then they will be less liable to become excited and trample and injure pigs.

Embuda Geese.
Embuden geese are of German origin. The city of Embuden was in an early day the central place for marketing the geese of the country; hence the name of this breed. Standard weights: Gander, twenty pounds; young gander, eighteen pounds; adult goose, sixteen pounds; young goose, sixteen pounds. Plumage color, pure white.

MAINE POULTRY HOUSE.

A Structure Which is Deservedly Popular Among the Farmers.

In determining the type of fowl house which is apt to best serve its purpose it is always well to bear in mind that, without reference to the climate in which the structure is to be used, it is desirable that it be insulated, thereby enabling the owner to control the ventilation. For that reason the Maine type of henhouse is apt to be pretty close to the right thing. The building shown in the illustration is popular throughout the coldest portions of New England and would be equally valuable in any portion of North America.

It is true that the shingling of the sides entails an expense to which many poultrymen do not feel at first warranted in going, but in the end the plan is a great money saver, as these houses, if the shingles are properly treated before being applied, are practically indestructible. The side of the



AN ECONOMICAL HENHOUSE.

house containing the windows of course faces the south. There is a ventilator in the very peak of the building. This comes down to near the second floor, in the middle of which there is an opening to the first floor. Thus there is always abundance of ventilation without the possibility of drafts. The second floor makes an admirable place in which to store litter, or it may be used as a pigeon loft. The floor of the house proper is of concrete if the building rests on the ground, but if it is elevated, which is the better plan, it is of double boards, with tarred felt between them, thus making it absolutely rat proof. The uses to which such a structure may be put and the variations upon the general plan herewith illustrated are almost without number.

Poultry Short Cuts.

"Farmer" Vincent in Farm Journal (Philadelphia) wisely says:

When the combs of the fowls begin to droop and look pale and limp, better sort them out and get hens with nice, bright combs.

It is the singing hen that does a good day's work. Same way with men folks.

The beef trust is leading us to trust more and more in hens.

Change the diet of the hens often. None of us likes to live all the time on pudding and milk, good as they are.

About the surest way to fail is to crowd too many hens into one pen. It never paid. It never will.

Kind of hard work to wash eggs, but they look so much better when you offer them for sale!

Keep the doors closed at night. This is the time of the year when enemies of the biddies prowl around.

Use some animal food every day, but have it good.

Have the feed boxes high enough from the floor so that you can sweep under them. Sure to be a lot of litter there.

Hens do not like to pick their shells out of a box half full of straw and cobs. Keep the shells clean by putting the box up where the litter will not get into it.

Expect to learn something about the chickens every day.

The Old Time "Pip."

Pip is just one symptom in disease. It is just a dry tongue. Never try to remove the dry covering of the tongue. Better hunt the real trouble and cure that. A "pip" tongue is seen in bronchitis, pneumonia—in fact, in all diseases of the air passages, says a writer in American Poultry Advocate. One thing I am sure of—that is, that boiled potato skins never produce trouble. I see no reason to think that there is drying quality enough in these skins when fed raw to give the looks of pip.

Scurvy in Poultry.

Scurvy is something like eczema, sorehead or other like ailments. Some call it white comb in poultry. It comes from an ailment of the blood. It is very difficult to cure. A thorough treatment with epsom salts, iron and quinine tonics for a number of months might remove the ailments. It does not injure them otherwise, unless the sore places become lacerated and canker. When this comes, they should not be used for food.

A Good Dry Mash.

The following ration is a very satisfactory dry mash: Twenty pounds wheat bran and ten pounds each corn meal, middlings, gluten meal, linseed meal and beef scrap, the whole thoroughly mixed. Keep this before the birds all the time in a food hopper. Also give one or two feeds a day of corn, wheat and oats, equal parts, fed in deep litter. Give vegetable food and green stuff freely.

Duroc-Jerseys Are Popular.
Duroc-Jerseys are not as large as Berkshires or Poland-Chinas, but have a vigorous constitution, mature early, are very active and consequently are good grazing hogs. The meat is more lean than some of the other breeds, and the proportionate amount of bone and offal is somewhat smaller. Durocs have come to be exceedingly popular in the corn belt and are used with a great deal of satisfaction in crossing upon the finer boned Poland-Chinas and also upon Berkshires.

Handling Beef Cattle Successfully

One of the most successful live stock feeders for market purposes in Allen county, O., is R. E. Morris, says American Agriculturist. Last fall he secured from Chicago and Kansas City forty-one head of carefully selected cattle. Ten head were added to the herd which were picked up in the country in his own section. He paid on an average \$33.32 per head. In selecting cattle for fattening he says that he prefers steers that are well rounded and have good general conformity to the beef type. He selects with a view to having the cattle weigh 1,000 pounds on Oct. 1. If properly selected, he says that he gets best results with Herefords, Shorthorns and Galloways. He does not have any special preference if the stock cattle come up to his ideal.

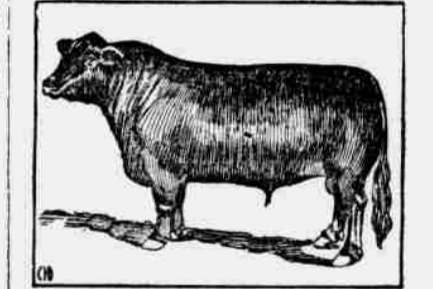
The cattle are put in the stable late in the fall, when the weather becomes unsettled. He believes in giving the steers plenty of hay after they are taken from grass. He says it pays him to feed plenty of roughage until after the holidays. He then begins giving them a little corn, feeding them very lightly at first. He gets them in full feed about Feb. 10. By feeding them about 100 days it takes about fifty or sixty bushels of corn per head to fatten for market. At Elmwood farm he has a barn 40 by 60 feet in which to feed. There is a lot on the north and east sides of the barn in which the cattle are allowed to run except during very stormy days. He has racks on both sides of the barn in which to feed.

From the time he purchases his cattle until they are put on the market he figures on about 200 days. The average weight of the cattle secured in the fall of 1905 was 800 pounds at the time they were purchased, Oct. 1. The average weight when sold at Pittsburg in May was 1,162 pounds. They were sold at \$5.30 per 100. As he lets the cattle run loose in the barnyard, he prefers to have them dehorned. He does none of the dehorning himself, but selects cattle to meet this condition. From the fifty-one head of cattle sold last spring he estimates that he secured about 300 loads of manure, which he valued at \$1 per load. It was put on meadow land after harvest with a manure spreader, which, he says, is one of the best all round implements that the farmer can have. The fodder is fed from the shock.

In addition to the fifty-one head of cattle, Mr. Morris wintered 100 head of hogs. In estimating the number of animals he wants to follow the cattle he says he prefers to have about two head of swine for each steer. The swine are allowed to run with the cattle all winter. Poland-Chinas have been found very satisfactory on this place. The swine are bought about the time the cattle are brought in. Mr. Morris likes to have them weigh about 150 pounds each. He usually pays the market price, which varies slightly from time to time. The swine get no special feed other than what they pick up following the cattle.

Red Polled Cattle.

The first notable importation of Red Polls to the United States in their modern form was made in the year 1873 by Gilbert F. Taber, and this herd was maintained for some years in Putnam county, N. Y., says Denver Field and Farm. A number of importations have



RED POLLED BULL.

since been made, and the state of Ohio has been the center of active interest in making these cattle known in this country. The animals of this breed are about the same size as Devons, and, being of the same color and of the beef form, the resemblance is still greater. The absence of horns and the change thus caused in the shape of the head, which assumes a comparatively high and sharp poll, with a tuft of hair upon it, are the only noticeable distinctions. The illustration, owned by W. S. Hill of Alexandria, S. D., and is a very good representation of the breed.

Give the Hogs Clean Water.

What the hogs need is clean water, says a writer in Farmers Advocate. If there is a stream on your farm, give them access to it. If there is no stream, construct some sort of bathing pool for the hogs. A Texas farmer recently went so far as to construct a great basin with a granitoid bottom to serve as a bathtub for his hogs and declares that since then he has not had a sick hog on the place. Give your hogs clean water and keep their pens as clean as possible, and they will thrive better and be much more healthy than under the old plan.

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