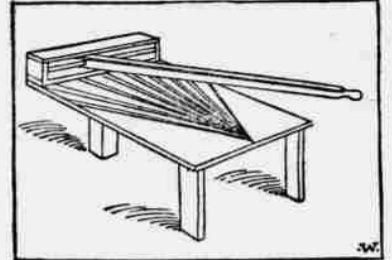




In constructing a butter worker like the one shown in the illustration maple, ash or chestnut are the best woods to use. The butter worker stands on a table or low bench or if made in larger size upon the floor, says the Montreal Herald. The lever works upon a rod and can be moved sidewise. The table slopes forward and has several



A BUTTER WORKER.

grooves to carry the liquid down to a pail or a dish placed to receive it. The lever at the underside has a round or sharp edge.

Three Things Necessary.
A writer for the Cream Bulletin gives these three points as the things necessary to produce good separator cream: The first requirement is perfect cleanliness. Every article that is used about the milk must be washed with good soap and some washing powder every time it is used. The sooner it is cleaned the better. After being washed it should be thoroughly scalded with boiling water and then thoroughly dried. I find borax excellent for cleaning my separator.

The second requirement is to keep the cream cool. The best place is near an open window at the northwest corner of the house. This provides a free circulation of air. The vessel in which the cream is kept should not be shut tight with a metal cover. It is better to keep a thin damp cloth over it, as this allows ventilation.

The third requirement is to keep the cream well stirred. Fresh cream should never be added without mixing it thoroughly with that which is already in the can.

By following these instructions it will not be difficult to deliver good cream in good condition.

The Man Behind the Cow.
If "the man behind the cow" would do his part, no unprofitable cow would masquerade under the fictitious appellation of "milk cow," says F. D. Coburn of Kansas. She would either be sent to the butcher's block or be made to return a profit by more intelligent care and management. It passeth understanding why theft in a cow should be tolerated more than theft by a human being. In effect the loss to the consumer is in either case the same. Our government has found it wisdom to study and establish far reaching methods for the detection and suppression of crime by the human family, and by the same token why should our farmers and dairymen be less vigilant in regard to this possible proclivity in their cows—beasts described as dumb, yet outwitting their owners?
So long as cows of this class are permitted in the dairy herd just so long will there be dissatisfaction and failure. Improvement is the route to success, whether by breeding or better management, and intelligence in our cow owners is the power that will force development in the right direction.

A Good Calf Rearing Mixture.
The following is one of the most successful of homemade calf rearing mixtures when used along with a little linseed cake: Two parts, by weight, of oatmeal; two parts of cornmeal, one part of pure ground flaxseed. These meals should be finely ground. It is prepared for use by boiling with water or by scalding with boiling water and allowing it to stand for twelve hours. The calf rearer is recommended to begin with a quarter of a pound per head daily for calves a month old, new milk being fed the first month. The allowance may then be increased to half a pound and more per day as the calves become older, and the meal may be supplemented profitably by half a pound to one pound of pure linseed cake per head daily.—W. R. Gilbert.

Keeping the Calf Healthy.
Keep the calf a little hungry and eager for more rather than fill it to dullness. The endeavor should be to prevent the beginning of indigestion, which leads to scouring. Nothing causes indigestion sooner than over-feeding or irregularity in the quantity, time and temperature of the milk, especially while the calf is young, and absolute cleanliness about the feeding vessels is essential, with frequent scalding. If it can with certainty be kept equally clean, some feeding device which compels the calf to suck its milk instead of swallowing rapidly is preferable to the open pail.

Keeping the Cow Clean.
A Pennsylvania dairyman says: The secret of keeping a cow clean is in the stall. Cows should not be tied in a stable without a platform, as it would be impossible to keep them clean even if they 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.

THE DAIRY CALF.

Feed and Care Necessary For Growth and Development.

One of the very best feeds to give the skim milk calf is oats chop, says the Farmers Advocate. Throw a little dry chop in a box and allow the calf to eat of it whenever it desires. Gradually increase the amount as the calf grows older.

The calf should never be confined in a stall during the day if the weather is warm and dry. Exercise is the principal thing in the development of constitution.

If the reader is feeding a heifer calf with the intention of making a dairy cow of it when it has matured, there should not be much fat forming foods given. Cornmeal, ground barley and even chopped rye should be fed sparingly. The little animal needs feed rich in protein, such as oats chop and bran, with only enough fat forming feeds to balance the ration and furnish a variety.

Treat the calf kindly from the first. The gentle pet never makes a kicking cow. Let the children pet it until it is "as gentle as a lamb."

Do not feed the calf too much coarse feed, as it has the tendency to distend the paunch and make an ill shaped animal. On the other hand, do not make the ration entirely of concentrates.

Careless methods of feeding are responsible for most cases of disease in young calves. Cold milk, as well as milk that has been overheated, is injurious because it upsets digestion. Overfeeding is almost as bad in its results as feeding too little until the calf is old enough to eat hay.

The Way to Doctor Cows.

Perhaps the best way of demonstrating the danger of drenching of cattle is to advise the reader to throw back his head as far as possible and attempt to swallow. This you will find to be a difficult task, and you will find it more difficult and almost impossible to swallow with the mouth open. For this reason drenching cattle is dangerous. However, if a cow's head be raised as high as possible and her mouth kept open by the drenching bottle or horn a portion of the liquid is very apt to pass down the windpipe into the lungs, sometimes causing instant death by smothering and at other times causing death to follow in a few days from congestion or inflammation of the lungs. Give all cattle their medicine hypodermically or in feed. If they refuse feed, give it dry on the tongue. The proper method of giving a cow medicine is to stand on the right hand side, placing the left arm around the nose, at the same time opening the mouth, and with a spoon place the medicine, which should be of a powdered form, back on the tongue. She can then swallow with safety.—Dr. David Roberts, Cattle Specialist.

Home Churning.

A barrel or box churn is the best for the home dairy. When the cream is ripe, scald the churn and cool to the temperature of the cream, which should be from 56 degrees to 64 degrees, according to conditions. If color is used, it should be put in the cream when it is put in the churn. Turn the churn so as to get the greatest concussion possible. The butter should come in from thirty to fifty minutes. After the butter comes draw the buttermilk, using a strainer to catch the particles of butter that may escape with the buttermilk; then wash with cold water, using about the same quantity as there was of cream.

DAIRY TALK OF TODAY.

At the national dairy show to be held in Chicago Oct. 10-19 there will be \$10,000 awards in cash prizes, medals, cups and diplomas to exhibitors of cattle and dairy products. An interesting feature will be judging contests for dairy school students. Special awards will be given to the exhibitors of market milk and cream.

Test Your Cows.
The testing of each cow at least once a week as to quantity and quality is the basis of all successful dairymen, as in only too many cases the poor cows in a herd eat up the profit of the good ones. Better to have six good cows than to have twelve medium ones.

The Dairy Sire.
The external qualities of a dairy sire are indicated by bright, prominent eyes far apart, a masculine head and neck; deep, broad chest; deep, capacious barrel; soft, loose hide; clean bone and a general spareness of flesh, especially in the region of the shoulders, thighs and hip bones. Indeed, from the shoulders backward the dairy bull should have the same general outline possessed by the dairy cow. He should have an active, graceful style, showing that abundance of vigor so necessary in a good breeder.

Cow Testing Associations.
In some states recently co-operative cow testing associations have been formed and are weeding out those animals which are not profitable and in this manner putting the dairy industry on a profitable footing.

A Contest For Cleanliness.
In California a unique campaign for cleanliness has been started. The dairymen in the vicinity of Arcata are going to try to outdo each other in keeping their places clean. The plan is to have each dairyman who enters the contest deposit in the bank \$1 each time he cashes his check from the creamery. At the end of the year a committee will visit each one of the dairies contesting, and the three who have made the best showing in a sanitary way will be awarded first, second and third prizes.

HANDY HAY CAPS.

Their Use on Alfalfa and on Clover. Put Green into Cocks.

The cloth in the cap is made from (A) sheeting torn into pieces forty inches square, and to each corner a larger washer weighing about one-fourth of a pound is tied, says Hoard's Dairyman, which shows one of these caps in the accompanying cut and comments as follows upon the use of hay caps:

Put Up into Cocks.

The hay is put up into cocks about seventy-five pounds each and then covered with the hay caps. The weights that are attached to the corners of the cap tend to keep the cloth tight over the hay, for as the hay settles the weights drop closer to the ground.

To shed the water well the cloth must be kept smooth and free from wrinkles, and to accomplish this the weights, when the caps are put over the cocks, should be several inches from the ground. This method gives the weights an opportunity to pull down constantly on the four corners of the cap.

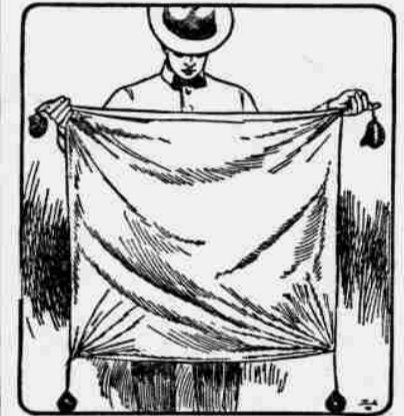
To Shed the Water Well.

Some have recommended pegs be attached to the corners of the cap and hook them into the hay to hold the cap over the cock. This system would be all right if the cock of hay did not settle, but since the hay through settling would soon pull away from the cap, enough to materially loosen it and cause more or less pockets and folds in the covering, we do not recommend this method.

There is no better hay for dairy cattle when properly cured than alfalfa. It compares very favorably in composition with bran, as is shown in the following table, which gives the amount of digestible nutrients in 100 pounds each of bran and alfalfa hay:

	Protein.	Carbohydrates.	Fat.
Bran.....	12.5	38.5	3.0
Alfalfa.....	11.0	32.5	1.5

When bran in these days is worth around \$20 per ton we believe that it will pay farmers to spend some money and time in making sure of a good crop of alfalfa. When the dairyman has his barn filled with good alfalfa hay and his silos full of silage he has a



HAY CAPS WITH CORNER WEIGHTS.

splendid foundation for a good dairy ration, and it does not require heavy grain feeding to produce large flows of milk.

It might be added that the hay cap serves equally as well in the curing of clover hay. The advantage of the hay cap is not only valuable in protecting the hay from rain, but from the sun as well. The hay can be put up into cocks when it is green and cured in the shade, which is better than drying it out in the sun. Hay cured this way is more palatable and retains more of the leaves because they do not become brittle and break off. The leaves of the hay are the most valuable part of it, and any system that tends to cure them properly and prevents losing them in the field is, in our estimation, worth practicing.

The Range Horse.

The range horse is disappearing as a prominent factor in the live stock industry of Colorado. High prices for land are partly responsible for this. Moreover, the past two or three years have also witnessed very high values for breeding mares, and many ranchmen could not resist the temptation to close out. The Horseshoe ranch of this state had 8,000 horses on it a few years ago, but this supply has now been cut down to 1,900, states a Colorado man in Orange Judd Farmer. I could name other large outfits that have curtailed operations. Some of them are turning to sheep. It takes only a year to mature sheep for market, while four years are required for horses.

Alfalfa in Nebraska.

Alfalfa is the greatest forage plant grown in Nebraska. Every effort should be made to extend its culture through all parts of the state. This is a nutritious perennial and produces a permanent meadow. It is very palatable and is relished by all kinds of stock. Its greatest value lies in the production of hay. For certain kinds of stock it is valuable for pasture, but when used extensively in this way it is likely to kill out in spots.—Kimball's Dairy Farmer.

Strawberry Beds.

If the beds are in bad condition start as soon as runners can be obtained and peg these down outside the hills, where they will soon root and by the middle or end of July will be fit to plant out in their permanent quarters in good soil. Strong, loamy soil well drained suits the strawberry best, and a south or southwest aspect should be chosen.—Gardening.

Strawberry Plants.

It is poor policy to let strawberry plants ramble away at will year after year, gradually getting weaker and producing smaller fruit, says Gardening. Even if new beds are not made much may be done by removing useless crowding runners and at least keeping the soil free of rotting weeds.

POINTS FOR THE HORSE BREEDER.

In a bulletin issued by the University of Wisconsin the writer, F. C. Warren, the well known breeder, says about the care and management of stallions: A few things that I consider of great importance are, first, before using the stallion let him get some age. No colt will breed as well as an old horse, from eight to sixteen years old, provided the horse has been properly taken care of. Next, avoid all pampering, both as to care and feed. Feed and work him as you would any horse, not overheating or overexerting him.

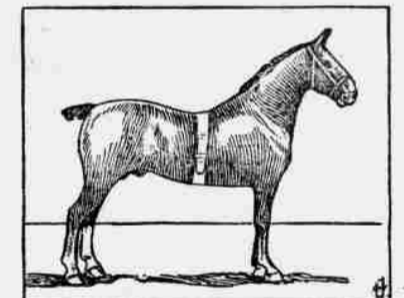
If not situated so you can work or drive him, have a good, roomy yard where he can run and exercise at his own free will. There are three things that should be remembered that are not conducive to fertility in the stallion or to soundness, strength or longevity in his progeny—viz, idleness, pampering with unhealthful food and putting him to service when too young. If these matters are observed and you will limit your horse to the proper number of mares, you will get good results.

As to feed, we would give him a liberal quantity of oats and bran, two parts oats and one of bran, twice a day, and once daily through the mare season a good feed of boiled barley with a little flaxseed cooked with it. Mix with bran and feed hot at night. This, with good timothy hay and sufficient grass, should constitute his daily feed, with perhaps a few ears of corn occasionally. Remember this one important matter, keep your horse healthy and as near a natural condition as possible. To do this you must feed and exercise him properly. This must be continued all through the year. The man who keeps his horse right just through the mare season and then confines and keeps him in an unhealthy state all the rest of the year will find himself with an unprofitable stallion in a short time.

The Useful Hackney.

An old English breed still popular is the hackney as bred for many years for speed, endurance and style, says American Cultivator. It is a full breasted, short backed horse, rather short legged and carrying head and neck like the typical coach horse. As compared with other coach breeds, it is rather more blocky and broader in shoulder and rump. Of late years breeders have aimed at a more stylish, high stepping gait, sometimes to an exaggerated degree.

The feet should be carried clear from the ground and well raised at the knee.



A HACKNEY STALLION.

As shown in the illustration, which indicates in an attractive way the stylish gait and conformation of the ideal hackney. The breed is remarkable for soundness and good constitution, with a great amount of bone and substance. Cross breeding with native stock has given good results for both style and constitution. In this country the breed is quite abundant in eastern and northern states. The standard height of the breed is fifteen and a half hands, and the range of height is from fourteen to sixteen hands. It is one of the best all round roadster and coach breeds.

Care of the Harness.

I have seen collars and saddles put back day after day covered with hairs and reeking with sweat, says a writer in the Horse Breeder. "No time to brush or air them" is, of course, the excuse. Naturally they soon become as hard as boards and ingrained with filth, so Dobbin or Damsel is badly galled and perhaps thrown out of work for a fortnight at a busy season, to say nothing of the fact that a very short time suffices to ruin any piece of harness which is not kept clean. One wonders that as bits and stirrups are only rubbed up for special occasions steel should be so generally used. It is true that no manufacturer will guarantee a nickel bit, but it is far easier to keep bright than a steel one, and, as farm horses are rarely of a "larky" disposition, the risk of a break would be slight. The market team fares no better. It may have been a good one originally, possibly bought second hand as a bargain and nicely done up by the local carriage builder, but it is very seldom washed and never properly dried, so the paint and varnish soon lose their pristine freshness, and the farmer's wife or daughter can no longer drive to town taking an innocent pride in the turnout which at first excited so much comment.

Building Up the Flock.

By selecting the best of the ewe lambs each year and breeding to a first class ram each time you can soon build up a flock that will please your eye and strengthen your bank account. Your ram is one-half the flock, and in case your ewes are grades he is more than half when it comes to giving form and quality to a flock. Never use a grade ram if you want to improve your flock. Any of the mutton breeds are good. Select the breed you like best, but be sure to get a good individual to head your flock.

DINING IN FRANCE.

Tact With Which Guests Are Brought into a Social Group.

Every one knows his position and his cue, and every hostess knows that part of her duty is to indicate and to give them, says Professor Barrett Wandell in Scribner's. Perhaps, the most characteristic instance of the way in which this affects social conduct is what generally happens at a dinner party. Instead of sitting at the ends of the table, where they are far apart, the host and the hostess sit opposite one another in the middle, where the table is narrowest and where they are able at once to keep in touch with each other and easily to talk with the guests on either side of each. Thus a company of twelve is at once brought into a single social group, and the outlying members of a larger party are not so far away that they cannot readily listen to the general talk or even take part in it.

And the talk is always general, addressed no doubt to one or another of the hosts happens to find pleasant, but never broken into a system of separate confidential dialogues, as is generally the case at home. A French dinner is not noisy any more than is a French drawing room. But in either case the deeply subdued tone of voice prevalent in England and among the better sort of Americans would be almost a breach of polite manners. Every social function in France, even to the most informal, has a social character far more pronounced than ours.

The individual is there to enjoy himself. But he is also there to play his part. In consequence all social intercourse in France has a quality less personal, less confidential, somewhat more reserved, than an American is used to. Whoever, even in private places, finds himself in the presence of his fellow beings conducts himself in many ways as if he were in public. The French are in no way conscious of this phase of their manners. It is as normal to them as it is novel to an American visitor. And it results in a general and cheerful, though not quite intimate, conviviality which makes our own manners seem in contrast somewhat melancholy in their dual isolation.

Sure to Keep His Word.

A well known clergyman on one occasion preached a sermon in a prison. During the services he noticed that one of the convicts present seemed very much impressed. Later in the day he sought him out and said:

"My friend, I hope you will profit by my remarks just now and become a new man."

"Indeed I will," was the cheerful reply. "In fact, I promise you that I will never commit another crime, but will in future lead an exemplary life."

"I am very glad to hear you say that," said the clergyman heartily. "But are you certain you will be able to keep the promise?"

"Oh, yes," said the convict. "I'm in for life."

Origin of Dyeing Cloth.

A dog gave us the art of dyeing cloth. One afternoon, so many years ago that the date is of small consequence, a noted man and his sweetheart went for a walk along the sands of the seashore in a far off country. A little dog trailed along at their heels and, becoming weary of much love making, finally ran ahead and went fishing among the rocks. One particular shellfish which he captured and devoured exuded a fluid which dyed the hair about his mouth a pretty purple. Investigation of this incident founded the science of dyeing cloth, which now gives a happy feminine world the pleasure of haunting so many brilliant colors in its attire.

Information at Hand.

A lady who had gained quite a reputation in her own community because of her strict regard for the quietude of the Sabbath had occasion on a pleasant Sunday afternoon to walk by a vacant lot on the outskirts of the town. There she perceived a crowd of boys and men playing "scrub" with great vim. She accosted the nearest boy, who was playing center field, and asked him, "Little man, what would your father say if he saw you playing ball on the Sabbath?"

"I dunno. There he is over there playin' first base. Go ask him."—Boston Herald.

Every Modern Improvement.

Mrs. Hunter—This house doesn't seem to be very substantially built. Even the floors shake when we walk on it.

House Agent—But, madam, this floor is—er—the very latest thing in spring dancing floors. All the newest houses have them.

Mrs. Hunter—And the stairs creak terribly.

House Agent—Oh, we don't make any extra charge for those patent burglar alarm stairs, madam.—London Mail.

A LITTLE NONSENSE.

Literally Speaking, the Doctor Told the Truth.

Two or three generations ago Dr. Samuel Reed was one of the prominent physicians of Boston. His large practice included many patients outside the city limits, and these he visited in a buggy.

One day he bought a new horse, with which he was much pleased until he discovered that the animal had an insurmountable objection to bridges of all kinds and could not be made to cross one.

As at this period it was necessary to cross some bridge in order to reach any one of the surrounding towns, the doctor decided to sell the horse. He did not think it necessary to mention the animal's peculiarity, but was much too honest to misrepresent him, and after some thought he produced the following advertisement, which he inserted in a local paper:

For Sale.—A bay horse, warranted sound and kind. The only reason for selling is because the owner is obliged to leave Boston.

—Lippincott's.

Horrible.



Practical Father—Why did you find it necessary, Elinor, to discharge the baby's nurse?

Hygienic Mother—Why, I actually caught her giving baby a bath in water a third of a degree hotter than the physician had ordered. We can't afford to risk baby's life in that reckless manner.—Bohemian Magazine.

Mysterious.

"You say the alimony was a million?"

"So the paper states."

"And he paid it without a grumble?"

"I believe so."

"How in the world did she ever quarrel with such a man as that?"

—Pittsburgh Post.

Two Views of It.

Rivers—Don't you get tired of hearing Weerius always telling his wonderful stories of adventure in the first person?

Brooks—I don't mind that so much as his always telling them to the first person he happens to meet.—Chicago Tribune.

The Limit.

Biggs—The Dopsons are very exclusive, I understand.

Diggs—Yes, indeed. Why, they even have wire screens on their doors and windows so their flies can't get out and associate with the flies of their neighbors.—Chicago News.

Best For the Poor.

"Surely," remarked the good man, "it goes without saying that honesty is the best policy."

"It is," replied the wise man, "until you get prominent enough to drop policy and start playing the stock market."—Philadelphia Press.

A Law of Nature.

The rain was falling. Somebody had made an observation to this effect, conversation having languished.

"Did you ever know of a rain that didn't fall?" asked a querulous person.—New York Times.

Safer Behind the Bars.

"The man with fifteen wives was sentenced to a year in the penitentiary."

"I'll wager something handsome that he dreads the day when they let him go."—Cleveland Plain Dealer.

Useful.

"You enjoy writing dialect?"

"Yes," answered the youthful scribe. "It enables you to lay the blame for your uncertainties in grammar and punctuation on some imaginary character."—Washington Star.

Discouraging.

Though not all that's written is rotten, though not all is rotten that's written, this axiom must not be forgotten. No sign shows the writers of quittin'. So all is not written that's rotten.—That is, all the rotten's not written. Much yet will be written that's rotten.—Much rotten is yet to be written.—Judge.