FARM AND GARDEN

GRAIN IN FEEDING.

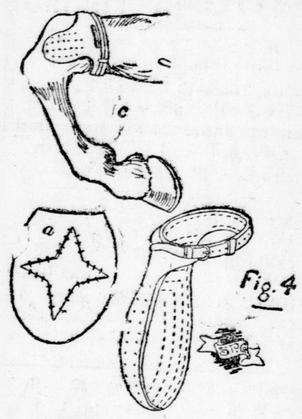
Coarse Feed Lacking in Nourishment if Fed Alone.

Grain of any kind may be used to excess. Even though the total quantity supplied is not extremely large, it may prove injurious by being given with too small a proportion of other substances. Ruminant animals especially need bulk of food as well as nutriment. Hay, straw, or some similar material must be given in connection with it in order to have meal or any other concentrated food give its best results. This is true not only as regards the growth or productiveness of the animals, but also in respect to their health.

The old method of keeping animals upon grass and hay until they reached maturity has very largely given way to the more scientific and also more profitable plan of supplying a good deal of bran, meal, or some similar material in connection with the coarse fodder. The new system is a great improvement upon the old, whether the object to be attained is growth, fattening, productiveness or labor. The inability of animals to digest a sufficient quantity of bulky food to supply them with all the nutritious matter which they can profitably use is a very serious defect which cannot be remedied while the old method is exclusively followed, but which is completely removed by the addition of a suitable quantity and quality of concentrated materials.

Improved Horse-Leg Fender.

The nature of this invention consists in providing a fender or leather pad, so made as to fit the inside of the knee-joint or the ankle-joint of a horse addicted to interfering or striking either of those joints with the opposite foot or



HORSE LEG FENDER.

leg, and thereby to prevent the cutting and bruising of the same. The important feature of the improvement is the interlining or stiffener which prevents the pad from slipping out of place. It is made of stiff leather and is first cut in the shape shown in a, Fig. 4. Two incisions are then made through the middle at right angles to each other, and opening them, triangular pieces are fit therein of such dimensions as to give the whole piece the shape required—that is, so as to make it sufficiently concave as to fit over the joint or part to be protected. These wedge-shaped or angular pieces are sewed fast in their places, and the whole stiffener is then enclosed by substantial harness leather outside and a softer covering inside. The stiffener and the coverings are then sewed firmly together as shown in Fig. 4 and provided with straps and buckles with which to attach them to the leg. Inserted at the upper end of the fender, just below the strap, is a narrow strip of whalebone, wood, or other suitable substance, hard and moderately elastic. The use of this is to prevent the pad from turning round on the leg and being displaced.

Early Hatching and Moulting.

It has surprised those who were not aware of the possibility of such happenings that some of the pullets hatched early began to moult in the fall. As a rule pullets do not moult the first year, but shed their feathers the fall of their second year. For this reason—that of pullets moulting in the fall of the year in which they are hatched—experienced poultrymen will not hatch the pullets before April. The moulting of the early pullets depends upon circumstances. It is only after a pullet matures and really becomes a hen that she moults, the early hatching placing her in the same position as a late hatched pullet of the previous year. If the pullets are of the large breeds, such as Brahmas and Cochins, they will hardly mature before winter is near at hand, hence they may be hatched as early as may be desired, but Leghorns, which sometimes mature before they are six months old, are liable to moult the same year as hatched and may consequently be hatched as late as May and be early pullets. Forcing pullets with too much oily food also sometimes causes them to moult prematurely.

Early Maturity of Animals.

Only the thoughtful farmer is able to enumerate the advantages of forcing into early maturity the animals intended for the butcher's block. The economy in the amount of food, the better quality of beef, pork and mutton, the time necessary to realize upon the investment, all count in favor of shortening the time as far as possible, in which to bring the animal up to the highest state of perfection for marketable purposes, consistent with the health and vigor of constitution necessary to resist the inroads of disease. Breeding animals should be handled by more conservative methods near the stage of maturity but during the growing period the muscular development may be urged on with equal safety to both. The fat forming foods should be used only to a limited extent until the finishing period or until the framework has been practically completed. The swine plague is largely due to the lack of this care to select the foods which are essential to the ends desired.—Ohio Farmer.

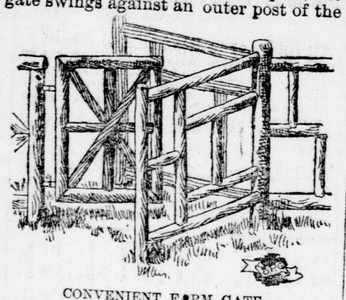
How Pastures May Be Made.

Permanent pastures may be made of one species of grass only, but the feeding value is increased by having a variety. The variety should be selected with a regard to their habits of growth—as hardihood, durability, the part of the season during which they grow and the feeding value of each.

A RUSTIC GATE.

One Convenient and Very Simple of Construction.

Many of the most frequently used farm pathways lead through fields in places distant from the wagon gate. An ordinary small gate on such a path is very apt to be left open, permitting the stock to trespass on growing crops. A stile over the fence is generally unsightly, and climbing the steps is only less inconvenient than climbing the fence. A suitable gate for such a pathway is shown in the illustration. This gate is always open for people, but when a four-footed animal attempts to pass, the gate swings against an outer post of the



CONVENIENT FARM GATE.

triangle and closes the way. A person standing in the angle can easily swing the gate so as to make a wide passage-way. The hinges should be strong, and the gate so heavy that the wind cannot move it quickly.

Weeds on the Farm.

It is painful to see that the weed crop has become a general one. Few farms are free from the pests. And yet they can be exterminated by proper action at the proper time. I will give my experience and observation the past summer.

Wheat stubble fields, in July and August, had an unusual crop of green ragweed. About August 20, when this weed was in full bloom, seeds beginning to shape, I took the mower and cut a large portion of a field nearest the house, so that I could carefully note the result. I raised the cutter-bar high so as to cut as little of the young clover as possible, but shaved the wheat stubble and the weeds about four or five inches from the ground.

The result is satisfactory. There is scarcely a weed on the portion so treated, while the unmown part is gray with the useless crop. Mowing destroys the seed for a future crop; the short pieces of the stubble clipped off act as a mulch to the young clover, holding moisture during the hot months and protecting the roots during the winter, and it hastens the return of both stubble and weeds back to fertilizer work. The clover is much finer on the mown part. Cutting the weeds relieved the soil of the draft necessary to mature the plants and seed, and thereby promoting the growth of the clover.

If the season is very dry raise the cutter-bar higher and cut the second time, if weeds come on again. This is a practical method of getting rid of these annual pests easily and rapidly. Try it. You will be pleased with the result.

A Fifty Cent Smokehouse.

This will hold four hams and a flitch (side) of bacon. It is made as follows: Take a dry goods box, which can be

FIFTY CENT SMOKEHOUSE.

bought for fifty cents, turn upside down and bore six pairs of holes in the bottom. Then lay on its side, tie each ham securely by inserting the cord through the pairs of holes and drawing the ham close up to the box bottom. When this is done place the box bottom up which will leave the meat suspended from the top. Now dig a trench from under the box to a fire pit six feet distant, one foot deep and the same width. Over this trench place sheet iron and cover with earth; also earth up around the bottom of the box to keep in the smoke. In the fire pit put hickory chips, set on fire and cover with another piece of sheet iron.

Brief Items.

Sweep the barn floor often.

Thrifty, vigorous hens should be the ones selected for early mothers.

Look out for vermin on all kinds of stock before they get too thick.

Early maturity is just as valuable in growing colts as in growing steers.

Curry combs distress many horses greatly. A stiff brush should be substituted.

Do not go into turkey raising unless there is plenty of pasturage.

Teasing horses render them vicious; do not permit it.

Children will take much more interest in the orchard or garden work if made partners in the work and profit.

In all feeding it is to be remembered that scarcely any two animals will be found exactly alike in appetite or thrift.

Potatoes and onions are crops which on the average will yield good returns, if properly planted, cultivated and marketed.

The Intelligent May Err.

It is true that the great majority of farmers err in the direction of not giving enough rich food. But there are many, in all, especially among dairymen and producers of beef and mutton, who are inclined to feed a smaller proportion of "roughage" than their animals really need. There are, also, many young farmers, who are intelligent and energetic men but who have more zeal than experience, who are liable to make the same mistake.

Don't Forget Your Wife.

When ordering your garden seeds be sure and not forget to let the wife and children order a few flower seeds. Even if it is hard times we cannot afford to let all beauty depart from our homes.

The Small Farmer's Troubles.

Mother—Horrors! How did you tear your clothes so?

Small Boy—Tryin' to get over a barbed wire fence without tearin' 'em.

The Plow Team.

A good plow team is a great aid toward producing crops cheaply. If you have not such an one it would be well to look about now and secure it at once.

A New Use For Onions.

It has been suggested that if a few pieces of onions, or the skins of onions, are placed in the nests of the hens, the lice will depart

THE DAIRY

SALTING BUTTER.

F. C. Curtis, of Wisconsin, Gives His Method of Salting.

I assume that it is generally considered that butter absorbs salt, which it does not. In proof whereof I will state that some two months ago I worked up a pound of butter into a solid ball without salt. This butter has been kept immersed in strong brine until the present time, when on cutting it open I find no trace of salt, except near the surface of the ball. Salt properly exists in butter only as dissolved in the water remaining in butter; if found in the butter in an undissolved state, objection is made by any good judge of butter. From this reasoning it will be seen that the amount of salt in butter depends somewhat upon the amount of water in the butter when the salt is added. Let us suppose we have a quantity of drained granular butter with twenty-six per cent. of water in it—our object is to salt only half the water, but that is an impossibility; we must salt all the water in the butter. Hence if we are required to have one ounce to the pound in the finished product, twice as much salt must be taken, for half of it will come out in exuded brine. There is no danger in getting in too much salt provided no more salt is put in than will dissolve. Sometimes twenty pounds of butter after salting in the granular state will exude three or four quarts on revolving the churn and working it into a mass and sometimes not more than one pint. The difference is undoubtedly in the fineness or coarseness of the granules when the salt is added.—F. C. Curtis, in the Stockman.

A Milk-Room Device.

What housewife, says the American Agriculturist, has not had trouble again and again to tell just how old is the milk in each pan in her milk room? When the same number of pans are used at each milking, and these can be always placed in regular order upon the shelves, there may be little danger of getting Tuesday morning's milk mixed up with that of Monday night; but sometimes there is room for only a part of the pans upon one shelf, and so some must be placed out of order, or an unequal number of pans may be used; and in these ways uncertainty often

LABELS FOR MILK PANS.

arises as to the age of the milk. This trouble may be obviated by the device shown in the illustration. Slips of wood, narrowed at one end and having a slit just large enough to slip upon the edge of a pan, are made as shown in the sketch. Let there be a sufficient number so that as many may be marked "Monday morning" as would ever be wanted to accommodate a single milking, and let an equal number be marked "Monday evening," "Tuesday morning," and so on through the days of the week. By this means a housekeeper can always be sure before she disturbs a pan whether it contains double or triple cream.

Preserving the Grain of Butter.

There is no part of the process involved in making an extra quality of butter that is of equal importance with properly working it. That the buttermilk and water must be taken out of it and the salt put into it, are matters of necessity, and the man who can invent some cheap method by which this can be done without working the butter will be the dairyman's benefactor. To make fine butter we must retain the grain in it, while all working, much or little, tends to destroy this grain. The modern plan of working butter is to do away with working it as much as possible, and do that little as lightly as can be, and at the same time expel all the milk and water and introduse the salt. To do this, stop the churn when the butter granules are very fine, draw the buttermilk, and introduce water at a temperature near 55° F., which hardens the butter, and when the water runs clear introduce the salt, mixing it well with the hard granules of butter in the churn. Then remove the butter to a table and press into shape for market. This will need no second working to remove the mottled appearance. Do not expect to succeed perfectly with the first trial, but a little experience will soon teach how to overcome the difficulties. It is well at first to wash the butter in the churn with a strong brine, instead of clear water, until more skill is attained by practice.—American Agriculturist.

Imitation Butter.

It has been my lot, says A. M. Lyman in the Homestead, to observe the working of the great and formidable foe to the dairy interests in placing of imitation butter on the market. It is made from stuff that is worth as grease 1c. per lb., but costs the consumer about 28c. Some of it is put up so as to look like the butter our grandmothers made, put up in round balls and wrapped in "old linen" to have it look natural. Some of it is made in oblong balls so as to look like good old-fashioned dairy butter. Some of it is made in imitation creamery style, wrapped in parchment, so as to look new fashioned. But it is all made from cheap grease, and not from the pure cream of cow's milk, which costs more to make than the bogus stuff retails for. Some of the oleo manufacturers make up testimonials and construe words and letters from prominent men so as to deceive the public.

Butter and Cheese.

At the Western Ontario Dairymen's meeting Prof. Dean of the dairy school, in speaking of cheese, said that while large parts of vegetable food were either innutritious or indigestible, and meats had great wastes, milk, butter and cheese were all digested and taken up by the system, to not only repair wastes, but supply energy as well, and no other food has as much working action as did the milk foods, so that to promote a greater demand for such food, this fact needs to be more prominently brought before the public, and, what is more, only the best butter and cheese should be made, and as cheaply as they can, so that "once tasted, ever in demand" will be the result.