

should be made to meet the necessity which is likely to arise. The best means of doing this is by the rise of soiling crops. The practice of soiling to bridge over the usual dry time in the summer has been adopted by a few dairymen, and the practice is steadily growing in favor and increasing, as those who employ it with any sort of skill find it pays. The practice ought to become general this year. It is yet in season to get in crops for this purpose. Corn sowed or drilled (the latter is best) is the almost universal crop for summer soiling. It produces the heaviest yield and keeps the longest time in condition to feed. It is not, however, fed to the best advantage when fed alone. It is better to be fed in connection with clover or millet. Corn has an excess of gum, starch and sugar; clover and millet an excess of flesh-forming matter. By feeding corn with them the excesses balance each other and make a better food than either could alone. The clover and millet should be cut early and may be fed either green or dry. Neither is worth much if cut late. Millet is growing in favor as a soiling crop. It has many valuable qualities for such a use. It grows quick, produces largely, is exceedingly rich in nutritive matter if cut when in blossom, and has greatly the advantage over corn in the matter of drying. It contains but a small amount of moisture, and in its most succulent stage may be easily dried for fall or winter use. There is no other crop which cures so easily, and none so rich in valuable nutriment if cut in the proper season. It is so much inclined to form woody fibre as it matures that its value depreciates very rapidly as it passes the season of flowering. It should not be allowed to stand later than that, except when desired for seed. Peas and oats sown together, and cut green, make a splendid food for either summer, fall or winter use, but they do not produce so liberally as corn and millet. Any green crop is better than dry and scanty pasture for encouraging the yield of milk. If for any reason soiling cannot be adopted, wheat bran will be found an excellent substitute for deficient pasture. Something, at any rate, ought to be provided to prevent the customary shrinkage which so effectually every season converts a good cow into a poor one, and depletes the pockets of her owner.

Heat your cows by running, beating or exciting them, keep your milk in temperature 70° or upwards, pour hot water in your churn, set your vessels of milk around the fire, cook one side gently and then turn the other side and cook it also, wash your butter in warm water, or with the hands instead of a paddle, churn your butter back into the milk after it has risen to the top of the churn, until the grains are all broken and mashed into the particles of caseine—all of these ways produce a mass of cheesy grease and not butter, which should have its particles granulated. Keep all the milk vessels sour and dirty, and a few vegetables decomposing in the milk room, and the butter will be sure to have a bad flavor and be poor.

Manufacture of Edam Cheese.

The process of manufacture of the round or bullet cheeses in Holland, so widely known as Edam cheeses, is as follows:—

The rennet is put into the milk as soon as it is taken from the cow; when coagulated, the hand, or a wooden bowl, is passed gently two or three times through the curd, which is then allowed to stand a few minutes; then the bowl or finger is again passed through it, and it is permitted to stand some minutes longer. The whey is taken off with the bowl, while the curd is put into a wooden form of the proper size and shape of the cheese to be made. This form is cut out of the solid wood by a turner, and has one hole in the bottom. If the cheese is of the small size, about four pounds, it remains in this form about fourteen days. It is turned daily, the upper part during this time being kept sprinkled with about two ounces of purified salt. It is then removed into a second box of

the same size, with four holes in the bottom, and put under a press of about fifty pounds weight, where it remains several hours. It is then taken out, put on a dry, airy shelf in the cheese apartment, daily turned for about four weeks, when Edam cheeses are generally fit for market.—*Ex.*

Salt for Stock.

The use of salt for dairy cows varies with the season and the flow of milk. The larger the flow and the more immature the feed the greater the amount of salt required. In June, for example, when the flow is abundant and the grass tender, more salt is required than in November, when there is less milk and the grass is better supplied with mineral matter. In the former case the cows want salt where they can have access to it every day or oftener; in the latter twice a week will answer all demands. The best way I have tried for salting cows is to keep a little salt in the manger, where they can have access to it every time they come into the stable to be milked. They will lick a little every time they come in when the grass is very tender. Salting twice a week is then not enough, as tests made upon the quantity and quality of milk have proved. Later in the season they will take it less frequently. If salt can be had *ad libitum* cows will never eat any more than is required for their good, but if it is fed only at long intervals they often eat to their injury. For salting young cattle the best arrangement I know of is to place rock salt in a suitable box, or half barrel, where they can have easy access to it, and under a cover, so as to protect it from wasting by rain. This avoids both excesses and deficiencies, and requires the least labor and attention.—*Prof. L. B. Arnold, in N. Y. Tribune.*

The Horse.

How Shall the Stallion Foal be Reared.

It is specially imperative that a young entire should be kept constantly growing, should receive no check, should be so managed that he will develop the fullest amount of bone, muscle and constitution. This can only be effected by a liberal and varied dietary. Whilst still with his dam he should have a few pounds of bruised oats, and unless his pasture is particularly good, and his mother a first-rate nurse, a pound of bruised linseed cake should be added. Even at this early age he may have the head-stall put on during the day, and be accustomed to be led about, and stand tied up. After weaning, when colts are very apt to fall off in condition, the youngster must be carefully fed. Having already learned to eat oats, the supply will be increased. Unless the clover or vetches are particularly fresh and good, he should have dry fodder, either cut or long; and, throughout the winter, will be much the better of a few pounds of swedes or carrots, for which in many parts of England mangold are now substituted. A strong early foal, now nearly a year old, will eat daily 7 lbs. or 8 lbs. of good oats, about the same weight of roots, 12 lbs. or 15 lbs. of clover or other hay or of hay and straw chop, a pound or two of linseed cake, and a bran mash twice a week. Beans or peas are too heating for such young subjects. The colt should have plenty exercise, taken either of his own accord in an open yard, or if he lies in a loose-box, he must be led about for an hour daily. The sooner these colts are handled the better, and the discipline must be continued regularly. Without exercise the young stallion will never thrive as he should do, nor acquire that robustness, muscle, and of action so important in a good stud horse.—*Agriculturist N. B.*

Horses and the Horse Trade.

The number of horses in the United States is estimated at 8,000,000, Illinois ranking first in number; New York next with over half a million; then Ohio, Missouri, Pennsylvania, Texas, Iowa, Indiana and Kentucky. The number of horses in the New England States is estimated at 500,000, Maine having the largest number and Massachusetts next. The farm or workhorses of Maine and Vermont are noted throughout the land. The farmer who breeds horses knows his own interest well enough to study the tastes of the community, and to breed up to them. Speed is, to be sure, only one of the many qualities which are essential to a good roadster, and size, style, action, temper, form constitution and endur-

ing qualities are equally important in making a general estimate of the character of horses. The horses raised in Maine are, generally speaking, fine specimens of the equine race. So are those imported from Vermont and Canada, the latter having qualities of their own quite distinct from the thorough New England animal. The weight of a good roadster may vary from 950 to 1,000 pounds. For ordinary purposes on the road and for general work an old horse dealer tells us that 1,000 lbs. is heavy enough. A large sized horse would not be found serviceable in horse-cars, omnibuses or hacks, and certainly not in the buggy or light carriage. A heavy horse will not last so long over the hard pavements of the city as a medium-sized one. The practice now conforms to this rule, we believe, as strangers especially notice in all large cities (in the east, at least) quick, tough horses for most kinds of work. A medium-sized horse will range from 14½ to 15½ hands in height.—*Dunton's Spirit.*

Diet for Thick-Winded Horses.

The *British Agriculturist* gives an inquiry from a correspondent on this subject, and the reply is as follows:—

Your old favorite, we presume, is thick in his wind—blows when pressed quickly up hill or with a heavy load; his wheezing and short breathing are noticeable both in inspiration and expiration; he shows his imperfection chiefly when worked immediately after a full meal or in thick muggy weather. This condition somewhat resembles asthma in human patients; it is connected with and often brought on by gastric derangement, such as overloading the stomach and eating indigestible fare. Free allowances of musty hay often produce it, and occasionally it results from a single greedily-devoured meal of wheat or barley. When fairly established it is incurable, but may usually be held in check, and, by strict attention to diet, the animal enabled to perform moderate work with comparative comfort to itself and satisfaction to the master. The food must be concentrated and of the best quality, mainly consisting of oats, which had better be given bruised, mixed with chaff, and damped when put into the manger. This dampening of the dry food operates beneficially in various ways. It favors digestion, it lessens the amount of fluid which the animal drinks, and horses with damaged wind require specially careful management as to their water supply; they must not suffer from thirst, but should have their drink in small quantities at short intervals, should have a full allowance at night, and only a restricted amount in the morning; and even this should be a couple or three hours before the period for work arrives. Oat straw, being hard and dry, usually does better than hay. Rank, succulent new clover hay is particularly unsuitable for such cases. But with a liberal supply of corn, which may be varied by admixture with a little maize and a few dry peas or beans, the quantity of fodder may be reduced to eight or ten pounds daily. To counteract the effect of the concentrated dry food and maintain the bowels in a proper state—a matter of primary importance in all cases of damaged wind—a pound of bruised linseed cake should be given every night, and once a week a bran mash, with a little salt and nitre. Frequent bulky mashes of boiled roots are unsuitable in such cases, but a few slices of raw swedes for an evening meal are not hurtful.

IS RINGBONE HEREDITARY?—A mare is much more likely to transmit a tendency to ringbone if it has occurred from some naturally faulty conformation. Thus, if the pasterns are unduly upright so that an excessive jar is thrown upon the bones of the pastern, or if the pasterns are excessive in length and obliquity, so as to increase the strain on the lateral ligaments of the joints, the same conformation and tendency to disease may be looked for in the progeny. Again, if the mare is very lame from the ringbone during pregnancy, so as to concentrate her attention on this point, she is much more likely to have colts liable to ringbone. But if, on the other hand, her conformation is good, her joints large and well formed, her cords well set back from the bones, her pasterns neither unduly upright nor too long and sloping, and if her general health is good, an old ringbone, the result of direct mechanical injury, and which now neither causes lameness nor tenderness, is no more likely to be hereditary than a docked tail or a cropped ear. In these last conditions too, with strong, perfect limbs, and healthy constitution, a ringbone acquired by accident may recover as perfectly as a splint or sprain, and determine no permanent injury, even though a little bony enlargement is left.