

Saving Land by Soiling.

F. J. O., Whitney's Point, N. Y., wants definite information upon soiling as an economy of land, as he has a family with many wants, and only fifty acres of deep, gravelly loam well adapted to corn, clover, rye, etc., from which to supply their wants.

Mr. O. should take courage with such a farm, for when managed fully upon the soiling system, after a few years' preparation, it will be larger than any of his neighbors' who count one hundred acres, with two-thirds of it in pasture, as is the custom of most stock keepers. We would not advise him to go into full soiling at once, for few farms are in condition to do this. But with such land as he mentions, well managed, let him put in one acre of winter rye, sown thickly, to every five head of cattle and horses, the first of September, that it may get well rooted before frost, and if the growth is too large, pasture it some in the fall. This will give a cutting early in May, another in June, and probably another in August, if care is taken not to allow it to head. Then, as early as may be in spring, sow one acre of oats to every ten head, and twenty days later, the same amount. Begin to cut the oats when they first head, and you will finish when in the milk. As early as the climate will permit, sow one acre of common yellow corn to every ten head, and follow this ten days later with the same amount of Western corn. Do not cut any till in tassels unless necessity requires it.

Here you have three-quarters of an acre per head in rye, oats and corn, which will be quite sufficient with a small amount of pasture. This programme may be used during the change from pasturing to full soiling. It takes two or three years to fully establish orchard grass. That should be sown in the fall, according to most experiments with it. Sow next spring one-quarter acre of clover to each head to be soiled, but let one-half be medium clover and the other half large clover. The soiling ground should be near the barn, that it need not be carried far. When the crops are all properly arranged on well-manured land, one-half acre will feed each cow, head of cattle, or horse, through the pasturing season. —*Live Stock Journal*.

How the Cattle Rub!

At this season of the year in the open yards, and even in the stalls, especially where the animals are not brushed over daily, where the feeding is indifferent in quantity and nutritiveness, and where barley straw is used for fodder, or even for litter, animals are too often seen restlessly rubbing. Gates, posts, and partitions are broken, put out of plumb, or knocked down; and what is equally bad, itching animals cannot rest and thrive as they should do. The slightest indication of vermin, the disposition to rub usually about the tail or neck, should prompt an examination and, if need be, a dressing. It is senseless to wait until the unfortunate scratch has removed the hair from his own skin and spread his tormentors amongst his fellows. The pediculi or lice, of which almost every animal has its own particular species, are not difficult to kill. A good scrubbing with soft soap and water will remove them. Lined oil or any other oil prevents their migrating, and destroys them; but the efficacy of the oil is increased when to every pint is added an ounce of impure carbolic acid, or of Burnett's zinc chloride solution. Decoctions of tobacco and stavesacre also poison the vermin, an ounce to the pint of water being generally used. Where animals have been much infested, a second dressing should take place about a week after the first, and brushing, cleanliness, and usually a more liberal dietary also enjoyed. —*N. B. Agriculturist*.

Self-milking Cows.

It seems entirely impossible to break some cows off this habit, hence many persons have come to the conclusion, after repeated experiments, that it is best to put the cow into a beef barrel. It is generally true that self-milkers are very large milkers, and if this is the case, it will pay to try and break up the habit. Oftentimes the habit is formed in consequence of irregular milking. The udder becomes so full as to be painful, and the cow, in endeavoring to get relief, licks her bag. By chance she gets hold of a teat, finds relief by drawing the milk, and then fall to repeating it every day.

The following method of treating a self-sucking cow was communicated to this paper some years ago: put a strap around her neck and another around her body about midway. Take a stout stick about the size of a hoe handle, and long enough to reach from one strap to the other. Pass the stick between the fore legs and fasten it to both straps. It will be impossible for her to suck with it on. —*Prairie Farmer*.

Soiling Crops.

J. H. Y. asks about crops for soiling. He intended to sow a patch of rye early in the fall for early spring feed, and another late in the fall for late spring feed (one acre in all), and then to plant two acres of drilled corn for fodder; and wants to know how many cows he can keep from time of first feeding rye to end of corn feeding. The arrangement is not a good one. Probably the late and the early sown rye will shoot at the same time in the spring, the chief difference being that the early sown will make the heavier growth. Rye is only useful for a very early feed. As soon as it blooms it imparts a bad taste to butter, and the straw early gets too hard to be relished by cattle.

A better arrangement would be one-half acre early sown rye, one-half acre early sown oats, two acres corn, planting at four different times from May 15th to July 1st in plots of one-half acre each.

"The cattle having the range of six or eight acres of moderate pasture, the soiling crops should suffice for the supplementary feed of from eight to twelve cows, according to how 'moderate' the pasture is, and how good the land growing the soiling crops. —*American Agriculturist*.

Raising Calves at an Agricultural College.

The *London Milk Journal* tells how stock is raised at Hohenheim. The rules laid down at this great agricultural college are, that it is best to rear calves entirely by hand, so as to have less trouble with both cow and offspring; and the quality and amount of food must be regulated as follows:

1st week, daily,	12 lb. milk,	6 lb. oatmeal,	9 lb. fine hay
2d "	" 16 "	" "	" "
3d "	" 20 "	" "	" "
4th "	" 22 "	" "	" "
5th to 7th "	" 22 "	" 1 "	" "
8th week "	" 21 "	" "	" "
9th "	" "	" 1 "	" "
10th "	" 16 "	" "	" "
11th "	" 12 "	" "	" "
12th "	" 8 "	" 2 "	" 10 "

In the ninth week the milk is first mixed with water and a little fine oatmeal. The meal is afterwards mixed with dry fodder. After three months the milk is withheld, and then the young animals receive daily, till two and a half years old, from twenty to twenty-two pounds of hay or its equivalent. But the calves never after receive, even in summer, any dry food till they are nine months old. The average feeding is so divided that the younger portions receive less, the older more, till two and a half years, when they begin to receive the regular rations of the older cattle, including the regular grain fodder, as indicated above. The growth with this treatment is so remarkable that it is only a little surpassed by the rapidly-maturing Short-horns.

Average weight of calves at 3 months	Heifers	Bulls
" " " 9 "	232 lb.	354 lb.
" " " 1 year "	351 "	472 "
" " " 2 "	640 "	728 "
" " " 3 "	1,184 "	1,300 "

Daily increase of calves
in 2d year ... 1.5
in 3d year ... 1.5

The college, whose management of young stock is given above by the *Milk Journal*, was established in 1818 by King William, on the Roßville estate in Hohenheim Wurtemberg.

How to Keep a Cow.

At a recent meeting of the N. Y. Farmers' Club, Mr. Todd related his experience as follows:—I have a thousand dollar cow which I feed and milk with my own hands every day. She is a cross between the Short-horn and the Durham. About 7 o'clock in the morning she is fed with as much cut hay and cut corn-stalks, in equal parts, as can be pressed into a basket that will hold one and one-fourth bushels. This feed is moistened by pouring over it about one gallon of water, boiling hot. Three quarters of wheat middlings are then mingled with the mass, and when it is given to the cow it is all fragrant and smoking. She likes such warm feed. She is supplied daily three times, as regularly as the time is measured by the clock, with a basket of such cut feed and meal. At noon, also, she gets a peck of turnips. Between meals she has access to about a pound or two of hay. As soon as the cut feed is eaten, she gets two water pails of the usual size full of tepid water, into which about a quart of meal is stirred. She swallows two pailfuls of warm drink morning, noon, and evening as quickly as one will drink a cup of superb coffee. Her calf is now four weeks old, and the milk of two teats is all it can force down. The other two I milk, and such rich milk and such yellow cream and gilt-edge butter is not often seen. —*N. Y. Times*.

What our Farm Stock Eat.

It is calculated from an old table of close experiments, that the quantity of feed to keep stock in good condition in the winter is three pounds of good timothy, or clover hay each day for every 100 lbs. of animal. That is, thirty pounds of hay for a cow, or horse weighing ten hundred pounds.

100 lbs. of hay is equal to	45 lbs. wheat.
" " "	64 lbs. barley.
" " "	69 lbs. oats.
" " "	64 lbs. rye.
" " "	57 lbs. corn.
" " "	69 lbs. linseed cake.
" " "	274 lbs. wheat straw.
" " "	195 lbs. oat straw.
" " "	276 lbs. carrots.
" " "	504 lbs. cow turnips.
" " "	350 lbs. swede do
" " "	239 lbs. beets.

Corn fodder cut and secured before frosted, is desirable for any kind of stock, and one acre will give as much substance as a ton of hay. The quantity of corn fodder left on the field frozen and bleached, trod into the mud, and covered with ice and snow, for an animal to wade around in, to satisfy the cravings of an empty stomach, and to plump out its poverty, pinched up ribs, has not been calculated.

The last manner of feeding stock operates best when several farmers of this stamp live in the same neighborhood, so that they can have a mutual aid society, and pass around each morning to help tail up the cattle. —*L. R. in Farmers' Union*.

HEAVY STEERS.—I send herewith the weight of two yearling steers of my breeding and raising; weighed this day after travelling 2½ miles:
No. 1—22 months old this day ... 1,390 lbs.
No. 2—21 months and five days old ... 1,290 lbs.

Total of both ... 2,670 lbs.

IN FATTENING animals, the great aim of the feeder is to induce them to eat all they can digest and assimilate. How this can best be done depends on circumstances. Change of food will sometimes be attended with advantage and sometimes not. There is one general rule that should be borne in mind: When the animal is hungry, in the morning, feed the less palatable food, such as straw or stalks; and when the animal has eaten as much as it will then tempt it to eat more by giving cut straw or stalks moistened or mixed with bran and meal. The food left in the mangers may be sprinkled with salt and water and put in racks in the yard, and when the cows are turned out to water they will be likely to eat it up clean.

SHEEP are specially fond of clover hay. They will keep in good condition on this alone. But when straw is fed grain should be given in addition, say one pound each per day. We are now feeding our sheep (Cotswolds) twice a day, chaffed oat and pea straw, all they will eat, ½ lb. bran, and ½ lb. oats or peas, and 15 bushels of sliced mangels to 100 sheep. We feed mangels only once a day, at noon. We never let them do better. Menus of course, being so much smaller, require less food.

WHEN to feed will depend a good deal on circumstances. Horses and cows should be fed early in the morning, say six o'clock. Sheep need not be fed until after breakfast, say seven or eight o'clock, and then again at four o'clock in the afternoon. They do not like to eat in the dark, unless it is a little in the middle of the night.

SWINE, owing to low prices, have been much neglected. It is a good time to engage in raising improved breeds of pigs. The demand is now good, and is likely to be still better. Pork has advanced rapidly, and the prospects are favorable for a still further advance. Get a good breed, and give good care and feed, and pigs will be as profitable as any stock we can raise. —*Am. Agriculturist*.

VALUE OF CORN FOR HOGS.—A writer in the Cincinnati *Gazette*, gives the following account of the increased profit of feeding corn on the farm to swine, instead of selling the grain in market. His experience is as follows: In August, 1872, I bought thirty-seven head of hogs at four dollars per cwt., the average weight being 126 pounds. Cost of the lot, \$186.48. On Dec. 10, when I sold them, the average weight was 270 lbs., or a gain of 144 lbs. per head. They ate twelve bushels of corn apiece. This, at twenty-five cents per bushel, would be three dollars. The total cost of the hogs, when fattened, was, therefore, \$267.48. I sold them at four dollars per cwt., amounting to \$399.60. Balance in favor of feeding, \$101.12. By feeding my corn, it brought me nearly forty-eight cents per bushel.