

Among some of the best for eating are the *Sugar* and Red Turnep rooted.

Parasips should be planted as early as possible in drills, like beets, and in common with all root crops require a well manured soil.

Parsley should be sown early in drills one foot apart and one inch deep.

Salsify, or vegetable oyster, requires the same treatment as carrots and parsnips.

Onions may be sown about the middle of April, and buried half an inch deep in drills twelve inches apart. When of suitable size they are to be thinned to a distance of two or three inches in the drill. One of the best varieties is the *Silver-s* in red; The *Strasburg* is good for a general crop.

Lettuce may be sown as early as desired, either in a hot bed or in open ground.

Egg plant may be sown in a hot bed, the sash to be closed to keep it up. In the middle or at the end of May, the plants are to be set out two feet apart in good garden soil. If transplanted too early it will hurt by frost.

Celery should be sown as soon as spring opens, in drills half an inch deep, and afterwards transplanted into open ground in proper trenches for earthing.

Sea Kale requires a deep rich sandy loam, as the roots penetrate to a great depth, and should be sown as early in the spring as the state of the ground will admit, in drills, an inch and a half deep, twelve or fifteen inches apart, and six or eight inches in the drill. When a year old they are to be transplanted more than a foot apart, and blanched by covering them nearly with sand, gravel, or what is much better, inverted pots. Three or four weeks are required for the blanching.

Tomatoes are best raised by sowing them in hot beds, and afterwards transplanting them into open ground. If the soil is rich, they should stand when transplanted, at a distance of at least two or three feet from each other.

CATTLE.

The best cattle have the face rather short; the muzzle small; the horns fine; the neck tight, particularly where it joins the head; the chest wide, deep and capacious; the tail broad and flat towards the top, but thin towards the lower part, which it will always be when the animal is well boned; the lower part of the thigh small; the legs short, straight, clean, and fine boned, though not so fine as to indicate delicacy of constitution; the flesh, rich and mellow to the feel; the skin of a rich and silky appearance; the countenance calm and placid, denoting the evenness of temper, essential to quick feeding and a disposition to get fat.

Every breed of animals which has, through a few generations (two or three is sufficient) been overfed, requires similar feeding; and the offspring of such animals require and can digest more food than others, who have lived upon little.

All growing animals, including mankind, ought to be sufficiently well fed to preserve health and strength, but never to be stimulated by excess of food. The children of parents, however, who have, through many generations, been well fed, would perish if given no more food than would be sufficient for an Irish or Highland Scot's peasant child.

The chief qualities sought for in cattle are the tendency to fatten on little food, and that to yield abundance of rich milk. The tendency to fatten is indicated chiefly by the capacity of the chest. Animals of all species, says Mr. Knight, all other qualities being equal, are, I think, capable of labor and privation, and capable of fattening, nearly in proportion, as their chests are capacious; but the habits of ancestry will operate very powerfully.

It is the width and depth of frame, says Mr. Berry, which confers weight, and not the

mere circumstance of great height. While equally great, if not greater weight can be obtained with shorter legged animals, they are independently of other recommendations, generally found to possess better constitutions and greater propensity to fatten.

Mr. Knight says, the constitutional disposition to form fat, is certainly hostile to the disposition to give milk. Cows which give little milk often present large udders, which contain much solid matter; and, to inexperienced eyes, a two year old Hereford cow would give a promise of much milk, where very little would be given. A narrow forehead, and a long face, nearly of the same width from end to end, as in the Alderney cow, certainly indicates much more disposition to give milk than the contrary form, which I have pointed out as indicative of a disposition to fatten.

Fat animals are more generally those of the north, where cold diminishes sensibility. Fat indeed, appears to be the means which nature very extensively employs to lower sensibility by interposition between the skin and the central parts of the nervous system. Fat animals, accordingly, have not only less sensibility and irritability of the skin, but of the organs of sense generally. Thinner animals, on the contrary, are more generally those of the south, and have more acute sensibility and exquisite sensation.

In reply to this observation, Mr. Knight says, I do not doubt but you are right respecting the use of fat in cold climates; all sleeping animals, through winter, go to sleep in a fatted state. I do not think that breeds of cows, which give much rich milk, are very hardy. The Alderney cows are what the Herefordshire farmers call very *neesh*, that is, very incapable of bearing any hardship of any kind, and particularly cold, consequently of greater sensibility.

Cows which give much milk have the power of eating and digesting much food, and they require, whilst they give much milk, a very abundant and good pasture. The breeds of cows which give less milk, and present greater disposition to become fat, are generally less *neesh*, and will fatten upon less food. The influence of the *feelings* is very considerable. I have observed that whenever a young Hereford cow disliked being milked by the dairymaid, she soon ceased to give milk; and I do not doubt that, in all cases, if the calves were twice every day permitted to suck after the dairy maid had finished her labor, the cows would longer continue to give milk and in larger quantity.

This tends to corroborate what has been said as to greater sensibility being favorable to milking.

If this led only to distinction of these two kinds as to milking, namely—that of fatness and thinness, and that of smaller and larger organs of sense and greater or less sensibility, it would still be valuable, as showing, either at a later or an earlier period, what we may expect in this important particular. But perhaps its utility may extend still further, and enable us to improve the race.

It may form a basis for our determining whether, in endeavouring to improve a breed, fatteners may most easily become milkers, to some extent; or milkers may, to a similar extent, become fatteners; and what are the circumstances which would most favor such partial interchange, if not absolute improvement. Indeed from these principles I would conclude, that an animal fattening in the north, would become a better milker in the south, where a more genial temperature would render fat less necessary, would increase sensibility, and would cherish the secretion of milk, so intimately connected with that excitement of the reproductive functions which warmer climates produce.

As these two desirable qualities are both dependent upon one system, and as they are opposed to each other, (for excess of one secretion is always more or less at the cost of

the other) they will be most easily obtained by being distinctly sought for, and the animal of diminished sensibility will most easily fatten, while the animal of increased sensibility will most readily yield milk.

These views are confirmed by the conduct of the London dairy-men. While they acknowledge that the Alderneys yield the best milk, they keep none of them, whatever they may pretend, because these animals are peculiarly delicate, and more especially because they cannot, after being used as milkers, be fattened for the butchers. The York and Durham cows suit them best.

In certain constitutions, however, and to a certain extent, there is a compatibility between fattening and milking.

Mr. Knight says, the disposition to give much and rich milk, and to fatten rapidly, are to some extent at variance with each other; but I have seen causes in which cows which have given a great deal of rich milk, have given birth to most excellent oxen, the cows themselves, however, always continuing small and thin whilst giving milk.

I very confidently believe in the possibility of obtaining a breed of cows which would afford fine oxen, and would themselves fatten well; but, as great milkers require much more food than others, the farmer who rears oxen, does not think much, perhaps not enough, about milk, and is in the habit (which is certainly wrong) of breeding his bulls from cows which have become his best, owing only to their having been bad milkers.

In the selection of bulls, besides attending to those properties which belong to the male, we ought to be careful also, that they are descended from a breed of good milkers, at least if we wish the future stock to possess this property.

ROADS.

As the "Farmer" is understood to be devoted to every thing that has relation to the interest of the farmer, I take the liberty of forwarding a few lines on the subject of roads and road mending; than which, there are few subjects which have a more intimate connection with the interests of an agricultural community.

Many of our readers have, from various causes, been very injudiciously located, but as they are now generally the division lines of contiguous farms, and the habits of our people have become conformed to them, it would not be an easy matter materially to change their position; so that we must submit to what we cannot easily remedy; and continue to travel over steep hills, when it would be much easier to go round them, or to approach their summits at a less angle by oblique directions. In the selection of juries to lay our new roads, it would be well for the judges of our courts to display their powers of discrimination, in selecting the most intelligent and enlightened men to be found in the country; and it would not be amiss, if those thus delegated to perform such an important trust, in which not only the present generation, but posterity will have an interest, should be endowed with a full proportion of moral courage, so that they may not be swayed by local or individual predilections to the prejudice of the interest of the community at large.

After roads have been laid out, confirmed by the court and opened in obedience to, and according to law the public are the undoubted proprietors of them, and have the right through their proper officers to the exclusive jurisdiction and care of them, to the full width and length they have been so laid out. Now it must be obvious to every person who moves to and fro in our country, that in numerous cases our highways are much straightened and contracted, and in some instances full one-third of the public right is discovered to be *over the fence*, within the enclosure of some individual, who appears to have more regard to the indulgence