



LABOR.

Toll swings the axe, the forests bow,
The seeds break out in radiant bloom;
Rich harvests smile behind the plow,
And cities cluster round the loom;
Where tottering domes and tapering spires,
Adorn the vales and crown the hill,
Stout labor lights its beacon fires,
And plumes with smoke the forge and mill.

The monarch oak, the woodland's pride,
Whose trunk is seamed with lightning scars,
Toll launches on the restless tide,
And there enrolls the flag of stars;
The engine, with its lungs of flame,
And ribs of brass and joints of steel,
From labor's elastic fingers came,
With sobbing valve and whirling wheel.

This labor works the magic press
And turns the crank in hives of toll,
And beckons angels down to bless
Industrious hands on sea and soil.
Her sunbrowned toil with shining spade,
Links lake to lake with silver ties,
Strung thick with palaces of trade,
And temples towering to the skies.

Sheep Husbandry. IV.

WINTER TREATMENT.

The favorite method with the careless farmer is to feed them at the stack with his young cattle and colts, or let them take their chance in the open yard with the cows and oxen. Here they are hooked about, scared from their food, and not unfrequently maimed or killed. It is thought that sheep can live on the refuse of the yard. But the man who means to make sheep profitable, must have a place for them and attend to their feeding. The Winter is the most critical time with them, and many a flock is more than decimated by neglect. The crows have rich pickings of mutton, and the boys hard pickings of pulled wool, along in the warm days of the opening Spring.

After the snow begins to fly, and the Winter has fairly set in, we are decidedly in favor of keeping sheep in the yards provided for them. It is true there will be open spells when they might pick something from the pastures, but the feeding at this season is bad for the roots of the grasses, and not favorable to the thrift of the flock.

The selection of a location for the sheep yards and sheds, is a matter of very great importance. Whether you feed them for stock or for the butcher, you must have a dry location—if not naturally so, made such by drainage. If the ground is wet, your flock will soon be in trouble. Much of the prejudice against confining sheep to narrow quarters arises from the neglect of this precaution. The sheep have the foot ail, and contract diseases in wet yards and sheds, and the evil is charged to close confinement. The fact is, the sheep is naturally gregarious, and if favored with a dry bed and plenty of fresh air, will thrive in small enclosures quite as well as other domestic animals.

One of our most successful farmers, who sometimes feeds five hundred at a time for the market, confines them to sheds either with a small yard in front, or no yard at all. Sometimes seventy five are shut up in a shed twenty one by thirty six feet, with a yard about eight feet wide on the southern front. But in this case, the shed is well furnished with absorbents for the manure, and is kept littered with straw, and at the back side, a board a foot wide swings upon hinges, so as to keep up a thorough ventilation. With this care the flock thrives and lays on flesh as kindly as if in larger quarters; without it they would do poorly with any amount of room. Sheep must be kept clean and free of foul air. They love the dry atmosphere and the free breezes of the hill tops.

If yards are allowed, some provision should be made for confining them to the sheds in stormy weather. It takes a great deal of food to dry a thoroughly soaked fleece in winter, to say nothing of its bearing upon the health of the animal. It is much better that this food should go to form muscle and fat. The sheds in all cases where it is practicable, should open toward the South, so that the Winter sun may come in upon them as much as possible. The sun has a wonderful influence upon the animal economy. In small sheds and yards, a less amount of straw is needed for litter, and the manure is more easily managed—an important consideration.

The sheds must be furnished with racks and troughs, so that they can be fed with hay, grain, or roots, at the option of the owner. There should be room enough for all the sheep to feed at once.

A rack or feeding box of convenient size for use and for moving, may be made as follows: For the posts, take pieces of any good hard wood, 2 by 2 1/2 inches, six in number; one for each corner, and for the middle of the sides. For siding and ends, take boards twelve feet in length, twelve inches wide for the bottom, and eight inches for the top. This will give you an opening of ten inches for the heads of the sheep, if the posts are thirty inches in length. But they can readily be made a little longer or shorter, according to the size of the sheep you wish to keep. For

the bottom, take three narrow strips of board, one at each end, and one in the middle. Upon these, fasten a board twelve inches wide, running lengthwise through the middle. This is for the bottom of the trough. Upon each side of this, put in a board upon a bevel, extending to the sides of the box. This will make the bottom dishing at the sides, and tight, for holding grain, meal, roots, or any thing else you wish to give them. This box may be made with wooden pins, or nails, but the best fastening is stout screws, about two and a half inches in length. In the moving about, the boxes are subjected to a considerable strain, and screws will be found the cheapest in the end. Such a box as this will accommodate about twenty large sheep. It is easily turned over and cleaned without sweeping, and readily put away for the summer. This kind of feeding apparatus has been in use in this country for at least forty years, and is, on the whole, the handiest contrivance we have ever met with. It will pay any man who keeps sheep, to have enough of these made to accommodate his whole flock. In the common slovenly way of feeding upon the ground, more fodder will be wasted than would pay for the boxes. The sheep is a cleanly animal, and its tastes should be consulted.

SELECTION OF SHEEP FOR FATTENING.

Few farmers raise the sheep they feed for the market. The best districts for raising sheep are not always the best for preparing them for the butcher. The mountainous regions that yield abundance of grass, are not so good generally for grain and roots. The farmers who live near good markets, or whose farms are well adapted to grain and roots, can fatten sheep to better advantage than those who live in a more broken country. But much of the success of feeding depends upon skillful buying. The refuse, cheap sheep of light weight, are not the ones to be fed with most profit. As a rule, it takes no more food to finish off for the butcher a sheep weighing a hundred and fifty pounds, than one of a hundred pounds or less. They will gain much faster, and give you more money for the food consumed. The same constitutional habit that has made them thrifty in the light hill pastures, will make them gain faster in the feeding yards. Therefore purchase the larger sheep, even if you have to give more for them in proportion to their size than for small ones.

FEEDING.

The practice of skillful farmers differs considerably here, both as to time and the articles of food consumed. Some feed thrice daily, others four times; viz., early in the morning, at 11, at 1, and at evening. Whatever times are selected, the feeder should be on the spot at the appointed hour. Regularity in feeding is a prime element of success in the fattening of all domestic animals.

In the change of the flock from the pastures to the yards, care should be taken not to over feed them with grain at first. The quantity of meal, grain, or oil cake, may be gradually increased from a handful up to a pound for each sheep daily, beyond which quantity it is not ordinarily profitable or safe to go. Too high feeding with meal or oily food, sometimes leads to sudden death, and the butcher loses his mutton, and you lose your profits.

The sheep, as well as any other domestic animal, loves a variety of food, and will do much better upon three sorts daily, than upon any one. Whatever bill of fare be made out for them, clean sweet hay should always be the staff of life. They are very fond of turnips, and these may form a part of the daily food, both in the Fall, before they come to the yards, and while they are in confinement. Carrots, beets, and other roots are also highly relished. Some one of these will profitably form one of the daily meals. For fattening, they also need some kind of oily food, as oil cake, cotton seed cake, or Indian meal, or corn. They relish almost all the grains, and these may be fed to advantage where the farmer raises them, or can buy cheaply. The straw of the grains, oats, wheat, and rye, if run through a cutter and mixed with a little oats, or meal, can be profitably fed. Beans are an excellent feed, and are more greedily eaten by sheep, than by other kinds of stock. The need neither boiling nor grinding. Indeed, there seems to be no profit in grinding any of the grains for this animal, so perfect is its mastication.

SHEEP MANURE.

One great advantage of putting sheep under sheds in the Winter, is the large quantity of manure you are able to make by the process. You can use all the muck that is desirable, without any danger of miring the sheep as in the case in large open yards. The whole area of the shed and small yard attached, may be covered to the depth of a foot or more with muck, and not an ounce of the manure, liquid or solid, need be lost. This muck should be kept covered with straw, or refuse hay of some kind; so that the sheep may be dry at all times. In the books this manure stands high among fertilizers, and judging from what we have seen of its effect upon crops, it is not at all over-estimated. It is quite equal to the manure of the sty. While in the yard and trodden by the feet of the sheep, it is in no danger of fermenting. In the spring when the yards are cleaned out, if it be not immediately spread upon the soil and plowed in, it should be mixed with additional muck, as it is very prone to fire-fang.

PROFITS OF SHEEP HUSBANDRY.

It would perhaps be too much to say that no animal pays better upon the farm than sheep. The amount of profit will depend something upon location and upon the charac-

ter of the farm. Where the circumstances are favorable, we are confident it will pay well enough to keep sheep and to feed them for the butcher. This business is attracting more and more attention in the North and East every year, and mutton enters more largely into the family marketing. Many of the farmers on the Connecticut, in New-Hampshire and Vermont, are feeding all the grain they can raise to sheep. They buy wethers, and put them up about the 1st of December, feeding on cob meal and oats for grain. In March they shear them, and send to market when they will weigh 150 pounds and upward, and will bring from four to six cents a pound live weight.

A TREATISE ON HORTICULTURE.

BY E. SAYERS, HORTICULTURIST.

No. 17.

CULTURE OF THE RHUBARB OR PIE PLANT.

There are two distinct varieties of Rhubarb—the *Rheum palmatum*, or hand-shaped, and the *Rheum ponticum*—or triangle leaved. The first is known as the Turkey Rhubarb and the roots are cured in its native country, Turkey, for medicinal purposes.

The *raponticum* is the variety cultivated in our gardens for domestic cookery. Of this there are several varieties, which have been produced from seed—all of which require precisely the same treatment. For seedlings, in this locality, the Victoria is the best. All the different varieties are extremely hardy—the roots bearing the most severe winters in this latitude without injury when properly managed.

CULTURE.

The plants require a deep, rich, mellow soil to roam into, which should be dug deep and a quantity of well-rotted manure mixed in before planting out the roots.

Rhubarb is a very gross feeding plant and requires much nutriment to grow into a good perfection. In poor, meagre ground the stalks are always small, tough and unfit for use. The more luxuriant the stalks are grown the more tender, juicy and palatable they will be when used in cookery.

PROPAGATION.

Rhubarb is increased by two methods. First, by seed; and secondly, by dividing the roots. Seedling plants are to be preferred to cuttings or dividing the crown or main root, for the reason that a seedling has the top or crown of the root entire, takes better hold of the ground and makes a good plant the first year of planting; whilst a cutting or part of a crown requires at least one season to make new roots and form into a good plant. The practice of dividing roots is, however, necessary with the Giant and other large growing varieties that do not produce seed and have to be increased by dividing of the roots.

SOWING THE SEED.

The seed should be sown as soon as it is ripe, and not allowed to become too dry before planting. Indeed it always germinates best when taken fresh from the plant and sown immediately into a bed of rich mellow ground, with a good portion of well rotten manure mixed therewith. The bed should be kept moderately moist, and the plant be kept in a good, healthy, growing condition for final transplanting by the 1st of November.

Rhubarb should always be planted in the fall before the close of winter. By doing this the plants will be well established in the ground and make a good start early in the spring.

PLANTING OUT THE BED.

Having the ground well prepared, mark off the hills in rows 4 feet apart each way; take out a few spades full of earth to each and fill it up with a compost of half well-rotted manure and half of good, mellow loam, and if a portion or sand is mixed therewith the better.

Having the hills prepared, the plants may be inserted—one plant in the centre of each hill—being careful not to plant too deep. The crown or top of the root should be a little below the surface or level of the ground.

When winter closes, it will be well to cover over the top of the plant with a little well-rotted manure to preserve it through the winter.

In the spring the bed should be either forked or spaded over to make the ground loose and mellow.

THE GENERAL CULTURE

Of the pie plant is simply to keep the ground in good mellow condition. Keep down the weeds, allow no other vegetables to grow among the plants and apply a good dressing of manure, to be put around the roots in the

fall, to remain through the winter, to be dug into the ground in the spring.

Early in the spring it is a good method to cover the crowns of the plants a few inches with old tanner's bark or light rotten manure, in order to forward the young shoots; it also has a tendency to make the stalks crisp and tender.

The ground should be regularly irrigated while the plants are in a growing state, being careful always to keep the crown or top of the plants a little above the level of the surface, in order that the water may not soak into the heart, which often is the cause of the whole plant rotting. Care must also be taken not to permit the plants to become too dry, which is often the cause of the plants wilting and sometimes dying; indeed the plants are very tenacious of too much water or being too dry. Either of these extremes greatly injures rhubarb in a growing state.

It should be a general rule never to pull any stalks the first year after planting, which always weakens and injures the young plants. Care should always be taken never to pull off too many stalks at once, so as to leave the crown of the plant too bare, which is often injurious to its growth. The crown or top of plants of rhubarb should always be well shaded with its own leaves, to be in a healthy condition.

USE OF PIE PLANT.

There is no vegetable more extensively cultivated, nor applied to a more useful purpose than the stalks of green rhubarb. It is healthy, pleasant to the palate, and used by the housewife, either in pies, puddings or sauce, as a substitute for green apples, gooseberries, apricots and almost all kinds of green fruit, partaking of a similar flavor and cooked in the same manner.

PREPARATION.

It is also readily prepared by simply washing the stalks, slitting them down the middle and cutting it into pieces about an inch long, when it is fit for use.

Some people take the trouble to take off the skin or rind of the stalk, which is useless if it is crisp and tender; indeed the skin contains the best part of the stalk, having the best flavor.

PRESERVING AND DRYING.

Besides the present use of the stalks, they can be preserved in the same manner as green fruit. The stalks can also be dried the same as dried apples, by slitting and cutting into small pieces and drying in the shade.

WINE-MAKING, ETC.

Rhubarb is also converted into excellent wine and vinegar by the same process as is applied to currants and other fruits, in some countries extensively. It can also be converted into the same useful purposes in this Territory.

THE ROOT

May also be applied for medicinal purposes, as the rhubarb of the shops—the only difference being that our cultivated rhubarb is not so powerful and requires a larger dose.

The fall is the best time for curing the roots, when they have been fully matured. They should be taken from the ground and cleaned by hand—not washed, which takes out a portion of the virtue of the root—slit down the middle and laid in a room to dry gradually, when they may be put away for use.

Sir John Hill, M.D., in his excellent work, "The Family Herbal," says of the Rhapontic Rhubarb: "The root is the part used, and this is what the ancients used under the name *rha*. It is of the nature of rhubarb, but different in this, that it is less purgative and more astringent; for this reason there are many purposes which it would answer. We have it at the druggists, but there is no depending upon what they sell, for they seldom keep it genuine."

Priced List of Scions or Grafts of Fruit Trees.

In consideration of the repeated demand for scions or grafts of the different varieties of imported and choice seedling fruit, the Domestic Gardeners' Club have resolved,

That, in order to encourage the introduction of choice varieties of imported and seedling fruit trees, they will adopt the following List of Prices for the sale of grafts and scions (of from 10 to 12 inches in length):

Of choice scarce varieties, 25c. per scion.
Scions of the general leading varieties, 10c. per scion.

For 1 dozen leading varieties, \$1 per doz.
For 100 do, \$3 per 100.