

Storing Roots for Winter.

For harvesting and securing roots for winter-feeding the month of November is the time. Some of the root crops have been already removed from the ground. Potatoes are secured—at least they are taken from the ground where they were grown, if not stored in the cellar or root-house. Mangel wurzel not being so hardy as turnips are generally taken from the ground in October, lest they might suffer from the early frost, but they are, for the most part, piled in heaps in the field and covered with leaves, where they are left for some days to sweat before they are put into the root-house or pit. This sweating process is carried out by many good farmers with turnips as well as mangels.

It is of great importance in securing roots for the winter that they be kept at such a temperature as to prevent heating on the one hand and freezing on the other.

In some parts of the country little is known by farmers of the culture or care of roots for winter-feeding their stock. For them some brief directions on storing cannot come amiss. The primitive way is to place them in long heaps on the surface of the ground, and cover them with straw, and cover the straw with earth. The pile may be of any length most convenient, and about four feet in length, tapering to the top. Due precautions are necessary to secure sufficient vent for the escape of the heat produced by the heaping together of a quantity of fresh-dug roots, and the gas caused by their fermentation. The covering of earth should be sufficient to save the roots from frost, and a drain should be made to carry off any water.

It is better to store roots in well-constructed pits where the ground is perfectly dry. These pits may be dug from two to three feet deep, and from four to six feet wide. What the length may be is immaterial. The floor of the pit should be graded so that no water can lodge in it; and drains should be dug round it in such a way as to prevent any water from lying about the pit. In our climate it is better to have the pit extending east and west that both sides may have an equal temperature. It is well that the layers of roots have the space between them filled with dry sand or earth to absorb the moisture and preserve them in a fresh condition. The roots should be piled up to a ridge, as when piled on the surface, and boards placed so as to cover the sides of the pile, if they can be had. Over the pile so prepared, there is then placed a good covering of straw; then cover with earth—a light coat at first till the heating and sweating of the roots are over, and then earth enough to keep out the frost. Chimneys made of boards should be formed at regular intervals through the covering, connecting with the roots to secure perfect ventilation. They should be closed in very cold weather as a preventive against frost.

These chimneys or pipes can be made out of inch boards, such as are used in fencing, four inches and two inches wide. Two opposite sides should be some inches longer than the other two, and over these longer ones a board may be nailed to keep out snow or rain.

Potatoes may be stored in the same way as roots for stock-feeding, if there be not a root-house or room enough in the cellar. Potatoes that are to be kept till spring keep, if properly pitted, fresher than in the cellars, whether intended for table use or seed. We have found it so. But they must be pitted when dry, and the storing done in workmanlike manner. The greatest disadvantage attending this method of storing roots is the difficulty of getting them when wanted during the winter. On this account a root-cellar or a field-cave is preferable to pitting.

Veterinary.**Vertigo (Megrims).**

A correspondent wishes some advice as to "staggers"—"Is there any preventive, any remedy, when attacked?" We give space to the following reply on the subject from the *N. Y. World* :—

Where acute attacks of vertigo (megrims) have been neglected and allowed to come and go of their own accord without resorting to effective remedies for removing the direct primary cause producing the attack their eradication would prove very difficult. Effective preventives of an attack of this disease are of far more value, utility and profit than all the pounds of cures imaginable. The seat of the disease is located in the stomach. There has been neglect in the dietary and general stable management of the animal attacked with disease now under consideration. The consequent result of this neglect and oversight is a disturbance of the brain-function and the nervous system, and the disease therefore must be considered as incurable so long as the brain-function and nervous system remain in this abnormal and pathological condition. Regularity in the hours of feeding and watering, sound and sweet grain-food and provender, pure and soft water given in sufficient quantities only as the occasion requires, will prove the most efficacious treatment and preventive of an attack of vertigo I know of. But when this rule of reasoning has been neglected, overlooked and consequently disobeyed, attacks of vertigo are the result. Hence the stomach of an animal developing the slightest diathesis to an attack of vertigo should never be allowed to become distended with provender. In these cases it should be kept in rather an empty condition. Immediately after the first attack of vertigo and when the animal has so far recovered from it as to be conscious, a mild laxative drench is requisite and should be administered. The following is adapted and will be found efficacious :—Twelve ounces raw linseed oil; two drachms finely pulverized pure Cape aloes, and one drachm of *antimonii et potassa-tartrass*. Incorporate well together in a common drenching horn, or a smooth-necked champagne bottle, and after elevating the head well pour the drench slowly and gently down the throat. Repeat the drench three times, allowing five days to intervene between each dose. The solid food given the animal while under treatment should consist of equal parts of purely sweet and sound bran and oats, made into a mash and properly seasoned with salt. Not more than six or seven pounds of this mash food should be fed at any one time, and not more than three times in every twenty-four hours nor more than six quarts of pure, soft and fresh water given at any one time, nor oftener than three times in twenty-four hours. When water is craved oftener and in larger quantities it should be acidulated with cream of tartar; two drachms of the latter well mixed in six quarts of water will be a sufficient quantity. Small messes of carrots or Swedish turnips, well washed and sliced, will be found very beneficial to feed twice daily. If the season permits the animal should be turned out on short pasture. But in all cases where dry hay or provender has to be fed, not more than one-half the usual allowance—seven or eight pounds per diem—should be given. No corn or other heavy grain, whole or ground, should be fed.

Disease of Liver and Mesenteric Glands in Cattle.

The *Country Gentleman* recommends the following :—"Give the following at one dose :—Linseed oil, 1 quart; tincture of opium, 1 oz.; tincture of aconite, $\frac{1}{2}$ dr.; mix. Afterwards give every other day for a week the following, in thick linseed gruel.—Powdered opium, 1 dr.; calomel, 1 dr.; tincture of aconite, 20 drops. Then give twice a day the following in 1 quart of warm stock ale :—Powdered gentian, $\frac{1}{2}$ oz.; powdered ginger, 3 dr.; caraways, 1 oz.; powdered ammoniated sulphate of copper, 3 dr.; mix. The best food is a great necessity, and of that which is easily assimilated. Oil-cake, cotton-seed cake, oatmeal flour and good hay are the best. But in some cases the mesenteric glands are so disordered in function that no treatment is beneficial for more than a brief period.

The Horse.**The Horse for the Farm.**

In stock breeding the farmer should have some definite object in view. In this department, as in many others, there is too little attention paid to this important matter. A farmer breeding young horses to work on his own farm should endeavor to have such as are most applicable to it. If the farm be a heavy clay soil, the horses for the plow should be heavy in proportion to the soil, but in no case should the farmer's horse be a dull, sluggish animal. He should be of high spirit and mettle, inherited from his sire. A writer in the *Rural New Yorker* says : "The slow, heavy horse is no horse for the farmers in these times. A medium-sized, active animal that can go from eight to ten miles per hour on the road, and haul two tons per pair on the fair, is the farmer's horse."

Judging Draft Horses.

We deem this a good time to enter a protest against the prevailing custom of judging draft horses in the showing mainly with reference to weight, as one would judge a group of fat oxen prepared for the butcher's block. In the latter case, the quantity and quality of the meat are the primary considerations; but we fail to see why such a test should be applied to the former. We don't eat horse flesh in this country, consequently mere weight of carcass is of no value except as it gives greater ability to draw a heavy load; and if this weight be made up simply of an accumulation of adipose tissue (fat), it is a positive cumbrance rather than a help, and should be judged accordingly.

There can be no question that the size is an important feature in a draft horse; but to be of value, the desired weight must be made up of other tissues than fat. Bone and muscle must form an important part in making up this weight; and even here we cannot depend upon the tape lines nor the scales in making an award. The quality of each is a vital consideration. If the indications are that the bony tissue is of a soft, porous nature; if the joints are gummy and defective, or the muscles flabby and ill placed; the hoofs flat and brittle or too much contracted; or if the disposition be sluggish and dull, like that of an ox, no amount of mere weight should be permitted to atone for such serious defects.

A good draft horse must possess strong vital organs, which fact is usually indicated by the form and relative size of the trunk. His joints and legs must be strong and perfect, free from curbs and spavins, the skin lying close and firm to hard and elastic cords, with an entire absence of "beet" upon those parts. The feet should be large, neither flat nor mule-shaped, the horn hard and elastic, but not brittle. The bottom of the foot should be examined to see that it possesses the desired concave appearance, and that the frog does its work perfectly, because it is in the feet that our heavy draft horses are most notoriously defective. As we have said in a former number of the *Journal*: The principal requisite of a good draft horse is, good size, made up without a superabundance of fat; but to this must be added, docility, soundness, and endurance. Given all the valuable qualities above described, in perfection, and then the more of action and style he possesses, the better. He may be nearly perfect in all respects, and yet be too small to be classed as a first-class draft horse. On the other hand, he may weigh a ton, but if the weight be made up mainly of fat, or if he be ill-tempered, unsound, or lacking in endurance, his value is materially lessened. He may possess all the points above enumerated and yet be so deficient in energy, and so heavy and sluggish in his movements, as to come far short of a perfect draft horse.—*Live-stock Journal*.