

## Agricultural Columns.

### BARNYARD MANURE.

#### Construction of the Manure Heap—The Use of Preservatives.

Careful construction of the manure heap so that air will be as completely excluded as possible, keeping the heap moist and avoiding alternate wetting and drying have been suggested as means of preventing loss of valuable fertilizing constituents and of promoting a decomposition which will largely reduce the power of the manure to convert available nitrogen into less valuable or useless forms (denitrifying power) in the soil. Here we have an explanation of the effectiveness of well rotted manure. Not only is the availability of its own nitrogen increased, but its power to injuriously affect available nitrogen from other sources is reduced.

Authorities agree that management of the manure heap is more important than the use of preservatives. Kainit has been found to be effective in checking the formation of ammonia, and superphosphate in preventing its escape. The use of these is to be recommended where they can be cheaply obtained, because, in addition to preserving the manure, they add to its constituents (potash and phosphoric acid) in which it is somewhat deficient. Caustic lime has been found effective in destroying the denitrifying power of manure above referred to, but there are objections to its use. It has a tendency to drive off ammonia from organic matter such as manure. However, if the lime is applied to the fresh manure the danger of loss from the escape of ammonia has been found to be very small. It is only after fermentation has commenced in the manure that the danger of loss on application of lime becomes serious. It has been suggested that it might be safe and economical to mix caustic lime or marl with the manure to destroy its denitrifying power and to cover the heap with earth to prevent the escape of ammonia. A second objection to lime is that it tends to convert the available nitrogen of manure into insoluble and less available forms, but this tendency is, in a measure, compensated for by the fact that in addition to destroying the denitrifying organism, as already explained, the lime promotes nitrification, or the formation of nitrates, when the manure is applied to the soil. Lime should not be used in connection with superphosphate. Bisulphide of carbon almost entirely destroys the denitrifying organism, but its use in practice is not recommended because of its expense. Sulphuric acid has proved very effective, not only preserving the fertilizing constituents, but increasing the availability of the nitrogen, but its general use can hardly be recommended. In addition to the foregoing interesting information based on results gained in experiment station work a United States department bulletin adds:

One point which has been clearly brought out by recent investigation is that the addition of straw may very decidedly reduce the fertilizing value of manure, the

injurious effect being greater the larger the amount of straw used. This is explained by the fact stated above that straw contains organisms which convert the available nitrogen in manures and in the soil into forms which the plant cannot utilize. The excessive use of straw as litter under animals should therefore be carefully avoided if the most effective manure is desired.

#### Shredding Corn Fodder.

A correspondent of Country Gentleman offers these suggestions to beginners in shredding fodder: 1. Cut the corn as early as practicable and set it up to stand well and tie the shocks well. 2. Let the stalks get dry enough so that no juice will appear when it runs through the rolls. 3. Provide two or three platform wagons, about 7 by 16 or 18 feet and as low as possible, with ends 3 feet high, on which to haul the corn to the machine. Do not attempt to haul on common, narrow, high hay riggings. 4. When the corn is dry and before fall rains set in, get at it and rush, rush, until all is husked and shredded. The cost will exceed the cost of husking by hand slightly.

#### Winter Grain After Potatoes.

Wherever the potato crop can be got off in time for seeding with fall grain it makes the very best seed bed, according to American Cultivator. "No plowing is needed if the weeds have been kept down. It is only necessary to pile the potato vines in heaps and burn them, starting the fire in a brush heap, if the potato tops are too green to burn readily. A great deal of plant food is developed after growing a crop of potatoes. It is largely nitrogenous, as the potato crop is chiefly water and carbon, with some potash, which is mostly found in the potato tops."

#### Best Time to Sow Rye.

Time is regulated somewhat by latitude and elevation above sea level. Dixie Farmer says: The warmer the locality, the later it should be sown. In such localities early sown rye is liable to be attacked by rust. In middle Georgia the first week in September is a good time. In the northern portion of the state it may be sown in August, and in southern Georgia the 1st of October. For raising seed a half bushel to the acre is sufficient, for pasture or mowing 1½ to 2 bushel per acre.

#### The Autumn Crops.

The first question to be considered is, What should be embraced in the list of autumn crops? Here is what Southern Cultivator says in reply:

Oats stands first and foremost in the list, because they can be sown in every part of the cotton states irrespective of climate or soil and because they should constitute the leading grain for work animals. Next in importance is rye, because it can be sown also universally and is beyond comparison the most reliable crop for winter grazing and soiling in early spring. For similar but not quite so strong reasons we should place barley, then wheat, then, in

the more elevated localities and stronger soils, red clover and the perennial grasses, and, lastly, the turnip, more especially the ruta bage.

#### Ripe Tomatoes for Christmas.

A correspondent of American Agriculturist writes: "Before frosts come pick all sound, green fruit from the vines and carefully wrap each one separately in a 6 by 9 inch sheet of white wax paper, taking care not to twist it as in packing oranges. Spread out in a single layer on trays or in shallow boxes and place in partial light in a cellar. To hasten ripening they may occasionally be exposed to the sun half an hour at the time. Once a week I examine and pick out the red ones and those that may decay. This may be done easily, not necessitate unwrapping. Thus I have a constant supply of plump, palatable and beautiful tomatoes till Christmas usually, with but trifling expense and trouble."

#### Blanching Celery.

The old method of planting celery in trenches and blanching the stalks by piling soil around them is not much practiced now. Various expedients have been devised to blanch celery cheaply. Much the best we know is to have the celery planted as nearly as possible on a level surface. When the stalks are large enough, place wide boards against the celery, holding them from falling by piling soil against the outside of the board protection. This will blanch the stalks and leaves without causing rust, as soil is sure to do in a rainy season.—American Cultivator.

#### Fall Sown Wheat.

A big acreage of fall sown wheat is being planned for by many farmers. American Agriculturist says in this connection: "We say don't. Present and prospective high prices will probably stimulate an enormous sowing of wheat this fall and next spring, not only in the United States, but throughout the world. Just this was done after the high prices of 1891-2, and it caused a world's overproduction of wheat which has just been reduced to normal proportions by a short crop in foreign countries this year, following a reduced yield last season. Low prices are as likely to follow big supplies of wheat next year as during the past few years."

#### Measuring the Height of Trees.

It is a very simple matter to get the height of a tree when the sun is shining. If a person 5 feet in height throws a shadow 10 feet, he may be reasonably sure that a tree with a shadow 100 feet is 50 feet high. Any school-boy with the knowledge of arithmetical rules of proportion can get the height of a tree in this way without difficulty, according to Meehan's Monthly.

#### Keeping Cabbage.

The old plan of burying or putting cabbage in trenches during winter or for winter use has become obsolete, and a more simple and easy plan has been adopted. American Gardening says: "Where cabbage is grown on a large scale for shipping purposes the best plan is to lift the cabbage and stack them two tiers deep and as closely as they can be placed in an orchard, or wood if

convenient, and cover with leaves to the depth of two or three inches, the leaves to be kept in place by a slight covering of earth. In this way the heads will keep perfectly sound all winter, and they can be easily taken up as wanted for shipping.

"For family use cabbages can be kept in the same way, only it will not be necessary to make the second layer. It is quite important to keep them below the freezing point. It has been suggested to keep them in some convenient building, but this plan has always resulted in failure, as the dry atmosphere is fatal. Cabbage must be kept moist and cool. The slightest wilting renders it unfit for the table."

#### Things That are Told.

It has been proved that red and white clover, orchard, tall oat, herds and blue grass can be grown in the upper portion of the Carolinas, Georgia, Alabama and Mississippi as well as they can be in Virginia, where limestone soils prevail.

It is reported that the Florida Fruit Exchange estimates the coming orange crop at between 150,000 and 200,000 boxes.

The practice of fodder pulling is firmly established in the south and promises to continue for some time to come.

On fairly good land rye may be relied on for fall and early spring grazing or for cutting and feeding grain.

#### THE OHIO SENATORSHIP.

#### McLean Not a Candidate—Will Support Any Good Democrat.

Columbus, O., Sept. 30—John R. McLean, his nearest friends declare, is not a candidate for the United States senate. Mr. McLean has had a conference with the State committee and his friends say he spoke as follows:

"I am not a candidate for the United States senate. I am merely a good Democrat, and wish to see the Democratic State and legislative ticket successful. In the event that the legislature is Democratic I hoped to see some good Democrat elected to represent this State in the United States senate. I believe General A. J. Warner is a good man for this place. For this matter, there are half a dozen men in the State who are as well known and as able as General Warner. I would be glad to see any one of them elected."

#### STATE'S OYSTER BEDS.

#### Portion of Them Leased for the Coming Twenty Years.

The State sinking fund commission yesterday held a meeting which continued nearly all day. A great many matters of no public interest were disposed of, numerous discharges of property taken for delinquent taxes being granted upon the liquidation of the claims of the State.

The board considered at some length the application of Mr. L. C. Lachicotte for a 20 years lease of the State's oyster beds located in a branch of Murrel's inlet, giving him the exclusive right to plant and gather oysters therefrom. After much discussion and investigation the board, by a vote of 3 to 2, decided to grant the lease.

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