

# South Jersey Republican.

VOL. 3 NO. 11 HAMMONTON, N. J. SATURDAY, NOVEMBER 9, 1867. 200 PER YEAR

**Advertisements.**  
Advertisements inserted at the following rates, a square being one inch.  
For the first week, 25 cents.  
For the second week, 20 cents.  
For the third week, 15 cents.  
For the fourth week, 10 cents.  
For the fifth week, 7 cents.  
For the sixth week, 5 cents.  
For the seventh week, 3 cents.  
For the eighth week, 2 cents.  
For the ninth week, 1 cent.  
For the tenth week, 1 cent.  
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For the hundredth week, 1 cent.

## AGRICULTURAL.

### How to Increase the Manure Pile.

This is a question of the solution of which is of vital importance to all economical agriculturists. Much has been written in relation to the farmer's resources for farm manure, and very much more remains to be written before all his resources will have been improved and exhausted. The ordinary person, let him turn which way he may, can scarcely fail of seeing the greatest negligence and waste of which the general farmer can be accused, in the neglect to save and apply fertilizers, or matter that may be turned into such, and until these wastes are economized, the soil will fail to produce to the greatest capacity it is capable of, as a reward to the labor bestowed thereon.

Nature does not work in this way when not interfered with by man; she always furnishes her workers the means to accomplish all her requirements. If we refer to her mode, we shall see that she first sows the seed, and this comes up a small and tender plant, requiring but little to nourish and sustain it, and a portion of that little is furnished by the air which it breathes, and at the end of the growing season the foliage is annually shed, and falls around the roots to protect them, in case they are perennial, and to decay and become incorporated in the soil, to furnish future nutriment for an increased vegetation. This is the way nature acts; she always gives more than she takes. Can we do any better, or improve upon her teachings? Yet how few there are who act as if they respected nature as our best teacher. Unless we return to the soil at least some proportional amount of the matter withdrawn by our crops, the most fertile of virgin soils will become exhausted of its fertility in the course of years. True, much is gained by rotation of crops, deep plowing and thorough culture, but nothing can be substituted that will entirely compensate for the elements withdrawn from the soil in the crops, except a return to the soil of substances which will furnish those elements, and to provide as far as possible those substances is one of the important duties of the economical farmer.

Manures, when applied to the soil, act in various ways, and differently on differently constituted soils; hence it becomes the farmer to understand the why and wherefore farm manure in a certain state is applicable to one soil, while it produces no effect, or if any, a deleterious one, on a different soil. It is only by the decomposition of animal or vegetable substances into their original elements that they can furnish food for a future growth; in this decomposition many chemical changes took place which it is not necessary to here notice. If this decay goes on in the soil together, it is slow; yet the soil, if a close and heavy one, is acted upon mechanically, as well as otherwise, in having its particles separated, and thus benefited, whereas, if a light and loose one, a disadvantage instead.

The greater quantity of humus a soil contains, in a state of natural decay, the better prepared it is to support vegetation—the greater its capacity to absorb and retain heat and moisture, essentials in support of plant growth. The great source of this humus of the soil, is animal and vegetable substances, and as these substances are unequal in their decay, it is better to mix them; the animal putrefaction proceeding rapidly tends to hasten the rottable, while the vegetable tends to temper the animal, thus together benefiting each. In this decomposition gases are evolved which are essential to vegetation, and which, if allowed, pass off in the air, and are lost. Heat is also developed in the process, which needs tempering, or the life principle of the manure is lost, and instead we have only carbon, a principle important as combined with other elements, but alone, in its material state, of small benefit to vegetation. To regulate this and absorb the gases evolved, substances should be added, which, while uniting with or absorbing them, will so regulate the evolution of heat, that no ill effects will result. Muck, peat, loam, and other like substances, are capable of absorbing and retaining the gases evolved, and at the same time regulate the combination as well as furnish important elements of plant nutriment.

To derive the greatest advantage from composted and fermented manure the decomposition should be undergone under a shelter from the effects of sun, winds, and rain, as many and all of these carry off or destroy much that is saved when sheltered. Of the various substances used in composting with animal excrement and substances, perhaps there is none superior to good dry muck, while it absorbs the liquid it also drenches the manure with which it is composted, absorbing and retaining the ammonia and other gases, ready when applied and mixed with the soil, to impart the same to vegetation. It is this which is mixed with night-soil in the manufacture of poultice, rendering the night-soil manageable and easy of transportation and application. The muck being composed largely of decayed vegetable matter, is a useful addition to the animal matter; of itself, when free of acids, or nearly so, as it generally will be when thrown out in low piles and left exposed to the action of the air, rains and frosts of a year or two, it is of great benefit when applied to light or sandy soils, or any soil deficient in vegetable matter.

The fall of the year being a more leisure time with farmers, and the ground being usually drier than at other seasons, is the best time to dig muck, peat, &c. In quantities sufficient to be used freely as a do-dorizer anywhere about the premises where it may be wanted, and to mix with the yard

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