

green sand beds, suitable for manure, are only known to crop out at comparatively few localities.

5th. That the lowest portions, which, in New Jersey, are the best, may be expected to be found near their northwestern border resting upon the clays, Nos. 21 and 22.

During the early part of last winter I paid a visit to New Jersey for the purpose of examining the extensive marl pits, near Blackwoodstown, in Camden county. I noticed there a section formed by cutting to a depth of about thirty-six feet, of which the upper sixteen feet, consisting principally of siliceous and feruginous sand containing a few shells, was thrown aside. That portion used as manure, the remaining twenty feet, consisting principally of pure green sand without shells, and a small proportion of common siliceous sand.

Immense quantities of this have been taken out from this and numerous other pits in this formation, which extends from near Sandy Hook, in a southwest course, to Salem, and through Delaware into Cecil county, Maryland.

It is largely used in New Jersey, and is also exported to Pennsylvania and New York.

During the time of my visit teams were being laden to transport it a distance of twelve miles. The quantity applied was usually twenty tons to the acre, whilst some used as low as ten tons and others thirty tons per acre.

Some parties, I was informed, hauled it eighteen to twenty miles, so well are they satisfied of its value.

The very inclement weather of last winter, during the only time I could spare from other duties to visit New Jersey, prevented me from fully investigating the agricultural value of the green sand. When we find the farmers of that State (after an experience of more than fifty years,) continue its use, and at so large a cost to those residing ten to twenty miles from the marl pits, we may be sure of its advantage to them, but before I can venture to speak fully upon the subject, it is my intention to visit that region again and attempt to determine its value by the experience of those who have extensively used it.

We can well understand why, in the *very* sandy soils of a portion of New Jersey, this material, so rich in silicates of potash and iron, should be useful, but it is by no means, certain, owing to the almost total absence of lime, whether it will be as effective upon most of our soils, although it may be useful to some of them.

While the Jersey green sand usually contains little or no lime, owing to the absence of fossil shells, the Maryland article abounds in shells and will doubtless be found to contain a much larger proportion of phosphoric acid, which, in the Jersey green sand, is rarely equal to one per cent. Unfortunately the lower green sand of Maryland, so far as has