

ally received in Baltimore, more than three-fourths of which are opened in that city for home use and for exportation. There are left at least four millions of bushels of shells which are calcined into lime, and used for the soil principally of the tide-water districts.

The recent oyster shell is composed principally of carbonate of lime, with about $1\frac{3}{4}$ per cent. of phosphate of lime, and a small portion of animal matter. As it loses nearly half its weight in being calcined, the lime itself contains $3\frac{1}{4}$ to $3\frac{1}{2}$ per cent. of phosphate of lime, and its great value as a manure is in part owing to this fact.

It should be remembered that as oyster-shell lime only weighs about 50 pounds to the bushel, and therefore should be used in nearly double the quantity that would be required of stone-lime, which, when fresh, weighs about 90 pounds per bushel.

CHAPTER IX.

Marl.

The term Marl, in Britain, is applied to beds of clay or other fine earthy matter containing a mixture of carbonate of lime, and which will crumble down or disintegrate, upon being exposed to the weather.

In this country a wider signification has been given to the term, thus the green sand, so much used in New Jersey, is called Jersey marl, blue marl, or green marl, although it is generally nearly free from lime.

The extensive deposits of marine shells, in many of the tide-water counties of Maryland and Virginia, have received the name of Shell marl.

Our attention will be first directed to the green sand.

The lower green sand of our State is one of the upper number of what the geologists term the cretaceous group; implying that it was deposited during the era of the formation of the chalk beds of Europe. Our green sand is precisely similar to that of Europe, but the chalk beds do not exist with us.

The area occupied by the older or cretaceous green sand, in Maryland, has not yet been finally determined, but it exists in considerable amount in the southern part of Cecil and in the northwestern parts of Kent county.

It has been obtained, in many localities, upon the headwaters of the Bohemia and Sassafras rivers, and has been