

improved, retain their improvement with great tenacity and have convenient access to limestone, one of the permanent sources of fertility, at very cheap rates.

Though the soils of this section vary greatly in productiveness, yet they may be referred to the following general varieties :

First, Red Isinglass Soils ; second, White Isinglass Soils ; third, Clay Limestone Soils ; fourth, Mica Slate Soils ; fifth, Slate (roofing) Soils ; and sixth, the Red Lands.

The climate is most favorable, the resources for improvement widely diffused and easily attainable, and the means of transportation to and from its markets of great convenience. The whole section is well wooded and well watered.

THE INTERNAL RESOURCES FOR IMPROVEMENT OF SOILS.

Though these are not so varied as are found in the tide-water section of the State, nor exist in so favorable a condition for ready use, yet they are inexhaustible in quantity and of a varied nature to suit the several varieties of soils which exist.

They consist of Limestones of the greatest purity, or Dolomites, that is Limestone, containing from ten to forty per cent. of Magnesia,—or other varieties having imbedded in them layers of Mica Slate, which when burnt affords good quantities of Potash and Silica in a soluble form, both invaluable substances in manures and rarely found in them. These Limestones are either metamorphic limestones,—that is limestones which after being deposited has had its texture changed, and more or less perfectly chrystalized by heat,—or the sedimentary limestones, which though of the same chemical composition as the former, yet have sustained no change by the action of heat since they were deposited. These extend in layers parallel to the mountain ranges, and are found to a greater or less extent, but everywhere in sufficient abundance, for exportation in all of the counties except Montgomery county, comprising this Division. Millions of bushels are used yearly for agricultural and building purposes in this Division, or exported to other sections for like uses.

When the great value of lime to soils is properly appreciated, not only in improving the texture, but in furnishing them indirectly with nutrient substances, by causing the *inert* mineral matters in a soil to assume a form in which they are capable of being used by the plant to increase its growth, the value of these deposits cannot be overrated. This Division has, therefore, within its bounds, and perfectly within control of its population, a choice of these staple, permanent fertilizers, not only for improving the texture but also for increasing the supply of plant food, sufficient in a great measure to supply, with the ordinary resources of the farm, nearly all of