

same geological formation which contains the most important zinc mines in the United States.

These are near Sterling Hill, in Sussex county, New Jersey, near Bethlehem, and also six miles above Lancaster, Pennsylvania. At this last place, works had been erected for the preparation of zinc white for paint, but at the time of my visit, six years since, they were not in operation.

The ore at Sterling Hill is transported to Newark, N. J., where it is treated on a very extensive scale.

The establishment at Bethlehem operates with the ores of that vicinity, and produces a large supply of the white oxide.

These two companies furnish nearly all the zinc white now used in this country. The quantity required is very large owing to the general use of this instead of white lead.

Neither of these companies has yet succeeded in the production of metallic zinc profitably, and there is little probability of success in this with Anthracite coal. With the Maryland coal it could be done, if we could procure the ore in Frederick county as rich and as cheaply as is done in the New Jersey and Pennsylvania establishments.

In the prolongation of the great valley (in which Hagerstown lies) into Virginia, we find an ore of manganese in Clarke county and lead ore in Wythe county, which last has long been worked. It occurs also in Shenandoah county and at some other places, which I do not remember at this moment. I have met with no indications of this or other ores, except those of iron, in the portion of this valley lying within the limits of Maryland.

The same may be said of all our territory westward of the North mountain, and certainly do not expect they will ever be met with in those parts of the State.

As persons in many cases, within my knowledge, have wasted their money and time in trying to find gold, silver, and almost every kind of valuable metal, in that portion of our State, it becomes my duty to give some words of caution in this relation.

Without at this time going into a geological discussion of the question, I think proper to state that no valuable metalliferous ores, except those of iron and manganese, have ever been discovered in that portion of our State west of the North mountain. I may add further, that they have not in any known part of the world been found to exist in a region whose geological characteristics are similar.