The progress of the work has opened the mine to such an extent that the yield of ore must continue to increase.

Sulphuret of cobalt also occurs in small quantity at this mine.

Copper ores have not yet been discovered in the remaining portion of this range in Carroll and Montgomery counties sufficient to encourage mining operations.

Chrome ores, however, occur at many points in a serpentine formation, which stretches from near New Lisbon, in Carroll county, through Montgomery county, four miles west of Rockville, nearly to the Potomac River. The ore has been worked at several points, and is found to vary considerably in quality. A sample of excellent ore was recently sent to me by Dr. Washington Waters, of Montgomery county.

From the extent of this formation in Montgomery and Carroll, we may expect that further explorations will develop chrome ores in large quantity.

Black oxide of manganese occurs one mile and a half west of Brookville in Montgomery county, but the workings, which were commenced, were suspended. There are indications of the outcrop on the road side, but there was no opportunity to form an opinion of the ore, as the old opening was covered up.

A few miles east of this a gold mine was opened about thirteen years ago, but owing, as I was informed, to some difficulty between the owner of the property and the lessees, the work was discontinued.

The central portions of Parr's Ridge comprise a belt of eight to ten miles in width, extending from the Pennsylvania line to the Potomac, destitute of other ores than hematitic iron, so far as I have been able to ascertain.

Between this and the Monocacy, however, there is a very interesting metalliferous district ranging south-west from the Pennsylvania line to the Potomac.

The ores of this district consist of copper, lead and iron—the last have already been noticed under the proper head.

I have observed indications of copper ore at numerous points of this region. Many of these are in the new red sandstones and shales between Middleburg and Little and Big Pipe Creeks. The ore in these consists of silicate and carbonate of copper, and is so sparsely disseminated in the rock as to be useless for any industrial purpose. There are no indications of veins or masses of value, and all attempts to mine for copper in these shales have proved unsuccessful in Maryland, as in several other States into which they extend.

A much more important part of this copper region lies south of the red sandstone, extending southward and perhaps beyond the Baltimore & Ohio Railroad. Owing to the fact that it is drained by the Linganore River and its numerous affluents, it has been called the *Linganore copper region.*