

taking out the ore, will be prosecuted, and large and regular supplies of ore will be obtained. Up to this time the proprietors have very judiciously been satisfied with taking out no more ore than sufficient to pay expenses, but the time is at hand when they will be largely rewarded for their enterprising skill.

From eight to ten miles west by north from the Barehills is another formation of serpentine called Soldier's Delight, which may be classed with the second metalliferous district.

The only minerals of industrial value it contains is chrome ore and a magnesian mineral; the latter having been used for the manufacture of epsom salts.

The chrome ore here is similar to that at the Barehills, and continues to be mined to some extent, but operations have not been extensively carried on within either of those formations since they were commenced in Harford county, about thirty years since.

One of the most important metalliferous districts in Maryland ranges along the north-western edge of the metamorphic rocks, (No. 5 of the table of strata and on the map.)

Beginning in the north-east we find it along the northern part of Cecil county, as well as in the adjacent portion of Lancaster county, Pennsylvania. A long belt of serpentine rock lying in both of these counties contains probably the most valuable chrome mines now known, and supplies the greater portion of the ores used in the world. The masses of ore in this serpentine formation are not only thicker than at any other mines, but approximate in regularity the character of veins.

An ore of nickel occurs in one of these mines, but not in sufficient quantity to possess an industrial value. It is a carbonate of nickel, sometimes called emerald nickel, because of its beautiful green color.

Following this range about west by south we find another intrusive mass of serpentine, with chrome ore, a few miles north of Cooptown, in Harford county. The ore in this formation was discovered some years later than that at Barehills and at Soldier's Delight, but being in much larger quantity, and more cheaply mined, it caused a suspension of operations in the two latter districts. The mine near Cooptown was worked for many years, and until it was ascertained that the ore existed in larger quantity, and was mined at less cost in the mines in and near the northern limits of Cecil county already noticed. The workings in the Cooptown mines were then suspended.

Near the northern edge of the serpentine formation north of Cooptown some traces of copper ore, in the form of carbonate of copper, were observed some thirty-five years since. The openings at that point, however, gave no encouragement to those by whom it was explored. Some years since I examined similar indications of copper (for an English company) near Difficult