

- 4 Alum earth—clay embracing iron pyrites and lignite, 7 to 10 feet.

This stratum is very irregular in its inferior line of separation. It rests upon 5. A stratum of ferruginous sand stone, 1 to 2 “
 which, if accidentally penetrated, admits the flow of water from beneath in such abundance as to put a stop to any further excavation.

The value of the *Alum* obtained annually from this source is estimated at *seventy-five thousand dollars*, and that of the quantity exported out of the limits of the state at *sixty five thousand dollars*.

As stated above, this alum earth is associated with a bed of *copperas ore*—the annual product of which has been ascertained to amount to *six thousand dollars*; of which one half is exported. This same ore of copperas, as it is termed, which chemists describe as a *bisulphuret of iron*, occurs in many other situations throughout the district of country which is now being reviewed. It has been found in Cecil county; it occurs on the shores of the Round bay, in Anne Arundel county; and at Oxen creek in Prince George's county, it was observed under circumstances leading to the suspicion that there may exist in that place a formation similar to the one at Cape Sable.

Associated, also, with the clay deposits, are found abundant formations of two varieties of iron ore, which, as they are but seldom used for the extraction of the metal, may be properly mentioned here. These two varieties of iron ore, are the *ochrey red oxide of iron* (red ochre) and the *ochrey brown oxide of iron*, (yellow ochre.)

The estimate of the value of red and yellow ochres produced at Baltimore and exported, exceeds two thousand dollars a year. By the production of these articles within our own limits, their importation has been entirely excluded; and the domestic articles are now furnished at one half of their former prices.

But a still more valuable constituent of the Tertiary formation of Maryland is the deposite of those ores of iron which are used for the extraction of the metal. Notice has already been taken of the *bog-ore* of the Eastern Shore. The same variety is found on the Western Shore, as in the neighborhood of Queen Anne, in Prince George's county, &c.

Those kinds of iron-ore, which are the most valuable are described in systematic works under two specific heads; namely, *carbonate of iron* and *brown oxide of iron*. The