Magothy River, I have observed evidences of a large deposit of this mineral at Oxen Creek, five miles south of Washington, and indications of it at several intervening points in the same geological formation.

Iron pyrites has become of more importance since the perfection of Mr. Monier's process for the production of sulphuric acid (so largely used in the arts) from that material. Before this discovery sulphur was exclusively used for this purpose, and America and Europe depended entirely upon the article imported from Sicily.

It is also well to know that pure sulphur may be obtained from iron pyrites at a cost somewhat greater than the cost of importing it from Sicily, so that if we should be deprived of foreign supplies, we can produce it at home.

Red Ocre or Spanish Brown.

Many now living remember when this, the cheapest of materials for common painting, was imported from Europe; but this importation ceased more then thirty years ago; since when the ground material has been produced in Maryland at a much lower price than was formerly paid for the foreign article.

It consists of red oxide of iron, more or less mixed up with earthy matters, and forms subordinate beds in the lower or oldest clays before described. It is ground to a fine powder at establishments in Baltimore and the market is fully supplied.

Whilst pursuing my investigations in the counties my attention has frequently been directed by those interested to localities which they supposed contained iron ores because of the existence of chalybeate springs. In order to prevent persons from deceiving themselves by such indications it is proper to say that they are not to be taken as indicating the presence of iron ores. It is true that in some few instances we find such springs issuing from iron ore deposits, but much more frequently this is not the case. On the other hand, we have innumerable chalybeate springs in different geological formations without any relation to iron ore. Oxides of iron exist in almost every rock, and by chemical agencies are converted into the carbonate, which is soluble in water containing carbonic acid. This, upon reaching the surface, is dissipated by exposure to the atmosphere and the iron deposited is acted upon by the oxygen of the atmosphere. By this means it is converted into hydrated peroxide of iron, which at first being yellow is supposed by many to indicate the existence of a *sulphur spring*.

The presence of sulphur in water is sufficiently indicated by an odor similar to the washings of a gun barrel, and it will darken the color of a piece of clean silver, if left in it a few minutes.