

trated in the purest form, and least mixed with foreign ingredients, it seems, as is also the case with most metallic ores, to lie between the different kinds of rock. I have indicated by the blue tint approximately, upon the general map, the tracts underlaid by the plumbaginous limestone formation referred to.

On your lot No. 3, in the second range, the limestone is penetrated by a mass of syenite, forming a ridge of seventy or eighty feet in height, and of a linear extent of one hundred and sixty rods; on the south side of which, and near to the line of contact of the two distinct rocks, the deposit of graphite occurs. Another description of intrusive rock, consisting of a species of trap or dolerite, also occurs here, being observed at some places to overflow or cap the limestone, and at others to cut it in the manner of a dike. Such changes of rock are everywhere regarded as favorable for the aggregation of minerals and metallic ores; and occurring, as they do here, in a limestone highly charged with graphite, have, no doubt, been conducive to its deposit here in large quantities, and in a state of great purity.

A considerable amount of work has been done in exploring and testing this location; and about three tons of very pure plumbago have been incidentally obtained and sent to market, where it has realized the highest price usually obtained for this article. Four pits have been opened upon a course N. 50° E., coinciding with the strike of the rocks; the distance between the extreme points of the openings is about five hundred yards; and pure plumbago has been obtained at all the openings, which may thus be