

original proprietors or of the public. Contracts were entered into without a proper knowledge, on the part of the owners of the lands, of the value of the material which they contained; and exclusive privileges were granted to make researches and excavations, under terms that, besides securing nearly all the benefits to one only of the contracting parties, prevented a full development of the resource to the county. It is much to be regretted that I was not consulted, in my official capacity, in the passage of these contracts; and that the requirement of the act authorizing the survey should have rendered it impossible for me to make a more minute examination of the county, at an earlier period. I did, however, what my duties to the public required at the time; namely, to point out the direction in which minerals of value might be expected to occur. On the other hand, it has been gratifying to find that these contracts embrace only some of the localities where the ore has been discovered, and that large bodies of it remain, of even a superior quality, whence the demands of our industry and of our commerce can be supplied with a more equable distribution of the profits arising out of them.

But there are other matters to be attended to, in order to secure to the county the entire fruition of this resource; and these are: 1st. To become well acquainted with the ore itself—2dly. To determine the quantity of that constituent of the ore which alone gives it value; and 3dly. To adopt some judicious mode of extracting it.

Now, although it would seem only necessary to have a few opportunities of comparing specimens together, to enable one to recognise the ore, and to discriminate a good from an indifferent one; yet, from the numerous mistakes that are made, even by those who pretend to a familiar acquaintance with it, it appears that more than an ordinary attention, or perhaps some natural aptness, is required, to enable one to seize readily those distinctive characters, by which to an accustomed eye it is recognized from all other substances. An experienced Mineralogist will rarely be at a loss, because the external characters of the ore are well marked; yet it is exceedingly difficult, if not impossible, to furnish such a description of them as would enable one who is not a Mineralogist to distinguish this from many other mineral species. Upon the whole, then, it seems that the best advice to be given to those who are interested in possessing a knowledge of this ore, is that they endeavor to familiarize themselves with its appearance by a frequent examination and comparison of specimens known to be of good quality; and, above all, to learn to discriminate the ore itself from the rock in which it is imbedded. To determine the quantity of that constituent, contained in the ore, which alone gives it value, requires some knowledge of chemical analysis; but those who have only a slight acquaintance with chemistry will readily understand and may avail themselves of the following simple process: A given quantity of the ore is to be first reduced to as fine