

why he has not given more geology in his report, his answer will probably be: first, that nothing has been published on the geology of that region; second, that the persons by whom he was employed desired practical results, not theories. Of the two reasons thus given, the first is certainly a valid one, and the want of published data is one which it should be the first duty of the Geological Survey to supply. The second is the expression of a prejudice, unfortunately too common in the public mind, in favour of practical as opposed to scientific mining—a prejudice for which mining engineers as a class are partly responsible. Fortunately, this prejudice is gradually disappearing. Ten or fifteen years since it was so strong that the fact that a man was a graduate of Freiberg or other European mining academy, was almost sufficient to bar him from employment in a western mine; while to-day, in Leadville, among the most successful miners and metallurgists, are found prominent names of graduates of Freiberg and other European schools, such as Eilers, Meyer, Grant and others. Nor is this prejudice confined to untechnical men. Many mining engineers, while freely admitting the necessity of a geological basis for determining the value of coal, iron, petroleum, and allied deposits, consider it at best, in the nature of an ornamental or decorative addition to a report upon metallic mines. In my opinion, however, there is no inherent reason why, with sufficient study and investigation, the geological relations of metallic deposits should not be determined as accurately as those of coal and iron. The subject, it is true, presents greater difficulties, and in the rapid advances of geology at the present day, the geologist and the mining engineer have been pursuing somewhat divergent paths—the former confining himself more and more to special branches of theoretical study, and the latter to the technical and mechanical side of his profession. In Prosepy's excellent work, *Archiv der Geologie*, a chapter is given (*Geologie und Bergbau in ihren gegenseitigen Beziehungen*), deprecating this tendency, and outlining in some detail the official work done at present, in both branches by civilized nations. It behoves us, then, it seems to me, not only as geologists, but as mining engineers, to give greater importance to geological structure in our reports and papers on metallic mines; and this, not only for the purpose of removing the above named prejudice, but for the sake of accumulating matter which shall, in time, afford us the means of rendering to ourselves as satisfactory and definite an idea of the manner of the formation of metallic deposits, as we have at present in the case of coal." It is one of the most important things that our Geological Survey could devote their attention to; the origin of the ore deposits, the relation of the metals of the country, the laws of deposits, whether they are richer or within certain zones of rocks or poorer, and so on. Such investigations are considered now, by foreign geologists, as likely, in a very short time, to lead to great practical results.

By Mr. Wood:

Q. I think you stated that your report would be submitted in a few days?—Yes.

Q. And that you have done work in British Columbia?—Yes.

Q. How were you engaged there?—In 1878 I was sent out there by some gentlemen in Montreal, under the instructions of Sir Alexander Galt, and associated with him were Mr. Geo. Stephen, Mr. R. B. Angus, Hon. D. A. Smith, and some fifteen or twenty other gentlemen, with instructions to go out and report on a precious metal mine there. They intended to organize a company and engage in work there.

Had you any interest in the speculation?—Oh, yes; I was to receive a percentage on the products, in addition to my salary as manager.

Q. You have no such connection at present?—No. While I was connected with the Survey I had no financial connection with any mining enterprise.

Q. In regard to your plans for the future: are you looking forward to following mineralogy as a profession, or with the view of speculating?—Recently I have secured patents for improved methods of protecting boilers from the loss of heat by the use of infusorial earth, and the manufacture of fire bricks out of the same material, and I intend to give my attention to these patents.