

the vein of magnetic iron and mispickel referred to on pages 7 and 8 has been opened and tested:

The great hindrance hitherto to the extraction of the gold, from these valuable ores has arisen from the obstinate character of the arsenical combination, the component parts of the ore being iron, sulphur, and arsenic, the arsenic and sulphur being 65 % of the whole.

Scientific knowledge has at length been brought to bear upon their treatment, and the result has been the discovery of a process simple and inexpensive, which not only frees the gold, making its extraction by amalgamation no longer a matter of difficulty, but the whole of the ore is resolved into its simple elements, all of which have a large commercial value. The ore recently treated in large quantities under this process by the Dean & Williams Company, has yielded \$30 worth of gold to the ton, although their machinery for the purpose is as yet only in a crude state, and this yield is expected to be largely increased. The other products under this process are large quantities of a valuable arsenical green paint material, known in commerce as Paris Green; also a valuable yellow arsenical orpiment, white arsenic, in large quantities, and the entire residuum, after these being extracted, is a mineral oxide of considerable value, being largely used in various branches of manufacture. This process was recently discovered by Professor Chapman, and is held by him, and two other gentlemen interested in this locality, under a patent, and the projectors have secured the right to use the process under the most favorable terms.

It may be noticed here that this process does not necessitate any outlay for skilled or scientific assistance, and the additional expense for machinery and accessories is comparatively nominal; and independent of the gold obtained, the resulting chemicals are likely to yield 50 per cent. profit upon the cost of treatment. This can be understood when it is shown that a large proportion of the 46 parts of the arsenical combination of this ore, and the entire residuum, become of commercial value.

An idea of the value of this property may be gained by computing the product of a small mill, and the result is so likely to appear incredible, that, were not the property easy of access, and the facts capable of verification by a visit to the mill now working