

have secured the promise of the valuable services of Mr. Haas, Sr., Fourth Avenue, corner of 21st St. I believe it is conceded that Mr. Haas is unexcelled in copying works of art by electro-deposition of copper. He has agreed to take copies of the Berzelius Medal, as well as it can be done by the battery, for the following prices, provided he receives an order for at least two dozens of copies :

Copy in two separate halves, each half representing one side of the medal—ready to be mounted on a card—each copy.....	\$1.50
The two halves mounted on dark green or maroon velvet—ready for framing.....	\$2.00
Copy of the medal solid, <i>i.e.</i> , both sides soldered together and filled—an exact reproduction of the original—each.....	\$3.00

It may be necessary to explain that it is not possible by electro-deposition, to obtain the beautiful shining surface which can only be given by a steel die. These copies are, however, to be made in the best style, and equal to any copies by electro-deposition that amateurs have in their collections.

If the members of this Society desire it, I propose to receive subscriptions for these copies, and when these subscriptions call for at least two dozens of copies, I will proceed to collect the sums subscribed and give the order to Mr. Haas.

P. CASAMAJOR,

Corresponding Secretary.

11 E. 14th St.

NEW YORK, May 1st, 1879.

XV.—ANALYSIS OF BINDHEIMITE, FROM ARKANSAS.

BY CHAS. E. WAIT.

THE antimonial deposits of Arkansas have furnished some interesting minerals; the analyses of a few of them have been presented to the public.

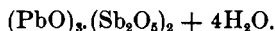
Several months ago the former owner of one of these mines, gave to me for examination a few ounces of a lemon-yellow, earthy mineral, which came from the Stewart Lode, Sevier County. It gave, upon analysis, the following :

H ₂ O.....	5.00	per cent.
PbO.....	45.38	“
Sb ₂ O ₅	41.72	“
Fe ₂ O ₃	2.06	“
Al ₂ O ₃	4.05	“
SiO ₂	1.84	“
Ag.....	.041	“
	<hr/>	
	100.091	

Or, neglecting those substances, which we may assume to be impurity, we will have :

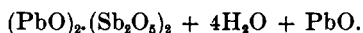
H ₂ O.....	5.43
PbO.....	49.26
Sb ₂ O ₅	45.40
	<hr/>
	100.09

Representing the composition of the mineral and corresponding to the formula :



Upon inspection it will be seen that the results of this analysis agree nearly with Analysis No. 2, Dana, page 591. Yet I find they differ greatly from an analysis of Bindheimite, obtained from the same mine, read before the Amer. Assoc. for the Advancement of Science, Nashville Meeting, Aug., 1879.

The author of that interesting paper thinks there exists no fixed ratio between the oxides, but that the number of molecules of water is either once or twice the sum of the molecules of the oxides. Such a ratio may be derived in this case, if we assume part of the PbO to exist as anhydrous, thus giving the formula :



This mineral resisted the action of strong nitric and hydrochloric acids, also fusion with the carbonated alkalies, but was readily decomposed by boiling with sulphuric acid.

We may assume, I think, without error, that the mineral under discussion, is the result of the decomposition of Jamesonite, as some interesting specimens of the latter have been found in this mine.