

being present in almost insignificant quantities. It is however by no means a rare composition which is possessed by these rocks. The examination of the rhyolites of the Great Basin, near the 40th parallel, by the chemists of the King Survey showed several rocks closely allied to these in composition and similar ones have been described from other parts of the western United States and from Europe.

NOTE ON WHAT APPEARS TO BE A NEW MINERAL FROM
THE GAGNON MINE, BUTTE, MONTANA.

BY RICHARD PEARCE.

The mineral in question has as yet been found only in massive form, with an appearance much like bornite. It has a Specific Gravity 4.95, and Hardness 3.5-4.

An analysis of apparently pure substance gave the result below :

	Found :	Calculated for $3\text{Cu}_2\text{S}, \text{Ag}_2\text{S}, 2\text{ZnS} :$
Cu	41.10	41.4
Ag	24.66	23.5
Zn	9.80	14.1
Fe	2.09	
S	20.51	20.9
insol	1.02	
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	99.18	99.9

The analysis leads to the formula $3\text{Cu}_2\text{S}, \text{Ag}_2\text{S}, 2\text{ZnS}$, the calculated composition of which is given above. From this material it seems difficult to determine whether the mineral is to be regarded as new, or as a variety of bornite in which the copper has been partly replaced by silver, and the iron nearly all replaced by zinc. It seems to me however that the mineral is entitled to a distinctive name, should the composition given prove to be correct. Efforts to secure further and better material will be made.