Other districts in Colorado.—These include Tenmile, Red Cliff and Rico. At Rico[59] much of the earlier production (Newman Hill) was from deposits that show certain epithermal features. The ore minerals are galena, zinc blende, pyrite, tetrahedrite, a little chalcopyrite and various sulphides, sulphantimonides and sulpharsenides of silver, in a gangue of quartz and rhodochrosite. The ores fill the interstices of a shale breccia resulting from the solution of a sedimentary gypsum bed, but they also form fissure veins in the underlying Pennsylvanian sediments. The veins tend to be beautifully banded. Much of the later work at Rico (C. H. C. Hill) has been in bedded limestone replacement deposits, the ores consisting chiefly of pyrite, galena and zinc blende with quartz and fluorite gangue.

Silver-lead replacement deposits in calcareous sediments.

Nevada

Eureka district.[60]—In the Eureka district, the deposits occur in Cambrian limestone (two beds) in a region that has been moderately folded, faulted, and intruded by granite porphyry and quartz porphyry. The intrusions occurred probably in the late Mesozoic. The ore bodies are tabular replacements along the fissures, or they may make out along certain beds. The main sulphide minerals are argentiferous and auriferous galena, pyrite, and lesser amounts of arsenopyrite and blende.

White Pine district.[61]—In the White Pine district, which produced $22,000,000 before 1887, quartz monzonite and granodiorite bodies intrude Paleozoic limestones and slates. Ore deposits are zoned around the quartz monzonite, a copper belt occurring on the inside, a lead belt in the middle, and a silver belt on the margins of the mineralization. The deposits of the lead belt are replacement beds and veins in Ordovician dolomite; those of the silver belt occupy saddle reefs in Devonian limestone beneath Carboniferous shale.

Cortez district.[62]—The deposits of the Cortez district replace unfaulted limestone, probably Ordovician, beneath a quartzite. They are irregular and are localized along sheeted zones that lie parallel to igneous dikes. The minerals are galena (which is rich in silver), stibnite, pyrite, blende, stromeyerite, tetrahedrite, quartz, and calcite. The region has been intruded by granitic and porphyritic rocks.

Pioche district.[63]—In the Pioche district, much of the early production

[59] Ransome, F. L.: The ore deposits of the Rico Mountains, Colorado. U. S. Geol. Survey *22d Ann. Rept.*, pt. 2, pp. 229–397, 1901.

[60] Curtis, J. S.: Silver-lead deposits of Eureka, Nevada. U. S. Geol. Survey *Mon.* 7, 1884.

[61] Larsh, W. S.: Mining at Hamilton, Nevada. *Mines and Minerals*, vol. 29, pp. 521–523, 1909.

[62] Emmons, W. H.: U. S. Geol. Survey *Bull.* 408, pp. 100–106, 1910.

[63] Westgate, L. G. and Knopf, A.: Geology of Pioche, Nevada, and vicinity. *Trans.*