

10 *W. P. Blake on the Gold Region of California and Oregon.*

Copper pyrites is also found in a vein about seven miles below the summit level of the New Pass, which leads from the Great Basin to the valley of San Francisquito. This vein outcrops on the southern slope of a granite hill on the north side of the Pass, and is about 90 feet above the bed of the creek. The ore resembles in its luster and color the variegated copper pyrites, but is much softer. It is found in strings and narrow veins distributed through a hard quartzose gangue about fifteen feet thick: the thickest seam of ore, however, does not exceed two inches; but when several such were closely combined a thickness of eight inches of good ore was seen.

This vein has been prospected and a small quantity of ore broken out. It is about sixty miles distant from Los Angeles by the trail.

*Native Copper and Red Oxyd of Copper.*—When visiting Camp Yuma at the junction of the Colorado and the Gila rivers in Dec., 1853, several large masses of superior copper ore were shown to me by the officers of the fort. This ore was brought from the adjoining State of Sonora, Mexico, and the vein is reported to be near Altar. It is within the limits of the strip of territory recently acquired by purchase and is therefore now in the United States. Specimens are frequently brought in by emigrants who cross the Colorado at the ferry below the fort. The ore is principally the red oxyd of copper associated with the pure metal and green crusts of carbonate. The specimens that I saw ought to yield about ninety p. c. of pure copper. This is probably the ore that has recently excited so much attention in California, and has been reported to be highly charged with gold.

*Calaveras Co.—Native Copper and Silver.*—A specimen of pure copper combined with silver is reported to have been found in a placer mine near Mokelumne Hill. The specimen was exhibited in several places and sent to San Francisco, but I have not been able to obtain any reliable information concerning it, or the circumstances under which it was found.

**IRON ORES.**—*Mariposa Co., Burn's Creek.—Limonite.*—An outcrop of hydrous sesquioxyd of iron or limonite occurs near the banks of this creek, on the right of the road going south. It is associated with a quartz vein and forms a bed about twenty-five feet thick, lying conformably with talcose and chloritic slates. The ore outcrops in great solid blocks from two to four feet in diameter: it is compact, of a dark brown color, and breaks with a smooth conchoidal fracture. The position and peculiarities of this ore indicate that it has resulted from the decomposition of pyrites, and that it forms the "gossan" of a vein of sulphuret below the surface. The mass does not, however, present that cavernous and friable condition in which gossan is generally found.