

Magnetic Iron Ore.—A massive and fine-grained variety of this ore is found associated with one of the auriferous quartz veins of the county. Specimens that I have seen were colored green by their layers of carbonate of copper. It has polarity and lifts small fragments.

Tulare Co.—Magnetic Iron Ore.—This ore occurs in a bed or vein about three feet thick in a low ridge of white crystalline limestone at the summit of the pass known as the Cañada de las Uvas. The ore is compact but not crystalline, when broken it shows a brilliant fracture and a granular surface, and does not break with flat faces, like the massive magnetic ores of New York and New Jersey.

New Pass.—Magnetic Iron Ore.—Specimens of very pure and highly crystalline magnetite were picked up in the valley of this Pass: it is associated with hornblende, cinnamon-colored garnets and chlorite.

Placer Co., Volcanoville.—Large boulders of compact magnetic ore occur in the bed of the creek that flows by the side of the great vein of auriferous quartz at that place. These boulders are so large and abundant that it is probable a vein of ore will be found in sites in that vicinity.

San Francisco Co.—The fissures and crevices in the serpentine rocks of San Francisco are occasionally drusy, with small but brilliant octahedral crystals of magnetite. They did not give reactions for chromium when examined before the blowpipe.

Sulphuret of Iron.—Good crystals of pyrites are obtained in the talcose slates in various parts of the mining region. At Georgetown, Placer Co., it is abundant in minute cubic crystals. They are obtained free from rock or gangue as one of the products of gold washing, and as they are very brilliant and of uniform size they are worthy of a place in good collections.

CHROMIC IRON.—Monterey Co.—Massive chrome ore of excellent quality was shown me in San Francisco and reported to be from a short distance south of the Mission of San Juan. It is an interesting fact that it is almost identical in its appearance with the ore from "Wood's pit" in Maryland and like it, is partly covered with green coats and crusts of emerald nickel. The extensive distribution of this mineral in California has been noticed at length by Mr. P. T. Tyson in his report.*

ANTIMONY.—Tulare Co.—A large vein of the sulphuret of antimony, (antimony glance,) exists in the high granitic range that borders the Tulare valley on the south. It is about eighty miles from Los Angeles and is most readily visited from the Tejon. By observations with the barometer, I found the outcrop of this vein to be at an altitude of about 6000 feet above the sea. It is on the side of a precipitous ridge of granite and not favorably situated for examination. Its thickness was estimated to be ten feet

* Ex. Doc., No. 47. 31st Cong., 1st Session. (Senate.)