

The Source of Gold.

The greatest incentive the miner has to seek for gold is the discovery of rich ore or placer gold in an unsuspected place. There are streams, gulches and flats, famous in mining history for the rich placer mines developed in them, but the source of the gold is not always apparent. Generally, in these later days there are those who at once seek the source of the gold found in rich placers, in the belief that a more valuable and permanent mine is likely to result if this source can be found. There are instances where years have passed before the source of gold in a placer gulch has been recognized, and in some instances the original source of the gold still remains undiscovered. The trained geologist in such cases, after careful investigation, can usually reach a conclusion, satisfactory to himself, but the miner is often at a loss to account for the existing condition of things. It is not always found that a rich vein produces rich placer deposits. The erosion of veins and deposits which produce telluride gold ores does not always result in rich placers. The erosion of the telluride ores of the Black Hills, South Dakota, has not, as far as known, resulted in placer deposits, though those of Cripple Creek, Colo., occurring under entirely different conditions—in fissures, instead of blanket deposits—have produced placers. In some regions rich placer deposits have been discovered and worked out, and the source from which the gold came has never been satisfactorily determined. The ancient river channels of the Forest Hill divide, Placer county, Cal., which have produced many millions, appear not to have derived their gold from quartz veins such as exist in other portions of the State, but seem to have been the result of erosion of a slaty or schistose rock, in which the gold occurred in narrow seams and in pockets. In some of these mines large nuggets have been found in which the edges of the crystallized gold were still sharp, being little or not at all abraded by the detritus of the stream, being conclusive evidence that the gold is found near its original source. Gold has also been found in the bedrock in situ, further proving that the gold of that section is derived from the pockets and seams in the rock, and not from quartz veins of the ordinary type.

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