parts of it. When two veins cross each other, one vein may be auriferous on one side of the intersection and not on the other; but in this case the other vein will be auriferous on both sides.

"Lodes lying between two different kinds of rocks, are usually richer than those which have the same kinds of rocks on both sides. Thus it is said that the richest veins of auriferous quartz in California have been discovered at the intersection of trap and serpentine, and the richest places in veins, are where they cross from one kind of bed rock into another. The richest part of a lode of auriferous quartz, is almost invariably on the lower side of the vein, near the foot wall. All these are facts to be remembered by the prospector, as a guide and assistance to him, in his search for rich gold-bearing veins.

"If the lode is covered with earthy matter, he may sometimes trace its course, by the difference in the color of the dirt and stone over it, from that elsewhere. When the prospector finds dirt and stones on a vein, evidently disintegrated portions of it, he should wash some of the dirt in a pan, and if he finds no gold, the presumption is that the vein is barren."

So much for quartz lodes, and now here is his description of "Placer Mines."

"Placer mines are divided into many classifications. The first and most important, into deep and shallow. In the former the pay dirt is found deep, twenty feet or more below the surface; in the latter, near the surface. The shallow or surface diggings are chiefly found in the beds of ravines and gullies, in the bars of rivers and in shallow flats. The pay dirt is usually covered by layers of barren dirt, which is sometimes washed and sometimes left undisturbed, while the pay dirt is taken out underneath it by tunnels or shafts."

In California the placer diggings are generally near the surface; in Australia, generally deep. After div-