

nia was announced, and the rush of gold seekers that immediately took place, was unexampled in the history of the world. St. Francisco was not only emptied but the tide flowed from Mexico, Peru and Chili; from China and Australia, and lastly from the U. States and Europe. In November of the first year four thousand persons were at the diggings, and the gold taken out was valued at \$5,000,000. So rich were the washings that it was not uncommon for a single miner to obtain ten ounces in a single day. In 1849 about 55,000 miners were at the diggings, and the gold obtained amounted to \$40,000,000, which was increased in 1850 to \$50,000,000.

Whitney, writing in 1854, regrets that there had been no proper Geological survey, and expresses the opinion that from the facts then known, much light could not be thrown on the probable future of the country. It was however known that the Sierra Nevada, was made up of granite rocks, through which volcanic fires had occasionally found vent, and piled up lofty masses of debris, these were flanked by slaty rocks in which the talcose predominated; these alternated with trappean and serpentine masses, which extended to the valley of the Sacramento, where they were concealed by sedimentary deposits of recent origin. The slates of the Sierra, formed a belt of fifty miles wide extending through the valley; they are very ancient, and if they ever belonged to the Palæozoic series, all traces of organic remains have been obliterated, and they have assumed a crystalline structure, being every where invaded and broken up by igneous masses. They may be classed with the lower Silurian of the Andes and the Ural, and are undoubtedly the source of the gold of the placers.

Up to 1854 almost the whole gold had been obtained from the *superficial deposits*. At the close of 1853, there had been deposited at the Mint, gold to the