

The Title to Mining Claims.

In nearly all the laws extending the right of pre-emption to settlers upon public lands, mineral lands were reserved from their operation. Indeed, not only was this the case with regard to settlers, but when the land was granted to the State by Congress, this same reservation was made. Digging for minerals, therefore, before the passing of the Act of 1866, was a trespass. But the first section of this Act opens up the public land of the Union to prospecting, and to the use of the claims already occupied, or which might afterwards be taken up—with this restriction, however, that the local laws and customs are to be in force, unless in conflict with the laws of the State. The title conferred by the section is in the nature of a possessory right. It is a license by the Government to go upon the public lands and search for minerals and appropriate them. No other title than this possessory one can be acquired for alluvial claims under the existing law; but in the case of quartz reefs, and mining for silver and copper, provision is made for the purchase of the claim.

The first section of the Act of 1866 is as follows:—"That the mineral lands of the public domain, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and occupation by all citizens of the United States, and those who have declared their intention to become citizens, subject to such regulations as may be prescribed by law, and subject also to the local customs and rules of miners in the several districts, so far as the same may not be in conflict with the laws of the United States." As this Act may be of some advantage for future reference, I have given it at length in the Appendix to this Report, and will here refer further to its second section only:—"And be it further enacted, That whenever any person or association of persons claim a lode or vein of quartz or other rock bearing gold, silver, cinnabar, or copper, having previously occupied and improved the same according to the local customs or rules of miners in the district where the same is situated, and having expended in actual labour and improvements thereon an amount of not less than one thousand dollars, and in regard to whose possession there is no controversy or opposing claim, it shall and may be lawful for said claimant or association of claimants to file in the local Land Office a diagram of the same, so extended laterally or otherwise as to conform to the local laws, customs, and rules of miners, and to enter such tract and receive a patent therefor, granting such mine, together with the right to follow such vein or lode, with its dips, angles, and variations, to any depth, although it may enter the land adjoining, which land adjoining shall be sold subject to this condition."

I have just been informed that there is a Bill now in course of progress through Congress, having for its object the sale of the mineral lands in the several gold-producing States of the Union. The passage of such a measure is very favourably received by the public at large, as a step in the right direction. One of the leading papers of this city, the *Bulletin*, thus comments upon the proposed measure:—"The Bill proposes to encourage permanent settlement in the mining districts, by allowing placer miners to buy the claims they hold, without disparagement to agricultural interests in the same localities. It will operate to prevent disputes and ill-feeling between miners and farmers. It will facilitate the survey of mineral lands, and bring them more rapidly under the provisions of the pre-emption and homestead laws. It has been commended by the press of California, Oregon, Nevada, Utah, and Colorado, and by large public meetings. Nobody can make any money out of it except by working in the soil: can this fact be urged against its passage?"

This brings me to the third and last sub-division—

The Methods of Working Claims.

In using the word claim, I refer now to what is termed "placer claim" in this country; that is, to claims other than quartz claims. In this, as in all other gold-producing countries, mining was at first carried on in the beds of creeks, along their banks, and in the flats and gullies, for the simple reason that in these localities the gold was extracted without much labour or expense. But in the course of time, as these favoured localities became exhausted, the attention of miners was diverted to the deeper sinking on the hills. It was soon found, however, that the machines hitherto used were inapplicable to this new working, and water became the agent used in extracting the precious metal. Then the cradle and long tom gave way to the sluice box, and ground-sluicing on an extensive scale was carried out. The richest deposits being usually found in the bed-rock on these hill diggings, and in the channels of old watercourses, it was found necessary, in order to reach them, that expensive tunnels, in some cases thousands of feet in length, should be constructed for the purpose, as well as for the drainage of the ground, and giving an outlet to the water from the sluice. A large force of water, sometimes as much as 1,500 and 2,000 inches, brought to bear upon the banks, tore them away to within a few feet of the bed-rock, when blasting was had recourse to for the removal of the underlying hard cemented gravel. Several plans are adopted to secure the gold. Sometimes the bed of the sluice is paved with round stones, the gold, when carried down, being retained in the interstices, and washed out every nine or ten days; sometimes blocks of wood are used, sawn across the grain, 2 feet square and 6 inches deep; a 2-inch batten is fastened across these, at a distance of every two feet, along the bottom of the sluice, and in this way the gold is prevented from being washed away; undercurrent sluices are also occasionally used with advantage. The method adopted is this:—A grating of iron bars is constructed at the end of the last sluice-box and through the apertures the very fine gravel and clay and water drop into another set of boxes, more gently graded than the main sluice, and are carried along them, in a different direction. Taking the rate of labour at 8s. a day, the following is, approximately, the cost of removing a cubic foot of deposit:—

	£	s.	d.
With the tin dish
With the cradle
With the long tom
With the sluice

Quartz Mining.

Introductory.—Unlike the placer mining, which, as I have already stated, sprang suddenly into