The cretaceous and carboniferous rocks are both severely broken up by igneous intrusions of late Jurassic age. The carboniferous strata are the oldest yet detected in California, but from that period onwards there is a striking resemblance in the geologic changes that have taken place in the two countries. In British Columbia a greater range of the geologic scale is exposed, as compared with California, and therefore it might be expected—as is the fact—that the metallic minerals would be met with in a greater number of rock systems in the former country.

6. MINING LAWS.

The mineral laws of British Columbia have been framed almost entirely in the interests of the prospector and miner and are probably not exceeded in liberality by the mining laws of any other country in the world. They admit of improvement, however.

The time allowed for the first year's assessment work is much too long. Sixty days would be quite sufficient. In the case of claims located in the fall a "lay over" might be obtained provided it could be shewn, to the satisfaction of the gold commissioner, that the work could not be done without, on account This would prevent the staking of the weather. of claims that are not intended to be worked forthwith and the locking up, in idleness, of a large extent of country that may contain much mineral The assessment work of the second and subsequent years should be done before the end of July—so that if a claim be abandoned it can be restaked by anyone so disposed, and the first year's assessment work, of the new locator, done during the remainder of the prospecting season.

The name of claims that are abandoned before the end of the first year should be posted in some conspicuous place at the Record office, for at least four-teen days, before they can be relocated. This would prevent collusion to avoid assessment work.

It is not necessary here to describe the process of locating and recording a claim, but a few remarks will be made on the mineral rights conferred by the different acts which are, to a greater or less extent, in

operation at the present time.

The oldest locations existing to-day were probably recorded under the Mineral Act of 1884, which re-Section 50 lated to both placer and quartz mines. of that act provided that "Mineral claims-that is claims containing or supposed to contain, minerals precious or base (other than coal) in lodes or veins, or rock in place—shall he 1,500 feet long by 600 feet wide," and section 64 provided that "the lawful holders of mineral claims shall have the exclusive right and possession of all the surface included within the lines of their locations and of all veins or lodes, and ledges, throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically, although such veins, lodes or ledges may so far depart from a perpendicular in their course downwards as to extend outside the vertical side lines of such surface locations; but their right of possession to such outside parts of such veins ore ledges shall be confined to such portions thereof as lie between vertical planes drawn downwards, as above described through the end lines of their locations so continued in their own direction that such planes will intersect such exterior parts of

such veins or ledges; nothing in this section shall authorize the locator or possessor of a vein or lode which extends in its downward course beyond the vertical lines of his claim to enter upon the surface of a claim owned or possessed by another.

This act was amended in 1886 and 1888 but the amendments did not affect the parts just quoted.

In 1891 two acts relating to mines were passed, one entitled "The Placer Mining Act, 1891," the other "The Mineral Act 1891." By section 31 of the latter act the above quoted section (64) was amended by the addition of an important pro-A few immaterial verbal alterations were also made in the section. The added proviso is as follows:" Provided always, that a prior location on the dip of a vein or lode shall have priority over a subsequent location on the same vein or lode, though such subsequent location may be upon the apex of the vein or lode; and provided always that in cases where the land in which such claim is situate is lawfully owned or occupied for other than mining purposes, the above section shall be read subject to the rights and interests of such owner or occupier. And it is hereby expressly declared that a location laid crosswise of a vein or lode, so that its centre line crosses the same instead of following the course thereof, will secure only so much of the vein or lode as it actually crosses at the surface, and the side lines of the location will become the end lines thereof for the purpose of defining the rights of the owner. location shall be deemed to have been laid crosswise when the smallest angle made by the centre line falling on the general course of a vein or lode is greater than (45) forty-five degrees."

The rights conferred by the acts of 1884 and 1891, it will be seen are very different. Intending purchasers of old locations will therefore do well to satisfy themselves whether a claim, held under the latter act has or has not been located crosswise or they may be seriously disappointed afterwards. In this connection it may be mentioned that the course of a vein on the surface may be very different from its general course, and the non-recognition of this fact has often led to location being improperly staked so that their end lines are in reality side-lines.

By "The Mineral Act (1891) Amendment Act (1892)"* the last quoted section was repealed and the size of claims made 1,500 feet square. The mineral title conferred by that act was the same as in the act of 1896 to be presently quoted. The repeal of the act giving extra-lateral rights was doubtless a great boon to the miners of British Columbia, as it will spare them the trouble and costly lawsuits that afflict the miners of the United States, where a like law prevails.

In 1896 the mining laws assumd somewhat of their present form. Section 15 of the act passed in that year says: "Any free miner desiring to locate a mineral claim, shall subject to the provisions of this act with respect to land which may be used for mining, enter upon the same and locate a plot of ground measuring, where possible, but not exceeding, 1,500 feet in length by 1,500 feet in breadth in as nearly as form," Section possible a rectangular sub-section (a), of the same act declares "the holder of a mineral that claim shall entitled to all minerals which may lie within

^{*}Amendments were also passed in 1893, 4 and 5, but they did not alter the size of the claims, or the title to the minerals.