

are the Three Jays, Uncle Sam, Mountain Treasure, Lake Shore, Belvidere, Blue Bells and Great Expectations.

On the Three Jays it is claimed that there are about 75,000 tons of ore in sight, as exposed by the drifts and crosscuts on the three levels opened. Sample shipments aggregating about three hundred tons were made from this property in 1899, since which time the management has been actively engaged in developing ore in sight, with a view to ascertaining the capacity of the mine previous to installing an aerial tramway, ore bins and a permanent mining plant. The management of this property, which is owned by the Nahmint Mining Company, has shown the utmost confidence in the district, having expended about \$100,000 in developing the

mined in the winter of 1899 and 1900. The outcroppings were so extensive and of such high grade that a New York syndicate purchased the property, organized the Monitor Mining Company, and started work on an extensive scale. During the year a camp of substantial cabins has been built, a wharf, ore bins and an aerial tramway constructed and about 1,100 tons of ore shipped.

The ore body apparently fills a fissure in an igneous rock. Crystalline limestone is also closely associated with the ore body near the surface, but whether deeper work will determine the ore body to be a contact vein or deposit between limestone and igneous rock, instead of filling a fissure, remains to be proven. The structural geology of this section of the district is quite com-



SURFACE WORKS, EXTENSION COLLIERY.

Three Jays to its present condition. The ore is a good grade of chalcopryite, with occasional occurrences of native copper. The smelting returns show an average of about 11 per cent. copper, with low gold and silver values.

The installations of an aerial tramway about 5,000 feet in length, compressor plant and extension to wharf, including ore bins, has been recently completed. A crosscut tunnel have also been started 425 feet below the lowest workings and about 700 feet below the apex of the outcroppings.

The country rock is crystalline limestone, diorite and a greyish color feldspathic rock, having a porphyritic structure. The ore is usually found either at the contact of the limestone and feldspathic rock, or else at the contact of the latter rock and diorite.

Systematic development of the Uncle Sam was com-

plicated and very difficult to study, because of the heavy covering of moss and material from slides which hides the geology on the surface.

The limestone is most capricious in its occurrence, sometimes occupying quite extensive areas, then again appearing as a narrow seam as though filling a fissure in an igneous dyke, or as filling the space between two dykes, and at one point on the Three Jays it has the shape of a wedge with the thin edge downwards. On the Uncle Sam this rock has maintained the same capricious characteristics, thereby rendering it extremely difficult to classify the ore body.

About \$5,000 was expended on the Lake Shore group of claims, which are situated on the east shore of Anderson lake. The outcroppings of pyrrhotite are extremely persistent, and unlike many other outcrops on Vancouver Island can be traced a long distance.