

diverse, chrysocolla and cuprite occurring in addition to chalcocite and native copper.

Four miles east of Mamette Lake and between Highland Valley and Ten Mile camps, extensive beds of amygdaloid are found covering a large area. These beds are in most cases nearly horizontal, with but a slight dip. Occurrences of tetrahedrite (grey copper) are met with in these beds, a few of which could be made to pay by quarrying; however, up to



A Curious Granite Formation.

the present time little work has been done. On one property, the Grey Eagle, the ore was followed down to a depth of 75 feet, from which one shipment was made, but owing to difficulties in transport shipments, were not continued.

In this article I have endeavored to show that there exists a very interesting and wide mineral belt in the country to the north of Nicola and commencing but a very short distance from that place. When transportation facilities are afforded it will be found that in the place of promising prospects there will be producing mines.

#### ST. EUGENE CONSOLIDATED MINING CO., LIMITED.

(By E. Jacobs.)

**T**HE St. Eugene Consolidated Mining Company resumed work at the St. Eugene mine on April 18, employing 60 men, and it was intended to add to this force about 200 miners during the last week of April and first week of May. Shipment of ore is to commence at once, most of it going to home smelters, only the surplus they are for the time unable to handle being shipped to Antwerp, Belgium.

The mining property of this company consists of ten mineral claims, comprising three adjoining groups known respectively as the St. Eugene, Moyie and Lake Shore groups, situate on the east side of and contiguous to Moyie Lake, in the Fort Steele Mining Division of East Kootenay.

The St. Eugene and Peter claims were located on

June 20, 1893, the former by Rev. Father Coccola, of St. Eugene Mission, near Fort Steele, and the latter by Mr. James Cronin, a mining man of many years' practical experience in mining and mine management in the United States and elsewhere. Later it was ascertained that the lode on which the St. Eugene location was made dipped into the Peter, so an arrangement was mutually agreed upon under which the two locators each held a half interest in the two claims. Sufficient work was done on the claims in 1893 to meet the assessment requirements for two years. In 1895 they were extensively prospected and a vein of silver-lead ore eight to ten feet in width was opened up. This looked so promising that Mr. John A. Finch, of Spokane, Washington, bought out Father Coccola's interest for \$12,000, thereby enabling that devoted priest to carry out the object he had in view when he yielded to the urgings of one of his Indian Mission "boys," who, after discovering the mineral outcrop, gave the Reverend Father no peace until the "chicamon stone" had been located which was to provide money for the erection of a fine church at the Mission after which the mine was named.

During the next three years Messrs. Cronin and Finch expended about \$80,000 in developing the property. In 1899 they sold a two-thirds interest to the Gooderham-Blackstock Syndicate, of Toronto. The development and equipment of the mine were thereafter still more vigorously proceeded with, and a further outlay of \$150,000 was made. Meanwhile the Moyie and Lake Shore groups, which lay between the St. Eugene and Moyie Lake, were purchased, and then the St. Eugene Consolidated Mining Company was organized to acquire and operate the amalgamated properties.

There are altogether more than five miles of underground workings in the St. Eugene mine, which is opened by twelve tunnel levels, a 125-ft. shaft from the lowest tunnel down to 50 feet below the level of the surface of the lake, and numerous drifts, cross-cuts, winzes, raises, etc. Of these tunnels four are on the St. Eugene group, five on the Moyie, and three on the Lake Shore. The depth from the top of the St. Eugene hill and the approximate length of the respective tunnels are as under:

On St. Eugene Group:—	
Tunnel.	Length.
At 100-foot level .....	250 feet
At 200-foot level .....	550 feet
At 300-foot level .....	600 feet
At 400-foot level .....	800 feet
On Moyie Group:—	
At 600-foot level .....	600 feet
At 800-foot level .....	1,200 feet
At 900-foot level .....	600 feet
At 1,000-foot level .....	900 feet
At 1,100-foot level .....	750 feet
On Lake Shore Group:—	
At 1,500-foot level .....	700 feet
At 1,700-foot level .....	900 feet
At 1,800-foot level .....	2,000 feet