cutting a series of black carbonaceous or graphite slaty shales, and thin bedded limestones, often much folded, but showing an average dip of from 35° to 40° to E. N.E. and apparently flattening towards the summits of the mountains. Most of the veins are parallel with the shalefication, though not unfrequently passing from one bed plane to another."

"The formation, locally at Hlecillewaet, so far as examined, presents commonly a heavy limestone caprock and foot wall of slates—black or dark pyritous slates.

"Iron sulphurets, brightly colored on the surface, form part of the veins and hanging walls.

"The ore usually consists of galena, carbonates of lead and gray copper.

"The gangue of the veins is generally a reddish quartz, which lies in regular veins varying from four to twelve feet in thickness, and is sometimes closely mixed with streaks of pure limestone. The carbonates run through this quarts in streaks from the size of a few inches up to two feet, and generally carry from twenty to forty ounces of silver to the ton, and from 10 to 25 per cent. of lead. Some streaks, however, are found which assay from 100 to 100 ounces to the ton.

"Mixed with these carbonates is the pure galena ore, in pieces varying from an ounces up to a ton in weight, and lying in veins from three to eighteen inches in thickness. This ore, when free from gangue, gives from sixty-five to seventy ounces of silver per ton, and 55 to 60 per cent. of lead.

"The gray copper ore lies in solid veins from four to eighteen inches in thickness, sometimes mixed with galena, and assays from 200 to 800 ounces silver per ton, and from 6 to 30 per cent. of copper. Some of the decayed copper ore of a greenish hue has run as high as 1,800 to 1,900 ounces, and one specimen gave 2,825 ounces per ton.—G. M. Sproat's Report, 1887.

The principal claims are the Lanark, upon which the greatest amount of work has been done. The lode is from 2½ to 5 feet in width of high grade ore; the Maple Leaf, 4½ foot vein, showing silver, gold and lead; the Gladstone, vein 18 to 30 inches, high grade; the Gold Cane, the Corbin and Kennedy; No. 1 and 2, and Dunvegan on Fish Creek. There is a number of others, the indications in all of which have been of the most promising character.

Of course, in a description of this kind it is impossible to convey a good general impression of the mining claims, without going into details which would be wearisome and too lengthy. The information presented, however, has been drawn from the most authentic sources, and generally may be relied upon.

### Trail Creek.

Trail Creek, on the Columbia river near the boundary, has been attracting attention and shows some remarkably good claims, about 170 in all of which have been recorded, considerable work has been done. The principal claims are LeRoi, Josie, Centre Star, Idaho, No. 1 and St. Eldmo. A shipment of ten tons from Le Roi claim averaged $86 in silver. Concerning this camp, last year's mining report says: "The camp at Trail Creek has advanced in public favor. The principal leads are of silver-bearing copper ore, yielding also gold. There is also silver-bearing galena ore. The leads are very extensive, and the quality proves to be higher than was at first supposed. About 30 men have been at work in the camp. The Le Roi Mining Co., an active Spokane concern, has an 82 feet shaft, and a tunnel 130 feet. Assessment, and also some development work, has been done on other claims. The size of the leads and the presence of quantities of ore that will pay to 'matte' are encouraging facts. Assays and returns have been satisfactory."

## ECONOMIC CONDITIONS.

*A General Talk of the Character of the Country.*

After we have found the ore and reduced it to bullion, the next great consideraton is to sell it, and the state of the market affects the demand for and the value of mines. As is well known, silver, lead and copper are low in price, and likely to be for some time. Smelters are combining to limit the output in the United States, and wealthy mine owners have closed down some of their mines. Mine owners with limited capital are, of course, forced to keep producing to live, but have to content themselves with smaller profits on the output. In the case of lead, there is a duty, not only on lead in bars but on the lead contained in the ores, when classified as lead ores, going into the United States, which is the most profitable market. If the market for lead and silver was rising there would be a decided boom in the sale and development of Kootenay mineral properties. On the other hand if they were low grade they would attract little or no attention at the present time from mining men on the other side. As it is, while the ores so far are unusually rich in silver, that is speaking of argentiferous properties, the value of mines is affected, and capitalists invest with the condition of the market in mind. The lead for the time being, which is usually looked to to pay for the cost of treatement, must remain largely an inoperative factor. This constitutes one of the problems of mining in the Kootenay country.

However, the fortunate fact remains that the ores are rich enough to pay a good profit under present conditions, and upon the future must depend the possible utilization of the lead. It is just possible that a profitable market may be found in England and in the United States as well. The market in silver will of course appreciate again, and if the present agitation for a universal bi-mettalic standard of coinage, owing to the high premium on gold, succeeds, although many regard that as highly improbable, it means great things for Kootenay, British Columbia, and the Pacific coast generally. Kootenay would at once jump to the foremost position in the world as a silver producing district.

The scarcity of gold and the present depressed condition of the silver market is leading to and will still further inspire renewed activity in prospecting for gold. The gold belt in Kootenay is limited, though well defined, but not sufficiently developed to determine its importance. A number of prospectors this season are out in quest of placer diggings in the Big Bend country, up the Lardeau and other sections which formerly produced placer gold or where "colors" are known to exist; and with this is included the quest for vein gold or quartz properties. It is premised by many that a rich gold belt exists north of the present Slocan properties and it is confidentially expected that the next big finds will be in that direction That is, however, speculative. A good deal of confidence is expressed in the future of the gold belt on Toad Mountain and the reserve of the owners regarding the Poorman Mine, which is the best representative of its class there is reported as significant of important developments in the near future. Gold at present, is the acme of the miners hopes, notwithstanding that West Kootenay is, speaking widely, distinctly an argentiferous property.

### Advertising the Resources.

So far, beyond the articles that appear from time to time in the press at home and the individual efforts made by mine owners, government reports and the excellent treatises of Dr. Dawson little has been done in the way of systematic advertisement of the country's mineral resources. The first step in this direction was the sending of mineral exhibits to the eastern fairs two successive years, one of which was sent to London, England, and the other placed in the Canadian Institute Toronto. So far as Eastern Canada is concerned, this was practically the first that was known of Kootenay's mineral riches, and was instrumental