

moss, partly swamp and tangled vegetation, rendering its examination very difficult, and the discovery of the rich spots a matter requiring time and labor. In this respect it differs altogether from the character of ground that prospectors work in this State.

CASSIAR.

Most miners will remember the Cassiar excitement of a few years since. This is the most northern discovery on the auriferous belt in British Columbia, being situated about north latitude 59 degrees, and separate from Omineca by over 300 miles of rough country, unknown geographically, and scarcely prospected. Gold has long been known on the lower part of the Stickeen river, by which Cassiar is approached by the coast; but it runs there in light, sandy particles, like those found in many places on the Fraser.

The deposits of Cassiar lie on the sources of the river Dease, and about Dease lake, the upper end of the latter being separated by only a few miles of low country from a part of the Stickeen. The Dease empties into the Mackenzie and this passes into the Arctic sea. The gold field is about 300 square miles. Dease and McDame creeks, the most important, are 100 miles apart. Discoveries have been pushed northward and eastward on river systems connected with the Dease, to an estimated distance of 370 miles in a region which probably lies beyond the province of B. C., in the Northwest Territory. The Cassiar mines are worked under great disadvantages. Situated in almost Arctic climate, where the soil is permanently frozen at a small depth below the surface on the shady sides of the valleys, and a short season during which floods are liable to occur; a country difficult of access; high prices of provisions; only the highly auriferous character of some parts of the region make it at all attractive. The existence of these rich deposits are important as showing the continuity of the auriferous belt of the country.

It is scarcely necessary for us to refer at any length to the Fraser river gold deposits, the first to attract notice, but rich in only a small portion of their extent. Most early Californians will remember the great Fraser river excitement which took thousands from the mines of this State and nearly depopulated many of our towns. It was thought a second "49" was at hand. The gold occurs all along the course of the Fraser, but the mining is now done mainly by Chinamen and Indians.

In Vancouver Island, Leech River district, about 20 miles from Victoria, attracted attention at one time, and yielded considerable gold from a small area. Gold in small quantities has also been found in other parts of Vancouver Island, but the forests are so thick, little prospecting is done.

WHERE GOLD IS FOUND.

Gold has seldom been found *in situ* in the south-

ern portion of British Columbia, but occurs in remunerative quantities in placer deposits in a number of places. These are generally found to lie on, or in the immediate vicinity of certain black, slaty rocks, from quartz veins traversing which the alluvial gold appears to be derived. In the search for gold placers, the extent and distribution of these slaty areas consequently become important, and although only a portion of the streams flowing over these slaty regions hold gold in paying quantity, a knowledge of their position may serve to deter too great expenditure of time in prospecting places probably barren, and turn attention to regions which promise better. These slaty rocks are those which have frequently been referred to by Dawson as included under the Anderson river and Boston bar series of the preliminary classification.

On the lower part of Fraser river, embraced in the district under discussion, no important gold-yielding bars or benches can now be mentioned, though this was the first region to attract the attention of the gold miners to B. C., and yielded largely in the earlier days of gold excitement. Here it would appear as the result of mining that the richest bars, and those yielding the heaviest gold, were found precisely in that part of the river which is occupied by the slaty rocks previously mentioned. The rapid character of the river has, however, led to the distribution of the finer particles of gold throughout its entire course. No deposit of any great extent, as rich as those at first worked on the Fraser, is again likely to be found, as the valley is generally quite narrow, and the upper benches, as well as the bars near the level of the stream, have been well prospected. A considerable quantity is, however, still obtained from the Fraser, when the water is at a low stage, for the most part by Chinamen and Indians. It is also probable that the California hydraulic method may be applied to many of the benches with profit.

From the Thompson, near Nicommen, the first gold known to have been found in B. C. was brought (in 1857), and this locality has continued to yield a considerable quantity of gold at its lowest stages of water. The gold is in large particles, and is obtained by the Indians in crevices among and beneath the stones in the river. No rocks of the slaty series are known near this place, or for some distance above it. Mr. Alfred G. Lock, in his recently published, valuable work on "Gold," where these facts are summarized, thinks "it is not improbable that the gold may here be derived from some of the igneous rocks of tertiary formation. The occurrence of gold in rocks of igneous formation in such quantities as to produce paying placer deposits has lately been distinctly proved in several cases in other parts of the world, and should be borne in mind." On the Nicola river gold in thin