sunk through the muck, and subsequently through the gravel, until bed-rock is reached, and lateral tunnels are then driven from this into the auriferous gravel ; the gravel must then be raised by windlass or hoist to the top of the shaft and there shovelled into the sluice-boxes ; or (2) the muck is stripped off and an "open cut" or quarry is worked into the gravel. The latter appears to be the more satisfactory, but the more expensive method. It can only be conveniently adopted on creeks which have a tolerable grade—say one of about 10 feet to the claim if the gravel is to be shovelled straight into the sluice-boxes. Sometimes it is advisable to shovel away part of the overburden of gravel and to pass the lower portion into the sluice-boxes.

The difficulties of mining in the region are largely due to the presence of the coating of muck (sometimes more than 10 feet thick), which possesses a remarkable power of keeping the gravel beneath it permanently frozen throughout the summer. Sheets of solid ice, locally known as "glaciers," are sometimes encountered in the gravel, and these considerably increase the difficulty of the work, not only because they are hard to penetrate, but because they may, in melting, cause a collapse of the roof.

The creek gravels are those which were first discovered to be auriferous, and the manner in which the earlier work was carried on, by thawing out the gravel with hot stones or wood fires in the winter and washing it in the summer, has been often described.

(2) BENCH CLAIMS (AND HILLSIDE CLAIMS.)

The gold here occurs in older gravels upon the sides of the valley above the present level of the stream. Some of these are sufficiently dry to be unfrozen. In any case, the necessity of stripping is obviated by "drifting," or driving tunnels into the gravel from the face of the hillside.

(3) WHITE CHANNEL.

Of the "bench claims " which rise in successive tiers above

8