

Residual gravels occur on many of the higher slopes in the Klondike, but only in few cases do they form workable placers. The best illustration of such placers which came to my notice was on the upper portion of Victoria Gulch, one of the tributaries of Bonanza Creek, where some beautiful sharp "spinel twins" of gold were found, just in the condition in which they had been washed out of a vein that outcropped higher up towards the summit of the ridge.

Most of the placers in the country are such as are designated above "alluvial gravels" and belong to the class of alluvial gravels found "in the channels of brooks and rivers."

In many of these alluvial gravels that occur throughout the Klondike some gold can be found, but in the gravel deposits in the bottoms of most of the wider valleys, whenever gold is present, it is not evenly distributed, for most of the coarser particles are found in a band of restricted width which lies on or close to bedrock, and wherever the bedrock is fissured these particles descend into it for varying distances. This band or run of coarse gold is known as the "pay-streak," and the discovery of it beneath the gravel of the alluvial plain is the constant desire of the prospector.

The existence of this pay streak has been recognized by placer miners from time immemorial.

A. G. Lock refers to it as the "gutter," which he defines as "the lowest portion of a lead, which contains the most highly auriferous dirt."

Posepny states: "The gold occurs concentrated in the deepest portion of the weather-detritus, that is to say, on the contact with bedrock, and has penetrated all the open, loosely-filled fissures in the latter."

Beck states: "It would, however, be an error to assume that in a cross-section of a river valley the lowest layers of shingle, gravel or sand are throughout the richest. On the contrary, the values in this horizon are variable and pay gravel is ordinarily limited to streaks of greater or less width, which are found in one place in the centre of the valley, in another along one side, now nearer, now further away, from the present water-course."

W. Lindgren writes of the pay-streak as follows: "It is well known to all drift miners, however, that the gold is not equally

* "Gold," by A. G. Lock, 1882, p. 1181.

† "Genesis of Ore Deposits," by Prof. F. Posepny, New York, 1902, p. 153.

‡ "The Nature of Ore Deposits," by R. Beck, translated by W. H. Weed, 1885, p. 620.

§ "The Tertiary Gravels of the Sierra Nevada of California," by W. Lindgren, U.S. Geol. Surv. Prof. Paper 73, 1911, p. 66.