5. Rotten rock, contains particles of gold.

6. Decomposing rock surface, uneven, non-glaciated. Gold in the crevices.

It is in division 4, the lowest member of the stratified beds, that the gold is found in greates quantity, though often met with in the overlying series, as well as in the decomposed rock beneath. Where these stratified, oxidized gravels rest on the bed rock, the gold is most plentiful in the lowest strata, and in the clefts, or between the folia, of the rocks.

The enquiry as to the origin of these gravels and how they came to be gold-bearing takes us back to an early period in the geological history of the region,—soon after it emerged from beneath the sea and became dry land. Subaerial denudation then began and has been in incessant operation ever since. About this time the larger rivers probably had their origin and began to carve out their valleys. Throughout the long ages which have intervened since, these forces of nature, under varying conditions, have been wearing away and reducing the surface of the land. This reduction has been unequal because of the unequal hardness of the rocks, and the difference in their power of resisting erosion. The degradation from these agencies must have been enormous, amounting to several hundreds, perhaps several thousands, of feet, entirely changing the appearance of the country, the existing residual forms of relief being, in no small degree, the result of this wear and waste of the land surface. Regional and orogenic movements have taken place during these ages, the effects of which are evidenced by uplifts and downthrows in several places and in the dislocation of the river valleys; but no cessation in the action of the decomposing and transporting forces seems to have occurred till a much later period, when it was interrupted by the ice age.

Coming down to the Tertiary period we can, perhaps, form some conception of the appearance of this region then, though in an imperfect degree, if we suppose it stripped of all the boulder-clay and overlying deposits. Except on some of the more prominent hills and summits, the surface of the rocks would be mantled by a thick sheet of its own debris. On the slopes and in the river valleys this material would be largely denuded and portions of the decomposed rock would form stratified beds, especially where it