

TERRACES AS A RESULT OF WARPING.

There seem to be but two causes competent to produce terraces of so wide a distribution and so uniform a character. One of these is warping of the earth's crust and the other is change of climate. It is highly probable that terraces resulting from both causes may exist close together, but in the main the terracing in Central Turkestan seems to be due to climatic variations. The reasons for this conclusion are, first, the wide distribution of the terraces, and, second, their relation to the deposition of gravel.



Fig. 140. - View down the Kuzzil Su on the eastern border of Bokhara, showing a gravel-filled valley which has been re-excavated. In the foreground four terraces can be seen on the left.

A phenomenon of so wide an extent and of such uniformity in essential features as are the terraces must have a proportionately extensive and uniform cause. It is possible to imagine a complicated and intermittent bending of the earth's crust so extensive and so systematically related to the streams that all portions of a large area containing four or five distinct and interlocking river basins, with streams flowing in every direction, should be warped so as to cause every stream to cut terraces of the same sort and in the same order. But this would involve a more highly specialized type of bending than is known elsewhere. It would require that