

must have been especially energetic. During the course of time the volume of the lake's effluent grew less and less, until at last it was a mere brook that crawled along the base of the terrace, and now even the brook has ceased to flow. When that came to pass, the lake was cut off and became salt. Now it has entirely disappeared.

The brook which eroded this terrace was a tributary to the Tsanger-shar. At Camp CXXXVI, 4407 m., which is 25 km. from the Tso-nyak, the front of a talus fan from a northern tributary had been exceedingly sharply cut by the Tsanger-shar, and formed a tremendous wall reminding one of those in the Chang-chenmo valley.¹

Thus through the latitudinal valley from Camp CXXXIII to Tso-nyak which I followed in 1901, there once flowed a very mighty feeder of the Panggong Lakes. We have found high and well-defined fluvial terraces both above the Panggong Lakes, in the Tsanger-shar and below the lakes in the Drugub brook and Shayok River, and we have now to examine whether any old terraces also are to be found along the shores of the lakes.

And indeed there is an abundance of well-defined terraces and beach-lines! HENRY STRACHEY observed them in 1848 and says: »All along the banks of the lake there is a well-defined zone of horizontal watermarks, extending to a height of perhaps 70 feet above the present surface, formed both by calcareous concretions and by erosions on the foot of the marginal rocks, corresponding marks being also visible in parts of the alluvial shore; and the uppermost of these lines no doubt marks the level of the existing watershed at Donzho (the threshold).»²

But these old marks are no fluvial terraces; they are as STRACHEY says, beach-lines. They are not formed by the action of erosion along a river, but by the abrasion of waves and ice in a lake. As this lake has subsided gradually by reason of desiccation, the beach-lines indicate former niveaux of the lake. During the distant epoch when a gigantic river flowed through the Panggong valley, mighty fluvial terraces of the same kind as we find along the Shayok, Indus and Chang-chenmo, were built up along its banks. It is obvious that the rising of the surface which dammed up the valley, obliterated these terraces, for it would be absurd to assume that the rise could have been so regular as to save the terraces from destruction. The beach-lines of the lakes are very regular and absolutely horizontal.

In the vicinity of Camp CXXXIX at Bal on the northern shore of the eastern Tso-ngombo where the mountains come down in precipitous walls, old beach-lines are often observed. In one place there are five such, rising one above the other, and to some of them there were corresponding beach-lines on the southern shore, showing up with remarkable distinctness as dark and perfectly horizontal lines. The

¹ Opposite p. 264, *op. cit.*, there is a photo of this terrace.

² *Physical Geography of Western Tibet*, J. R. G. S. Vol. XXIII, p. 47, 1853.