

the existing stream. Now these cannot have been produced by chance heavy rains, because we know as a fact, that the range between the river's high-water level and low-water level varies within only narrow limits in the course of the year; in other words the volume of the stream remains practically unchanged. The accompanying illustration represents the transverse valley at Kalka.

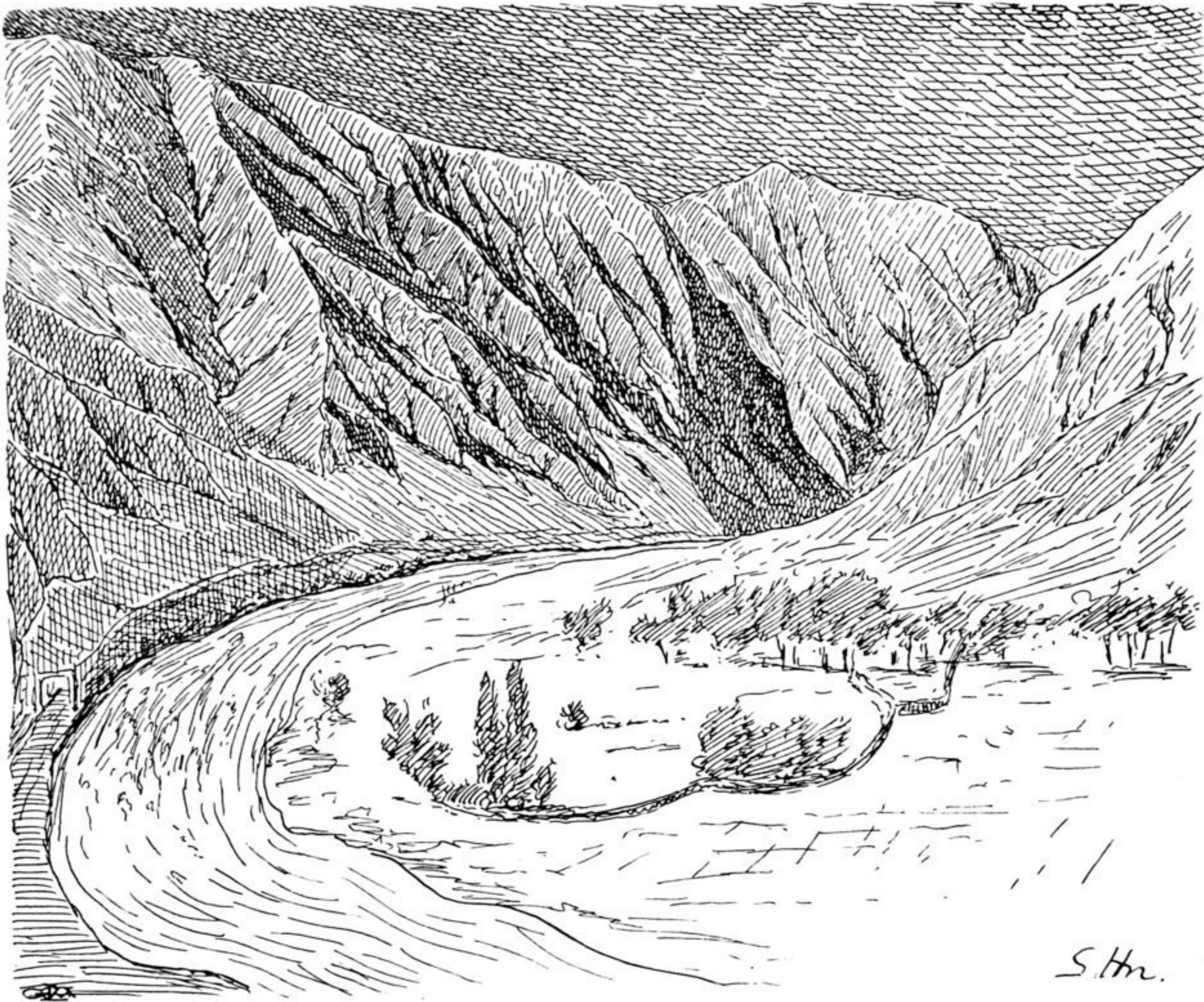


Fig. 177. VIEW OF THE KURUK-TAGH AT KALKA; TOWARDS THE NNW. THE TRANSVERSE VALLEY OF THE KONTSCHE-DARJA COMING DOWN FROM BAGHRASCH-KÖL.

Since then the surface of the lake is constantly subsiding, the substratum upon which the Ak-bel-kum rests tends to grow relatively higher, and to lift itself terrace-like above the lake. The lake-dunes must advance very slowly towards the north-east, if it is the fact, as is stated, that the eastern part of the lake is deep; while on the other hand the leeward slope would be prolonged considerably under the water, and the nearer the dunes approach to the deep parts of the lake the slower will be their forward movement. If the water-level  $a-a$  (see fig. 178) drops after a certain time as low as  $b-b$ , and during the same period the dune  $A-A'-A''$  advances to  $B-B'-B''$ , then in the latter case the leeward side will have been proportionally prolonged. Whilst this is taking place, the kamisch-grown abrasion terrace  $A'$  travels to  $B'$ , describing a line which horizontally is directed to-