

perhaps the unconformity between Tertiary and Quaternary time. This uptilted series contrasts with that above in being of fine silts and sandstones, with only an occasional bed of conglomerate, and is much more consolidated. But its detailed structure is that of alluvium and appears exactly like those silts deflated on the surface farther out and whose thickness up to 40 feet is exposed in channels cut by larger streams. The beveled strata rise more and more to view with occasional masses rising above their general surface of erosion as monadnocks buried in the later piedmont, and, in time, some ridges rise out into open air, thus taking part in the topography of to-day.

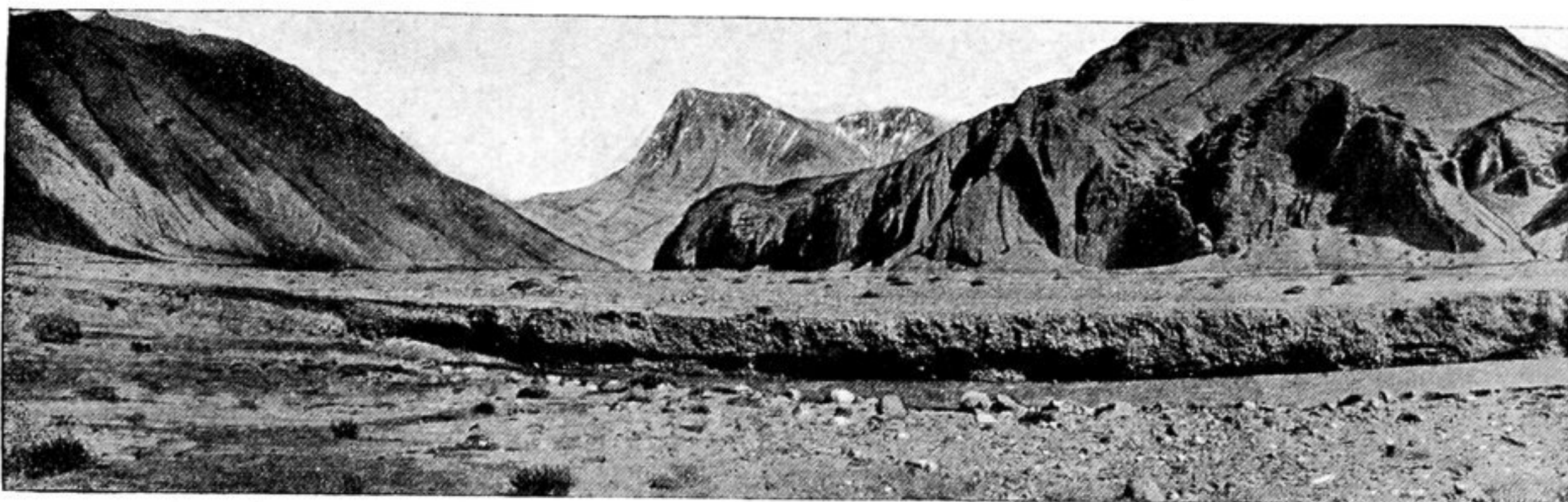


Fig. 463.—Terraces of Markan Su.

The canyon is now perhaps 500 feet in depth and cut half in the older series. Its depth increases to 1,000 feet and more while the older series rises, outcropping from the now much-dissected piedmont more often, until at length we find it as spurs projecting from border masses of ranges entirely composed of it (the older series), and its tilt has steadily increased. These mountains, thus composed of desert piedmont strata built as those now forming, were in Quaternary time the

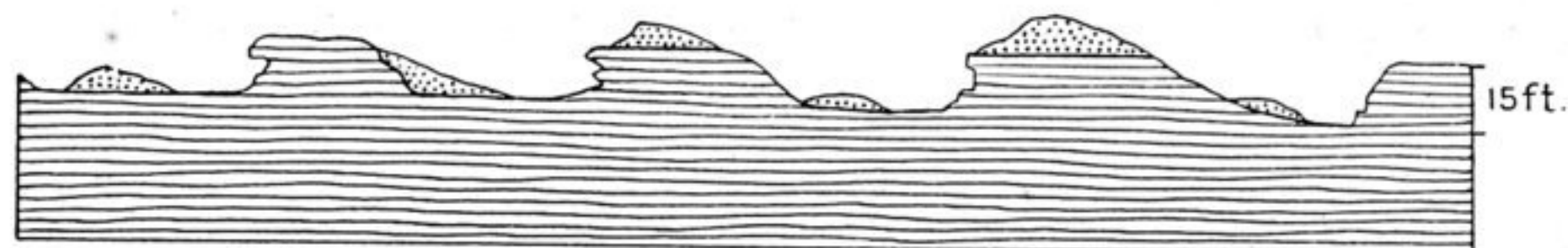


Fig. 464.—Deflated Silts and Residual Sand-dunes (Tarim).

source of the red silts and conglomerates composing the more recently dissected piedmont and are together with them the source of materials laid down on the oasis playas and piedmonts of to-day. Continuing the journey into the mountains there were seen remnants of a high-uptilted and much-dissected topography of mature form and doubtless corresponding to the dissected piedmont derived from them. This topography, none of which may be termed a peneplain, but which nevertheless conforms to that found on the border ranges of Pamir, is doubtless an equivalent of the mature stage found by Davis in the Tian Shan and Bailey Willis in Central China.

Such in general are the great features of Western Tarim. Yet one characteristic of importance should be considered. We have seen how a wide margin of