

from passing trains shows that almost universally the "ateck," or "skirt" of the mountains, as the Turkomans term the piedmont slopes, has been subjected to a slight dissection. The numerous coalescent fans are intersected by small dry valleys, the peculiar feature of which is that they are not fresh, but are everywhere grassed over, while the sides are reduced to a very gentle angle and the bottoms appear to be half filled with sediment. They are certainly not channels which are now being eroded, and they seem to extend farther than the farthest floods of to-day. It is possible that they belong to a rather recent time when the streams flowed farther out into the desert than they do to-day. The largest stream of the district is at Lutfabad, where the railroad crosses the lower waters of the stream whose terraced upper portions have been described by Professor Davis. Here, where the stream spreads out upon its fan shortly before coming to an end, it is bordered by two distinct terraces.

From Dushak southeastward for 80 miles to Serakhs, at the northeastern corner of Persia, on the Heri Rud, or Tejen River, I traveled by caravan and was able to examine the country more closely. Few new features were seen, however. Near the mountains the fans are naturally more arched and more gravelly than farther out toward the plain. Curiously enough, the old stream channels do not take the form of depressions, but appear as incipient ridges topped with a belt of cobble stones, some of which are 6 or 8 inches in diameter. Apparently at some previous time the streams deposited cobbles along the floors of their channels. Since that time the fans have been so far degraded that the channels have disappeared and their floors have been converted into ridges. The present streams are incised below the plain to depths of from 10 to 15 feet, or even more. All that were seen were small dry channels, with the exception of the flowing streams at Meana.

THE MURG-AB RIVER.

Omitting for the present the Heri Rud (river), which comes from the interior of the Iran basin, one more stream must be described, which flows from the northern side of the mountains. The Murg-ab, *i. e.*, Murg-water, rises in the Paropamisus Mountains in northwestern Afghanistan, and flows northward into the desert of Transcaspia, where it finally loses itself in the reed-beds of a swamp after watering the flat oasis of Merv. At Merv itself and throughout the oasis the main stream flows practically on the surface of the delta, although some of the irrigation canals are incised 10 or more feet. Upstream, however, the delta is bounded by cliffs of silt, which gradually converge and grow higher until at the dam of Hindu Kush, 30 miles above Merv, the river flows in a well-defined valley. At the dam the sides of the river show two terraces, one of them 10 feet above the level of the water in June and the other 30 feet above that level. The banks of both terraces appear very young and freshly cut, as indeed they ought, since the lower is merely the border of the channel and the upper is occasionally undercut by the river when an unusually high flood causes the stream to overflow. It is interesting to note that the channel seems to be growing deeper at an appreciable rate. The dam is located just below the divergence of an old river channel which was abandoned something over a hundred years ago, and into which the new dam, completed about 1895, now