Wind, water, and ice erode the mountains and have particular deposition areas within the highlands, where part of their products accumulate more or less temporarily to form loess, alluvium, and moraine. But as these positions are, in the course of long time, unstable, practically all the products of erosion must ultimately find repose in strata of the great interior plains. Moraines, however, are very resistant to transportation from their zone, and massive remnants of those deposited in even the beginning of the glacial period still survive *in situ;* and it is still possible to recognize sections of alluvium and its wind-blown derivatives, sand and loess, deposited during the glacial period on now dissected highlands and broad valley terraces.

Within the latitudes of Central Asia, glacial deposits are confined to the peripheral mountains of desert basins. Areas of alluvium, loess, flying sands, and lacustrian deposits are found more or less unstable on the highlands, while the great alluvium, flying sands, and lacustrian deposits have their special, well-defined, and concentric zones respectively one within the other on the great interior plains of a basin. Loess and flying sands are in large part the wind-blown derivatives of spread-out alluvium, but they are undoubtedly much added to from direct deflation of the more arid highlands—a fact to be demonstrated in the section on the Northern Pamir. As lake deposits are simply modified alluvium, there are only four primary derivatives of the original mountain masses—moraine, alluvium, loess, and flying sands; and much of the alluvium is modified moraine and the direct charge of glacial grindings.

An ideal desert basin, not over about 100 miles across from crest to crest, would be completely inclosed by mountain ranges. Its glacial zone would be a periphery of ice mantling the crests and extending into the heads of high valleys; its loess zone would flank the base of the mountains thus encircling the plains; its alluvial zone would lie next inside as a piedmont belt of the plains; while the flying-sands zone would lie next within as a wide belt surrounding the lacustrian zone or brackish sea of the middle of the basin, reached by large streams rising in the glacial zone and crossing the loess, alluvial, and flying sands.

In Western Turkestan the lacustrian, alluvial, flying-sands, and loess areas are now four well-defined zones, respectively one within the other, loess on the outside, while glacial deposits are naturally confined to the higher mountains and nowhere reach below an elevation of 7,000 feet. As an exception to this generality, the rivers Amu and Syr penetrate to their inland sea, the Aral, thus dividing the zone of flying sands with two narrow extensions of the alluvial. The lacustrian is thus united with the alluvial zone, and this is more often the case in Eastern Turkestan, where flying sands are divided into several wide nuclei by long rivers that traverse the basin. Although it is to future exploration that we must look for comprehensive records, a general outline of past conditions may be construed from our observations on the five zones, together with sections in earlier layers, exemplified and checked by a study of the topography of erosion.