

be transported and spread in a sheet on so gentle a slope. East of Sistan the wonder becomes greater. According to Colonel McMahon, the dreary expanse of the Dasht-i-Margo extends eastward 150 miles without change and without interruption from the top of the bluffs of Sistan to the first mountain, Malik-Dokhand in Baluchistan. In this distance the plain rises 2,500 feet—less than 17 feet per mile—and yet gravel has been smoothly distributed everywhere. It is noteworthy that in the driest regions the accumulation of gravel is most extensive, provided the relief of the neighboring mountains is great.

Proceeding now from the coarser to the finer deposits, we find that the center of each basin usually holds a salt lake or playa, bordered by an area of fine silts. Playas and salt lakes are so abundant and various that the Persians have different names for different sorts. The names are used loosely and often overlap, but there seems to be some system. Thus "darya" signifies simply a lake or any large body of water; "hamun," which is often translated "swamp," is used for a body of water which is partly open and partly filled with reeds; next comes "nemeksar," a salt lake which is dry part of the year, but contains water during the rainy season, and, on drying up, deposits salt which can be used commercially. Still drier than the nemeksar is the "kavir," a salt playa or swamp which may sometimes be covered with water for a brief period, but never forms a real lake in which salt of economic value is deposited. Its deposits are always mixed somewhat with sand and silt. The Persian naturally looks upon the utilitarian side of physiography, but his classification is exact enough to be of scientific value. In all these forms of lake, swamp, or playa the deposits which are not composed of salt present much the same appearance, being usually fine-grained saline clays or silts.

OLD AGE.

In the absence of observational knowledge of any country which has grown old under arid conditions, we are obliged to fall back upon deduction in order to discover the ultimate fate of Persia if the present conditions of climate and elevation remain unchanged. In youth and maturity the elevation of the floors of the basins above sea-level is of small importance. In old age it plays an important part. If the floor of a basin is below the level that would be occupied by a peneplain at the same distance from the sea, it will never be affected by aqueous erosion and, unless otherwise influenced, will preserve the forms due to deposition as long as the continent continues to exist. If the center of the basin is considerably above sea-level, on the other hand, the basin form and the features due to deposition will eventually disappear. In every region where there is any aqueous erosion the divides between different drainage areas must shift continually until the slope on the two sides is equal. In a basin region such a state of equilibrium can never be attained so long as the streams on one side flow to the ocean and those on the other to a basin; for the local base-level of the basin rises indefinitely by reason of deposition, and the slope of the streams flowing inward is continually diminished. The ocean base-level, on the contrary, remains fixed, and the slope of the streams reaching it is diminished only by the lowering of the divide which affects the streams on both sides to an equal extent. Accordingly the ocean streams will always have a slightly perhaps imperceptibly, steeper slope than their opponents, and the divide