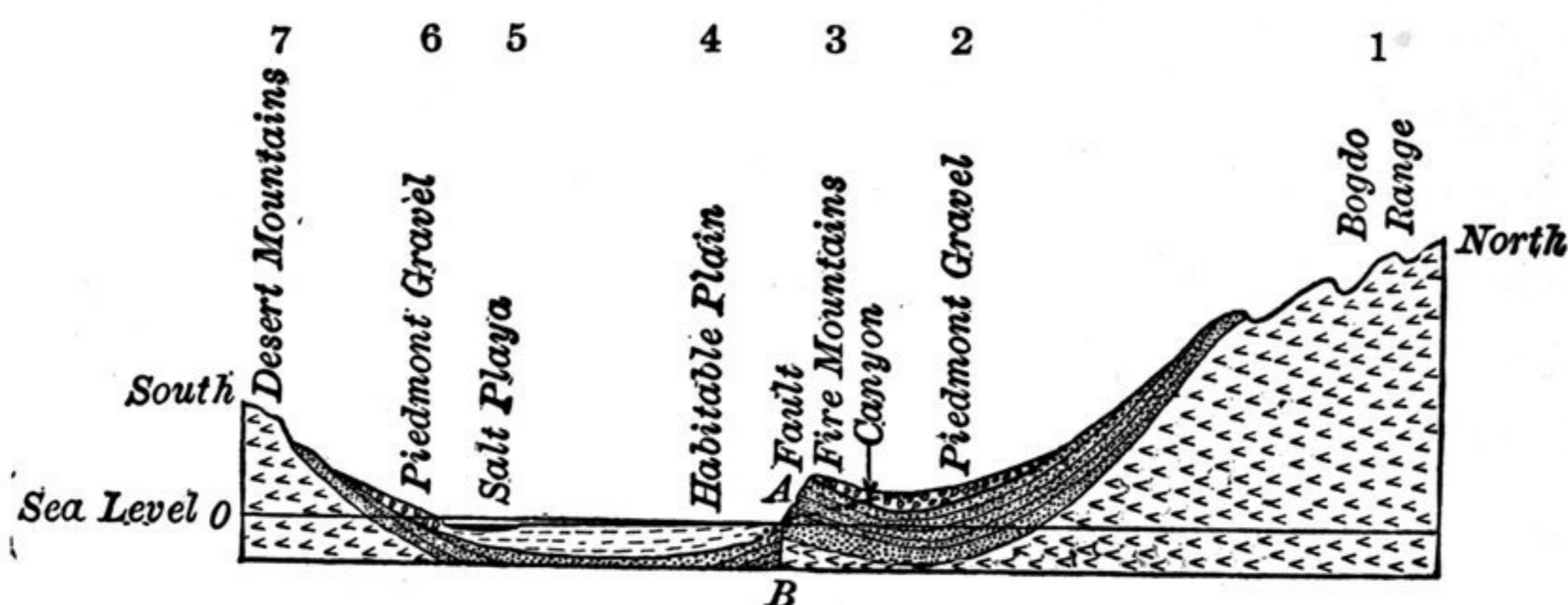


among the Chinese, and hence has come the erroneous assertion that there is an active volcano in Central Asia. The hollow between the Fire Mountains and the Bogdo range is so deeply filled with gravel that the little fault-range appears very insignificant on the north side, though on the south it rises in a steep, straight escarpment to a height of nearly two thousand feet above the lacustrine plain (4) at its base. While the Fire Mountains were being uplifted, the stream from the Bogdo range cut gashes across it, the narrow red canyons mentioned above, which penetrate



GEOLOGICAL CROSS-SECTION OF THE TURFAN BASIN

into the very heart of the northern piedmont gravels, and drain the hollow between the ranges. Most of the water which seems to have been lost at the base of the high range drains out again into the canyons, and after dashing down the steep red gorges, emerges on the lake plain to support numerous prosperous villages. Farther south and on either side of the streams from the canyons, no surface water is available for irrigation, and the people have adopted the Persian device of digging "kariz," underground tunnels with a grade less than that of the sloping plain, and thus lying farther and farther below the surface as they are fol-