

culture at 20 feet below the surface of the plain. In shaft D, sunk through the culture-strata on the low northern extension of the kurgan, the base of culture was found also at 20 feet below the surface of the plain, allowance being made for the inclination of the plain in going north. But fragments of pottery and wash, derived from the lower culture-strata, found at 30 feet below the surface in shafts F and E, prove that this kurgan also was founded on an elevation. Shaft C disclosed the fact that the main mass of the South Kurgan was, like that of the northern one, founded on loess.

The first important results of the underground studies came from shafts sunk at and near the South Kurgan, and shown on plates 2 and 3. We were fortunate in finding in these the data for calculating the relative rates of growth of the sediments in aggrading the delta on the one hand, and of the culture-strata on the other. A low plateau extends out from the main and high part of the kurgan. Now while

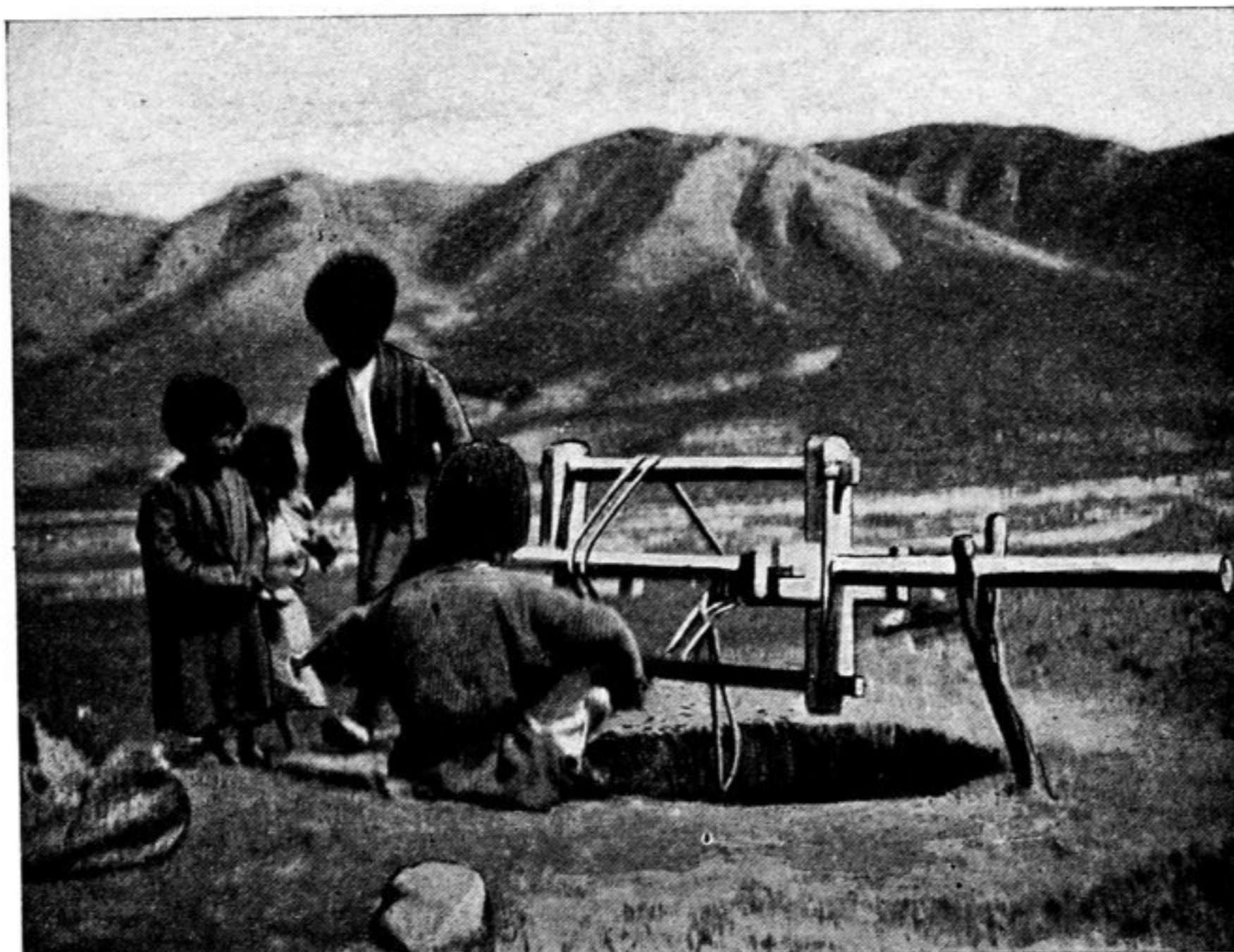


Fig. 9.—A Persian Windlass.

shaft C, sunk to the bottom through the heart of the high part, is wholly in culture-strata, shaft D in the projecting plateau, after sinking through culture-strata, enters natural sediments, below which it passes again through culture-strata till it finds the base of culture at the same level as under the main body of the kurgan in shaft C. As we recognize geological horizons by their characteristic fossils, so here we recognize the cultures to which these strata belong by their characteristic pottery in which they abound. We find interbedded in the natural sediments in shafts E and F a layer of wash, W, which contains pieces of the lower culture that was cut in shaft D. After the depositions of this pottery the natural sediments grew 19 feet in height, submerging the settlement and rising to the level at which it is covered by culture-strata in shaft D, which is 16 feet below the beginning of the pure iron culture (culture IV). Now the evidence in shaft C is that the main body of the kurgan grew uninterruptedly from its base 52 feet,