

but deep and rapid. Karaul-dung itself is a conspicuous sand-dune, overgrown with vegetation, about 10 m. high, whence an excellent view of the locality can be obtained. We now perceived that the portion of the river which we last traversed consisted in reality of a network of arms, all reuniting at the foot of the hill. The greater part of them only carry water during the season of high flood, when they probably fuse together into one broad stream. The left bank was steppe, the right bank young forest. In the south and south-east, at a distance of one to two kilometers, we saw the extreme outlying dunes of the great »ocean of sand«. In the west, on the other side of the river, is the stationhouse of Aksak-maral, embowered amongst poplars and willows. The surface of the country through which the river here ploughs its way consists of sand, and nothing but sand. In places it had cut a path through the sand-dunes, 4 to 6 m. in altitude, showing in the face of the cutting the different wind-deposited layers of which they were built up. These dunes however, owing to the vegetation which covered them, were stationary; and although a narrow strip of silt and mud had been deposited at the foot of the cutting close to the water's edge, it had not sufficient consistency to support the weight of a man. The district was perfectly uninhabited, destitute in fact of animate existence; and yet distinctive parts are sometimes not without names. For instance, there are Kuda and Kum-atschal, where a tolerably luxuriant poplar wood is growing. Here the scarped

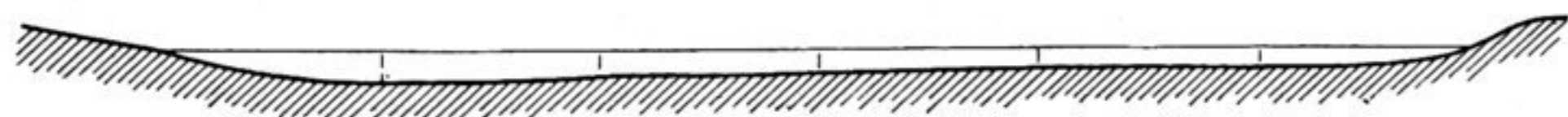


Fig. 27. Left. 1.07 0.95 0.89 0.82 0.79 = depth. Right.
 68 72 56 43 39 } velocity.
 56 65 47 29 29 }
 Breadth = 48.0 m. Kum-atschal, Sept. 25. Scale 1 : 500.

banks were 2 m. high, and the river 6 m. deep, this measurement being obtained, as usual, in a bend. Above the same bend, where the river was 48.00 m. broad, the mean depth did not exceed 0.753 m., while the mean velocity was 0.4808 cm. in the second, and the volume 17.38 cub. m. in the second.

September 27th. During the last 36 hours the river had fallen 3.8 cm., and a new erosion level had made its appearance in the face of the escarpment. The main stream was now rejoined by one of the arms which branched off from it at Kötäklik; it is here called Atschal. After receiving this fresh augmentation, the river resumed its previous appearance — scarped banks 2 to 3 m. high, alluvial deposits, and borders of magnificent woods, interrupted now and again by smaller kamisch-beds, as well as by isolated sand-dunes, some with vegetation, others without. This was especially the case at Petelik-otak, a place where the river makes a considerable bend towards the south; there the sand-dunes burst through the forest and approach quite close to the stream, the bank being at that spot $3\frac{1}{2}$ m. in height. Upon reaching Kum-atschal we again struck the broad empty bed of the Kona-darja, and so issued from the new four-year old Jangi-darja, which we had followed ever since we left the district of Kötäklik. The old abandoned river was, as I have just said, dry, except for a little *köl* of stagnant water at the very end of it, a survival of the stream which flows through it at the season of high flood, and then only. Indeed, its bed was in part overgrown with fresh grass, and on its left bank there were