September 19th. At first the river flowed due north, afterwards almost due east. The accompanying forest, although it grew a little thicker, still remained less than 4 m. in height. The vertical face of the containing banks seldom exceeded 1½ m. The nomenclature bears witness in the name Kum-tokaj (Sand Forest) to the arenaceous character of the surface. Kosch-toghrak (Double Poplar) derives its name from the fact that the great caravan road passes there between two high poplars; the same district is also called Kosch-otak. There too a mill is driven by a little canal issuing from the river. In that same locality the stream is very broad and expanded. Immediately below the place last named a canal strikes northwards from the river and irrigates the fields of Jeren-patti, where the shepherds grow maize and wheat. At Schäschkak there are old and lofty poplars; the place is inhabited by four shepherd families, owning some 200 sheep, besides a number of goats and cows. These people also carry on some agriculture, their fields, which lie on the right bank of the river, being watered by a canal which quits it at Bisch-köl. The information which I gathered during the course of the day is not devoid of

interest. For instance, I was told that the river had reached its maximum flood two months before the time of our visit, that is to say, about the 20th July; and since that date it had been subsiding, at first slowly, but later on more rapidly. It was expected to freeze there in about 75, or at the most 80, days. There too the ice is wont to remain for three months. After the ice melts, and after the water thus liberated has flowed away, there remains so little in the river that its bed can be forded in several places.

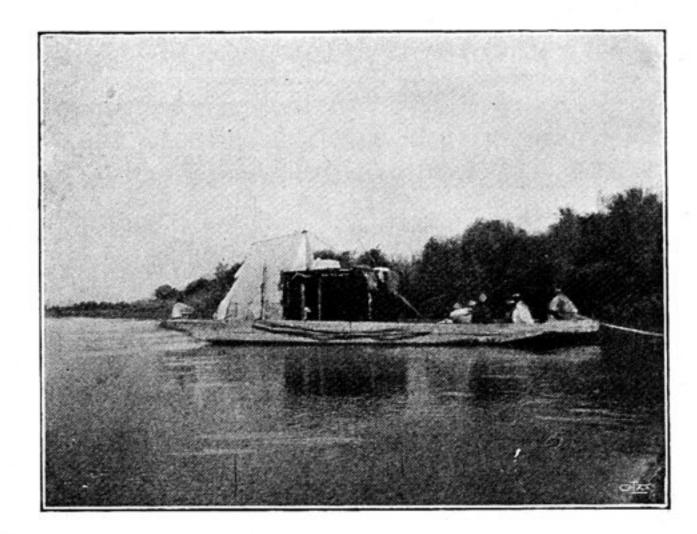


Fig. 13. THE FERRY-BOAT A LITTLE BELOW LAJLIK.

At Schäschkak the current was very narrow and deep. Its breadth amounted

to 42.6 m., of which a portion, 5 m. across, next the left bank, was dead, that is to say, it had no current. The maximum depth was 3.90 m., and the mean depth 2.274 m. The mean velocity = 0.6608 m., and the volume 64.01 cub. m., in the second. Thus the river still continued to show an appreciable fall. At our camp the face of the right bank measured vertically 2.30 m.

During the night the level dropped I cm.; but during the next following night it rose again at the same place I 1/2 cm. These oscillations would seem to depend

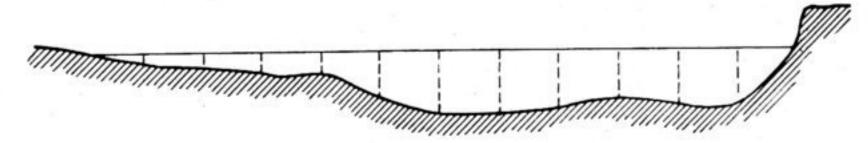


Fig. 14. Left. 0.52 0.81 1.22 1.17 2.87 3.90 3.76 3.62 2.95 3.20 3.27 = depth. Right. 40 54 45 60 50 57 89 81 91 89 70 41 33 34 66 72 79 91 84 80 66 72 velocity. 63 83 85 76 84 56 65

Breadth = 42.60 m. Schäschkak, Sept. 19. Scale 1:500.