turn back, for, as the canal itself is only a few hundred metres long, its fall cannot exceed two or three cm. When I paddled across the mouth of the canal of the Ullugh-köl on the morning of the 8th May there was a scarce perceptible movement out of the lake back into the river. Judging by the eye, I put its volume down at 1, or at the most $1^1/_2$, cub. m. in the second. On returning to our winter-quarters at Jangi-köl on the evening of the same day, we fixed, as I have already stated, a sounding-rod, marking ± 0 at the surface-level. By the 16th May the river had dropped 15.1 cm.; on the 19th it stood only 7.9 cm. below the ± 0 mark. The next day it rose 1.1 cm., and on the day following that 8.7 cm., so that on the 21st May its level was 2 cm.* higher than on the 8th May. Slight though this difference of level is in itself, it was nevertheless sufficient not only to neutralise the outflow from the lake, but also to pour into it a volume of 6.665 cub. m. in the second. On the basis of these figures it is fair to infer, that on the 16th May, when the river-level was higher than on the 8th May, a considerable volume of water flowed out of the lake. The Ullugh-köl is subject to oscillations of level for a considerably longer period than the Karaunelik-köl, because its canal is nearly twice as deep as the canal of the latter. The final result is no doubt pretty nearly that which I have already obtained, for during the whole of the time that the river is oscillating in level, now rising, now falling, the surface of the lake is steadily diminishing, in consequence of the evaporation and absorption into the ground, irrespective of what its absolute level may be. The energy of the river is directed to equalising the levels of itself and the lake. After a sudden rise in the river, which, as we have seen, can amount to 1.345 m. above the level of 21st May, the lake becomes filled with immense masses of water boiling like a cataract. Eventually a state of equilibrium is reached, and then water is drawn out of the river by the aspiration of the lake, set up by evaporation and absorption. If the Tarim then drops, the lake drops with it, because it not only suffers loss through the two ways just mentioned, but its water begins to flow out also into the Tarim. According to the natives, the current from the lake back into the river is never very lively; it is never under any circumstances comparable with the inflowing current, so that these lakes may at all times be regarded as parasites living upon the river.

I have already stated that on 7th May the river at the neighbouring Kirtschin carried a volume of 89.06 cub. m., and on the 23rd May a volume of 78.58 cub. m. One would naturally expect therefore, that the inflow into the lake would be considerably greater on the former than on the latter date, when the volume of the river was $11^1/_2$ cub. m. less. But it was not so; and for this there exists an obvious and very natural cause, namely the 7th May is the nearer date to the 15th March, when the river at that spot attains its maximum. From and after this date enormous quantities of water flow into the lake; and even though the river continues to drop, however slowly, the inflow nevertheless still goes on, although at a rate which

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* This figure is only approximate, because the two data last quoted were obtained at a different place from the others, and the resultant 2 cm. is correct only on the assumption that the river possessed precisely the same breadth in both places. But the breadth was undoubtedly greater at the place where the two last measurements were taken, so that the resultant rise, measured on the sounding-rod at Jangi-köl, is more than 2 cm.