

take the mean of the three volumes we obtained from our three different methods of measurement — 13, 22, 57 millions — then for the quantity of water which the Karaunelik-köl draws off from the Tarim during the 66 days between 15th March and 20th May we obtain a total of 31 million cub.m.

Turning now for a moment to the cubical capacity of the lake, we find that its area amounts to 5,850,000 square meters, thus distributed — 1,550,000 square meters in the northern, and 4,300,000 square meters in the southern, basin. Soundings were taken at 53 different points, and gave as the mean depth of the lake 5.61 m. Hence the total cubical capacity of the basin is 32,818,500 cub. m., or a solid cube of water each of whose sides measures 319 meters. According to the method of computation adopted above, the lake during the 66 days of high water received an influx of 31 million cub.m. of water. Thus in the space of little more than two months the body of the lake was entirely renewed, and a mass of water equivalent to a cube of 319 meter sides was thus prevented from flowing down to the Kara-koschun. And we may safely assume, that during the autumn flood precisely the same thing takes place (see (2) and (3) fig. 229), the only difference being, that more water is then lost, owing to the evaporation in the lake being incomparably heavier in the summer than in the winter, when the lake is frozen. At this latter season such loss as there is takes place through absorption into the ground. It is easy to conceive what the annual loss of two cubical masses of water such as these signify for the Kara-koschun; and as I have already endeavoured to show that the Tarim is relatively a recent comer in this part, and that the lakes we are discussing are also new creations, it will readily be understood that their origination is one of the causes of the disappearance of the Kara-koschun. Throughout the entire region of the Kara-koschun there does not exist a single open lake possessing the dimensions of the Karaunelik-köl, and what proportion this lake bears to the area of the entire lacustrine system we shall endeavour to calculate lower down. By way of obtaining yet another and final check upon the results we have obtained above, let us assume that the volume of 2.3 cub.m. represents the mean inflow for the whole of the year, and it is rather too low than too high an estimate, then we obtain for the annual drain which the Karaunelik-köl makes upon the river a total of 72,500,000 cub.m., which agrees approximately well with the result we have obtained of two solid cubes each of whose sides measures 319 meters.

When the lake is full and stands at the same level as the river, as it did on the occasion of my visit, then the influx of 2.3 cub.m. in the second is a measure of the amount of water which the lake loses through evaporation and absorption into the ground. Thus it is not enough that all this chain of lakes should be filled, for even when this has been effected, and they have thus levied one heavy contribution upon the river, they go on — that is if the canals are open, as that of the Karaunelik-köl was — to drain away yet other vast volumes of water, and to that extent seriously impair its riverine vitality. We may liken them to polyps or parasites, who have fastened themselves upon the Tarim, and suck away its life-blood, the natural consequence of which is that the river, so to speak, pines away, and its terminal basin, into which all its surplus waters ought properly to be gathered, shrinks year by year.