

in the volume of the Tarim to that amount, and would bring up its volume from 64 to 82 cub.m. as the mean per second, notwithstanding the losses which inevitably take place on the way down to the mouth of the river. The total volume which under those circumstances would be poured into the Kara-koschun would amount to 2585 million cub.m., or one-fifth more than the total cubical capacity of 2,018 million cub.m., which we have calculated it at above. The origination of these 35 marginal lakes is therefore a factor of great importance for the Kara-koschun, and we ought also to remember, that in addition to them there are innumerable others all along the course of the Tarim. The river would only need to change its bed in the vicinity of Jangi-köl and the supply to the lakes would be cut off, and the Kara-koschun would at the same time be appreciably enlarged. Their existence is certainly one of the causes of the shrinkage which has taken place in the terminal lake during the latest phase of its history. Whether in the time antecedent to that they stood in any sort of mutual relation to the Kara-koschun, as also whether they are at the present time expanding, cannot be decided, though it is probable that both questions should be answered in the affirmative. Perhaps the raising of the lake-basin as shown in fig. 128 does have some sort of relation to the origination of these marginal lakes; for if the water-level of the Kara-koschun were raised, it would naturally of necessity react upon the lowermost Tarim, as a sort of ascending wave, or general elevation of the level of the river, resulting in an arrest of erosion and an increase in sedimentation. But now, that the river appears to be deserting the Kara-koschun, and new lakes appear to be forming to the north of it, the difference of level between them and the lower Tarim is greater, and perhaps this circumstance so far will prove detrimental to the marginal lakes and advantageous to the new lakes to the north of the Kara-koschun. Meanwhile however the difference of level is so slight that any effects it may have are as yet minimal.

Bogdanovitsch received the same impression that I did in 1896, namely that the terminal lakes of the Tarim are, as it were, travelling *up* its stream. This inference is suggested by the great number of recently formed deltaic arms which break off from the river above Kum-tschapghan, and which grow every year at the expense of the arms that exist below them, as well as at the cost of the Abdal lakes and the new lake-basin which has formed between the lowermost Tarim and the Tokus-tarim. But the inference is erroneous; the movement which it presupposes is only apparent and accidental, and is contradicted by the formation of the new lake-basin to the north of the Kara-koschun. The real fact is, that the Kara-koschun is so nearly completely filled up that the water *must* gather elsewhere, either to the west or to the north of it.

It is difficult to determine with complete certainty what the relations are which obtain between the northern lakes and the Kara-koschun. All we know is, that the former were receiving on 31st March a volume of 34 cub.m. in the second, or rather less than the volume which the Tarim carried altogether at Jurt-tschapghan on 25th June. Further, we know that this river had at the same place on 3rd April a volume of 141 cub.m., and it was then subsiding; in other words, the 34 cub.m. was coincident with the high flood of spring, which we have taken to be 160 cub.m. Now the question arises — does the inflow into the northern lakes decrease pro-