

portionally to the decrease in the volume at Jurt-tschapghan, or is it virtually independent of that decrease, in the same way as the Tarim is at Kum-tschapghan? I have shown, that when the volume diminishes at Jurt, the canals dwindle away one after the other, but at Kum the volume remains within certain limits virtually constant. If the same conditions prevail in the arm  $c$ , which communicates with the new lakes, it would mean that the main body of the water, or the true stream of the Tarim, proceeds thither undiminished; and that this probably is the case is suggested both by its greater velocity and by the incipient attempts at rampart-formation which we noticed at each end of the arm, in the two adjacent lakes that it links together. The formation of these northern lakes must occasion a considerable lowering of level throughout the Kara-koschun, and consequently large areas of its domain must have been converted into dry land, a circumstance which would naturally in a high degree facilitate the rampart-building operations of the continuator of the river, the arm C. But seeing now that the greatest depression in that region no longer exists within the confines of the Kara-koschun, but outside them to the north, it is clear that the stream is aiming to avoid the old lake, at all events the dry exposed portions of it, and is striving instead to flow directly to its real terminal lake.

If on the other hand we assume that the volume in the arm C. is all the year round proportional to the volume at Jurt-tschapghan, that is to say, if it forms the same curve as is shown in fig. 129, the corresponding stadia being each a little later in date, then the arm C will carry a mean volume of 13.6 cub.m. in the second, or 429 million cub.m. in the year. What direction its development will take can only be decided by fresh investigation. One thing however is certain, that the new lakes will be as ephemeral as the Kara-koschun, and while expanding after the high flood, they will dry up almost entirely in the summer. There can be no doubt that the recently formed Tokus-tarim arm is intimately related to the new lakes, in that both have come into existence since the old basins became filled up with sediment, and consequently became no longer serviceable.

When describing our return from this interesting journey I shall have another opportunity to touch upon the last-named river-arm. We started on 1st April, our goal being Jurt-tschapghan. Great changes had already taken place on the northern shore of this the western part of the Kara-koschun; a large part of the route we followed the year before was now under water, and we had to adopt a more northerly line of march. Nor had we advanced very far towards the south-west before we saw wide expanses of water spreading to the north of us, so that we were travelling along a promontory of varying breadth, and traversed by ranges of dunes. Hence from these lakes, which are formed from the Tokus-tarim (issuing at Schirge-tschapghan), it is no great distance to the new desert-lakes, and no doubt they are endeavouring to effect a junction with them, and will effect a junction with them unless they are prevented by a threshold not evident to the eye. At intervals we observed the usual dead vegetation — tamarisks, kamisch, and two or three poplars, one decimeter thick. On the south we had the parts of the Kara-koschun known as Jaghisma-köl and Tschöl-köl.

The water from the Tokus-tarim was now divided into three arms. The first, which was 9.81 m. broad, had a mean depth of 0.440 m., a mean velocity of 0.3165