

Kara-koschun happens to be higher than the level of the river, its water may actually flow backwards up the river. This is the train of reasoning which was suggested to me by the statement, that in summer the river drops 2.55 m. In 1896 Kuntshakan Bek told me, that the difference between high water and low water amounted to  $2\frac{1}{2}$  to 3 kulatsch, or 4 to 5 m.; and at a later date I ascertained myself that there was a drop of more than one-half in the space of  $2\frac{1}{2}$  months. Considering then that on 8th April the maximum depth of the Kara-koschun was 5.15 m., whereas in summer it drops 2.55 m., it results that at the latter season its maximum depth ought to be 2.60 m., and by far the greater part of the marsh ought then to be dry, for it is of course only those parts that are free from reeds which possess a depth of 2.60 m. Wherever there are reeds, and this applies to nine-tenths of the entire area of the marsh, the depth at the high-water period falls a long way short of that figure, indeed it seldom amounts to as much as 2 m. As the areas free from reeds are the only parts of the marsh that are accessible for sounding, and as all my measurements refer to such parts, it may safely be said that the figure 5.15 m. comes at any rate very near to the actual maximum depth. Thus in the height of the summer it is only an extremely small fraction of the entire area of the marsh that is under water; in fact it is only the deepest trenches and hollows that then contain water. During that period however the kamisch suffers no harm, for it is only left dry for about a couple of months; and not only is the groundwater close to the surface, but the soil itself on which it grows is so thoroughly moist, that the reeds easily hold out until October, when the returning water once more supplies sustenance to its roots. But during this interval, in which the surface is laid dry, will not the wind carry away some of the material from the exposed area, and thus help to deepen the basin, and so tend to preserve it as a depression? Not at all, certainly not. The kamisch prevents it from doing so; for equally whether it grows on dry land or in water, the kamisch still continues to arrest the dust and drift-sand. Add to this, that for some time even after it is exposed, the bottom of the marsh remains moist, and so still detains the loose material. The most important point of all is however this, that in July, August, and September there is but little wind; the season of storms is then past. Hence the annual exposure of certain parts of the bottom of the marsh cannot in any way contribute to the perpetuation of the depression as such.



Fig. 107. THE LOWERMOST TARIM ACTING AS A RESERVOIR FOR THE SUMMER WATER.

All the same, and notwithstanding the unanimous statements with regard to the enormous drop in the summer, I truly believe that the Kara-koschun, even at that season, acts upon the lowermost Tarim after the manner of an «aspirator», or suction-pump, although its power is very slight. On the 25th June 1900 the Kuntschapghan arm was practically dry, for it contained nothing more than an insignificant rivulet. Now a drop of 2.55 m. in the Jurt-tschapghan could not fail to pro-