

the river; but in spite of that, we found, when the stream was at its lowest, that the maximum flood-level was about one meter higher than the actual level at the end of October. And the next measurement we made showed, that the Ak-su-darja is almost five times as big a stream as the Jarkent-darja at the confluence of the two. I have no doubt that the same relative proportions are maintained at the period of maximum flood, though it would require a fresh measurement at that season to make the matter absolutely certain. Indeed, I can readily conceive, that the difference between the two streams is, if anything, greater in July and August than it is in October, for the sources of the Jarkent-darja are very much more distant than those of the Ak-su-darja, so that the maximum flood of the former must reach the point of confluence considerably later than the maximum flood of the shorter stream, the Ak-su-darja. In other words, the maximum floods of the two rivers do not reach the confluence simultaneously: that of the Ak-su-darja arrives earlier than the flood of its sister-stream, owing to the fact that its feeders in the Tien-schan are very much nearer the confluence than the feeders of the Jarkent-darja in the Kwen-lun.* In a similar way, once its highest point is attained, the Ak-su-darja, no doubt, begins to fall before the Jarkent-darja does, so that by the end of October the subsidence of the former is more advanced than the subsidence of the latter, and yet we ascertained that the Jarkent-darja is only one-fifth as big as the Ak-su-darja. In the early summer of 1895 I found an even greater difference than this: for instance, on 2nd June, the Ak-su-darja measured 69.3 cub. m. in the second or approximately ten times as much water as there was in the Jarkent-darja. On the strength of these data there is reason to suppose, that the Ak-su-darja is absolutely the larger stream at all seasons of the year. If however the distance from the point where each

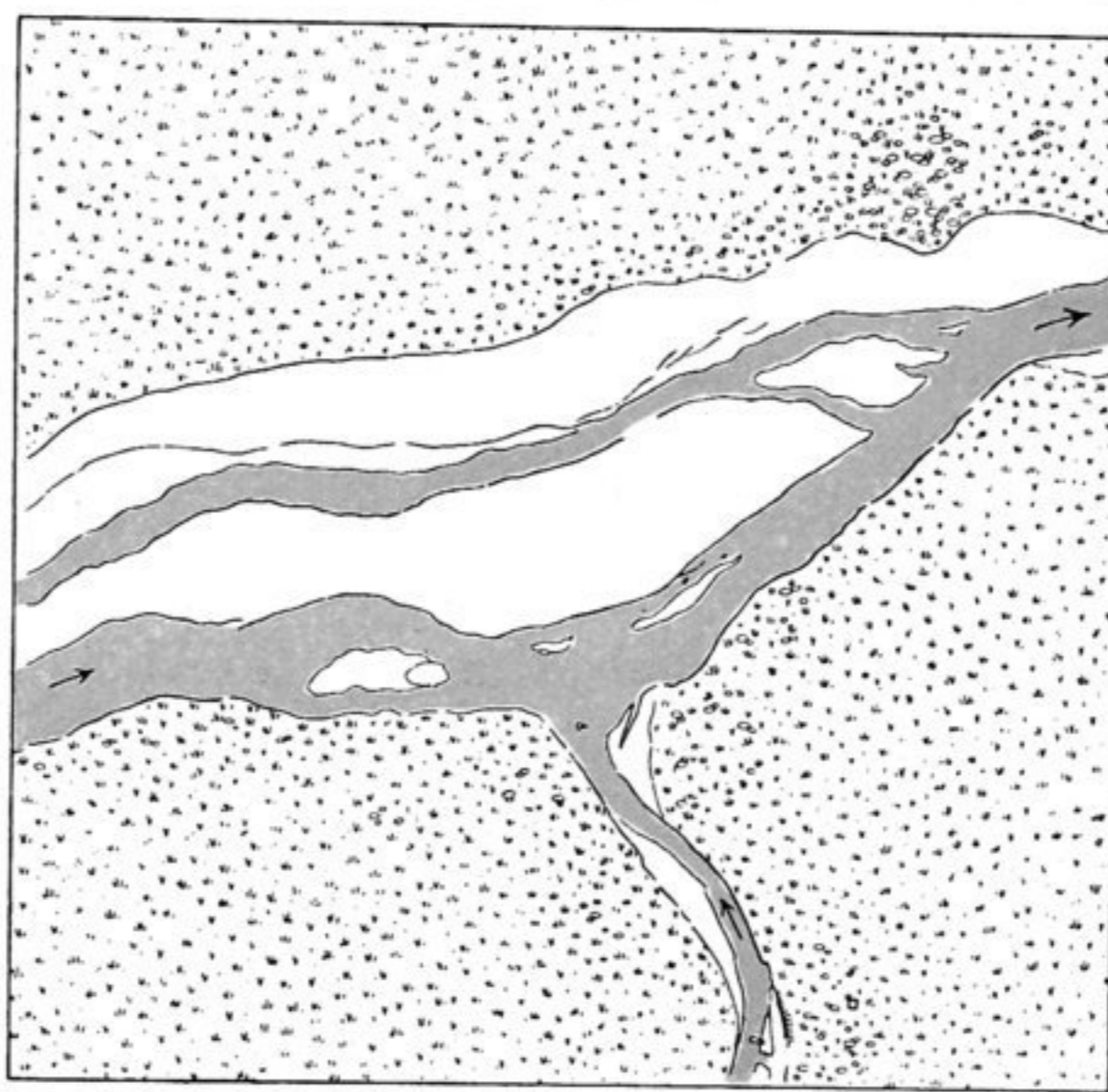


Fig. 79. CONFLUENCE OF JARKENT- AND AK-SU-DARJA.

* A man, who apparently possessed an intimate knowledge of that part of the country, gave me information of a different tenor. He asserted, that the Ak-su-darja attains its highest level in the end of August, and that the full-flood period only lasts a week. The flood water of the Jarkent-darja arrives, he said, ten to fifteen days earlier, and the flood-water of the Chotan-darja in the end of July or beginning of August, that is to say, coincidentally with the flood-water of the Jarkent-darja, and so considerably earlier than the flood of the Ak-su-darja. It is of course quite impossible to lay down any law in this case, the circumstances being to such a great extent dependent upon climatic conditions. On the one hand, the basin of the Jarkent-darja, and especially the gathering-grounds of its sources, are situated at a more southerly latitude than those of the Ak-su-darja. On the other hand, the gathering-grounds of the latter are probably more directly exposed to the power of the midday sun. Besides, the thermometric conditions over the regions in which the two streams originate respectively vary from year to year. A cold summer at the head-waters of the Jarkent-darja will retard the date of its maximum flood, while at the same time the conditions in the head-water region of the Ak-su-darja may perhaps favour a rapid melting of the snow. Hence it is impossible to lay down any regular and uniform law with regard to this matter, especially as the region as a whole is so little known, and continuous observations extending over a prolonged period are altogether wanting.