

## VOLUME OF WATER

I may here say something about the volume of water in the Konche-darya in the spring of 1934. The measurements were carried out by CHEN, who used a current meter with electric transmitter.

The river Khaidu-gol, which comes from the Yulduz Valley and flows into Lake Baghrash-köl, was on February 28th at Qara-shahr carrying 45.26 cub.m of water a second. That the Konche-darya at Korla was carrying only 25.77 on March 5th proves that the canals above Korla deprive the river of a very considerable part of its volume. The result of the measurements at Yar-cheke on April 7th is very interesting, for the river was found to be carrying a volume of 94.65 cub. m; this figure proves that the river receives a handsome contribution from the Tarim. The stream at Sai-cheke was 67.1 m. in width; the maximum depth was 5.5 m; and the greatest velocity 1.099 m per second. The volume of 96.87 cub.m per second (on April 12th) was the highest we measured. To judge from the highwater marks on the banks and the information we received, the volume of water is much greater in the autumn (September and October) than in the spring, amounting then to probably a couple of hundred cub.m per second, of which by far the greater part comes from the high water of the Tarim.

Thus, all this water running out into the desert below Sai-cheke is more or less wasted. It was our task to investigate means of controlling it and utilizing it for human use. The populations of the oases of Eastern Turkistan are almost entirely dependent on the water that streams down from the surrounding mountains — the K'un-lun, Pamir and T'ien-shan — and is diverted over fields and gardens through innumerable canals. The volume of water carried through the desert to Lop-nor down the Qum-darya, which has sprung into being again since 1921, could, if controlled by irrigation, provide many thousands of people with their daily bread.

We started on April 13th from Sai-cheke, the picturesque metropolis that our visit had caused to spring up among the dunes on the bank of the Konche-darya, voyaging downstream as smoothly as if we travelled upon the most perfect highroad. Long, narrow reed-clad islands lay strung out along the banks, where the reeds also formed wide yellow fields. Wild geese, ducks and other water-fowl started up from time to time with a whirring of wings and shrill cries of warning. As we passed a little overgrown islet one of our boatmen sprang ashore and came back with half-a-dozen duck's eggs. When a hen-bird rises from a patch of reeds in the river it is always likely that she comes from a nest containing eggs.

From a burning field of reeds a short way ahead rose black clouds of smoke.