

tions and walls could be glimpsed here and there on the rocky heights on either side. The valley was so narrow that its little stream took up most of the bottom, and one splashed along the bed in the water. The mouth opened towards the south-east, and on the south side of the exit was a stone fortification wall one and a half meters in height and thirty meters in length. From the foot of the Langshan one has a magnificent view over the Huang-ho valley.

They rode on eastwards, over the alluvial fans at the foot of the mountain, over small dunes — and finally reached the first settlement, where the sand-dunes came to an end and the country had more vegetation to show. To the south stretched a belt of bound dunes. Crossing a canal, that happened to be dry, they pitched camp at a place called Sain-nor. Here were three little newly erected farmsteads, and several others could be seen in the distance. The farmers cultivated wheat, millet, hemp, melons, potatoes, cucumbers, beans, cabbages and all kinds of greens, and maize. For the right to farm here every settler had to pay fees both to the Mongols and to the authorities of Sui-yüan.

The fauna in these parts includes antelopes, hares, pheasants, partridges, foxes and wolves. Vultures, swans, wild ducks and geese are common. The domestic animals are camels, donkeys, sheep and goats.

According to local information, the first frost may be observed as early as September 8th, and August 24th is regarded as marking the end of the summer. September and October is here the loveliest season of the year. In January the temperature in San-tao-chiao sinks to -20° or 30° C. There is but little snow in winter. The sand-storms begin in the month of March, and come from the west. The ice on the river is as much as two meters in thickness. The break up of the ice in spring is followed by floods. The work in the fields begins on April 4th or 5th, and is finished in October. The wet season comes at the end of July and the beginning of August, but the rainfall is not heavy. In June it is only eleven millimeters, in July thirty. Fogs occur practically not at all. The Huang-ho is frozen over from December to March. Navigation is possible from April to November. Transport takes place on rafts floated on hundreds of sheep-skins, the latter being either inflated with air or stuffed with wool. Three tents can be erected on such a raft. Huang-ho fish are most easily caught in the canals, where one also finds turtles.

The Chinese merchants take up their position at the foot of the mountains to which the canals flow. On these waterways are transported flour, grain, coal etc., which are exchanged for hides and wool from Mongolia.

HEMPEL and ZIMMERMANN crossed one of the largest of these canals with their party. It flowed from the south-west to north-east, was fifteen meters across and 1.6 meters deep. The rate of flow of the current was 1.5 meter per second. It extended to quite near the foot of the mountains where the Huang-ho had its course two hundred years ago. But the bed of the river has shifted further and further