ON THE TRAIL OF THE OPIUM POPPY

SIR ALEXANDER HOSIE







THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA LOS ANGELES

IN MEMORY OF CARROLL ALCOTT

PRESENTED BY

CARROLL ALCOTT MEMORIAL LIBRARY FUND COMMITTEE





.

.

. .

.

*

.

ON THE TRAIL OF THE OPIUM POPPY VOL. I

.





YÜAN SHIH-K'AI. President of the Republic of China.

ON THE TRAIL OF THE OPIUM POPPY

A NARRATIVE OF TRAVEL ' IN THE CHIEF OPIUM-PRODUCING PROVINCES OF CHINA

BΥ

SIR ALEXANDER HOSIE, M.A., LL.D., F.R.G.S.

LATE H.B.M. CONSUL-GENERAL, TIENTSIN, CHINA AUTHOR OF "THREE YEARS IN WESTERN CHINA," "MANCHURIA: ITS PEOPLE, RESOURCES AND RECENT HISTORY," ETC., ETC.

VOL. I

LONDON

GEORGE PHILIP & SON, LTD., 32, FLEET STREET Liverpool : PHILIP, SON, & NEPHEW, Ltd., 20, Church Street

1914

(All rights reserved)

- .

DS 710 H6680 V.1

PREFACE

THIS book is not a history of the Opium Question, nor does it deal with the evils which attend the abuse of the drug. It is a plain narrative of journeys made in China during the years 1910 and 1911 for the purpose of investigating the extent of poppy-cultivation in those provinces which had hitherto been the chief centres of opium production. The main results of this investigation have already been made public through the medium of Parliamentary papers; but he would be a poor observer who confined his attention to one particular subject and shut his eyes to the physical characteristics and economic conditions that constantly present themselves, not to speak of those incidents which befall every traveller in a little known and, in part, unexplored country. It is in the hope that a description of these characteristics, conditions and incidents may prove of some interest that the following pages, compiled from my diary, are now published. The inception, organization and methods of the anti-opium crusade in China are described in the first of two Appendices, the second of which contains a summary of my investigation into poppy cultivation in each of the six provinces traversed by me.

ALEX. HOSIE.

SANDOWN, ISLE OF WIGHT. November, 1914.

1454530

CONTENTS OF VOL. I

CHAPTER		PAGE
I.	PEKING TO THE YELLOW RIVER	I
II.	THE YELLOW RIVER TO HSI-AN FU, CAPITAL OF THE PRO- VINCE OF SHENSI	21
111.	HSI-AN FU TO THE FRONTIER OF THE PROVINCE OF KANSU	60
IV.	FROM THE FRONTIER OF KANSU TO THE CAPITAL OF THE	
	Province	87
v.	Along the Northern Road from Lan-chou Fu back to	
	Shensi	118
VI.	Across Shensi from Kansu to Shansi	160
VII.	RETURN TO PEKING THROUGH SHANSI AND CHIHLI	184
VIII.	Peking to the Province of Szechuan	213
IX.	FROM WAN HSIEN TO CHUNGKING BY RIVER AND LAND .	2.42
X.	CHUNGKING TO CHENGTU, THE CAPITAL OF SZECHUAN .	264

ILLUSTRATIONS IN VOL. I

	MAP OF THE PROVINCES OF SHANSI, SHENSI, AND KANSU At end of e	FACING	PAGE
	Yüan Shih-k'ai, President of the Republic of China Frontie		
Ι.	Bridge on the Cheng-T'ai Railway		16
2.	RAILWAY GATE OF T'AI-YÜAN FU		16
3.	South Gate of T'ai-yüan Fu		16
4.	CAMEL CARAVAN, SHANSI		32
5.	STONE MILL, SHANSI		32
6.	The Loess Formation, Shansi; with Mule Litter Passenger Cart	AND	48
7.	Well Irrigation, Shansi		48
8.	Loess Cave Dwelling, Shansi		48
9.	NESTORIAN TABLET, HSI-AN FU, SHENSI		64
10.	INNER SOUTH GATE, HSI-AN FU, SHENSI		64
11.	PAGODA OUTSIDE SOUTH GATE, HSI-AN FU	•	64
Ι2.	PUBLIC WATER TOBACCO PIPE, WITH CUSTOMER		96
13.	LANCHOU FU, CAPITAL OF KANSU, WITH BRIDGE ACROSS Yellow River	THE	128
14.	POPPY HEAD (Papaver somniferum)		176
15.	MEMORIAL ARCHWAY, NEAR SHUANG-LIU HSIEN, SZECHUA	N .	176
16.	Long Stone Bridge across the Pa Ho, Shensi		t 76

ILLUSTRATIONS IN VOL. I

		FACING	
17.	Gorge on the Upper Yangtsze	•	224
18.	$T_{\mbox{\scriptsize rackers}}$ at a Rapid on the Upper Yangtsze .		224
19.	$R_{\mbox{\scriptsize APID}}$ and Gorge on the Upper Yangtsze $% A_{\mbox{\scriptsize APID}}$.		240
20.	BRIDGE OVER A TRIBUTARY OF THE UPPER YANGTSZE,	Wan	
	Hsien, Szechuan		240
21.	CITY AND PORT OF CHUNGKING, SZECHUAN	•	272
22.	SALT JUNK ON THE UPPER YANGTSZE, CHUNGKING .	•	272
23.	POPPY FIELDS IN SZECHUAN PRIOR TO THE ANTI-OPIUM CRU	ISADE	288
24.	CHINESE ASH (Fraxinus chinensis), COATED WITH INSECT W	ніте	
1.	WAX, NEAR CHIA-TING FU, SZECHUAN		288
25.	THE AUTHOR'S CHAIR ON THE CHENGTU PLAIN, SZECHUA	AN .	288

The Author's grateful thanks for the loan of photographs, here reproduced, are due: for Nos. 2 and 3, to Mr. W. E. Bryant; Nos. 5 and 6, to the English Baptist Missionary Society; Nos. 10, 11, and 16, to the Rew. J. C. Keyte; No. 13, to Dr. G. E. Morrison; while for No. 23, the Author wishes to acknowledge his indebtedness to "Commerce," 9th January, 1901.

viii

ON THE TRAIL OF THE OPIUM POPPY

CHAPTER I

PEKING TO THE YELLOW RIVER

The petals of the Chinese opium poppy¹ are of various hues. White predominates; but pink and white, different shades of red, and purple are by no means uncommon. The season of cultivation differs with the provinces : in the west and south-west sowing takes place towards the end of October or beginning of November, flowering occurs in Szechuan in March, and the opium is harvested in April. In Yünnan and Kueichou it is one to two months later, and in the north-western provinces of Shansi, Shensi, and Kansu the poppy is in full bloom in June, with harvest in July.

It seems almost unnecessary to explain that opium is the juice or sap which exudes from incisions made on the outside of the capsules when they have attained their full development after the fall of the petals. In India the petals are carefully collected and used in the preparation of the outer shells or husks of the balls containing the opium, but in China they are discarded. The incisions in the capsules, sometimes horizontal, but more frequently perpendicular, are made with the points of three or four small parallel

¹ Papaver somniferum.

VOL. I.

blades inserted in a short wooden handle, and so arranged as to leave the tips exposed, and only sufficiently long to lance without penetrating the wall of the capsule. Occasionally, as in parts of the province of Chekiang, a small instrument resembling a carpenter's plane takes the place of the multi-bladed lance, and the capsules are shaved downwards leaving the ragged tags attached to the lower sides of the poppy-heads. These incisions or shavings, which are repeated at intervals several times on each capsule, are, as a rule, made in the evening, and the exuding sap, at first cream, with a dash of pink, in colour, but later turning dark brown to black, is collected in the morning, the collector-man, woman, or child, as the case may begenerally using a flat strip of bamboo to remove the inspissated sap-the raw opium-which is dropped into a bowl or cross-section of a bamboo, and thereafter exposed in the open for the evaporation of surplus moisture or, if required for more immediate use, dried by the application of heat.

I have specially mentioned the above six provinces because they have hitherto been the chief centres of opium production in China, and because they are the provinces with which this narrative deals. Distances in China are so great, and transport in the interior so slow, that on my return to China towards the end of April, 1910,' it was too late in the season to reach the south-western provinces while the poppy was in the ground, and I accordingly directed my steps to the north-western provinces of Shansi, Shensi and Kansu, where I should be able to see it in flower, and the opium in process of being harvested, reserving till the following season my examination of the provinces of Szechuan, Yünnan and Kueichou.

On arrival in China I proceeded to Peking where I made the necessary preparations for my first journey, and on the 4th May, 1910, I left the metropolis by rail bound for T'ai-yüan Fu, the capital of the province of Shansi. Early on the afternoon of the same day the train, after running south for 150 miles through the province of Chihli, steamed into the station of Shih-chia-chuang, where, next morning, I joined the train which goes westward to T'aiyüan Fu, a distance of 151 miles, over the metre gauge line known as the Chêng-T'ai railway. The approach from Chihli to Shansi by rail did not create a favourable impression on my mind. The line passes up through the well-known loess formation, then arid to a degree owing to lack of rain. The low hills, many of them inhabited by cave-dwellers, are terraced, and the terraces faced with stone to prevent denudation by rain or that detrition which is steadily going on throughout the whole loess formation, owing to its friable vertical cleavage, a detrition which must in time change the whole aspect of the provinces it overlies; but I shall refer to this subject later. It is only when T'ai-yüan Fu is neared that the country opens out and reveals a plain, 3000 feet above the level of the sea, resembling in many respects the seemingly boundless plains of Honan and stretching away to the south and south-west. Some miles to the north-west and north, the plain is hemmed in by hill ranges giving birth to streams which, uniting to the north of the provincial capital, join the Fen Ho, flowing from the north-west, whose waters and tributaries irrigate the south of Shansi and ultimately enter the Huang Ho or Yellow River before the latter, sweeping south and dividing the province from Shensi, resumes its eastern and north-eastern course

4 ON THE TRAIL OF THE OPIUM POPPY

through Honan, Chihli and Shantung to the Gulf of Pechihli.

Comparatively few trees dot the loess hills bounding the track of the railway; but willow, poplar, fir, date (Zizyphus vulgaris), Cedrela sinensis and Ailanthus glandulosa ("Tree of Heaven") find an occasional foothold. Coal, however, both anthracite and bituminous, underlies the loess, and the whole province of Shansi is known to be one of the largest and richest coal-fields in the world.

The railway station at T'ai-yüan Fu lies outside the south wall of the city, and on arrival there on the afternoon of the 5th May, I found the Principal of the Imperial University and his wife-old friends-awaiting me, as well as the carriage of His Excellency Ting Pao-ch'iian, Governor of the province, who was good enough to place it at my disposal during my stay in the provincial capital. His Excellency was well aware of the object of my visit and at two interviews which I had with him on the 6th and 7th May, he assured me that the cultivation of the poppy had entirely ceased within his province in 1909, and that an attempt to revive cultivation in 1910 within the district of Wen-shui Hsien, a two days' journey to the south of the provincial capital, had been suppressed by a military force which, on resistance being offered, opened fire on the threatening crowd, resulting in over forty casualties in dead and wounded, and uprooted the young poppy plants.

In 1909 His Excellency had invited a friendly examination of his province, and a Consular Officer was detached from the British Legation for the purpose. He spent a month in the south of Shansi, covering a distance of 400 miles, but failed to find a single poppy plant. His

Excellency expressed a wish that I should meet such members of the Provincial Assembly (not then in session) as were in T'ai-yüan Fu and on the 7th May I had the opportunity of discussing with them the whole question of opium. The President and members of the Assembly present gave me the same assurance regarding the eradication of the poppy in Shansi as the Governor, and seemed to be justly proud of the achievement of their province; but when they hinted that, Shansi having done so much, there should be a further reduction in the export from India, I pointed out that their province was only a small part of China and that, as regards diminution of poppy cultivation, the Empire must be taken as a whole and not individual provinces. They said that, instead of a diminished, there was an increasing import of Indian opium into China, and I explained that the higher prices ruling in China, as in trade generally, naturally attracted opium from other consuming countries and that the menace to China was not Indian but native-grown opium, and they seemed surprised when I told them that at the Shanghai Opium Commission the Chinese delegates in their Memorandum admitted that the annual production of opium in China amounted to about eight times the quantity annually imported from India and in former years had even exceeded that amount. They were (no doubt inspired by the Governor) anxious that I should express an opinion regarding the measures of suppression taken within the district of Wen-shui Hsien, but this I declined to do, saying that any decision thereon rested with the Chinese Government and the Chinese Government alone.

Meantime, I was organizing a caravan to convey myself, servants and baggage to the provinces of Shensi and Kansu, and it was ultimately composed of five baggage mules, a litter resembling a sedan chair, but seatless, swung between two mules, two riding ponies, two servants, four muleteers, and a groom. To these have to be added a petty official from the Bureau of Foreign Affairs at T'ai-yüan Fu and a soldier, both mounted, deputed by the Governor to escort me to Hsi-an Fu, the capital of the province of Shensi. Local escorts, varying in number and changed in each district traversed, completed the caravan. With this cavalcade my aim was to enter Shensi in the north and then pass south through that province. To the west the Yellow River is the boundary of Shansi and Shensi; but there was little knowledge of the river in T'ai-yüan Fu, and opinions differed as to the place where the crossing could most easily be effected. The only thing was to trust to luck, and on the morning of the 10th May we emerged from the main south gate of the city and soon entered the sandy valley of the Fen Ho where wheat and barley were well above ground.

Between the city and the river, which we crossed by a bridge of millet stalks, troops—infantry and cavalry were being drilled, and they proved very inquisitive as to who and what I was and whither I was bound. Across the river the road runs south by west, parallel to ranges dropping their foot-hills into the plain and starting streamlets, whose waters were diverted to the fields under crop. Eleven miles from T'ai-yüan Fu we passed through the district city of T'ai-yüan Hsien, and four miles beyond lunched at the village of Chin-tzu which lies close to the foot-hills, whence irrigation channels, frequently banked with stone, ramify into the plain. Another ten miles brought us to the village of Ch'ing-yüan-hsiang, where we lodged for the night after passing through a country full of wheat and barley some eighteen inches high, and thickly dotted with the Chinese date tree 1 with occasional willow, Sophora japonica, whose petals yield the Chinese Imperial yellow dye, poplar, and vines trained over wooden frames and carefully tended. The barley cultivated in this part of Shansi is a huskless bere which, as in the case of the huskless oat also grown in this province, but still more widely in Shensi and Kansu, threshes out like wheat. Small flocks of sheep in poor condition were nibbling with the greatest eagerness withered grass wherever there was any waste land, and the stubble of last year's crops where the fields awaited ploughing and flooding for the reception of the rice or padi shoots-in some cases already planted out. The sheep were of the fat-tailed variety, but their tails were much attenuated.

During the second day's journey from T'ai-yüan Fu the road, still following the trend of the hills, takes a more westerly course as far as the district city of Wen-shui Hsien, about 25 miles from Ch'ing-yüan-hsiang, passing midway the district city of Chiao-ch'eng Hsien, the approach to which is lined on both sides by elms for a distance of seven miles. We did not enter the latter city, but had lunch outside the walls in a temple which had been thoughtfully swept and garnished. From this point the road is bordered by willows as far as Wen-shui Hsien, within and without whose walls are magnificent specimens of Sophora japonica of enormous girth. The city itself is so poor, however, that it does not possess a single decent inn and the magistrate had been good enough to borrow a few rooms for our accommodation from a friend. In addition

¹ Zizyphus vulgaris.

to wheat the soya bean (*Glycine hispida*) was a prominent crop, and the fields were dotted here and there with peach trees and vines, while farm houses were frequently surrounded by high crenelated walls containing lofty square towers also crenelated. In some places there were depressions between the foot-hills and the plain, necessitating wellirrigation by hand-windlass. Trade was not conspicuous : there were a few carts; but the bulk of the traffic, such as it was, consisted of wheelbarrows, each with a man pushing the handles and a donkey tracing in front, and some camels carrying sacks of lime from the hills to the north. A few miles before entering Wen-shui Hsien we passed the scene of the affray between the opium cultivators and the soldiery on the 23rd March already referred to.

The 11th May, the date of our arrival at Wen-shui Hsien, was a black-letter day in the history of this journey. At nine o'clock in the evening my personal servant, after making my room as comfortable as possible, was retiring to his room next door for the night when, on passing my two riding ponies, which were tied up under the projecting eaves, he was kicked by one of them on the right leg, just above the ankle, and sustained a compound fracture of both bones. He was carried into his room, and, in his agony, begged me to give him a dose of poison to end his suffer-He would not allow me to touch his leg, so I called ing. in a native doctor, who professed to have some acquaintance with Western medicine, and who produced a tiny bottle of chloroform, which we administered without success. Fortunately I had in my medicine chest a sleepingdraught mixture, which I administered so liberally that the patient at last dozed off. Then we put the leg in splints, had a bamboo litter made, and sent him off next morning at daylight to Fen-chou Fu, the next stage of the journey, where I was informed there was a foreign mission hospital. As my personal servant was in charge of clothing and stores for the journey, I had to remain in Wen-shui Hsien for a day, to overhaul the caravan, and hand over everything to my cook, who knew nothing whatever of the duties of a personal servant. This journey, begun under such unhappy auspices, was unhappy to the end, for, although the same servant had sustained a fracture of the skull on a previous journey to the Eastern Frontier of Tibet, and had then, as now, to be left behind, while the same cook did double duty, yet the previous accident deprived me of his services for only eighteen days, and occurred in a country where there were fewer difficulties to contend with. As every traveller knows, the success or failure of a journey depends in great measure on the capability of his servants, and, although it was unwise on my part to proceed short-handed, yet I was unwilling to await the arrival of a new, and it might be incompetent, servant from Peking, which I had left a week before.

From Wen-shui Hsien to Fen-chou Fu the road goes west, and then south as the latter city is neared. The distance is only about twenty miles, but the road, especially as Fen-chou Fu is neared, winds exasperatingly round fields, devoted at this season of the year to wheat and ground-nuts (*Arachis hypogoea*). The latter flourishes best on a sandy soil, and the plain stretching southwards appeared to be less well irrigated. The Sophora, willow, and peach were the prominent trees. On arrival at Fen-chou Fu I called at once on the American mission, and found that my servant was in their temporary hospital, under the care of a doctor who, however, was unable to deal with the broken leg until the swelling had subsided. Here I remained two days, and ultimately arranged with the doctor to send my invaluable servant, in case of no complications and final recovery, to Hsi-an Fu, to await my return from the province of Kansu. The doctor told me, however, that he was soon proceeding with his family to the seaside for the summer, and, as will be seen later, I had to pick up my servant on my return four months afterwards, still unable to put his foot to the ground. His experiences will be described in their proper place.

Six o'clock on the morning of the 16th May saw us off from Fen-chou Fu, which we left by the north gate, and our course lay west by south, along a road much under the surface of the surrounding country, and varying in places from 20 to 40 feet broad. This road, more like a deep cutting, is characteristic of these north-western provinces, over which the loess has spread its deep mantle of brown earth, interesting from a scientific point of view, but exceedingly monotonous to wander over and through for months, for, during the journey under description, it was never out of sight, stretching as it does many miles to the west of Lan-chou Fu, the capital of the province of Kansu, which was my furthest point. Travelling in the bowels of the earth was not in keeping with the nature of my investigation, and I rode for ten miles through fields of wheat and other crops not yet above ground to the village of Hsiangyang-chen, at the eastern entrance of a rocky gorge bounded by cliffs, rising in places some 50 feet or more, and frequently overhanging the roadway, which was 15 to 50 feet in breadth. This gorge is a miniature Upper Yangtsze gorge, without, however, a rushing river; but what the road may be in the rainy season it is not difficult to

imagine, for it must be a raging torrent bounded by stiff cliffs-dangerous cliffs, too, for the higher rocks projecting over the roadway might be, and no doubt are, easily dislodged by the rains, and the numerous small stone props piled at dangerous places, not for support, but merely as thank-offerings for escape from destruction, testify to the great risks that have to be run. These stone props mark the road as a great trade route, and so it is. Hundreds of mules, donkeys, and some ponies were staggering down the gorge under loads of sheep's wool, sheep- and goat-skins, vermicelli, wheat, felt, linseed oil in water-proofed willow baskets, and hemp, twine, and ropes. Down also came flocks of sheep and herds of fine fat oxen and black pigs. One peculiarity of the pigs was that the young had hairless ears sweeping the ground as they followed the call of their herdsmen, who kept feeding them with beans from small The gorge was a passage over a ridge, from the sacks. summit of which the road descends into a valley running north-west, bounded by loess banks and fairly cultivated. This valley was soon hemmed in by a range going east and west, and we turned in the latter direction to the dry bed of a stream, which we followed to the village of Wu-ch'eng, about 32 miles from Fen-chou Fu. The bounding hills, which were scantily wooded—mostly with willow—were lower, terraced, and better cultivated as the end of the day's stage was neared.

It seems almost incredible that this road is a great trade highway between the west and north of China, but so it is, and an execrable road to boot. When my caravan left Wu-ch'eng at six o'clock on the morning of the 17th May, we found ourselves in the company of many mules and ponies laden with native cloth, bound, like ourselves, for the

ΙI

Yellow River and the province of Shensi, and we met during the day hundreds of loads of wool, Kashmir hair the combings of the under hair of the goat—wrapped in felt rugs, wheat, abutilon hemp (the fibre yielded by *Abutilon Avicennæ*), ropes and cordage, willow baskets and straw hats going east, the pack animals including a number of camels. Some of the loads were flying flags bearing in Chinese characters the names of well-known British firms at Tientsin, an indication that the produce was being carried under outward transit pass to a port for shipment abroad.

On leaving Wu-ch'eng the road goes north-west for a short distance along the bed of a streamlet which winds down a stony valley and had to be repeatedly forded and re-forded. With the exception of some wheat and beans an inch or two above ground, the hills bounding the valley were bare and sparsely wooded with willow; but the plough was at work, especially as the department city of Yung-ning Chou was neared when the valley opens out and the road leaves the bed of the stream. It was bad going, and twice I took refuge in my mule litter to save my horse; but on each occasion the front mule fell and had ultimately to be replaced by one of the pack mules. The chief feature of the day's journey from Wu-ch'eng to Yungning Chou, a distance of about 25 miles, was the number of villages of cave-dwellings, some of them inhabited but the great majority in ruins. The entrances to the caves were mostly stone or brick arches, the arched roofs extended back into the solid loess, and smaller arches carved several feet from the ground served as windows. In the interior, bedsteads, recesses, shelves, and even the cooking-stoves were cut out of the earth, and there was little else in the way

13

of furniture, wooden-pegs driven into the walls carrying the loose odds and ends of a Chinese household.

The city of Yung-ning Chou stands on rising ground, and as we passed from its eastern suburb, where we had spent the night, round the eastern and southern walls on the morning of the 18th May, I noticed that in many places the loess foundations had given way, the wall itself cracked beyond the possibility of repair, and the whole place bore that look of neglect which has marked all the cities of Shansi which I have as yet visited. At the city the road to the Yellow River divides, one branch going north-west to Chi-k'ou, the other west to Chün-tu. We followed the latter and proceeded with a stream winding down a fairly wide valley bounded by hills where the cave-dwellings were fewer and villages more numerous. Those villages were fairly wooded, and all available land where irrigation was possible was under cultivation. It narrowed from time to time and afforded little room for tillage; but, wherever possible, wheat, beans, and peas were in evidence. In addition to the willow, the poplar, plantations of date trees, mulberry and peach were frequently to be seen. On approaching the large market-town of Liulin-chen, twenty miles from Yung-ning Chou, we forded a stream flowing south-west to join the main stream which we crossed by a wooden bridge to the west of the market-town, and thereafter kept, as far as possible, to its right bank to the considerable market-town of She-ts'un, where my caravan caused great excitement, and where I was received not with that quietude which has hitherto characterized the people of Shansi; but She-ts'un, lying as it does only seven miles from the left bank of the Yellow River, is a border town, and border towns in China are proverbially lawless. Traffic

on the road was brisk : wheat packed in long brown sacks slung loosely over the backs of donkeys, mules, ponies and camels, sheep's wool and goat hair were all being carried east from the provinces of Kansu and Shensi. Flour in its various forms is the staple food of the people of these north-western provinces, and at Liu-lin-chen, where there were many flour mills driven by water-power, it cost only twelve [cash a pound, or about half a crown a hundredweight.

The previous day the eye was cloyed with the sameness of the scenery-the eternal loess hills; but after all they have a great beauty which dawned upon me on the morning of the 19th May when we left the somewhat inhospitably inclined She ts'un where, in spite of an attempt at rowdyism, we spent an excellent night. In the very early morning the town was practically asleep, and there was no crowd to greet me, rudely or otherwise, when we rode through the western suburb into a beautiful valley where the sun rising over the eastern hills was tinting with a golden hue the hill-tops on its western side. The valley, unfortunately small, was green with wheat, peas, and vegetables; melons were a few inches above ground; and date and mulberry, both now well into leaf with their respective light and darker green tints, lent a charm which, however, was not of long duration, for the road soon left the stream to find its way to the Yellow River, and wound up north-west between the loess hills. There was perfect stillness as we rode up the path, and the ripple of a stream in the dry watercourse below would have been welcome; but the ride was short, for the road rose abruptly and twined about! a mountain side when we had to dismount and lead our horses up and down for six miles to Chün-tu, a ferry-station perched high

up on the east bank of the Huang Ho or Yellow River whose yellow-brown water we had earlier sighted deep down in a valley to the north-west. After breakfast at Chün-tu, or "Military Ferry," we descended to the river where two boats, each divided into three compartments, and some 30 feet long, with a centre width of some fifteen feet, awaited us. The mules were unloaded and there was little difficulty in inducing them to jump into one of the boats; but to persuade our riding ponies to share our boat was quite a different matter. One was with much urging finally forced into the centre compartment, but the other absolutely declined to face the boat until a wooden gangway in the shape of the bow-piece of an old boat was fetched, and he was driven in after a long struggle. An escort pony promptly refused to ascend the gangway which was thereupon lowered and levelled with stones. All in vain; he declined to budge. His front feet were at last captured, and he was hoisted by tail and hind legs into the stern compartment. Another fine pony belonging to my escort had evidently been accustomed to this necessity, for he stepped quietly into the middle compartment with the other two. This accomplished, we started down river after the other boat; but the motion and the noise of the two long oars, each manned by three or four men and boys, startled the ponies soon after we had cast off, and their struggles resulted in one of them falling into the bottom of the boat causing her to leak. His desperate struggle to regain his feet did not mend matters, for the boat was built of boards loosely held together by iron clamps. By this time our boat was well down river with a strong current, and she was ultimately brought to and beached on a sandbank a quarter of a mile above the usual landing-place. At the

15

16 ON THE TRAIL OF THE OPIUM POPPY

crossing the river, which is about 800 yards broad, after making a sharp bend from the north-west sweeps south-west and a few miles beyond turns south. We were carried on the backs of the ferrymen through shallow water to dry land, a service for which extortionate but unsatisfied demands were made.

Having now reached the Yellow River, the boundary of the provinces of Shansi and Shensi, after a journey of little over six days from T'ai-yüan Fu, I propose to give the reader an insight into the working of my caravan. I have already given the numbers of men and mules, the latter fine large animals, each capable of carrying a load weighing 250 lb. Two mules, however, counting as three in the matter of cost, bore the mule litter. Of the four muleteers two were supposed to attend to the litter, and the other two to look after the five pack mules ; but this disposition was not rigidly adhered to and more often as not only one man attached himself to the litter, and on occasions to the back of the rear mule, especially, I might say invariably, when fording streams, for, like most Chinese landsmen, he had an antipathy to wet feet. Attendance on the litter was not a favourite occupation, and each man took it in turn for a day. In the case of the five pack mules the drivers could, and frequently did, ride and sleep on the top of the packs, swaying about in the most alarming fashion, but never once within my observation losing their balance. On the other hand, the front mule of the litter had, as a rule, to be led by a driver on foot, and, although Chinese can sleep at any time and in any position, I have not yet met the man who can walk and sleep at the same time. To me the litter proved a most uncomfortable conveyance. As I have said, it is a large sedan chair carried by mules instead of men.



Copyright.]

[See page 3.

I. BRIDGE ON THE CHENG-T'AI RAILWAY BETWEEN SHIH-CHIA-CHUANG AND T'AI-YÜAN FU.





2. RAILWAY GATE OF T'AI-YÜAN FU.

3. SOUTH GATE OF T'AI-YÜAN FU.

[To face p. 16.

In the bottom there is space for packing away odds and ends, and on the top of this there is a wooden grating on which the traveller piles his bedding and pillows. On each side there is a sliding window, the foot of which is raised a little above the grating, and there is a fixed window in front. The two side windows are the only means of entrance and egress. The latter process is simple enough; but mounting is not so easily effected, and the muleteer usually presents his thigh as a ladder to the traveller who, in scrambling in, has to be careful not to capsize the whole thing, for the frameworks fixed to the poles or shafts in front and rear rest loosely on the wooden pack saddles, and are liable to slip over. A Chinese can coil himself up and sleep soundly in such a litter, but, not being a short man, I could neither stretch nor coil, and had to content myself with sitting when I wanted a rest, for the nature of my investigation precluded my attempting to sleep during the day. Of the seven mules, one, by far the best and strongest, was entire and vicious in the extreme, frequently attacking with his teeth any pony that happened to come in his way; and there was many a scene and row on this account. The four muleteers, two of them boys of about twenty years of age, were decent enough fellows, and treated their animals well; but I had many a passage of arms with the head muleteer, who, although the exact sums and dates for payment en route had been duly arranged by written agreement, was continually endeavouring to extract more than was due, usually on the ground that fodder was much more expensive than he had expected. His statements were as frequently proved to be untrue, and on these occasions he ended by assuring me that he was a Catholic, and that his family had belonged to that faith for many VOL. I. С

17

generations. He was exceedingly plausible in his pleadings, and occasionally succeeded in obtaining advances considerably ahead of due date; but he was always warned that there would be a day of final reckoning, a warning which did not appear to trouble him in the very least. I soon discovered, too, that, whenever possible, he was in the habit of making short payment to innkeepers. Strictly speaking, this did not concern me, for I had nothing to do with the feeding of his animals; yet I knew that he relied on my presence to escape payment of his due debts. In this, however, he was disillusioned, as I frequently called up the innkeeper as we were about to start in the early morning and asked if everything had been paid for. Sometimes there was no complaint, while at others I would be told that water for the mules had not been accounted for, or that more than the actual quantity of straw purchased had been used. They were, as a rule, trifling sums, and were paid grudgingly after some altercation; but I always took care to remind him that the faith which he professed, and which he never failed to impress on me, was proof of his truthfulness, and honesty forbade him to cheat. By the time we parted company, I think he was sorry that he had ever confided to me the nature of his religious beliefs. The young muleteers were jolly boys; but I am safe in saying that one of them did not wash his face or have his head shaved more than four times during as many months, and that my remarks regarding his colour, meant to be sarcastic, had not the slightest effect on him. It transpired later that he had once worked in a coal mine, where he had contracted a facial skin disease, which the application of water would intensify. Such was the explanation given me by the head muleteer, and I must leave it at that.

At T'ai-yüan Fu I had engaged a groom to attend to my two riding-ponies, and he turned out to be a very decent servant. The petty official and the soldier deputed by the Governor of Shansi to escort me to Hsi-an Fu, the capital of Shensi, were exceedingly attentive, and, with the groom, did much to make up for the loss of my personal servant, for my cook proved perfectly hopeless in his attempt to do double duty, and was a source of annoyance during the whole of the journey.

To avoid carrying large quantities of silver, I had purchased in Peking drafts on native banks in T'ai-yüan Fu, Hsi-an Fu, and Lan-chou Fu, the capital of the province of Kansu, all of which I proposed to visit, and at each of these three places I had the silver ingots which these drafts represented carefully weighed, and the weight written on each as a guide to its approximate weight, for previous experience of travelling in China had taught me that the scale differs not only in each province, but in every place in a province, and that the weight is almost invariably against the traveller. Haggling over weights and exchange is one of the chief annoyances that have to be encountered in those parts of the interior where there is no silver coinage. In T'ai-yüan Fu itself, subsidiary ten and twenty dollar-cent silver coins were the currency; but outside the provincial capital their circulation was confined to a very narrow radius. Although I carried silver-or sycee, as it is generally called in China-I arranged to pay my caravan on a dollar basis; but payments for food, inns, and the like had to be made in copper cash, the exchange between which and sycee was as varied as between sycee and dollars. I had, therefore, two sets of exchanges to contend with, and my experience, which has been considerable, is that the foreign

19

20 ON THE TRAIL OF THE OPIUM POPPY

traveller in China is a child in the hands of the native money-changer. As a Chinese fellow-traveller once put it : if you start with a hundred ounces of silver, and convert them into local weights at each city between two provincial capitals, you will find that by the time you reach the end of the journey, or even before, the whole amount has been swallowed up by loss in exchange. This may be a slight exaggeration, but there is a very big grain of truth in it. Every one who has any knowledge of commercial matters in the interior of China is well aware that the domestic trade of the country is similarly ruined by the incidence of taxation. As a colleague of mine, sent on a mission of inquiry into the state of trade at the treaty ports of China, wrote in his report : "It would be an interesting experiment for some one to start in any direction with a quantity of merchandise, selling, as it became necessary, a portion to pay the taxes imposed en route. Like water poured on sandy soil, it would all be absorbed before going far."

CHAPTER II

THE YELLOW RIVER TO HSI-AN FU, CAPITAL OF THE PROVINCE OF SHENSI

In the preceding chapter frequent reference is made to the loess, and it will be well, before proceeding further, to explain the nature of this formation which overlies these north-western provinces and in places extends as far south as the river Yangtsze. Various theories have been advanced to account for this earthy covering which is known to the Chinese as Huang T'u, that is "Brown or Yellow Soil." It has been described by some as a fresh-water, and by others as a marine, deposit; but the late Baron von Richthofen, the distinguished German geologist, who visited these provinces in 1870, propounded what has generally been accepted as the correct explanation, and I cannot do better than quote his remarks on the subject. He says : "The loess is among the various substances which would commonly be called 'loam,' because it is earthy and has a brownish yellow colour. It can be rubbed between the fingers to an impalpable powder, which disappears in the pores of the skin, some grains of very fine sand only remaining. By mechanical destruction, such as is caused by cart-wheels on the road, it is converted into true loam. When in its original state it has a certain solidity and is very porous, and perforated throughout its mass by thin tubes,

which ramify like the roots of grass and have evidently their origin in the former existence of roots. They are incrustated with a film of carbonate of lime. Water, which forms pools on loams, enters therefore into loess, as into a sponge, and percolates it, without in the least converting it into a pulp or mud. The loess is everywhere full of organic remains, but I have never seen any other than land-shells, bones of land animals, and the numberless impressions of roots and plants. It is not stratified, but has a strong tendency to cleave along vertical planes. Therefore, wherever a river cuts into it, the loess abuts against it, or against its alluvial bottom-land, in vertical cliffs which are in places 500 feet high; above them the slopes recede gradually in a series of terraces with perpendicular front faces. Where the river washes the foot of such a wall, the progress of destruction is rapid; the cliff is undermined, and the loess breaks off in vertical sheets, which tumble into the stream, to be carried down by the water. Such is the case along the southern bank of the Yellow River near Kung-hien and Sz' shui-hien, and probably in many other portions of its course. The beds of the affluents which join the river in these places, are no less deeply cut into the loess, and ramify into its more elevated portions like the roots of a tree, every small branch a steep and narrow gulch. It would lead us too far astray from the objects of this letter, to describe more in detail the exceedingly curious feature which the scenery of a region composed of loess presents. Among the most noteworthy is this, that it gives habitation to many millions of human beings. You walk on the richly cultivated bottomland of a river, and yet do not see a single human dwelling. But as soon as you approach the precipitous wall of loess, on either side, you find it thronged

with people like a bee-hive. They live in excavations made in the loess.

"As regards the mode of origin of this formation, the loess of China, like that of Europe (where it exists on a comparatively small scale), has been supposed to be a freshwater deposit. This supposition is erroneous as regards the loess of northern China, because it extends equally over hills and valleys, and does not contain freshwater shells. Others have therefore considered it as a marine deposit. This view is more erroneous even than the former, because it would presuppose the whole of northern China to have been submerged at least 6000 feet beneath the level of the sea in a recent epoch, while there is abundant evidence to prove that such has not been the case. Nor can the theory, current in Germany, that the loess of that country was produced by glacial action, be at all applied to the loess of northern China, from various obvious reasons, too lengthy to explain here. Unbiassed observation leads irresistibly to the conclusion, that the loess of China has been formed on dry land. The whole of that vast country which was covered by a continuous sheet of loess, before this had undergone destruction, was one continuous prairie, probably of greater elevation above the sea than the same region is now. The loess is the residue of all organic matter of numberless generations of plants, that drew new supplies incessantly from those substances which ascending moisture and springs carried in solution to the surface. This slow accumulation of decayed matter was assisted by the sand and dust deposited through infinite ages by winds. The land shells are distributed through the whole thickness of the loess, and their state of preservation is so perfect that they must have lived on the spot where we now find them. They certainly

admit of no other explanation than that here hinted at, of the formation of the soil in which they are imbedded. The bones of land animals, and chiefly the roots of plants, which are all preserved in their natural and orignal position, give corroborative evidence."¹

There is a small military post at Sung-chia-ch'uan, on the right bank of the Yellow River, where the petty official had his command of five men drawn up to receive and welcome me to the province of Shensi ; but our ignominious landing above the ferry somewhat marred this kindly intention. We followed down the right or west bank of the river for some six miles to the hamlet of Kang-chia-ta, and then turned west and north-west into the hills, whence the road emerges and rises mile after mile winding northwest from mountain to mountain, and frequently skirting the edges of deep, loess precipices that I refused to face in the litter. I had walked nearly the whole of the morning and, considering the precipitous and difficult stone road, I felt absolutely inhuman when I found it necessary to be The day's journey of about 27 miles from carried. She-ts'un was exceedingly trying, and on arrival at the hamlet of Hu-yen animals and men were completely used up. Wheat and peas were the visible crops, but as yet I had seen no sign of the poppy, which should have been well above ground. This absence of cultivation strengthened my desire to ascertain whether opium could be purchased at Hu-yen, and I ordered one of my men to be taken suddenly ill in the lower part of his chest, and gave him twenty cents to buy a dose of opium with which to obtain relief. His contortions were wonderful and, when I was

¹ Report by Baron von Richthofen on the Provinces of Honan and Shansi Shanghai, 1870-72. unable to effect a cure, the innkeeper was begged to find some opium. He declared that it was utterly impossible for him or any one else in the hamlet to procure it : it was unobtainable, and my device was unsuccessful. I presented my man with the twenty cents in appreciation of his wonderful display of a sudden attack of colic : it might even have been cholera, for he was a most realistic actor as what Chinese is not ?

It was refreshingly cool when we turned out of our inn at Hu-yen just before six o'clock on the morning of the 20th May. Still ascending, we gazed from the brow of the hill above the hamlet at a sea of similar hills or rather mountains, tossed about and broken up in glorious disorder, but all glowing in the light of the sun rising in a cloudless blue sky. The road runs level for a short distance, and then plunges down in a north-westerly direction into the usual narrow valley where a trickling stream kept us company. Here were several tiny hamlets, mostly stone-built, where the women tried to entice the muleteers to indulge in a decoction of millet (Setaria italica) boiled in water, and in hard-boiled eggs. Here fowls cost only 160 cash (say four pence) apiece, and eggs three cash, or some sixteen for a penny. One grizzled old lady was holding out a couple of straw hats, for the gaudiest of which she asked 30 cash; but my muleteer had no time to haggle over the bargain, and the purchase was not completed. Straw hats are a main feature of the traffic along this road. I said, above, stone houses, for we have come to sandstone underlying the loess, and blocks of the horizontal strata have replaced the conglomerate stones hitherto seen in the arched entrances to the better class cave dwellings, for in the earlier caves met with there was

merely the loess arch without any stone work whatever. The large village of I-ho-chen, ten miles from Hu-yen, is an excellent example of this stone-work. The best houses facing the street were built on terraces supported by several slab archways, these archways being generally used for stables, byres, manure-pits, and other less reputable purposes, while the houses were built on the terraces behind the arches and reached by double slab-paved ramps with balustrades capped with long slabs fitting into each other-the projecting centre end of one slab locked into an opening cut in its neighbour. The walls surrounding the houses were built of rows of slabs, the alternate rows slanting in opposite directions. Many of these houses were unoccupied, as is the case in nearly all the villages along the road, for these provinces have never recovered from the desolation caused by the Mohammedan Rebellion of 1865-73, the daily sight of deserted and ruined villages presenting a somewhat melancholy spectacle. On this road there is not only poverty and misery : there is death. Yesterday, a pitiful cortège passed our caravan. It consisted of a rough deal coffin, a white cock perching on the top, slung between two mules. Inquiry elicited the statement that the inmate had been a muleteer who had succumbed to the hardships of the road. The surprise is that there are not more casualties. As an example of the difficulties that have to be encountered, I may mention that while my muleteers were hanging on to the tails of their animals to keep them from slipping with their loads down a most precipitous part of the road just beyond I-ho-chen, the servants of a military official, on his way from Ning-hsia Fu in the province of Kansu to the port of Tientsin, were holding on to the tails of their ponies to help them up in the other direction. The sight was ludicrous;

we were all up to the ankles in loess dust, and the official himself and I exchanged greetings entrenched behind our coloured dust-spectacles. Down we trudged into a valley and regained the stone road, before entering at noon the hamlet of San-shih-li-p'u where, after a hasty meal, I had a quiet talk with the innkeeper, a rather reserved individual. I asked him when the poppy-seed was sown in this part of Shensi. He replied that much depended upon the weather and the condition of the ground, but that sowing was usually over by March with flowering in May and June. I remarked that I had seen none on the way. "Ah !" he said, "there is none here now," adding that such stringent proclamations had been issued against cultivation and strong measures taken by the high authorities of the province that farmers were afraid to sow and that little or no opium had ever been grown in the neighbourhood. I remarked that it was probably cultivated in small quantities here and there, but this he contested, saying that deputies had recently been scouring the country in search of it. He added that the poppy required abundant water, which was not available on the slopes of these loess hills, and that there was little level ground in the neighbourhood. This was quite true, and the innkeeper was visibly relieved when I thanked him and took my departure.

It was a weary struggle from San-shih-li-p'u to the department city of Sui-te Chou, a distance of ten miles. The rough, rocky road follows a valley, with a stream frequently overhung by rocks, at first south-west and then north, till at last our eyes were gladdened with the sight of a plain of inconsiderable size running north and south, at the northwest corner of which the city is beautifully situated on some

hill-tops. The plain is watered by a river some 50 yards broad called the Wu-ting Ho, which, coming from the north-west, flows south along the eastern side of the plain and is joined by a stream from the west just to the north of the city walls. The Wu-ting Ho, known in its lower reaches and before it joins the Yellow River as the Yi Ho, rises in Mongolia. We struck the plain a short distance below the city and ascended the left bank of the river to the ferry where we had nearly as much difficulty in shipping our ponies as at the Yellow River. A wide shingle bed, an indication of the breadth of the river during the rains, lies between the right bank and the hills on which Sui-te Chou is built. But the heat in the plain was oppressive, and we hurried up to the city, glad to find shelter in an inn abutting on, and on a level with the parapet of the city wall. No one was more eager than I was to rest for a day at Sui-te Chou : we had not yet got into the swing of a long journey, and the muleteers could point to a lame mule which had not failed to escape my observation, especially as part of its load had been transferred to a fellow beast of burden. Indeed, there is very little personal cruelty exercised towards the animals by their drivers. The cruelty, if so it may be called, consists of verbal abuse, which is not confined to the beast itself, but is freely bestowed on a long line of ancestors. Just as the Emperor of China exercised the power of ennobling an individual's ancestors to several generations, in like manner the muleteer damns his charge's ancestors to any number of generations. In either case the matter is of little importance and has little meaning. As far as the muleteer is concerned, he will curse whole generations of animals and then burst into song from lightness of heart until the next stumble, when the

flow of vituperation recommences. So they jog along, mule and man, the former probably as intelligent as the latter if their minds could be scientifically analysed and compared.

We spent the 21st May at Sui-te Chou where I endeavoured to discover something regarding the roads leading south through the province of Shensi; for, although I had hoped to follow the right bank of the Yellow River as far as possible, experience had taught me that for my purpose little was to be gained by being cooped up between never-ending loess hills, and I now wished to shape my course to Hsi-an Fu down through the centre of the province in the expectation of finding a country more suited to the cultivation of the poppy and, if it existed, the poppy itself. That it did exist in the neighbourhood of Sui-te Chou is certain, for it was exceedingly difficult not to overhear a conversation carried on in the loudest of voices several rooms off between the men sent by the Department magistrate to protect me during my stay in Sui-te Chou and others-probably some of my own men. These guardians of my safety lamented the price of opium which had suddenly risen from 250 to over 1000 cash a Chinese ounce, and in their enthusiasm waxed eloquent over the beautiful poppy-fields which used to fringe the Wu-ting River. They described the excellent flavour of the opium, and said that this fine rich soil which had hitherto yielded 30 taels a mou (6 mou = 1 English acre) from the poppy, had now, on account of the stringency of suppressive measures, to be given up to the far less profitable millet (Sorghum vulgare).

My experience of travelling in the interior of China is that after a day's rest there is always a strong disinclination

on the part of one's followers to take to the road next morning. The 22nd May was no exception, and my men were all more or less asleep when they turned up to load the mules. At last, however, we got away from Sui-te Chou at about six o'clock, by no means sorry to part with those vampires of Chinese inns which defy even Keating's insect powder and make night hideous with their clammy irritating touch. On leaving the city we proceeded west as if with the intention of ascending a pretty valley down which flows a stream to join the Wu-ting Ho. Soon, however, we plunged into a narrow branch valley to the south-west, passing, on the way, numerous stone tablets erected by the roadside to commemorate the worth of former officials and others. Down this side valley came a rill much utilized for the irrigation of small patches of wheat, peas, hemp (Cannabis sativa) and vegetables; but the valley soon narrowed and was cooped up by hills whose slopes and summits were under similar crops until nothing but the roadway banked by bare loess cliffs remained. Southward beyond these cliffs we came upon small hamlets so ruined and poverty-stricken, that I was unable to get a table or even a settle for breakfast. A little further along the road our wants were supplied at the hamlet of Machia-p'ing-tzu, but even here there was the greatest difficulty in finding fodder for the beasts of burden. The scene was as amusing as it was sad. Our sudden arrival was too much for the old, wrinkled, small-footed lady who ruled the roost in the loudest of voices. All the neighbours, men, women and children were impressed to assist and they were a motley crowd. Old men, with remnants of queues and the dirt of ages on their hands and faces, were sent to cut up millet stalks, a water-carrier was called in, the old lady

herself began to cook sundry messes for the muleteers, hobbling between times to fetch small cups of wine from somewhere round the corner, while naked children collected and gazed at me, and one boy of maturer years had lost not only the seat but also the corresponding part in front of his pants, which now consisted of two lower parts of patched legs suspended by pieces of string from a waistband concealed under a short jacket. Even the solitary black pig came to share the fun. It would have been a real comedy had it not been for the dreadful misery and squalor of the whole crowd.

South of Ma-chia-p'ing-tzu the road, which runs along a wider valley, greatly improved before we entered the hamlet of Wang-chia-pao, whence we pushed on to the wretched village of Shih-tsui-yi, about 25 miles from Sui-te Chou, where we spent the night. Trade during the day was represented by a few loads of wheat, goat wool, and raw cotton bound north, and there were numerous flocks of brown goats and some sheep herded by men and dogs on patches of brown withered grass. The willow was the most prominent tree, but the mulberry, peach, and Ailanthus glandulosa were not uncommon. There were stacks of good lump coal in the yard of the inn which we occupied at Shih-tsui-yi, and the innkeeper, who was very civil and communicative, told me that it came from the district of Mi-chih Hsien to the north of Sui-te Chou, and cost him, laid down, six cash a catty, or about sixteen shillings a ton, a very high price mostly due to the cost of carriage. From coal I turned to the subject of opium, and he informed me that last year it was abundantly cultivated in the glens where water was available, but that sowing had not taken place during the present year owing to the risk of discovery and

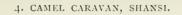
its consequences. He seemed to be telling the truth; but, as truthfulness is not a Chinese virtue, Chinese statements require much sifting and, as often as not, are found to be very inaccurate and misleading.

A solitary loess cliff rises to a height of about one hundred feet opposite and close to the village of Shih-tsui-yi, and I took this to be an indication that we were approaching more level country to the south; but after a few miles the road again plunged and rose among hills with narrow valleys between, and at the highest point I had an excellent opportunity of examining many valleys and gullies. All in vain, however, as only wheat, peas, and hemp could be found. Descending on the south side we entered a wellcultivated valley and followed it over a fairly good road with accompanying stream to the district city of Ch'ing-chien Hsien, the entrance to which is graced by a long line of honorific sandstone tablets. The city occupies the southern face of a hill with a large outcrop of sandstone which is utilized for building, paving, and slating, and the stream flows south under the western wall of the city, deep down between horizontal strata of the same stone through which it has cut its way. In the valley, in addition to wheat, peas and hemp, beans were an inch or so high, melon seeds were being planted, while millet and maize were sown but not yet above ground. In planting melons, holes are dibbled in ridges, and into each hole is dropped one or two seeds with a pinch of powdered manure. On the top of each hole is then placed a small stone which prevents pilfering by birds, and serves the far more useful purpose of retarding the evaporation of the moisture required to assist germination. The stones are removed overnight but replaced during the day until the seedlings are sufficiently



Copyright.]

See page 14.





Copyright.]

5. STONE MILL, SHANSI.

[To face p. 32.

advanced to withstand the heat of the sun and shift for themselves. Inquiries made all along the road during the day elicited the information that the poppy was in evidence last year, that to the immediate north of the city of Ch'ingchien Hsien it was cultivated during the present year along the banks of the Ch'ing-chien River, as this stream, a tributary of the Yellow River, is called, but that the plants were plucked up when a few inches high by official orders. This, however, was only hearsay evidence. What I wanted was ocular proof. That was forthcoming the following day, 24th May, at the hamlet of Ying-t'ien, ten miles south-west of Ch'ing-chien Hsien, where I came upon a patch of poppy which had been rooted up the previous day by a deputy and his followers sent by the district magistrate to search out and destroy all poppy found under cultivation. The plants, several inches long, were still green. From Ch'ing-chien Hsien we accompanied the stream in its sandstone bed as far as Kuai-mao, where it is joined by a tributary from the east, and then struck west along a valley which widened out and gave more room for crops of peas, hemp, beans, maize, and a little wheat. In this valley the principal trees were the willow and date, with a sprinkling of elm and poplar, and at the village of Ma-chia-kou, the end of the day's stage of some 26 miles, silkworms were being fed on the mulberry.

The district city of Yen-ch'uan Hsien lies two-thirds of a mile off the main road, and we did not enter it, but pushed on to Ma-chia-kou, three miles beyond. I rode out of the latter early on the morning of the 25th May, considerably depressed, for my mission so far, whether for good or for ill, had yielded little or no result. It is true that I had seen a freshly destroyed patch of poppy at VOL. I.

Ying-t'ien; but this was a meagre result for many days' wanderings, and I began to think that in this province of broken country my quest of the poppy was like hunting for a needle in a haystack. Little did I think at the moment that my interest was soon to be awakened. I had ridden six miles westward up the valley when at a place called Feng-chia-wan, within the district of Yen-ch'uan Hsien, I suddenly came upon a plot of poppies some eight to ten inches high by the roadside and close to a streamlet flowing east. It was a suitable spot, for a water supply was at hand. Further search led to the discovery of a much larger plot on a terrace above, and another on the opposite bank of the streamlet, and four miles beyond there was still another plot. The plants, which were all of vigorous growth, were not likely to be in flower for another month and my investigation to the south would be much facilitated by the petals which admit of no concealment. In every village through which I passed I noticed over the door of a dwelling-house or shop a signboard with the conspicuous Chinese characters, "Opium Abolition Branch Office," and I had the curiosity to try and enter one of these offices to ascertain the duties of the official in charge; but I found the door locked and not a soul about the place. It was not a solitary instance, and I was driven to the conclusion that, in the usual Chinese way, the signboards had been scattered broadcast by command, and the abolition of opium thereby made effective! Soon after sighting the fourth plot we passed through the hamlet of T'o-chia-ch'a beyond which the road ascends a steep mountain side covered with grass, brushwood and thorn bushes to a pass, called Yen-men-kuan, with a small temple and stone archway joining two mountainsides. The descent on the other side, which was equally

steep, led to a valley running south, well cultivated in places with wheat, peas, beans, maize, and hemp. The date, usually in the vicinity of hamlets, mulberry, willow, elm, and poplar were common trees. There was little traffic on the road, but we met not a few animals carrying coffin boards of cypress wood from the district of Kan-ch'üan Hsien further south. We had seen the wild iris, known as Ma Lan Hua, in the province of Shansi; but here it fringed the roadway and grew even in the middle of the track which, but for its steepness in places, was good as Chinese roads go. The petals of the iris vied with the blue of the heavens, and their colouring was the only pleasing thing that met the eye, for the hamlets, few in number, afforded only the most wretched accommodation, and the markettown of Kan-ku-yi, where we spent the night, 30 miles from Ma-chia-kou, was fit only for pigs! There were considerable flocks of sheep and goats all along the road, and it was curious to watch the way in which they took the heat of the day. The sheep huddled close together in the shade of the loess hills, while the goats frisked about in the sun and butted each other in sheer wantonness.

On the morning of the 26th May we left Kan-ku-yi and its unpleasant bed-fellows and skirted the north side of a valley or plain varying in width from two hundred to two thousand yards, bounded by gentler hills much better cultivated than usual. Down the valley came a stream crossing and recrossing it from time to time. As the country was exactly suited to the cultivation of the poppy, I forded the stream with my escort soon after leaving Kanku-yi, but, finding none after a ride of seven miles, I casually remarked that no opium was produced in that neighbourhood. This gave an opening to one of my local

escort, who said that two years ago this valley was one vast poppy garden, but that the authorities had since that time completely stopped its cultivation. Later, at the hamlet of Yao-tien, ten miles from Kan-ku-yi, the keeper of the inn where we breakfasted declared that the poppy had been sown in the spring and the seedlings uprooted a fortnight ago by the magistrate's emissaries, and he complained bitterly of the loss of the money which the crop would have realized. I do not pretend to say which of these men spoke the truth; but an hour after leaving Yao-tien I came upon a large patch of poppies, an English acre in area, some four inches high lying along the north side of the road. There was no concealment or attempt at concealment; this poppy-field, which was situated within the district of Fu-shih Hsien in the prefecture of Yen-an Fu, was open to the observation of every passer-by.

The accommodation available along this road is of the poorest : at Ai-li-p'ing, eighteen miles from Kan-ku-yi, I had to take lunch in the shade of a Sophora japonica, the only decent room smelling so strongly that the use of it had to be abandoned. Some villagers crowded round me, and I took the opportunity of asking them why they allowed their houses to fall into such a state of disrepair. They replied that they were too poor, and, when I pointed to the crops that lay below, they said that the soil did not produce enough to yield a profit, and certainly appearances seemed to accord with their statement; but I could see that if I had cared to sit with them for hours they would willingly have kept me company instead of finding work. These people appeared to be mostly sheep and goat herds, and they told me that a sheep was worth the equivalent of about half-a-crown and a sheep-skin about sevenpence.

After leaving Ai-li-p'ing we came upon a hamlet of cavedwellings without any stone work whatever, and, eight miles beyond, we entered the small prefectural city of Yen-an Fu on the left bank of the Yen-shui flowing west to the Yellow River and at the base of hills to the west blocking the valley we had ascended the whole of the day. The willow, mulberry, peach, elm, date and *Sophora japonica* were all met with during this stage of some 26 miles, and the willow was particularly abundant near the city. Peas, hemp, beans, maize, wheat, and poppy were the crops on the ground.

I had scarcely settled down in an inn in Yen-an Fu when I received a visit from Mr. Ernest F. Smith of the English Baptist Missionary Society, which has a very strong footing in the province of Shensi. He was good enough to ask me to join himself and his wife at their evening meal, and, although I disliked leaving my caravan and delaying the posting of my journal even for a few hours, I was unable to resist his kind hospitality. Mr. Smith had spent the greater part of his four years in China at and in the neighbourhood of Hsi-an Fu, the provincial capital, and had only recently arrived at Yen-an Fu, where he was busy putting his new station in order. Yen-an Fu is such a poor place that he had experienced the greatest difficulty in hiring skilled labour for the work he had in hand, and ultimately had found it necessary to have recourse to the hangers-on of the local official who were willing to serve as paper-hangers and painters, because they were unable to earn a living wage in their official capacity. Occasionally there was a scrimmage and one or other of the men was called away to perform some official duty, whereupon he donned his official hat and coat and hurried off, to return later, remove the habiliments of office, and resume work as

an artisan. Mr. Smith informed me that he had seen opium cultivators beaten a thousand blows on the buttocks in the presence of a magistrate. This was in the south of the province, where he estimated that the cultivation of the poppy had been reduced about 70 per cent. That was a very large reduction and would require some confirmation.

The city was barely astir when we left Yen-an Fu by the south gate on the morning of the 27th May. Presumably the authorities were still asleep, for they neglected to provide my escorting official with a fresh mount, and he had perforce to hire a pony with a bare, wooden saddle at the gate, in the hope that the official animal would soon catch up the caravan. Our course lay south, up a valley, and at the end of four miles we called a halt at the two-housed hamlet of Wo-hu-wan, where there was a poppy patch, twenty yards by ten, close to the roadside. There was still no sign of the missing pony, and the soldier was sent back on the hired animal to fetch it. This he did, swearing loudly at the laziness of the magistrate who had neglected his duty. There was not much in the way of cultivation in the main valley; but branch valleys and glens were numerous on both sides, and were better cultivated. While I was seated at breakfast at a stone table, shaded with branches of trees, in front of a mud hut, in the hamlet of Erh-shih-li-p'u, seven miles from Yen-an Fu, six sedan chairs carrying a Chinese official and his family from Hsi-an Fu suddenly appeared, and took possession of the inn in which I had refused to have my meal, so foul was it. On leaving Erh-shih-li-p'u there was quite a transformation scene. For a time the road ran south, through broken hills, which, in contrast with the bare, brown loess to which we had been accustomed for many days, were really beautiful.

The hill-sides and gullies were rich with vegetation : trees, especially the willow and elm, crowded each other along the roadside, and in the ravines shrubs in full bloom, notably a rose covered with yellow blossoms, lit up the various shades of green. It was a real oasis in the brown loess. A very steep descent followed, and brought us again to cultivation, which had ceased since leaving Erh-shih-li-p'u. No sooner had we descended than I came upon a large field of poppies, about four inches high. I took the trouble to measure this field, which was 220 yards long by 30 yards broad. It lay alongside the road, near the entrance to the hamlet of Ta-lao-shan, where I had an amusing experience. When I arrived upon the scene the innkeeper's family were trying to sweep away the dust of ages from a room in which I was to eat; but the air was so thick that I had to take refuge under the eaves of a house under construction behind the inn, whither a table and settle were brought for my use. While lunching I noticed across a gully a patch of plants that seemed familiar, and, crossing after my modest meal, I was not surprised to find about a third of an acre of poppies in excellent condition. I put one of the plants in my pocket, returned to the inn to start off my caravan, and was standing at the doorway when a welldressed man approached, and said to me, "We do not grow opium here." I replied that this was rather odd, as I had just measured a field of poppies before entering the hamlet, and, producing the plant from my pocket, I said that I had plucked it a few yards away, and asked if he recognized it. A smile passed over the faces of the usual crowd of bystanders, and the man quickly edged away and disappeared. During the descent to Ta-lao-shan we kept company with a rivulet, which quickly grew in volume, and was available

for irrigating purposes on reaching the valley which we descended to the miserable-looking district city of Kanch'üan Hsien, 30 miles from Yen-an Fu. Two-thirds of a mile before entering the city, however, I came to another poppy-field, close to the village of Yang-chia-pien. It covered an area of 166 by 35 yards, and had the great advantage of lying close to the rivulet, part of which was diverted across the field. The plants thus irrigated were the healthiest I had yet seen, and gave excellent promise.

It was a tired and sleepy-looking caravan that emerged from the south gate of Kan-ch'üan Hsien somewhat later than usual on the morning of the 28th May, and it was evident that a day's rest would soon be indispensable. We at once struck the left bank of the Lo River, a yellow, muddy stream flowing from the north-west. It rises in the north-west of Shensi, and, after passing through a corner of the province of Kansu, re-enters the former province, and crosses it south-east to the Yellow River, which it enters to the north of the more important tributary, the Wei River. The road followed the left bank of the Lo River the whole day, sometimes high up on the hillsides, and at others close to the water's edge. The river zigzags down a valley, occasionally narrowing, but more frequently widening out, and affording room for plains or flats, which, owing to the excellent water supply, seemed ideal spots for the cultivation of the poppy. But wheat and maize occupied the most of the ground until we reached the hamlet ot Huang-pu-tien, some sixteen miles from Kan-ch'üan Hsien, and under the jurisdiction of the independent-department magistrate of Fu Chou, where my search was rewarded by the discovery of two plots, one on each side of the road, measuring respectively 56 by 35 and 60 by 46 yards. This

was but the beginning, for a mile and a half further south I unearthed three other plots 25 by 108, 58 by 17, and 30 by 50 yards. These were close to the hamlet of Ts'uichia-kou, another mile and a half to the south of which is the hamlet of Tz'u-yao, where, to the dismay of the inhabitants, I measured four plots—75 by 11, 32 by 96, 70 by 35, and 16 by 178 yards—and was only prevented from measuring four others by the intense heat. They were, however, as big as any of the others. At a wooden bridge which crosses a small tributary of the Lo River a mile south of Tz'u-yao there was another plot, measuring 42 by 16 yards; and at the entrance and exit of the hamlet of Yü-lin-ch'iao, two-thirds of a mile further south, were two plots of similar size. I do not pretend, nor do I think, that these sixteen poppy plots were all that we passed during the day; but I kept a careful watch, and those I saw were easily observable from the road. As stated above, the day was uncomfortably hot, and we had to circumvent so many gullies that we did not reach the hamlet of Ch'afang, the end of the day's stage of about 28 miles, till nearly seven o'clock. Men and beasts were all jaded and worn, and a day's rest was at once proclaimed amid general rejoicing. To reach Ch'a-fang, which lies about a mile and a half to the east of the city of Fu Chou, we proceeded south by east, up a side valley, down which flows a clear mountain stream, to mingle with the yellow, turbid Lo, and I made up my mind to explore this valley in the cool of the following morning. This I did, and starting at six o'clock, I was back at seven with twelve more poppy-fields, one of them about four English acres in extent, added to my list. Now, many such side valleys are passed during a day's journey, but it would be impossible to follow them up and

41

unearth their secrets without spending months instead of days in the investigation. Should each contain as much poppy as I saw in an hour, the production of opium must be very considerable. I do not say that they do; but here, at any rate, no repressive measures were in force, and the probability was that extensive poppy cultivation was the rule, not the exception. The petty official from T'ai-yüan Fu and my groom, who have both learned to take a great interest in my quest, accompanied me during my morning walk. The former never ceased to rail at the apathy of his own authorities, while the latter did all in his power to assist me with his keener eyesight.

Part of the road from Ch'a-fang to Lo-ch'üan Hsien, which marked the end of the next day's stage of 26 miles, was the most atrocious we had yet encountered. We began by winding up a steep hill-side to a plateau torn here and there with the usual deep crevasses, and by a steep descent dropped into the miserable hamlet of Chieh-tzu-ho where we were overtaken by a thunder and rain-storm. Crossing a streamlet going west to the Lo Ho we ascended to a similar plateau, the descent from which was so winding and the road so narrow between banks of bare loess that the mule litter frequently came to grief, the mules stumbling and falling every few yards. Thereafter the road zigzagged to a third riven plateau and, after a long weary day of over twelve hours, we entered the poor district city of Lo-ch'üan Hsien surrounded by a wall, partly brick and partly loess, within which the accommodation at my disposal was a bare mud room, mud floor, half a chair and a tottering table. I was unwilling to take up my night quarters in such a place; but the heat during the day had been so intense and the road so difficult that a

muleteer was ill, two mules were lame, and the whole caravan was limp. There was no help for it; the mules were unfit for work and had to be given a two-days' rest. There was no poppy to be seen during this stage, for it is not cultivated on these hills where water is not available. Wheat, short in straw, was a poor crop but the most extensive, and was followed by peas, hemp, and beans.

After a two-days' rest, man and beast were again fit for the road; but there was a deluge on the 3rd June, and we did not leave Lo-ch'uan Hsien till the following morning. The country to the south was much the same as between Ch'a-fang and Lo-ch'üan Hsien-up and down loess mountain-sides broken by deep, wide rifts and gullies. After ten miles we descended from a plateau to the hamlet of Chiao-k'ou-ho and the left bank of the Lo River which we crossed by ferry-boat, the animals wading. In the hamlet was an Opium Prohibition Branch Office where I proceeded to make inquiries. It was untenanted and, according to the father of the hamlet, had never been occupied. Yet the title over the door stated that it was opened during the first month of the first year of the Emperor Hsüan T'ung, February, 1909. Another case of paper orders ! The Lo River flows west round the small plain and then turns south, while the road winds west up the side of a plateau, crosses it, and then descends to a rift at Jung-sheng-ch'uan, where we crossed a clear stream going west. The same stream, known as the Hsien Ho, had again to be crossed and recrossed as it winds east and west between lower hills over which runs the road. The valley with its excellent water supply seemed a suitable spot for poppy cultivation and, after crossing the stream for the third time, we came upon three plots well advanced, the

plants standing from 18 to 24 inches high and rapidly nearing the flowering stage, and a quarter of a mile from the north gate of the district city of Chung-pu Hsien there was a very considerable plot on the right bank of the stream where three of the plants were in full white bloom, harbingers of a white field within the next few days.

Scarcely a house or a soul is to be seen along this road, and, although cultivation is general where possible, the crops were poor: wheat was most in evidence, but it was exceedingly thin and short in straw. There were a few patches of barley, buckwheat, rape in seed, and some tobacco recently planted out from the seed beds. But there was an unmistakable air of poverty everywhere. When I was sitting by the bank of the Lo River watching the mules fording it with their packs, a man of my local escort who happened to be alone with me suddenly addressed me and said that he was exceedingly poor and hoped I would give him sufficient to pay his way back-which I had every intention of doing. He went on to say that he had received no money from the magistrate to pay his expenses, and it should be remembered that money has, as a rule in China, to filter through several hands before it reaches the intended recipient and that it gets very much attenuated on the way, if it does not actually reach vanishing point. The distance between Lo-ch'üan Hsien and Chung-pu Hsien on the left bank of the stream is 23 miles, and there is little to choose between the two cities in the matter of poverty and inn accommodation. In the latter, opium could be bought at 1300 cash, or over a Mexican dollar (about 1s. 8d.), a Chinese ounce, and two of the escort from Lo-ch'üan, who had evidently laid in a supply of the drug on the strength of my present to them, began to smoke in a room adjoining mine. The fumes of opium are unmistakable, and at my request the smokers were ordered elsewhere, the man who complied with my request, himself an opium smoker, talking loudly of the disgusting and filthy habit during the process of ejection ! And I need hardly add that one of the smokers was the man who begged from me on the bank of the Lo River ! Truly, the Chinese are a wonderful race.

Leaving Chung-pu Hsien by the south gate on the morning of the 4th June we forded a stream flowing east under the city wall, and at once proceeded to climb southwest to reach the usual cleft-riven loess plateau. At one spot the narrow road dividing two of these deep crevasses was supported on rough timbers of which, though covered with earth, our animals thoroughly disapproved. Slipping on either side meant death to man and beast; but we got them across with some coaxing. We had left the main road to save a few miles. Once on the top we found the usual type of plateau with immense fields of wheat, peas, and beans, but scarcely a sign of life or habitation. It was dotted here and there with growing timber, a few isolated clumps of trees, which in China generally betoken the neighbourhood of a village or hamlet. But here there was not a single house, not even a cave. After thirteen miles we descended to the cave-dwellers of P'ien-ch'iao-chen where, during breakfast, I inquired what it all meant-why all this cultivation, poor though it was, and apparently not a soul to till, sow, reap, or consume? An old gentleman with spectacles constituted himself the spokesman, and said that much of the land was uncultivated; but this I declined to accept as a sufficiently valid reason, for the land not under crop was the exception, and all these plateaux had presented

exactly the same features. He then said that much of the labour was imported, and that farm-hands came during the tilling and reaping seasons from as far off as the province of Szechuan to aid the proprietors of the soil who lived mostly in the cities, and he added that such a labourer's wages amounted to from 60 to 70 cash a day with food. This latter explanation I found at a later date to be the correct one, and it reminded me of Manchuria which during the open season is supplied with farm labour by the provinces of Shantung and Chihli.

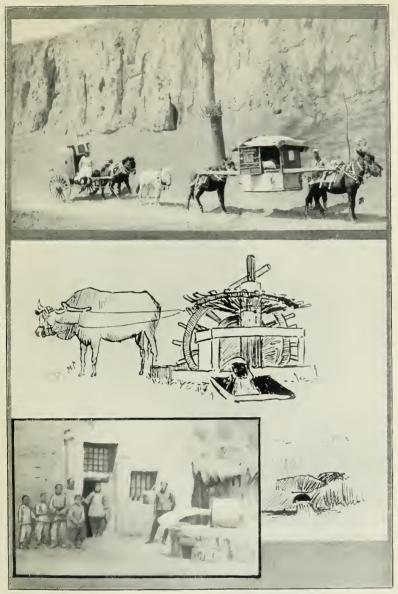
The table round which this conversation took place in the loess cave at P'ien-ch'iao-chen had one of its legs propped up with three stones to make it level. This process of propping is peculiarly typical of China. Things, great and small, are kept going day by day by propping, and it is remarkably effective so long as no violent measures are taken to loosen the props. It has lasted for centuries and may continue for many more unless an upheaval, more violent than usual, upsets the whole table.

From P'ien-ch'iao-chen the road continued to descend west by south into what appeared to be a long, smiling valley with hill-sides terraced and cultivated; but we were soon undeceived, for avoiding the main road we took a short cut by a small road and soon found ourselves in uncultivated land thickly clad with grass, flowers, and scrub, affording excellent cover for pheasants which rose and whirred every few yards at our approach. Pheasants have not been uncommon along the whole road; but at this spot they were particularly numerous and tame. In the middle of the scrub we struck a caravan of pack animals grazing, twenty to thirty of them, and the six muleteers

having a meal. The packs, which were ranged side by side on the ground, consisted of miscellaneous goods-mostly paper and water-pipe tobacco from the province of Kansu. They were doing the journey from Hsi-an Fu to Yen-an Fu. Keeping south over uneven country we soon came in sight of the district city of Yi-chün Hsien, some twentythree miles from Chung-pu Hsien, built on a hill-top, and with its wall and two-storied tower over the north gate looking in the distance like a large fort. External appearances count for much in China; inside, the city consisted of ruined buildings and plots of ground overgrown with weeds. It looked as poverty-stricken as Chung-pu Hsien, the crenelated brick top of whose wall was very imperfectly repaired with loess mud. In the case of Yi-chun Hsien the brick parapet surmounting sandstone was overthrown in many places and left to its fate. I saw no sign of poppy between these two cities, and the only reference to it was a proclamation posted on the wall of the hostel in which I had a meal at P'ien-ch'iao-chen. It was a long document issued by the Treasurer of the province imposing, in accordance with regulations submitted to and approved by the Board of Revenue, a tax on the transfer of land and house property to make good the deficit in the revenue hitherto derived from opium. It was dated the third moon of the second year of Hsüan T'ung, April, 1910.

The stage from Yi-chün Hsien south to T'ung-kuan Hsien is by Chinese reckoning 30 miles. For ten miles the road follows a high ridge with deep valleys on both sides containing billows of hills rising like waves in a stormy sea. With the exception of a brown speck here and there tillage was entirely absent. The country was covered with scrub and trees of various kinds, and pheasants were crowing everywhere. It is a botanical paradise : in addition to the yellow roses already mentioned, scrub, oak, and hazel kept company with willow and walnut, and there were many other shrubs and creepers decked out in their beautiful white blossoms. Where there was a clearing, the crops were wheat or barley, and young maize; but they were poor in the extreme and seemed hardly worth the labour being bestowed upon them. For another ten miles the road, descending from Lieh-ch'uan-chen, a filthy hamlet which I was glad to leave after snatching a hasty meal, entered a valley at the north end of which there were a few cultivated patches; but Nature soon reasserted herself, claiming the whole of the narrow valley for a stream and the roadway, the former rushing southwards, leaping from rock to rock, and the latter humbly following it in its windings, sometimes high above the torrent's bed and frequently descending to and crossing it as room for it on one side or the other became impracticable. If we crossed that torrent once during the day we must have forded it at least twenty times. I gave up counting in despair, for there were many more attractive things claiming attention. The steep hill-sides which cooped up the narrow valley were one mass of white blossoms on the shrubs, trees, and creepers with which they were clad. Although the poppy was my quest, I could not help revelling for an hour or two among beautiful specimens of, among others, Clematis, Cotoneaster, Elæagnus umbellata, Ranunculus acris, Lonicera quinquelocularis and Sophora flavescens. I had caught them all in full bloom and they were lovely.

At the hamlet of Chin-so-kuan, where the southern end of the valley opens out, I found that the hovel in which I had a meal had over its door the important announcement



Copyright.]

6

7

8

- 6. THE LOESS FORMATION, WITH MULE LITTER AND PASSENGER CART, SHANSI.
- 7. WELL IRRIGATION, SHANSI.
- 8. LOESS CAVE DWELLING, SHANSI.

[To face p. 48.

[[]See pages 16, 37, 195.

that it was an Office of an Anti-Opium Society. It was a ruin and might have been classed as a tenth-rate Chinese lodging-house, and yet it was the Office of an Anti-Opium Society ! Was there ever such mockery or such an attempt to make the most of a name? Who is to blame for all this trickery, the government or its servants? Both, I think, for the former has the means to enforce its will if it chooses. Instead, it appears to be content to accept as proof the reports that emanate from the emissaries of its servants. Poor China ! your administration needs drastic reformation. There was a prisoner chained leg to leg in this Anti-Opium Society's Office : he was a highwayman from the Chung-pu District on his way to the provincial capital to be dealt with by the High Authorities there. He was an unpleasant looking customer. He was allowed his pipe by his gaoler ; but the probability was that his smoking days in this world were nearing an end. I was not a prisoner in chains; but the foreign traveller in the interior of China is always a prisoner. He can never escape observation, and his every movement is watched and criticized.

South of Chin-so-kuan the valley widens and cultivation became general. The stream we had followed during the day increased in bulk by additions from side valleys, and was largely used for irrigation purposes, canals drawing away from the main channel abundant supplies, with the result that wheat and barley were yellowing unto harvest and promised a good yield of grain and straw. Rape was practically ripe and ready for the sickle, and maize and beans were well above ground. In many places the rice shoots had been planted out, and many plots of land were submerged in preparation for the receipt of similar shoots from the seed-beds with their beautiful light-green tints. VOL. I.

E

In one plot, not far from the city of T'ung-kuan Hsien, I noticed three poppy plants about two feet high: they had not yet flowered, and appeared to have been part of a large patch which had been destroyed. As we neared T'ung-kuan Hsien, the end of the day's stage of 26 miles, we came upon a large caravan with pack loads of sheep's wool and goat combings stacked under canvas while the animals grazed. Rain, which had been falling since morning, had compelled a halt. As we approached the city of T'ung-kuan Hsien, which lies on the right bank of the stream, all available ground was given up to the cultivation of vegetables such as turnip, lettuce¹ (grown for its stalk, not for its leaves) and leek.

The rain of the previous day made the road very bad going when we left T'ung-kuan Hsien on the morning of the 6th June. It followed southward the west side of a valley down which flows the stream we had forded so often yesterday and which we had again to ford four times before arriving at Yao Chou, the end of the day's stage of 23 miles. For six or seven miles the valley is fairly wide and the crops of barley, wheat and rape were excellent. The barley was white to harvest, and in places the garnering of the crop had already begun. The walnut and Sterculia platanifolia were prominent trees south of T'ung-kuan Hsien, and further south peach trees were scattered among the wheat-fields. As we neared Erh-shih-li-p'u, after a sevenmile ride, a stream from the west joins the main stream, and it was being utilized for flooding plots of land in preparation for the rice shoots. Here there is a village of cave-dwellings, and Erh-shih-li-p'u itself, with the exception of a mud hut by the roadside in which I had breakfast, is carved from the

¹ Lactuca Scariola.

loess. In China any excuse is good enough for invading another man's house especially when it harbours a foreign traveller, and the little room in which I sat soon became so congested with visitors demanding eggs or lights for their pipes, that I found it necessary to inform them that I was paying for the temporary accommodation, not they. The hint was sufficient; but the evacuation was carried out leisurely to show one another that their retirement was quite a voluntary act. During the morning I had seen only four poppies on the edge of a wheat-field and they were doubtless from seeds that had fallen by the wayside, for I was informed that last year all the land watered by this stream had been under poppy, but this year the cultivation had been completely suppressed. This was corroborated seven miles south of Erh-shih-li-p'u at the hamlet of Huang-pao-chen where I fell in with the Rev. Mr. Bell, of the English Baptist Society, who was paying pastoral visits and at the same time looking about for a cool retreat for himself and family during the hotter months. He said that last year all the land watered by the stream from T'ung-kuan Hsien southward and including Huang-pao-chen was given up to poppy, but that this year it had all disappeared and he had seen only occasional plants in fields of wheat or barley. He added that in the south 90 per cent. of the plain in the neighbourhood of Hsi-an Fu, hitherto a poppy garden, was now under cereals, and that the suppressive measures taken by the authorities had been effective. When we reached the city of Yao Chou, however, through a country of low terraced hills with the road frequently much under the level of the cultivated land, Mr. Comerford, also of the English Baptist Society, was good enough to accompany me on a walk outside the south gate where we found some

half-dozen poppy-plots not only in flower, but the opium in process of being harvested. They were of no great extent, the largest measuring some forty by five yards. They lay along patches of indigo and quite close to the city wall.

When we left Yao Chou on the morning of the 7th June, we began the day with a chapter of accidents, which, if at times amusing, were somewhat trying to the temper, not always at its best on the road in China. A stream from the west joins the main stream flowing south to the east of the city a short distance from the south gate. This we had to ford, and while doing so, one of the mules lost its footing and threw its load of two boxes of stores into the stream. There was much shouting and yelling in consequence, but above all rose the screeching of my Ningpo cook, whose dialect, at best all but unintelligible to the muleteers, had to be largely supplemented by the language of signs. It turned out that his bedding, wrapped in a coir mat, was affixed to the top of the thrown pack and, naturally, it suffered more than the tins, which merely parted with their labels and obliterated the names of their contents. The bedding was soaked, and the fuss and the language of the little cook regarding the bundle, probably not worth five shillings, were extraordinary as he danced attendance on it during the day with a face that was ludicrous to all but himself. He is a peppery little man, and there was a feud between him and the muleteers during the rest of the stage. Another mule stampeded shortly afterwards; but the contents of the thrown pack were in this case altogether mine, and the little accident did not seem to concern anybody much. The head muleteer drew a long face for a minute or two and, after a few repeated "Ai-ahs!" quickly recovered the expression of utter

weariness of the world which he was fond of assuming when he and I had to discuss affairs of business.

But other matters demanded my attention. Patches of poppy in full bloom met the eye from time to time alongside plots of the two indigo dye plants-Polygonum tinctorium and Indigofera Bungeana-which were under careful cultivation. The road goes south over a plain, past numbers of circular brick vats, built in the ground for the steeping of the indigo-leaves and the extraction of the blue dye. It was too early in the season for the indigo harvest and the vats were empty. At the entrance to the plain, which is well irrigated by channels branching from the main stream, were some fine persimmon trees, and during the whole stage they were quite common in the company of the poplar, cypress, Sophora japonica, walnut, Sterculia platanifolia and willow. There were splendid crops of wheat and barley, much of the latter already harvested, and in places hemp-Cannabis sativa-had attained a height of four or five feet against the same number of inches a few days ago. Eight miles south of Yao Chou the plain was broken and we descended from the hamlet of Mi-tzu-chen between precipitous loess walls to the cave-dwellers of Chao-tzu-ho, where I found a patch of poppies, not yet in flower, carefully guarded by thorn branches. Of course, nobody would claim ownership when I asked the assembled squatters to whom it belonged, and I may remark here that opium was a subject which for obvious reasons no one seemed inclined to discuss.

Crossing the rift and a streamlet over a small bridge, we ascended to a plateau with equally splendid crops, and, after another steep descent, landed at the village of Ling-ti,

where my appearance was the signal for the usual crowd. My local escort of one or two men usually preceded the caravan and secured a room for a meal; but on this occasion they had stopped on the way to smoke opium, and we arrived before them to find that no preparation had been made. The only place that could be commandeered at the moment was the front and, indeed, the only room of an old curiosity shop, whose proprietor, a very gentlemanly old man, reproved the crowd that packed the street to watch the "foreign devil" washing and feeding. I performed both operations to the satisfaction of all; but several friends of the proprietor called on him during my short stay, entrenched themselves behind the counter and, pretending to talk high politics, succeeded in obtaining a nearer view than the men on the street. In the crowd was a Lama, evidently a lunatic, who bared his arms and postured as a pugilist, but, to universal amusement, refused to stand his ground when I approached with the intention of addressing him. There was one customer during my meal, and his purchase was a sheet of match-paper for which he paid one cash. On leaving the shop, I graciously thanked the proprietor for the temporary accommodation, and he as graciously received the thanks, as a Chinese gentleman can do so well. So long as I was present he would not touch the hundred cash which my cook placed on the counter for the use of the shop.

A poppy here and there raising its head from wheat, barley, or peas, means nothing, and such plants were common enough during the stage; but before entering the village of Ling-ch'ien-chen, thirteen miles from Yao Chou, where carts were in various stages of construction, I came across a large field with from 50 to 60 plants in full

THE YELLOW RIVER TO HSI-AN FU 55

bloom. The field contained to all appearances a crop of thistles, for the variety and size of which I have not seen the province of Shensi excelled. The people of Shensi may not be so intelligent as the inhabitants of other provinces, but I did not credit them with cultivating thistles, and a careful examination of the field showed that the blooms were parts of rows of poppy-plants which had originally covered the ground. There could be no doubt that the poppies had been destroyed, but I could get no explanation from the villagers of Ling-ch'ien-chen, for nobody would talk of opium except the local escorts, who are almost invariably smokers, and whose lament was the high price of the drug. At Yao Chou the cost of raw opium had risen from 300 to 1200 cash per Chinese ounce. Several other poppy patches were observed during the day's stage, but they were of no size or importance. The road from Ling-ti runs south over a most fertile and wellcultivated plain to the district city of San-yüan Hsien, which, 26 miles from Yao Chou, is a great banking centre, and one of the greatest Shensi depôts of trade with the province of Kansu.

South from San-yüan Hsien the road runs over a large plain dotted here and there with the dilapidated ruins of camps or garrison stations whose loess walls now present a sorry sight. They are the remnants of the Mohammedan rebellion, which had its origin in an attempt on the part of the Chinese to extirpate the followers of the Prophet who had endeavoured to throw off the Chinese yoke in the sixties and were all but decimated in 1873, when the rebellion was quelled by a Chinese army under the command of Tso Tsung-t'ang. In the plain harvesting, threshing and ploughing were in full swing. Ploughing was done by ponies instead of the ox and the ass as in the northern part of the province. Threshing was accomplished by rolling grain and straw with a horizontally grooved stone roller on a threshing floor beaten hard with pieces of straw as binding. The roller has a greater diameter at one end than the other, and this facilitates its circular motion over the broken up sheaves arranged in a circle on the floor. Whether wheat, barley, or rape, the process was the same. Reaping was done not with the usual curved sickle but with a straight blade ten inches long and two inches wide, fitted by iron clamps into the groove of a nine-inch piece of wood inserted at right angles in the end of a short rounded wooden handle with a slightly curved hand grip. In cutting the grain the reaper keeps the straw on the scythe until he has collected a sheaf, which is then thrown aside. Soon after leaving San-yüan Hsien we came upon a plot of poppy by the roadside, with numerous blank spaces in the rows, a sure sign that an attempt had been made to destroy it, and at the hamlet of T'a-ti, twelve miles from the city, were a couple of patches which had not been tampered with, owing, most probably, to their insignificant size. A little later we struck the left bank of the Ching River, a brown muddy stream some 50 yards broad, flowing east, across which we and the pack loads were ferried by boat with the assistance of a rope stretched over cross poles erected on both banks. Below the ferry the stream widens and is shallower, enabling the animals to wade across; but there were many holes, and several of the muleteers were wet to the waist when they reached the right bank. Just under the left bank there was a patch of poppy in full flower, and on the right bank was a large field in which about a hundred blooms were scattered about. Evidence

collected on the spot went to show that these hundred blooms were the remnant of a crop which had been officially destroyed at an earlier date.

The Ching River, which comes from the north-west, is made up of a number of streams rising in Shensi and Kansu, and leaving it the road goes south to the left bank of the much larger river-the Wei which, soon joined by the Ching, goes to swell the Yellow River at a point to the south of the latter's junction with the Lo River. A distance of some four miles separates the Ching from the Wei, and on the plateau between them I came upon a field of poppies some 10 by 300 yards in area well concealed behind a field of wheat. The harvesting of the opium on this field was proceeding, the most of the capsules having been bled. Soon the plain of Hsi-an Fu and the Wei River came into view and, descending from the plateau, we at once struck a number of poppy-fields by the road-side, some of which had been partly destroyed; but one large field, measuring some 500 by 30 yards and containing certainly two-thirds of a full crop, was being harvested.

We reached the left bank of the river, also flowing east, over a sandy uncultivated flat and had to await in the intense heat the arrival from the other side of one of the two large ferry boats or barges which are used for crossing the northernmost of the three channels into which the Wei is divided up at this season of the year. At last it arrived carrying seven carts, each with two animals and their drivers, and when these had been discharged I succeeded in getting my caravan on board after the usual delay with the riding-ponies, which had to be helped with more than gentle

persuasion. The passage was tedious and the navigation peculiar : six men poled at the stern to prevent the current, which was fairly swift, from carrying the barge down stream, while two men at the bows armed with long sweeps headed the craft up stream, and had great difficulty in averting a broadside presentation to the current. The sandy bed of the river is little under a mile broad; but, once across the northernmost or deep-water channel, the mules and ponies easily waded the other two channels and we were soon on the right bank to find ourselves amid the ample remains of poppy-fields where opium harvesting was taking place. These fields were of great size, and I am safe in saying that they were yielding a half crop, so ineffectively had the work of official destruction been carried out, while in other fields brilliant petals of various hues defied concealment as they overtopped the peas amid which the poppies had been sown. But one beautiful picture clamoured for attention to the south of the Wei River; long lines of graceful trees, principally poplars, edged and crossed fields in wonderful profusion, adding an unwonted charm to the landscape. The memory of that picture did much to sweeten the night spent in a stinking mud cell.

I had lunch in the vestibule of a farmhouse at the hamlet of Wen-chia-pao after the passage of the Wei River, and the farmer, in return for my explaining to him the working of a *Prana* syphon and praising his cool well water, told me that last year from the right bank of the Wei River southwards, the land was one blaze of poppy, that this year the authorities had been most stringent, and that those who had sown the poppy during the present season had suffered considerable loss. This farmer, who appeared to be straightforward and truthful, stated that experiments were now being made with cotton and sesamum to take the place of the poppy. It was a weary ride from Wen-chia-pao to the city of Hsi-an Fu and, although the road passes through a fine fertile country, we were all tired of the long day's stage of over 30 miles. As if to remind us that we were still in the loess country, the road passes down southwest between high precipitous cliffs of brown earth before entering the north gate of the provincial capital, and on this narrow road we had considerable difficulty with passing carts which are in use on the great Hsi-an plain.

CHAPTER III

HSI-AN FU TO THE FRONTIER OF THE PROVINCE OF KANSU

THE name of the provincial capital of Shensi is variously known as Hsi-an Fu, Si-an Fu and Si-ngan Fu, according to the taste of the speller. I have adopted the form Hsi-an Fu, which accords with the romanization of Chinese characters used by the British Consular Service in China. The city, which I reached 29 days after leaving T'aiyüan Fu, and which has a walled circumference of some ten miles, lies, like many other provincial capitals, within two districts-Ch'ang-an Hsien and Hsien-ning Hsien. It has a great historical past : Ch'ang-an Hsien, then known as Hao, was the capital of the Yin Dynasty (B.C. 1401-1121), and of the Chou Dynasty (B.C. 1122-769), while under its modern name of Ch'ang-an Hsien it was the capital of the Western Han Dynasty (B.c. 206 to A.D. 24), of the Sui Dynasty (590-619) and of the T'ang Dynasty (620-906). In other words, the city of Hsi-an Fu has from time to time been the capital of five dynasties, and it was to this ancient capital that the Emperor Kwang Hsü and the Dowager Empress Tzu Hsi fled from Peking on the 15th August, 1900, the year of the Boxer rising, and from which they returned on the 7th January, 1902.

The high brick walls of the city with their four towering gates form a parallelogram, whose north and south sides are longer than the other two, and there are extensive suburbs

outside the east and west gates. In the centre of the parallelogram is the Drum Tower whence a good view is obtained of the whole city. In the north-east corner is the Manchu walled quarter, which was stormed during the late revolutionary movement, and its inhabitants, men, women and children, variously estimated at from 10,000 to 15,000 souls, hunted for four days and butchered in cold blood, the darkest stain on the whole revolutionary period. In the south-east section of the city, which is mostly residential, is the celebrated Pei Lin or Forest of Stone Tablets, on which are cut the Thirteen Classics or Canonical Works, including the Nine Classics of the T'ang Dynasty, and there are many other similar records of antiquity and specimens of caligraphy. The tablets are arranged in a series of low buildings, and in one room close to a stonecarved portrait of Confucius is the famous Nestorian Tablet standing on its tortoise stone pedestal, the earliest record of the propagation of Christianity in China. Nestorian missionaries from Persia and Nipal entered Northern China in 506, during the reign of T'ai Tsung of the T'ang Dynasty, and the tablet, erected by Imperial sanction in 781, records in Chinese the tenets of their creed known as the Ta Chin Ching Chiao or "Illustrious Religion of Syria."

The tablet, which is in an excellent state of preservation, was unearthed from some ruins in 1625, and re-erected about a mile outside the west suburb of the city near the highroad which leads to the district city of Hsien-yang Hsien on the left bank of the Wei River. The preservation of the tablet is doubtless due to the Syriac writing cut on it—on each side and at the foot of the twenty-eight perpendicular columns of Chinese characters as well as on its left edge. The Syriac writing on the face of the tablet gives the names and offices of the high dignitaries of the Nestorian Church in China, while that on the left edge consists of the names of 67 Nestorian priests, of which 61 are followed by their Chinese equivalents. The Chinese character columns are 66 inches in length, each column, with one or two exceptions, containing 62 characters. Surmounting these columns and in large characters, nine in number, arranged in three rows, is the heading Ta Chin Ching Chiao Liu Hsing Chung Kuo Pei, that is, "Tablet [commemorating] the Propagation in China of the Illustrious Religion of Syria," above which there is a small cross some two and a half by two inches. The four points of the cross as well as its centre are ornamented with circles, and its foot rests on what appears to be foliage with a distinct branch at each side. The heading and the cross are supported on each side by a dragon, griffin or other fabulous animal with six legs, two legs of each animal raised and meeting above the cross. While cross and foliage are cut into the stone at a less depth than the Chinese characters, the two animals are in relief and the top of the tablet ends in a curved arch. On the edge of the tablet there is another inscription to which I have seen no reference made, probably because it is of recent date. It consists of 47 Chinese characters, some of which have unfortunately been cut over Syrian writing, and reads : "One thousand and seventy-nine years later, in the ninth year of Hsien Feng (1859), Han T'ai-hua of Hangchow came to examine the tablet, and luckily finding the inscriptions in good condition re-erected a pavilion over it. Unfortunately his old friend Wu Tzu-mi, the Provincial Treasurer, was unable to accompany him, to his everlasting regret." As mentioned above, the tablet was erected about a mile outside the

west suburb of Hsi-an Fu; but a few years ago it came to the notice of the authorities that a Danish subject was having a replica made with, it was thought, the intention of carrying off the original to be exhibited in an American museum. They took fright and had the tablet removed to the Pei Lin, where I saw it housed. To me it seemed almost incredible that I was looking at a stone with inscriptions 1129 years old; but its marvellous state of preservation must in some measure be due to the fact that it lay buried for many centuries. At the time of my visit rubbings of the inscriptions were being made, and there were two shops inside the grounds of the Pei Lin where rubbings of this and other tablets were on sale.

In the southern part, but near the centre of the city, is the official residence of the Viceroy or Governor-General of the two provinces of Shensi and Kansu, but when the Hsin Chiang or New Dominion was incorporated as a Chinese province the seat of the latter was transferred to Lan-chou Fu, the capital of Kansu, and the Governor of Shensi, vacating his own, took possession of the residence of the Viceroy. The vacated residence, which is in the north-west section of the city, became the temporary palace of the Emperor and Empress-Dowager when they fled from Peking in 1900. The rooms which Their Majesties occupied were pointed out to me, but entrance to them was denied, and I was requested not to take any photographs. Covered-up furniture was to be seen through the windows, and this temporary abode of royalty, consisting of many clean courtyards and several miniature gardens, was silent as the grave. To the west of the Manchu city is the Mohammedan quarter with its two mosques, and still further west is what may be called the Szechuan quarter,

for it is inhabited almost entirely by natives of that province who, crowded out from their own, have emigrated to Shensi as labourers, harvesters and artisans. Of this I shall have more to say later. This north-west section of the city is the most densely populated and the principal business quarter.

Hsi-an Fu, with a population of about a quarter of a million inhabitants, is a great commercial centre, and has trade relations with Kansu and Tibet, Szechuan, Hupei, Honan, and Shansi. Previous to the construction of the Peking-Hankow (Ching-Han) railway, the greater part of the trade of Southern Shansi and its connecting markets was carried on by the River Yangtsze and its very important tributary the Han, which joins the former river near and to the west of the port of Hankow, that is, " Mouth of the Han." Goods in ever-increasing quantity are now carried by rail from Hankow north to Cheng Chou in the province of Honan, where the Peking-Hankow line is crossed by the K'ai-feng Fu-Honan Fu (Pien-Lo) railway, and from Cheng Chou they go west as far as the present railhead at Honan Fu, whence they reach Hsi-an Fu by cart or pack animals in less than a fortnight, an immense saving in time and cost in comparison with the long and difficult ascent of the Han River and a long overland journey to boot.

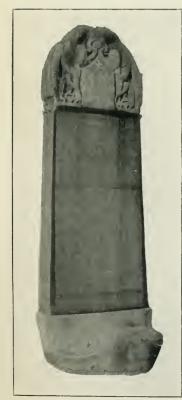
It was late in the afternoon of the 8th June when we entered the city of Hsi-an Fu by the north gate, where my name and whence I came were required by a khakiuniformed policeman. Unfortunately we missed my escorting officer, who had gone ahead to find a suitable inn, and we wandered about the streets for a couple of hours in the hope of encountering him. At last we came upon him at



Copyright.]

[See page 63.

IO. INNER SOUTH GATE, HSI-AN FU, SHENSI.



Copyright. [See page 61. FU, SHENSI.



Copyright.] 9. NESTORIAN TABLET, HSI-AN II. PAGODA OUTSIDE SOUTH GATE, HSI-AN FU. [To face p. 64.

the door of an inn with wretched accommodation. He said that he had seen only one good inn which, however, was fully occupied, but that he would arrange with its keeper next morning to secure part of it for my use. This he did, and it proved far and away the best inn I had seen since leaving Peking. As soon as I had settled down I sent my card to the Governor, His Excellency En Shou, with a proposal to pay him a visit next day at ten o'clock, or such other hour as would be most convenient for him. I was immediately waited upon by a member of the Bureau of Foreign Affairs requesting to know the nature of my business with the Governor. I replied that I had no special business and that I would communicate such as I had to His Excellency when I had the pleasure of meeting him. The interview took place at ten o'clock on the 10th June. His Excellency said that he had received a letter from the Governor of Shansi that I was coming, but was not yet in receipt of any communication regarding me from the Wai Wu Pu (Foreign Office) at Peking. I at once produced my passport from the Wai Wu Pu, dated the 28th April, which he read. I explained that I had come to thank him for the protection which I had received from the local authorities of his province on my way south, and to express the hope that he would be good enough to ensure a continuance of that protection on the road to Lan-chou Fu, the capital of the province of Kansu, whither I was bound. I informed him that the Governor of Shansi had sent a special deputy and a mounted soldier all the way with me to Hsi-an Fu, that both had served me exceedingly well and that, if it could be arranged by telegraph with his colleague of Shansi, I should be glad if the deputy were allowed to accompany me as far as Lan-chou Fu. I said VOL. L. F

that the deputy was willing to go, that, as I had temporarily lost the services of my personal servant owing to an accident, he had done everything in his power to make good my loss, and that I should consider it a great favour if the present arrangement could be continued. His Excellency expressed his willingness to comply with my request, and said that he would telegraph to the Governor of Shansi for the loan of the deputy whom he desired to see. This he did the following morning, and, so far as I could gather, the result was satisfactory, the only information volunteered to me by the deputy being that he asked whether I was making a map of the country.

I remarked to His Excellency that I had been struck by the splendid harvest prospects of a great part of the province through which I had passed and incidentally mentioned the subject of opium. He stated that he had taken stringent measures to put a stop to the cultivation of the poppy, that it had been reduced by from 60 to 80 per cent., and that, although it might still be found growing in out-of-the-way places and corners of the province, cultivation might be considered as practically stopped, and that by the end of the year it would be entirely eradicated. He added that the people somewhat resented this wholesale suppression of what had been to them a very profitable means of livelihood for many years; but I gathered that this would not stand in the way of his doing his duty.

I informed His Excellency that it was my desire to proceed to Lan-chou Fu by way of the valley of the Wei River, and I asked if all the roads to Kansu were safe. He replied that they were, but suggested that I should keep to the high-road. To this I demurred, saying that I

should see little of the country in which I was interested if I went and returned by the same road. He said that he would have inquiries made regarding all the roads and let me know the result later. As a consequence the deputy from the Bureau of Foreign Affairs, who was present at my interview with the Governor in the capacity of interpreter, but whose services were, much to his relief, not required, called on me on the night of the 12th June, bringing with him a list of the stages as far as the frontier of Kansu. This list gave the names of the stages to the north and west of Hsi-an Fu; but I told him, as I had informed the Governor, that my wish was to follow the valley of the Wei River. As he could adduce no valid reason why I should not take that route, it was decided that I should follow up the Wei River as far as possible, and I announced that I was leaving on the morning of the 14th June. He said that the Governor had been indisposed for a couple of days and was much concerned that he had been unable to return my call. To show the want of uniformity in Chinese Government Departments, I may mention that three members of the Bureau of Foreign Affairs who called upon me each sent me a route list, each list differing from the other, the aim of all seemingly being to keep me as far away as possible from the Wei River, where the cultivation of the poppy was no doubt known to be extensively carried on. There could be no other possible reason for trying to head me off the route I had mapped out for myself. Hsi-an Fu is the headquarters of the English Baptist Missionary Society in the province of Shensi, and there and elsewhere I received every kindness at the hands of its members. Mr. Shorrock, the senior member at Hsi-an Fu, has spent many years in the province and he

was able to give me much valuable information regarding poppy cultivation in the neighbourhood of the provincial capital. He told me that remarkable, almost incredible, progress in suppression had been made in the great plain of Hsi-an, which only a very few years ago had been one large poppy garden, and he was also able to give me satisfactory results which had been achieved in other parts of the province; but his information was incomplete as regards the western districts which I was about to traverse. It is quite common for merchants from other provinces to buy up the crop as it stands in the fields, engage men to harvest the opium and transport it eastwards for consumption. This, however, is a risky business, for, should rainy weather set in, much of the juice or crude opium as it exudes from the capsules is washed away. During my visit the price of raw opium in Hsi-an Fu, which was about 70 odd taels per 100 Chinese ounces in the latter half of 1909, had, owing to the prohibition of the export of the drug, fallen to 50 taels. These represented some fourfold the prices of former years. The price of prepared opium, that is ready for smoking, was about 1400 copper cash per Chinese ounce or five times the cost in 1909. I should say that a tael, which was approximately the equivalent of half a crown, could purchase from 1100 to 1400 cash, and that a Chinese ounce is equal to 13 English ounces. The currency of Hsi-an Fu was somewhat complicated : side by side with the old copper cash, which are being pushed west from those provinces using the new copper coins, there was a note currency guaranteed by the provincial government. These notes represent cash, but a 1000 cash paper note was equivalent to only some 700 actual copper cash. As in Shansi, the new copper coins

representing 5 and 10 copper cash pieces were not in circulation in Shensi.

I left Hsi-an Fu on the morning of the 14th June, and proceeded west over a good broad road with a considerable cart traffic as far as the village of San-ch'iao-kai, where, during breakfast, we had an adventure with a grey-headed old woman who followed us into the court yard of an inn shouting at the pitch of her voice, and ultimately lying down just inside the gateway. Thinking that she was a beggar I told my servant to give her some cash; but she refused the gratuity and continued her loud monologue until she was ejected by the innkeeper. She then lay down on the road outside the inn till passing carts compelled her to move on. She was insane. From San-ch'iao-kai the road turns north-west to the village of Feng-ch'iao, named after the bridge at its western end spanning the Feng Ho, a tributary of the Wei River, whose right bank we almost immediately struck. Between San-ch'iao-kai and Fengch'iao I noticed on the north side of the roadway what appeared to be a field of peas. As, however, it had a somewhat peculiar appearance I dismounted and examined it carefully to find that it was a field of poppies well concealed by pea stalks and leaves. The poppy capsules were most of them lanced. The field was within the district of Hsien-yang Hsien, the city of that name lying on the right bank of the Wei River. Opposite the city the river is divided into two channels by a long sandbank, the wider and deeper channel lying along the left bank. Crossing by two sets of ferry-boats we entered the city and lunched in the official rest-house, the Governor having been good enough to send instructions ahead that these government buildings were to be placed at my disposal if I preferred to occupy them.

The city of Hsien-yang was the capital of the Ch'in Dynasty (B.c. 255-206), during whose brief sway several important events occurred. Incidentally it may be mentioned that the name China is generally supposed to be derived from the name of that dynasty. China had hitherto been divided up into a number of feudal states or principalities, but the first and third princes of the Ch'in Dynasty (the second prince reigned only three days) set themselves the task of subduing the other states and welding them into one kingdom. The fourth prince, named Cheng, who succeeded to his heritage in the year B.C. 246 at the age of thirteen, continued the work of subjugation, and in B.C. 221 felt himself powerful enough to proclaim himself Shih Huang Ti, or "First Universal Emperor" of a country from and including the province of Chihli in the north to the river Yangtsze, with the addition of the present province of Chekiang, and from the Yellow Sea on the east, to the province of Szechuan in the west. This empire he divided up into 36 provinces, a forerunner of the divisions of to-day. The reforms of Shih Huang Ti were thwarted by the scholars of the time, and on the advice of his Prime Minister he issued a Decree in B.c. 213 commanding that all classical literature, with the exception of works on agriculture, astrology, divination, and medicine, should be burnt. This is known in Chinese history as the "Burning of the Books." There was a loud outcry against this Decree and, as a consequence, 460 scholars were put to death, some say buried alive. For this act his name has always been held in detestation by the literati of China. During his reign Shih Huang Ti made roads and built bridges, and to him is due the credit of constructing or, rather, completing the Great Wall of China, to protect his

kingdom from the Tartar tribes in the north. He was very superstitious and was in the habit of consulting soothsayers by what means he could attain to great age. He was informed that he was the prey of evil spirits, and to avoid them must never sleep in the same room two nights running. He accordingly built an enormous palace in the neighbourhood of Hsien-yang in B.C. 212; but he died in B.C. 209, in the province of Chihli, while making a tour of his kingdom. The palace is known in Chinese history as A-fang-kung, and its construction was so costly that it called down the remonstrances of the Emperor's eldest son, who was, in consequence, banished to the neighbourhood of the Great Wall, where he committed suicide in accordance with an Imperial order forged by his brother immediately on his father's death. In this way the younger brother Erh Shih Huang Ti, or the Second Universal Emperor, came to the throne, and one of his first acts was to build a vast mausoleum for his father's remains in the vicinity of the district city of Lin-t'ung Hsien, fifteen miles to the north-east of Hsi-an Fu. The mausoleum was built by criminals, but its cost and adornment proved so great a tax on the people that they rebelled. Erh Shih Huang Ti was assassinated in B.C. 206 and, although his son nominally reigned for a couple of months, the Ch'in Dynasty was overthrown, and was succeeded by the Han Dynasty.

Through the west gate of Hsien-yang the road runs seventeen miles due east to the district city of Hsing-p'ing Hsien, and, on the way, between the villages of Ma-paoch'uan, with its several cave dwellings, and Shang-shih-pao, I came across six fields of poppy at short intervals, three to the south and three to the north of the roadway. The first, on the south side, was close to the road, and measured about

100 by 10 yards; in the second, measuring 50 by 50 yards, some 100 paces from the road, three men were busy lancing the capsules; and the third field was about the same size. On the north side were : first, a plot some 10 by 150 yards, the second 10 by 100 yards, and the third-a patch in full white bloom-some 50 by 50 yards. These were in the Hsing-p'ing district. In all I came across seven fields and plots of poppy during the day. There was no sign of interference with the cultivation, and the only conclusion to be drawn was that no effective repressive measures had been taken in the district of Hsing-p'ing Hsien. Other crops on the ground were wheat, barley, the lucerne fodder plant (Medicago sativa), and peas; and whole families were in the fields gleaning what was left by the rake. Cotton, common hemp, beans, and maize were showing well above ground, and there were not a few patches of Abutilon hemp (Abutilon Avicennæ, Gaertn.), the fibre of which has for many years been erroneously classed as jute by the Chinese Customs. During the earlier part of the day the roadway was bordered by willows a few yards apart; but the poplar, Sophora and cypress, also common, were ultimately overshadowed by the elm, which was much in evidence as the city of Hsing-p'ing Hsien was approached.

Soon after leaving Hsing-p'ing Hsien, on the morning of the 15th June, I noticed several fields, half peas, half poppy; but all this anxiety to conceal quickly ceased, and before entering and after leaving the hamlet of Pan-ch'iao-pao, six miles west of Hsing-p'ing Hsien, three large poppy-fields, distant 200 to 300 yards from the south side of the road, came into full view, and at the entrance to the village of Ma-wei-chen, where we broke our fast at eight o'clock, there were two large patches and one small plot within the village itself. But these were trifling compared with what was to follow. On leaving Ma-wei-chen, I quitted my caravan and struck down a likely glen to the south, and at once came upon three very large fields of poppy, in which the petals had fallen and the capsules had been bled. On higher ground, to the immediate west, were two still larger fields and a small patch by the road on the north side. But I need not enter into too great detail. During the day I added to my list 52 fields and plots of poppy between the district cities of Hsing-p'ing Hsien and Wu-kung Hsien, a distance of some 30 miles. These, with the exception of half a dozen, were within the Wu-kung district, and in the city of that name we passed the night. One of these fields measured 17 by 800 yards. It was a sample of many such fields, which were all within sight of the road, and the great bulk of them quite close to it. In only two cases did I notice signs of official destruction, which consisted in lopping off many of the capsules; but other capsules had matured, and were being bled. It was quite evident that no effective measures had been taken to stop cultivation of the poppy in the Wu-kung district, for, if the roadside gave such results, what must have been the state of the interior of the district? It could hardly be want of knowledge on the part of the magistrate, whom I met proceeding into the country to hold an inquest on the body of a man who had met his death in a gambling brawl. Had he been a few minutes earlier, he would have found me measuring the field above referred to, while the many poppy blooms by the roadside could not have failed to attract the attention of even the blindest official.

Of the two mounted soldiers sent to escort me from Hsi-an Fu to Lan-chou Fu one was a quiet, unassuming

man, who always rode behind me; the other was more active, and undertook the duty of going ahead and procuring accommodation for meals and quarters for the night. The former remarked, soon after leaving Hsing-p'ing Hsien, that the poppy now grown in Shensi represented only about one-tenth of the cultivation of former years, when the price of opium ranged from 13 to 14 taels per 100 Chinese ounces, that the price had risen to over 50 taels for the same quantity, with a recent slight decline, owing to the greater stringency of the measures taken in regard to the disposal of the drug, and that the number of merchants from other provinces who used to visit Shensi to purchase opium was now greatly reduced. What, he said, induced farmers to produce opium, and to produce it in the face of official warnings and prohibitions, was this : one mou (one-sixth of an English acre) of land will produce opium which will realize seven times the price of wheat grown on the same area; and not only will it realize this larger amount, but it will always find a ready market, and, what is of still greater importance to the farmer, ready money. There was little to chronicle except the poppy between Hsing-p'ing Hsien and Wu-kung Hsien. Wheat was being harvested and threshed, and the ground was being ploughed and prepared for the reception of millet (Sorghum vulgare), much used in this part of Shensi for the distillation of spirit, especially in the city of Feng-hsiang Fu, whose product is famed throughout these western provinces under the name of Feng Chiu ("Wine of Feng"). We met carts going east laden with this spirit, contained in baskets of willow twigs waterproofed with oil-paper. The road, if somewhat broken at Ma-wei-chen by a slight descent between loess banks to the left bank of a stream-

a tributary of the Wei River—and a small plain at the west side of which nestles the district city of Wu-kung Hsien, under a range of hills running north and south, was level and good. To cross the stream, flowing south, I took refuge in the mule litter, and in mid-stream the rear mule stumbled and fell, with the result that the bottom of the litter was flooded; but no great damage was done, and wet bedding was soon dried in the official rest-house in the city which sheltered me for the night. The elm and *Sophora japonica* were the most prominent trees between the cities of Hsing-p'ing Hsien and Wu-kung Hsien, the latter tree preferring the villages.

Leaving the west gate of Wu-kung Hsien, the road ascends a loess bank, and goes west over a plain similar to that of the day before, covered with golden wheat and barley, soon to be cut down by the sickles of the hundreds of harvesters who accompanied us on the morning of the 16th June, a day remarkable for its heat and for the extent of poppy cultivation. It was the hottest we had hitherto experienced, and between the loess banks, when the road ran below the surface of the plain, the atmosphere was stifling, entirely demoralizing men and animals. After a ride in the morning, I had to take refuge in the suffocating mule litter, and it was a great relief when, at the end of 20 miles, we descended to the small district city of Fu-feng Hsien and its official rest-house, where the magistrate had prepared some refreshment in the shape of Chinese fruits, laid on a table covered with a bed-spread as table-cloth. It was a kind attention, but the intense heat prevented full justice being done to the offerings. We had still ten miles to accomplish, and we put up at the official rest-house in the village of I-tien at five o'clock in the afternoon, weary

and exhausted by the great heat of the day. But the most remarkable incident in the 30 miles between the district city of Wu-kung Hsien and the village of I-tien was the largest find of poppy in one day. There were 104 fields, plots, and patches visible from the road, many of them close to and others a short distance from it, but all within sight of the passer-by. Of these, 6 were in the Wu-kung, 85 in the Fu-feng, and 13 in the Ch'i-shan district, through part of which we had to travel to reach I-tien. As regards trade, we met three large carts laden with bales of sheep- and goat-skins, and other carts piled with bundles of hemp from Feng-hsiang Fu, to the north-west.

The great heat culminated in torrential rains which kept us prisoners in I-tien during the 17th, 18th, and 19th June. At nine o'clock on the night of the 19th, when the storm had abated, there was a great tumult in the village with loud shouting and noise, and the cause of the disturbance was the arrival of a large body of harvesters from Wu-kung in search of a night's lodging before going west. Dogs barked, women shouted and children cried, and it was a couple of hours before peace again reigned. My escort were afraid that an invasion of the official rest-house would be attempted, and gunfire signals were arranged between them and the local garrison in the event of the attempt being made. In the usual Chinese way I was told not to be afraid if I heard shots, and assuring my escort that I was not at all afraid, I went to bed. I had given instructions that, to avoid the heat of the day, we were to be up at four and off at five o'clock next morning; but the officer of my escort, who, I think, was really afraid of the harvesters and, incidentally, of my safety and baggage, was up at 2.30 a.m., and roused us by the noise he made in trying to light a

fire with the aid of a pair of sheepskin bellows. I got up and dressed, only to discover the mistake that had been made. I packed them all off again and slept until four o'clock. We were off at five. There must have been at least a couple of thousand harvesters at the west end of the village, where they had spent the night in the open. Many of them, in addition to their sickles, had the cash they had earned slung in cloth wrappers at the ends of carrying-poles or in packs on their backs. Hundreds of them accompanied us westwards. They were from Kansu and Szechuan, from the former province owing to its poverty, from the latter because it is in many parts over-populated. One could readily understand the amount of labour required to till and reap these immense fields stretching, field after field, to the far horizon, and frequently having, at a conservative estimate, an area of about 20 acres apiece.

From I-tien the road goes west with occasional dips for six to seven miles to the city of Ch'i-shan Hsien, where we had breakfast in an excellent rest-house. The yellow gold of wheat and barley was relieved by the glistening green of maize, green lucerne, the grey-green of the poppystems and capsules, and the darker green of the bean. From Ch'i-shan Hsien the road turns north-west to the prefectural city of Feng-hsiang Fu, a distance of twenty miles, and during the whole 30 miles I observed 51 poppy-fields, only three of which had been tampered with by the authorities. Some capsules had been lopped off, but no effective damage was done. Of these 51 fields, 43 were in the Ch'i-shan and eight in the Feng-hsiang district. Mr. Stevens, of the China Inland Mission, who had been resident at Feng-hsiang Fu for about fifteen years, informed me that the poppy, which in former years could be seen from the city walls in

all directions, had now entirely disappeared, and that its eradication was due to the energy of the late Prefect, who had recently gone into mourning owing to the death of his mother. He also stated that the district of Pao-chi Hsien to the west and on the right bank of the Wei River was, and still is, a great centre of opium production, and incidentally he remarked that the proportionate area of poppy to wheat used to be about three to four. I also noticed some patches of padi (rice), not a few fields of reeds, and many plots of indigo round the city of Feng-hsiang Fu, which, besides being a great spirit-distilling centre, contains numerous dyeing establishments, blue-dyed cottons hung out to dry forming archways under which we rode to the official rest-house. There was also some silk production and, of course, the mulberry. Other trees were the Sophora, elm, willow, and a species of Broussonetia-probably B. Kaempferie. Trade during the day was represented by some big carts from Kansu laden with drugs, especially Curcuma longa, L., and Angelica polymorpha, Max. var. sinensis, Oliv., as well as loads of millet (Kao-liang) spirit from Fenghsiang Fu.

It rained over night, and it was drizzling when we trooped out of Feng-hsiang Fu, at a quarter to six o'clock on the morning of the 21st June, to make the stage of 23 miles as far as the district city of Ch'ien-yang Hsien to the north-west. The plain in which Feng-hsiang Fu lies is bounded on the north by a range of hills running northeast and south-west, and, as far as the southern foothills, contained many villages and farm-houses well wooded with *Sophora*, elm, willow, *Broussonetia*, peach and other trees and crops of wheat, maize, peas and beans. Outside the city, the rain came down in torrents, and when we had travelled

six miles, the muleteers showed an inclination to remain at the village of Liu-lin-chin for the day; but the accommodation was of the poorest description, and I determined to push on. Entering among the hills, we ascended a valley northwards between terraced and well-cultivated hill-slopes on which wheat and maize blended their gold and green colours. The weather cleared up, and the crow of the pheasant was heard on all sides. We soon left the main road, which was slippery and bad going, and struck northwest up the hill-slope, over the summit and down into a similar valley in which lies the district city of Ch'ien-yang Hsien, a poor city with loess walls surmounted with a brick crenelated parapet. It does not boast of an official resthouse, and we spent the night in a miserable inn in the south suburb. The branch road across the hills was extremely dangerous in places: at one point, where it made a sharp turn, part of the roadway had fallen down a steep precipice, leaving only a narrow path. I advised the head muleteer not to attempt the passage with the mule litter; • but, after a few minutes' reflection, he decided to risk his two mules, the litter and its contents. He gave a shout to the animals, and they and the litter disappeared from sight. We were in doubt what had happened until, looking round the corner, we discovered they had passed safely and were hugging the inside bank. How they succeeded in rounding the sharp corner we did not see, but all was well. Neither I nor any of my men dared to ride round it. What mules will do is truly marvellous: they succeeded in descending the steep, slippery path that followed the dangerous spot without mishap, and we rejoined the main road before reaching the bottom of the valley-a wide valley down which flows a stream, the Ch'ien-shui, going south-east.

.

This stream is named after the city of Ch'ien-yang Hsien on its left bank, to reach which we had to ford a couple of rills which joined the main stream from the north-east. The wide, stony beds of these rills gave some indication of their size during the rainy season. This valley, with its excellent water-supply, seemed a favourable spot for the poppy, and this it turned out to be, for I observed 25 patches between the village of Wu-li-p'o, where we entered the Ch'ien-yang district, and the city, a distance of ten miles, and this number, together with 23 observed earlier in the day in the Feng-hsiang district, made up a total of 48 fields, plots and patches, all within easy view of the road.

The fates nearly compelled us to remain a day as well as a night at Ch'ien-yang. I had given orders that we were to be up at four and off at five o'clock on the morning of the 22nd June; but at four it was raining heavily, and my men were as gloomy as the weather, and moving about in a listless way in anticipation that I would call a halt. Ch'ien-yang, however, was unkind in the matter of accommodation and unpleasant bed-fellows, and, for this and other reasons, I was determined to lose no more time, so that when the rain ceased at six o'clock we hurried through the city and proceeded north-west along the east side of the previous day's valley, passing on the way peach, persimmon, walnut, and apple orchards, and fields of yellow wheat and green maize on the terraced hill slopes bounding the valley. The wheat in the valley itself was nearly all harvested and stacked at the farm-houses and cave dwellings which were particularly numerous. The stream flowing down the valley divides up into branches, forming islands, on which the peasants were busy diking and flooding fields for the reception of

padi or rice shoots. If the hamlet of Kou-chiao-ho failed to produce a table or even a chair for the morning meal, it made up for its lack of civilization by the number and beauty of its willow trees. There was some rising ground to the north of the hamlet and, to avoid the hill-road, an attempt was made to ford a branch of the Ch'ing-shui and ascend the valley; but, although our riding-ponies crossed it, wading up to their girths, the mule litter and the pack animals declined to face it, and had to return and take the hill-road. When they joined us later we again found ourselves in difficulties, for the valley was cut up by irrigation canals, and in many places the road was a torrent, rushing from canal to canal. What may please the farmer may be a slough of despond to the traveller or trader, and the condition of the ground provoked the vituperation of the muleteers whose vocabulary of abuse, at no time scanty, was liberally hurled at agriculture generally, and farmers in particular. We had breakfast at eight o'clock, and at noon we reached Hsiang-kung-shan, a range of hills jutting into and seeming to block the valley on its eastern side. On one of the summits of the range, a few hundred feet above the road, was a temple whose bell sent its sweet note rolling down the valley almost beguiling us to tarry; but the sun was hidden by clouds, the day was cool, and we pushed west to round the range, and then north-west to the market-town of T'u-yang whose inhabitants were consumed with a restless curiosity, which was about equally divided between the foreigner with his brown gaiters and boots, and his tall Ili horse. The number of people who passed and repassed the bare room in which I had a meal was astounding : there was no rudeness, only the keenest interest in my movements. Seven miles north-west of T'u-yang, after crossing VOL. I. G

and recrossing the stream, we entered the department city of Lung Chou, which lies at the southern foot of a low range of hills. A messenger from the magistrate informed me that there was no suitable inn or rest-house within the city, but that he had made arrangements with the native caretaker of the China Inland Mission Station, the pastor, a Swede, being at home on furlough, to accommodate me in the front courtyard buildings which were officially provided with a few chairs and tables nicely draped. I appreciated this attention, for it ensured cleanliness and the chance of a good night's rest.

This valley of 30 miles, from Ch'ien-yang to Lung Chou, was an ideal spot for the poppy, which showed itself with unblushing frequency and effrontery. Well-watered and generally with a rich soil, it was largely taken advantage of for the production of opium. I observed in all 167 fields and patches of poppy-33 within the Ch'ien-yang and 134 within the Lung Chou district. As the poppy was here the white-flowering variety, it could be readily distinguished from other growing crops at a distance, and within two miles of Lung Chou I counted 44 fields-not mere plots or patches-whose white petals were nodding at the walls and gates of the city. The most prominent crop on the ground besides the poppy was common hemp (Cannabis sativa), which was in excellent condition and exceedingly promising. During the day we met several mule caravans laden with Kansu drugs packed in baskets of willow twigs, and this reminds me that, in addition to the fruit trees mentioned above, willows of various kinds, poplars, cypresses, and elms were abundant. There was much excitement at the city gate as we entered at six o'clock, and we were escorted to the China Inland Mission Station by the

magistrate's myrmidons and a fair share of the population. Swift canals flow under the city walls, and native flourmills were scattered here and there along their banks.

Fine old willow trees lined for several miles the road that led west from the city of Lung Chou; but they were not the only striking feature of the landscape on the morning of our departure towards the province of Kansu. From the back of my horse I counted within the first three miles 135 fields, plots, and patches of poppy in full bloom, most of it white, with here and there an admixture of red, purple, mauve, and pink and white. After three miles the road passes through more broken country, rounded, well-cultivated hills being dotted to the west with valleys between. Our way lay west up one of these valleys containing the higher waters of the previous day's stream, which we soon forded, and then entered on a fine plain, to the north of which, in a dip, flows the stream, not to reappear until we had accomplished some thirteen miles, and just beyond the village of Hsien-yi-kuan-regarded as the end of the first day's stage west of Lung Chou. It was a great surprise to me that from the city of Lung Chou to the hamlet of T'ou-ch'iao-p'u, which is less than a couple of miles to the west of Hsien-yi-kuan, I was able to count as many as 568 poppy-fields, including patches and plots without and within villages, in valleys, and on terraced hillslopes ; but the number of large fields on the plain was exceedingly striking, and in the fifteen miles to which I refer I was never out of sight of poppy-fields. One wondered if the magistrate of Lung Chou had ever been called upon to report on the production of opium within his jurisdiction, and, if so, what had been the nature of his reply. Nor must it be forgotten that I am speaking of what

I personally observed from one road within the department and not of the department as a whole. What the state of the latter must have been could readily be left to the imagination. When His Excellency the Governor of Shensi informed me that the cultivation of the poppy had been reduced from 60 to 80 per cent. throughout the province during the year, it seems to me incredible that he could have been posted regarding the condition of things in this western part of his province. I counted during the day 569 fields, including plots and patches, the extra one being observed on the descent from the hamlet of T'ouch'iao-p'u into a narrow glen where cultivation of all kinds practically ceased. On the Lung Chou plain willow and walnut trees were particularly numerous.

We had accomplished the short stage of thirteen miles by ten o'clock, and, as it would have been waste of time to spend the rest of the day at Hsien-yi-kuan, I suggested to the muleteers that we should proceed after breakfast and do the next stage of 26 miles. No serious objection was raised, and off we started, soon descending into a gorge or glen and crossing by a bridge the stream issuing from it. We had not gone far when rain overtook us. This narrow glen, whose rugged, rocky, bounding hills were enveloped in mist, resembles in many respects the glen we descended from I-chün to T'ung-kuan Hsien on the 5th June, especially in richness of vegetation. It lacked, however, that wealth of white blossoms which lighted up the other. Here the blossoms had fallen and the plants were seeding; but the vegetation appeared to me to be richer and more varied than between I-chün and T'ung-kuan Hsien. We ascended the glen westwards for some six miles when it turned south and brought us, after seven miles and after

crossing and re-crossing it several times, to the poor hamlet of Cho-t'o-p'u, where, drenched and hungry, we took refuge in a hovel whose thatched roof leaked like a sieve. We were all hungry, and men and animals called loudly for food. I had a cup of hot tea from my Isola flask ; but my men pleaded to the lady of the house for something to eat. "Give us eggs," they cried, "and we will willingly pay you four, five, even ten cash apiece for them." But she replied : "I haven't a single egg : I have no hens and I don't lay eggs." This sally was received with the greatest good humour, and even the pitiless rain did not damp the men's hilarity. The road up the glen is a narrow mule track, and after leaving Cho-t'o-p'u it ascends by a series of sharp, steep zigzags the side of a mountain-the Takuan-shan-through birch, oak, and other trees to the grass and flower-clad summit. The track, almost obliterated by dripping vegetation, was stony and slippery, and at sharp corners the mules had to be unharnessed from the litter which was with difficulty edged round by muleteers and escort. At other precipitous places the mules stumbled and fell, and employer and employed lost their tempers as they struggled upwards on foot through white drenching clouds. After three hours' work from Cho-t'o-p'u we passed through the clouds to the summit and began the descent on the west side at five o'clock. The descent, at first a wet, slippery stone path on which the mules kept stumbling and falling, was through denser vegetation and a greater variety of trees, with rich undergrowth of ferns and flowers, than on the east side. Gradually we entered a valley, silent but for the notes of a bird or two, and uninhabited but for the presence of a couple of woodcutters' huts far apart, and down we all tramped sombre and sullen,

for our tempers had been sorely tried by the mishaps of the day, and we were still nursing our resentment. The valley was deserted : a solitary woodcutter towing a small black pig up the mountain-side was the sole warning that we were not the only human beings in this remote western corner of the province of Shensi. At eight o'clock, after fifteen hours on the road, we issued from the valley at the village of Chang-ning-yi, where my men were soon sitting naked round a roaring wood fire piled high in an inn room. The flames from the logs lit up a merry party drying their clothes and satisfying the inner man, and soon all our troubles were forgotten in sleep. We had accomplished two stages, covered close on 40 miles, were within three miles of the Kansu border, and had proved that the cultivation of the poppy in western Shensi was not the negligible quantity which the highest authority in the province had tried to impress upon me.

CHAPTER IV

FROM THE FRONTIER OF KANSU TO THE CAPITAL OF THE PROVINCE

In the foregoing chapter I stated that at the village of Chang-ning-yi we were within less than three miles of the Kansu border, and, on the morning of the 24th June, our animosities of the previous day having evaporated over night, I proposed to the muleteers that we should endeavour to accomplish two stages, or a distance of 30 miles, and I at the same time promised them a day's rest as soon as decent accommodation could be found. To this they agreed, and we got away at five o'clock; but we had only just left the village when the eccentricities of one of the mules delayed us for an hour. The offender was the vicious entire mule, who bucked and threw his load three times and ultimately declined to carry it, afraid, no doubt, that the experiences of the previous day were about to be repeated. All attempts to load him proved fruitless; but with some persuasion he was induced to exchange packs with the donkey, which was grain-bearer for the mules and carried a much lighter load. The donkey, which had stood by during the performances of the mule, brayed loudly at the exchange, and one of the pack-mules which had gone ahead, missing the attentions of his driver, turned back to see the fun and, quietly lying down, threw off his pack. This, however, was easily adjusted, and we started down

the opening valley westward with the stream which we had followed from its source on the western side of the Ta-kuan-shan. Here was scant tillage: buckwheat, the broad horse bean and maize were met with in occasional clearings, where pheasants were strutting and crowing in large numbers. We soon left this valley and turned north up a second, down which flowed a babbling brook to join the streamlet from the Ta-kuan-shan. Less than three miles from Chang-ning-yi we crossed into the province of Kansu just beyond the hamlet of Ch'a-ch'uan-p'u and breakfasted at the village of P'an-lung-p'u, whose inhabitants were unusually inquisitive and annoying in their attentions. During breakfast I discussed with the head muleteer the question of transport and the delay caused by the obstreperous mule. He explained to me that he bought five similar mules at a particular place and at the same time, and that he had disposed of four of them. I suggested that he would do well to dispose of the fifth; but he remarked that the mule was a strong and excellent beast when on his best behaviour; while I expressed my opinion that these fits of temper would scarcely repay the loss entailed by smashed boxes and their contents.

Soon after leaving the village we crossed some rising ground, meeting on the summit a caravan of forty mules laden with drugs from Lan-chou, the capital of the province of Kansu. These drugs are sent down by cart to the department city of Ch'in Chou, eight stages from the capital, and there transferred to and thence brought down by pack animals. A gentle descent landed us in a valley full of oats six to eight inches above ground, and a further ascent and descent brought us to a second valley also covered with oats and dotted about with fine willows. At the foot of this

second valley there was a long village, whence the road again ascended a hill-side and dropped into a third valley with many walnut trees and crops of wheat and maize, as well as oats and flax some ten inches high on the hill-slopes. The general direction of the road is west, and, after another climb and thereafter skirting a mountain-side, we looked down into a deep basin in the bottom of which lies the markettown of Pai-sha-chen, which, although only twenty miles from Chang-ning-yi, is reckoned a day's stage. A steep descent leads from the rim to the bottom of the basin, which, so far as the eye could see, was surrounded on all sides by mountain barriers; but later acquaintance with it proved that there is an easy outlet on the west side. From the heights Pai-sha-chen seemed an ideal spot; but, like all Chinese villages, it could not bear close inspection, and its inn accommodation was so dispiriting that I was exceedingly glad that we had arranged to pass it by and spend the night at Ch'ing-shui Hsien, the first district city by this route within the Kansu border and ten miles west of Pai-shachen.

The oat referred to was the huskless Chinese oat (Avena sativa, L., var. inermis) in which I had taken a deep interest since 1908. In that year, when I was Acting British Commercial Attaché in China, I happened to read in an English newspaper that it was being experimentally cultivated in Norfolk by Mr. Charles W. Marsters, grower and seedsman of King's Lynn, from seed obtained from China, and I at once took steps to ascertain in what province or provinces this huskless oat was cultivated. Application for samples of Chinese oats was made to the Chinese Board of Agriculture through the Chinese Foreign Office, and it was at the same time explained that what was particularly desired was the

husk- or hull-less variety. For a time samples of hulled oats reached the British Legation, and it was only after further explanations that natural husk-less grain was received from the north of the province of Shansi. I sowed this naked oat in flower-pots in my room in Peking, and it germinated and grew freely. A box of this seed was forwarded for experimental purposes to the Board of Agriculture and Fisheries in London and distributed among ten Agricultural Colleges in Great Britain. Reports from the latter were not so favourable as Mr. Marsters' successful experiment would have led one to expect, for from the 56 lbs. of seed which he obtained in 1906 he was able in the season of 1909-10 to dispose of seed for two guineas a bushel. In his catalogue for that season, in which a head of the oat, reduced to one-fourth of the natural size, is figured, Mr. Marsters states, that " one of the distinctive features of this oat is that there are sometimes as many as nine grains on a panicle or bell," and that "the grain thrashes out like wheat; hence its name, huskless." He adds that "the natural weight of the oat in 1908 was 56 lbs. per Imperial bushel," and that in the sowing only one bushel is required per acre against three bushels for home-grown oats. In a note which accompanied the sample from the north of the province of Shansi it was stated that to prevent mould or mildew the seed is kept moist for 36 hours in samshu or millet (Sorghum vulgare) spirit before sowing. In Kansu no spirit is used : the seed is simply steeped for a short time in warm water. I shall have more to say regarding this huskless oat later. I have also referred to flax as a growing crop, and I may mention that this plant (Linum usitatissimum) is cultivated in China only for the linseed-oil yielded by its seed and not for its fibre. True linen is not made in China, and what passes as

linen among Europeans in that country is the finer quality of grass cloth manufactured from the fibres derived from the *Ch'u Ma* or *Boehmeria nivea*, also known as *Rhea* or Ramie. I have likewise heard it applied to the fine cloth made in Southern China from the fibres of the pineapple leaf. But the whole subject of Chinese fibres and their products is very much confused and I hope to deal with it at another time and in another place.

Having refreshed ourselves at Pai-sha-chen we passed through the town and left the basin by a wide opening on the west side leading to a valley or plain bounded by low, well-terraced and cultivated hills which, here and there, throw their bare loess into the plain. Through the opening and down the valley a stream kept us company, nurturing on its way field after field of hemp (Cannabis sativa) whose stems were some four feet in height. During the day crops had been backward : wheat was still green, and maize and hemp were short; but in this valley, what barley there was was fast ripening, while pits for retting the hemp stems were being repaired in anticipation of the coming harvest. The further west the better were the crops. Willows and poplars were common in the valley, and there were some Sophora trees to the immediate west of Pai-sha-chen. From the latter it took us less than three hours to cover the ten miles to Ch'ing-shui Hsien, a proof that the road was good going. Ch'ing-shui Hsien is a poor district city and, in the absence of an official resthouse, we took up our quarters in an inn in its western part. The muleteers at once came to see whether I would rest for a day; but when I pointed to the miserable mudfloored hovel which I occupied they did not press their proposal.

As the next stage on our western journey was only 25 miles long, I gave instructions that I was not to be disturbed until five o'clock on the 25th June; but the muleteers were all astir at the usual hour of four, overhauling their pack-saddles and harness, and hammering away in the courtyard in front of my room. Such is the force of habit that I, too, was awake although I had retired only at midnight. We were off at six as arranged and, leaving the city by the west gate, turned south-west up the stony bed of a streamlet on its way to join the stream (the Niu-t'ou Ho, a tributary of the Wei) which was our companion from Pai-sha-chen to Ch'ing-shui Hsien the previous day. The bed of the streamlet, which was little more than a trickle, is wide and densely packed with willows and poplars, principally the former. Low hills, green and in some places well terraced, hem in the valley, and loess banks falling from the hills on either side were fairly cultivated with wheat, maize, oats, hemp and flax; but they were poor crops and backward compared with those we had seen to the east of Ch'ing-shui Hsien. Seven miles brought us to the hamlet of Shao-ch'uan-p'u, which is approached through a narrow pass without room for cultivation, but studded with willow, poplar and walnut Here I breakfasted in a small room abutting on a trees. stone pathway, the only thoroughfare, surrounded by the inhabitants, the female members of whom were badly afflicted with goitre. Later the pass widens and again narrows till the road commences and continues up a precipitous ascent south-west over a rocky path which occasionally presented serious difficulties. In turning one corner, the mule litter had to be unharnessed and carried on men's shoulders up a very rough piece of rock which

formed part of the roadway. While this was being manœuvred rain came down in torrents, and as we rose to broken, hilly country with crops of green barley, oats, peas, broad beans in flower, hemp and maize, the rocky path gave way to loess mud in which our animals had difficulty in keeping their feet. The descent south and south-west on the other side was exceedingly slippery, and we were glad to reach the hamlet of Ts'ao-ch'uan-p'u without broken bones, although we had accomplished only After our arrival there the rain continued thirteen miles. to pour and prevented any attempt at further descent that day, for we had the unanimous assurance of the inhabitants of the hamlet, which lies in a hollow on the mountain slope amid willow and walnut trees, that the descent was much more precipitous and dangerous in the lower than in the higher slopes. For once in a way, this Chinese assurance proved correct, as we found to our cost next day. At Ts'aoch'uan-p'u I bought a Chinese pint, which weighed four pounds, of huskless oats, for the sum of 100 cash, or less than one halfpenny per pound ; but, later, I found that I had paid about three times the proper value. In China, however, fixed prices are the exception, and it is only by haggling and bargaining that an approximation to the true value is reached. On this occasion I did not haggle, as I was only too glad to obtain for twopence proof that the cultivation of huskless oats was not confined to the province of Shansi. As a matter of fact, this triffing expenditure led to the discovery that the huskless is the common variety of oat cultivated in Kansu, and in the north-western provinces of China generally, and that oatmeal enters largely into the diet of the population, whose principal food-stuff is wheatflour cooked and baked in various ways, As in Manchuria

and North China, rice is a luxury to the peasantry of the north-west.

Kansu, and especially its capital, Lanchou Fu, is famed for the excellent flavour of its tobacco, more particularly for its shredded leaf, which resembles shag, and is known as "water tobacco," prepared for smoking in the Chinese hookah or water-pipe. In manufacturing this tobacco, the whole leaves are first spread out separately in open-work bamboo screens and exposed to the sun for several days. They are then transferred in bulk to larger screens and tightly bound for a like period, after which they are removed and the stalks and coarser veins extracted by hand. They are then spread in layers in square wooden boxes some six inches deep with the addition of rape oil between the layers. When a box is full, a wooden lid is placed on the top and weighted with stones, and, in a couple of days, when the superfluous oil has been expressed, the contents are cut up into slices about two inches wide. The slices are thereafter placed in presses for from four to six days, till sufficiently hard to be planed into shreds-the "water tobacco" ready A pinch of this tobacco is filled into the head of for use. a short, removable metal cylinder--the whole pipe is usually made of copper-and, when it is lit, the smoke from it passes down into the bowl which is full of water and thence up into the mouth through a long stem. The cylinder, in the interior of which cross metal wires are adjusted not far from the top to prevent residue tobacco and ashes from falling into the water, is inserted in an orifice in the fixed lid of the bowl, and, when the pipeful is finished, it is drawn out and the ashes removed by blowing through the lower end. In most hookahs there is a receptacle or pouch for tobacco alongside the bowl and forming part of the pipe, as one fill

is sufficient for only two or three "draws," and the pipe has to be constantly refilled. This tobacco is distributed all over China and, for export from Kansu, it is packed for convenience of transport in wooden boxes which are carefully waterproofed with oiled paper to prevent injury by rain. On nearing Ts'ao-ch'uan-p'u we met several caravans of this tobacco and of drugs on their way from Lan-chou Fu to Hsi-an Fu.

The night of the 25th June, which we spent at Ts'aoch'uan-p'u, was so cold that we found a charcoal fire in the brick bed, with its concealed, radiating flues, exceedingly comforting. Everybody was astir before four o'clock in the morning, and half an hour later we were off to tackle the precipitous descent to the valley of our old acquaintance, the Wei River. Once out of the hollow in which Ts'ao-ch'uan-p'u lies, the road runs south and south-west, sometimes along the face of loess hills, and at other times along ridges between deep valleys well cultivated and wooded. The country was much broken up, and similar to those rounded loess mountains through and over which we had travelled in Northern Shansi. There was, however, this difference : cultivation was carried to greater perfection in the Kansu loess, and the crops were more varied. In Shansi wheat and barley predominated, whereas in Kansu oats, peas, flax, buckwheat, and maize were additional crops. At last, from a ridge, I sighted the Wei River in a deep valley, and then commenced the steep, precipitous descent which proved to be no mere Chinese fable, such as the traveller has so often to listen to, and so frequently discount. It was a reality; and it was a much-bemudded caravan that dropped into the valley at eight o'clock. Several accidents occurred on the way down : the pack-mules

slid and tumbled about on the sticky mud, and, at one point, the front mule in the litter slid away, leaving litter and rear mule behind. But these were trifles, for, had the rain continued, the descent would have been much more difficult, if not impossible. Where we struck the valley of the Wei the river flows north-east. Here it contains numerous mud islands, given up to padi (rice), which was also being cultivated along the edge of the plain running along the left bank of the river to the foot of the loess hills we had just descended. This plain is of no great size, for it is soon hemmed in by a ridge that drops down to the left bank of the river, and marks the position of the ferry. It was a striking contrast to the mountains we had just left. The grains were already harvested; cotton plants were a foot above ground; hemp, if small in quantity, was a thriving crop; and maize, with its long, shiny leaves, was exceedingly healthy in appearance. The grain-bearing fields had already been ploughed, and laid under other crops. But what was more striking was the great profusion of willows, of every shade of green, according to their age, and the numerous persimmon and pear orchards. The river twines about in the valley, and we had to go north for some distance to reach the ferry, where two boats were plying. Here sand-banks jut into the river from the right bank, and contract it to about 150 yards in width. The current was sluggish, and could be forded by those unencumbered with packs, and four men crossed it while we were loading up the boats, the water rising in some places above their waists. The river was fairly deep under the right bank, and one of our ponies, instead of jumping from the boat on to the bank, managed, in his haste, to fall between boat and bank and disappear, saddle and all, for a brief



Copyright.

See page 94.

12. PUBLIC WATER TOBACCO PIPE WITH CUSTOMER.

[To face p. 96.

minute. There was no damage done, except a wet seat for the cook during the rest of the day. If the small plain along the left bank of the Wei was fruitful, much more so was the wide valley to the west, which we ascended on leaving the ferry. Bounded by terraced hills, and watered by a stream flowing east, and by rills issuing from gaps in the hills to the south, it was well cultivated with peas in flower and in pod, broad beans (Vicia Faba) in bloom, cotton, hemp, tobacco, capsicum, indigo, and, in the upper reaches of the stream, padi. There were also some melon fields. The grain harvest had already been reaped. There were, in addition, immense persimmon orchards, varied with peach, pear, and plum gardens, while magnificent specimens of willow, and not a few poplars and cypresses, were dotted along the valley.

From the Wei River we followed an excellent, broad road, between lines of willows, to the department city of Ch'in Chou, and on the way I observed poppy blooms in 28 separate fields; but I was convinced that they were the result of stray seeds that had found their way into the ground with the seeds of other crops. I have it, however, on the authority of a British lady missionary resident at Ch'in Chou, that the plain lying along the left bank of the Wei was in 1909 entirely given up to the cultivation of the poppy, that it was similarly planted out in 1910, but that in the latter year farmers were compelled to plough up the plants with their own ploughs, fortunately in time for them to sow other crops.

Ch'in Chou is a city of some commercial importance : it is the meeting-ground of roads from Szechuan and Shensi, and it is connected with Lan-chou Fu, the capital of VOL. I. н

Kansu, by a road up the valley of the Wei, which I followed, and also by a direct mule-path or trail. Down the former medicines, tobacco, and other produce are transported by cart from Lan-chou to Ch'in Chou, whence they are distributed by pack-mules. I walked freely about the town without being the object of special attention, and visited the China Inland Mission Station, where I had hoped to meet Mr. Harding, who has an intimate knowledge of the department and of the adjoining districts; but he was unfortunately absent, visiting out-stations, and, although expected back daily, his exact whereabouts were unknown to his family. I waited till I p.m. on the 27th June in the hope that he would return; but at that hour my caravan filed out of the west gate of Ch'in Chou, and soon struck the left bank of the stream we had crossed before entering the city the previous day. The main branch of the stream lies further south, and the waters of the smaller branch were being drawn off to flood plots of land, some already planted out, others in course of preparation for the padi shoots. Soon, however, we crossed to the right bank and gained higher ground sloping down from hills which bounded the valley on the south side. We followed this bank for fifteen miles over a good broad road, passed fields of maize, millet (Sorghum vulgare), melons of various kinds, hemp, flax, beans, tobacco, cotton, peas, and one of the smaller millets (Setaria italica). The grain crops were nearly all harvested. In about a dozen fields of peas I noticed scattered poppy blooms-the produce of stray seeds or the relics of demolished poppy-fields. At any rate, no attempt was being made to extract opium from the capsules from which the petals had fallen, and I did not consider that these poppies were being cultivated for the production

of opium. There were several persimmon and pear orchards in the valley, the willow abounded, there were a few scattered poplars, and here and there cypresses were dotted about extensive graveyards-relics, no doubt, of the Mohammedan rebellion. Further west whole families were in the fields reaping wheat and barley, the women on their knees assisting in the cutting, for in this part of China women have feet so small and so tightly bound that they are unable to stand at work. I had previously seen them on their knees hoeing in the maize-fields. At the end of fifteen miles we recrossed the valley, and soon entered a narrow gully, stony and almost uncultivated; but higher up there were the usual crops. Having accomplished twenty miles during the day, we put up for the night at the miserable hamlet of Liu-shih-li-p'u, with little or no accommodation of any kind, and with no one inn large enough for my caravan. The inn in which I stayed did not boast a name, showing its insignificance and that of the hamlet.

Off from Liu-shih-li-p'u at five o'clock we found the valley which we had ascended the previous day almost entirely blocked by a range of hills jutting into it from the south. Rounding the range by an opening to the northwest, whence issues the stream, we entered a valley uncultivated except for a few flooded padi plots and bounded by precipitous loess hills. Gradually it opened out and gave room for the usual crops with the addition of some fields of the oil-yielding plant, *Perilla ocymoides*, and flax now showing its pretty five-petalled blue flower. In this valley, which is well timbered with willow, poplar, elm and walnut, but broken and stony in places where mountain torrents from gaps in the hills to the south-west carry down and

deposit broadcast stone and rubble, we came upon ten carts laden with boxes of water-pipe tobacco from Lan-chou. Each cart had a team of three animals. Our first stoppingplace was the considerable village of Kuan-tzu-chen, where the serious work of the day-the ascent and descent of the Hsieh-chia-shan-began. The ascent was fairly steep, but the descent can only be described as not merely precipitous but dangerous. Once up, there is flat going here and there, and the valleys on both sides of the road are terraced and well cultivated ; but this ends all too soon and down goes the road, north-west and north, with innumerable twists, windings and zigzags. Some have seen and many may have heard of the "Devil's Elbow" which lies between Braemar in Aberdeenshire and Blairgowrie in Perthshire, while many motorists have experienced considerable difficulty in negotiating it; but if a score of "Devil's Elbows" were thrown into an almost perpendicular descent, some idea might be obtained of the western face of the Hsieh-chia-shan. And yet travellers, Chinese and foreigner, talk glibly of the great cart roads of the province of Kansu. Carts certainly manipulate this road; but they do it in company, and each cart is dragged up separately by its own team, assisted by the teams of all the others. Thus it is that traffic is carried on by this route. The road ultimately descends into a gorge cooped up by precipitous loess hills, leaving room for the stony bed of a mountain rill. Later the willow puts in an appearance and ultimately a few mud huts find a footing, followed by patches of land which the rill is diverted to irrigate. Gradually the hill-sides are terraced, and it was interesting to observe a patch of poppy in full white bloom nodding to us from the heights, while beyond was another plot on a

level with the roadway. The gorge ends at a temple called the Lung-wang-miao ("Temple of the Dragon Prince"), two-thirds of a mile from the district city of Fu-ch'iang Hsien, and the road then drops down to a plain, and, skirting a couple of considerable graveyards, runs to the city which we entered by the west gate, for the south gate is small and low, and the traffic of the city passes through the former. Our record for the day was twenty miles, and we arrived at noon, leaving me ample time to visit the station of the China Inland Mission where I received every hospitality and kindness, and was able to replenish my exhausted stores. I noticed during the day three fields of poppy within the department of Ch'in Chou close to the border of the district of Fu-ch'iang Hsien and 84 within that district itself-a total of 87; but according to Mr. Mann of the China Inland Mission much more poppy was sown in 1910 than in 1909, and he told me that, until a month or two previous to my visit, the Magistrate of Fu-ch'iang Hsien held merely an acting appointment, and as his term of office was about to expire he had done nothing to stop cultivation. When the new incumbent arrived, he found the poppy some two feet in height, and it was only when the Prefect of Kung-ch'ang Fu, within whose jurisdiction Fu-ch'iang lies, was sent on a tour of inspection, that any steps were taken to deal with it. As soon as it leaked out that the Prefect was coming, farmers ploughed up the poppy fields lying along the high road ; but, contrary to expectation, he came by a small road, and there and elsewhere in the district he visited, caused crops to be destroyed. I had seen evidence of this before descending the Hsieh-chiashan; but at a distance from the road white poppy-fields were clearly discernible. Mr. Mann expressed the opinion

that, had the magistrate shown firmness, the farmers would have given way, and he instanced the case of the T'ung-wei district to the north of Fu-ch'iang, whose magistrate, without leaving his official residence, was able to clear his jurisdiction of the poppy. His method was simple. He summoned the headmen of the places where the poppy had been sown, cangued them, and sent word to the places concerned, that unless poppy plants were uprooted by a certain date, it would be his painful duty to beat their headmen. The threat was sufficient and the poppy was destroyed. The district of Ch'in-an to the north-east of Fu-ch'iang was, according to Mr. Mann, reported to be clear of the poppy, and the districts of Ning-yüan and Lung-hsi to the west and north were supposed to be clear ; but I take nothing for granted, and, as my way lay through these western districts, I was able to judge for myself as to the accuracy of these reports.

The Fu-ch'iang district had always been a great centre for the production and distribution of opium, and in the city itself there was at the time of my visit an office called the T'u-yao Chü or Opium Bureau where all opium (native, of course) was officially weighed, and where all purchases and sales of the drug were effected. It levied a tax of about 300 taels (about £37) on every mule-load of opium, amounting to about 240 catties or 320 lbs. The officer in charge of the Bureau held his appointment from the provincial capital, and was responsible to the High Authorities for the sums collected. Little silver had come to the city to purchase opium in 1910 as compared with other years : silver was scarce and had appreciated in value from 100 to 200 cash per tael. There were no public opium smoking divans in the city ; but every shop might be considered a divan, and

opium prepared for smoking might be purchased by any one who had the money to buy.

Fu-ch'iang Hsien is famed for the manufacture of woollen mittens, gloves and leg binders, which are exported to neighbouring provinces in large quantities. The yarn is spun on the spot, and the weaving done with wooden knitting needles. It was lately proposed to put a tax on this industry ; but the women rose in their might, stormed the magistrate's official residence, and the proposal was dropped. So busy are the women, said Mr. Mann, that they give this as their reason for non-attendance at service on Sundays. There is another industry connected more with the district than with the city itself, and that is the manufacture of straw hats from wheat straw. Hats were hung outside every doorway by the roadside for sale, and they, as well as straw sandals, seemed to occupy the attention of almost every household.

The room I occupied in the inn at Fu-ch'iang was a regular nest of vermin : I was exactly four hours in bed and suffered torment during that brief period. It is a mystery to me how it is that Chinese bugs, in spite of every precaution, find no difficulty in attacking their victims, and that with the least possible delay. My groom had warned me what to expect, for constant experience has taught the Chinese to predict from the walls of a room whether these pests are numerous or otherwise. We got away at six o'clock, and had not left the west gate of the city many minutes when we came upon patches of poppy in full bloom, and the record for the day between the cities of Fu-ch'iang Hsien and Ning-yüan Hsien, a distance of some 33 miles, was 283 fields, patches, and plots of poppy, a

record which, owing to the action of the Prefect of Kungch'ang, was not anticipated. I certainly observed mutilated crops, but much remained, and the plants were in full bloom. Of these 283 fields, 224 were within the Fu-ch'iang district, and 59 within the district of Ning-yüan, which was supposed by Mr. Mann to be clear of poppy. In reading these figures it should always be borne in mind that they represent what any observant traveller could see from the road, and do not cover the total amount of cultivation within these districts, which must have been enormous. They are merely an indication of what was no doubt taking place at a distance from the road, and, therefore, far more likely to escape detection.

Our road lay west along the south side of the valley of the Wei till little but the river bed, hemmed in as it is by precipitous conglomerate cliffs, remained. Under these cliffs we forded a branch of the river, and beyond, where the valley opens out, we found men wading up to the hips preparing plots of land for the reception of padi shoots. Of the crops, wheat and barley were green and backward, but hemp and potatoes were in flower. Other crops were maize, millet, melons, and cucumbers, the last selling at two to three cash a piece according to size, that is from 140 to 200 a shilling. The valley was densely wooded with willow, elm, walnut, poplar, and beautiful cone-shaped cypresses. The Sophora japonica was common in the villages. On leaving Lo-men, or Lo-shan-chen as it is also called, a village 23 miles west of Fu-ch'iang Hsien, we followed the road up rising ground to the city of Ning-yüan Hsien, where we put up for the night in an inn situated in its western suburb. Here I met with an imposing reception. A mounted messenger from the magistrate met me with

the latter's card some distance from the city and, in his master's name, bade me welcome, while, a little further on the road, about a dozen armed soldiers accompanied by two trumpeters awaited me and, heading the caravan, escorted me through and outside the city to my inn. The trumpets rang out from time to time, but the display was marred by heavy rain, for five miles from the city we were overtaken by a thunderstorm which continued well into the night. As we approached the city we were lucky enough to be able to ford two watercourses in which torrents from the hills to the south were momentarily growing, but my escorting officer, who had taken to a cart, was some distance behind, and he had to wait for hours till they had subsided. In spite of the rain an enormous crowd awaited our arrival at the east gate of the city. On the opposite bank of the river from the city were lines of beautiful pollard willows backed by rows of fine poplars. Reports had led me to believe that Kansu was a treeless province, but, so far as this part is concerned, the reverse is the case. Travellers are too apt to generalize from limited observation and this leads to unfortunate results. I told my cook to leave my bread-making oven at Hsi-an Fu as, there being no trees in Kansu, it would be impossible to procure charcoal; but no sooner had we crossed the Shensi border into Kansu than charcoal was abundant. The fact is, we know so little about China that we are apt to make serious blunders. Another instance will suffice. We have been saying for several years that China's new copper coinage has brought ruin to the whole country, whereas it has not even penetrated into the provinces of Shansi, Shensi, and Kansu, where the old copper cash still reigns.

An incident, trifling in itself but showing the difficulties

one has occasionally to contend with in an immense country like China, occurred during the day. When we left Fu-ch'iang Hsien, one of the local escort, evidently a man off the streets, began to make up to the muleteer in charge of the litter. He hovered round the front mule and the muleteer addressed him : "You are one of the escort, aren't you ?" The man replied in some unintelligible jargon, and the muleteer tried him again : "What is the name of the place at which we stop to-night?" The man appeared not to understand the question and I replied for him, "Ning-yüan Hsien." The muleteer thereupon said to himself : "This is very funny. I understand all my foreign employer says; but I do not understand what this man, a countryman of my own, says to me, nor does he understand me." He was passed on to the second muleteer after a long silence; but the latter was equally unfortunate. Nothing daunted, however, the man took refuge in song and kept on singing nearly the whole of the day. When will China possess a language which will be intelligible to the whole Chinese race?

The escort with the trumpeters accompanied me next morning for a mile outside Ning-yüan Hsien. The weather had changed for the better : there was a perfect blue sky, and it was actually chilly. The road clings to the south side of the Wei River valley, which we ascended till blocked by a range of hills from the south, leaving only a narrow footpath impossible for pack animals. A precipitous ascent and descent of this range brought us to the village of Kuangling-p'o, and another two miles to the village of Yüan-yangp'u, where we forded in a north-west direction three forks of a stream called the Nan Ho coming from the south and on its way to join the Wei River. A few hundred yards

beyond, we forded the Wei itself, its two branches containing less water than its tributary. The road then followed the left bank of the river which, owing to stony ground, was only moderately cultivated. Soon cultivation entirely ceased and the road ran up a hill-side covered with scrub, whence the chirping of cicadae announced that the day was getting hot. On the other side of the hill we were again in the river valley fairly cultivated; but we had again to ford the river to the right bank and to follow the valley till it opened out into a plain bounded by green, terraced and cultivated hills some miles apart. The road led over this plain north-west and north to the prefectural city of Kung-ch'ang Fu, lying between the end of a range of hills dropping into the plain from the south-east and hills to the north-east. The distance from Ning-yüan Hsien to Kung-ch'ang Fu, with its district city of Lung-hsi Hsien, is reckoned as 30 miles; but the mile on the flat was exceedingly long and tiresome, and we did not reach the end of the day's stage till seven o'clock. Ten miles from Kung-ch'ang Fu the muleteers made up their minds that they had had enough for the day and, although I rested an hour for lunch, they declared that they had not had their meal. I told them, however, that they had had ample time to eat and that, meal or no meal, we must go on. This we did amid much grumbling ; but authority had to be maintained. The grumbling continued all the way to Kung-ch'ang Fu, and in the evening I had the men up and told them that if any one was entitled to speak of hardships it was myself, a foreigner in their country, who had not seen a wooden floor since leaving T'ai-yüan Fu, who was living nightly in filthy and vermin-infested rooms, and who, owing to late arrival at the end of each day's stage, had to put up with at the most four or five

hours' sleep, while they were free to turn in till four o'clock every morning as soon as they had disposed of their evening meal and fed their animals. They replied that the mules were exhausted at the end of each day, and this I believed to be the case; but it was utterly impossible to travel the whole day and every day from daylight to dark, and they promised to accelerate their speed in future.

Villages were more numerous during the day, and some of them were of considerable size, but they all looked poor and squalid. In Europe their inhabitants would be described as living in abject poverty; but poverty is a comparative condition, and I am not sure that these people are not happy enough with their dirt, their vermin and their rags. As a matter of fact, the boys had the best of it, for they wore no clothes. The ludicrous part of it was this that, in spite of these sordid, mouldering villages, insanitary to the last degree from a European point of view, children swarmed on the streets. Their ragged parents sat at their doors, the men unshaved for many days, and the women with their hair done up in a knot at the top, or with a horse-hair cushion shaped like the sole of a shoe affixed at the back and projecting over the top of the head. Frequently the whole of the hair was enclosed in a conical cap, black as a rule, but occasionally red. I have often been teased by my friends and by newspaper critics regarding my predilection for referring in my reports of travel to the attractions of the fair sex in different parts of China; but I am sure I will be exonerated so far as these north-western provinces are concerned, for I have never seen less attractive or, figuratively speaking, heavier ladies than the women of Shansi, Shensi, and Kansu. To see them searching each other's heads for vermin in the open streets, unabashed by

the presence of passing strangers was, to say the least of it, disgusting.

The crops on the ground were much the same as before: green wheat and barley in about equal proportions : maize millet (Sorghum vulgare and Setaria italica), peas, beans (Vicia Faba), and flax and potatoes both in flower. The country was exceedingly well wooded with willow, elm, poplar, peach, cherry, and walnut. We met mule loads of paper and salt in bags from the west. Nine patches of poppy were observed during the day, four within the Ning-yüan and five within the Lung-hsi district; but with one exception, the poppies were well mixed with barley, peas or potatoes. They were not, however, the result of stray seeds, and barley was the favourite crop for purposes of concealment.

We spent the night of the 30th June in an inn in the west suburb of the city of Kung-ch'ang Fu, having passed through the town from east to west. Next morning we proceeded north for a short distance, the road cutting its way through a bare loess ridge which divides the plain to the west into two parts. Down the eastern part flows a brook to join the Wei; but our road lay along the right bank of the main river which spread over a wide stony bed with grassy flats on which herds of sheep, cattle, ponies, donkeys, and goats were grazing. On the low loess cliffs along the left bank there was cultivation and timber; but along the right bank there was neither till a valley opened out and the river was confined to its narrow bed. Then reappeared considerable fields with the usual crops which, however, were backward compared with those we had recently seen. Not a poppy stem nor a poppy flower was observed during the day. With the exception of the road,

which was lined with willows and sometimes elms and poplars, the valley was not well-timbered until the city of Wei-yüan Hsien, from which the Wei River derives its name, was neared, when there seemed to be a superabundance of these three kinds of trees. Double, treble rows lined the roadway, and they were so dense in the valley itself as almost to hide the city walls from view. On the right bank of the river, which flows under the city wall, preparations were being made for an annual fair to be held on the morrow. Booths and canvas tents were in course of construction, and merchants from the city were bringing out their wares to supply the country-side. The city of Wei-yüan lies at the junction of two streams which go to form the Wei River, and we had to cross one of them to reach the town, where the Magistrate kindly provided for our accommodation in a Government office and saved us from the attentions of a somewhat unruly crowd.

From Kung-ch'ang Fu to Wei-yüan Hsien, a distance of 30 miles, the road was flat and good going for a Chinese road, and the mules swung along at an excellent pace; in fact too fast for the muleteers, who complained of the length of miles on the flat. These men had struggled up and down mountain sides since we started from T'ai-yüan in Shansi without complaint, and my opinion is that, as the mules require so little vigilance on good roads, their minds and attention are less concentrated on their work, with the result that they become tired and weary. Most of them rode all day between Kung-ch'ang Fu and Wei-yüan Hsien on top of the baggage and, what was more marvellous, they were all able to sleep there. The mule is a very wise animal : like his master and, indeed, the Chinese race generally, he is always hungry and can eat at any time. In

Northern Shansi, where villages and even houses were few and far between, the sight of a building in the distance was the signal for that shout, half neigh, half bray, which he has inherited from his ancestors. The others at once took it up, looking upon it as the signal for feeding-time. In this part of Kansu where villages are more numerous they were greatly disappointed to have to pass on without a meal. The mule is intelligent enough to know when the day's work is nearly over. Then he hurries on to be rid of his burden and be fed. Like all other animals, including man, he is disinclined to work hard after a heavy meal, and then he creeps along slowly for an hour or so before regaining his usual steady stride.

The distance from Wei-yüan Hsien to Ti-tao Chou to the north-west is reckoned as 40 miles and, leaving the former by the north gate and passing through the suburbs, we commenced to zigzag up a mountain side, and had an excellent illustration of the methods by which trade is carried on in this part of the province. At the foot of the mountain we came on an unattended and unharnessed cart laden with all kinds of carter's gear, including wheels and the like, and just as we were nearing the highest point of the road, down galloped twelve mules to drag up the last of four carts, three of which had already reached the summit. In other words, the teams of all the four carts were required to drag each individual cart up the mountain side. From the highest point there was nothing to be seen but mountain chains running in all directions, and the road followed a ridge with deep valleys on either side, and thereafter circled a mountain side devoid of cultivation or of habitation. Yet cattle, sheep, goats and donkeys were grazing on the grassy slopes. Gradually the road began to descend north and

north-west, passing at a distance solitary houses, while small hamlets began to appear along the road itself. Each house and village had its clearing with oats, potatoes, buckwheat in flower, peas and broad beans. The last had an unusually large white flower with a black spot on the wing. On the mountain itself the willow had disappeared, leaving the poplar and elm, especially the former, in charge. As we descended we passed several small hamlets surrounded by green plots of huskless oats and nestling amid poplars. At last we dropped into the hamlet of San-shih-li-p'u and back to the willow. Thence we entered a narrow valley bounded by precipitous loess hills and containing a stream which we followed in its tortuous course north-west, fording and re-fording it many times during the day. At times this valley was merely the stony, broad bed of the stream, uncultivated but with good grazing ground; at others it widened out and there was a considerable amount of cultivation, flax and hemp joining the other crops. There was also some tobacco, and towards the end of the day's stage we saw whole families engaged in planting out the seedlings. I searched for the poppy vainly in this valley where pheasants were crowing loudly. On approaching the department city of Ti-tao Chou, a poor, deserted looking place, the road took to the north-east side of the valley, whose bed was repeatedly broken up, evidently by the action of the stream when in flood. This stream is a tributary of the Tao River which, rising in the south-west of the province, flows at first west and then north to join the Yellow River to the west of Lan-chou. Trees were being felled on the uncultivated slopes of the hills which, at the north-eastern side of the outlet of the valley, rose to a height of about 1000 feet, while an occasional bare loess

ridge dropped into the valley from the south-west. In crossing the mouth of the valley to reach Ti-tao Chou we passed through patches of melons and a large graveyard extending to the city walls. Trade was brisk during the day: we met many caravans of tobacco, salt and wooden saddles padded and covered with red cloth.

We were nearly fourteen hours on the road between Wei-yüan Hsien and Ti-tao Chou, and the mules repeatedly warned us that in their opinion they were being overworked; but I was anxious to reach Lan-chou Fu with as little delay as possible, and we left Ti-tao Chou on the morning of the 3rd July, in the hope of accomplishing the remaining 70 miles in a couple of days. We left Ti-tao Chou by the north gate and soon entered a wide valley bounded by hills unwooded and uncultivated. Down the valley flows the Tao River which we accompanied for a time; but it shows a preference for the west, whereas the road sticks to the east side. At the village of Hsien-tien, however, twenty miles from Ti-tao Chou, the river sweeps east for a time and soon after turns west, while the road at a distance of six miles from Hsien-tien runs direct north through bare loess hills and after a gradual descent on the other side makes a steep plunge down to the sub-department city of Sha-ni. The Sub-Prefect himself was good enough to meet me with some soldiers at a distance from the city, and, after an exchange of greetings, went on ahead to receive me at the elementary school-house which he had thoughtfully prepared for me. He had spent four years in Peking as a writer in one of the Boards and was anxious to obtain the most recent news of the Capital. Were all officials equally thoughtful, the lot of the traveller in China would be much happier; for whatever charm travel brings VOL. L. I

during the day is greatly marred by the accommodation and miseries of the night.

In the valley of the Tao River barley and wheat were the main crops, but other prominent crops were tobacco (Nicotiana rustica), small millet (Setaria italica) and rape in full vellow flower. Hemp, flax, maize, oats, peas and beans appeared in scattered patches. There were two kinds of beans-the broad beans and the small flat bean called Pientou or Ervum Lens. The stems of the latter do not exceed a foot in length, and each pod contains one and sometimes two beans. The flour of this bean is more highly appreciated than any other bean-flour. I observed fourteen patches of poppy during the day, seven within the department of Ti-tao Chou and seven within the sub-department of Sha-ni. One of these could be classed as a field, for it was thickly planted in a field of barley and had not yet flowered. Several of these patches bore traces of severe handling, and probably not more than one-third remained in flower or was available for the production of opium. On the road there was tobacco from Lan-chou and there was local traffic in poles for housebuilding.

In the course of conversation with the Sub-Prefect of Sha-ni during the evening, he assured me that the remaining stage of 40 miles to Lan-chou was a good cart road, and I made up my mind to accomplish it in one day. This resolution I much regretted later as we did not reach the provincial capital till long after dark, and I was thus deprived of a view of the approach to the city. From Sha-ni the road runs into the stony bed of a trickling stream with cultivated patches where land was available, and a few elms and willows. But the road soon leaves the valley and wanders in all directions through bare hills of a whiter and

more sandy consistency than the ordinary loess formation. On emerging from these hills we met a mournful procession. In front a woman, behind came a coffin covered with red cloth slung between two mules, and in the rear followed a pony carrying two small children and a servant. The remains of a dead husband were being carried to their last resting-place. Beyond the bare hills a steep descent led into a green valley with a stream flowing south. At the north end of the valley is the village of Chung-p'u which, although only ten miles from Sha-ni, is reckoned the end of one of the official stages to Lan-chou. Here we caught up three yak cows and their calves bound for the provincial capital. Their drivers told me that they had come from Tao-chou to the south-west, and I may mention here that the yak and especially the Pien-niu, a cross between the ox and the yak, gives very rich and abundant milk. North of Chung-p'u the road enters a stony pass between ridge after ridge of bare loess, dropping down to the roadway which has evidently been hewn out by mountain torrents in the course of long ages, while boulders and stones scattered about have been riven from the conglomerate beds on which the loess rests. When progress becomes no longer possible through these ridges, the road takes to a mountain side and rises till at the end of twenty miles from Sha-ni it enters, after a short descent, the village of Ma-ch'üan-kou in the neighbourhood of which an Indian surveyor attached to the Clark Expedition was murdered in 1909. The details of the murder were never satisfactorily ascertained; but the story told to me in the village was that the country had been suffering severely from drought, that the surveyer went from Ma-ch'üan-kou on two successive days to a place called Ma-han-shan some six miles off

to carry on his survey, that it rained on both days preventing his working, and that on the third day, which was dry, he again proceeded to Ma-han-shan. What the peasantry wanted was rain, and the stoppage of the rain on the third day was attributed to the surveyor and his work. I was not told who began the attack ; but the result was the death of the surveyor. His death was avenged by an armed party containing several members of the expedition and both sides cried quits.

We overtook several carts at Ma-ch'üan-kou and, as each cart had a team of seven animals, it was evident that the climbing was not yet at an end. So it proved ; but it was of brief duration and a steep descent landed us in a narrow valley which gradually opened out and brought us to the market-town of A-kan-chen almost entirely given up to the manufacture and sale of earthenware jars, pots and dishes of various kinds. Here the valley we had descended merged in another valley containing a stream which at once changed the conditions of cultivation. On the hill-tops and slopes were patches of barley, flax, hemp, oats and potatoes; but with the water appeared a patch of poppy followed later by fine, healthy poppy-fields in full white bloom, a lovely sight amid the fields of green wheat, barley and small millet (Setaria italica). I counted as many as 180 white fields, as often as not in groups of six or seven; but I am certain that I missed not a few, for the road frequently enters between high banks on the west side hiding for a time the valley from view. I saw enough, however, to convince me that little or nothing had been done to stop cultivation in this the chief district (Kao-lan Hsien) of the province within which lies Lan-chou Fu, the provincial capital and the seat of the Viceroy or Governor-General of Shensi and Kansu.

It was dark when we completed the descent of the valley northward to Lan-chou which we entered through its west gate, 56 days after leaving T'ai-yüan Fu, and the late hour of our arrival compelled us to put up for the night in a wretched inn just inside the gate pending the search for more comfortable quarters on the morrow.

CHAPTER V

ALONG THE NORTHERN ROAD FROM LAN-CHOU FU BACK TO SHENSI

THE city of Lan-chou or, to give it its full prefectural designation, Lan-chou Fu, is the capital of the province of Kansu. It lies on the right bank of the Yellow River, at an altitude of nearly 5000 feet above the level of the sea. It is comparatively small and, but for its eastern, western and southern suburbs which, like the city itself, are surrounded by a wall, might be taken for a very ordinary district city. It is situated within the district of Kao-lan Hsien and, besides being the provincial capital, forms the district city of that name. On the north side the city extends to the river bank, and there is no suburb. Various estimates of its population have been given. M. Richard, in his "Comprehensive Geography of the Chinese Empire," 1908 (p. 37), gives 500,000; and a Belgian professor attached to the mining school at Lan-chou stated to me in the course of conversation that he believed it to be about 350,000. But my own impression, derived from riding and walking through the city and suburbs, was that these estimates were excessive, and I agreed with the Chinese authorities that it lay between 100,000 and 200,000, and is probably nearer the latter than the former. Small, however, as the city is, it is an important centre of trade

FROM LAN-CHOU FU BACK TO SHENSI 119

between Tibet, the New Dominion (Hsin Chiang), and China proper. It lies in the valley of the Yellow River; but to the north the valley is somewhat obscured by a ridge of bare loess which, running east and west, and surmounted by a pagoda and one or two temples, rises from the north or left bank of the river. The range of hills bounding the valley lies further north. On the south side, and about a mile from the wall of the south suburb, is a range of high hills, some 1800 feet at the highest point, running east and west, and descending into the valley about three miles from the city on the west side, and sending down spurs to the right bank of the river about eight miles from the city on the east side. It was with the stream which enters the river to the west of the city that we descended on the evening of the 4th July, a stream which is very dangerous during the rains, and has been known to sweep into the Yellow River carts and mules attempting to cross it when in flood. The Great Wall-or, to be more exact, a subsidiary Great Wall—runs east and west a few miles to the north of the river.

During my brief stay of four days in Lan-chou I found the climate delightful: the temperature never rose above 80° Fahr. in the shade, and I was assured that even at 90° or over the weather is dry and bracing, not moist and oppressive. In winter the mercury may fall a few degrees below zero, but then it is a dry, not a biting cold, tempered by bright sunshine. In winter, of course, the Yellow River is frozen; but in the open season it is the great outlet for wool, skins, fur, and other Tibetan and Chinese products bound for the east. Wooden rafts with pig-skin floats carry this produce down the rapid and dangerous section of the river from Lan-chou to Ning-hsia in the

north-east of the province, where the goods are transferred to junks, and transported as far as Pao-t'ou-chen in Mongolia whence, if destined for Northern China, they are carried by camel, donkey, mule, and pony to Kuei-huach'eng (Kuei-hua T'ing), and thereafter to the nearest railhead, for conveyance to Kalgan and Tientsin for export. As I have stated above, the descent of the river from Lanchou to Ning-hsia is dangerous, and one Englishman, Mr. Birch, lost his life in attempting the passage during the Boxer troubles of 1900.

Up to 1909 there was a bridge of boats across the river at Lan-chou during the open season; but on the 9th July of that year a foreign-built bridge, which had been three years in construction, was formally opened. A few days before the opening the bridge of boats was swept away by a flood. The new bridge, called the Ti Yi Ch'iao, or "First Bridge," is an iron-girder bridge of five spans, 700 feet long and 30 feet broad, with a narrow, railed-off pavement on each side. The piers, which are of caisson construction, stand on rock varying in depth from 20 to 40 odd feet, and the floor of the bridge is sufficiently high at highest water to permit the passage of rafts. The contract for the bridge was given to a German firm, and the materials and engineer were American. After the bridge was opened, an attempt was made to macadamize it; but this proved unsuccessful, and boarding of Chinese wood, broken and loose in several places, covered the floor of the bridge at the time of my visit. The superstructure did not impress me, but, such as it is, the bridge is a great boon to Lan-chou. The cost of the bridge was about 360,000 taels (f,45,000), and was almost equally divided between materials plus labour and cost of carriage from the coast.

The presence in Kansu for many years of Mr. Splingaerd, a Belgian subject, who did good service for the Pro-vincial Government, has left its mark in the shape of various industries now in course of development. He himself unfortunately died when en route to Lan-chou with Belgian workmen to re-establish a woollen factory outside the city. At the time of my visit the factory was running under the management of a Belgian, with six Belgian workmen and 160 Chinese factory hands. Good materials, including camel-wool blankets, were being turned out; but while Tibetans were keen buyers, Chinese had not yet proved eager to use the goods. Indeed, the factory was being run at a loss, in the hope, however, that some day the products of the mill would be used for army clothing. But there is another reason for the failure. I was informed on the best authority that Chinese officials visit the factory and calmly appropriate, without payment, whatever takes their fancy. There are also small soap, candle, and glass factories; but a missionary informed me that, while the soap finds a market, "Primrose Soap" could be laid down cheaper in Lan-chou than the local manufacture. Candles have not proved a success, and the plain window-glass made is too thin and fragile for ordinary use. These industries not proving immediately remunerative, the provincial Government has turned its attention to copper and gold at a place called Yao-kai, 70 miles west of Lan-chou, and a contract was recently made with Mr. Splingaerd, son of the above-named Belgian, for milling plant and its delivery at Lan-chou for conveyance to Yao-kai, where a gold mill has already been erected. A smelting engineer, a British subject named Hanson, was resident at the mines, and part of the mining plant had already reached Lan-chou, and the

balance was on its way from the rail-head at Honan Fu in the province of Honan. The copper ore is said to be fairly rich; but the provincial authorities had not made up their minds as to the disposal of the metal. They hinted to me that the copper might be sent to Peking or elsewhere for coinage purposes, or used by a mint which could be established at Lan-chou. As the various mints at work throughout China have proved far from a blessing to the people, it is sincerely to be hoped that no extension will be made in this direction. There is a mining school at Lan-chou, where Chinese students were being trained by Belgian professors, as well as a Chinese post-office with a British postmaster. The latter was about to proceed west for the purposes of overhauling branch offices between Lan-chou and the New Dominion (Hsin Chiang).

As Mr. O. R. Coales of His Majesty's Consular Service had undertaken to report on the cultivation and production of opium in the west of Kansu through which he was travelling on his way to England on furlough, I did not proceed west of Lan-chou; but I was able to collect some information regarding districts which had to remain unvisited by Mr. Coales or myself. Mr. George Andrew of the China Inland Mission, who had been resident in the province for seven or eight years, informed me that he had quite recently returned from a journey to Ning-hsia Fu and Liang-chou Fu, two great opium centres in the north-east and north of the province, and that the cultivation of the poppy had been much reduced in the former and about 75 per cent. within the latter. He stated that a similar diminution had taken place within the district of P'ing-fan, another great opium centre, to the north-west of Lan-chou; but he considered the reported destruction of poppy-fields

within the prefecture of Hsi-ning Fu to the west of Lanchou of little moment, as it had never been an important opium centre. I asked Mr. Andrew what he considered had been the amount of reduction in that part of Northern Kansu with which he was familiar since the end of 1907. He replied that it was indubitably large, but he would not pledge himself to actual figures. He was wise, for I do not think that the Chinese authorities, the Chinese Government, or, indeed, any one can or will be able to say with any degree of precision what the actual reduction has been here or elsewhere.

The day following my arrival at Lan-chou I secured a fairly comfortable Chinese inn, and at once sent my card to the Viceroy, proposing to visit him next day at any hour he would be pleased to name. His Excellency sent back a message that he was indisposed and was unable to receive me; but the following morning he sent a messenger to say that the toothache, earache, and sleeplessness from which he was suffering were somewhat better, and that he would be pleased to receive me on the afternoon of the 7th July. His Excellency welcomed me most kindly, and expressed his regret at not having been able to receive me earlier. Our conversation turned mostly on the subject of opium, and he stated that the cultivation of the poppy in Kansu had been diminished by 40 per cent. I gathered, however, that the actual condition of things was little known to His Excellency, and I was requested to say what I had seen on the way to Lan-chou. I replied that I had observed very considerable cultivation along the southern road I had traversed, and that within the last ten miles of the provincial capital I had counted 180 fields of poppy in full flower and that probably many more had escaped my eye.

His Excellency thereupon whispered to the Taotai, who was present at the interview and appeared to be his Fidus Achates, that deputies must be sent to report on the condition of things. The Taotai, who claimed to have met me in Newchwang during the troublous times in Manchuria, then took up the conversation and asked why, instead of my coming all the way to Kansu to investigate opium cultivation, we were not content to accept the report of missionaries on the subject. I replied that, valuable as the reports of missionaries had been, personal investigation by an officer specially deputed for the purpose should prove much more valuable, and that I had learned more from what I had seen than I could possibly have gathered from other sources. I added that more personal investigation by the Chinese authorities and less readiness to accept the reports of deputies would be of considerable value to China in the task before her. I was assured that no poppy would be sown next spring (1911), and that Committees consisting of local authorities, deputies, headmen, and gentry would soon be formed in each district of the province to nip in the bud any attempts at sowing. In spite of stringent orders issued by the Viceroy in the spring of 1910 the poppy, as I have said, was still being cultivated in very large quantities. After the issue of these orders farmers collected at Lan-chou to ascertain whether the prohibitory proclamations were to be enforced, and, when no action was taken, they sowed the poppy at the usual time. What they resented was any attempt to destroy the crop after allowing the poppy to be sown and ripen almost to harvest. I may state here that the assurance that no sowing would take place in 1911 was valueless, and that poppy was cultivated throughout the province in that year. I thanked the Viceroy for the

courtesy and kindness extended to me by the local authorities along the road by which I had come, and His Excellency promised to instruct the officials along the main road to Hsi-an Fu to afford me special protection and to place the official rest-house at my disposal. I expressed my gratitude for this promise which was duly fulfilled. I also arranged that the official who had escorted me from T'ai-yüan Fu and the two cavalrymen from Hsi-an Fu should be employed to return with me to Shensi, but the Viceroy insisted on increasing my escort by two officials in spite of my protestations to the contrary. His Excellency begged me to stay another day so that he might be able to return my call. This I promised to do and he called the following afternoon. In the morning I rode outside the suburbs and came upon poppy and tobacco growing in alternate rows, and during the interview in the afternoon I took the opportunity of stating that that very morning I had seen the poppy in full flower just outside the walls of the suburbs. Both the Viceroy and the Taotai, who accompanied His Excellency, expressed the greatest surprise, at what they unblushingly called the audacity of the people.

The Lan-chou valley has a soil and water supply admirably suited for the production of opium and tobacco which have hitherto been and still are, in spite of the moderate curtailment of the former, the principal crops. It draws its grain and other foodstuffs from the west of the province. The price of opium in the city had risen from 40 (£5) to over 70 taels (nearly £9) per 100 Chinese ounces; but there had recently been a slight fall in value owing to the appearance of the new season's drug on the market. Lan-chou is also the centre of a great fruit country : beautiful large apricots were in season; grapes, said to be the best in China, would soon be in the market; luscious peaches were fast ripening, and melons of many varieties were already on sale in the streets. Supplies such as beef, mutton, poultry, eggs, flour, potatoes, and milk were abundant, and foreign residents require little more than tea and sugar. The latter for native use and for cooking purposes comes from the province of Szechuan. Lan-chou and the neighbourhood, as, indeed, the provinces of Kansu and Shensi generally, are subject to periodical droughts; but abundant rains had fallen in 1910 which was described as the best year that had been experienced within the last decade.

I left Lan-chou on the morning of the 9th July, to perform the first of the eighteen stages into which the high road back to Hsi-an Fu is divided. It is a short stage of twenty miles. Passing through the gate of the east suburb, we entered the Lan-chou valley, and had not proceeded more than a few hundred yards when I noticed five patches of poppy following each other in quick succession; but, as within the first six miles, as far as the village of Tung-kang-chen, the road, bordered by willows and elms, frequently runs between bare loess banks, some plots of poppy may have escaped my observation. Before reaching the village, we passed a large walled camp, at whose gates soldiers were bargaining with hawkers of fruit and vegetables. Carts with grain, and carriers with baskets of cucumbers and long purple brinjals (Solanum Melongena), were bound citywards. East of Tung-kang-chen, the hills to the south of the valley bend round to the north, and send their bare foothills down to the right bank of the Yellow River. The road goes direct east up and down several of these foothills, and on approaching the village of

Hsiao-shui-ts'un, six miles from Tung-kang-chen, drops to a level with, and close to the river bank. Here the poppy was growing wherever cultivation was possible, and I counted 127 fields and patches in a distance of three miles. It predominated over the other crops of tobacco, millet (Setaria italica), and barley. To the east of Hsiaoshui-ts'un, a stream flows northwards down a narrow valley to join the Yellow River. Up this valley goes the road, crossing and re-crossing the stream many times, till the valley opens out southwards and is cultivated from the banks of the stream to terraced hills beyond. Valley and terraces were full of white poppy, and a glen branching off to the south-west was also a mass of white blooms. Leaving this valley, the road runs east and south-east up a much narrower valley, and after passing through an avenue of willows skirts the north side of a wide valley in which the poppy was growing, not in patches, but in large fields, with extraordinary profusion. As all the land was practically given up to the poppy, there could have been no diminution of cultivation in this part of the district of Chin Hsien. Such extensive cultivation could not have escaped the attention of the authorities, and the question that naturally presented itself to me was, What official action had been taken? The question was answered at the market-town of Chin-chia-ai, the end of the day's stage, within the district of Chin Hsien, where I spent the night in the official rest-house, which was the scene of an attack in the end of May on the Prefect of Lan-chou who, failing the ability of the Magistrate to restrain the farmers, had been deputed to enforce the prohibition or diminution of poppy-cultivation. The farmers were summoned to meet the Prefect at the rest-house, and when they were brought

into his presence one of them knelt down in the usual way, as if to do homage, and suddenly seized the unfortunate official by the legs, when he was set upon by the crowd and badly handled. Native physicians are able to deal with ordinary bruises ; but, for injuries to his ribs, he had to call in the services of Dr. Lavcock, of the China Inland Mission, who was then stationed at Lan-chou. The result was the beheadal of one of the assailants a fortnight before my arrival, and the imprisonment of another for life. The Magistrate of Chin Hsien had been dismissed from office, and was awaiting the arrival of his successor. I counted in all 360 fields and patches, mostly fields, of poppy during the day and, although I have had considerable experience of poppy-cultivation in the south-western provinces of China, nowhere have I seen poppy-fields so closely packed together. This wholesale defiance of the authorities by the farmers does not bode well for the working of the proposed district committees referred to by the Viceroy.

From Chin-chia-ai the road runs for a considerable distance on the edge of a bank which falls into the valley from bare, treeless hills to the north, passing through numerous mud-built villages where every house had its heap of manure, consisting of fresh loess pulverized and mixed with the droppings of animals carefully collected along the road, ashes and other waste materials. The whole is reduced to a powder, and spread by spade over the land, forming an excellent top-dressing as well as a fertilizer. This, in fact, is the method of manuring the land in Shensi and Kansu, where new loess soil is always available. These conical manure-heaps might readily be taken for soil, pure and simple, and this may account for the statement of a foreign resident at Lan-chou, who assured me that the



[To face p. 128.

13. LANCHOU FU, CAPITAL OF KANSU, WITH BRIDGE ACROSS THE VELLOW RIVER.

Copyright.

·

farmers of Kansu took crop after crop off the ground without adding anything to the soil. Some people are exceedingly unobservant; but even the most unobservant could hardly fail to notice the malodorous stench which these harmless-looking heaps emit in rainy weather. Small feet are so much the fashion in these Kansu villages, that the women were walking about on their knees, which were protected by specially padded trouserings. Irrigation channels ramified in all directions on the higher ground, water being a first necessity for the cultivation of poppy and tobacco with which it was covered. Gradually the road descends into the valley going south-east and south, and crosses and re-crosses its stony bed which, in many places, had been cleared and planted out with padishoots. In the actual channel of the stream little water remained, both sides of the valley having drawn upon it higher up. On the loess bank and in the valley the poppy was everywhere, from plots and patches, thin in some places and alternating with rows of tobacco-plants, to large fields in the valley, and in two hours after leaving Chinchia-ai I counted 518. Poppy was far and away the principal crop. Of these 518 the district of Chin Hsien accounted for 362. Six miles from Chin-chia-ai the road leaves this valley and passes east through loess banks to the village of Hsia-kuan-ying, beyond which it enters another wide valley bounded by bare treeless hills and containing several knolls, tilled to their summits. Here, the ground is considerably broken, the road frequently running deep down under loess banks and rounding rifts and gullies. Under the hills to the north of the valley were many fields of white poppy, and there were not a few on the south side. Two ranges of hills with a valley between drop into the main valley VOL. I. к

from the west, and the road rounds the ends of both ranges and, crossing to the centre of the now contracted valley and skirting on the left side a deep cleft in the loess, goes south and south-east to the village of Kan-ts'ao-tien, the end of the second stage of twenty miles. The white poppy was noticeable in the valley to the west. South-east of Hsiakuan-ying we re-entered the Kao-lan district, and from that point to Kan-ts'ao-tien I observed 345 poppy-fields, making with the 362 within the Chin Hsien district a total of 707, the greatest number I had seen in one day since I started on my quest. There is no need to moralize : what I had seen within 40 miles of the provincial capital was an illuminating commentary on the alleged great reduction, and on the possibility of the total eradication of the poppy in 1911. And it should always be borne in mind that what I had seen was by the roadside or its immediate neighbourhood, and must have been merely a fraction, probably a small fraction, of the total cultivation in each district. During the day we met a small family party on the move : first came a man, carrying a couple of baskets slung at each end of a carrying-pole. In the front basket was a child, and the second was full of clothing. Behind trudged the mother and a girl, each struggling along with the aid of a stick. Soon afterwards we met an open cart on which was fixed a large cage with wooden bars containing a prisoner, on his way to Lan-chou. A number of official-hatted custodians were in charge. The prisoner was rather good-looking and respectably dressed. He had evidently not travelled far, for he had not that dishevelled appearance which betrays a long time on the road. Later in the day we were overtaken by a rainstorm, and as we hurried along we passed a family taking shelter under a

poplar by the roadside. A woman was kneeling on a piece of felt spread on the ground, and by her side, on his hands and knees, crouched her husband with a child on his back held in position by a second piece of felt. They looked the picture of misery : they were travellers, like ourselves, but in much worse plight. Although the day's stage could not be described as well wooded, there was abundance of poplar, willow and elm in many places thickly bordering the road. Harvesting was proceeding, and in some places completed, and tobacco was being planted out in the fields vacated by wheat and barley, especially where a water supply was available. There was some traffic on the road : half-adozen carts laden with medicinal brick tea and other produce passed west on their way to Lan-chou, and there were many smaller carts bound in the same direction with grain packed in long, narrow sacks. I was informed that the medicinal tea, which consists of tea-leaves mixed with powdered rhubarb, came from Tzu-yang, a district city on the left bank of the Han River in the south of the province of Shensi, where one firm has a monopoly of the manufacture. A commentary on "the great cart road from Shensi to Kansu" presented itself during the day : at one place we were blocked for a time by several carts which found great difficulty in surmounting a heavy piece of road. Extra tracers were tried with no effect, and at last a pick-axe was produced from one of the carts and an obstructing ridge hacked away.

The morning of the 11th July was misty, cloudy, and far from promising when we left Kan-ts'ao-tien to perform the short stage of sixteen miles to Ch'eng-kou-yi. Instead of proceeding south up the valley in which the former lies we crossed it south-east fording a stream flowing north,

and passing through fields of small millet (Setaria italica) amidst which I observed two fields of poppy-the only poppy seen during the day-to a narrow valley lying between low, green, treeless hills. In the bed of this valley there is a long rift, and the road, bordered by poplars, skirts its northern side through patches of green wheat and barley, oats shot a foot from the ground, peas and flax. The valley is soon blocked in its eastern course by a ridge whence we looked upon a sea of hills and valleys, spreading in all directions, treeless hills but green with crops and grass. East of the ridge lies a deep valley running southeast; but its bed and sides were so broken up by deep fissures, that the road has to turn north for some distance, and, after winding round hill-sides, and over hill-tops, at last strikes a ridge between two deep valleys along which it goes south-east and south till, reaching its highest point, it descends south, gradually at first, but later precipitously, into a gorge down which flows a mountain rill southwards. But it keeps the rill company for only a few hundred yards, after which it enters and corkscrews up the precipitous eastern side of the gorge, and at last finding an eastern outlet leads to the miserable village of Ch'eng-kou-yi, full of manure heaps, and its official rest-house within the district of An-ting Hsien. Between Kan-ts'ao-tien and the village of Ta-wan-lu, six miles from the former, we passed through what had once been a large mud village. It was a scene of destruction and desolation : parts of the house walls were still standing, but broad beans occupied the floors. These ruins have a history, the unpleasant history of a rebellion, and its ruthless suppression. While we were breakfasting and feeding our animals at Ta-wan-lu down came heavy rain, and during the precipitous descent to the

gorge, mules and ponies stumbled and fell on the slippery loess surface. Riding or resting in the mule litter was out of the question, and we trudged ankle-deep in mud between steep banks. As is frequently the case when the road lies deep in the loess, there was no room for two carts to pass, and at the foot of our descent a number of carts were waiting until the road was clear. Carts carry heavy bells swung underneath, and their loud tones give warning of their approach. My official from T'ai-yüan Fu was provided with a cart, and the jingling of its bell had arrested the traffic from the east. A mule caravan, on the other hand, is able to pass. The hills were mostly grassclad and occasional flocks of sheep were dotted on their slopes.

It rained very heavily overnight at Ch'eng-kou-yi and was still raining at five o'clock in the morning, when we were all astir but undecided whether to remain or proceed. I expressed my intention of proceeding; but, as we had only twenty miles to cover during the day, we could afford to wait a few hours. Fortunately the rain ceased at eight o'clock, and, although there was little prospect of a fair day, we started. As a matter of fact, it drizzled the whole of the day; but the muleteers took it very kindly, one of them who prided himself on his good voice sang merrily his lay, while the others, rarely heard except when swearing at the mules, condescended to follow his example. The road was heavy going, but not half so bad as anticipated : it was fairly level, there was little slipping, and we took only half an hour longer to cover the twenty miles. From Ch'eng-kou-yi the road runs east down a narrow valley bounded by low hills, altogether uncultivated on the north, but more sloping, terraced and cultivated on

the south side. The bottom of the valley was under crop except where the stream, which we touched for a few hundred yards the previous day, had washed chasms out of the loess during its winding eastward course. To avoid these chasms the road stuck to the hills bounding the valley on Before entering the village of Ts'an-k'ou, six the north. miles from Ch'eng-kou-yi, we forded the stream as it turned north to an opening in the hills, and at the other end of the village, we forded another and much larger stream, the An-ting River, flowing north-west to join the Ts'an-k'ou River to the east of the village, their combined waters to be known as the Tun Ho which forms part of the Tsu-li Ho, a tributary of the Yellow River. At Ts'an-k'ou the valley is much contracted, and the road goes south-east up the An-ting River valley, hugging the hills to the north-east to avoid chasms washed out in times of flood. Two or three gullies formed by streams from the north-east and east had to be rounded, and at one place we had some difficulty in fording a yellow streamlet, owing to the depth of the mud. The muleteer in charge of the litter overshot the ford, and, with that obstinacy which these men display, determined to risk the crossing rather than turn back. The mules were soon up to the knees in mud, and had to beat a retreat, the muleteer swearing roundly at the mules, as if they, and they alone, had been to blame. As we continued south-east and south, the valley widened, the hills, terraced and well cultivated, dropping away west and south-west, while cultivation was also observable on the hill slopes to the east. Before reaching the city of An-ting Hsien we again forded the river, and, close to the city, a western branch. An-ting Hsien has a suburb outside its north gate ; but we avoided this, entered the city by the east gate and put up at the official rest-house where I was welcomed by the district magistrate. After the customary greetings he opened the conversation by saying that he had heard that I had come to inquire into the cultivation of the poppy. I replied that such was the principal object of my journey. He thereupon remarked that the poppy had been entirely eradicated from his district in the spring. I was obliged to challenge this remark by stating that only a quarter of an hour earlier, I had passed two plots of poppy, one of them of considerable size, about a third of a mile from the north gate of the city. He said that the reports he had received were to the effect that all poppy-fields had been destroyed and he expressed his determination to deal with these two plots without delay. This case is an illustration of the readiness of the local authorities to accept without sufficient investigation the reports presented to them. As a matter of fact, I had observed in all nineteen fields and plots of poppy within the jurisdiction of this magistrate during the day.

Other crops on the ground and in great abundance were yellowing wheat and barley, huskless oats, flax in flower, small millet (*Setaria italica*) and beans (*Ervum Lens*) with peas, tall millet (*Sorghum vulgare*) and hemp in smaller quantity. The bean fields were particularly numerous, and the rows of golden bushes about a foot high were pleasant to the eye, contrasting with the blue-green oats and other green crops. They were ripe unto harvest, and the reaping consisted of pulling the bushes up by the roots, tying them into small sheaves and stooking them, roots up, on the field. I have already stated that the pods of *Ervum Lens* contain one but more often two beans, and referred to the preference for and the dearness of its bean-flour. The highroad was lined with elms, poplars and willows; but

the hills were treeless as were the valleys except round houses and villages, which were by no means numerous. Trade on the road was purely local, and consisted almost entirely of grain on its way to market.

A missionary at Lan-chou informed me that on a recent journey which he made between Lan-chou and Hsi-an Fu, he was delayed eight days by rain, and I had visions of a similar delay when at four o'clock on the morning of the 13th July, rain was descending in torrents and continued to pour during the whole of the day. Although I knew perfectly well that it was impossible to proceed, I gave it out that we should start after breakfast and ordered every arrangement to be made, including the folding up of my camp bed. The devices resorted to by my men to convince me of the impossibility of proceeding were extremely ludicrous. In moving about the compound of the resthouse, they covered themselves with the oilcloth used for protecting the baggage and with matting, while the harder the rain pelted the louder shouted my escorting officer that a start would be made immediately after breakfast in accordance with my commands. He might as well have shouted to the winds, for the muleteers, who had lodged their animals in an inn outside the city, did not put in an appearance. But of course the foreigner had to be hoodwinked and made to believe that his interests were paramount, and that to travel in the rain, which Chinese so much detest, would be a pleasure. Anxious as I was to be on the move, I had no desire to inflict the greatest of all discomforts on my followers, and I acknowledged the elements to be my master for that day in the hope that they would be kinder hereafter. At night moon and stars shone brightly and I turned in with every prospect of an early

start in the morning. No sooner had I retired than a sudden wailing and crying of female voices arose. They seemed to come from the front door of the rest-house, and I imagined that the magistrate had arrested the growers of the poppy near the city, and that their families had come to ask me to intercede on their behalf. I arose and was told, on inquiry, that they were only the lamentations of the women of a family next door whose breadwinner had just breathed his last. So flippantly was the information vouchsafed, that I again turned in with thoughts of the callousness of the Chinese race. Speaking of rain reminds me that I saw bigger umbrellas in Kansu than in any other province of China. They are of local make, of blue cotton, and of sufficient size to protect not only the head and shoulders, but also the whole body with the exception of the feet, which alone show themselves to one in the rear; they are even bigger than golf umbrellas.

Passing through the east gate of the city, we re-crossed the An-ting River by a small bridge of four spans and made for an opening in the hills bounding the valley on its eastern side. A slight ascent leads to the southern rim of a small valley, lying to the north and broken, like all these valleys, by a fissure or wash-out in the loess running nearly its whole length from west to east. Valley now succeeds valley and the road keeps to the rising divide with seas of hills and valleys spreading out in all directions. On the grass-covered hill-tops and the higher slopes was a network of sheep runs, while flocks of sheep and goats were grazing on the slopes and by the road, which at times lies along the flat and at others between loess banks clad in places with the sweet-scented red blossoms of the wild thyme (*Thymus Serpyllum*). On the lower slopes and in the valleys were

the usual crops; but one peculiar feature of cultivation was noticeable. There were whole fields of blue flax and yellow rape mixed in about equal proportions, and my escorting officer, whom I had taught to take an interest in agricultural products and economic botany generally, came to me at the end of the day's journey in great glee and said that he had discovered flax with a yellow flower. Alas ! the specimen he produced turned out to be rape; but so intimately were the blue and yellow flowers intermixed in the field with the stems about the same height, that I had actually dismounted during the day to examine them with greater care. The general direction of the road was east as far as the hamlet of Tung-erh-shih-li-p'u, where we came upon three carts laden with cotton cloth from the cotton-growing district of San-yüan Hsien in the province of Shensi, and brick tea. Each cart had only one pony in the shafts : the tracers had disappeared, and we then discovered that we were at the top of a deep descent eastward and that the tracers had gone to bring up the other carts, seven or eight in number, laden with similar goods. Steep indeed was the descent between loess banks, and half way up we met the carts and their teams struggling upwards. The first cart, which had a heavy load, had three rows of tracers, each row consisting of three mules, so that it required nine mules and a pony to drag it up this part of "the great cart road" from Shensi to Kansu. The other carts, being lighter, had only six tracers each. Down we went 'east and for a short time south, with difficulty passing the ascending carts in the narrow roadway, till we reached the bottom of a deep gorge with a small arched bridge, after crossing which the road, winding northwards up the opposite side of the gorge, landed us in a valley stretching east. The sides of the hills

cooping up this valley were only partly cultivated; but the valley itself, with the exception of the usual deep fissures and adjoining broken country, contained the usual crops in good condition. The road goes east along the north side of the valley, but later turns south-east and enters the market-town of Hsi-kung-yi, the end of the fourth stage from Lan-chou and 27 miles from An-ting Hsien. Soon after leaving the latter city I noticed some poppies in a field of flax, but they were of no consequence. Next door, however, to the rest-house in Hsi-kung-yi there was a large garden enclosed by a high wall which screened it from the street. It contained about half an English acre of poppies with well-developed capsules from which the opium was in process of being extracted. With the exception of the willows and poplars which bordered the road, the country between An-ting Hsien and Hsi-kung-yi might be described as unwooded, for the few scattered trees round farmhouses and villages made a poor show against the bare hills. Carts carrying grain westward were also fitted for passengers : arched mat roofs were spread over the sacks of grain, and the intervening space was utilized for the baggage and bedding of travellers who were to be seen sleeping away the day.

On leaving Hsi-kung-yi we continued our course eastward down the valley, skirting on the south side a deep fissure in its loess bed. Its bounding hills were buried in mist; but about a mile from Hsi-kung-yi I spied on the north side of the fissure five patches of poppy in full white bloom, and during the whole of the day I counted 31 patches and fields, eight of which were within the An-ting, and 23 within the Hui-ning district, the next district to the east. The valley was for the most part taken up with large

fields of wheat and barley, oats, flax, small millet, and the small flat bean now harvested and stacked in the fields to dry. Five miles from Hsi-kung-yi brought us, after a short, steep descent, to the left bank of a narrow, yellow stream flowing northwards; but that course was only temporary, for it winds down the valley, and we had to ford and reford it many times till, to the west of the city of Hui-ning Hsien, twenty miles from Hsi-kung-yi, it goes north to form with a stream from the east the Tsu-li River, above referred to as a tributary of the Yellow River. West of Hui-ning we met several carts laden with native cotton cloth from Shensi. We entered Hui-ning Hsien, a poor district city, by the north and left it by the south gate. A valley runs south from the city; but we struck east and descended into a narrow gully, in places not exceeding ten to fifteen yards in breadth, hemmed in by steep high banks, leaving little more than room for the bed of a stream flowing west. Owing to the rains the floor of the gully was soft, sinking sand, and at one spot, where a streamlet found its way down from the north bank, carrying with it fine sand and mud, we found a cart embedded above the axle. It was a passenger cart : carter and passengers were seated on a sand-bank on one side of the morass in which the cart was hopelessly stuck, and the baggage was piled up on the other. My muleteers declared the road impassable and hinted a return to Hui-ning Hsien; but I thought otherwise, as did my escort. Choosing a narrow place near the north side of the gully I told my groom to lead my pony across. This he succeeded in doing with some difficulty, and my escorting officer's cart, being light, took a crossing near the embedded cart at a gallop. The muleteers' wishes were not gratified : over we went and resumed our journey

eastward. We travelled eight miles in this gully which, judging from the water-mark at the bases of the cliffs, must have been two to three feet under water at a very recent date, forded and reforded the stream till there was no room for a road, and, where the stream comes from the south, ascended east between low hills into a small valley running west and east. This valley is succeeded by four or five similar valleys divided by ridges and, rising through these, we entered a much larger valley in which we spent the night at the village of Tsai-chia-so, 35 miles from Hsikung-yi. The Tsai-chia-so valley is much cut up by central and cross crevasses; but the latter are rendered passable by bridges, each bridge consisting of a brick arch in the bottom with many feet of earth piled on the top. The hills to the north of the valley are bare, steep, and uncultivated, while those to the south present gently sloping sides and rounded tops, most of which were under cultivation. In these valleys were many individual farmhouses dotted about, but villages lay under the foothills away from the high road. The houses and villages were well wooded ; but the hills were treeless. The road was lined all the way from Hsikung-yi to Hui-ning Hsien with poplars and occasional willows and elms, and to the immediate east of the village of Chi-erh-tsui, thirteen miles from Hsi-kung-yi, the display of poplars was remarkably fine, with several rows of trees on each side. Towards the end of the day's stage, however, the avenue consisted of willows with an occasional poplar. We were exactly twelve hours on the road from Hsi-kung-yi to Tsai-chia-so—a somewhat arduous day.

I have said little about the climate of Kansu, but it was so chilly on the morning of the 16th July when we left Tsai-chia-so that on consulting my thermometer I found

that it registered only 58° Fahr., while the highest reading for the day was 77° in the shade. To be able to wear thick, tweed clothes in the middle of summer is a condition of things which foreign residents in less favoured provinces of China would gladly welcome. From Tsai-chia-so the road goes east, skirting the bare uncultivated hills bounding the valley on the north and, after eight miles, reaching its highest point at the village of T'ai-p'ing-tien, whence it crosses two smaller valleys and then descends into a long wider valley with the usual deep fissure in the bottom containing a yellow rill which gains volume as it flows east, south, south-east, and gradually returns to east before we arrived at the village of Kao-chia-p'u, the end of the day's stage, 30 miles from Tsai-chia-so. In the smaller valleys and on the high slopes there was a considerable amount of uncultivated grassland where sheep, goats, cattle, and donkeys were grazing, while in the larger valleys were big fields of fine oats, flax, flax and rape mixed, small millet, and smaller fields of maize, tall millet and buckwheat. I noticed one patch of the small millet (Panicum miliaceum). I also observed nine patches of poppy during the day: six were within the Hui-ning Hsien district, and three within the department of Ching-ning Chou; but they were of no great size or importance. The stream which we accompanied in the main during the day is a tributary of the Ku-shui which joins the Wei River to the east of Fu-ch'iang Hsien. In one of the valleys we met seven carts laden with native cloth from Shensi bound west, and there were numerous pedlars on the road going in the same direction. Each of the pedlars carried his wares in a couple of boxes usually fitted with a pigeon-hole of drawers slung at the ends of a shoulder-pole, and to one of the boxes was usually affixed

a stool on which the vendor sat when exposing his wares in the villages. In the early part of the day the rows of trees bordering the road, mostly willows, were much broken, and there were many gaps; but towards the end of the stage, and especially to the east of the village of Chiai-shih-p'u, eight miles from Kao-chia-p'u, the willows on one side were frequently not more than two or three yards apart, while on the other side was a dense row of poplars on whose white bark the Chinese, like people of other lands, had cut their names, and in many cases poetical effusions. There were many cave dwellings by the roadside, and in front of the caves sat women displaying on loess mud tables dishes of hard-boiled eggs and flour cakes to attract wayfarers. "A cave dweller " is not an opprobrious title, for many of these cave dwellings are farmhouses in which cattle, donkeys, and agricultural implements have their appointed places. The inns for the accommodation of caravans are mostly surrounded by high mud walls, and there is a one-roomed house built on a high loess foundation inside and overtopping the wall, usually at one of the corners of the compound. In this house a watchman keeps guard at night against horse-thieves. The room in which I had lunch at Chiaishih-p'u was next door to the granary of the inn, and after my meal I sauntered into the latter and found a large willowtwig bin of huskless oats. I have already referred to the introduction of this Chinese huskless oat into England, and I bought from the innkeeper, for further experimental purposes, sixteen catties or $21\frac{1}{3}$ lb. for 140 cash, or about threepence halfpenny, equal to some 30s. the ton. The road from Kao-chia-p'u runs south-east along the valley till the latter turns south, when it continues southeast and enters an opening in the hills bounding the valley,

and after a very long and precipitous descent strikes another very long, wide valley stretching north and south and bounded by high hills terraced and cultivated in their lower slopes. Soon after descending we crossed a streamlet flowing west and followed the valley south to the department city of Ching-ning Chou, behind which a range of hills appeared to block the valley except to the south-west. Before entering the suburbs outside the west gate of the city, we forded a goodly, swift, yellow stream flowing west, in reality the upper waters of the Ku-shui on their way to the Wei River. It was at the crossing and on the right bank of the stream that I came upon my first and only patch of poppies seen during the day. The stems, the biggest and finest I had yet seen, with very large white petals to the flowers, were growing thickly in a field of small millet; but the crop was undoubtedly poppy, not millet.

There is a Station of the China Inland Mission in Ching-ning Chou, which is fifteen miles from Kao-chia-p'u, and before starting from the latter on the 17th July, I handed my card to one of my escort with instructions to ride ahead and deliver it at the Station with a message that I proposed to call on my arrival at the city. I was somewhat exercised in mind as to the diminution in poppy cultivation, and I was anxious to ascertain from an authoritative source whether the condition was or was not normal. On arrival in the city, however, I was met by my messenger who reported that the foreign pastor was absent. I had breakfast in the official rest-house in the city, and it was impossible not to overhear the magistrate's servant, who had been sent to attend to my wants, telling my followers how his master, a man of from sixty to seventy, was being worn to

death in his search for the poppy, how he made daily raids into the country on horseback-torture to a civil servantand how the question of opium occupied his mind night and day. What I had thus overheard was carefully retailed to me later by my escorting officer, who was probably influenced to commend the activity of the local authorities. As we were leaving the city by the east gate I saw a man enter carrying a bundle of poppy stems, some in flower and others with well-developed capsules, and this seemed to me to be a device for impressing on me the activity of the authorities in cutting down the poppy or for preventing me from seeing it actually growing. Ching-ning Chou had every appearance of being a poor city, and the streets through which we passed from the west to the east gate were devoted to the sale of agricultural requirements and second-hand clothing.

From the east gate of Ching-ning Chou the road goes direct east through an avenue of willows to the hills bounding the valley, and, after a slight rise, enters a bare gorge down the bottom of which flows a yellow stream which we had already forded to the east of the city. It runs high up along the north side of the gorge till, after a slight descent, it enters a wide valley or basin, much of which was grassland where many ponies were grazing. On the way down to this basin we met a very large mule caravan and a number of carts laden with native and foreign cloth bound west. In the basin the road twines north, north-east, and east; but east is the general direction as far as the village of Shen-lin-p'u, where we passed the night, 30 miles from Kao-chia-p'u. The road was good going from Ching-ning Chou to Shen-lin-p'u, and our pace was hastened by a thunderstorm. It blew a gale for a time, but we escaped VOL. I. L

the rain, the drivers on this occasion urging on the mules and working like Trojans to avoid the storm. From a temperature of 86° Fahr. in the Ching-ning Chou valley the thermometer fell to 66° Fahr. after the rain. In fair weather the muleteer will walk in front of the leading mule and regulate the pace of the whole caravan as he thinks fit : only rain and the fear of a drenching induce him to force the pace, to drive, not to lead. In the valley wheat and barley were already harvested and stooked in the fields, and everywhere donkeys were busy carrying home sheaves of the small, flat bean (Ervum Lens), only the heads and tails of the animals protruding from their loads. The Mu Hsi fodder plant-Medicago sativa-was especially prominent; but I shall have more to say regarding this variety of lucerne later. The iris or Ma-lan-hua re-appeared on the road in great abundance after an absence of many days. Willows and poplars lined the road in the valleys, but all but disappeared in the mountainous country and in the gorge.

As we had a long stage of 32 miles, including the crossing of the Liu-p'an Shan (8840 feet), to accomplish on the 18th July, we were off from Shen-lin-p'u at four-fifteen o'clock in the morning. For fifteen miles, as far as the district city of Lung-te Hsien, the road runs direct east up a valley and was in excellent condition. It crosses twice the yellow stream which winds down the valley to the gorge leading to the Ching-ning Chou valley, once about five miles from Shen-lin-p'u and again before entering the west gate of Lung-te Hsien. About a mile east of the first crossing the valley is divided into two by a range of low hills running east and west, and the road keeps to the northern branch with the usual crops. I had repeatedly

observed in Shensi and in this province fields of various growing crops having each a small triangular, white flag attached to the end of a stick planted usually in the centre of the field. I had asked the reason of the practice many times, but all whom I questioned either did not know or gave evasive answers. In this valley the flags were particularly numerous, and my continuous questioning brought the following answer. Each flag is a charm to prevent the crop being attacked by grubs or insects of any kind. It is blessed by a Taoist priest who, for a consideration, writes on it a cryptic character which is believed by the superstitious farmer to have the desired effect. The Taoist priest is always at war with evil spirits, and it is his business to satisfy his clients, for in China every effort is always being made to appease evil spirits, not to appeal to the good spirits, to ward off misfortune. An example occurs to me as I write. Who is the traveller in China who has not observed a branch of a peach tree suspended over shop or house door? The peach tree is believed to be the detestation of evil spirits, and the suspended branch is intended to prevent their entry into business or domestic life.

The city of Lung-te Hsien, which we entered by the west gate, is a very poor place with dilapidated walls, dilapidated streets and dilapidated houses, which were exceedingly few, and the greater part of the space inside the walls was overgrown with weeds which black pigs were busy grubbing up. We left the city by the east gate, and immediately afterwards again crossed the yellow stream on its way round the north wall. Then came a mountain rill of clear water which we crossed and re-crossed on our way north-east to ascend the west face of the Liu-p'an Shan. The ascent lies

for the most part up a gully between green, grassy hills, on emerging from which the road zigzags a little to reach the summit which is the boundary of the Lung-te district and the department of Ku-yüan Chou. To the west of Lung-te the road was lined with willows; but to the east of the city and on the lower slopes of the mountain there was an avenue of poplars. The rise to the summit from the city is between 3000 and 4000 feet, while the descent on the east side is much greater. The eastern face of the mountain near the summit was fascinating owing to its wealth of wild flowers in full bloom. Among these yellow, Papaver alpinum was prominent, and as I plucked it I did not anticipate that the other poppy, Papaver somniferum, was awaiting me at the eastern foot of the mountain. The name Liu-p'an is derived from the six great windings which the road makes on the eastern face of the mountain, windings of the steepest possible nature clearly marked by poplars. Willows were entirely absent from both faces; but from high up on the eastern side they could be traced eastward down the valley from the mountain foot almost into the village of Wa-ting, the end of the day's stage. Towards the eastern foot of the mountain the road is rocky with room for only one cart, and here we were delayed for half an hour waiting for the passage of half-a-dozen carts containing a Chinese official, his family and baggage, which were painfully struggling upwards. One of the carts had six tracers, and a rest had to be called every few yards to allow the animals a breathing space. It was sheer cruelty to animals : but that is an everyday occurrence on the high-roads of Western China. On a slope and almost at the mountain foot were two patches of poppy between two or three houses which heralded the approach to the village of Wa-ting or

Wa-ting-yi, the entrance to which was marked by groves of young poplars. To reach the village we recrossed the streamlet which had kept us company from its birthplace on the mountain side and which we had already crossed near the mountain foot. There was a third patch of poppy to the immediate east of Ho-shang-p'u.

Big mule caravans and a number of carts laden with native cloth, raw cotton, and miscellaneous goods were met going west, as well as several carts with boxes of machinery bound for the Yao-kai copper mines, to which I have already referred. Issuing from Wa-ting were also several carts on their way to Lan-chou with loads of copper cash. At exchanges then ruling, a tael of silver could buy in Hsi-an Fu, whence the carts were coming, some 1200 cash, whereas in Lan-chou it was worth only a little over 900, so that, after defraying cost of carriage, it was profitable to transport cash to Lan-chou and purchase silver there.

The descent from the Liu-p'an Shan did not end at Wa-ting, for passing down that village of inns next morning, through flocks of sheep and goats, and herds of cattle and ponies, waiting to be taken out to graze on the hillsides, we descended south-east into a narrow valley, bounded by rocky hills clad with grass and scrub. A brown brook, which we crossed and recrossed many times during the day, hurries down this valley with its avenue of poplars, its wild grass and shrubs of various kinds. The first clearing in this valley appeared at the hamlet of eating-houses known as Ch'ing-shui-kou, some four miles from Wa-ting, and it was covered with poppies, whose petals were of many hues—white, red, pink, and purple. This was the second field of poppy, for I noticed a patch in a garden within the

village of Wa-ting. There were but a few solitary houses in the valley, but each had its poppy plot in its immediate vicinity. Three miles from Ch'ing-shui-kou brought us to the exit of the valley, which contracts to fifteen yards in width; and just beyond were five patches, all in full bloom. Although the valley then opens out, it was practically wild and uncultivated as far as the village of Sung-tien, eight miles from Wa-ting. To the south-east of Sung-tien there was ample room for tillage : the grain crops, with the exception of oats, were mostly harvested, and the sheaves temporarily built up in ricks on the fields. The most important crop on the ground, and in process of being harvested, was the poppy, not now in small patches, but in large fields; and this was specially the case when we passed from the department of Ku-yüan Chou to the district of P'ing-liang Hsien. An-kuo-chen, the first village within the latter, was an extraordinary sight. Front and back gardens were chockfull of poppy, from which the petals had nearly all fallen; and I shall not readily forget a large plot at the very end of the village, where fat capsules nodded at me, as if claiming attention when I emerged from this poppy village. A few hundred yards beyond was a large field in flower, and from that onwards commenced a series of fine, large fields, mostly in capsule, and in process of being tapped. There was no concealment or attempt at concealment, and there was evidently no restriction whatever except unheeded prohibitory proclamations. In all I counted 87 plots and fields, mostly the latter, during the day, 24 of which were within the department of Ku-yüan Chou and 63 within the district of P'ing-liang Hsien in which the prefectural city of P'ing-liang Fu lies, 30 miles from Wa-ting. Six men were busy lancing the capsules in a large field, well within

sight of the west wall of the city, and what was still more farcical was a poppy-patch in full bloom, which greeted us just within the west gate, by which we entered the city of P'ing-liang Fu. To the south-east of the poppy village of An-kuo-chen the slopes of the hills bounding the valley on the south side were terraced and cultivated, but those to the north were almost untouched by the hand of man. About three miles to the west of P'ing-liang Fu the hills recede on both sides, and the valley opens out into a wide, stony plain, down which flows a stream in an easterly direction. This stream, which goes to join the main stream flowing south-east to the north of P'ing-liang Fu, we forded before entering the city.

The only crop of importance in the ground, in addition to poppy and oats, was maize. Traffic on the road was much the same as usual : mules and donkeys and a caravan of seven carts, laden with bales of native cloth and miscellaneous goods, were bound for Lan-chou.

I called at the station of the China Inland Mission in P'ing-liang Fu in the evening. It was occupied by three single Swedish ladies, affiliated to, but not members of the Mission. A missionary conference had recently been held at P'ing-liang Fu, and several missionaries from Shensi had remained on for a holiday, and to enjoy the cooler climate of the city, which is 4000 to 4500 feet above the level of the sea. There were in all ten present, and one of the gentlemen informed me that no curtailment of poppy cultivation had taken place within the district of P'ing-liang Hsien within the year, and that any steps that had been taken to limit the growth in the immediate neighbourhood of the city had been counterbalanced by increased sowing as

compared with 1909. One lady who had lived in Chen-yüan Hsien, to the north-east, and who was well acquainted with the conditions prevailing there, said that there had been great reduction in cultivation throughout that district ; but the information vouchsafed to me was tinged with that delightful vagueness about percentages of reduction which is so characteristic of the highest provincial authorities.

At P'ing-liang Fu I was quite a sybarite : for the first time in over two months I was the fortunate occupant of a bedroom with a wooden floor. Hitherto I had had to be content with mud, and on very rare occasions brick-to be on the same footing as a cave-dweller. And here I may state that there are two kinds of cave-dwellings in Kansu: there is the cave-dwelling excavated from the loess hillside such as we have seen in Shensi and in Kansu; and there is the underground cave-dwelling, where a large, deep hole is dug in the ground (it may be in a flat field), and from the bottom of the hole, which is reached by a steep incline, rooms are excavated underground. Whole families, and even villages, thus live under the surface, and the only indication of their existence is a low mud wall built round the mouth of the hole, and enclosing the family playground. The word "playground" is perhaps a misrepresentation, for there is little play for a Chinese child, and it is very doubtful whether he or she looks back on childhood as the happiest time of life. Labour is the lot of the Chinese child as soon as he or she is able to lend a helping hand or carry a load, however paltry that helping hand may be, and not infrequently it consists in nursing the next baby that seems to be always coming along in this province. In P'ing-liang Fu the rest-house was once the official residence of the Literary Chancellor : it is spacious, and had not had time to fall into a state of disrepair like so many other rest-houses on this road.

Early in the morning of the day after our arrival at P'ing-liang Fu I was waited upon by the muleteers, who stated that the best mule had gone lame overnight and begged for a day's rest. There was no doubt about the mule being very lame on a hind leg; but I replied that it was impossible for me to delay for the sake of a lame mule, and that the only thing to do was to find a substitute. As I understood, it was agreed to leave the lame mule behind in the care of one of the drivers, who would probably be able to catch us up at Hsi-an Fu. Of course, no one cares to be left behind, be it man or beast, so the driver dragged the mule along a mile or so, when it suddenly recovered from what turned out to be nothing more serious than a sprained muscle or tendon. The discussion regarding the mule delayed our start till eight-fifteen o'clock; but there was joy in the caravan when driver and mule suddenly turned up at one o'clock when we were lunching at Ssu-shihli-p'u, some thirteen miles from P'ing-liang Fu. There is a very long suburb outside the east gate of P'ing-liang Fu, and on issuing from it we followed the road between willows and poplars east and south-east down the valley, skirting as far as Pai-shui-yi, the end of the stage of 23 miles, the bounding hills to the south. The stream keeps well to the northern hills; the valley widens in places from one and a half to two miles; and the southern side of the valley is well irrigated by canals from the higher waters of the stream. Wheat and barley were harvested, the grain was being threshed out by flail, mostly by women and frequently on their knees, and the straw was being built into ricks round the farmhouse. Many of the ricks were

umbrella or toad-stool shaped, that is to say, the upper half of the rick was much greater in diameter than the lower-a protection from rain-and one sheaf of straw, brush-shaped, was planted on the summit. As a further protection from rain, the tops of the ricks were frequently coated with mud. The crops on the ground were poppy in capsule, maize, small millet, lucerne, and some tobacco. The poppy was everywhere in and around villages and in gardens. These might be called plots or patches; but the sides and bed of the valley were full of it in large fields, and by a field I mean an area of not less than 10,000 square yards. Indeed, many of the fields were much larger than 50 by 200 yards, and it is as well to define what field here denotes. Taking all the crops on the ground together I estimated that at least 75 per cent. of their area in the bottom of the valley was under poppy from which opium was being harvested. This may be better understood if I state that from nine o'clock in the morning to five-thirty in the afternoon-in the 23 miles from P'ing-liang Fu to Pai-shui-yi-I counted 734 poppy plots or fields of which at least one-half could be classed as fields as defined above. I have given these details to show that my estimate is not guess-work as other estimates and percentages have proved to be when subjected to careful scrutiny and close investigation. To me the sight was perfectly amazing, nor had I seen it surpassed in the old days in such opium-producing provinces as Szechuan, Kueichou and Yünnan. That such a state of things existed in the face of prohibition reflected little credit on the local or high provincial authorities, who do not take the necessary steps to ascertain the truth. Even in the back garden of the official rest-house at Pai-shui-yi where I spent the night, the opium harvest was practically complete, and bundles of stems and

FROM LAN-CHOU FU BACK TO SHENSI 155

exhausted capsules were stacked under the eaves of the house awaiting the disposal of the seed for oil extraction. Trade on the road was the same as usual: we met seven carts and many pack mules and donkeys loaded with cotton cloth, raw cotton and miscellaneous goods, and several carts with water-pipe tobacco accompanied us. It is difficult to understand why Tso Ts'ung-t'ang during his campaign against the Mohammedan rebels ordered his soldiers to plant trees along the highroad, except that it was something for idle hands to do. But to-day itinerant harvesters and pedlars reap the benefit. Groups of the former and the latter with their boxes of trinkets were daily to be seen eating or sleeping in the shade of the willows and poplars. And, again, one wonders on what principle the avenue was laid out. The trees are willows, poplars and elms. Sometimes one of the three runs for miles on both sides of the road; at others each kind keeps to its own side; and at others, again, all three are not infrequently jumbled up together.

The village of Pai-shui-yi ("White Water Village"), where we spent the night of the 20th July, derives its name from a clear mountain rill which enters the valley from an opening in the hills to the south, and flows past the village on its way to join the main stream. Our road from Paishui-yi again lay south-east through country similar to that of the previous day, and so long as we continued within the P'ing-liang Hsien district, there was no apparent diminution in the cultivation of the poppy. In the few miles that remained of that district I counted 60 poppy-fields; but I soon discovered fields in which the stems had been uprooted and made into bundles. In other words, the opium harvest was over in places, and the 60 fields were not an accurate

indication of the area that had been under poppy in the vicinity of the high road. From the district of P'ing-liang Hsien we passed into the department of Ching Chou, and within the latter as far as the city of that name I observed only five fields; but I am of opinion that this diminution was due not so much to the opium having been harvested as to an extended cultivation of other crops. Maize, the two smaller millets (Setara italica and Panicum miliaceum), the oilyielding plant (Perilla ocymoides), and common hemp (Cannabis sativa) were much more in evidence than in the P'ingliang district, and there were also many patches of tobacco (Nicotiana rustica) in full, yellow bloom, and several fields of the indigo plant called Ta-lan to which I have already referred. My experience of tobacco cultivation in China is that the plants are not allowed to flower, the tops of the plants being nipped off to prevent flowering, and thereby increase the development of the leaves. Although this practice was denied here, I am convinced that these flowering tobacco patches consisted of the previous year's plants being grown for seed. They were much more advanced than anything I had yet seen. Not only was there an increase in the variety of crops, but there was also considerable fruitgrowing. Orchards of apricots, dates, peaches, pears and plums were common, and the valley was much better wooded; but the bounding hills on both sides became very rocky and less amenable to cultivation. Gradually the stream which had kept to the northern hills crossed to the south of the valley, laying half of it stony and waste. The road now ran down to its right bank, and I was looking ahead for the city or Ching Chou when, on turning a corner of the southern hills, there it was to the south nestling at the foot of a semi-circle of hills, 23 miles from Pai-shui-yi.

FROM LAN-CHOU FU BACK TO SHENSI 157

But a stream which enters the valley from the south to the west of the city had to be forded before we passed through the north gate of Ching Chou with its moss and weed-covered walls. During part of the day we were accompanied by a flock of large woodpeckers which flew ahead of the caravan from tree to tree, and clinging to the boles peered at us as we swung along. The day was exceedingly hot : the thermometer marked 72° Fahr. in the shade when we started from Pai-shui-yi, and rose and stood at 94° until late in the afternoon. Trade was much the same : caravans of carts, mules and donkeys with native cloth, raw cotton, and foreign cotton goods, passed us going west, and strings of pedlars were hurrying from Shensi to Kansu with their loads and happy looking faces, looking forward, no doubt, to returning with big profits.

Ching Chou is 23 miles from the frontier of the province of Shensi, and, as we had a further ten miles to accomplish to reach the first city within that province, I ordered an early start on the morning of the 22nd July and we were off at 4.45 o'clock. Climbing the hill behind the city and passing up between bare loess banks we struck eastward over flat uplands, broken here and there by deep depressions necessitating many a twist and turn in the road. The country looked bare owing to the absence of wheat and barley already harvested, and, in spite of the coming crops in the shape of the tall and two smaller millets, hemp and lucerne, the most prominent feature on the horizon was the avenue of willows marking the somewhat tortuous eastern course of the road. These uplands, being entirely dependent on rainfall for irrigation, are no place for the poppy, but a short distance east of the village of Wa-yun-chen,

which is within the department of Ching Chou, I noticed one field, the last I saw in the province of Kansu, for, five miles east of Wa-yün-chen and after passing through the village of Yao-tien-chen, we crossed the Kansu-Shensi frontier into Shensi. Each village through which we passed to the frontier had its water-pond in an excavated hollow, and each pond was the bathing establishment of the children, the public wash-house and the village waterworks. Many years of residence and travel in China have taught me not to be squeamish; but the uses to which these ponds were being put made me taboo my usual tea at breakfast and lunch. Yet the stuff—I will not call it water —would have been all right if boiled; but I could not face it during the day. In the village of Yao-tien-chen the Sophora japonica, Ailanthus glandulosa and Sterculia platanifolia reappeared in some force.

Next to the poppy, which has been my special quest, lucerne (Medicago sativa) has appealed to me more than any other crop. Looking at the conditions under which it is cultivated, it might, I thought, be introduced with great advantage into Great Britain, her Dominions and Colonies. It grows well to an altitude of 4000 feet, fears neither drought nor deluge, and once sown seems to require no further attention. It yields at least three crops a year, is eagerly devoured by cattle, and is reported to have excellent fattening properties. I measured the stems in a field in process of being cut during the day, and the plants which were in flower were four feet in height. Every field swarmed with white butterflies, which are doubtless the means of fertilizing the flowers. Later I procured a quantity of the seed of this lucerne which was distributed by the Board of Agriculture and Fisheries in Great Britain,

Canada and South Africa. The results have been satisfactory, and especially in South Africa, whence a requisition for half a ton of seed was sent to China in 1912.

We had now accomplished the journey from Lan-chou Fu back to the western frontier of the province of Shensi in a few hours under fourteen days.

CHAPTER VI

ACROSS SHENSI FROM KANSU TO SHANSI

CH'ANG-WU HSIEN, the first district city within the frontier of the province of Shensi, is approached by a road cooped up between high loess banks, and its walls did not come into view until we were close upon them. It was seven o'clock before we reached our night's quarters; but the magistrate at once called upon me, and in the course of conversation assured me that the poppy had been entirely eradicated within his jurisdiction. I did not think it necessary to tell him that I had seen eight fields of poppy at Hung-chia-p'u and Erh-shih-li-p'u, distant respectively seven and five miles from the city. I told him the story of the magistrate of An-ting Hsien in Kansu who had given me a similar assurance, although I had seen two plots of poppy about a third of a mile from the north gate of his city, and I left him to draw the moral; but he took my story simply as a joke at the other magistrate's expense. However, the magistrate of Ch'ang-wu Hsien wished to be exceedingly friendly, and to provide me with dinner; but, when I declined the honour, he was not to be outdone, and insisted on sending for a cruet-stand, which was placed with all due care on a table in my bedroom ! He had spent some years in Peking and was, therefore, well versed in foreign ways! I made it a rule firmly, but politely, to decline all

presents, however triffing, explaining that I was not a Chinese official and could accept nothing.

The city of Ch'ang-wu Hsien lies in a hollow, and leaving it by the south gate we ascended south-east to uplands over which the road runs level for six miles, beyond which the country is slightly broken. Then comes a descent, during which we looked down into a deep valley with a yellow river-the Ching Ho-flowing from the north, and sweeping south-east. The descent, gradual at first, soon became precipitous, and landed us at the village of T'ing-k'ou, where we struck the left bank of a clear stream flowing from the south-west to join the Ching Ho. Fording the stream we made for the point of a rocky ridge descending from the south towards the right bank of the river. Rounding the point, we were in the valley; but ridge succeeded ridge, and each of these had to be rounded, the road in some places being high above the valley. A mile and a half from T'ing-k'ou the road makes an exceedingly steep and rocky descent to the village of An-hua, where we were delayed for some time by about 50 carts struggling up westwards with the help of many hired tracers and the lashes of their drivers. They were laden with native cloth, silks and satins in boxes, paper and miscellaneous goods. During the descent to T'ing-k'ou I noticed a field of poppy by the roadside, in which a man was plucking up the stems by the root for removal to the farmhouse, for the extraction of the seed. It is this uprooting that removes all trace of the poppy, and prevents a proper estimate being made of the area of land that has been under poppy cultivation. This field was situated within the district of the magistrate of Ch'ang-wu Hsien, and further discounted his assurance that his district was entirely clear of poppy during the year. VOL. I. м

The capsules of this upland poppy were only about onefourth the size of those grown in the valleys. To the southeast of An-hua we entered the department of Pin Chou, and five miles beyond, at the village of Ta-fo-ssu, so called from a temple with a large image of Buddha perched against the side of a high cliff, I came once more on a branch office of the Anti-Opium Society with locked doors. It was not functioning, and was an office merely in virtue of a signboard over the door. But there was something at Ta-fossu much more interesting than the branch office of the Anti-Opium Society. The cliff to the east of the temple was honeycombed with cave-dwellings hewn out of the sandstone three and four storeys high. This must at one time have formed a considerable village; but only the ground floor was now inhabited, the upper storeys being given over to wild pigeons which were flying in and out of doors and windows. One peculiarity of these deserted caves is that the doors and windows are cut square and not arched, as in the loess dwellings. They had every appearance of great antiquity. During the descent to the Ching River valley, between high loess banks, the heat was stifling. At Ta-fo-ssu the mercury stood at 100° Fahr. in the shade, and it was with some reluctance that, after refreshment and rest, we set out to accomplish the remaining 6 of the 26 miles to the city of Pin Chou. Near Ta-fo-ssu, I observed one patch of poppy, but it was small and of no importance in itself. What, however, was important, were sheaves of poppy stems spread out to dry at several farmhouses, a clear indication that there had been considerable cultivation in the neighbourhood. At any rate, the Ching River valley is admirably suited to the cultivation of the poppy; but I was a little late in my visit to be able to judge of the actual extent.

On leaving Ta-fo-ssu we passed through a jungle of date or jujube (Zizyphus vulgaris) mixed with pear trees, whose fruit was not then bigger than a walnut. Orchard of these trees succeeded orchard on both banks of the river, and the hills on both sides of the valley were terraced, wellwooded and cultivated where their rock formation admitted. On the uplands were tall millet (Sorghum vulgare), soya beans (Glycine hispida), the castor-oil plant (Ricinus communis) and hemp (Cannabis sativa), with small millet (Setaria italica), and lucerne (Medicago sativa) in less abundance. In the Ching River valley field after field of vigorous tobacco plants, some eight inches high, should be added to the above-mentioned upland crops with the exception of lucerne. The crop of hemp in the valley was one of the finest I have seen in China: many of the stems were at least twelve feet high, and were still growing. There were also some melon fields, each with its straw hut perched on piles for the night-watchman of the crop. Pedlars on their way back from Kansu kept us company, and I noticed that several of them had exchanged their wares for skins and deer-horns, the latter to be manufactured into medicine or glue. The avenue of trees, such a prominent feature in Kansu, had very much degenerated, was frequently broken, and contained a greater proportion of young trees. It was, in fact, overshadowed by the greater number and variety of trees in the province of Shensi, such as the Sophora, Broussonetia, Ailanthus and Sterculia, with the addition of many fruit orchards. The city of Pin Chou, which was the end of the day's stage, lies on the southwestern face of a high hill with much cultivated land within its walls.

From the south gate of Pin Chou the road passes almost

directly into hills to the south of the city, entailing a weary climb between high loess banks to uplands somewhat broken and less well cultivated; but these uplands did not long continue, for ahead lay a valley which the road had every appearance of crossing by a ridge seemingly dividing it into two. After running along for a time, however, it winds precipitously down and down into the very bottom and enters the village of T'ai-yü-chen, ten miles from Pin Chou, over a one-arched bridge spanning a rivulet flowing north. In the village were several carts loaded with boxes containing Kansu tobacco. These carts had no tracers, but, in spite of the assurance given me at the inn where I breakfasted that the road ahead was level, I had my suspicions that I was being deceived. At the south end of the village there is a narrow valley running east and west down which flows east the stream which, winding north with the valley, passes under the bridge already mentioned. We crossed the valley and struck south up a narrower valley between grassy uncultivated hills, leaving here and there only sufficient room for a patch or two of maize or hemp. The ascent was gradual and, although the road was stony and frequently formed the bed of a stream on its way to join the larger stream in the T'ai-yü-chen valley, I began to think the information tendered to me at the inn was not so far wrong after all, when down hurried several batches of mules, 20 to 30 at a time, to bring up the remaining carts. Still the road was not bad going, but later commenced a series of steep windings until we reached the summit, where seven carts with tobacco were waiting their comrades below. It was while ascending this hill, known as Yang-liao-p'o, that we encountered two carts with more machinery for the copper mines at Yao-kai, and three carts loaded with logs

of wood bound with iron bands. These logs, which had been sawn in two lengthwise and hollowed out, contained silver ingots, part of the annual contribution to the province of Kansu, whither they were being conveyed.

As soon as we had reached the summit rain began to fall, and we hurried on south along a ridge separating two deep, green valleys with very little traces of cultivation. All in vain : thunder pealed and crashed all round us, accompanied by high wind and torrents of rain, which soon converted deep ruts into flowing streams, and the road itself into a slippery, slimy puddle. It was bad going ; but down we went south with no greater mishap than a thorough drenching, and ultimately slid down to the north gate of the northern suburb of the district city of Yungshou Hsien lying on the northern slope of a hill and facing a valley running east and west. The characters "Yungshou "mean "Everlasting Old Age," and the suburb on a wet day at any rate left the impression that the city was even beyond the stage of senile decay. The official resthouse outside the south gate of the city gave us shelter after a short stage of 23 miles. There was little poppy cultivation to note during the day : when nearing the uplands after leaving Pin Chou I saw a man carrying a bundle of poppy-stalks, with capsules, down hill and near the village of Ti-yao-kou, ten miles from Yung-shou Hsien, but still within the department of Pin Chou, I observed one field of poppy-stems with capsules from which the opium had been collected.

Between Pin Chou and Yung-shou Hsien the cart traffic was the heaviest I had seen since leaving Lan-chou. From what I have already said it will be seen how impossible

it is for a single cart, heavily laden, unless provided with an unlimited supply of animals, to travel by this road. It is eighteen stages from Lan-chou to Hsi-an Fu, and no heavily laden cart, that is, a cart carrying over 2000 catties (2667 lb.) can accomplish the journey in less than 23 or 24 days. And carts travel late and early, resting in summer, however, several hours during the hottest part of the day. My escorting officers were now provided with three carts, and one of the carters was a Tientsin man whom the introduction of the railway from Tientsin to Peking drove to seek a living elsewhere, and he was trying his luck between Lan-chou and Hsi-an Fu. His fare for the journey was 24 taels (about f_{3}), of which four taels (about 10s.) were retained by official underlings. As the contract was made through a cart establishment or hong, the latter charged one tael (about 2s. 6d.) for brokerage and for guaranteeing that the contract would be carried out. This left nineteen taels (say f_{2} 7s. 6d.) for a journey of nineteen days, including one day's delay at An-ting Hsien. That is to say, the carter had a tael (2s. 6d.) a day to feed and accommodate himself and his three mules. He informed me that with a load of 1400 catties (1867 lb.) on his passenger cart he had done the journey in fourteen days, including a delay of one day, also due to rain; but he has a team of three splendid mules.

It was very doubtful whether we should be able to start from Yung-shou Hsien on the morning of the 25th July. It rained over night, was still raining at four-thirty o'clock, and there was every appearance that the rain would continue. But in the midst of my indecision came the jingling of the mule bells, and we were off at five o'clock to tackle a stage of 30 miles. Muleteers are not so particular in regard to

weather as chair-bearers, who certainly would not have started in the rain. My experience of the latter is that they will not face rain in the morning, but if overtaken by rain during the day they will go on to the end of the stage without a murmur. Under ordinary circumstances the road between Yung-shou Hsien and Ch'ien Chou is good, and once beyond the area of the previous day's storm all was well. It is a gradual descent all the way to Ch'ien Chou, at first along a ridge between deep, green valleys; but the country soon begins to open out and valleys disappear, leaving gentle undulations through which the road passes between loess banks. The general course of the road is south and south-east, and as the day was cool with a maximum of 78° Fahr. the mules swung along at a brisk pace. We breakfasted at a dilapidated official rest-house at the village of Chien-chün-chen, thirteen miles from Yungshou Hsien, and while the meal was being prepared I made a tour of the gloomy building. In a side room I discovered several sheaves of lucerne, and a careful examination of the stems revealed a number of brown seeds which, although apparently unripe, I resolved to appropriate. I told my servant to call in some one to collect the seed, and said that I would willingly pay for his work. A young man who had been hanging about the rest-house was quickly on the scene, and, when I told him what I wanted, he said that the seed was unripe, but that he had plenty of dry, ripe seed in his home. I told him to bring it along, and he soon appeared with a sheng or pint of seed wrapped in his coat. The price, he said, was 300 cash (about 71d.), and I told him that I would take another pint. This also he brought, and I asked him how much more he had. He went to see and came back with two pints, saying that his family could

spare no more as the balance was required for sowing. After paying him the 1200 cash, I remarked that I had given him exactly what he had asked, but that I would like to know, simply for my own information, the real market value of the seed. He replied that it was worth from 250 to 260 cash a pint. I was glad to get the seed at any price, for it seemed to me that a perennial fodder plant that dreads neither damp nor drought, and is eagerly devoured by cattle with excellent results, should have a great future. That I did not over-estimate the value of this variety of lucerne is evident from the successful experiment made with this seed in South Africa, resulting in an indent for a large quantity of the seed from China to which I have already made reference. On arrival at the village of Ling-ting, three miles north of Ch'ien Chou, we looked down southwards on a magnificent plain bounded on the south, east, and west only by the horizon with a large, green patch, which turned out to be the well-wooded city of Ch'ien Chou, on its northern edge. From Ling-ting the road runs down south by easy gradients between loess banks which give way to open ground as the plain is neared. On the way down we had a splendid panoramic view of the plain dotted about with numerous villages nestling among trees, and it was a pleasure, on entering the north gate of Ch'ien Chou, to see the police neatly dressed in khaki uniform, and to be saluted by the first man on his beat, who seemed to be somewhat taken aback at the unexpected appearance of a foreigner. The crops on the ground during the day were the three millets, yellow and black beans (Glycine hispida), hemp, maize, tobacco, and large fields of lucerne. There was no poppy as the opium harvest was now over. The uplands were well-wooded, and in some places, especially in villages,

densely. Even the avenue of willows along the road had a respectable appearance at times, but villages clung to the *Sophora*, *Broussonetia*, and *Ailanthus*. The elm and poplar were no longer represented.

To accomplish the stage of 36 miles from Ch'ien Chou to the district city of Hsien-yang Hsien, we had to make an early start. We were off at 4.45 a.m. and entered the north-west gate of the latter city at 6 p.m. We spent over thirteen hours on the road and they were long hours. We had travelled thirteen days without resting : my pony was lame, so was my cook who had fallen from his pony and hurt his foot. I had, perforce, to spend a great part of the day in the mule litter, the cook shared the cart with my Shansi escorting officer, and the two mounted soldiers led their ponies, as they had done all the way from Lan-chou. These ponies were the private property of the soldiers and were most carefully and considerately treated by them. One of the soldiers told me that when he wanted to enlist some three years before he was told to produce a horse, the bigger the animal the better. It might be as old as the hills, but that was a minor detail. His pay was at the rate of taels 7.4 (18s. 6d.) a month, out of which he had to provide his uniform and feed himself and his horse. As a matter of course, the commanding officer prefers, for reasons which will be self-evident to all who know China, to supply the recruits with uniform and deduct the cost thereof from his pay; but this is not compulsory. It costs about 3.4 taels (8s. 6d.) to feed the horse in camp, and the soldier, when once he has paid for his uniform, has a balance of 4 taels (10s.) to pay his mess and other miscellaneous expenses. He is not bound to serve for any specified number of years, and, when he wishes to leave the ranks, he has to find some

valid excuse which usually resolves itself into one of two things, that he is in ill-health or that his father has just died and he must return to his ancestral home to earn the family bread. My informant said that the only occasion on which he could save anything out of his pay was when his horse was put out to graze; but the saving was so infinitesimal that he intended to retire from the service as soon as possible.

Our course was south-east, and the road passes through four districts-Ch'ien Chou, Li-ch'üan Hsien, Hsing-p'ing Hsien and Hsien-yang Hsien. It winds about among cultivated fields, and there are so many cross-roads that it was at times difficult to distinguish the main road. Once, indeed, we followed one road too far, and had to retrace our steps. Mules are very clever at picking up the high road, probably owing to the greater number of tracks, and I have noticed them go ahead when the muleteers themselves were in doubt. The uniformity of the dark-green spots on the plain, seen from the heights the previous day, is due to the fact that each village is embowered with trees and surrounded by a high mud wall, usually in a dilapidated condition. During the earlier part of the day the growing crops were the three millets, tobacco, melons, and lucerne. At the entrance to the district city of Li-ch'üan Hsien, thirteen miles from Chi'en Chou, we found many heavily-laden carts in great difficulties owing to the softness of the road : they were having recourse to additional tracers, as if engaged in mountainclimbing. Among the many carts, I noticed four bound west with more machinery for the Yao-kai copper mines. When passing through the streets of Li-ch'üan Hsien, where we halted for refreshment, the entire mule, which

happened to be the front mule in the litter, suddenly made a rush at an inoffensive pony tied to a post in front of the door of a house, seized him by the neck with his teeth and refused to let go till lashed on the head with the butt ends of the whips of two of the muleteers. During the attack the pony made excellent play with his heels. At the hamlet of Shang-chao, three miles from Hsien-yang Hsien, we looked down south-east on a second plain with the Wei River flowing north-east past that city. A slight descent landed us on the plain amid field after field of cotton just beginning to blossom and considerable patches of maize in various stages of development, but not yet in flower. A further slight descent between steep loess banks brought us at last to the Hsi-an Fu plain, exceedingly well cultivated, cotton, the two smaller millets and lucerne being especially prominent. Sheaves of lucerne were being carried from the fields to the farmhouses, and I endeavoured to procure more seed of the plant. It was unprocurable; but I was assured that it could be bought in Hsi-an Fu, and although the provincial capital did not appear to me to be a likely place for such a purchase, I had to be content with the assurance and to trust to luck for a further supply.

It is not uncommon for mules to make a dash at an inn gate, be it in village or city, when they think they have had enough work for the day. This frequently happened on the long stage from Ch'ien Chou to Hsien-yang Hsien, and they resented having to pass village after village without rest or refreshment; but when they ultimately saw the walls of Hsien-yang Hsien, they seemed to recognise that the city was their destination, and, without wasting more breath in braying their disapproval, hurried along at full speed. A thunderstorm burst over the city as we passed along the

streets to the official rest-house; but we were fortunate enough to escape the heavy downpour of rain which followed. Some days previously, when we were travelling along the P'ing-liang valley, I had handed to my T'ai-yüan Fu escorting officer a well-developed poppy-capsule, and chaffingly remarked that it probably contained *yi wan* (literally 10,000) seeds. The two characters *yi wan* are also used by the Chinese to denote a very large but indefinite number. On arrival at Hsien-yang Hsien, he handed me 97 small paper packets, each containing 100 seeds, and another containing 94, so that the capsule actually contained 9794 seeds—not far short of the *yi wan* in its literal sense.

At Hsien-yang Hsien we were on known ground, having passed through that city on the 14th June on our way by the southern road from Hsi-an Fu to Lan-chou Fu. From it we retraced our steps over the fifteen miles that separated us from Hsi-an Fu and entered the provincial capital at noon on the 27th July. The crops on the Hsi-an plain, which were now well advanced, comprised those observed during the two previous days, with the addition of the fibre-yielding plant Abutilon Avicenna, in full yellow bloom. There is much confusion regarding Chinese fibreplants, and the fibres retted from the stalks of the Abutilon Avicennæ are frequently, but erroneously, called Abutilon hemp and jute. It is true that in America Abutilon Avicennæ is the source of "American jute," and it is probably for this reason that the name "jute" has been given to the fibres of Abutilon Avicennæ in North China, where, as well as in Mongolia and Manchuria, it is extensively cultivated. In the Index Floræ Sinensis, published in the Journal of the Linnæan Society, it is stated

on the authority of Dr. Augustine Henry that in North China the true hemp-plant (*Cannabis sativa*) is known as *Ch'ing Ma*. This is a mistake : *Ch'ing Ma* is *Abutilon Avicennæ*, not *Cannabis sativa*. *Corchorus capsularis*, the true jute plant, belongs to the natural order *Tiliaceæ*, and is grown in Southern and Western China; *Cannabis sativa*, of the natural order *Urticaceæ*, is widely cultivated in Northern and Western China; and *Abutilon Avicennæ* belongs to the natural order *Malvaceæ*. Nor should these three unrelated plants be confused with *Boehmeria nivea*, variously called Rhea, Ramie and China grass, whence grasscloth (by many erroneously called linen) is manufactured. I have already referred to this subject in connection with the cultivation of flax in China.

I put up at the same inn in Hsi-an Fu as on my previous visit, and at once sent a message to the Governor that I proposed to call on him and arrange about an escort and the use of official rest-houses along the eastern road to the Yellow River, whence I intended to proceed north through the province of Shansi to T'ai-yüan Fu, and thence by rail to Peking. An officer from the Governor soon waited upon and informed me that His Excellency had applied for and obtained two months' sick leave, and was neither receiving nor paying visits. My safe-conduct to Shansi was, however, satisfactorily arranged by letter, and, while my caravan rested, I spent two days visiting friends. As my horse was still lame, I hired a passenger cart, and I am not likely to forget my experiences on the rough, stone-paved streets, which were equal to those of Peking before macadamizing was taken in hand. Missionaries using these carts carry with them adjustable spring seats to prevent jolting and broken bones. While the body of the passenger carts in

Shansi, Shensi, and Kansu is much the same as in the Peking cart, the wheels are further apart, and there is a considerable space between the body of the cart and the wheel on either side. In other words, the gauge of the cart is made to fit the ruts in the streets and roads caused by the heavier and larger goods carts.

On my return to Hsi-an Fu, one of my first acts was to endeavour to procure a further supply of lucerne seed, and I turned out my escort for the purpose, reminding them of their assurance that it could be had in the provincial capital. As I expected, it was unprocurable in the city, and a man was sent into the country to hunt it up. He was successful, and returned the following day with a Chinese bushel of the seed, weighing about 30 lb.

Every traveller in China knows that after resting there is little alacrity to resume the road, and our two days' rest at Hsi-an Fu so demoralised men and animals that we had considerable difficulty in effecting a start at seven o'clock on the morning of the 30th July. There is an inclination to leave all preparations to the last, with the usual muddling results. Moreover, the thermometer rose to 102° Fahr. in the shade during the afternoon, and, although we had only a short stage of fifteen miles to accomplish, discomfort and discontent were written on every face. Passing through the large eastern suburb of Hsi-an Fu, we struck north-east, and this course, with various windings and twistings, was the general direction of the road during the day. At a distance of four miles we crossed, by a stone bridge, a clear stream called the Ts'an Ho, flowing north ; and three miles beyond, a yellow, muddy river, called the Pa Ho, flowing north-west. The latter, as well as its wide, sandy bed, is

spanned by a long, stone bridge, with carved, stone figures of animals and fruits erected at intervals on its parapets. Stream and river unite before joining the Wei River. To the north a range of high hills abuts on the plain and the road, rounding its northern end, skirts a second green range running north-east and south-west, to the district city of Lin-t'ung Hsien, which lies in a hollow at the foot of the range. We passed through the city and quartered ourselves in the official rest-house outside the south gate and at the very base of the hills. The whole plain was well wooded, and the avenue of willows along the road, if not so fine as in Kansu, was of respectable size. Poplars and elms were few in number. The three millets, maize, soya beans, sesamum, melons of various kinds, a little padi, Abutilon, and, above all, cotton in flower, occupied the plain. Fields of lucerne were scattered here and there. There was considerable traffic on the road, which was dry and dusty: carts laden with lump and dust coal and raw cotton, as well as bales of raw cotton carried by men, were bound for Hsi-an Fu, and many carts with passengers and baggage bore us company. The rest-house at Lin-t'ung Hsien is a spacious place, with many buildings, gardens, pavilions-one of which lies on an island approached over wooden bridges-and a spring of hot water gurgling up from the hillside and caught in a series of seven covered, stone baths, of which one is reserved for women. It is known as the Hua Ch'ing Kung, and was the summer resort of the emperors of the T'ang Dynasty, whose capital was at Hsi-an Fu. It was destroyed during the Mohammedan rebellion and afterwards rebuilt-not, however, in its pristine glory. It was visited by the late Empress Dowager Tzu Hsi when she was a refugee at Hsi-an Fu

during the Boxer rising in 1900-1901. One thing the traveller in China misses is his daily bath : he may have a swish down, but opportunities for a good tub are rare. To one's Chinese followers a bath is not a necessity. To them it would be an expensive luxury, for in a Chinese inn each kettle of boiling water has to be paid for. It was with this in mind that one of my soldier escort chaffingly shouted an invitation to all and sundry to have a hot bath without payment of a single cash. His dry humour was fully appreciated, and the invitation, received with shouts of laughter, was duly accepted. We were all glad to wash away the dust of the Hsi-an plain. The water in my bath, which was stone built and sunk in the floor of a room adjoining my bedroom, had a temperature of 109° Fahr. I carried off a sample of this water, and Dr. G. Douglas Gray, Physician to His Majesty's Legation, Peking, to whom I submitted it, informed me that it contains iron in good quantity, magnesium salts in fair amount, and chlorides in much higher proportion than ordinary water. The smallness of the sample which I took precluded the possibility of giving a quantitative analysis; but Dr. Gray expressed the opinion that the water has therapeutic power in suitable cases. I have already stated that the Emperor Shih Huang Ti of the Ch'in Dynasty, who died in B.C. 209, was buried in the neighbourhood of Lin-t'ung Hsien, in a mausoleum built by his son and successor, and that the extravagance displayed in the construction of the tomb led to rebellion and the eventual overthrow of the dynasty.

After a hot and sleepless night at Lin-t'ung Hsien we again indulged in a hot bath before starting on our next stage of 26 miles to the district city of Wei-nan Hsien. We re-entered Lin-t'ung by the south and, leaving it by



14. PAPAVER SOMNIFERUM (var. *nigrum*).

(The vertical scars are the incisions whence opium has been extracted.)



Copyright. LSec page 300. 15. MEMORIAL ARCHWAY NEAR SHUANG-LIU HSIEN, SZECHUAN.



Copyright.]

See page 175.

16. LONG STONE BRIDGE ACROSS THE PA HO, BETWEEN HSI-AN FU AND LIN-T'UNG HSIEN, SHENSI.

[To face p. 176.

the north gate, proceeded north-east, descending and passing through groves of persimmon trees. A low range of wellterraced and cultivated hills soon appeared to the east, and the road continued north-east with the evident intention of rounding it and several other ranges that drop into the south-east of the plain which, well wooded, stretches away to the north and west as far as the eye can reach. At the village of Ling-k'ou, thirteen miles from Lin-t'ung, we crossed by a one-arched stone bridge a yellow stream flowing north to join the Wei River. I had a slight disagreement with my men during the early part of the day. As the weather was now uncomfortably hot, I had impressed on my followers the necessity of an earlier start every morning; but we did not get away from Lin-t'ung till six o'clock, with the result that at half-past eight we had done only seven miles, and that, if we did not breakfast at the village of Hsin-fang, it would be necessary to wait for that meal till eleven o'clock. The escorting officer, my cook, and the provision basket, sharing one cart, hurried through Hsin-fang; but, as I had seen all my men gorging themselves with large round solid flour cakes before starting, I thought that I deserved some consideration and ordered a mounted soldier to overtake and bring back the cart. There was evident collusion between the occupants of the cart and the muleteers who, in spite of my warnings that there would be no more stopping until we had accomplished twenty miles, refused to feed their animals while I was breakfasting. There was some quiet grumbling; but I told them that, while I was quite prepared to wait till nine or even ten o'clock for breakfast, I declined to postpone that meal, such as it was, beyond the latter hour if a suitable halting-place could be found. The mules were the sufferers, for they VOL. I. N

cried loudly for food until two o'clock, when we reached the village of Liang-t'ien-p'o. Before that time, however, as we were passing between loess banks with the thermometer at 100° and the atmosphere stifling, the front mule collapsed and remained for some time on the ground before it could be resuscitated. It was then consigned to the pack carriers and replaced by the entire mule, which at once attacked and put to flight the horses of the fresh escort from Lint'ung Hsien. Men and mules fed well at Liang-t'ien-p'o, our differences were forgotten, and the muleteers burst into snatches of song during the rest of the day. Leaving Liang-t'ien-p'o the road makes a short gentle descent between loess banks to the plain in which the city of Weinan Hsien lies. As the city is approached the road takes a more easterly course and bends south-east for some distance before arrival at the west gate, which we entered after passing over a long stone bridge spanning the sandy bed of a stream flowing north to the Wei River, the latter going east to the north of the city. The whole plain from Lint'ung Hsien to Wei-nan Hsien was well cultivated, and there were fine, large fields of cotton with pale, white flowers, Setaria italica, and sesamum also in white bloom. The tall millet, maize, and lucerne were also abundant. There was less traffic on the road during the day; but I noticed two carts with more machinery for the Yao-kai copper mines. It will be observed that there is no longer mention of the poppy: the harvest was over and all trace of the crop had disappeared.

Next morning we left Wei-nan Hsien by the east gate and soon sighted the Wei River flowing east and north-east a few hundred yards to the north of the road which, following the direction of the river, rounds, sometimes between

loess banks, low, well-cultivated hills encroaching on the plain from the south. After rounding these hills, it runs parallel to but at some distance from a range of high mountains to the south. This range which runs east and west with very irregular serrated crests is the Hua Shan, one of the five sacred mountains of China. The foot slopes of the range were terraced and cultivated. At a distance of eight miles from Wei-nan Hsien, and at the entrance to the market-town of Shih-shui-chen the road crosses a small tributary of the Wei River, and during the day's stage there were several one-arched stone bridges spanning the dry beds of streams which during the rains sweep across the plain to the Wei River from the mountains to the south. In all cases the bridges were of the camel-back type, and the banks of the streams were built high above the level of the plain to prevent the latter being flooded. The city of Hua Chou, which consists of a business eastern suburb with little but cultivated fields within the city walls, is about seventeen miles from Wei-nan Hsien and is reckoned a day's stage; but, arriving there before noon, and having a good breeze tempering a heat of 96°, I suggested that we should proceed thirteen miles further to the village of Fu-shui-kai so as to be able to reach T'ung-kuan T'ing on the right bank of the Yellow River in good time on the morrow. No objection was raised, and off we started half an hour after noon. Between Wei-nan Hsien and Hua Chou the country was well wooded, the road passing between orchards of persimmon mixed with apple and plum trees. Baskets of apples, plums, and apricots were being carried to market at Wei-nan Hsien in the early morning as well as load after load of a white variety of melon called Hsiang Kua or "Fragrant Melon," which does not belie its name, for, like

my followers, I indulged in it freely and found it excellent in flavour. It was sold by weight and cost ten cash a catty. There were fields upon fields of this melon to the west of Hua Chou, and each field had its straw-thatched watchtower.

To the east of Hua Chou the country was still more densely wooded, not only with persimmon, apple and plum trees, but also with rows of tall, young poplars dotted round fields. But level ground soon gave place to lumpy, stony country stretching northward from the base of the mountain range to the south, while to the north of the road was a green mass of persimmon trees. This stony country was in turn succeeded by a plain which to the north of the road was bare, treeless and little cultivated owing to its marshy nature. In the rocky tract to the north of the road there were ponds of lotus in full bloom, and further east wild grass was thickly intermixed with reeds. But to the south of the road and to the base of the mountains cultivation was in a high state of perfection. By the time we reached Fu-shuikai, however, there was extensive cultivation and wellwooded country on both sides of the road, as well as a return to persimmon, willow, poplar and elm trees. In fact, the avenue of willows along the road was the best we had seen since leaving Hsi-an Fu and was in places as good as in Kansu. The crops on the ground were cotton, small millet (Setaria italica), sesamum, beans, tall millet, maize, melons, tobacco, castor-oil plant (Ricinus communis) in fields as well as edging other crops, and some common hemp. Where water was available there were patches of padi. The fields of cotton, small millet and sesamum were of large extent. Cart traffic was brisk : native cotton and foreign drills in the original packages were bound west, as were three more carts

with machinery for the Yao-kai copper mines. We also met three mules all but concealed by piled-up mail bags on their way to the Chinese Post Office at Hsi-an Fu. They were from the rail-head at Ho-nan Fu in the Honan province. At one place one of the many bridges had collapsed necessitating a short detour to the south, and here we came upon a cart with a broken axle. Goods and passengers were huddled together by the side of an atrocious track, while a new axle was being hewn from a log by a local carpenter. At Fu-shui-kai the official rest-house was undergoing repairs, and we spent the night in the best inn, which was a miserable shanty, and, as we found to our cost, infested by vermin.

The name of the village of Fu-shui-kai is derived from a stream, Fu-shui, which, coming from the Hua Shan Mountain to the south, flows north to the east of the village on its way to the Wei River, now about to join its waters with the Yellow River. A stone bridge spans the stream and its wide, sandy bed, and, leaving the village and its filthy inn without one particle of regret, we crossed the bridge and proceeded east and north-east parallel to the Hua Shan for ten miles as far as the district city of Hua-yin Hsien. At this point the eastern end of the Hua Shan range bends south and is succeeded by low ranges of terraced, cultivated, but unwooded hills, range following range as each descends and is merged in the south-east of the plain. Two miles east of Hua-yin Hsien we breakfasted at Huan-yin-miao, a famous shrine which pilgrims visiting the sacred Huan Shan usually make their starting-point. The story of this temple is that the Emperor Ch'ien Lung (1736-96) when making one of his journeys through his Empire slept at this spot, and during the night dreamt of a magnificent temple, which he later caused to be erected as

seen by him in his dream. From Hua-yin-miao the road continues north-east and, seven miles beyond, at the entrance to the village of Kung-chuang, we caught sight of the Yellow River coming from the north-west. Three miles more, and at the market-town of Wu-li-kou, the road turns direct east and runs parallel and near to a low range to the south. Within a mile and a half this range bends north and ends in a bluff on the right bank of the Yellow River. In the bend lies the sub-prefectural city of T'ung-kuan T'ing. All the crops of the previous stage were well represented between Fu-shui-kai and T'ung-kuan T'ing; but there was evidence in places that water was a difficulty, and here and there well-irrigation was being resorted to. The persimmon tree was still abundant, but the country was less densely wooded and the avenue of willows was altogether absent on nearing T'ung-kuan T'ing. The traffic going west, which was considerable, included foreign cotton goods, and silks and satins packed in boxes. The bridge across the Fu-shui stream was only one of several similar bridges spanning dry watercourses between Fu-shui-kai and T'ung-kuan T'ing.

The city of T'ung-kuan T'ing lies in an elbow at the foot of the bluff; but its high, brick wall, in excellent condition, encloses the north face of the hill to the south as well as the western side of another hill to the east. These enclosures are simply cultivated and terraced land. The north wall, with its two gates, has a straight face to the Yellow River flowing south-east several hundred yards below, and cultivated plots and gardens occupy the space between the wall and the sandy river bank. Across the Yellow River, some 800 yards in breadth, is the province of Shansi, and two-thirds of a mile to the east of the east gate of the city is the province of Honan, so that we had arrived

at the meeting-place of three provinces—Shensi, Honan and Shansi. Our last night in Shensi (2nd August) was spent in the official rest-house within the city of T'ung-kuan T'ing. It is a spacious building named the Wu Sheng Hsing Tai or "Rest-house for Five Provinces"—Shensi, Kansu, Szechuan, Yünnan and Kueichou—where the Literary Chancellors for these provinces used to take up their quarters on their way to the provincial capitals to hold the examinations under the old system.

Good-bye, Kansu and Shensi! I was not sorry to leave you, for many a weary day and many a restless night did I spend within your borders.

CHAPTER VII

RETURN TO PEKING THROUGH SHANSI AND CHIHLI

AT T'ung-kuan T'ing the Yellow River is the boundary of Shensi and Shansi, and on the morning of the 3rd August we left that sub-prefectural city by its Great North gate, and, descending through gardens and orchards to the ferry on its right bank, embarked our caravan on two of the twelve boats that ply between the two provinces. Each boat was armed with two long, clumsy oars, a mast with a large sail and a rudder of considerable dimensions. The pack mules with their loads and drivers occupied one boat, and the litter, ponies, escort, escorting-officer's cart with three mules and myself filled the other. A good up-river breeze was blowing, the sail in the first boat was hoisted, the second was taken in tow, and we reached the Shansi side in about half an hour. Here we were greeted by a policeman who requested my card. The same formality was observed when we entered the west gate of T'ung-kuan T'ing the previous day, when we left by the north gate in the morning and on the south bank of the river.

When we entered Shansi from the east on the 5th May it was through loess hills. As we re-entered it from the south on the 3rd August it was through the same formation, for, skirting the river for a few hundred yards eastward, the road then plunges upwards between steep loess banks, emerging after a short descent on to a plain backed

to the north by a mountain range running south-west and north-east with terraced and cultivated hills between the mountains and the plain. The mountain range, called the Chung-t'iao Shan, was no doubt connected at some remote period with the Hua Shan range to the south of the river, and the severance of the two ranges was probably due to an earthquake or some similar convulsion of nature. The first crop that met my eye on re-entering Shansi was the castor-oil plant (Ricinus communis), followed by cotton in yellow flower, the two small millets, the small green bean known as Lü Tou (Phaseolus Mungo) whose flour is used for the manufacture of vermicelli, maize, tall millet, sesamum, and water melons (Citrullus vulgaris). There was also some padi in places where water was available and ponds of lotus in white flower. On the whole, however, the crops were not so good as those in Eastern Shensi, and their inferiority was due to the presence of salt in the west of the plain where much of the land was covered with wild grass and practically unwooded. This south-west corner of Shansi is rich in salt, and there is a salt lake, some fifteen by five miles in area, to the east of the department city of Chieh (Hsiai) Chou where salt is manufactured and thence distributed in the provinces of Shansi, Shensi, and Honan. Further north the road passed through dense groves of persimmon, mulberry, plum, and willow trees, and in places here and there by the roadside and especially in villages were fine, big specimens of willow, elm, and Sophora japonica ; but the avenue of trees to which we had been so long accustomed was absent. The trunks of the persimmon trees presented a somewhat peculiar appearance. From a distance of from two to six feet from the ground the bark was of a much darker colour than the bark above,

and the stem was frequently of smaller girth. The bark of the persimmon is marked not unlike the scaly skin of the crocodile, and there appeared to be little difference in marking between the darker and lighter coloured bark; but there was a distinct dividing line round the stem resembling a healed cut. These persimmon trees were said to be grafted on to Hei-ts'ao-shu (lit. "Black Date Trees") and the difference in colour is doubtless due to grafting. They looked as if the bark of the lower parts of the stems had been pared or planed. The mulberry is, of course, used for feeding silkworms during the season, and the cocoons, mostly yellow, find a market at T'ung-kuan T'ing, where I noticed yellow silk being wound in street-shops as we passed along the streets.

On leaving the Yellow River the road goes north-west, and at the village of San-chia-tien, fourteen miles from T'ung-kuan T'ing, we had rounded the terraced hills and come into full view of the northern slopes of the Chung-t'iao Shan. We then struck north, north-east and again north before entering the south gate of the city of P'u-chou Fu with its district city of Yung-chi Hsien. At a distance the city, which lies to the north of a large, marshy plain with nothing to interrupt the view, looks imposing; but a nearer acquaintance revealed a mud wall with a brick facing tumbling to pieces. A great part of the land within the walls was given up to cultivation, and cotton and small millet were prominent amid the ruins of what had been excellent brick buildings. I had sent one of my escort ahead to have the rest-house swept and garnished; but on arrival I found that there were two rest-houses, one in the city and the other nearly a couple of miles to the east. As there was no sign of my messenger I took it for granted

that he had proceeded to the latter and, after a few minutes' delay, off we started for the village of P'o-ti, which is marked by a fine thirteen-storeyed pagoda and contains the country rest-house. My groom had ridden ahead and when we arrived we found him and the caretaker both sweeping away the dust of ages. There was no messenger. He, it subsequently transpired, had gone to the magistrate, who was pursuing that policy of masterly inactivity so characteristic of Chinese officialdom. The rest-house, when swept and garnished, was quite habitable, and it is a pity that these official buildings should be allowed to fall into decay. Only a small expenditure would be necessary for their upkeep, yet all that apparently is done is to pay at each place a caretaker a monthly wage equivalent to about four shillings and nothing for repairs. At least, that was the statement made to me by the caretaker at P'o-ti.

The muleteers were stripped to the waist during the day, for the mercury touched 100° Fahr. in the shade, and there was much drinking of *mi-tang*, a decoction of water and small millet, and wholesale gorging of fragrant and water melons exposed on roadside stalls for the refreshment of thirsty wayfarers.

The next stage of 23 miles from P'o-ti to the district city of Lin-chin Hsien was somewhat monotonous. The road at once plunged east between steep loess banks, and after a slight ascent north and north-east landed us on a slightly undulating plain over which it continued its course north by east with many a turn to north and east, as it ran along the surface or between bare or weedcovered banks. The waves of the plain limited the view to north and west, and it was only when Lin-chin was

neared, that a bank of low hills running east and west to the north of the city came into view. The soil was exceedingly dry and seemed to be entirely dependent on rainfall, for the wavy formation of the plain prohibits anything in the nature of a stream. There were, however, the usual crops which, with the exception of fields of lucerne which were numerous, evidently lacked moisture, and in this connection I may mention that at the town of Ho-lochen, ten miles from P'o-ti, I was successful in procuring a further supply of lucerne seed. It was market-day at the town, and horses, cattle and farm produce were on sale. Amongst the produce I noticed a farmer with a large basket of the seed exposed on a street stall. I bought the lot amounting to 40 catties $(53\frac{1}{3}$ lb.) for 50 cash (about $1\frac{1}{4}d$.) a catty, and, to show that he was not a loser by the transaction, when asked to count the strings of cash I tendered in payment, he declined to do so, remarking that he was quite satisfied that they were correct-a somewhat unusual Chinese proceeding. I may state here that I had great difficulty in keeping this and former supplies of the seed from sprouting : the sacks containing it occasionally got wet from the rain, and the seed had to be spread out every night on trays while they were being dried. Fortunately, only a very thin layer of the seed next to the wet sack sprouted and it was discarded.

The country between P'o-ti and Lin-chin Hsien was not well wooded. The most prominent tree, frequently appearing in groups, was the persimmon with its darkgreen, glossy leaves and green fruit about the size of a small apple. The elm was fairly common and sometimes of large size; the willow was less abundant; and I did not see a single poplar. The *Sophora japonica* sheltered villages and ruined temples, while the cypress did not confine itself to graves. Our local escort guided us by short cuts across fields to Lin-chin Hsien, and on arrival in the eastern suburb I discovered that there was no rest-house inside the city, that it was on the main road in the village of Fan-chia-chan, five miles to the south-east, and that it had been prepared for Having arrived at the city, however, and helped by me. the authorities we looked about for night quarters; but I could not face either of the two available inns. The best room was about six feet square, dirty and smoke-begrimed, with two raised brick bedsteads placed at right angles to each other and occupying nearly the whole of the floor space as the only furniture. Even the muleteers, although they were anxious to unload their tired animals, agreed with me that the accommodation was impossible, and off we started for Fan-chia-chan, where we were rewarded by a good resthouse, which would have been still more presentable had it not been overgrown with weeds.

The next stage of 23 miles from Fan-chia-chan to the village of Pei-hsiang might be described as in many respects similar to the stage from P'o-ti to Lin-chin Hsien. The road lies over a north-eastern continuation of the same wavy plain; but the country was well wooded, densely so in places, and there was a considerable difference as regards crops and timber. Cotton and sesamum, and there was little of either, were thin and poor; the castor-oil plant was absent; Abuliton hemp and tall millet, the latter in full ear and turning in colour, were in inconsiderable quantity; but maize, the smaller millet (*Setaria italica*), beans of various kinds, and lucerne were much more abundant. Lucerne, which occupied large fields, was being cut, bound into sheaves, and carted to the farmhouses. Melons, both

fragrant and water, were being cultivated in considerable quantity. The persimmon, such a conspicuous tree the previous day, was no longer to be seen, and its place during the latter half of the stage was taken by the date or jujube (Zizyphus vulgaris) of which there were dense plantations during the six miles from the village of Li-han-chen to Peihsiang. There were few willows ; but the elm was specially abundant, frequently lining the road, whose banks on either side were in many places a perfect jungle of young elms and wild jujubes, and the cypress and poplar, the latter with excellent specimens, were by no means uncommon. Country houses and villages, the latter generally surrounded by high walls with strong, iron-bound wooden gates, superior to many city gates, were scattered about the plain, and even house and inn doors within the villages had heavily built doors and gates studded with large iron bolts. These must have been built in less peaceful times.

The village of Pei-hsiang ("North Village"), which has a very respectable rest-house, is misnamed Paisiang in the "Atlas of the Chinese Empire" (Ed. 1908), specially prepared by Mr. Edward Stanford for the China Inland Mission. The mistake is in the first syllable, and the substitution of an a for an e may be simply an engraver's error, for the omission of h in the second syllable is immaterial, as the Chinese character for village is by many romanised *siang* instead of *hsiang*. This Atlas, which was my constant companion, while it contains much excellent work, has many blemishes, some of which I may be permitted to point out. Each province in China is divided into prefectures, subprefectures, departments, and districts, each of which contains a city bearing the name of the prefecture, sub-prefecture, department, or district as the case may be, and forming the

headquarters of the authority ruling over it. A prefecture is named Fu, a sub-prefecture T'ing, a department Chou, and a district Hsien, and in the Atlas, as in previous maps of China, certain symbols are employed to designate the ranks or orders of these cities. A prefectural city is marked by a square (\Box), a sub-prefectural city by a diamond ($\langle \rangle$), a department city by an oblong (\square) , and a district city by a circle (\bigcirc) . In the Atlas these respective symbols are coloured red. Uncoloured circles indicate villages or market towns, not cities ; but, unfortunately, the colouring is sometimes omitted from circles marking district cities, and there is nothing in the names attached to them to indicate that they are more than villages or market-towns. The district cities of Wei-nan Hsien and Hua-yin Hsien in Shensi, through which I passed on the 31st July and 2nd August respectively, are cases in point. Moreover, in each map of the Atlas, cities with the correct symbols denoting their rank have in addition tagged to their names the words Fu, T'ing, Chou, or Hsien, already denoted by the symbols, or they are altogether omitted. There is no uniformity : either the symbols should suffice, or each city should have its name and rank Fu, T'ing, Chou or Hsien set out in full or as described hereafter. Again, each prefectural city is situated in a district with, as a rule, a name different from that of the prefecture, and the district city is part and parcel of the prefectural city but with a different name. Indeed, some prefectural cities, such, for example, as Ch'engtu, the capital of Szechuan, and Hsi-an Fu, the capital of Shensi, are situated in two districts, and each practically consists of three cities. There is Ch'eng-tu Fu, the prefectural city with its two district cities of Ch'eng-tu Hsien and Hua-yang Hsien, all three within the same city wall, and there is Hsi-an Fu with its two

district cities of Ch'ang-an Hsien and Hsien-ning Hsien. Such district cities are as independent district cities as those at a distance from the prefectural cities, and should find a place in any authoritative map of China. In this Atlas, as, indeed, in foreign maps of China generally, they find no place. Another blemish in the Atlas is the insertion, after the name of a city in a map of a province, of a contracted form of that province. Surely, if the name of a city is found in a provincial map nothing more is required on that subject to indicate that it belongs to that province, even if there are other cities of the same name in other provinces. For example, the district city of An-ting Hsien in Kansu, where I was rain-bound on the 12th July, is correctly marked An-ting, with its proper coloured circle; but the name An-ting is followed by the word Kan, a contraction for Kansu. There is, however, another district and city of the same name in the province of Shensi, and in the Atlas map of that province it is correctly named "Anting," with its proper symbol, and without the contraction She to indicate that it belongs to the province of Shensi. In the index to the Atlas these two cities appear as follows :---"Anting, Shensi," and "Anting Kan, Kansu." The latter is a manifest absurdity, implying as it does that the name of the city is "Anting Kan," not "An-ting." The "Kan," whether in the map or index, is superfluous and misleading. Indeed, with the correct symbol nothing further is needed beyond the name of the city; but, if rank and symbol are both desiderated, the rank should be inserted in every case, and not omitted as it frequently is in the Atlas. An authoritative map of China requires cities to be marked by their correct symbols, and names followed, if need be, by the words (Fu, T'ing, Chou or Hsien) indicating their ranks

or, shorter still, by the abbreviations F. T. C. or H. to denote these ranks. And, as many sub-prefectures (T'ing) and departments (*Chou*) are independent of prefectures their names should be followed by letters to indicate their independence. An independent sub-prefecture and an independent department are respectively called *Chih-li T'ing* and *Chih-li Chou*, so that the name of the former might with convenience be followed by the abbreviation C.L.T., and the name of the latter by the letters C.L.C. or, shorter still, by the abbreviations I.T. and I.C., that is, Independent sub-prefecture or sub-prefectural city and Independent department or department city.

When we left Pei-hsiang at five-thirtyo'clock on the morning of the 6th August the thermometer stood at 84° Fahr., and rose to a maximum of 100° during the day. For a time the road runs north-east between loess banks passing through a continuation of the jujube groves of the previous day; but, after emerging on the plain, it skirts at a distance to the south-east a range of hills well wooded, terraced, and cultivated as far as the district of Wen-hsi Hsien, 30 miles from Pei-hsiang, and the end of the day's stage. About sixteen miles from Pei-hsiang, the road crosses, over a threearched stone bridge, the Tung-shui River flowing west to the Yellow River. The bed of the river was overgrown with weeds and there was a mere trickle of water flowing through one of the smaller arches. Behind the range of hills to the south-east there is a range of mountains running parallel to it and in the distance, to the north-west, another range of hills was apparently bent on cutting off the plain to the north. The crops on the plain, which was very dry, and too evidently suffering from drought, were varied and consisted of the three millets, maize, tobacco, cotton, sesamum, hemp, Abutilon hemp, sweet potatoes, capsicum VOL. I. 0

castor-oil, water and fragrant melons, and lucerne. Tobacco, Abutilon, and castor-oil were the greatest sufferers from the lack of rain, their leaves and stems drooping in a very limp and exhausted fashion. Lucerne was the only crop that showed no signs of the general depression. The country was thickly wooded, the elm frequently lining the road with here and there remarkably fine specimens of the tree. The poplar was less abundant than the willow and cypress, while the villages clung to large specimens of *Sophora*, *Broussonetia* and *Sterculia platanifolia*.

The water-melon was particularly abundant, and at the market-town of Kuo-tien-chen, six miles from Wen-hsi Hsien, I treated my men, who were tired and thirsty, to a melon feast. Here there were three varieties—the white, the yellow, and the pink. The white—that of which the skin, flesh, and seeds were all white—is known as the *san pai* ("three whites"), and is reckoned the best. They averaged nearly 20 lb. in weight, and cost 100 cash, or $2\frac{1}{2}d$, apiece. As the day was very hot, we steeped them in jars of cool water some minutes before the feast began.

The approach to the city of Wen-hsi Hsien is marked by some fine, stone roadside monuments and memorials; but they are sharing the fate of so many beautiful specimens of Chinese architectural art in the province—neglect, decay, and ruin. The rest-house at Wen-hsi Hsien was uninhabitable, and we spent the night in an inn in the eastern suburb, where my men were soon happy gorging more melons and concoctions of flour—the usual diet of the people of Shansi, Shensi, and Kansu. The number of solid flour cakes (Mo-mo) a man can put away, in addition to his meals, is simply marvellous. He eats well, he sleeps well,

any time, anywhere, and in any position ; he has no nerves, in the European sense of the word, and he is sober. These traits may be said to pertain to the whole Chinese race, and their combination accounts in great measure for the peaceful condition of the country. In the small room which I occupied at Wen-hsi Hsien the heat was intense, and there was no sleep. The inn was small, and the mules, also suffering from the heat, made the night hideous by their howling. And just as we were settling down for the night loud shouts told me that something was amiss. They were shouts of pain, and they emanated from my groom, who had been stung by a scorpion which had emerged from the matting on which he had thrown himself down to sleep. Then began a scorpion hunt, and it was some little time before the offender was caught and despatched. There is a saying that the scorpion is not found across the Yellow River (i.e. in Shansi); but it may, like many another Chinese saying, lack foundation in fact.

On leaving Wen-hsi Hsien we struck the right bank of the Tung-shui River flowing south; but as that river soon flows from the east, we left its willow- and poplar-clad banks, and proceeded north-east towards hills that had every appearance of barring our way in that direction. The hills to the south-east of the plain turn east, spurs drop into the plain from the north-west, and the road rounds the latter, sometimes passing between deep loess banks. Irrigation was now carried out from wells fitted with hand windlasses, or with horizontal cog-wheels working into vertical wheels with endless rope and wooden buckets attached, the latter pouring their contents into troughs fixed below the vertical wheels, and connected by wooden pipes with drainage channels. The road works its way through

the hills forming the western end of the barrier range, frequently skirting deep crevasses as far as the village of I-k'ou, twenty miles from Wen-hsi Hsien, whence it descends to a slightly broken and wavy plain, over which it runs for seven miles to the market-town of Hou-ma or Hou-ma-chen, the end of the day's stage of 26 miles. Hou-ma, which consists of one stone-paved street of houses running up a hill-slope from the right bank of a stream known as the Hui-shui Ho, flowing west to join the Fen Ho, is approached over a long, stone bridge of seven arches, spanning the stream whose waters at the moment found one arch sufficient for their needs. The bridge has seen palmier days : parts of the stone balustrade had fallen into the bed of the stream, and many of the carved stone animals on the upright pillars of what remained of the balustrade were sadly disfigured. The town, small as it is, is famous all over the province of Shansi for the manufacture of sheep's wool mats, just as the city of Yü-lin Fu, in the north of the province of Shensi, is noted for the same manufacture. The latter, however, produces a better and more expensive quality. These mats are used as sleeping rugs, and one of the best quality, measuring 6 ft. 9 ins. by 4 ft. 4 ins., costs the equivalent of five shillings. Inferior and cheaper makes are also to be had. We were caught in a rain storm on the way down to the wavy plain in which Hou-ma lies, and in a few minutes the temperature fell from 102° Fahr., at which the mercury stood at two o'clock in the afternoon, to 88°. The principal crop observed during the day was tall millet, followed in the order of their importance by maize, cotton, beans, sesamum, the two small millets, tobacco, lucerne, melons, the castor-oil plant with brown and green stems, and Abutilon hemp. The

country was fairly wooded : the principal tree was the elm, followed by the willow and poplar, while the *Sophora japonica* confined itself to villages, towns, and wayside temples usually in ruins. There was little traffic on the road, and it was of a purely agricultural and local nature, including one flock of goats and sheep bound south.

From Hou-ma the road goes north by north-east over a plain which was fairly wooded and well-cultivated; but agricultural conditions had changed. Cotton and sesamum predominated, and there was probably more of the former than the latter: but the cotton-bushes were short and had comparatively few yellow blossoms. Tobacco was next in importance, then the three millets all in ear, lucerne, some patches of the castor-oil plant and fields of melons, especially the water-melon. The approach to the market-town of Kao-hsien-chen, ten miles from Hou-ma, was studded with the Sophora, fine, old trees dotting the roadside, and in the town itself and six miles to the north of it, the tree was very conspicuous. They were old trees : many of them were mere shells, the interior having rotted away and fallen out not far from the ground, allowing daylight to pass through them. To the north of Kao-hsien-chen, the road enters between steep loess banks, entirely shutting out the plain, and emerges, after many ascents and descents, at the hamlet of Yen-tien, twenty miles from Hou-ma, where we discovered that by taking a more northerly course we had turned the western flank of a range running east and west, and passed through broken hills lying to the south and west of it. A gradual descent of five miles from Yen-tien, the road here and there skirting deep chasms, brought us to the market-town of Shih-ts'un, where we spent the night in a fairly decent rest-house. A

few miles to the west of Shih-ts'un, a range of hills running north and south marks the course of the Fen Ho, going south to join the Yellow River. For some days there had been little traffic on the road ; but between Hou-ma and Shih-ts'un we met five large carts laden with foreign cotton goods on their way south from T'ai-ku Hsien, an important commercial district city, about 35 miles south of T'ai-yüan Fu, the provincial capital. The goods had reached the latter by rail, T'ai-ku Hsien by road, and were now on their way to the province of Shensi. Speaking of T'ai-ku Hsien recalls the fact that Shansi is the cradle of Chinese bankers, and sends out her sons into all the provinces in that capacity. When they have amassed wealth, they return to their native province and settle down in certain centres of which the city of T'ai-ku Hsien is one of the most important. What strikes the traveller in Shansi is the evidence of a former prosperity altogether at variance with present conditions. This is attributable to the great famine which ravaged the province in the Seventies, when homes and lands changed hands, and a new and probably less energetic race took possession. It may be that insufficient time has elapsed to allow of recuperation, for the prosperity, such as it was, must have been due to agriculture, and there has certainly been no improvement in communications and methods of transport, except the short railway to T'ai-yüan Fu, which is of recent construction, and which is now opening up new fields of industry and enterprise. Shansi, however, is not considered a poor province in the sense that Shensi and Kansu are classed as poor and receive annual subsidies from other provinces. In my opinion, neither of these provinces is poor: what each lacks is speedier transit and a market for its products.

My groom's adventure with the scorpion at Wen-hsi Hsien made him rather chary as to his future bed-fellows. Soon after our arrival at the rest-house at Shih-ts'un I heard the noise of vigorous sweeping and shaking of mats, and a few minutes afterwards the groom brought for my inspection a live scorpion which he had captured, and which he held between the ends of a pair of chopsticks. But there is something less bearable than the sting of a scorpion : during the night, I awoke dripping with perspiration and suffering from an attack of intercostal rheumatism. The pain was excruciating; but I resolved to proceed. In this I was foolish, for pain compelled me to give in at the village of Chao-ch'ü-chen, only six miles from Shih-ts'un, where I went to bed in a miserable inn. Next day it rained heavily, and travelling was impossible. From Shih-ts'un the road runs north to Chao-ch'ü-chen, along a loess bank overlooking to the west the Fen River winding about the valley on its way south. The principal crop was tall millet, and there was also the small millet (Setaria italica); cotton and sesamum were little represented, while there were several patches of Abutilon and common hemp.

From Chao-ch'ü-chen the road goes north over and frequently between loess banks under a plain of broken formation for a distance of fourteen miles as far as the prefectural city of P'ing-yang Fu, with its district city of Lin-fen Hsien, which was concealed by the broken nature of the country until we were close upon it. The crops were the same, and the elm—small trees—was very abundant. The *Sophora*, too, was represented by fine specimens along the road. Twelve big carts with foreign cotton-goods were bound south from T'ai-ku Hsien. The city

of P'ing-yang Fu, which is surrounded by an excellent wall, is one of the oldest cities in China, and the tradition is that it was the residence of the Emperor Yao (B.C. 2357-2255). At P'ing-yang Fu I had hoped to obtain medical aid; but I found the Mission-house deserted. I was told that the doctor had gone on furlough, and that the other missionaries had sought refuge elsewhere from the heat. I was unfortunate; but I did not blame these men for escaping from the summer climate of Shansi, which has a most deleterious effect on even the strongest. To the west of the city of P'ing-yang Fu the plain is covered with a fine alluvial soil, deposited by the waters of the Fen Ho, which is divided up into a network of channels for purposes of irrigation.

I was still ill on the morning of the 12th August; but I had made up my mind the previous night that, well or ill, I must go on for the purpose of obtaining medical assistance, or failing that, of regaining civilisation, with the least possible delay. The road from P'ing-yang Fu to Hung-tung Hsien, a distance of twenty miles, goes north by north-east over the same broken country, which was exceedingly well cultivated with the usual crops, and, in addition, sweet potatoes and ground-nuts (Arachis hypogoea). Wellirrigation was being carried out on an extensive scale, and I noticed as many as four men drawing water from one well at the same time. A wooden stand was erected over the mouth of the well, and each man had his own windlass and rope fitted into the stand and acted independently of the others. The jujube, Sophora and elm were common trees during the day's stage. We crossed two small tributaries of the Fen River, one called the Kao Ho, three miles north of P'ing-yang Fu, and the second, the Tung Ho, outside

the south gate of Hung-tung Hsien. Both were spanned by stone bridges sadly decayed. We took up our quarters in the official rest-house outside the north gate of the city where we were unfortunately tempted by excellent peaches, which resulted in several of us being attacked by violent diarrhœa which laid us low for five days, and, when we were sufficiently recovered to make a start on the 18th August, rain fell in torrents and delayed our departure till the following day. It was still raining at five o'clock in the morning and the head muleteer came to ask me whether I intended to start. I replied in the affirmative, saying that, rain or no rain, I was determined to proceed. That settled the matter for the moment ; but I noticed that load-packing was done very leisurely and that my henchman in my difficulties, the escorting officer, did not back me up as usual. On leaving Hung-tung Hsien the road skirts for some time the edge of one of those loess steps that lead from hills behind down into the valley to the west. The Fen River, a shallow, brown stream less than a hundred yards in breadth, with a much wider sand and pebble bed, winds southwards down the valley. A white mist hung around us, the rain increased, and the soft loess mud made the going far from easy. The muleteers were soon wet through and splashed from head to foot with mud. Soon a spur from the east dropped westward into the valley, and after crossing by a stone bridge a small tributary of the Fen Ho we ascended the spur by a good stone road and, passing through the village of Chi-li-chen-p'o on the summit, continued north over uplands with twists and twines to east and west to Chao-ch'eng Hsien, at whose south gate we were met by a torrent of water rushing out of the city. I had observed my escorting officer and groom forging ahead earlier in the

day, and when I arrived at the rest-house I found every preparation being made for passing the night there. As we had done only ten of the thirty miles which constituted the day's stage, I explained that all these preparations were unnecessary as I intended to proceed after breakfast. This was to nobody's liking, and various reasons for remaining at Chao-ch'eng Hsien were adduced. They said that they were concerned about my health and that I needed rest; but, when this argument failed, the muleteer who had attended to the litter during the morning said that he was suffering from a sore foot and would be unable to walk the rest of the stage. But I was obdurate, knowing that I was being kept in the dark as to the true reason. The rain was still pouring, and I lay down for a short rest before starting. As, however, there was no sign of stirring, I became impatient, and, overhearing a somewhat heated argument between the escorting officer and the head muleteer, demanded an explanation of the delay. I was at once told that the mules were having an extra feed to enable them to accomplish the remainder of the day's journey and that they would be ready as soon as possible. I doubt whether the extra feed was given; but I was sure that an arrangement to spend the night in the city had been earlier made by the escort and muleteers.

Off we started, however, after two hours' delay, and, with the exception of the escorting officer and his cart, arrived at the department city of Ho Chou at six o'clock in the evening. Soon after leaving Chao-ch'eng Hsien we struck the left bank of the Fen River; but as another spur drops into the valley the road enters and runs northwards for miles between precipitous cliffs frequently over 60 feet in height, ultimately emerging on and skirting the conglomerate and boulder bank of the river with a magnificent well-wooded valley. I thought our work was now nearly over for the day and that the city of Ho Chou would be found at the foot of a cross range ahead; but, after skirting the eastern side of the valley, we struck north into the range, ascending and descending by steep gradients between high precipitous loess banks usually bare but in places held together by the merest semblance of binding vegetation. Before entering the south gate of Ho Chou we crossed by a stone bridge a tributary of the Fen River, and there were several smaller tributaries between Hung-tung Hsien and Ho Chou. There were also many irrigation channels, most of which were utilised for driving mill wheels. Ho Chou has two official rest-houses; both were occupied on our arrival and we had to take up our quarters in an inn where night was rendered hideous by those restless demons of the dark hours-bugs of all sizes and so vicious and voracious that I spent half the night in shedding blood and the other half in a chair with my pipe. The crops in the Fen River valley were excellent and included maize, tall millet, small millet (Setaria italica), castor-oil, padi, beans, sesamum, melons, capsicum, ground-nuts, and cotton. The jujube and more especially the persimmon were prominent, the latter in groves in valley and on uplands, and the willow, poplar, and elm were also abundant.

Rain was still falling heavily on the morning of the 20th August, and my escorting officer did not turn up until nine o'clock. In taking the steep incline that leads to the final descent to Ho Chou his cart was upset, its contents were scattered all over the road with its ankle-deep mud, harness was smashed, no assistance could be obtained in the darkness, and he and the carter had to stand by the wreck

until daylight. They presented a sorry sight when they entered the courtyard of the inn: the official's shoes had been sucked off his feet by the deep loess mud and had been replaced by straw sandals scarcely recognisable as such owing to mud, and the carter was the picture of misery. Their appearance elicited more merriment than sympathy from the muleteers who had been through the rain and mud the day before. No great damage, however, was done; but the incessant rain and the necessity of drying the contents of the cart which included the lucerne seed compelled us to remain at Ho Chou during the day. Fortunately, one of the rest-houses was vacated that morning by an officer proceeding to Tibet, and I was invited by the department magistrate to take possession.

The distance from Hung-tung Hsien to Ho Chou is 30 miles, and as the next stage to the north is about three miles longer, with the weather uncertain, I gave orders for an earlier start on the morning of the 21st August, and we were off before five o'clock. As it happened this haste was unnecessary, for, in spite of the rains, the loess mud was more sticky than slippery, and the stone part of the road, which was more considerable than usual, was dry and as good going as if no rain had fallen. On leaving the north gate of Ho Chou we passed over a stone bridge spanning an almost dry bed. This and the stone bridge outside the south gate are still fine monuments of a past and more glorious era; but present decay, due to the utter neglect of what is worthy of the most careful preservation, is fast dooming them to an inglorious future. These remarks apply, with few exceptions, to the numerous stone monuments of the whole province and, although many have every appearance of having been wantonly

disfigured and overthrown, there are many others whose foundations have given and are even now giving way. How far the instability of the loess, which appears to be continually on the move, is accountable for this I cannot say; but, to my mind, there is every indication that in the course of years, it may be centuries, the whole face of the provinces of Shansi, Shensi and Kansu must undergo great change and become less mountainous than it is to-day.

Over the bridge we proceeded northwards up the eastern side of the Fen River valley, and at a distance of three miles entered a range of high, almost bare, hills which we ascended to the summit where lies the village of Shihchuang, ten miles from Ho Chou. On the way up, the road frequently skirts deep chasms, and at other times clings to high precipitous bare cliffs where we must have looked like flies walking along a wall-an ideal place for landslips. From the summit we descended still in a northerly direction, and the sun, bursting through overhanging white clouds, revealed an excellent panorama of valleys and mountain ranges to the east. One deep valley lay immediately below us; but the road, instead of dropping into it, continued to wind about the sides of terraced, rounded hills as if to avoid the final drop, which came at last when it dived down northwards to the Jen-i valley with a muddy yellow stream, called the Jen-i Ho, flowing west to the Fen River. A few hundred yards to the north of the stream is the market-town of Jen-i-chen, twenty miles from Ho Chou, lying on the southern slope of the Jen-i Shan. The road, after passing through the town, ascends between banks of sandstone, conglomerate and, on the summit, loess, and reaches its highest point at a pass called the Han-hou-ling, 4000 feet above the level of the sea. Nearing the summit

we had a magnificent view of a sea of mountains to the north, while to the east and south-east rose the peaked range of the Ho Shan Mountains, blue-tinted and culminating in a cone, 7860 feet above the sea. From the Han-hou-ling it took us an hour to descend by a very steep gradient to a narrow stony valley running east and west. The bed of the valley was dry, and, crossing it, we held northwards into an opening between lower hills soon striking the left bank of the Fen River, where the latter, flowing south, makes a bend to the west. Here the river was some 50 yards in breadth; but the road kept to the eastern side of the valley, and soon entered the earth-walled district city of Ling-shih Hsien embowered among trees and occupying a lovely position giving promise of a good and comfortable rest-house. It was a sad disappointment to find there was no rest-house and to be relegated to a second-rate inn, where my followers were soon demanding doors for their rooms. The city is a poor one. With a river at its door one expected to be able to buy fish; but I was told that nobody caught fish for the simple reason that nobody was rich enough to buy such a luxury. However, the narrow valley in which the city lies was rich in crops of maize, millet, beans and melons, and it was much better wooded with willows and poplars than the mountainous and broken country to the south.

The commercial and the filthiest quarter of Ling-shih Hsien is its northern suburb, which consists of a long street of inns and shops. The road was covered with black slush emitting the most disgusting and penetrating malodour I had ever experienced in a land of evil smells, and I make no apology for saying that I was violently sick. A few hundred yards to the north of the suburb a couple of men were busy with spades repairing, as I at first thought, the roadway. The repairing of roads in China is such an unwonted event that my attention was particularly drawn to them; but, on approaching the scene of their labours, I found that they were removing to the roadside the black filth-saturated mud from the surface, and replacing it with chopped straw which, after due saturation, would be similarly removed for manure. In other words, the road was being used as a manure pit and cesspool. Truly it was a case of "where every prospect pleases and only man is vile" in the otherwise beautiful valley of the Fen River. Soon after leaving the northern suburb we again struck the left bank of the river winding south in a valley which narrows and widens, sometimes leaving only sufficient room for the river bed and at others admitting of cultivation and irrigation trenches leading water from the river to the fields. The lower slopes of the bounding hills were also tilled, and there were many villages, stone-built, creeping up the hill-sides from the river's banks. They were especially numerous on the right bank, and the irrigation trenches were used as millraces for driving water-wheels.

Eight miles north of Ling-shih Hsien excellent bituminous lump coal was being carried out on pack animals from a short gully giving access to low hills to the east. Two miles beyond, at the market-town of Liang-tu-chen, the price of this coal was a cash and a half a catty $(I_3^1 lb.)$ which works out at about 3s. 4d. a ton. A few hundred yards south of Liang-tu-chen, the Fen River is spanned by a large stone bridge of nine arches; but we passed it by and continued our way north through the market-town to the end of the valley which is marked by a nine-storeyed pagoda perched on the summit of the northern end of a

range of hills, rising from the right bank of the river. Issuing from the valley, we entered on a plain and struck east over gravelly ground in the direction of a range of mountains to the east. On the way we passed through an immense graveyard littered with stone monuments, some of them suffering from natural decay, but the great majority too evidently wantonly thrown down and ruthlessly destroyed. I hurried my caravan during the day with the result that we arrived at the official rest-house outside the walls of the district city of Chieh-hsiu Hsien, 26 miles from Ling-shih Hsien, early in the afternoon. We were now within twenty miles of Fen-chou Fu to the north-west, where I had left my servant with his leg broken on the 12th May. It was now the 22nd August, and I had not had any definite news of his condition. At Lan-chou I had received a letter from him stating that, as the doctor at Fen-chou Fu had gone to the seaside for the summer months, and that as his leg was not making satisfactory progress, it had been decided to send him to T'ai-ku Hsien, some 50 miles off, where there was another doctor belonging to the same mission. A subsequent letter said, that after his arrival at T'ai-ku Hsien by litter, the doctor was called to Fen-chou Fu to attend an urgent case, and my servant was carried back again. Since then, I had heard nothing, and, as I had made up my mind to continue my journey along the highroad to T'ai-yüan Fu, and not return to Fenchou Fu, it was incumbent on me to ascertain his condition and, if possible, take him back with me to Peking. Accordingly, on arrival at Chieh-hsiu Hsien, I instructed my escorting-officer to proceed to Fen-chou Fu, and bring in my servant if he was at all able to travel, using such method of conveyance as circumstances required. He started an

hour later on horseback and arrived at Fen-chou Fu at seven o'clock. He found that the T'ai-ku Hsien doctor was away in the hills, eight miles from Fen-chou Fu, and that my servant, although his leg was healed up outwardly, was unable to walk or even put his foot to the ground. He was told, however, by the resident missionary that the patient could be moved, and, hiring a cart and travelling over night, he and my servant reached Chieh-hsiu Hsien at nine o'clock on the morning of the 23rd August. I found that the bones of the leg were very imperfectly united and that my poor servant was still altogether helpless.

I gave the overnight travellers an hour's rest, and off we started on the next stage of 26 miles north by east, over a somewhat monotonous undulating plain, which was well wooded for a distance of fifteen miles and contained good crops of millet, beans, castor-oil, tobacco and sesamum. For the remaining eleven miles, however, tall millet was scant in ear, and very short in straw, the two smaller millets were shooting nine inches above ground, and bean stalks and leaves were quite withered. The country was suffering from drought. P'ing-yao Hsien, which is one of the three richest district cities in Shansi, the others being Ch'i Hsien and T'ai-ku Hsien, was the terminus of the day's stage. In passing through the city, entering by the south and leaving next morning by the north gate, I noticed many large shops, and the people looked prosperous. Outside the north gate, there is a fine carved stone bridge of nine arches spanning what was at the time almost a dry watercourse. We started from P'ing-yao Hsien with the intention of accomplishing a stage of 37 miles as far as the district city of Hsü-kou Hsien, and thus leaving a VOL. I. р

209

short stage of 26 miles to T'ai-yüan Fu for the morrow; but the fates proved adverse. Thunder had been muttering all morning and a deluge descended just as we reached the suburbs of Ch'i Hsien. In a few minutes the streets through which we passed became rushing torrents and we had to take refuge in the gateway of an inn on the way to the official rest-house. From P'ing-yao Hsien our course lay north by east over a sparsely wooded plain, with ranges of hills to the north and east in sight. The crops were parched and, although rain had fallen in places, it had come too late in most places to revive the withered stems. Wells, which depend on the rainfall for their supplies, were deserted and all attempts at irrigation had been abandoned. As a sign that distress was pressing, beggars, young as well as old, were unusually numerous along the road. Here for the first time I came across field after field of that graceful feathery ellipsoidal shrub called sao-chu whose beauty it is desecration to convert into the humble sweeping broom.

Rain kept us prisoners at Ch'i Hsien, and I held a council to consider the feasibility of making T'ai-yüan Fu, 47 miles from Ch'i Hsien, the next day, as by this time I was weak with illness. It was agreed to make the attempt and to effect a start at 2 a.m. At that hour the moon was shining brightly and we were off. Our first check was the fording of the Sha Ho, a tributary of the Fen River about two miles north of Ch'i Hsien. It was in flood : the mules refused to face it and had ultimately to be led across. North of the Sha Ho the roads were fair going, and we reached the city of Hsü-kou Hsien at eight o'clock. Here we had to wait two hours for the carts, and, as it was evident that they could not possibly make T'ai-yüan Fu that night, I resolved to forge ahead with the mules and

ponies. We had no sooner left Hsü-kou Hsien, however, than we found the whole country in flood : villages were cut off, and the roads for miles were three to four feet deep in running water. Several times the muleteers protested that the road was impassable, and it certainly looked it; but I had suffered so much for days that I was determined to reach T'ai-yüan Fu that night, and I sent a mounted messenger from Hsü-kou Hsien to request the authorities to be good enough to leave the south gate of the city open against my arrival. I sent my groom with one of the ponies to feel and lead the way. The latter was frequently submerged up to the girths; but the mules followed, and after many miles of plunging and stumbling we reached dry land. Had it not been for a good avenue of willows it would have been impossible to find the road, for in many places only the heads of the tall millet showed above water, and much of the country was a series of lakes, especially at the village of Shih-kou-ts'un, fifteen miles south of T'ai-yüan Fu, where a stream called the Hsiao Ho had overflowed its banks. At Tung-pao-ts'un, still ten miles from the provincial capital, we fed our animals at five o'clock, and then plodded on through twilight and darkness till we reached the south gate of T'ai-yüan Fu at eight o'clock. But we were delayed for half an hour outside while the gate-keepers who had, in accordance with my request, been instructed to open the gate immediately on my arrival, kept shouting out that one of their number had carried off the keys. At last they were found, and the creaking of the unwieldy gates as they opened to admit us was music to my ears, for I knew that in half an hour more I should be with friends whose home I had left on the 10th May, and who now persuaded me to remain some days to recuperate before returning to Peking. The carts did not

turn up till nine o'clock next morning, having had to wait until the floods had somewhat subsided. I now paid off my caravan, and, having sufficiently recovered to travel, left T'ai-yüan Fu by rail on the morning of the 3rd September, and reached Peking the same evening after an absence of exactly four months, during which I had covered 2064 miles by road, and 646 miles by rail.

It will be observed that from the crossing of the Yellow River from Shensi into Shansi to my arrival at T'ai-yüan Fu, the capital of the latter province, I have made no mention of the poppy. The reason is that daily inquiries made along the road showed that no cultivation had taken place. And, even had there been cultivation, the opium would have been already harvested and all trace of the crop removed from the ground. I did not see a single poppy in the province of Shansi, nor, with the exception of the frustrated attempt at cultivation within the district of Wen-shui Hsien, already referred to, did I hear of its existence in 1910.

CHAPTER VIII

PEKING TO THE PROVINCE OF SZECHUAN

In the south-western provinces of China the poppy is sown towards the end of October or beginning of November, and the opium harvest commences in April of the following year. I accordingly left Peking on the 8th December, 1910, to investigate the provinces of Szechuan, Yünnan and Kueichou, which had always been great centres of cultivation : indeed, the single province of Szechuan had, for many years past, produced four times the quantity of opium annually imported into China from India.

I travelled by train to Tientsin, and then took steamer to Shanghai, where I provisioned myself for a journey of six months. From Shanghai I ascended the Yangtsze by steamer to the port of Ichang, which I reached on the 31st December. On the way up the river we met the S.S. *Shu-tung*, the only steamer which runs west of Ichang, on her way to Shanghai for a general overhaul, and on arrival at the former place I had to engage a Chinese travelling boat to convey my party and baggage to Szechuan. My arrangements were completed on the 3rd January, 1911, and next day I left Ichang for Western China accompanied by a Chinese typist, assistant, personal servant and cook. My assistant was the Chinese official who had been deputed by the Governor of Shansi to escort me on my previous journey, and who had obtained permission to

accompany me a second time, while my servant was the same individual who had the misfortune to have his leg broken in Shansi, but was now sufficiently recovered to continue his services.

I had previously resided for five years in Szechuan, and had travelled extensively in the centre, west, and south of the province; but the eastern section, its products, trade, and general conditions, had hitherto remained little known, and I determined to pay it a visit. As already stated, I left Ichang on the 4th January, and on the 10th of that month I reached Wu-shan Hsien, the first district city within the Szechuan border, on the left bank of the Yangtsze, in lat. 31° o' N. and long. 109° 57' E. At Wu-shan Hsien I made up my mind to push north, to the district city of Ta-ning Hsien, a three days' journey, and then strike west to the district city of K'ai Hsien, and thereafter south, to the district city of Wan Hsien, on the north bank of the Yangtsze, in lat. 30° 57' N. and long. 108° 32' E. By carrying out this programme I would traverse and be able to investigate the five districts of Wu-shan, Ta-ning, Yün-yang, K'ai Hsien, and Wan Hsien, the last two being noted centres of opium production in the past.

Wu-shan Hsien is a poor city, creeping up the slope of the river bank, and I had great difficulty in scraping together a scratch team of chair-bearers and porters, of whom many suffered from skin diseases; and one was queueless, not, I imagine, because it was becoming the fashion to part with this appendage, but probably for some less reputable reason, and I am certain that no paper factory would have offered half a crown for the whole clothing kit of my own six bearers. The chairs were covered with torn, faded blue cloth, had exceptionally short carrying-poles, and were so small that, with an overcoat, I had the greatest difficulty in squeezing myself in and out of the largest which fell to my lot. It was a ragged caravan that assembled on the river bank on the morning of the 12th January, and it was only after each porter thought that he had found the lightest load that we effected a start at eleven o'clock. Ascending the river bank, we entered the city by the south gate, and climbed up stone steps to the north gate, through narrow streets lined here and there with bamboo and cactus, the latter of the spindle variety, with the lower stems as thick as a man's thigh. We emerged from the north gate, only to find that the climbing had to be continued. Ten miles from Wu-shan Hsien we halted for a meal at the two-housed hamlet of Ma-ya-k'ou ("Horse Tooth Gap"), where the old lady of the house proved exceedingly inquisitive as to my business. I told her that I had come to study the products of the country, and expressed the hope that she would be good enough to enlighten me. I said that on the way up to her house I had passed some clearings of broad beans, wheat, and especially peas, that I had noticed the stubble of maize and millet (Sorghum vulgare), and I wound up by asking her what other crops were grown. To the above she added turnips and cabbages, and, observing in a corner of the room a basket of cotton bolls of poor quality, I asked her whether cotton was produced locally. She admitted that it was. A number of globular straw balls, about four times the size of ordinary footballs, were suspended by straw handles from a rafter, and these she informed me contained peas, beans, maize, and millet, to preserve them from frost. I expressed some astonishment

at this extreme cold in Szechuan, where I had spent several years without experiencing severe cold; but she pointed to the snow-streaked mountain slopes to the north, in proof of a low winter temperature. Before leaving I asked her whether poppy was grown in the neighbourhood, to which she replied that up to the previous year it was grown, but that the stringent official prohibition now made it too dangerous to run the risk. From her house the path ran north-west by a seemingly endless stone staircase up a mountain side, in the direction of the snow-streaked mountains, and on to a ridge dividing into two an east and a west valley, and connecting the range we had just ascended with another range to the north. Over the rim of the latter the road enters a shallow valley, where there was little but scrub and an occasional pine. Boulders lay about in every direction, the melted snow from their surfaces frozen into icicles hanging under their edges. The valley slopes gently northwards; but the going was bad, owing to melting surface snow, until we were suddenly brought up by a depression several thousand feet deep, terminating on its north-west and north-east ends in dark, narrow gorges, down the former of which rushed a mountain stream, which, entering the depression, flowed past the southern exit of the north-eastern gorge, where it was spanned by a small stone bridge. Our road lay up the north-eastern gorge, which was dry and stony; but to reach the bottom of the depression and the bridge we had to descend by a series of remarkably sharp and steep zigzags-so sharp and steep as to be positively dangerous. In the descent my chair was upset, and the upper part of my body shot through its side, while the bearers exerted all their strength to keep chair and occupant from being precipitated into

the depths below. Fortunately, only the chair suffered : one of its sides was completely knocked out by my head and shoulders. Darkness set in before we had threaded the gorge, and we had to feel our way to the hamlet of Lung-wu-pa, twenty miles from Wu-shan Hsien, lying at the entrance to a narrow valley to the north of the gorge.

Flakes of snow were falling when we left Lung-wu-pa the next morning. The valley we had entered soon bent westwards, and our road lay up a mountain side, west by north, on to a scrub-covered moor, which we descended to a belt of cypresses and bamboos sheltering a solitary house known as Yu-cha-fang, some three miles from Lung-wu-pa. Here the scene was impressive : there were ranges of mountains on all sides, terraced only on their lower slopes, and divided up by deep valleys full of plots submerged in preparation for the rice crop, or green with peas, beans, and wheat. From Yu-cha-fang a path led us north by west, along mountain sides, through better wooded country : cypresses, pines, bamboos, occasional coir-palms (Trachycarpus excelsus) and here and there groups of wood-oil trees (Aleurites Fordii) were much in evidence. I may state here that much misapprehension prevails regarding the varnish trees of China. There is only one varnish-yielding tree in China, the Rhus vernicifera, whose sap, obtained by tapping the stems and branches, is true varnish. Wood-oil, on the other hand, is expressed from the fruit or seeds of the Aleurites, and, after boiling for an hour, becomes a syrupy oil, used for mixing with varnishes and paints. If a waterproofing material is required, wood-oil is boiled for two hours with one-half per cent. weight of "earth pellets," grey outside and chocolate-brown inside, to which are later added, during the boiling, eight per cent. weight of

powdered quartz impregnated with a yellow metal resembling iron pyrites. A yellowish-grey, sticky substance is the result, and it is applied by brush to silk gauze and pongees, to make them waterproof. With the true varnish tree I shall deal later.

From Yu-cha-fang the path, which rarely descends to the valley bottoms, clings to the mountain sides and leads north by west to and over a range well-clad with pines, cypresses and scrub oaks. On the south side of the range there is a coal mine which was being worked in the usual primitive horizontal method. The price of this bituminous coal at the pit mouth was equivalent to two shillings and fourpence the ton. On the north side of the range is the twelve-housed hamlet of Shih-chia-ya, ten miles from Lung-wu-pa, and from the hamlet the road takes a more northerly course over a wide ochre-coloured ridge with deep, narrow valleys on both sides. The country looked as if Nature had used some gigantic land scoop, leaving narrow ridges between the scooped depressions, and dropped some of the scooped materials in the hollows to form hills. The road was now a simple bridle path and was difficult to manipulate in places, especially as Shui-k'ou, the end of the day's stage, was approached, for, as in the case of Lung-wupa, there was a steep descent to high, bare cliffs containing cave-dwellings cut from the solid rock. These cliffs lie between two gorges, and down the western gorge flows a stream with a wide boulder bed under the cliffs and sweeps east and north down the eastern gorge along which lay our road. In the latter gorge were more cave-dwellings, and any doubt as to these being inhabited was set at rest by the discovery of a ladder suspended by rope to an opening right in the centre of the cliff, but inaccessible from its base.

We had crossed the stream by a line of stepping stones to enter the gorge which, after a few hundred yards, gave place to more open country. On the bank of the stream were a couple of paper factories, the refuse from which dyed the clear, crystal water a milky-blue colour. Beyond them was the village of Shui-k'ou on the left bank of the stream, twenty miles from Lung-wu-pa. Peas, beans and wheat were the growing crops noticeable during the day. The cypress, pine and wood-oil tree were abundant ; the vegetable tallow tree (Sapium sebiferum) from whose seeds and kernels tallow and oil are respectively extracted, was also in evidence, and clumps of bamboo and scattered coir-palms were not uncommon. From the brown bracts of the coir-palm, Nature having already woven them into a coarse material, rain coats, ropes and sandals are manufactured.

Day had little more than dawned when we turned out of Shui-k'ou on the 14th January, to accomplish the third and final stage of the journey to the city of Ta-ning Hsien. To my surprise I found that Shui-k'ou is situated on the right, not the left bank (as given on the War Office Map of Szechuan) of the Ping-chi River which flows into the Yangtsze to the immediate east of the city of Wu-shan Hsien. It lies on the left bank of the tributary we followed the previous day, at its junction with the Ping-chi, which is a shallow crystal-clear river about a hundred yards broad, running south-east over a wide, pebbly bed. The ferry is some hundred yards above Shui-k'ou, and we were soon across and followed up the left bank to a small tributary three miles from Shui-k'ou. This tributary is the boundary of the Wu-shan and Ta-ning districts. The road follows the left bank of this tributary along an avenue of cypresses

and over a small stone bridge to the one-housed hamlet of Hsiao-tz'u-chi looking out on two or three pumelo (Citrus decumana) and loguat (Eriobotrya japonica) trees. I expressed the wish to buy a pumelo; but the lady of the house and a number of bystanders assured me that the tree bears fruit only in alternate years and that these trees did not bear in 1910. This assurance did not satisfy me, for, although I had resided at the port of Amoy in the province of Fuhkien, the greatest pumelo producing centre in China, I had never heard of this peculiarity of the tree. On my return to Peking I requested His Majesty's Consul at Amoy to confirm or refute the assurance, and he replied that, to the best of his information, the pumelo tree bears every year, and that some trees in his Consular garden certainly did so. Immediately behind Hsiao-tz'u-chi we commenced the ascent in a northerly direction of a high mountain range, for the Ping-chi River, cooped up between steep, rocky banks, flows with many windings which would render a close adherence to its course not only dangerous but exceedingly circuitous. The ascent was made by a series of sharp zigzags, the lower slope of the mountain, probably 4000 feet above the river, being little wooded and having only a few clearings with peas, beans and wheat. Cultivation, with the exception of a few patches round the huts of woodcutters, practically ceased on the upper slopes; but the summit was well timbered with cypress, pine, Cunninghamia sinensis, and scrub oak with considerable undergrowth. The coir palms were dotted here and there over the whole mountain side, and on the lower slopes were many clumps of bamboo. The summit or, rather, the pass several hundred feet under the summit, is marked by a small white shrine called the Tung-yüeh-kung, and just under it on

the north side the Cunninghamia, oak and pine increased in dimensions and woodcutters were at work, planks some 30 feet long being carried south. The descent on the north side is gradual and the road runs down a narrow valley between well-wooded hills rising to a height of from 600 to 1000 feet above it. Here there were a number of clearings and side valleys; but the descent soon became exceptionally steep, and timber and cultivation practically disappeared. At the hamlet of Tsao-kuo-shu (" Date Tree "), eighteen miles from Shui-k'ou, we struck a very deep and wide chasm coming from the east and bending north-west. The road skirts its unprotected edge; but the Chinese are the coolest of bearers. They clamber along the most forbidding precipices like goats without the least thought of danger, and one becomes quite inured to their steadiness and strength of head. This is one of several illustrations of that absence of nerve or, rather, tense nervous system which characterises Orientals, but especially Chinese. The chasm, whose bed was full of boulders and pebbles, opens on the left bank of the Ping-chi River, to which it doubtless adds considerable tribute during the rainy season. Crossing the mouth of the chasm we ascended and skirted the edge of the rocky precipice forming the river's left bank parallel to a similar precipice on the right bank, and after about half a mile's going turned a corner and came in sight of the small but beautifully situated walled district city of Ta-ning Hsien, on the right bank of the river flowing east before taking a sweep to the south-east and entering a gorge similar to the gorges of the Yangtsze but on a less gigantic scale. The city is encircled on all sides by high mountains, and the first sight of it prompted the question, Why had it not been submerged and swept away by floods ? Opposite the city

the river is crossed by a wooden trestle bridge of several spans, the floor of the bridge, high above the present water level, being composed of movable gangways provided with hand rails. Just below the city, half a dozen salt boats of light draught were finding great difficulty in descending : their crews were in the water pulling and pushing them over the shallows. As at Wu-shan Hsien I had been able to engage transport only as far as Ta-ning Hsien, it was necessary to find a fresh relay of bearers and porters to continue my journey westward. This I was enabled to do next day with the assistance of the keeper of the inn where I took up my quarters. He was a very capable business man who, in reply to my questions regarding the products of the district of Ta-ning Hsien, replied, "Mountains, nothing but mountains." There he was wrong, for he omitted to mention salt, the annual production of which at the brine wells of Ta-ning-ch'ang, a much more important place than the district city, amounts to about 6000 tons.

It will be observed that I have made no mention of poppy during this journey of three days. I saw none, nor do I think that the country is suited to its cultivation.

The 15th January was spent in engaging new transport, and I was relieved to hear next morning that all the bearers and porters had turned up for the seven days' journey westward to K'ai Hsien. And I was all the more relieved to find that about half of the men had re-engaged themselves to accompany me, for these men from Wu-shan Hsien, poor and wretched though they looked, had done their work well.

Issuing from the west gate of Ta-ning Hsien on the morning of the 16th January we at once dropped into a valley running west and bounded by mountain ranges of considerable height with hills, sometimes the foot-hills of one or other of the ranges, dotted about the bed of the valley. For some distances the ranges were bare, and the absence of timber was no doubt due to the wood-consumption of Ta-ning Hsien and neighbourhood, for we met long strings of carriers with wood and charcoal bound east. On entering the valley we at once struck the left bank of a stream of no great size on its way to join the Ping-chi River. This stream we soon crossed and left for a time when it emerged from a narrow valley between the northern range and some hills which the road skirted on their southern side. The road continued west, passing from valley to valley, some large, some small, according to the number and positions of the hills between the main ranges. We rejoined the stream five miles from Ta-ning Hsien, but soon crossed it by a roofed bridge of three spans with wooden floor and rails resting on stone piers. The scenery was now approaching the usual Szechuan type: farmhouses, frequently whitewashed, nestled amid clumps of bamboos. The pumelo was a common tree, and a single pumelo exposed on a table at a farmhouse door was the advertisement that the fruit was on sale. As we proceeded west the foothills closed in and the road kept rising through better wooded country, the cypress and bamboo being exceedingly dense and beautiful, while the pine mingled with the cypress on the side ranges and the coir-palm dotted the valleys. The banana tree was not wanting, but it does not ripen its fruit in Szechuan. The wood-oil and vegetable tallow trees were present in considerable quantity. In addition to beans, peas, and wheat, there was a little rape in full yellow flower ; but the greater part of the arable land was divided up into

plots submerged in preparation for the rice crop. The road seemed barred twenty miles from Ta-ning Hsien; but it passed down by the side of a number of well-wooded, rounded hills to a narrow valley, where we put up for the night at the inn at Ting-chia-kou, 23 miles from Ta-ning Hsien. During the day we met many loads of bags made of split bamboo bound east; they were on their way to the salt wells to be used in packing salt; but the great traffic from west to east consisted of ponies and mules, with packloads of rice in bags as well as of large, iron pans for use in salt evaporation. The valleys, owing to their plentiful supply of water, were admirably suited to the cultivation of the poppy, and I gathered that on account of the enhanced value of opium a larger crop than usual was harvested in 1910. I saw none, however, and the landlord of the inn declared that the restrictive measures now being enforced had stopped sowing during the autumn. He further told me that the price of wood-oil had risen 100 per cent. owing to the increasing demand in foreign countries; but when I suggested that this increase would balance the loss from opium he scouted the idea, and said that he could no longer look forward to the custom of agents who used to reside at his inn and buy up the drug. From his point of view the action of the authorities had led to a grave financial crisis.

The submerged plots reserved for padi were frozen over, and the bean stalks were drooping when we trooped out of Ting-chia-kou on the morning of the 17th January. Our course continued west, the road crossing and re-crossing the stream whose bed, then stony and boulder-strewn, narrowed and became a defile. Where the stream debouches from the north we left it at the bend and ascended, crossed the rim and descended to a red-soiled plain whose



Copyright.]

17. GORGE ON THE UPPER YANGTSZE.



Copyright.]

See page 214.

18. TRACKERS AT A RAPID ON THE UPPER YANGTSZE. [To face p. 224.

PEKING TO PROVINCE OF SZECHUAN 225

rounded, bounding hills, also red, were clad with cypress, pine, Cunninghamia, and scrub oak. The plain itself was one mass of submerged plots with a streamlet flowing west lined with pollard willows. It is soon blocked by foot-hills through which the road passes to a narrow valley bounded by well-wooded hills backed on both sides by mountain ranges running east and west and about a mile apart. The northern, the higher of the two ranges, was densely wooded in parts on its lower slopes, while the range, or rather, series of ranges to the south, was also thickly timbered with cypress, pine, Cunninghamia, and oak. The coir-palm, wood-oil tree, and scrub oak were dotted about the valley. Foot-hills again barred the way, and the road ran up and down among them in a defile narrowing in places to less than twenty feet and for the most part wild and uncultivated. For a distance of ten miles, except for a few solitary houses where it was possible to till a patch or two, the country was practically uninhabited. Beyond the defile the road emerged on more open ground, where we took up our quarters at the solitary inn called Yang-chia-ta-tien, 25 miles from Ting-chia-kou.

Food is cheap in this part of Szechuan, and during this stage I was able to solve the daily expenditure of a Chinese porter. At lunch time in the general room of an inn I watched my men at their meal. Nine of them seated themselves round a table on which was placed for them in the centre a large bowl of chopped up turnips and carrots. Then came a smaller bowl of condiments consisting of chopped up chillies mixed with oil and vinegar, and several bowls of green vegetables swimming in their own juice. Each man was then supplied with a large heaped-up bowl of boiled and steamed rice, ten to eleven ounces in weight.

Thereupon they all fell to and devoured the lot, and some had a second helping of rice. Vegetables were replenished ad libitum free; but the extra rice (a whole bowl costing 18 cash) was an additional charge. As I wished to arrive at the actual cost of a meal, the additional rice was a confusing element; but I concentrated my attention on one of my porters who had his meal apart, sitting on the doorstep of the inn. He had his big bowl of rice, his small dish of condiments, bowl of turnips and carrots, and two bowls of vegetables. The total cost of his meal which was paid to the landlady at the table at which I was seated was 22 cash, or less than one halfpenny. Moreover, he acted as if he had been spending pounds instead of cash : he shouted at the pitch of his voice for more vegetables, and exacted as much attention as if he had been an habitué of the Ritz or Savoy, and, in fact, had much more liberty than at either of these well-known hotels. The meal did not, of course, include any meat dishes. Now, a man on the road has three such meals a day, and he has to pay for his sleeping accommodation and bed cover. The two latter cost twenty cash a night, so that his total for food and lodging for 24 hours would be 86 cash. However heavy a meal a man may eat, he is always nibbling on the road, and fourteen cash may be taken as his average daily expenditure on extras and tobacco, so that 100 cash may be assumed to be the amount of his expenses. It not unfrequently happens that a man tries to have a meal or part of a meal for nothing, and innkeepers have to be continually on the watch to prevent this. One method of swindling is the following. Should there be more than one inn the men divide themselves over two. A man will get a bowl of rice from one inn and slip over to his comrades in the other. When

asked for payment in the second inn he declares, truthfully enough, that he obtained his rice in the other; but he forgets to return there and pay for it. I saw this game played while I was at a meal, and, although the innkeeper knew and loudly declared that he was short one bowl of rice, he was unable to put his finger on the man who had swindled him. While the Chinese are the most cunning of liars, even when there seems nothing to be gained by a departure from the truth, they are often extremely credulous. An amusing instance illustrating this credulity occurred during the day at a place called San-chiang-chün ("Three Generals"), ten miles from the end of the stage. My personal servant went ahead as usual to prepare a room in the inn where we were to pass the night. We caught him up at the "Three Generals," a solitary small inn, and he held in his hand, suspended by a string, a piece of beef four pounds in weight, which he said, in the hearing of all my men, he had bought for me for 126 cash, and the following was his story to them as it was told to him : "Robbers had raided the inn the previous night and killed one of the cattle, skinned it and carried off its hide : hence, cheap beef." There was a rush by bearers and porters, and a considerable quantity of beef changed hands. What I saw was the horned head of an animal lying on the ground attached to a pole by a rope passed through the nostrils. I said nothing at the time; but when we arrived at our inn I asked my servant whether he had invented the story. This he repudiated; but when I said that the whole thing seemed to me very doubtful, he replied that a man had been stabbed in resisting the robbers. Asked if he had seen the wounded man, he said he had not. When I suggested that the story was an excellent advertisement for getting rid of an animal

that had died a natural death, and stated that on no account was the meat to be served to me, he admitted that my surmise was probably correct. My only hope was that those who gorged themselves on the beef would have no cause to repent of their cheap bargains.

The debauch on the carcass of the cow had apparently no evil effects on my men, except that they were unable to complete the next day's stage. We had reckoned on doing 25, but accomplished only 20 miles. From Yang-chia-tatien the road plunged down among well-wooded, isolated hills with deep basins between. Hills and basins were alike rocky ; but in the latter were many clearings and individual houses, and the wood-oil tree was especially abundant. In fact, the rockier the country the more numerous were these trees which share with the coir-palm a preference for stony ground. Four miles from Yang-chia-ta-tien the road crosses a mountain stream, the Fen-shui Ho, coming from the northern range of mountains and flowing south. It is confined within a narrow, shingle bed by high, rocky banks connected by a wooden-roofed bridge whose side walks were partitioned off into restaurants and other cubicles in which beggars, roused from their slumbers, cried loudly for alms. A mile beyond we breakfasted at Shui-t'ien-pa which, as the name implies, is a small plain of water or padi-land, in other words, land suitable for the cultivation of rice. Soon afterwards the road descends to and crosses an unbridged dry watercourse with a shingle bed much wider than that of the Fen-shui Ho.

On leaving Shui-t'ien-pa, we passed through a series of clearings abounding in wood-oil trees, and struck the southern end of a deep valley lying under the northern

range with its many cone-shaped peaks. Instead of descending into the valley, we ran along the opposite hill-side, through a forest of pine and Cunninghamia trees of no great girth, but tall and straight as arrows. Out of the forest, our course lay west-by-south over three ranges with cultivated land between. Below the summit of the first range, the hillside was one mass of water-washed lime-To the west of the three ranges we ascended a stone. narrow valley, bounded by scrub-clad hills to the summit of a pass at San-cha-kou, the boundary of the Ta-ning Hsien and Yün-yang Hsien districts. Then began a very steep descent into a deep valley bounded on the south by a high range of mountains running east and west. But darkness was fast approaching, and we had to put up for the night half-way down the side of the mountain bounding the valley on the north side. On reaching a solitary inn, I found that the only available room, some six feet square, was so filthy, malodorous and dark, that I absolutely refused to occupy it. I sent one of my escort back to the last house we had passed in the hamlet of Sheng-t'ang-kou to try to borrow a room for the night. He returned with the welcome news that a room of sorts could be had, and I was soon installed in an empty mud-room at the back of the house, which I furnished with my baggage and a few borrowed planks to keep my camp-bed from the dank, mud floor. It was bitterly cold : snowflakes had fallen the greater part of the day, and the rivulets on the mountainsides were frozen into beautiful icy cascades. Apart from small vegetable gardens, in which some cabbages and long red turnips found a place, the only growing crops in the clearings were broad beans and insignificant quantities of wheat a few inches above ground.

I have frequently referred to clumps of bamboo; but behind the inn at Shui-t'ien-pa I noticed four of those beautiful bamboos with feathery branches known as *Tan Chu* which occupy, as regards size of stem, a middle-place between the common bamboo (*Phyllostachys mitis*) and the large bamboo called *Mao Chu*. The stems of the *Tan Chu* are more closely jointed than those of the common bamboo: they are stronger, and in greater demand for carryingpoles.

The 19th January was a day of mountain work : descending to the valley, over a thousand yards in width, and containing good arable land with terraces on the lower slopes of the mountains on both sides and a dry watercourse in the bottom, the road goes west till, at a distance of six miles from Sheng-t'ang-kou, it is blocked by some hills to the south-west, leaving, however, a passage on the north-west side leading down a narrow valley to precipitous crags at the base of lofty mountains. Our road lay west as far as the hamlet of Huang-ni-p'o, where we ascended the southern mountain-side in a west-by-south direction through pines, Cunninghamia, oaks and scrub, to the summit of a ridge overlooking, many thousand feet below, a yellow spot with glistening water, surrounded on all sides by mountain ranges converging at this one point. That yellow spot we had to make; but the lower slopes of the mountain are so steep, forming, as they do, giant precipices, that it was impossible to approach it in a direct line. The road turns south, and makes the circuit of an amphitheatre, or basin of mountains, and again bending west, descends on the opposite side, ultimately with numerous short, sharp zigzags, towards the yellow spot-a small plain of shingle, through which flows a mountain

stream which enters it from a dark gorge to the north, and leaves it by a wider gorge to the south-west. Another but much smaller stream joins it from the south-east, entering the plain of shingle from an opening in that direction. The main stream is called the Sha-t'o River, and is the headwaters of the Wan-tung Ho, which enters the Yangtsze to the immediate east of the city of Yün-yang Hsien. After the zigzag descent through numerous wood-oil and occasional pumelo and coir-palm trees, we forded the smaller stream to the market-town of Sha-t'o-ssu, which gives its name to the main stream on whose left bank it lies. Its inhabitants were more than inquisitive, and I had the greatest difficulty in getting away from the place, for my men had made up their minds to spend the night there. The plan had been well arranged : at breakfast, an inordinate time was taken by my men over their meal, and when I began to urge a move, I found that two of the porters had only just made up their minds to eat after the others had all finished. They were calmly sitting by the fire, about to partake of their bowls of rice, vegetables, and condiments. This was too much for human endurance and, seizing one of the men by the collar of his coat, I shot him, bowl of rice and all, out at the front door of the inn. The second man required no helping out ; but they carried their bowls of rice with them, and ate as they went, throwing away the empty bowls, for which the landlady was clamorous for payment. There was, however, no time to discuss the matter of a few cash, and the men kept well ahead of me during the rest of the day. I heard many a gibe at my expense; but I did not wish to carry the matter further, especially as I had the rest of my men on my side, for when I slung the porter out of the inn, I remarked to

the headman that that was the way I treated any one who disobeyed my lawful orders, and he agreed that my action was just. But Sha-t'o-ssu was the scene of the struggle for the mastery. When we arrived there, at four o'clock, after a very arduous day, my men took it for granted that we were to spend the night in the town, and began to dismantle chairs and baggage without asking any questions or consulting me in the matter. A moment's inspection of the inn convinced me that I could not possibly spend the night there : it was built over and was really a cesspool, and, moreover, smelt of one. I thereupon asked what all the dismantling meant, and intimated that I intended to proceed as soon as we had refreshed ourselves. After an hour I ordered a start, but was informed that my men had not even begun their meal. My servants were ignored when they conveyed my orders, and they begged me to interfere personally. This I did, saw the rice ladled out, and gave a significant warning that we were about to start. Later, the headman came to me and said that they were all unwilling to go, that it would soon be dark, that there was no inn for miles at which we could put up, and that they would not be responsible if I were upset and hurt. When I told him that I would take all risks, he replied that there was nothing more to be said, and that they must go; and go we did. It is a wonder to me how the Chinese prefer to wallow in their filth. So far as the present journey was concerned, I have found a corner in a wood-cutter's hut a palace compared with a room in a Chinese inn.

Descending from Sha-t'o-ssu to the left bank of the river, which was about 50 yards wide, with a much wider shingle bed, we were ferried across, and ascended westward the mountain side forming the right bank; but darkness was soon upon us, and, with the aid of a hurricane lamp, we plunged on for a couple of miles to a farmhouse, poor but comparatively clean, known as Ssu-ya-p'ing, having accomplished only twenty miles during the day, but a fair day's work considering the mountainous nature of the country, and the delays due to the stubbornness of my men.

From Ssu-ya-p'ing the road goes north up the mountain side, dotted with wood-oil trees, pines and occasional clumps of bamboo, cypress and coir-palm, till it reaches the altitude of the point at which we commenced the descent the previous day to Sha-t'o-ssu. It then strikes west by north to the summit and the hamlet of Tung-men-kuan shaded by a couple of camphor trees. From the summit the road winds west through mountain-tops, rocky but fairly wooded, the valleys between becoming deeper and deeper, and then descends to the hamlet of Shui-chu-lin, twelve miles from Ssu-ya-p'ing, whence it descends more gradually from valley to valley, which widen and narrow as the rocky, encircling hills permit. At Fu-chia-pa, four miles from Shui-chu-lin, there is an unusually large cultivated plateau, whence we descended into a narrow valley, at the east end of which there is, externally at least, a magnificent building of grey brick with three pavilions facing, on the west side, a long stretch of submerged rice plots. According to my local escort the house was built as a residence for a former magnate whose descendant, falling on evil times, had been obliged to mortgage it for several thousand taels. The valley is soon cooped up between rocky banks containing little room except for a streamlet which we followed for a time, and then, crossing a dry boulder bed, entered the market-town of Chieh-k'ou-tzu, where my men, having done only eighteen miles, seemed

determined to pass the night. My baggage was held up there pending my arrival; but, as there was still plenty of daylight, I considered it advisable to push on in spite of assurances that there was no inn within a reasonable distance. West of Chieh-k'ou-tzu the country opens on a plain of some considerable extent; but the road soon enters hilly ground, covered with wood-oil trees, and we had to light our lamps to reach a solitary house named Wu-paoching, where we succeeded in finding a resting-place.

A mile west of our resting-place, we crossed the boundary of the Yün-yang and K'ai Hsien districts and, eight miles beyond, descended through stony, broken country, the road winding between hills, wooded with cypress and wood-oil trees. Most of the cultivated land in the numerous valleys was reserved for rice, but at the sides were many patches of broad beans, peas and wheat. The descent continued, hills always looming ahead, till we found ourselves face to face with bare mountains that seemed to bar the way. But the road makes a detour to the north for some distance, and passing to the east a long deep cultivated valley, and again turning west and skirting a mountain side, and a deep chasm with precipitous bare rocky walls, descends rapidly to a town ahead from which clouds of steam were rising. This turned out to be the large market-town of Wen-t'ang-ching, where brine wells are worked and a considerable quantity of salt evaporated. The town clings to the mountain side, and we descended to it by a series of stone staircases to the left bank of a stream some 50 yards wide, flowing south with a sharp turn to the south-west and again to south. At the town it is cooped up between steep rocky banks, but has a wide shingle bed below. Rafts of boards, each worked by a man armed with a bamboo pole, were descending, and boats of light draught laden with coal were being tracked up to the salt works, coal being the fuel used in the evaporation of the salt. Wen-t'ang-ching smelt like a gasworks, and I was informed that one of the three wells emitted so nauseous a gas that it was found impossible to work it. Pan or cake salt was the kind of salt produced at the wells.

Although I rested some considerable time in the town, my presence caused little excitement : some children congregated round me; but they were quiet and orderly, and I imagine that the great bulk of the adult population was busy at the evaporation sheds. Two-thirds of a mile down stream we were ferried across to the right bank, and found ourselves in the centre of coal mines, with their adits and rough rails laid for trolleys opening on the bank. Three miles from Wen-t'ang-ching, we put up at the hamlet of Hsi-pa on the right bank, where the mountains on both sides of the stream, called the Tung Ho, recede and give way to plains stretching to the bases of the receding mountains. Latterly in the course of the 22 miles accomplished during the day, the road was paved crosswise with sandstone slabs, an indication that we were approaching more civilized parts of the province.

The 22nd January was a typical Szechuan day, dull and misty. From Hsi-pa the road skirts the right bank of the Tung Ho, leaving it when the stream deviates from its southerly course and passing through fine plains left by the receding mountains which were practically bare. The plains were well cultivated; but the greater part of the land was given over to flooded rice-fields, the balance being taken up with wheat and beans in a much more advanced state of

cultivation than we had hitherto seen. Empty, flat-bottomed boats were being tracked up the river, while similar boats laden with salt from Wen-t'ang-ching were descending in considerable numbers. Camphor trees were prominent in the hamlets and villages which dotted the banks of the stream. Large, light, bamboo-built irrigation wheels with floats of matting and lengths of bamboo fixed under the rim were being driven by the current of the stream : these lengths of bamboo, filled with water when immersed, are placed at such an angle to the rim that on rising to the top they pour their contents into a trough fixed on the land side at a height half-way between the top of the wheel and the axle, and the water thus raised is conveyed from the trough by bamboo pipes to irrigation channels on shore. This system of irrigation, which is common in many Chinese provinces, appears to me to deserve attention in other countries where irrigation is necessary and water has to be raised to a considerable height. All that is required is a current of water sufficient to drive the wheel : no further attention is demanded. Coal was everywhere abundant : each house had its coal cellar outside and open to any thief that might care to come along; but it was so cheap, costing only one cash a catty, or about 2s. 6d. a ton, that it was not worth the stealing. As the city of K'ai Hsien, seventeen miles from Hsi-pa, is approached, the road hugs the right bank of the stream, and all along sugar cane was on sale, and a fair amount of land had been under crop as the withered leaves of the canes testified. The city of K'ai Hsien has a population of from 40,000 to 50,000 : its streets were thronged with people, and this, I was told, was its normal condition.

The district of K'ai Hsien was noted as the second

PEKING TO PROVINCE OF SZECHUAN 237

greatest opium producing district of the province of Szechuan, and large stocks of the drug were still being held. In 1908 the poppy was sown in certain parts of the district; but the plants were destroyed when young, and in 1909 and 1910 no attempt was made to renew the cultivation. Raw opium had risen in price from 150 to 1200 cash a Chinese ounce ($1\frac{1}{3}$ oz. English), and it was purchasable at an official retail shop in the city. So far as I had traversed the district I had not seen a single poppy plant, and I was assured by others who had recently travelled widely throughout the district that they also had failed to find it. In the neighbourhood of the city and, indeed, in the whole district poppy used to be the principal winter crop, and this probably accounted for the enormous area of land lying fallow, in other words, submerged in preparation for the rice crop. I have stated that rice was the principal article of trade going east; but to the east of K'ai Hsien we met many loads of vegetables, cabbages, carrots and turnips bound for the salt wells, together with load after load of rice bowls.

Leaving K'ai Hsien by the south gate we skirted the right bank of the stream, soon crossed by a wooden footbridge a tributary from the west and proceeded south through somewhat broken country towards the foot-hills of a range some 2000 feet in height. The road takes advantage of these foot-hills for the ascent, and we reached the summit at Ta-liang about seven miles from K'ai Hsien. The range was crowned with pines, and both sides of the mountain were dotted with wood-oil trees. During the ascent we met porters with firewood, charcoal, coal and granular salt. This salt, superior in quality to the pan salt produced at Wen-t'ang-ching, was on its way from the salt wells of

Yün-yang-ch'ang in the Yün-yang district, and is largely used for salting vegetables for which Wen-t'ang-ching salt 1s less suitable. A deep valley lay to the south-west ; but a precipitous descent landed us in a small valley running north and south, and ultimately south-west. At the market-town of Ch'ao-chia-ch'ang, seventeen miles from K'ai Hsien, we touched the left bank of a stream flowing east, but soon left it to ascend a narrow valley, bounded by poorly wooded hills, to the south-west. We reached the head of this valley at the hamlet of Ma-an-ch'ang three miles beyond, where we rested in the company of porters with Yün-yang granular salt proceeding in the same direction as ourselves. Just beyond Ma-an-ch'ang we passed a small paper factory. The paper was being made of bamboos retted with lime in concrete tanks, and the lime was being squeezed out of the retted material, which was being rolled by a deeply grooved stone roller to which an ox was harnessed. Bundles of bamboos were waiting their turn in the tanks. We then returned to the left bank of the stream for a short time, but soon struck south-west through broken country with numerous valleys to the market-town of Ch'en-chia-ch'ang, on the left bank of the stream, 27 miles from K'ai Hsien. The mountain sides were terraced and tilled where possible, and between its southern foot and Ch'en-chia-chang the whole country was in a high state of cultivation. The crops were broad beans, rape about to come into flower, wheat about a foot or more high, peas in small quantity and turnips. There was also some sugar-cane still uncut, and submerged rice-land was smaller in quantity. All this land was well watered and suitable for the cultivation of poppy, but I did not see a single plant. Although there was no poppy cultivation, opium dens were numerous throughout the district, and their supplies of the drug were derived from old stocks. The cypress and bamboo were common in the valleys and every village and hamlet had one or more camphor trees. Some three miles north of Ch'en-chiach'ang we passed over a fine, one-arched, camel-back, sandstone bridge spanning a rivulet on its way to the stream which had been with us a great part of the day, and on whose left bank we spent the night. It was market-day at Ch'en-chia-ch'ang, and as we approached the town we met large numbers of country people returning with their purchases of red candles, red paper, and large slices of pork for decoration and feasting on the China New Year which fell on the 30th January.

At the south end of Ch'en-chia-ch'ang the road crosses the stream by a trestle bridge, and skirts its right bank through country which was well cultivated. Mountains loomed ahead, ridge behind ridge each rising higher than the other, their summits fringed with trees. Soon we struck the left bank, strewn with boulders, of a stream flowing from a gap to the south-east. A sandstone bridge of two arches spans this mountain stream at the entrance to the gap up which our course lay south-east, taking ridge after ridge without any great descent till we attained the summit at 4000 feet, just beyond which a stone gateway and wall connecting two ridges marked the boundary of the K'ai Hsien and Wan Hsien districts. The northern faces of these mountain ridges were profusely dotted with wood-oil trees of unusually large size, and quite at home among the scattered sandstone boulders. They had recently been pruned to prevent them from going to wood. Pines and the Cunninghamia were also in considerable force and there was a certain amount of scrub-oak. Down the

mountain slopes, many of them exceedingly steep, with long sandstone staircases, came porters with loads of cotton yarn, raw cotton, oranges, orange peel, rice bowls, seaweed, paper, and tobacco, and there were a few bundles of false faces for use in the New Year's festivities. False faces in a country where every one wears a natural impenetrable mask are something of an anomaly. Between the ridges, and in the valleys to which the gap led us, the ground was occupied with broad beans and wheat, while the slopes were given up to peas. On the right bank of the stream flowing north-west were a bamboo-paper mill and a wood-oil mill, and the sound of the hammering in of the wedges into the oil press greeted us as we passed far above them. From the summit the road makes a steep jump down to a ridge and runs southwards along it between two deep valleys, ultimately descending into the eastern valley through a dense tangle of wood-oil trees. The country then opens out into redsoiled rounded hills all under crop, a long white cylindrical turnip of very large size being especially prominent. The road makes another drop to the north bank of the Yangtsze, high up on which lies the district city of Wan Hsien, its walls containing only official residences, and its business quarter sloping to the water's edge which was filled with shipping. On the way down to my junk, which I left at Wu-shan Hsien with instructions to proceed up river and await me at Wan Hsien, we passed through a part of the city which had recently been devastated by fire and was being rebuilt. The origin of the conflagration was the burning of paper cash, that is, sheets of paper stamped all over with figures the shape of copper cash, one of the chief offerings to the departed in the other world.

During my twelve days' overland trip I had not seen a



Copyright.]

[See page 214.

19. RAPID AND GORGE ON THE UPPER YANGTSZE.



Copyright.]

See page 243.

20. BRIDGE OVER A TRIBUTARY OF THE UPPER YANGTSZE WAN HSIEN, SZECHUAN.

[To face p. 240.

PEKING TO PROVINCE OF SZECHUAN 241

single poppy, and, as regards the district of K'ai Hsien, I was satisfied from my own observation and from what I heard from foreigners as well as Chinese that no cultivation had taken place for two years. As regards the Wan Hsien district, poppy was grown in two places south of the Yangtsze during the winter of 1909–1910; but I saw none, and an English member of the China Inland Mission, a very close observer, assured me that during a journey which he made through the district a month before my arrival he had not observed a single poppy patch. These were remarkable results, and there could be no doubt that the measures taken by the authorities had been most effective in this part of Szechuan. Farmers, however, still held stocks of seed in anticipation of the stringency being relaxed.

The next chapter will be devoted to a journey through what had hitherto been the chief opium producing part of the province.

VOL. I.

CHAPTER IX

FROM WAN HSIEN TO CHUNGKING BY RIVER AND LAND

Fu Chou, the city of the department of that name, lies 127 miles to the south-west of Wan Hsien. It is situated on the right bank of the Yangtsze, and on the left bank of its tributary the Kung-t'an River which, flowing from the province of Kueichou, and known there as the Wu Chiang, enters the province of Szechuan near the important markettown of Kung-t'an, whence it derives its Szechuan name. The Kung-t'an is a rapid river flowing between steep, rocky banks, and its tortuous course gives rise to many formidable rapids; but it is navigated between the Yangtsze and Kungt'an by a special build of junk, one-half of whose stern is considerably higher than the other, which enables two sets of stern sweeps of different lengths to be worked simultaneously, and prevents disaster in the event of one sweep being disabled in the rapids-a very common occurrence. Salt from Szechuan for Kueichou is the principal up-river cargo : second in importance are sugar and paper. Rice is the main return cargo. The department of Fu Chou had always been the chief opium producing centre and the great opium market of Szechuan. It had offered the most strenuous resistance to the measures of suppression, and an excellent opium crop, much larger than usual, had been reaped in 1910, and my object was now to examine this department and ascertain whether its resistance had or had not been overcome.

We started up river from Wan Hsien on the 26th January, and arrived at the city of Fu Chou on the 2nd February. There was one day's delay owing to China New Year falling on the 30th January, when the crew worked only half the day, and half of the 29th, when they were preparing for the usual feast. On the way up I carefully examined the river banks which eight years before were practically given up to the cultivation of the poppy. I now found them entirely occupied by wheat, broad beans, peas, rape, sugar cane, and vegetables. Not a single plot of poppy was observable. Times had changed, not only as regards opium cultivation, but also in the matter of opium smoking. It had been my lot to travel many times up and down the Upper Yangtsze, and on each occasion the vessel in which I travelled was nightly impregnated with the neverto-be-forgotten sickly smell of opium smoke ; but the smell was now entirely absent, and the secret of its absence was the fact that opium smoking had given place to opium eating. I had a crew of 28 men, and five of them, who had been inveterate opium smokers, assured me that they derived as much satisfaction from a dose of one-hundredth as they had hitherto done from smoking one-tenth of a Chinese ounce of the drug. The raw opium was made up into small conical pellets costing 30 cash a piece.

On arrival at Fu Chou on the 2nd February I at once organized a caravan of carriers and porters for a journey through the department south-west to the district city of Nan-ch'uan Hsien, and then west to the district city of Ch'i-chiang Hsien and north to the port of Chungking

on the left bank of the Yang-tsze and the right bank of its tributary, the Chia-ling. A considerable part of the country to be traversed was personally known to me as a centre of opium production, especially in the part to the south of Chungking where I had spent three years as Consular Agent prior to the city being made an open port, and whence I had made three long journeys through Szechuan, Yünnan and Kueichou.

My preparations were completed on the morning of the 3rd February when, skirting the western sandstone city wall, we ascended by stone steps the face of the hill on which Fu Chou is built, and, after passing through a short western suburb, proceeded south-west along a hill-side bounding a valley to the east. This was merely the beginning of a series of valleys separated by sandstone ridges through which the road passes south-west; but these valleys, some shallow, some deep, are simply the bottom of a wide valley bounded to east and west by high well-wooded ranges. All the valleys and terraced hill-sides were in a high state of cultivation; yet, although admirably suited to the cultivation of the poppy, they were, with the exception of a small area, reserved for padi, almost entirely covered with broad beans in flower and wheat a foot or more high. Where the ruddy soil was scanty near the hill-tops peas took the place of beans. As we proceeded south-west the hill-tops were rockier and were frequently crowned with pine and cypress. The wood-oil tree was very abundant in valleys and on hill-sides; the camphor tree was met here and there; and there were many clumps of bamboo and not a few oaks. In the neighbourhood of Fu Chou hillsides were clad with orange trees yielding that variety of fruit known as Chü-tzu-the loose-skinned mandarin orange.

At five and ten miles from Fu Chou we passed through stone-walled refuges on hill-tops-memorials of less peaceful times in Szechuan. Opium was harvested all along this road in 1910, and the price of raw opium at Ma-wu-va, the market-town where we spent the night 25 miles from Fu Chou, was 900 cash per Chinese ounce, while prepared opium cost 1200 to 1600 cash according to quality, that is, according to the amount of adulteration. My arrival at Ma-wu-ya was the signal for the whole market-town to yell at and crowd me, and I had the greatest difficulty in keeping the wretched room which I occupied to myself. It was separated from the piggery by a wooden partition, and I had to call in the innkeeper to cover up with matting the many holes between the pigs and myself. On the whole, however, the pigs were less annoying than the people, who had to be reminded that I, not they, had paid for the use of the room. Mobbing robs travelling in China of half its pleasure, and the filthy night accommodation takes away the other half. It was bitterly cold and I had a charcoal fire brought into my room; but it was contained in an earthenware jar which, after emitting a number of loud reports, fell to pieces, scattering the red-hot charcoal all over the mud floor.

The 4th February was a cold, sunless Szechuan day : it was also a day of broken but densely-wooded country, the road continuing south-west between low hills, terraced, in places, to their summits, in others, affording but scanty footing except for pines, oaks, scrub-oak springing from old roots, cypresses and *Cunninghamia* with undergrowth of bracken and grass. As on the previous day, the road passed through many small valleys, at times skirting them along their bounding hill-sides, and at others descending into their bottoms and

following the edges of flooded padi-fields which were now much more numerous. I have frequently referred to fields submerged in preparation for the reception of the padi or rice shoots, usually in May; but submersion is not the only preparation. In the edges of these fields semicircular pits, from eight to ten feet in diameter, and separated from the rest of the fields by low mounds of earth, had been excavated and filled with farmyard and other manure. In some fields these manure pits were round or square, and from them the macerated fertilizing matter gradually percolates through the fields.

Six miles from Ma-wu-ya there were beautiful bamboo groves along the banks of a small stream which we crossed by a three-arched sandstone bridge, and they were being manufactured into paper by a small mill whose concrete pits were full of bundles of bamboo stems steeped in lime and weighted with heavy stones. Beyond the mill we followed a small valley for a short distance and then ascended a ridge densely wooded with pine-fine, straight trees about 60 feet high with a girth of about five feet at a height of four feet from the ground. Many of these trees were barked for their resin from one-half to three-fourths of their circumferences to a height of six feet, and the resin, which is used for coating tinder wood and impregnating and preserving coffin logs, was being collected. Other trees bore marks of former barking, and new bark was thickening over the old scars. Wood-oil trees and coir-palms were met with in the valleys, and broad beans covered the terraced hill slopes and fringed the mud banks of the padi-fields. Wheat and peas were small in quantity.

I was told at Fu Chou that if the poppy was being

cultivated within the department the place to find it would be on its borders, that is, where it adjoins the district of Nan-ch'uan Hsien, the reason being that the borders are more notorious for their lawlessness; for, when an offence is committed, the offender skips across the border and thereby escapes the meshes of the law. Now the markettown of Leng-shui-kuan where I spent the night, 30 odd miles from Ma-wu-ya, is one-half of it within the department of Fu Chou and the other half within the district of Nan-ch'uan Hsien, and yet I failed to see a single poppy plant during the whole of the day. Raw opium was quoted at Leng-shui-kuan at 1000 cash a Chinese ounce, or 100 cash dearer than at Fu Chou. A big crowd escorted me to my inn at Leng-shui-kuan and hung about the place in the hope of getting at me through chinks in door and walls. A tile removed from the ceiling was the only window I had in my previous night's quarters : at Leng-shui-kuan my room had a small paper window which gave less light than a removed tile; but I had a wooden floor, though with many rat holes leading to an empty basement, while overhead eyes, glued to the cracks of a wooden ceiling, were watching my every movement. By shifting my position from time to time I led my inquisitors a weary dance to enable them to satisfy their morbid curiosity.

Leng-shui-kuan lies on the top of a ridge, which we ran along for some distance southwards on the morning of the 5th February between deep valleys, turning afterwards south-west, down into valley after valley, divided up by well-wooded ridges. It was a continuation of the lumpy, sandstone country of the previous day; but the valleys were larger, and the ridges were terraced almost up to their summits. For the first ten miles there was less submerged

padi land, and wheat ran broad beans close for the first place, with rape and peas far behind for the third and fourth places. But rape increased in quantity towards the end of the day's stage, and was in full yellow bloom. Rape is a misnomer. It is doubtful whether the true rape plant exists in China; and the so-called rape plants are Brassica juncea var. oleifera and Brassica campestris var. oleifera. Pines, cypresses, oaks, and bamboos were everywhere abundant ; but pines were by far the most numerous. There were also occasional banyans (Ficus infectoria), but not of any great size. Ten miles from Leng-shui-kuan we struck the left bank of a river some fifty yards broad, flowing east and north-east on its way to join the Kung-t'an River. A few hundred yards up its left bank brought us to the markettown of Shih-niu-ho ("Stone Ox River"), which is bisected by a stream from the west, spanned by a fine, one-arched, roofed, stone bridge leading into the town. The stream joins the river below the town, to the south of which we crossed a ridge, with terraces of padi land fringed with broad beans, and returned to the left bank of the river. This we soon crossed, by a low, sandstone bridge of seventeen arches, and followed up its right bank, which opened out, and was terraced and cultivated. The lower slopes of the higher left bank were also terraced, the higher slopes being covered with cypress. The road follows the river valley in its southern windings, and, after passing another slab bridge of eleven arches, soon recrosses the river to the left bank by a third slab bridge of eleven arches, whence a mile and a half brought us to the solitary inn at Chao-chiatsui, thirteen miles from Shih-niu-ho. While I was having lunch the innkeeper assured me that the river was nameless; but this is unlikely, for it is no mere mountain

torrent, but a green-water river, showing in many places a deep, central channel washed from its sandstone bed. The banks of the river were frequently lined with cypress, which was the predominating tree throughout the whole ot the valley. As the river was fairly deep in its bed, irrigation wheels of the type already described were much in use for raising water to the terraces along both banks. Some of these wheels were about 40 ft. in diameter, while others of 10 ft. were irrigating the lower terraces. As wheels and axles revolve together, they are occasionally put to other uses besides irrigation. In the long axle of one wheel I noticed that wooden bars had been fitted, and as they revolved they caught, depressed, and released the ends of levers, whose other ends, with heavy stone wedges attached, worked into conical stone basins containing padi or unhusked rice. In other words, it was a primitive rice-hulling plant, driven by water instead of by foot, which is the ordinary method employed. The river valley widens out considerably to the south of Chao-chia-tsui, where it is encircled by well-wooded hills. Later, the valley closes for a short distance, allowing only room for the river, and then opens out into a slightly broken plain with a tortuous river; but the road goes south, and soon crosses the latter by a fine one-arched, roofed bridge of stone, built, according to inscription, in the year 1858. We were again on the right bank of the river, and about a couple of miles to the south of the bridge we entered the north gate of the white, stone-walled district city of Nan-ch'uan Hsien, with a prominent temple, similarly walled, outside the gate.

All along the road from Leng-shui-kuan to Nan-ch'uan Hsien the woodcutter was at work, and cypress trees were being felled and fashioned into coffin-wood on the spot.

As we neared the city of Nan-ch'uan Hsien more of the land was reserved for padi, and there was more rape than beans. Not a poppy plant was to be seen during the day's stage of 30 miles in a valley well suited by soil and water supply to its cultivation. In recent maps of Szechuan, Nan-ch'uan Hsien is placed on the left bank of the stream, which, for want of a better name, I shall call the Nanch'uan River. This is a mistake : it lies on the right bank. It is a pleasure to record that the room which I occupied within the city was quite palatial. It had a wooden floor; its walls and ceilings were papered; it contained four chairs, two tables, a small sideboard, and a bedstead to match; its walls were adorned with six Chinese paintings; and it had a paper window, with two shutters near the ceiling, which could be opened and closed at will. The whole was an unwonted luxury.

On arrival at Nan-ch'uan Hsien I had to engage fresh transport for the two days' journey westward to Ch'i-chiang Hsien, and after long haggling I had to accept the same terms as between Fu Chou and Nan-ch'uan Hsien, namely, 500 cash per man per day. We left the city by its west gate on the morning of the 6th February, and passed southwest between, and occasionally over low, rocky, well-wooded hills, with the usual valleys full of padi land and patches of rape and broad beans. Some distance to the south of Nanch'uan Hsien are several hill-ranges running east and west, and to the west a higher range going north and south; but they do not meet, and the road to Ch'i-chiang Hsien runs between them. The most prominent tree was the cypress, with a sprinkling of pine and abundance of bamboo. The cypresses resembled elongated toadstools, with umbrella tops and bushy stems, their shape being due to the rough

lopping of their lower branches for fuel. These trees the farmer utilizes for building his straw ricks, the stems to which the sheaves can readily be attached forming the centres, and the umbrella tops affording the necessary protection from the elements. The ricks are sufficiently raised above ground to escape the reach of cattle or other animals. The road, which was frequently built several feet above the level of the padi land, and paved with stone slabs, was good going, and along it we were accompanied by many carriers of raw iron in short, round bars, each weighing from 9 to 10 lb. The heaviest load I saw consisted of ten bars, five swinging from each end of the carrier's shoulder-pole, and the lightest was one bar, carried in a basket on the back of a child of about four years, who was struggling manfully with his burden. Meeting us came porters with loads of coal, coke, and lime, in which the district of Nan-ch'uan Hsien is rich. Many loads of pan salt from the Tzu-liuching brine wells in Central Szechuan were also bound for Nan-ch'uan Hsien, three miles from which we again struck the right bank of the Nan-ch'uan River, flowing north. Here a fine stone bridge of three arches, with flights of steps leading to it on both sides, spans the river, and below and above the bridge were many large irrigation wheels, raising water to the terraced banks.

Over the bridge the road soon runs through the markettown of Ta-hsing-ch'ang, and on to the village of T'ienchia-ch'iao, at the eastern entrance of which it crosses, by a bridge of one arch, a streamlet from the north and south range, already referred to, on its way to join the Nan-ch'uan River, which is again spanned by a three-arched wooden roofed bridge to the north of T'ien-chia-ch'iao. The valley down which the main river flows, stretching as it does south

to the east and west ranges, was under perfect cultivation and, although much of the land was reserved for padi, there were excellent crops of wheat, rape and beans. I also noticed several tobacco seed-beds where the seedlings were shaded by screens of bracken and reeds raised a foot or more above ground. On the edges of gardens here and there were neglected tea bushes. Beyond T'ien-chia-ch'iao the road hugs the north-west side of the valley and soon turns west into low rocky foot-hills well covered with cypress, scrub oak, the wood-oil tree and bamboo. A gentle descent from the foot-hills leads to a plain running north and south, and this we crossed to the market-town of Ch'en-chiach'ang which was made up of blacksmiths' shops. To the west the plain is bounded by low hills full of coal; but the chief mines whence the porters were carrying coal to Nanch'uan Hsien lie three miles to the south-east of the high road, from which a branch road leads to the mines. In other words, the principal mines were about twenty odd miles from the city of Nan-ch'uan Hsien. Among these hills is the hamlet of Tsung-lin-kou, whence a slight descent brought us to a mountain rill flowing north, spanned by a stone bridge of one arch where it turns north-west. The road then passes to the south-west, to a hill crowned by a white, high-walled, circular refuge, and ascends a valley southwest bounded at first by low, grassy hills which gradually become densely clad with small-stemmed bamboos of a beautiful yellow-green tint. This valley contracts with the ascent and opens out near the summit into a semicircle of hills, enclosing a considerable amount of arable land which was given up to wheat and beans. Over the rim runs the road, and along a flat, descending ridge fairly cultivated with deep valleys on both sides bounded by hill

ranges running south-west. The sides of the ridge and the hill slopes were one mass of bamboos, the road frequently passing through dense bamboo forests. The summits of the lower hills in the deep valleys were crowned with dark pines, which were thrown into relief by the yellow-green tint of the bamboos. It was a wonderful sight, and nowhere in China had I seen bamboo forests on such a large scale. Needless to say, numerous small factories were busy converting them into paper; but the bamboo is such a fast grower that they seemed to be making little impression on these wonderful forests. Leaving the ridge to pursue its course south-west we turned south and soon looked deep down south-west on a plain full of flooded padi plots and green crops with a mass of houses huddled together on slightly rising ground near its northwestern edge. This was the market-town of Wan-shengch'ang, where I was the object of intense curiosity. The road zigzags down to the plain, and during the descent we passed a coal mine where good lump coal was valued at three shillings a ton. Wan-sheng-ch'ang had very poor accommodation for travellers, and I passed the night in a windowless cell with a mud floor, all the light I got, and that was very little, coming from a hole in the tiled roof. I had to commandeer a door on which to level my camp bed on the top of a frowsy bedstead, the only article of furniture in the room.

Wan-sheng-ch'ang is 23 miles from Nan-ch'uan Hsien, and as we had still 33 miles to accomplish to reach the city of Ch'i-chiang Hsien, we were off next morning before the inhabitants had awaked to the business of the day. Our way led through a practically deserted street towards low hills bounding the plain to the west. At the edge of the

plain a fine stone bridge of three arches spans a stream flowing south-west. The stream was dammed just below the bridge, and boats were plying on the cooped-up water above it, one large boat laden with bundles of coarse, yellow paper lying along the left bank. A few hundred yards westward through a gap in the hills brought us to the boundary of the Nan-ch'uan Hsien and Ch'i-chiang Hsien districts, and to a valley running north and south. One valley followed another, all running in the same direction, till we had crossed three of them, and then we ascended north-west a fourth valley which landed us after a steep climb up stone steps at the summit known with its two houses as Sung-shang-p'o. After a gradual descent westwards, we entered a large broken plain lying north and south. The west side of this plain is rocky, and it was dotted about with wood-oil trees and more especially with coir-palms often twenty feet high. All the hills we passed through were clothed with bamboo, and there were numerous small paper factories at work. On the road we met strings of porters with pan salt and brown sugar wrapped in paper to prevent melting by rain. After wandering about north-west among broken hills, we ascended a long staircase through a forest of bamboo and cypress, springing from a carpet of bracken, to the summit crowned with pines, and thereafter ran along a ridge for a short distance through pines and oaks before descending to a wide valley with a south-west and north-west trend, in which lies the market-town of Yung-feng-chen and beyond it a sluggish stream flowing south-east. Crossing the stream by a six-arched slab bridge, we soon left it to ascend northwest a steep ridge clothed with cypress and dropped down into a narrow, rocky valley with a mountain rill flowing

north-west cooped up in a boulder bed. This valley was densely packed with wood-oil trees growing in the rockiest of sandstone soils. We crossed and recrossed the rill, which gradually assumed the proportions of a stream by receiving tributaries on its north bank, and again crossed it to enter the market-town of San-ko-t'ang, otherwise known as San-ko-ch'ang, on its left bank, 23 miles from Wansheng-ch'ang. Three miles beyond we crossed to the right bank and followed the stream, which is a tributary of the Ch'i-chiang River, till it turned south, when we passed over a ridge into a wide plain running north and south and bounded by low hills on its west side. On reaching the west of the plain we again struck the right bank of the stream where a small tributary enters it from the north, and followed it up until it again turned south. Passing over a couple of ridges to the west we again rejoined the stream, which ultimately goes south and south-west, and then ran north-west up a ridge covered with orange groves with a fine shady banyan on the summit. To the south a white pagoda, perched on a hill-top, marks the approach to the district city of Ch'i-chiang Hsien, which a western bend of the road revealed to be a town irregularly built on the east face of a low hill. The city lies on the left bank of the Ch'i-chiang River, which flows north-west to and enters the Yangtsze at Chiang-k'ou to the south-west of the port of Chungking. The river was alive with junks, for to Ch'ichiang Hsien is brought salt from the Tzu-liu-ching brine wells for distribution in southern Szechuan and northern Kueichou. It was dark when we were ferried across the river and entered the city. The greater part of the numerous valleys through which we passed consisted of submerged padi plots; but wheat, the most prominent growing crop,

rape, broad beans in flower, and peas occupied the terraced and sloping hill sides.

We were still two long stages from the port of Chungking and I had to engage fresh transport at Ch'i-chiang Hsien. A demand was made for 600 cash per man per day; but this I resisted, offering 500 cash on condition that we should reach Chungking in a couple of days, no matter what the weather. My offer was declined and I went to bed; but at midnight I was roused with the welcome news that my terms were accepted. There is, as a rule, no fixed price in China, and the value of an article or labour is arrived at only after the keenest bargaining. In 1882 I travelled from Chungking to Ch'i-chiang Hsien on my way to the provinces of Yünnan and Kueichou, and I made the distance about 64 miles; but the innkeeper declared that it was only 63. This may well be, for up-hill is reckoned more than down-hill, and we were now descending to the Yangtsze. Ordinary maps are of little use for giving road distances, especially in China, for, although it is a simple matter to take a pair of dividers and measure the distance between two places on the scale provided, that distance merely represents the crow's flight, and takes no account of the many sinuosities of the road caused by rounding hills and rice fields. Measured by dividers Chungking is 45 miles from Ch'i-chiang Hsien, whereas, as I have said, the actual ground to be travelled is from 63 to 64 miles.

It was raining at daylight next morning (8th February), and the innkeeper, not, of course, from disinterested motives, advised me to remain a day longer as he felt certain there was to be a regular downpour. I told him, however, that my time was not my own, that I was the servant of a government which was occasionally penny-wise and pound-foolish, and did not always consider the acquisition of information useful to mankind of more value than the expenditure of a few cash, and that I must hurry on. This came as a surprise to one of a race which places little value on time, and is well content to leave till to-morrow, or even much later, what should be accomplished at once. He gave it up, and we were off, and, although the predicted downpour did not arrive, rain continued to spit for more than twenty miles; but my men affixed their iron crampons to their sandals and thus prevented slipping on the muddy sandstone road.

We recrossed the Ch'i-chiang River and proceeded northwards along its right bank for a few hundred yards till it made a bend to the west, when the road makes a slight ascent northwards past many banyan and orange trees and under a number of carved stone memorial arches into somewhat broken country consisting of low hills with intervening Some of these hills were cultivated to their valleys. summits, while others were covered with cypresses and russet oaks. Pines and bamboos, too, were not wanting, and the wood-oil tree was dotted about on rocky hill-sides and in valleys. The oak, of which there are two varieties -Quercus Bungeana and Quercus Fabri-is a valuable asset to the farmer in this part of the province, for it is on its leaves that the wild silkworm, known as Antheraea Pernyi, feeds and on which it spins its cocoon, yielding the silk called Tussah or Tusser. The latter is said to be derived from the Hindustani word tassa; but there is a curious similarity between the former and the two Chinese characters for T'u-ssu, which may be translated "Wild Silk." The Antheraea Pernyi is bivoltini, and two crops of cocoons VOL. I.

are gathered every year—in spring and autumn. Its presence in this part of Szechuan is due to the enterprise of a Chinese official who introduced the eggs from the province of Shantung, which ranks second to Southern Manchuria as a producer of wild silk. But much more of this silk is produced in the province of Kueichou than in Szechuan and at Chengtu, the capital of Szechuan, where I made a careful study of the silk industry of the province, this silk, whether of Kueichou or Szechuan origin, is called Kueichou silk, and the silk dealers there tried to persuade me that none was produced in Szechuan, turning a deaf ear to my statement that I had seen these silkworms feeding on the oaks in the district of Ch'i-chiang Hsien in 1882.

The whole day's journey of 28 miles from Ch'i-chiang Hsien to the market-town of Chin-ngo-ching may be described in a few words. The road goes north, with slight deviations to east and west, from valley to valley, sometimes along hill-sides above them, at others descending into them, crossing ridges separating them, and passing along ridges to avoid them. There were no steep gradients as the hills are of no great height. At only one place did cultivation practically cease, and that was through a narrow valley through which the road passes on nearing the small market-town of Lung-kang, about 23 miles from Ch'i-chiang Hsien. Although the rain had ceased, the hills on both sides of the road were enveloped in mist which completely obscured them. At the hamlet of Fen-shui-ling, thirteen miles from Ch'i-chiang Hsien, we passed into the Pa Hsien district in which the port of Chungking is situated. One thing that impresses itself on the mind is the sight of a coffin, and here they were in the piece as well as made up. Every house had a coffin or two lying under its eaves, some

new, some old, and one's first surmise was that the mortality in these parts must be great. The cause was, of course, the abundance of cypress, whose wood is much prized for coffin-making, and it must be remembered that in China a coffin is a most acceptable present, especially if made by one's own family. Many hundreds of pounds are frequently spent on a single coffin, and it is highly treasured by the person for whom it has been designed. To Western ideas the present of a coffin by a son to a parent would be somewhat suggestive, and the daily sight of it at the house door would certainly tend to hasten its occupation. In China it is otherwise : a coffin is one of the most valued of gifts.

The Chinese have very few pastimes, and such as they indulge in are usually carried out with a view to profit in one shape or another. Fishing is a case in point. In spring small bundles of reeds and grass are strung on bamboos, sunk in the shallow water of the Yangtsze, and weighted with stones. Here fish spawn and their ova adhere to the bundles which are later taken up and sold to farmers, who distribute them in their submerged padi plots, where the ova hatch and develop into fish some six inches long. The fisherman in these plots, of which we passed many during the day, requires neither line nor hook. With a long bamboo in his right hand and a circular bottomless wicker basket with a hole in the top in his left, he wades up to his thighs in mud and water, and, as he wades, he ruffles the surface of the water with a semi-circular sweep of the point of the bamboo. The fish are scared and dash about to find places of safety, thus exposing themselves to the eye of the fisherman, who plunges forward, and caps the spot of disappearance with his basket. Inserting his hand and arm in the hole in the top of the

basket he gropes in mud and water for his prey and is rarely at fault.

The stage of 38 miles from Ch'i-chiang Hsien to Chin-ngo-ching was too much for my men, and we did not reach the latter place till long after dark. Then I found that the two porters with my camp-bed, silver, and stores had not arrived, and that one of the two men who formed my local escort, and was in charge of the baggage, was coolly smoking opium in the room next to mine. He was promptly bundled off in search of the missing men, one of whom turned up at midnight and reported that, owing to darkness, they had been obliged to give up three miles from the end of the stage, that their loads were quite safe, and that they would arrive at Chin-ngo-ching soon after daylight. They kept their word, and in a few hours we started on our last stage of about 25 miles to Chungking. The road goes north along a ridge between two valleys which were full of padi plots, wheat and beans, while the ridge itself, terraced and cultivated on both sides, was timbered with cypress, pine, the wood-oil tree, a few oaks, and a sprinkling of Cunninghamia. On descending the ridge, the road runs along valleys and hill-sides similarly cropped and timbered, and after ascending and descending several low hill-ranges, drops into a long, wide valley, and into the market-town of Lao-ch'ang, eighteen miles from Chin-ngo-ching. Writing of this valley in 1882, I said :---"Beyond the range of hills opposite Chungking, one of the highest peaks of which is crowned by Blakiston's 'Pinnacle Pagoda,' we enter a valley which, at this season of the year, presents a surprising sight. The poppy is in flower, and one white field follows another, relieved here and there by fields of purple. With the exception of the

plots reserved for padi, at present submerged, and a few patches of wheat, barley and rape, the whole of this valley and the hill-sides, where cultivation is possible, are covered with poppy. I am near the mark when I say that at least one-half of this valley, which extends for miles, is given up to the drug. Lao-ch'ang appears, at first sight, to be a place of little importance, but it is the centre of this poppy-valley, and Lao-ch'ang opium has a reputation not inferior to that of Yünnan." Not a single poppy was now to be seen in this valley.

To the north of the Lao-ch'ang valley, the road threads through other smaller valleys with many wood-oil trees and over ridges well wooded on their summits, and drops into the village of Hai-t'ang-ch'i, which lies on the hill-slope forming the right bank of the Yangtsze, and overlooks Chungking, creeping from the water's-edge on the left bank up a hillside just above the junction of the Yangtsze with its tributary the Chia-ling River. Before reaching Hai-t'angch'i, however, I noticed many signs of the proximity of foreigners in the shape of bungalows and European houses, perched on hill-sides, many of them well over 1000 feet above the level of the Yangtsze. These, some 30 in number, were the summer resorts of the foreign consular, commercial and missionary community of the port and neighbourhood. Times had changed : when I arrived in Chungking as British Consular Agent in 1882, I was promptly mobbed, one of my predecessors having been rioted and injured in his attempt to escape the hands of a howling mob. Chungking is now quiet, and little attention is bestowed on the foreigner, who has all the luxuries denied to less fortunate pioneers. He has gunboats and the protection which they ensure. Even electric

light was being installed, and in the lower parts of the city it was struggling with the rush-wick, candle and kerosene lamp to pierce the gloom of the city's murky streets, and, so far as I could see, not very successfully ; but Chungking was buried in its usual fog, through which and seething humanity we climbed to the hospitality of the British Consulate, after being ferried across the Yangtsze.

I spent three days in Chungking, and the question of opium occupied the greater part of my attention. His Excellency the Vicerov of Szechuan, in his efforts to suppress opium, had prohibited its export from the province from the 3rd October, 1910. A fortnight's grace was afterwards allowed; but after its expiry it was found that, owing to a falling market, considerable stocks remained unexported. These had to be dealt with, and an official bonded warehouse was set apart into which dealers were required to deposit their opium. The exact amount so deposited was unknown, but it was estimated at about 1350 piculs. This opium, if accompanied by a certificate, was being exported, and the Commissioner of Customs informed me that about 100 piculs had passed through the Maritime Customs in January for export down river. No other opium could be exported. The same measures had been taken at Fu Chou and Wan Hsien. The export duty through the Maritime Customs remained the same, namely 20 Haikwan taels a picul; but such opium, when it reached Ichang in the province of Hupei, was liable to a further tax or consolidated duty of 115 K'u-p'ing, or 113.14 Haikwan taels per picul. The export from Chungking through the Maritime Customs in 1910 was 4633 piculs of Szechuan and 2780 piculs of Yünnan opium ; but the total which reached Ichang in that year by the Yangtsze was

28,350 piculs of Szechuan, Yünnan and Kueichou opium. How this total was apportioned between the three provinces was unknown, for, although very little Kueichou opium reaches Chungking, it is well known that much of the so-called Yünnan drug is really Szechuan opium mixed with a much smaller quantity of Yünnan opium and the mixture passed off as the Yünnan variety, which fetches a much higher price. The restricted cultivation in Szechuan in 1910 led to increased demand from the Eastern and Southern provinces, with the result that the price during summer rose from 1100 to 1200 taels a picul in Chungking. At the same time, the demand led to excessive adulteration, and the down-river buyers became heavy losers. As a consequence the demand slackened, and at the time of my visit the price had fallen to 960 taels a picul. In Chungking there were many official prepared-opium shops where, and where alone, smokers were permitted by regulation to make their purchases; but small stocks were held by others, and supplies could be bought privately.

I had made two short journeys into the east and southeast of the province, and had failed to find the poppy, and I now determined to proceed overland from Chungking to Chengtu, the capital of Szechuan, through a country where I had found the poppy a prominent crop in former years.

CHAPTER X

CHUNGKING TO CHENGTU, THE CAPITAL OF SZECHUAN

In the flying visits from my junk described in the two preceding chapters, I travelled light because they occupied only a few days each; but as I was now to undertake a journey of four months, it was necessary to carry supplies and clothing for that period, and I found that, after discarding luxuries in every shape and form, I required a caravan of not less than 37 bearers and porters. I was, however, able to cut down the wage of each man from 500 to 400 cash. Chengtu, the capital of Szechuan, some 200 miles by road from Chungking, was my objective, and from that city my plan was to proceed south-west to Yünnan, pass through that province from north to south as far as its capital and then cross the province of Kueichou from west to east into the province of Hunan, whose capital-Changsha Fu-is in communication by steamer and rail with Peking. This plan, with one or two deviations, I was able to carry out, and this and subsequent chapters contain the results of these wanderings.

In 1883 I travelled overland from Chungking to Chengtu, following in the main the high road which goes west by south to the district city of Lung-ch'ang Hsien and then north-west to the provincial capital. In February, 1903, I went overland from Chia-ting Fu, on the right bank of the Min River, one of Szechuan's chief tributaries of the Yangtsze, to Chengtu. In both years I found the poppy a very prominent crop along these roads, and now, in February, 1911, I resolved to proceed from Chungking to Chengtu by way of Chia-ting Fu so as to combine as much as possible of the two routes, and thus enable me to draw a comparison between present and past conditions. We set out on the 13th February, two days later than in 1883; but the start was delayed until the morning was far spent owing to haggling among the porters over their loads, each desiring to carry the lightest possible weight consistent with a decent show of bulk. By their contract they undertook to convey me, my followers and belongings to Chengtu in fifteen days without a single day's rest.

The small walled town of Fu-t'ou-kuan, five miles to the west of Chungking, is perched on the shoulder of a peninsula whose neck, washed on the south side by the Yangtsze and on the north by its tributary the Chia-ling, is surmounted by the large sandstone rock on which Chungking is built. The town is unimportant ; but outside its west gate it is embellished with many stone carved archways and tablets through which runs the road. These had been added to since I visited the town in 1884, and stonecutters were busy cutting figures and characters on the sandstone pillars of a new archway in course of erection. From Fu-t'ou-kuan the road goes west by south, and after eight miles encounters a couple of low ridges running north and south. These, each with a village on its crest, it crosses, and a little further west passes through a double stone gateway with a low wall running up the face of the hills on each side. From this pass a good view is obtained of a plain stretching westwards; but it is a plain full of low hills or mounds which, in the plain itself, prevent any

265

wide outlook over the surrounding country. In this plain, twenty miles from Chungking, is the large market-town of Pai-shih-yi, where we spent the night. The two ridges crossed during the day were more heavily timbered than in 1883 with cypress and wood-oil trees; but the pine, bamboo and coir-palm were also much in evidence. The bracts of the coir-palms, besides being made into rainclothes, ropes and shoe uppers, are much used for manufacturing shoulder straps for pack frames and baskets and for covering wooden boxes. Writing of this stage in 1883, I said :--- "The crops at present in the ground are wheat, beans, rape, poppy and peas. On the less hilly ground the poppy abounds; but on the hills, which have scarcely any depth of soil, beans and peas, the former in full flower, seem to thrive well." With the exception of the poppy, which was entirely absent, this description was equally applicable in 1911. The traffic going east consisted of loads of tobacco leaf, cased with screens of bamboo, from the Chengtu plain, silk fans and bags of orange skins which are used in the preparation of drugs.

Along the high road to the provincial capital there are many large market-towns, some of them more important than cities, where passing caravans are accommodated and where a considerable trade is carried on. Such a town is Tsou-ma-kang lying in a cleft between two hills six miles to the west of Pai-shih-yi. To reach it we had to cross a few ridges, and to the west of it the road enters a typical Szechuan plain dotted with low, rounded hills cultivated to their summits, the bottoms of the valleys being flooded for the coming padi crop and the surface of the water covered with a floating, rust-coloured, small-leaved aquatic plant. The hamlet of Lao-kuan-k'ou, five miles to the west of

Tsou-ma-kang, is the meeting ground of three districts-Pa Hsien, in which Chungking is situated, Chiang-ching Hsien to the south and Pi-shan Hsien to the west. Our road lay west to the market-town of Ma-fang-ch'iao, 30 miles from Pai-shih-yi. The banyan was very common, and under its shade nestled houses and hamlets, while several fine carved sandstone arches spanned the road. To the east of Tsou-ma-kang the ridges were clad with cypress, pine, oak and wood-oil trees, for they are rocky and little cultivated on their higher slopes. Their sides were in many places densely covered with bamboo. Quantities of orange trees were dotted about the low hills to the west of Tsou-ma-kang, and to the west of Lao-kuan-k'ou I noticed several tea plantations. I have stated that the valley bottoms were full of submerged padi plots ; they were also studded with farmhouses embowered in bamboo groves through which peeps could occasionally be had of the whitewashed walls. Writing of this stage in 1883 I remarked :-- " The ordinary winter crops are on the ground, and as we proceeded westwards the poppy increases : this crop looks particularly healthy and the plants are strong and vary in height from six to nine inches." There was now no poppy : broad beans, rape and wheat with here and there a plot of taros (Colocasia antiquorum) were alone to be seen.

Ma-fang-ch'iao lies on both banks of a stream which, spanned by a fine, new, sandstone bridge of four arches, flows east and then south to the Yangtsze which it enters to the south-west of the district city of Chiang-ching Hsien. The parapet of the bridge, which is built just above a low slab bridge of many arches, was still incomplete and rough sandstone blocks waited to be dressed and round up the

work. Across the bridge the road follows the right bank, but soon turns west by south and crosses a hill, on the west side of which it passes through a stone archway marking the boundary of the Pi-shan and Yung-ch'uan Hsien districts, less than two miles from Ma-fang-ch'iao. A mile beyond the boundary it crosses by a three-arched stone bridge a streamlet whose bulk was quite out of keeping with the size of the bridge. Three miles further found us in the large market-town of Ta-an-ch'ang situated on the summit of another hill and all but concealed by bamboos and banyans. The road then descends south-west to exceedingly well cultivated and fairly timbered country stretching for ten miles to the district city of Yung-ch'uan Hsien occupying the southern face of a hill and with extensive eastern and western suburbs. Beyond the city the road goes north-west through higher hills less cultivated but better wooded than to the east. In fact, many of the hills were graveyards. Ultimately it enters and ascends a valley down which flows a stream obstructed, here and there, by rocks in its southerly course to the Yangtsze. This stream we crossed by a three-arched, wooden-roofed bridge, giving its name to the village of Shuang-shih-ch'iao which the stream bisects. From the bridge the road runs up a hill-side through many banyan trees to the village of Huang-ko-shu ("Banyan Trees"), 26 miles from Ma-fangch'iao, where we put up for the night. There was considerable traffic on the road between Ma-fang-ch'iao and Huang-ko-shu. Accompanying us were carriers of foreign cotton yarn and the finer cotton goods packed in bamboo baskets from Chungking, and to the east and west of the city of Yung-ch'uan Hsien we met many porters with baskets of granular salt, protected by water-proofed paper,

from the great salt wells of Tzu-liu-ching. Some of the streets of Yung-ch'uan Hsien were lined with baskets of coal, mined five miles to the west of Huang-ko-shu, whence men, ponies and bullocks were carrying it eastward. Charcoal made from bracken and undergrowth was also bound east. We also met many carriers of grass-cloth woven from the inner fibrous peel of Bahmeria nivea, which grows well in the district of Yung-ch'uan Hsien to the west, and several droves of white pigs for which the district is noted. The banyan was common by the roadside and it shared with the wood-oil tree the rocky banks of the stream near Shuang-shih-ch'iao. Hill-tops and sides, where not terraced and cultivated, were clad with cypress and bamboo. In 1883 I reported that in the Yung-ch'uan Hsien district the poppy occupied more ground than the other growing crops. Such was no longer the case : only beans, rape, wheat and some sugar canes still uncut were to be seen.

The road makes a slight ascent northwards from Huang-ko-shu into the same low, hilly country, and then goes north-west and west, rounding hills and skirting fields in the valleys. The hill-tops when not under cultivation were wooded. Soon after leaving Huang-ko-shu we ran into several droves of young white pigs, some with black faces, on their way to market. One pig, less courageous than his brothers, could not be induced to pass our chairs, and bolted back followed by two men in full chase. He was headed once or twice, but managed to escape and continued his flight. Some of my men joined in the hunt, and amid cries of, "Catch him ! Catch him !" from their comrades ran the gallant porker up a hill-side until all the chairs had passed. Younger pigs were being carried in

bamboo baskets. The large market-town of T'ai-p'ing-chen lies in a hollow five miles from Huang-ko-shu, and five miles beyond is another large market-town called Yu-ting-p'u, and in the hills between the two towns are the mines whence coal is distributed east and west. On the hill-sides east of Yu-ting-p'u potters were at work moulding pots and other household utensils from a mixture of clay, coal ashes and potash. The ware, which is exceedingly light when baked, is glossy black in colour and looks as if the surface had been blackleaded and polished. It is cheap but effective. The northern district of Ta-tsu Hsien juts into the Yung-ch'uan Hsien district two and a half miles to the west of T'ai-p'ing-chen, and Yu-ting-p'u, built on both sides of a hill, lies within the former ; but the Yung-ch'uan Hsien district is re-entered two miles west of Yu-ting-p'u, only to be succeeded two and a half miles later by the district of Jung-ch'ang Hsien. On leaving Yu-ting-p'u, in which many blacksmiths were busy turning out choppers, shovels, and other household utensils and agricultural implements, the road takes a more northerly course for five miles, and then goes west by south for a similar distance to the market-town of Feng-kao-p'u, which, it being market-day, was one mass of seething humanity through which my bearers had the greatest difficulty in pushing their way to an inn. The market-town is a great institution in Szechuan; each district has a number of them, many or few according to its importance and size, and each town has its market, usually several times a month on dates fixed so as not to interfere with markets in other places. At these places on their appointed market-days the countryside assembles to sell or buy, as the case may be. Before entering Feng-kao-p'u the country begins to open out, and

west of the town the low hills were more fully cultivated, and there was less timber. The approach to the city of Jung-ch'ang Hsien, ten miles from Feng-kao-p'u, is marked by many carved stone archways spanning the road two or three hundred yards apart. They and banyans were exceedingly common during the day; but they were particularly numerous in the neighbourhood of the city. Many of these magnificent monuments were desecrated by the proximity of wretched hovels and their side arches were frequently used as receptacles for rubbish. The billsticker, too, had been plying his trade, and it was painful to see the carved stone work defaced by posters advertising foreign-made cigarettes. Trade was brisk : hundreds of porters with coal, sugar, salt, grass-cloth, red or purple sugar cane, and water chestnuts (Scirpus tuberosus) were going east. Wheat, beans, and rape with a few patches of peas were the only crops in a beautifully cultivated country. In 1883, reporting on this country, I stated that the poppy was the most prominent of the usual winter crops. It was now entirely absent.

I stated above that the district of Jung-ch'ang Hsien is noted for its grass-cloth; but the finest Szechuan grass-cloth is much inferior to and cheaper than the same material woven on the looms of the Kwangtung or Canton province.

The city of Jung-ch'ang Hsien lies on the left bank of a stream flowing south, where it is spanned by a sevenarched stone bridge outside the west suburb, and then south-west on its way to join the T'o River. Across the bridge the road skirts the right bank till the stream makes a bend to the south, when it leaves it and goes north-west through knolly country all well cultivated and with a

certain amount of flooded padi land. Nor was wood wanting, for cypresses and clumps of bamboo were dotted about on knolls and round farmhouses, and an occasional coir-palm was also in evidence. The right bank of the stream was fringed with bamboos, which supply wood for the handles and ribs of fans, the manufacture of which is a special industry of the city of Jung-ch'ang Hsien. In 1883 I reported that the poppy had a prominent place along both banks. This was no longer the case ; the poppy had given way to wheat, beans, rape, and another oil-yielding plant called Ch'ing-ts'ai, a species of Brassica with a much larger leaf than rape. The leaves of this plant when young are eaten as a vegetable. It was in full yellow flower and the oil expressed from its seeds is used for cooking. It sends up its flower-bearing stalks from the centre of a number of large cabbage-like leaves. At the bend the stream, about 100 yards wide, is rendered all but unnavigable by a reef of rocks from the right bank, leaving only sufficient room on the left bank for a narrow boat to pass. Several boats laden with coal were waiting their turn to be tracked up-stream to Jung-ch'ang Hsien, and two or three empty craft lay above the narrow passage ready to descend. Six miles from Jung-ch'ang Hsien we passed through the market-town of Kuang-shun-ch'ang, to the immediate west of which a road runs north to a range of hills with a northeast and south-west trend. This range, about a mile or more from the high-road, supplies the coal, and from this branch road men, bullocks, and ponies were issuing from a gap in lower hills close to the main road, with loads of lump coal bound east for the village of Hsiao-ho-pien on the right bank of the stream, six miles below Jung-ch'ang Hsien, for shipment to that city and west to the district



Copyright.] [See 21. CITY AND PORT OF CHUNGKING, SZECHUAN.



Copyright.]

[See page 287.

22. SALT JUNK ON THE UPPER YANGTSZE, CHUNGKING.

[To face p. 272.

,

·

city of Lung-ch'ang Hsien and market-towns on the way. Seven miles beyond Kuang-shun-ch'ang we passed through the large town of An-fu-ch'ang, otherwise called Shao-chiufang, crowded with humanity, for here, too, it was marketday. Many shops displayed pottery ware in the shape of jars, flower vases, tea-pots, and other articles, mostly brown, with here and there samples of a well-glazed, fine, lightgreen colour. Ramie, that is, the fibre of Bahmeria nivea, large iron cooking-pots and common woodware were exposed for sale on street stalls. Eight miles to the west of An-fu-ch'ang the country is flatter, and here, in addition to the usual crops, there was a considerable quantity of white sugar cane still unharvested. Two miles from the western edge of this flat country we passed from the Jung-ch'ang Hsien to the Lung-ch'ang Hsien district. More hilly country succeeded the flat, and the road goes north and north-west through the foot-hills of a range, well timbered with pine, cypress, and bamboo, to which it lay parallel the greater part of the stage. At the hamlet of Shih-yen-ch'iao, six miles within the boundary of the Lung-ch'ang district, we crossed by a ten-arched slab bridge a sluggish stream about 30 yards broad, another tributary of the T'o River. This bridge is adorned with carved stone heads of elephants and other monsters rising sideways from its piers. From the bridge the road keeps north-west through hilly country and, after crossing a low pass with a seven-storied pagoda on the hill-top, enters the southern suburb of the city of Lung-ch'ang Hsien, 33 miles from Jung-ch'ang Hsien. Salt in large quantities, tobacco and water chestnuts represented trade moving east, and accompanying us were porters with paper for Tzu-liuching to be used in protecting the salt on its way from VOL. I. т

the salt wells to places of consumption. Rain fell heavily before we reached Lung-ch'ang Hsien and it did not improve the road or our tempers.

On leaving Lung-ch'ang Hsien on the morning of the 17th February we struck the left bank of a stream about sixty yards broad flowing west. This, too, is a tributary of the T'o River. It is spanned by a large stone bridge across which lies the high road to Chengtu; but our way lay west, and we skirted its left bank for a few hundred yards till it makes a bend to the south, when we crossed by a seven-arched slab bridge to a wavy country well cultivated and fairly wooded. I have already referred to rape and another species of Brassica as oil-yielding plants; but another oil-yielding plant called Hua-ch'ing-ts'ai, also a Brassica, now put in an appearance. It was in full yellow bloom and its long beautiful scalloped and deeply indented leaves aptly suggest the word "Hua" or "Embroidered," which is used to describe the plant. Most of the white sugar cane had been cut, and peas were growing amid the stubble in the drills which had held the canes, while spring wheat was rising in the trenches between the drills.

Ten miles from Lung-ch'ang Hsien we passed through the large market-town of Lung-shih-chen which is bisected by a small stream flowing south and spanned by a slab bridge of nine arches, and two miles to the north-west we crossed another stream going south-west. It, too, had its bridge of six arches. These two streams were bound for the T'o River. Eight miles from Lung-shih-chen brought us to the large market-town of Huang-chia-ch'ang, beyond which the road takes a more westerly course and enters

more hilly country with well-watered valleys. At a distance of seven miles from Huang-chia-ch'ang we passed from the Lung-ch'ang Hsien to the Fu-shun Hsien district, and the boundary is a stream flowing east and bending south where it is spanned by a bridge of ten arches, five of which are within the Lung-ch'ang Hsien and five within the Fu-shun Hsien district. Three miles more and we entered the large market-town of Niu-fo-tu on the left bank of the T'o River, a commercial highway of very considerable importance. In some of the deeper valleys to the east of Niu-fo-tu water was being lifted by means of the endless chain pump from the submerged padi land to the terraces higher up. The road from Chungking to Lungch'ang Hsien has frequently a width of ten to twelve feet; but west of the latter it narrows very considerably and our chairs had some difficulty in passing the loads of the hundreds of salt porters without collision. The markettowns, although as numerous and large as along the high road, are poorer and dirtier, catering as they do to the salt porters who have little money to spend and have no thirst for the luxuries which money so often engenders. But, poor as these men are, it was a pleasure to notice the courtesy and consideration with which they were treated. While I was lunching in the one room of the inn abutting on the street, the young innkeeper and his wife addressed every passer-by with the laconic invitation, "Come, sir, and eat," repeated over and over again. One porter, who appeared to be an old acquaintance, having replied that he had already eaten, was invited to "Come on your way back." One is sometimes inclined to relegate the Chinese wife to a second place ; but from my experience of Chinese inns I am of opinion that the innkeeper's wife is veritably

"the better half." It is marvellous to note the way in which she tackles guests for the price of their night's lodgings and refuses to abate a single cash in reply to pleadings for a reduction, and I have frequently overheard man and wife, after all the guests had gone to bed, counting the takings for the day, and the wife upbraiding her lord in no measured terms if the receipts did not tally with her estimate. As in many other households, she always had "the last word."

The banyan was common by the road-side and orange trees occupied many of the hill slopes. At Niu-fo-tu the T'o River is about 150 yards broad. It is navigable by small boats as far north as the district city of Nei-chiang Hsien, which is one of the chief centres of sugar production in Szechuan. Two varieties of sugar cane are cultivated in the province-purple or red cane (Saccharum officinarum var. rubricaule) and white cane (S. officinarum var. sinenese). One looks in vain for a field of purple canes; but the reason is simple. When growing, and even when ripe, these canes, which are used mostly for chewing and not for the manufacture of sugar, are covered with a creamy white substance, and it is only when they have been harvested by uprooting in November and pitted for a time that they develop their purple colour. They are unearthed as required for consumption and are available all the year round. A whole cane measures four to five feet in length with a girth above the root of from four to four and a half inches, tapering very gradually to some three inches near the tip which has a crown of leaves. A good cane of this size has twelve to fourteen joints separated near root and tip by short intervals which increase to some six inches near the centre.

It is from these joints that the new canes of the following year spring, the planting out in the end of March and the beginning of April consisting in laying down cuttings of the old canes in shallow trenches and covering them with soil. The white cane which, exclusive of its crest leaves, attains a height of about nine feet, is much slenderer and longer jointed than the purple variety and is much more widely cultivated. The principal cane growing and sugar producing areas in Szechuan lie along the T'o River, especially, as stated above, in the district of Nei-chiang Hsien, and along the banks of the Yangtsze from Hsuchou Fu, better known as Sui Fu in lat. 28° 43' N. and long. 104° 32' E., to Chungking. Nei-chiang Hsien is noted for the quality of its sugar; but much of the sugar which bears that name is produced elsewhere. The sugar is manufactured in small factories which abound in the canegrowing areas and I shall now describe one of these and the method of production. In the centre of the shed with, as in this case, a circular roof two stone cylinders, four feet high and two feet in diameter, are fixed upright side by side in a stone bed by wooden axles and kept in position by a wooden bar into which the axles at the tops of the cylinders are fitted. This bar is held by stone pillars sunk in the ground at each end. The stout top axle of one of the cylinders projects high above it, and into the projecting part a long curved wooden lever, sloping downwards to the edge of the shed, is firmly fixed. At the end of the lever two water buffaloes are harnessed, and it is sufficiently curved, when dragged round, to clear the wooden bar which keeps the cylinders in position. The upper parts of both cylinders are grooved and wooden cogs inserted so that, when the lever is dragged round by the buffaloes, the cogs of one

cylinder fit into the grooves of the other and both cylinders revolve inwards. The lower halves of the cylinders are smooth and the canes are fed by hand between them and passed out at the other side, while the juice falls into a tank underneath and drains off into a second tank adjacent to the boiling pans. In a room alongside the shed a furnace, twenty feet long by eight feet wide, is built of brick and lime to a height of two feet above the floor with six circular openings, three feet in diameter, in which six iron pans rest. Three of the pans are arranged in the form of a triangle, and the other three are in line at right angles to its base. Coal is the fuel used in the furnace underneath. The pans contain juice in different stages of boiling, and there is a tub alongside into which scum from the various pans is emptied. One man ladles juice in small quantities from pan to pan, commencing from the apex downwards, while another violently stirs with a wooden plumper the final pan, that is the pan furthest from the triangle, in which the juice concentrates. Later the contents of this pan are ladled into a cold iron pan, where they are again vigorously stirred for ten minutes with a miniature iron spade, and then poured into wicker baskets of various sizes loosely lined with paper. These baskets are sized to contain from 2 to 30 catties (2²/₃ to 40 lb.), and their contents, when cool and adhering to the paper, are more like toffee than sugar. This is brown sugar, which is a very important article of internal trade, entering largely into the manufacture of confectionery and sweetmeats of every description. This brown sugar, which is very imperfectly crystallized, is refined into what is called white sugar, a granular sugar of a brownish-white colour. The process is primitive. Wooden vats with drainage holes in the bottom

are carpeted with grass, filled with brown sugar, and covered with vegetable ashes or earth. The vats are then exposed in the open day and night for about thirty days, and moisture percolating through ashes, or earth, and sugar washes away the syrup which escapes through the drainage holes. The ashes or earth are then removed and the contents of the vats further bleached by spreading on mats in the sun until the necessary grade of whiteness is obtained. Barley sugar or sugar candy is made from the so-called white sugar by fusion, and the high temperature is attained by mixing lard with the sugar. The result is large, dingy-brown crystals which are used as a sweetmeat. The lees collected during the conversion of brown into white sugar are used for mixing with water as a beverage as well as in baking whole rice cakes. For transport the lees are put up in tubs of a capacity of over 200 catties ($266\frac{2}{3}$ lb.) each. There appears to me to be much waste in the production of sugar in Szechuan. Apart from the fact that the primitive method of crushing the canes does not extract the whole of the juice, the appearance of the brown sugar shows that it is very imperfectly crystallized in the process of boiling, probably due to the development of acidity and, were a little quicklime added prior to boiling, there can be little doubt that much better results would be obtained.

At Niu-fo-tu the T'o river, which flows south and then bends south-east, is not bridged and we were ferried across to the right bank where a three-arched stone bridge spans a small tributary from the west. Following up this tributary we proceeded west along a long, wide plain bounded by low hills scantily wooded and, after crossing the tributary, ascended a low ridge to the hamlet of Tingchia-chan, five miles from Niu-fo-tu. For a distance of

thirteen miles this plain was succeeded by low, red-soiled hills with intervening valleys, well watered and under excellent cultivation, as far as the market-town of Hsien-t'an on the left bank of an important tributary of the T'o River. Broad beans, rape and the other two oil-yielding plants, with peas on the hill slopes vacated by sugar-cane, were the growing crops. Sugar-cane was still unharvested in places. Although cypresses and bamboos were to be seen here and there and an occasional wood-oil tree, the country generally was little wooded. The banyan was common along the road-side, and it was especially abundant in Hsien-t'an, which is a dirty, second-class market-town. A number of small boats lay along the left bank of the river below the town and above nineteen skiffs, each with one man in charge of a number of cormorants, were busy fishing. Each man was armed with a long paddle with which he belaboured the surface of the river, at the same time shouting at the pitch of his voice. As all the nineteen were beating the water and shouting at the same time, pandemonium seemed to be let loose, and the noise was intended either to encourage the cormorants or to frighten the fish and drive them from their hiding places, and thus become easier prey to the cormorants which were floating on the river waiting their opportunity. While I was watching, several dived without result and pandemonium continued. We skirted the left bank till the river commences to make a series of bends north and south, when we left it, and proceeded north-west through broken country full of rounded sandstone hills with little depth of soil on their summits. Rain overtook us at Hsien-t'an, and it was a weary trudge of thirteen miles to the large town of Tzu-liu-ching, the approach to which, after crossing a final

ridge, is marked by a stone-walled refuge on a hill-top. In and around the town rose countless high cranes betokening some important industry, for Tzu-liu-ching is famous for its brine wells, which make it the greatest centre of salt production in the province of Szechuan. The town occupies the sloping south face of a hill forming the left bank of the river, which, although not navigable above Tzu-liu-ching, is the most important tributary of the T'o River. A large number of junks were loading salt at the east end of the town.

In the town of Tzu-liu-ching, on both banks of the river, and in the vicinity there are several thousands of brine wells, many of them running to a depth of from 2000 to 3000 feet, and, what is of the greatest importance to the salt industry, there are about a score of "fire wells," that is, wells yielding natural gas which is used as fuel for evaporating the brine. In boring, a brief description of which may be of some interest, it is impossible to predict whether brine or gas will be struck. To bore a well, a wooden cylinder about five inches in diameter, made from the hollowed trunk of a tree, is set up on a rock (the formation is red sandstone) with its upper end fitting into a circular hole cut in a stone slab supported by masonry. Behind and on each side of the slab a wooden platform is erected, and between the platforms and the slab a bamboo lever is set up, the pointed end of the lever when in a horizontal position reaching the hole in the slab and its butt-end lying midway between the two platforms. Α vertical hollow drum is erected not far from the spot and round it is coiled a cable of split bamboo. One end of the cable passes from the drum under the bamboo lever, and along its length to its point overhanging the hole in the slab down through which and the wooden cylinder it

28I

passes, and is attached to a long, iron drill or jumper several hundred pounds in weight. The boring machinery is now complete. Men take up their positions on the two platforms and, stepping on to the butt-end of the lever, raise the jumper several feet, step back to their platforms, thus releasing it, and continue their labour for two or three years, for two or three feet of boring represent a day's work. Water is poured in from time to time and water and crushed rock are withdrawn when necessary by means of a bamboo cylinder fitted with a leather valve at its end. As the jumper descends a man standing by the side of the slab gives the cable a twist to expedite the work. The cable is lengthened by unwinding it from the drum as the boring proceeds and, to change the jumper, it is again wound on the drum. The bore is lined to a depth of 200 to 300 feet with cypress logs six feet long, cut in two lengthways and hollowed out. When brine is struck, cable and jumper are removed and a fixed crane, some 60 to 80 feet in height, with a small vertical wheel near the top, is set up over the mouth of the well. One end of a hempen rope about an inch in diameter is passed over this wheel and attached to the head of a long tubular bamboo bucket some four inches in diameter, while the other end is drawn under a similar wheel fixed near the ground and led to an open shed in the centre of which stands a large, vertical wheel or whim, some 60 feet in circumference and twelve feet high, to which it is affixed and round which the loose rope is coiled. The length of the rope depends on the depth of the well. To raise the brine the bamboo tube-bucket, which is fitted with a leather valve at the bottom, is pushed into the mouth of the well and descends rapidly by its own weight to the bottom of the well drawing the slack of the

rope with it. The brine enters by the valve and, when the bucket is full, water buffaloes are harnessed at equal distances to poles projecting at right angles from the axle of the whim. At one of the principal wells I visited in 1883 four water buffaloes were harnessed to the whim and each was followed by a driver armed with a stout piece of rope with which he belaboured it till it broke into a trot in a track sufficiently low to allow the ascending rope to coil round the upper part of the whim. In a quarter of an hour the head of the bucket appeared at the mouth of the well and was drawn up to the wheel at the top of the crane. A workman standing by the well threw a noose round the end of the bucket as it emerged and, drawing it to one side over a wooden reservoir built into the ground, plunged an iron rod into the bottom, thereby raising the valve and allowing the contents-black, dirty-looking liquid-to escape. The buffaloes were then unharnessed and removed and the bucket, replaced in the well, descended with great velocity, the rope uncoiling from the reversing whim which created violent wind all round. At this well 34 coils of rope were wound round the whim before the bucket reached the surface, showing that it had been raised from a depth of over 2000 feet. In shallower wells of about 50 feet in depth the brine is raised by an endless chain of buckets on the axle of a vertical cogwheel fitting into a horizontal wheel to which one or more mules or donkeys are harnessed, and in other parts of the province trenches some eight feet long and two and a half feet wide are dug and wooden buckets of brine, with lengths of bamboo attached, are passed up by workmen standing on wooden poles with which the trenches are shored.

When gas, not brine, is struck, a wooden cap perforated

with round holes in its sides is fitted over the mouth of the well and carefully cemented with lime to prevent escape. Hollow bamboos, limed at the jointings, are inserted in the holes and lead the gas to sheds containing rows of raised brick furnaces, with circular openings on their tops for the iron evaporating pans, under each of which is fitted a bamboo gas-tube with a long iron burner affixed by cement. From the reservoir by the side of the well the brine is conducted by bamboo pipes to smaller wooden reservoirs in the evaporating sheds, and the pans are fed from the latter by open bamboo pipes. Salt is evaporated in from two to five days of twenty hours according to the strength of the gas flame, and the average cost of production at Tzuliu-ching may be placed at twenty cash a catty, for, although the cost is less when a brine and a gas well are in juxtaposition, quantities of brine have to be carried in buckets to the evaporating sheds. When, however, brine is found on surrounding hill sides and hill tops, it is frequently carried in bamboo pipes from the wells to the gas evaporating sheds below, and I counted as many as eleven bamboo pipes laid parallel to each other on one road-side. The brine in shallow wells is yellow; in the deep wells it is black, and the amount of salt evaporated ranges from 7 per cent. in the former to 13 per cent. in the latter. Both pan and granular salt are made at Tzu-liu-ching, and the latter is purified by the addition to the boiling brine of a warm filtered decoction of yellow soya beans ground up with cold water in a stone quern. The pans weigh 1600 pounds apiece and are contracted for by the year to the well-owners by blacksmiths, who renew them once a fortnight. But other kinds of pans are in use in the province. In Yenyijan Hsien, in the south-west, they are cone-shaped, the

apex of the cone forming the bottom of the pan, and they vary in height from one to two and a half feet. Here, too, the method of evaporation is peculiar. A ladleful of brine is poured into the heated pan, and the liquid bubbling up deposits a thin layer of salt on the inside. Another ladleful follows with the same result, and so on until the salt obtains a thickness of from three to four inches. Care must be taken to keep the pans well supplied with brine, otherwise the salt cones crack and break up, for the cones are transported whole on the backs of pack animals. At these wells two days and nights are required to evaporate the necessary size. Lignite is the fuel used, and the price of salt when it leaves the evaporator's hands is a little over 30 cash a catty, to which has to be added the government tax of 12 cash, so that the wholesale price at the wells is over 42 cash a catty.

All these brine wells are the property of private individuals or companies; but the production and disposal of the salt are under the Salt Administration of the province and, in a number of districts, of the local authorities. The wholesale distribution of the salt is carried out in one of three different ways. Merchants, duly licensed by the Government, are free to buy at the wells and dispose of the salt within certain fixed areas; Government buys from the producers and transports and disposes of it to licensed dealers; and Government buys from the producers, transports and sells to retail merchants.

Ten years ago, when I was Consul-General for Szechuan, I made a study of the salt industry of the province, and I came to the conclusion that the total annual output was not less than 5,000,000 piculs. The Salt Commissioner

furnished me with the names of all the producing districts and the amount of salt which each annually produced, and his total was 4,694,872 piculs, against my estimate of 4,840,000 piculs; but in his total and my estimate illicit salt, computed to amount to 10 per cent. of the regulation output, was not included. With this addition his total and my estimate would be increased to 5,164,360 and 5,324,000 piculs respectively. Szechuan exports annually by the Yangtsze some 967,404 piculs to the port of Ichang for consumption in Hupei; 136,200 piculs overland to parts of Hupei west of Ichang; 534,806 piculs to the province of Kueichou, and 80,000 piculs to north-eastern Yünnan, while its own consumption amounts to 3,600,000 piculs. These give a total of 5,318,410 piculs and leave, according to my estimate, a balance of 5590 piculs to supply the department of Li Chou in the province of Hunan.

Prior to 1908 the total annual salt taxes within the province of Szechuan amounted to 2,500,000 taels. In that year, however, a further tax of 3 cash a catty was imposed to make good the deficiency caused by the loss of likin on native opium consequent on the prohibition of the cultivation of the poppy. This tax is equivalent to another million taels, so that the total annual revenue collected from Szechuan salt within the province may be placed at approximately 3,500,000 taels.

Leaving Tzu-liu-ching on the morning of the 20th February, we proceeded to the western end of the town where the river, flowing east and bending south-east, is spanned by a bridge of one arch, into which it is cooped by stone abutments from both banks, and through which it flows with a strong current. This is the highest navigable point on the river, and junks engaged in the transport of salt were loading at the east end of the town. Over the bridge we skirted the right bank westwards for a few hundred yards, passing an eighteen-arched slab bridge connecting both banks of the river with a mass of rocks rising from its bed, and then turned north and later north-east through a large busy town which, although it may be described as a suburb of Tzu-liu-ching, bears the name of Chang-chia-t'o. In the main street of the town and beyond it we met pan salt of the usual black and white colour on the backs of men, boys, mules, ponies and oxen coming in from the numerous salt wells which surround the town and, wide as was the road, some difficulty was experienced by my escort in clearing a passage for our chairs. Beyond the town the road goes north-west up a hill-side with brine wells on both sides, the deeper wells marked by high cranes, the shallower by square wooden towers within which mules were dragging round horizontal wheels working into vertical wheels, with endless chains of buckets attached. On the road-sides were rows of bamboos for carrying brine from wells to the evaporating pans in the town. When these bamboos, which were carefully cemented at the joinings, crossed roads or low-lying ground, they were supported by wooden piles. Descending the hill on the west side we struck the right bank of a stream, flowing north in a rocky bed, spanned by a seven-arched slab bridge which forms the boundary of the Fu-shun Hsien and Jung Hsien districts. This stream is a tributary of the river which flows past Tzuliu-ching. Kung-ching, in olden times a district city, also contains many brine wells, and on looking back while ascending westwards a steep hill behind the town, I could only liken the many cranes erected over the wells to church

steeples in a European city. A heavy fog, through which they were imperfectly seen and their harsher outlines obscured, heightened the resemblance. Lump coal tied on pack saddles was being rushed into the town from the west for use at the salt wells.

Ascending out of the Kung-ching salt basin we made a slight descent into less hilly country with fewer valleys. Beans, rape, and a little wheat and peas covered the hills ; but the other two oil-yielding plants were almost entirely absent. In addition to coal, rice was being carried to the wells by men and oxen. The road, which runs north-west from Kungching, passes later through better wooded country ; but the road itself, fairly wide at Tzu-liu-ching and Kung-ching, degenerates into a sandstone path a couple of feet broad, much worn in the centre by heavy traffic. Rain water and mud had collected in the hollows and, instead of accomplishing 30 miles as I had hoped, we were obliged to put up, owing to darkness, at the wretched market-town of Chang-chia-ch'ang, 23 miles from Tzu-liu-ching, where the best room in one of its two inns was so close to the pigsty and other odoriferous quarters that I had to abandon it and take refuge elsewhere.

A mile to the north-west of Chang-chia-ch'ang we entered a corner of the district of Wei-yüan Hsien which projects into the Jung Hsien district from the north, but re-entered the latter three miles beyond. Meantime we passed through the market-town of Wu-tung-ch'ang, three miles from Chang-chia-ch'ang, which advertises its name in large letters at its eastern end. To the immediate southwest of it there is a large walled refuge on a hill whose sides consist of precipitous sandstone cliffs. Roofs of houses,



Copyright.

See page 289

23. POPPY FIELDS IN SZECHUAN PRIOR TO THE ANTI-OPIUM CRUSADE.



Copyright.]

[See page 294.

24. CHINESE ASH (FRAXINUS CHINENSIS) COATED WITH INSECT WHITE WAX.



Copyright.] [See po

LSee page 264.

25. THE AUTHOR'S CHAIR ON THE CHENGTU PLAIN, SZECHUAN.

[To face p. 288.

seemingly in good condition, were visible over the top of the crenelated wall. West of the market-town of Kao-shanp'u, six miles from Chang-chia-ch'ang, where but for the bad condition of the road we should have rested the previous night, the country is rockier and some beautiful memorial sandstone archways span the road before it reaches the rim of a plain to the west. Two of them, new and in excellent condition, stood on large square stone platforms surrounded by stone rails leaving a passage for the road. Down into the plain, rather uneven and dotted with hills, the road runs direct west to the city of Jung Hsien lying in a hollow. A slab bridge of nine arches spans a stream flowing south with a rocky bed outside the east suburb through which we passed into the city, where I called at the Mission house of the Canadian Methodist Mission inside the north gate. Dr. Smith, whom I had met at Chia-ting Fu in 1903. informed me that when he arrived in Jung Hsien seven years ago the whole country round the city and the district generally were given up to poppy cultivation, that since the suppression began in 1907 the area under poppy had rapidly diminished, and that the season of 1910-11 was the second in which no poppy had been cultivated in the district. He said that opium could still be purchased at shops under official control, and that men of substance held stocks of the drug and continued to dispose of it secretly. Beans and oil plants, he added, had superseded the poppy, and this was fully borne out by my own observation not only in the Jung Hsien district but in other parts of the province which I had examined.

The eastern suburb of the city of Jung Hsien is entered over a nine-arched slab bridge spanning a stream flowing south in a rocky bed, and another stream similarly bridged vol. I.

289

flows south-east outside the west suburb. The two streams unite to the south of the city and go south-west to swell the Min River which, rising in the north of the province, goes south to Chia-ting Fu where it is joined by the Tung River, and thereafter south-east to the Yangtsze at the city of Hsü-chou Fu. From Jung Hsien we struck west and soon rose to the western rim of the plain where the hilltops, rocky and little cultivated, were covered with wood-oil and vegetable tallow trees. A steep descent south-west leads to a deep valley containing a stream flowing east and bending south-east on its way to join the stream to the south of Jung Hsien. The cypress, wood-oil and vegetable tallow trees were prominent in the valley; but the bamboo was specially abundant and was being utilized by a paper mill on the left bank, where the stream is spanned by a slab bridge of seven arches. Sheets of yellow paper were spread out to dry on rocks rising from the bed of the stream. The road then runs westwards up a hill side skirting the left bank till the stream bends from the north-west, and on reaching the summit we proceeded west to the large-market town of T'ieh-ch'ang-p'u, eight miles from Jung Hsien, or a day's journey of 21 miles. The district of Jung Hsien is rich in coal and iron, and both were being carried east, the former in very large quantities.

From T'ieh-ch'ang-p'u the road runs west down a hillside into a valley. This we crossed, ascended another hill, and dropped into a second valley through rocky country with little room for cultivation but well wooded with woodoil and vegetable tallow trees, cypress, pine, *Cunninghamia sinensis*, bamboos and coir-palms. In the bottom of this second valley lies the large market-town of Chang-shanch'iao, which is cut in two by a stream flowing south-east

to the Min River. This stream is spanned by a bridge of four arches. Then followed ten miles of more open and better cultivated country as far as the market-town of Chuyuan-p'u, which is the meeting-place of three districts-Jung Hsien, Ching-yen Hsien and Chien-wei Hsien. East of Chu-yiian-p'u there was a pottery by the roadside where rude earthenware bowls and jars were being manufactured. Five miles more brought us to another belt of brine wells which stretch south-west to the Min River on whose left bank are the Wu-tung-ch'iao salt works, second in importance only to those of Tzu-liu-ching. These wells are shallower and the method of raising the brine is somewhat different from that employed at the deeper wells already mentioned. Close to the mouth of the well is a broad vertical wheel over which passes a stout rope of split bamboo, connected at one end with the bottom of the long bamboo bucket which descends to collect the brine, and at the other with a large horizontal wheel distant as much as 100 yards from the well. When the bucket is at the bottom of the well, a bullock or water buffalo is harnessed to the horizontal wheel, and as it walks round and round, the rope, passing over the vertical wheel at the mouth of the well, coils on that part of the horizontal wheel which is higher than the buffalo. As the bamboo rope is attached to the bottom of the bucket, the latter rises clear out of the well, and is fixed to a loop at the top of a pole erected near the mouth of the well pending the release of the brine through the leather valve at the bottom of the bucket. The system of well-boring is the same as at Tzu-liu-ching; but the necessary depth can be attained in from three to four months.

From Chu-yüan-p'u we proceeded west and north-west

for five miles and then descended into a narrow valley which we followed south-west through flooded padi-land, the water flowing from one terrace to another and ultimately forming a stream. The bamboo, cypress, banyan and wood-oil and vegetable tallow trees abounded in this valley, from which we emerged in the dark at the markettown of San-chiang-chen, ten miles from Chu-yüan-p'u. Beans, wheat, rape and peas occupied the terraced hill-sides bounding the valley. A considerable number of porters with silk goods from Chia-ting Fu packed in soft bamboo baskets passed us on their way east.

At the western end of San-chiang-chen a shallow stream some 50 yards broad flows south to join the Min River. Across the stream, which is spanned by a three-arched bridge, the road follows its right bank south-west for a short distance, but soon strikes west along a valley exceedingly well-wooded with wood-oil and vegetable tallow trees, cypress, bamboo, mulberry and the thorny Cudrania triloba, whose tender leaves are fed to the infant silkworm before it is treated to a diet of mulberry leaves. To be exact, the worm is fed on Cudrania leaves chopped fine for 22 out of the 48 days it requires to be fed before commencing to spin its cocoon. The reasons given for Cudrania feeding are : the leaves come out earlier than those of the mulberry; the silk is strengthened by the diet; and, finally, the output of silk is greater. It must not be supposed, however, that the silkworms of Szechuan are all fed on the leaves of both trees, for, while the mulberry is well distributed throughout the province, the Cudrania is particularly abundant, so far as I know, only within the prefecture of Chia-ting Fu, one of the chief centres of sericulture in Western China.

The stream winds south-west and we rejoined its right bank twice before finally leaving it at a point three miles from San-chiang-chen where it turned south. Our road then lay west through the usual broken country for eleven miles to the whitewashed market-town of Ho-erh-kan, where I had spent the night of the 15th June, 1884, when on my way to investigate the subject of Chinese Insect White Wax of which I shall have more to say later. To the immediate west of Ho-erh-kan, where my men wasted half an hour bargaining for straw sandals which they ultimately bought for 26 cash a pair, another stream, spanned by a bridge of nine arches, flows south to join the San-chiang-chen stream. These two streams, much about the same size, unite before they enter the Min River. The Ho-erh-kan bridge marks the boundary of the Chien-wei Hsien and Lo-shan Hsien districts, within the latter of which lies the prefectural city of Chia-ting Fu. From Hoerh-kan the road enters a narrow valley running north-west to the market-town of Mao-ch'iao-p'u, whence it ascends valley after valley, one leading to the other by gentle gradients, bounded by low hills, well-wooded, especially with cypress with very fine thin fronds. These valleys were full of tall straight alders, their buds just beginning to open, fringing padi-land and small streams. Numerous side valleys branched off to north and south exposing low hills equally well-wooded, especially with cypress. Oaks, too, were by no means uncommon. Mao-ch'iao-p'u lies midway between Ho-erh-kan and the small market-town of Hsin-ch'ang at the eastern base of well-wooded hills forming the left bank of the Min River. It had drizzled the greater part of the day, the road was slippery and bad going, and it was dark before we reached the hills. Scrambling up these

hills and threading a narrow pass with many cave dwellings hewn from its rocky sides we entered the hamlet of Pi-tzukai near the summit where we purchased lanterns and candles to light us down the western sides of the hills to the left bank of the Min and across the river to Chia-ting Fu which we reached at 8 o'clock, 28 miles from Sanchiang-chen and eleven days from Chungking.

The city of Chia-ting Fu is the centre of several important industries as well as one of the greatest depôts for drugs produced in the west of Szechuan. Its two principal industries are the production and preparation of insect white wax and sericulture and silk weaving. In my book Three Years in Western China I described the life history of the Coccus pe-la, the insect which, propagated on the Ligustrum lucidum or large-leaved privet, excretes the white wax on the branches of the ash known as Fraxinus chinensis ; but I did not state, nor was it then known, how the insects were propagated on the Ligustrum. This I discovered twenty miles south of the prefectural city of Chao-t'ung Fu in the province of Yünnan through which I passed later on the present journey, and I may as well describe the process here. In that part of Yünnan I found plantations of the privet entirely devoted to the reproduction of the insect. In the end of April, when the motherscales containing the minute cocci are ripe for transport to Szechuan or other provinces where the Fraxinus is cultivated, they are collected and a selection of the finest scales is made. The latter are kept for a fortnight, then wrapped, about a dozen together, in leaves of the coir-palm, and the packets affixed at varying heights on each Ligustrum. When the hot weather arrives the cocci escape through the openings between the fingers of the leaf to the branches,

where fertilization and reproduction take place later without excretion of wax as in the case of the *Fraxinus* or only in minute quantities of little commercial importance. When I wrote on this subject in 1889 it was considered that the Chien-ch'ang valley in the south of Szechuan was the only breeding-ground of the White Wax Insect; but it now appears that Yünnan is another breeding centre for Szechuan and other provinces, notably Hunan. The annual production of white wax within the Chia-ting Fu prefecture is estimated at between 50,000 and 60,000 piculs, according to climatic conditions, and these quantities, at 45 taels per picul, have a value of 2,250,000 taels to 2,700,000 taels or £320,000 to £385,000.

The other important industry of the prefecture is sericulture and silk weaving, its annual production of raw silk amounting to some 6700 cwts. or about one-sixth of the total for the whole province of Szechuan. The value of this raw silk, of which 78 per cent. is yellow and the balance white, is about 2,135,000 taels or £300,000, a little less than the value of insect white wax in an indifferent year. The market town of Su-ch'i, six miles to the west of the city of Chia-ting Fu on the way to Mount O-mei, is the greatest silk-weaving centre in the prefecture. It contains some 500 looms for the manufacture of a plain, white silk which is in very general use. In the city of Chia-ting Fu

We left Chia-ting Fu on the morning of the 24th February bound for Chengtu, the provincial capital. Passing through the northern walled suburb we were ferried across the Min River, and skirting its left bank for some distance over level ground proceeded north towards

a low range of hills which compel the Min to make a long bend to the west before resuming its southern course. There is only one large market-town, Meng-tzu-ch'ang, six miles from Chia-ting Fu, between the latter city and the hills which the road crosses to the north of the village of Pan-ch'iao-chi. These hills, some 500 to 600 feet above the level of the river, are of sandstone formation and were thickly wooded with vegetable tallow and wood-oil trees, pines, oaks, large-leaved privets and the ash (Fraxinus chinensis). We worked our way over and through these hills, reaching the highest point at Kuan-tzu-men, where the road is cut through the sandstone summit which is the boundary of the Lo-shan Hsien and Ch'ing-shen Hsien districts. Descending the northern face of the range we struck the left bank of the river, where it sweeps from east to west and crossed by ferry at the hamlet of Hsi-lu-k'ou to its wide shingly right bank, which we followed east and north to the market-town of Liu-chia-ch'ang, otherwise known as Jui-feng-ch'ang, 23 miles from Chia-ting Fu. The plains to the south and north of the range were thickly dotted with mulberry and Cudrania trees, and there were many fine, straight specimens of Cunninghamia sinensis. The crops among the trees were especially broad beans, then wheat, rape, large white turnips and peas. Broad beans were very prominent, and even in full flower were being cut down for fodder. They appeared to have taken the place of the poppy, which in the winters of 1903 and 1905 when I passed through the same country shared the ground with wheat, rape and beans in about equal proportions. Less than a couple of miles to the north of Liu-chia-ch'ang we were ferried across the Ssu-meng-ho, about 50 yards broad, coming from the north-west to join the Min River, and

then followed up a branch of it, wherein many large bamboo irrigation wheels were busy lifting the water to the surface of the plain from a depth of ten feet. North of the Ssu-meng-ho the country was cultivated like a garden through which we travelled north, passing farmhouse after farmhouse nestling amid bamboos, and entered the south gate of the district city of Ch'ing-shen Hsien on the right bank of the Min River, 30 miles from Chia-ting Fu.

The road runs north from Ch'ing-shen Hsien at a short distance from the right bank of the Min, which we again touched at the market-town of Chang-chia-k'an, thirteen miles from the city, through the same beautifully cultivated and well-wooded country. Following up the right bank of the river, where many large irrigation wheels were at work lifting water to a height of 30 to 40 feet, and afterwards skirting a canal bank lined with dressed sandstone slabs and repeatedly spanned by small bridges, some flat, some arched and protected on the river side by stones packed in bamboo open-work crates, we crossed a small tributary of the Min and four miles beyond entered the south gate of the Department city of Mei Chou, twenty miles from Ch'ing-shen Hsien. Mei Chou is a poor city, much of the area contained within its red sandstone walls being given up to cultivation, while in gardens I noticed many mulberry trees and fine specimens of the Machilus Nanmu, a laurel whose wood is highly prized for the manufacture of the best class of furniture. This laurel is particularly abundant in the line of the Min River, in the prefectures of Hsü-chou Fu, Chiating Fu and Chengtu Fu; it is a prominent tree in the temple grounds in and around the provincial capital; and it is met with as far west as the city of Kuan Hsien on the borders of the Chengtu plain. Its wood is expensive,

costing about two shillings and sixpence per Chinese cubic foot.

From Mei Chou the road goes north for thirteen miles to the district city of P'eng-shan Hsien, also walled with red sandstone and of no great importance. Wheat, rape and beans covered the ground, while the principal trees were the mulberry, *Cudrania triloba*, alder, banyan, *Pterocarya stenoptera*, *Melia Azedarach*, *Eriobotrya japonica*, and some willows. When I passed through this country in July, 1904, the growing crops were maize, padi, soya beans, and the small green bean which is ground into flour for the manufacture of vermicelli, ground nuts (*Arachis hypogoea*), millet, sugar-cane, and sweet potatoes, while tobacco had already been harvested.

The main branch of the Min River to the north-west is blocked in its southern course by a range of low hills running east and west and forming the southern boundary of the great Chengtu plain. On reaching the range it is diverted to the east, and on rounding the eastern end of the range it turns south-east and joins its Chengtu or eastern branch just below the important town of Chiang-k'ou, some three miles to the north-east of P'eng-shan Hsien. On leaving the latter city, therefore, we proceeded north following up canals drawn from the river higher up, and containing numerous locks which can be opened and closed at pleasure, and thus assure the irrigation of the land lying along their After ten miles we rejoined the right bank of banks. the river at the large market-town of Ch'ing-lung-ch'ang, whence another eight miles brought us to the market, town of Teng-kung-ch'ang, less than two miles from the district city of Hsin-ching Hsien to the north-west. At

Teng-kung-ch'ang we crossed the river by ferry just below a point where a stream from the east joins it and soon crossed the latter, divided up into three branches, by three wooden trestle bridges. North of the river our course lay northeast for five miles to the important market-town of Huach'iao-tzu, which we entered over a sandstone bridge adorned with carved stone figures spanning one of the many branches of the main river. This bridge, like most of the high bridges in the Chengtu plain, has steps leading up to the floor of the bridge on either side for foot passengers, while in the centre at each end are inclined planes of stone to facilitate the passage of wheel barrows, by which the greater part of the passenger and goods traffic of the plain is carried on. For passengers a chair, usually made of bamboo with a cross foot-rest, is fixed on the platform of the barrow behind the wheel, and to the back of the chair a bamboo pillow is tied to enable the fare to rest comfortably and sleep, which, in spite of the continuous squeaking of the wheel and the jolting caused by the unevenness of the road, the nerveless Chinese generally succeed in doing. For carrying goods the chair is removed and the load lashed with ropes on the barrow, and when the load is too heavy for the man in the shafts a tracer or two and, often as not, a donkey is employed. A string of wheelbarrows, each with a couple of huge black pigs lashed on their backs, is quite a common incident on the Chengtu plain.

At Hua-ch'iao-tzu we were still 26 miles from Chengtu, and leaving the former on the morning of the 27th February, we proceeded north by east over a plain, crossing a network of canals flowing south-west to join the Chengtu branch of the Min river and irrigating on their way the

magnificent Chengtu plain, the richest agricultural area in the province of Szechuan. Thirteen miles from Huach'iao-tzu, we passed through the small but busy district city of Shuang-liu Hsien, which lies on one of the main highroads to the west of Szechuan and to Tibet as well as to the province of Yünnan. From Shuang-liu Hsien the road goes north-east, and half-way to Chengtu it passes through the large and important market-town of Tsu-ch'iao, whither during the silk season, from May onwards, raw silk is brought from the country side and disposed of to silk dealers who annually take up their residence in the numerous inns contained in the town. Wheat, rape, and beans were the crops on the ground. The mulberry and Cudrania were less in evidence; the bamboo and cypress all but concealed farmhouses dotted about the plain; the alder thickly fringed the banks of watercourses and frequently formed plantations; and the coir-palm was to be seen here and there. Crossing by a fine stone bridge that branch of the Min River which flows south-east under the southern wall of Chengtu, we entered by the south gate the capital of the province of Szechuan, one of the largest, finest, and richest cities of China, where I had resided as Consul-General for the province from 1903 to 1905.

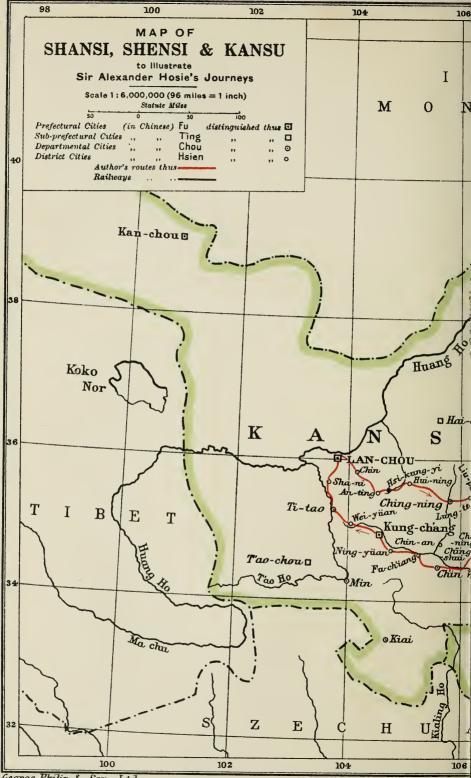
END OF VOL. I.

PRINTED BY GEORGE PHILIP & SON, LTD., LONDON.

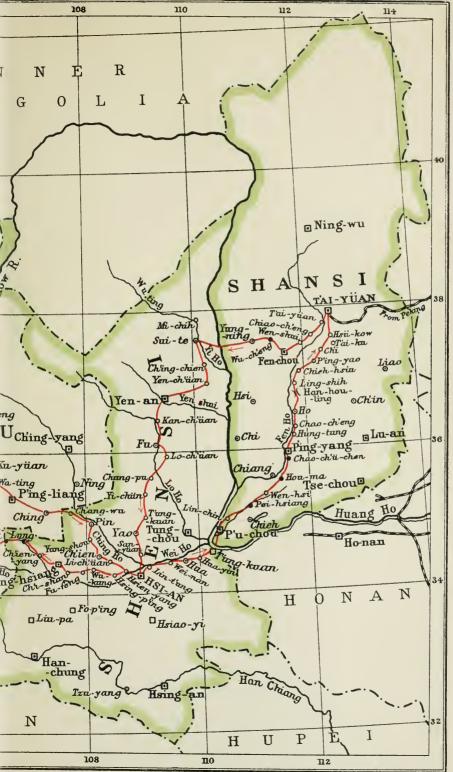
ь. -

т.

.

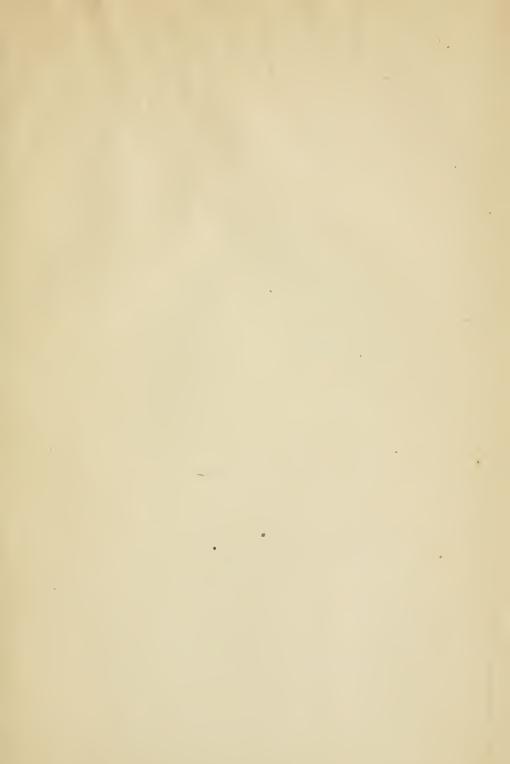


George Philip & Son, Ltd.



The London Geographical Institute





UNIVERSITY OF CALIFORNIA LIBRARY

Los Angeles

This book is DUE on the last date stamped below.



JUL 2 5 1978

TECO LO-URS

NOV 1 9 1992

QL APR 1 1 2005

Form L9-Series 4939



