

NOTES ON TIBET



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PREFACE

In the following pages I have endeavored to give the results obtained during a journey of several thousand miles through a very imperfectly known portion of the Chinese Empire. My object has been to supply facts concerning the country, of an historical, geographical and ethnographical nature, and not to attempt to turn out a well-finished bit of literary work.

Besides the notes collected on my journey, I have been able to improve and complete my work in many cases by those made during a four years' residence in Peking, when I was in daily and intimate intercourse with natives from various parts of Tibet and the border-land of Kan—su. Chinese literature, so rich in geographical and anthropological lore, has also been of great service to me, having supplied me with many facts, and has enabled me to offer explanations of customs, names etc., which while they may not always turn out to be correct ones, cannot fail to be of value.

W.W. Rockhill

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NOTES ON TIBET

I

FOREIGN TRIBES OF KAN-SU ¹

In the District of Ho Chou (southwest of Lan-chou Fu)

1. SA-LA.—According to the annals of the Ming dynasty (*Ming shih*), composed of a large number of clans of Hsi-ch'iang, settled between the Ho (i. e., Yellow River), the Huang (i. e., Hsi-ning River), T'ao Chou and Min Chou.
2. CHEN-CHU T'U-FAN or FAN-MIN.
3. CHA-TS'ANG FAN-MIN or T'U-FAN.
4. HO-FU HUI (Mohammedan) FAN-MIN, like the Salar in outward appearance.

In the District of Ti-tao Chou (south-southwest of Lan-chou Fu).

5. FAN-MIN of Ts'an-tsa and Kao-shan.

In the District of T'ao Chou (in Kung-ch'ang Prefecture).

6. CHO-NI-TO and other clans, originally Wild Fan, from the Western regions (*Hsi-yü*), numbering 475 in all.²
7. TI-CHI-PA and other independent clans, thirty-seven in number, paying no tribute as Black Fan-tzū outside the border.
8. TSO-LA and other Fan clans, fifty-nine in all, originally T'u-Fan outside the border, reclaimed in the third year of Ming Hung-wu (A. D. 1370).
9. CHU-SUN and other clans of Fan-tzū, eleven in all. The Ku, Lu, and Pu clans are Fan; the Yang, Ting, and Ko are inside T'u-fan. Organized in the Hung-wu period (A. D. 1368–1399).
10. LIU-SHAO CH'UNG-KU-ERH, independent (*Sheng*) Fan tribes of outside the border.

In the District of Min Chou (in Kung-ch'ang Prefecture).

11. WA-SHE-PING Fan, forty-five clans, all belonging to the Ma tribe.
12. T'U-JEN (Aborigines), or T'u-fan of MOU-CH'IA-SHAN P'U. inhabiting forty villages (*p'u*).

¹ Taken from the "Huang Ch'ing chih-kung-t'u." Bk. V.

² All the above settled in Kan-su in the early Ming period.

13. T'U-JEN (Aborigines), formerly T'u-fan of *Hsü-erh-chuang*, inhabiting eleven *p'u*.
 14. FAN-MIN of Ma-lien-ch'uan of T'u-fan descent.¹

In the Chuang-lang Sub-prefecture (T'ing), (in Liang-chou Prefecture).

15. HSIEH-ERH-SU, and other clans of Fan-min, eight in all, inhabiting tents.
 16. MAO-T'A-LA, T'u-min.
 17. HUA-TS'ANG and SHANG-CH'A-ERH-TI Fan-min, twenty clans; like the Koko-nor Fan-tzū, they yearly pay a money tribute. They are also called *Hsi-Fan*, which is the real name of these tribes.

In the Wu-wei Prefecture (Liang-chou Prefecture).

18. The western TO-PA, three clans of Fan-min belonging to the Ch'ing hai. Pay a yearly horse tribute of seventeen head.²

In the Ku-lang Prefecture (Liang-chou Prefecture).

19. A-LO and other Fan-min clans, eight in all, originally Koko-nor Hsi-fan. Pay a yearly horse tribute of eleven head.

In the Yung-chang Prefecture (Liang-chou Prefecture).

20. YÜAN-TAN and other Fan-min clans, five in all, generic name Hsi-fan. Comprise fifty Hundreds. In olden times they grazed on the Huang-liang shan, south of Yung-chang Hsien. Yearly tribute of six horses.

In the Hsi-ning Prefecture.

21. TUNG-KOU and other Fan-min clans, eight in all, of Hsi-Ch'iang descent. Live seventy *li* from Hsi-ning Hsien.
 22. CH'AN-T'OU. Originally from the western regions (*Hsi yü*). First came to Hsi-ning in the Ming Hung-wu period to trade, and after that established themselves there. They live at Hsin-tseng P'u,³ forty *li* from the city.
 23. TO-PA. Fan-min. Related to the people of Great Tibet (*Hsi-Ts'ang*).
 24. Aborigines (T'U-MIN) descendants of Hsi-Fan.

On the Ma-lien River. See p. 27, note 3. ² One head for every Hundred.

³ Probably the Hsin-chen or ch'eng, referred to on p. 97.

In the Nien-po Prefecture (in Hsi-ning Prefecture).

25. TUNG-KOU,¹ Tu-min, descendants of Li Ko-yung of the Shato Turks in the T'ang period.
26. TA-TZŪ (Mongols), WAN, etc., twenty clans of Fan-min; belonged originally to the Ki-pen Mongols. In the Yüan period their ancestor, To-erh-chi Shih-chieh, was Secretary (*Tso-cheng*) of Kan-su.
27. NAN-SHAN ("South Mountain") Fan-min of Ch'ü-yün-ssü. This lamasery was built (according to the "Ming shih") in the Hung-wu period by the lama Sa-la, chao Chiang-han-tung no-pu in the Nan ch'uan of the Nien-po prefecture.
28. PA-YANG JUNG (Bayan rong) Fan-min; belong to the Ch'ing hai (Koko-nor).

In the Military District (Wei) of Ta-l'ung (north of Hsi-ning).

29. HSING-MA, etc., Fan-min, six clans; belong to the Koko-nor. Each Dsassak is called Hei-Fan.² They are pastoral tribes; hence, also, Sheng Fan (*i. e.* "Wild Fan").

In the Military District (T'ing) of Kuei-té (south of Hsi-ning).

30. FAN-MIN, twenty-five clans (*tsu*). Belonged in old times to Hsi-chi'ang; formerly attached administratively to the Koko-nor. Have black tents, but cultivate the soil.

In the Prefecture of Kan Chou (Kan-liang Circuit).

31. BLACK FAN (*Hei-Fan*), commonly called Hei-jen ("black people");³ belong to the lamas of Tibet. Have been living for generations back, in the mountains south of Kan Chou, but take tribute to Lh'asa.

In the District of Kao-t'ai (Su-Chou Prefecture).

32. HUANG FAN ("Yellow Fan"), two clans, called the *Cha-shih-tun* and *So-nan-shih-tien*; formerly Koko-nor tribes.
33. HEI FAN ("Black Fan"); belong to the lamas of Tibet. Their chief lives in the Sa-erh-pa valley. Pay a yearly tribute of two head of horses.

¹ *Cf.* the name *Dungans*, given to the Mohammedan rebels of Kan-su, which may possibly be derived from Tung-kou. See Bretschneider, "Not. of Med. Geog. of Central Asia," p. 125.

² I do not understand this; there is possibly a misprint.

³ All the laity is called by this name in Mongol countries.

In the District of Wen Hsien (Chieh Department).

34. FAN-MIN of Lien-ch'in-shu, a tribe of eastern Tibetan (*Miao-Man*) descent; not like the Fan on the west border (of the province). They live to the south of the district. Their dwellings are on high slopes, and on mountains.

II

ORIGIN OF THE PRAYER, "OM MANI PADMÉ HŪM"

THE Buddhist magic formula *om mani padmé hūm* occupies such an important place in the every-day worship of the people of Tibet, so much time and money are expended by them in reproducing on stone and paper the six syllables composing it, that it deserves more than a passing mention.

Although the six-syllable prayer (*vidyā shaduksharī*, it is called in Sanskrit) is not found in early Buddhist writings, it is probably coeval with the rise of the cult of Avalokiteshwara, which we know to have been popular as early as the fourth century of our era. It is therefore possible, as is in fact claimed by native historians, that it was introduced into Tibet by the first missionaries who visited that country in the seventh century, but, for the time being, we have not sufficient evidence to settle the question definitely.

The earliest mention I have found of it by any European writer dates from the second half of the thirteenth century. Willelm de Rubruk, speaking of the Buddhist monks at Karakorum, says: "Habent etiam quocumque vadunt semper in manibus quamdam testam c. vel ducenorum nucleorum, sicut nos portamus pater-noster, et dicunt semper hec verba, *om man baccam*,¹ hoc est, *Deus, tu nosti*, secundum quod quidam eorum interpretatus est michi, et totiens exspectat remunerationem a Deo quotiens hoc dicendo memoratur."²

The explanation the friar gives of this prayer is, of course, wide of the mark, and so are nearly all those which subsequent

¹ Some MSS. have *mani hactain*, and *mani hactani*.

² "Itinerarium Willelmi de Rubruk.

Recueil de Voyages et de Mémoires publié par la Soc. de Géog. de Paris." IV. p. 285

writers have offered from time to time. The *mani*, as the prayer is colloquially called in Tibet, is an invocation to Avalokiteshwara, the Merciful One, whose one great self-imposed mission is the salvation of all living creatures from the miseries incident to sentient existence, in the hope that it may lead them on in the way of salvation, and that he will, hearing it, ever keep the world in mind. The continual repetition of this prayer is recommended as a means of acquiring merit, and as the only way of keeping in the road to freedom; its diffusion and reproduction by writing, printing, and engraving are held to be highly philanthropical acts.

The legendary origin of this prayer is set forth in a Tibetan work called "Mani kabum" (also pronounced Mani kambum) or "Hundred thousand precepts of the Mani."¹ This work is attributed to Srong-tsan gambo, the first Buddhist sovereign of Tibet, who lived in the seventh century of our era; but it is probable, from internal evidence, that it was written at a more recent date, in all likelihood in the fifteenth century, after the establishment of the Lh'asa pontificate. As the genesis of Avalokiteshwara and his vain efforts to save the world are intimately connected with the origin of the prayer, it is necessary to begin the history of the formula (Chap. IV) with that of the god addressed in it, which is also found in the "Mani kabum" (Chaps. II and III). The following is a translation:

(Chap. VI.) "Then the Perfect Buddha, called 'Infinite Brightness. (*ang-wa t'ä-yä*), Light eternal' (*Wu-pa-mé*), having discerned that the Great Compassionate One (*T'u-jé ché*) was wise in means and filled with compassion, bethought him of using him under the appearance of a god, and the goddess Drolma under that of a goddess, in the work of redemption of the world. So Nang-wa t'ä-yä entered the state of profound abstraction called 'Redemption of the world by T'u-jé-ché,' and from his left eye came a ray of white light out of which issued the Bodhisattwa called 'the Lord looking with a glance of his eye' (*Shen-rü-zig Wang-ch'nyuk*),² and from his right eye came a ray of blue light out of which issued the goddess Drolma. Moreover, after this apparition had been thus miraculously born for the redemption of the kings and other mighty ones of the world, he appeared from out a lotus (*Padma*), for there came (as

¹ The title of this work has frequently been translated "Hundred thousand precious commandments," but, as I have said, the word *mani* is used to designate

the prayer whose power and efficacy this work sets forth.

² A literal translation of the Sanskrit *Avalokiteshwara*.

will now be related) a light out of a Lotus pond (*Ts'o padma-chan*) and he was born in the body from out a lotus in his apparitional person.

"It happened that in the western lands, in the realm called 'Lotus abode of bliss' (*Padma-chan Dé-wa-chan*), there reigned a mighty monarch, a universal king (*chakravartin rāja*), called 'the Best One' (*Zang-po ch'ok*). He ruled over the four continents, and all riches and power were his, but his consort was barren and had borne him no son, though, this excepted, he enjoyed every blessing given the righteous. Now there was a lake in that country, called 'the Lotus pond' (*Ts'o pa-mé*), and when the lotuses had bloomed on the lake and it was time for the king to make offerings to the Chief Rarity (*Kon-ch'ok*) swift messengers were sent to get flowers which they brought to the king, and he offered them to the *Kon-ch'ok*. It happened one day that a messenger, having come to get flowers, was filled with the greatest amazement on seeing in the pond on a lotus stem surrounded with spear-like tendrils and shield-like leaves a closed flower. He went and told this to the king, who said: 'It is certain that there is in that flower a miraculously born creature; I will go myself to see this much-to-be-revered object.' So, having called to him his queen, his ministers, and his inner and outer attendants, with boats to go on the lake, chariots, all kinds of presents, banners, flags, etc., and to the sound of a great music singing *akarū*, *duruka* and every other kind of sweet perfume, and many garments of *Kashika* cotton, he came to the Lotus pond. and having embarked on the pond in a boat he came to where as the flower, which opened, and in it he saw a youth of sixteen marked with all the signs and characteristics of a Buddha. A mighty glory came from out his white body, and he was in the full bloom of youth. He carried a sharp sword, and he was gorgeous with all kinds of precious jewels. He was wrapped to his middle in silk, and a deerskin hung over his shoulders. From out his mouth there came these words: 'Love of all creation.'

"Then the king and all his attendants bowed down and worshiped him, and the king, having presented him with a piece of *Kashi* cloth,¹ requested him to ascend a chariot, and, all the offerings having been made him, he went to the royal palace, where he became an object of worship. Having been born from out a

¹ We are reminded here of the Tibetan custom of offering *k'atag*, so frequently referred to in the body of my narrative.

lotus (*padme*) he was named 'Lotus-born' (*Pamé-lä chyé*) and also 'Lotus-heart' (*Pamé nying-po*).

"The religion-defending monarch asked his master, the Buddha Nang-wa t'ä-yä, 'What means this miracle; who is this miraculous personage?' And the Buddha replied, 'Great King, this miracle is in consequence of the universal prayer of the Buddhas, and has occurred for the weal of the whole created world. It is an apparitional manifestation from out the bosom of all Blessed Ones (*Dé-war shé-pa*)¹ of the three ages, and its name is *P'apa*² *Shen-rä-zig Wang-ch'yuk*. My lord, he will be a blessing to all creation.'

"After this, the king, when came the full moon, made great offerings to the Kou-ch'ok, and showed also every honor to this miraculous creature, and made him offerings without number. And the miraculous child, bearing in mind that he had come at the prayer of all the Buddhas, thought within himself what could be for the good of creatures. And with his compassionate eye he looked at all the sentient creatures in the three regions of space, and he saw in his mercifulness that all, through their wickedness, were sunk in the waters of lust, burnt with the fire of passions, wrapped in the dark folds of ignorance, held by the force of pride, blown about by the wind of envy, bound in the fetters of selfishness, plunged in the fiery pit of the miseries of regeneration. Then tears flowed from his eyes, and from the tears which fell from his left eye came out the goddess Drolma, and from those which fell from his right eye came the goddess Tronyer ('She with the angered face'). And the goddess Drolma said: 'Lord, for the sake of sentient creatures, exert your powers of omniscience (*bodhi*).' And the goddess Tronyer said: 'For the weal of sentient creatures, let not your mind become wearied.' Then they both said: 'Lord, we will be your helpmates,' and they once more vanished in his eyes.

"Now the king asked why it was that when tears fell from this miraculous child Bodhisattwa, two goddesses had come out of his eyes. The child replied: 'The tears fell because I could not bear the sight of the sufferings of all creation, and the two goddesses I have selected as helpers of the world. As for me, I must accomplish what is for the good of the infinity of sentient creatures, and I seek thy leave to do it, great king.' The king replied, 'Lord, all those who have come in like man-

¹ In Sanskrit, *Sugata*, an epithet frequently given to Buddhas.

² *P'apa* (*hp'ags-pa*) means "Venerable," and renders the Sanskrit, *Arya*.

ner (*Dé-dzin shé-pa*)¹ of the three ages have done, when in the state of Bodhisattwa, what thou now wishest to do for the weal of all creation, and afterwards have become Buddhas; so be it,' and he granted him his request.

(CHAP. III.) "So then the incarnate god, the Great Compassionate One, P'apa Shen-rä-zig, set about as follows, laboring for the welfare of all creation. The incarnate god-child prepared a great offering and worshiped all the innumerable Blessed Ones (*Déwar-shé-pa*) who abide in the ten regions of space, and, casting himself on the ground, he prayed to them in his sweet voice, which sounded like that of the cuckoo (*Kalapingka*), saying, 'What shall I do for the weal of all creatures?' Then from out the ten corners of the heavens there came voices saying, 'Lord, let thy heart be strong in love and mercy; let not despondency and weariness take hold of thee.'

"Then asked the child, 'How may I acquire the peace (*samadhi*) of love and mercy?' and at the same moment the Lord of peoples, the Buddha Nang-wa t'ä-yü, appeared in all his person merged in the state of calmness called 'Great diffused light.' And then, to initiate the greatest of the Bodhisattwas, P'apa Shen-rä-zig Wang-ch'yuk, in the way of doing good to creation, there came out of his body a glory greater than man can possibly conceive, from which emanated a great number of 'regions of bodies of perfect enjoyment' (*long-dzog-kui-djing*), in which appeared many Buddhas with bodies of perfect enjoyment (*samboghakāya*), whence great good was done to sentient creatures. From the hearts of these bodies of perfect fruition there emanated an infinite number of 'regions of apparitional bodies' (*trul-pé kui-djing*), in which appeared many Buddhas with apparitional bodies (*nirmānakāya*). Moreover, from out the hearts of these apparitional bodies there emanated an unspeakable radiance from out of which came P'apa Shen-rä-zig Wang-ch'yuk, Tronyer-ma, Drolma, and countless numbers of sentient creatures, and the good of creation was accomplished.

"Furthermore, there came a radiance from the Buddha's body whence emanated regions of the world as infinite in number as are the atoms composing the universe, and there were also innumerable Buddhas (*Tathāgata*), and they were a blessing to all creatures. And from the bodies of these latter Buddhas there

¹ This is the well-known Sanskrit epithet of Buddhas, *Tat'ḡgata*.

came unbounded lights, from each of which there emerged an India (*Dzambuling*), each with a Diamond throne (*dojé-dän*),¹ each with a barbarous snowclad country to the north of the Diamond throne, each with a king of horses Balaha, each with an eleven-faced Shen-rä-zig, each with a Drolma, and a Tronyer, in each a king Srong-tsan, a white and a blue princess.² And from their (*i. e.*, the Buddhas'?) bodies there came an unspeakable effulgence whence emanated the Great Compassionate One and the Six Syllables,³ and sentient creatures without end, and they were a blessing unto them.

(CHAP. IV.) "The mightiest of all the Bodhisattwas, P'apa Shen-rä-zig Wang-ch'yuk, his mind intent on the work of saving all creatures, made an oath in the presence of the Buddha Wupamé and all the eleven times ten millions of Buddhas, saying 'In me are embodied for the work of salvation the deeds and the perfection which passeth all human understanding of all the Buddhas of the three ages. I pledge myself to bring every sentient creature to the highest and most perfect state of enlightenment. But should I so long for rest and peace as to stop in the way, may my head burst into ten pieces as would a cotton boll (*ardzaké-dog*)!'

"Then spoke the Buddha Wupamé, 'So be it, so be it, Lord. This is also the prayer of myself and the Buddhas of the three ages inhabiting the ten regions of space. Furthermore, I who am a Buddha will be thy helpmate in the work of saving all creatures.'

"Then from out the body of P'apa Shen-rä-zig Wang-ch'yuk there came six rays of light which reached to the six inhabited regions. Some rays penetrated to the abode of the gods (*Lh'a*),⁴ where, for the purpose of redeeming the gods, they became the lord of gods 'Hundred Sacrifices' (*Jya-chyin*);⁵ and then were heard the sacred words saying: 'Subject to the misery of the fall of the gods through the power of pleasure and carnal desires, if I have entered the abode of the gods, let there be an end to all the misery of the fall of death and regeneration!' Some rays penetrated to the abode of the fallen gods (*Lh'a-mayin*),⁶ where, for the

¹ *Vadhrāsana*, the seat of the Buddha at Gaya, where he obtained omniscience.

² The two wives of King Srong-tsan gambo, a Chinese and a Nepalese princess.

³ *I. e.*, the prayer *Om mani padmé hum*. This chapter is a fair sample of the jargon of Tibetan mysticism.

⁴ *Deva*, celestial beings. Applied to the inhabitants of the twenty Brahmaloкас and the six Devalokas.

⁵ *Shatakratu*, epithet of Indra.

⁶ *Asura*, Titans. and, like them, at war with the gods or Devas.

purpose of redeeming them, they became the lord of the Lh'a-mayin T'ag-zang-ris; and then were heard the sacred words saying: 'Subject to the misery of war through the might of pride and anger, if I have entered the abode of the Lh'a-mayin, let the misery of death and regeneration through the sin of waging war be ended!' And some rays penetrated to the abode of men, where, for the purpose of redeeming them, they became the lord of men, 'the Mighty One of the Shakya' (*Sachya tupa*); and then were heard the sacred words saying: 'Held in bondage through the power of desires and lust, and subject to the misery of birth, old age, disease and death, if I have entered the abode of men, let the misery of becoming man be ended!' Some rays penetrated to the abode of brute creation, where, for the purpose of redeeming them, they became the lord of brute creation called 'Great-enduring-lion' (*Senggé rabtan*); and then were heard the sacred words saying: 'Through the power of ignorance, subject to the misery of servitude and violent death, if I have entered the abode of brute creation, may all of you, now held in the meshes of ignorance, be quickly endowed with enlightenment such as that I enjoy!' Some rays penetrated to the abode of the departed (*Yidag*)¹ where, for the purpose of redeeming them, they became the lord of the Yidag, 'Treasury of the Sky' (*Nam-k'a dzo*), and then were heard the sacred words saying: 'Bound through the might of avarice, subject to the misery of hunger and thirst, if I have entered the abode of the Yidag, let there at once be an end to hungering and thirsting, and let happiness be reached!' Some rays penetrated to hell, where, for the purpose of redeeming it, they became the lord of hell, 'King of the Law' (*Ch'ü-gi jyabo*), and then were heard the sacred words saying: 'Bound through the might of lust and subject to the misery of being killed by heat and cold, if I have truly entered hell, let the torments of hell, the agonies of being killed by heat or cold, be ended!'

"And thus the six classes of sentient creatures, who heretofore could not be freed, when arose these six Mighty Ones from out the light, and the sacred words were heard, escaped from out their abodes as out of an iron box which has been opened, and all the six realms were completely emptied of creatures.

Then the Great Compassionate One ascended to the top of

¹ *Preta*. manes. with huge bellies and narrow throats, condemned to suffer perpetual hunger and thirst. and to wander about in graveyards and near houses.

Mount Sumeru (*Rirab*), and looked with the eye of wisdom, and saw that there were as many creatures in the world as before, so a second and a third time in his mercy he emptied the divers regions of the world of all creation, but the numbers (of sufferers) decreased not, and he was filled with despondency and despair. 'Alas,' he cried, 'through the instrumentality of the Blessed One (*Sugata*) innumerable regions of conversion, innumerable heavenly realms, innumerable regions of sentient creatures have been brought into the truth. But though I have released so many creatures, yet this orb cannot be emptied even for an instant, and the redemption of sentient creatures is never accomplished! So having found my own peace and happiness, I will be with the Completely-passed-away-Buddhas.' And then he remembered his former prayer, and his head split into a hundred pieces. He cried aloud at the pain, which he could not bear: 'Alas, merciful Buddhas and Bodhisattvas, and thou Buddha Wupamé, I cry not for myself but from anguish at not having accomplished the salvation of the world!' and he wept aloud.

"Then the Buddha Wupamé gathered together all the pieces of the head of the Great Compassionate One and made them into eleven faces, and as the orb of transmigration has neither beginning nor end he made them placid faces, and though placid he made them to be as dark and angry countenances to the wayward man. Moreover, he said: 'The orb of transmigration (*k'orwa*) has neither beginning nor end, and thou mayest not take all creatures out of it.'

"Then spoke P'apa Shen-rä-zig, saying: 'Since I have not been able to remove all creatures from the orb of transmigration, may I have a thousand hands and a thousand eyes, so that the thousand hands may be as those of a thousand universal monarchs, and the thousand eyes as those of the thousand Buddhas of the cycle (*bhadrakalpa*), and by them I may serve all creatures.' And at the self-same moment he became eleven-faced, with a thousand hands, in the palms of which were a thousand eyes.

"Then spoke the Buddha Nang-wa t'ä-yä: 'Most Compassionate P'apa Shen-rä-zig Wang-ch'yuk, by the following six letters the door of birth for the six classes of created beings may be closed: *Om mani padmé hūm*. By *Om* the gate of birth among gods (*Lh'a*) is closed; by *ma* the gate of birth among Titans (*Lh'a-ma-yin*) is closed; by *ni* the gate of birth among men is closed; by *pad* the gate of birth among brute beasts is closed; by *mé* the

gate of birth among *pretas* (*Yidag*) is closed, and by *hūm* the gate of birth in hell is closed. These can empty the kingdoms of the six classes of creatures. Understand it well, remember them, repeat them, impress them well upon your mind."

The six-syllable prayer is pronounced *ōm mani pémé hum* by all Tibetans; occasionally you will hear Mongols pronounce the third word *padmé*, but no one, save T. T. Cooper, ever pronounced it *omanee peminee*.¹ The repetition of this formula is the most common mode of praying met with among Mongols and Tibetans, and is spoken of as *mani-dōn*. The prayer-wheel or "*mani-wheel*" (*mani k'orlo*) is another way of repeating mechanically this formula. The prayer-wheel has probably its origin in a misinterpretation of the term *dharma chakra pravarteti*, literally "to turn the wheel of the law," which properly means "to establish the supremacy of Truth."² The prayer-wheel consists of a cylinder in which are arranged, one on top of the other, sheets of paper, on which the formula *om mani padmé hūm* is printed in fine characters. The sheets must be wound on the axis from left to right, and the wheel, when set in motion, must revolve in the opposite way, so that the writing passes in front of the person turning the wheel in the way in which it is read, *i. e.*, from left to right. If made to revolve from right to left, it is held sacrilegious. General Cunningham³ says that the earliest mention of the prayer-wheel is found in the "Fo kuo chi" of Fa-hsien. This, however, is an error resulting from a mistranslation in Abel Rémusat's rendering of this text. Fa-hsien does not mention the prayer-wheel at all, nor does Hsüan-chuang or any of the Chinese dynastic histories, although one would have expected this peculiar custom noticed in these minute and carefully prepared works. The practice is unquestionably old, as we find prayer-wheels, in a modified form it is true, in Japan and Korea, countries which have not received any extraneous Buddhist practices for five or six centuries at least. Cunningham (*op. cit.*, p. 375) gives a medal of Hushka (first century, A. D.) representing, according to him, a man holding a prayer-wheel in his hand. To my untutored mind the implement may be anything one chooses, consequently a prayer-wheel is not an impossibility.

¹ "Travels of a Pioneer of Commerce," p. 209.

² See R. C. Childers, "Pali Dictionary," s. v. *dhammacakkam*.

³ Alex. Cunningham. "Ladak." p. 375, and Abel Rémusat, "Foe koue ki," pp. 27, 28

III

EARLY ETHNOGRAPHY OF THE KOKO-NOR AND EASTERN TIBET

THE annals of the Sui (A. D. 581-618) and of the T'ang (A. D. 618-905) dynasties¹ contain some interesting notices on the early population of the Koko-nor and Ts'aidam, the T'u-ku-hun, and on two important tribes or nations of Eastern Tibet, the T'ang-hsiang and the Kingdom of Su-pi or Nü Kuo, "Kingdom of Women," as the Chinese always call it from its peculiar form of government. The accounts of these people contained in the "T'ang shu" are nearly reproductions of those in the older "Sui shu," but as they are clearer in a number of passages I have thought best to copy them. I have called attention in foot notes on preceding pages to the most striking resemblances between the customs, dress, etc., of the tribes of the present day and those of these older ones; I will not point them out again here.

T'U, KU-HUN

("Sui shu," Bk. 83.) "T'u-ku-hun was originally the name of the son of Shih Kuei who lived on the Pei-t'u ho of Hsi hsien in Liao-tung.² Shih Kuei had two sons, the elder called T'u-ku-hun, the younger Jo-lo Kuei. Shih Kuei dying, he was succeeded by Jo-lo Kuei, but some of the clans could not be made to transfer their allegiance from T'u-ku-hun, and migrated with him to the Hsi Tu-lung and established themselves to the south of Kau (Chou) and Sung (Chou, *i. e.*, Sung-p'an in northwest Ssü-ch'uan), and to the southwest of the T'ao ho, taking in several thousand *li* of the Pai shan and Lan shan (districts). Later on, T'u-ku-hun founded a kingdom.³ During the Wei and Chou

¹ "Sui shu," Bk. 83, and "T'ang shu," Bk. 221A. Other dynastic histories do little more than reproduce these accounts.

² The "Pei shih," Bk. 96, says Tan-tu ho. This eastern origin of the T'u-ku-hun appears to me improbable. The account given in the "Pei shih" differs con-

siderably from that of the "Sui shu," but only in details. The migration is said to have taken place between A. D. 265 and 313.

³ The "Pei shih" says that he left sixty sons. The eldest, called T'u-yen, was seven feet eight inches high.

dynasties (A. D. 550-581) (the chief?) was known as Ko-han-t'u-t'a-ssü. The capital was 50 (or 15) *li* west of the Koko-nor. It had walls; the people did not live in it, however, but went wherever there were grass and water.¹ Their officials comprised a prince, dukes, chamberlains (*Po-shih*), presidents of boards (*Shang-shu*), vice-presidents (*Lang-chung*), generals (*Chiang-ch'ün*). The prince² wore a black hat, the queen (or the married woman) a gold-embroidered one. Their implements, arms, and clothing were like those of China. The prince, the dukes, and many of the wealthy people among them wore broad-brimmed hats, like the Chinese straw hats in shape. The women wore a plaited skirt and a jacket; they did up their hair in plaits on which they sewed pearls (or beads) and cowries. This people had no regular system of taxation. They put a man to death for stealing horses; for all other crimes the culprit paid a fine in goods. Their customs were somewhat like those of the Tu-küeh (Turks). They wore mourning clothes (or special clothes for a funeral) until the funeral rites were at an end. Their other characteristics were covetousness and cruelty. Their country produced barley, millet, and beans. . . . They had a great many yak. There was much copper, iron, and cinnabar, also *shan-shan ch'ieh mo* (?)³ found here."

("T'ang shu," Bk. 221A.) "The T'u-ku-hün live to the south of the mountains of Kan Chou and Sung Chou, and to the southwest of the T'ao ho.⁴ . . . They live in tents and eat meat and grain. . . Their sovereign wears his hair in a knot, with a black head-covering; his consort wears an embroidered brocade gown, woven skirts with gold embroidery, and head ornaments. The men's clothes consist in a long robe, and a head-cover of light stuff, or a broad-brimmed hat.⁵ The women do their hair up in little braids, and sew beads (or pearls) and cowries on them. As to their marriage customs, the rich get wives by purchase, the

¹ "The country was 3000 *li* from east to west, and over 1000 *li* from north to south," adds the "Pei shih."

² The "Pei shih" calls him *Kua-lü*, probably a word of their language.

³ The "Pei shih" adds "mules and nautilus shells (*ying-wu*). It also says of them that "like the Turks, the brother married his deceased brother's wife, the son his deceased father's wife." The "Annals of the Anterior Han" (*Ch'ien*

Han shu, Bk. 94) attributes this custom also to the Hsiung-nu (Turks), who justified it by their abhorrence of mixing families and their desire to keep the family stem untainted.

⁴ Southwest Kan-su, approximately the territory occupied at present by the South Koko-nor Panak'a and the Golok.

⁵ A broad-brimmed hat is the peculiar head-covering of the K'amba and the Koko-nor people of the present day.

poor steal theirs. When the father dies his wife is married by his son; the brother marries the wife of his deceased brother. They wear mourning until the funeral is over, when they put on again their every-day dress. The country is very cold, fit only for barley, beans, millet, and greens (*wu-ching*)."

T'ANG-HSIANG

("Sui shu," Bk. 83.)¹ "The T'ang-hsiang are descendants of the San-miao. They comprise the Tang-chang, Pai-lang, etc., and are (collectively) known as the Monkey tribes (*Mi hou*).² They border to the east on Lin and T'ao Chou, and to the west (north?) on P'ing. To the west they constitute a barrier against the Yeh Hu. From north to south their country is several thousand *li* in breadth. They live in mountain gorges and each cognomen constitutes a separate clan, the large ones containing over 5000 horsemen, the small ones over 1000. They weave yak and goat hair and sheep's wool, and make tents. Their clothes consist of a fur-lined cloth robe and a felt jacket ornamented outside. They are all warriors, but do not know how to use a sword scientifically. They have at present regular troops which they bring together. They have no *ula*, and object to taxes. They move about from place to place, tending their herds of yak, sheep, and swine, of all of which they eat. They do not till the soil. As to their customs they are given to lechery and obscenity to an extent unknown even among any other savage race. They keep account of the seasons of the year by means of reeds. Every three years they have a great gathering, when they sacrifice oxen and sheep to heaven. When people of eighty or over die, the relatives do not mourn, for they say that those had reached the end of their allotted time, but if a young person dies they cry and lament, saying that it is a great wrong. They have banjoes (*p'i-pa*), flutes, and they use bits of bamboo to mark the measure."

("T'ang Shu," Bk. 221.) "The T'ang-hsiang form a portion of the Hsi Ch'iang tribes of the Han period. Since the time of the

¹ Cf. "Pei Shih," Bk. 96; but it contains no new matter.

² The legend translated in Supplementary Note VI may possibly explain the origin of this name of "Monkey tribes."

Wei and Chou dynasties (A. D. 535–581), they have greatly spread, embracing in their territory, Mi, Tang, Chang, and Teng. Their country is the *Hsi-chih* of antiquity. To the east they border on Sung Chou,¹ to the west on the Yeh Hu, to the south on the Ch'un-sang, Mi-sang and other Ch'iang (Tibetan) tribes, and to the north on the T'u-ku-hun. They live in secluded, rugged valleys, many of them three thousand *li* from any other tribe. A tribe is divided into little clans. A large one comprises a myriad horsemen, a small one several thousand. It is impossible to give the names of all these clans, but we may mention among them the Hsi-feng clan, the Fei-t'ing clan, the Wang-li clan, the P'o-ch'ao clan, the Yeh-tzū clan, the Fang-tang clan, the Mi-ch'in clan, and the T'o-pa clan. The T'o-pa is the most important one.²

“They have no houses, but with the hair of their yak and the wool of their sheep they weave stuff out of which they make tents, whose location they change according to the season of the year. They are all fighting men but ignorant of military art; at present they have regular levies. They reach to excessive old age, many of them exceeding an hundred years. They are much given to robbing and plundering, and consider it most commendable; they covet everything they see. Their hair is matted, their faces filthy, and their feet bare. They live on roots and game. Men and women wear long skin gowns, or of coarse woolen stuff with a nappy surface. Their domestic animals comprise yak, horses, asses, and sheep, which they eat. They do not till the soil. The country is cold; in the 5th moon the grass sprouts, in the 8th moon there is frost. They have no written characters, but record the years by means of little reeds. Once every three years they assemble together and worship heaven by sacrificing oxen and sheep. They get barley from neighboring countries; from it they make a fermented drink. A son may marry his deceased father's or uncle's wives (or wife); a younger brother, his deceased brother's wife, but he may not marry a person of the same cognomen as himself. When an old person dies the children and grandchildren do not weep, but if a young person dies they say that it is a great wrong and they lament over him.”

¹ Sung-p'an in northwest Ssü-ch'uan.

² From this clan descended the founders of the Hsi Hsia or Tangut dynasty in the 10th century A. D.

NÜ KUO (KINGDOM OF WOMEN)

("Sui shu," Bk. 83.) "The Kingdom of Women is south of the Tsung-ling mountains.¹ In this country the sovereign is a woman; her family name is Su-pi. . . . The queen's husband is called Chin-tsu,² but he has nothing to do with the government of the state. The men of this country fight its wars. The capital is on a mountain, and is five or six *li* square. There are ten thousand families (in the kingdom). The sovereign lives in a nine-storied house, and has several hundred female attendants. Every fifth day there is a council of state. There is also a "little queen" (*hsiao Nü-wang*), the two together ruling the kingdom. As to its customs, the women hold in light esteem their husbands, nor are they jealous. Both men and women paint their faces with different colored clays; every day or so they change (the color). All the people arrange (or cover) their hair. They wear rawhide boots. They have a system of taxation, but on no fixed basis. The climate is very cold, and they live by the chase. The country produces *tou-shih*,³ cinnabar, musk, yak, fast horses (*tsun ma*), striped horses (*shu ma*), and salt,⁴ in great abundance, which they carry to India and make great profit by the trade. They have often waged war with Hindustan and the T'ang-hsiang. When their queen dies they collect a large sum in gold coins, and then seek in the clan of the deceased for two women of ability, one to be queen, the other to be the 'little queen.'

"When a wealthy person dies they remove the skin of the body and put the flesh and bones mixed with gold dust in a vase and bury it. After a year they put (the remains together with) the skin in an iron vase and bury it.

"They usually address their prayers to devils (*Asura*, *O-hsiu-lo*) and to the gods. At New Year's they sacrifice men or monkeys, and then go into the mountains and pray until a bird like a hen pheasant comes and perches on the diviner's hand. He splits open the bird's crop and examines it. If there is grain in it the

¹ From the text of the "T'ang shu" we learn that by this is to be understood that the Nü kuo embraced all northern Tibet.

² Meaning "gold gathered together." Cf. the account of the "T'ang shu," which says that the family name was

Suvarna gotra, a Sanskrit name meaning "Golden family."

³ A kind of copper ore containing gold.

⁴ Probably by salt "borax" must be understood. Tincal is still exported from Tibet to India.

year will be fruitful, but if it only contains sand and gravel there will be calamities. This is called 'bird divination.'

"In the 6th year of Sui K'ai-huang (A. D. 586) this country sent tribute to court; since then it has discontinued doing so."

("T'ang Shu," Bk. 122.) "The Eastern Kingdom of Women (*Tung Nü kuo*), also called Su-fa-la-na chü-chü-lo,¹ is a division of the Ch'iang. There is also in the far west (*Hsi hai*) a country ruled by women, so this is called the eastern one. To the east it borders on the T'u-fan, the T'ang-hsiang and Mao chou. To the west it touches the San-po ho (Yaru tsang-po). To the north it is conterminous with Yü-tien,² and to the southeast with Ya chou (in Ssü-ch'uan), the Lo-nu Man-tzū and the Pai-lang savages. From east to west it is a nine days' journey, from north to south twenty days'. It has eighty towns, and is ruled over by a woman who resides in the K'ang-yen valley, a narrow, precipitous gorge around which flows the Jo River in a southerly direction. There are over 40,000 families and 10,000 soldiers. The sovereign is styled *Pin chin*, and the officials, called *Kao-pa-li*, are like our *Tsai-hsiang* (ministers of state). They depute men to perform all outside duties, and these are thence known as 'women's deputies' (*ling nü kuan*). From the interior (of the palace) the men receive and transmit the orders.

"The sovereign has near her person several hundred women, and once every five days there is a council of state. When the sovereign dies the people pay in several myriad of gold coins, and select from the royal clan two clever women (one to reign), the other as assistant sovereign to succeed her in case of death. If the one who dies is a maiden, the other, a married woman, succeeds her, so that there is no possibility of the dynasty becoming extinct, or of a revolution.

"They inhabit houses: that of the sovereign is nine stories high, those of the people six. The sovereign wears a black (or blue) plaited skirt of a rough texture, with a black (or blue) robe with sleeves trailing on the ground, and in winter a lambskin gown ornamented with embroideries. She wears her hair done

¹ For Sanskrit, *Suvarna gotra*, "Golden family."

² I. e., Khoten, also called Ho-tien in Chinese.

up in little plaits, also ear-rings, and on her feet a kind of leather boot known (in China) as *so-i*.

“The women do not esteem highly the men, and rich ones have always men-servants who arrange their hair and paint their faces with black clay (*lu*). The men do also the fighting and till the soil. The sons take the family name of their mother. The country is cold, and only suitable for barley. Their domestic animals comprise sheep and horses. Gold is found here. Their customs resemble closely those of Hindustan. Our 11th moon is their first. To divine they go in the 10th moon into the mountains and scatter grain about and call a flock of birds. Suddenly there comes a bird like a pheasant. The diviner splits it open and examines it. If (its crop) contains grain the coming year will be fruitful, but if there is none the year will bring calamities. This is called ‘bird divination.’

“They wear mourning for three years, not changing their clothes and not washing. When a man of wealth dies, they remove the skin from the body and put it aside; the flesh and bones they place in an earthen vase, mixed with gold dust, and this they carefully bury. When the sovereign is buried several tens of persons follow the dead into the tomb.”

IV

DIVINATION BY SHOULDER-BLADES SCAPULAMANCY OR OMOPLATOSCOPY

THE following, taken from G. Klemm's “Allgemeine Culturgeschichte der Menschheit,” III, pp. 200, 201, who himself quotes from Pallas's “Nachrichten,” II, p. 350, agrees exactly with what information I have been able to obtain on the subject, it being only necessary to remark that the interpretation of the cracks in the bone varies according to the object in view or the undertaking in hand, and is not confined to the words given in the text.

Fig. 1 represents the upper side of the right shoulder-blade. It shows :

- (a) *Amin chalga*, "the road of life," the line of business with the impediments and events which can take place in it, as follows :
- (b) *Booduk*, a special impediment or misfortune, (c) death of a Prince, (d) of a Saissan, (e) of a commoner, (f) of a servant.
- (g) *Mangna bair*, prompt good luck.
- (h) Tardy good luck.
- (i) *Mangna-aschida*, very tardy but enduring good luck.
- (k) *Chudurga*, "saddle crupper," impediment and delay.
- (l) *Dengna daissun*, line of war and the chase ; when the cracks meet on the ridge or stop on either side of it, it shows that the parties will meet or not, that the chase will be either good or bad.
- (m) *Zalma*, "loop," the death of a sick person, or recovery of lost cattle.
- (n) *Chaissan*, "kettle," the joint cavity, plenty or poverty according to the marks in it.

Fig. 2 represents the under side of a shoulder-blade, on which there are fewer cracks to note ; they show :

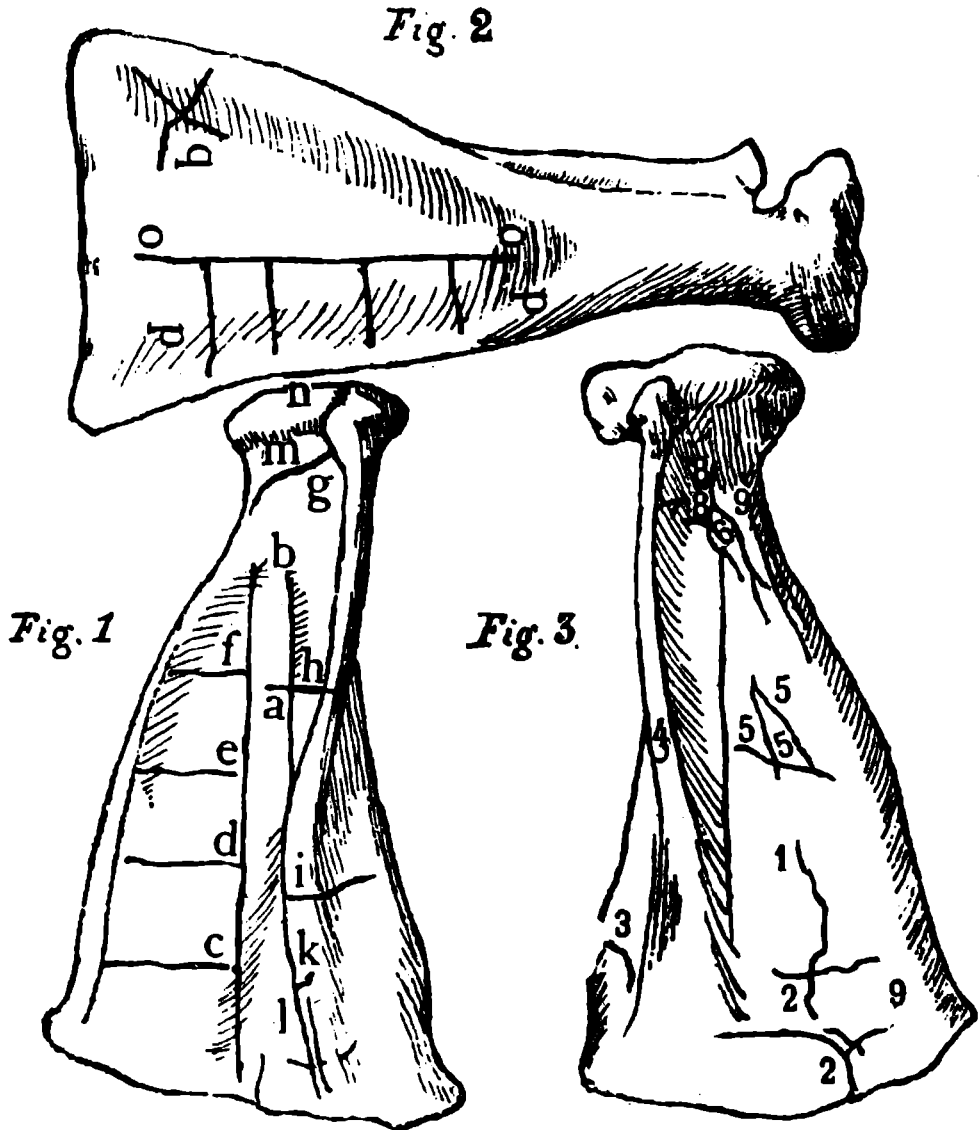
- (oo) *Tsehetkurin chalga*, malevolent spirits, working of evil.
- (pp) *Tenggrien chalga*, assistance of good spirits.
- (q) *Sanggi*, news, which, when the crack is single, will come late ; when it forms a cross, will come soon.

The other shoulder-blade (Fig. 3) shows cracks and alterations concerning a sick person. They are :

- (1) *Amin chalga*, the road of life.
- (2) *Jerrien sam chalga* or *ollon chalga*, roads leading to life.
- (3) *Dallain-daissun*, signs of the attack.
- (4) *Aschida*, duration of good luck and of life.
- (5) *Setkirin obo*, signs of evil spirits, standing near the living.
- (6) *Boodok*, or signs opposing these evil spirits.
- (7) *Chal-bajar*, prompt recovery of patient.
- (8) Portent of protracted suffering which will not prove fatal.
- (9) *Tenggrien alliga*, good spirits' crack.

I find the following interesting account of the method of divining by sheep shoulder-blades in William of Rubruk's "Itine-

rarium," p. 318 (Edit. Soc. de Géog. de Paris): "Et dum ingre-
diemur (domum Mangucam) exhibat quidam famulus exportans
ossa scapularum arietum, combusta usque ad nigredinem car-
bonum, super quo miratus sum valde quid hoc sibi vellet.
De quo cum postea inquisivissem, intellexi quod nichil facit in
toto mundo quin primo consulat in ossibus illis unde nec per-



mittit hominem ingredi domum suam, primo consulat os illud.
Quod genus divinationis ita fit: quando vult aliquid facere, facit
sibi afferri tria de ossibus illis nondum combustis, et tenens ea
cogitat de illo facto de quo vult consulere, utrum faciet vel non;
et tunc tradit famulo ossa ad comburendum. Et sunt due parvule
domus, juxta domum in qua jacet, in quibus comburuntur ossa
illa, et queruntur diligenter cotidie per totam herbergiam. Com-
bustis ergo illis usque ad nigredinem, referuntur ei, et tunc ipse

inspicit si ossa fixa fuerint ad calorem ignis recte per longum. Tunc via aperta est quod ipse debeat facere. Si autem crepata fuerint ossa ex transverso, vel pecie rotunde exilierunt, tunc non facit. Semper enim finditur ipsum os in igne, vel quedam tela que est extensa desuper. Et si de tribus unum recte findatur, ipse facit.”

V

POLITICAL GEOGRAPHY OF EASTERN TIBET

(List given me by the Secretary of the Chag-la jyal-bo at Ta-chien-lu.)

1. Nang-ch'en-wa Sbring-pa.....pronounced Dring-pa.
2. Lchags-lapronounced Chag-la.
3. K'ro-skyabpronounced Tro-jyab.
4. Hbahpronounced Ba (Bat'ang).
5. Li-t'angpronounced Lit'ang.
6. Sder-gipronounced Dérgé.
7. K'ang-gsarpronounced Kang-sar.
8. Ma-zurpronounced Ma-zur.
9. Brag-monpronounced Dra-mon.
10. Hbé-rimpronounced Bé-rim.
11. Gri-htupronounced Dri-tu.
12. Hgo-zipronounced Go-zi.
13. Po-mopronounced Po-mo.
14. Lchog-rtsi.....pronounced Chog-tsi.
15. Nying-hgagpronounced Nying-ga.
16. Smi-li.....pronounced Mi-li.
17. Brag-stingpronounced Dra-ting.
18. Lo-dgu and Ba-bam.....pronounced Lo-gu and Ba-bam.

No. 1 is frequently called Mupin (or ping).

No. 2 is the district under the rule of the native king residing at Ta-chien-lu, and is called by the Chinese Ming-cheng-ssü.

Nos. 7, 8, 9, 10, and 11 are called collectively *Hor-sé k'a nga*, “the Five Clans of the Horba,” the whole region being also frequently called *Hor chyok (p'yogs)*, “the Horba district.”¹

Nos. 12, 14, and 15 occupy the upper course of the T'ung River, called Chin ch'uan.

No. 13 is frequently called So-mo. It is situated near Sung-p'an T'ing, and is at present ruled by a woman.

¹ Conf. E. C. Baber. *op. cit.*, p. 95.

No. 16 is situated to the west of the Ta-chien-lu country, and is governed by a lama.

Nos. 17 and 18 are to the north of the Chin ch'uan, between it and Sung-p'an.¹

Another list was furnished me by a lama who had lived at Ta-chien-lu for some years. In it Ba, Li-t'ang, and Dér-gé are omitted. It agrees closely with the list which Baber gives, but is fuller than his. I give the two in parallel columns. The second column is Baber's; the numbers in parentheses refer to the first list given above :

(1) Drumba	Djum-ba.
Jya-k'a	Djia-k'a.
(12) Wo-jé	Wo-jé or Go-jé.
Tsen-la and Raten	Tsen-la and Rap-ten.
Tam-ba	Tam-ba.
(13) Sa-ma	So-mung.
(14) Cho-tsé	Djiu-tse or Djiu-tzū.
(15) Zun-ga	Zur-ga.
(3) Tru-jyab	Tehro-shiop.
Pa-ti-pa wang	Pa-wang.
(17) Tra-ti	Tehra-tin.
Gi-shé-ts'a	Ge-shie.
(18) Leur-go	“
(16) Me-li	“
(2) Ja-la	“
Jyé-dam	“
(7) Kon-ser	“
(8) Ma-zer	“

The general name of *Nya-rong jyä-k'a chu-bjyü*, or “the Eighteen Tribes of the Nya-rong,” sometimes shortened to *Jyä-k'a chu-jyü*, is given to the tribes mentioned in this list, Nya-rong being the name of the upper basin of the Nya-ch'u and its affluents. The tribes inhabiting along the lower course of the Nya ch'u are called *Män-nya-k'a* or “inhabitants of the lower Nya ch'u,” and are the Maniak of Hodgson, the Menia of Baber.

So much for the native divisions of the country. For those whom the subject interests, I append two lists taken from Chinese works, both published about fifty years ago, the first called “Hsi-yü k'ao ku-lu,” the second the “Sheng-wu chi.” These lists

¹ The Mä-nya country, or Chan-tui, is omitted, as it formed from 1864 until 1889 part of the kingdom of Lh'asa.

are interesting, moreover, as giving the boundaries of each district, the population, the amount of taxes due the Imperial government, the Chinese rank of the native chiefs, and, in some cases, their head village. The list given in the "Sheng-wu chi" comprises probably places occupied by non-Tibetan tribes, but as I am not able to determine all of these I have concluded to give it as it stands. Shen-pien and Leng-pien are in Ssü-ch'uan, in the Ya-chou Fu district, Shen-pien being conterminous with Ch'ing-ch'i Hsien, and Leng-pien with T'ien-chüan; but both of them have native chiefs (*T'u-ssü*). The people of these two tribes are at present undistinguishable in dress from the Chinese, but they speak a Tibetan patois.¹

The "Hsi-yü k'ao ku-lu" distinguishes thirty-three tribes, which it calls "the thirty-three Yü-t'ung² Hsi-fan Tribes." The "Sheng-wu chi" gives fifty-one, about half of which are identical with those of the first list.

¹ See Yule's "Marco Polo," second edition, II, p. 37, and his note in Gill's "River of Golden Sands," II, 77.

² Baber, *op. cit.*, p. 54, says that Yü-

t'ung is a tribe of the T'ung valley, a little above Wa-ssü-k'ou. It certainly is not in the accompanying list, although it generally has not so broad a meaning.

THIRTY-THREE YÜ-T'UNG HSI-FAN TRIBES.

Names.	Boundaries.	Capitals.	Population (by families, <i>ku</i> , of five persons).	Chiefs.	Taxes (in taels).
1. Shen-pien	{ E. Ching-ch'i Hsien S. Ta-tien-ma t'u-ssü.... W. Ming cheng ssü..... N. Leng-pien	Shen-pien	122	Ch'ang-kuan-ssü.....	55
2. Leng-pien	{ E. T'ien-ch'uan S. Shen-pien..... W. Tsan-li t'u-ssü..... N. Mu-ping ssü.....	Leng ch'i....	275	Ch'ang-kuan-ssü.....	41
3. Ming-cheng (<i>Chagla</i>).....	{ E. Leng-pien S. Chien-chang t'ing W. Li-t'ang ssü..... N. Sun-k'o tsung.....	Ta-chien-lu.	6,591	Hsüan-wei-shih-ssü..	Not stated.
4. Cho-ssü chia	{ E. Ts'a-ku t'ing S. Ta chin-ch'uan..... W. Ko-shih-tsa N. Wa-shu mu-ch'üeh-ya	Cho-ssü chia	9,000	An-fu-shih-ssü.....	2.6.9
5. Tan-tung Ko-shih-tsa.....	{ E. Ta chin-ch'uan..... S. Ming-cheng..... W. Kan-mu..... N. Hor Chango.....	Tan-tung....	830	An-fu-shih-ssü.....	2.6.9

THIRTY-THREE YÜ-TUNG HSI-FAN TRIBES—Continued

Names.	Boundaries.	Capitals.	Population (by families, <i>hu</i> , of five persons).	Chiefs.	Taxes (in taels).
6. Pa-ti (<i>Pau pawang</i>)	{ E. Hsiao chin-ch'uan..... S. Ming-cheng..... W. Ko-shih-tsa..... N. Ta chin-ch'uan..... }	Pa-wang	850	An-fu-shih-ssü	2.6.9
7. La-kun	{ E. Ming-cheng..... S. Li-t'ang..... W. Lower Chan-tui..... N. Ming-cheng..... }	La-kun	970	An-fu-shih-ssü	Not stated.
8. Li-t'ang (<i>Li'ang</i>)	{ E. Ming-cheng..... S. Ba-t'ang..... W. Wa-shu..... N. Chan-tui..... }	Li-t'ang.....	5,322	Hsüan-fu-shih-ssü.....	450.0.0
9. Ba-t'ang (<i>Ba</i>)	{ E. Li-t'ang..... S. Lh'asa..... W. Sang-ang-pang..... N. Chamuto..... }	Ba-t'ang.....	3,063	Hsüan-fu-shih-ssü.....	1,895.4.8
10. Tê-ko-tê (<i>Dérgé</i>)	{ E. Upper Chan-tui..... S. Chamuto..... W. Upper Na-to..... N. Lin-tsung..... }	.....	7,977	Hsüan-wei-shih-ssü ..	280.0.0

THIRTY-THREE YÜ-TUNG HSI-FAN TRIBES—Continued

Names.	Boundaries.	Capitals.	Population (by families, <i>lu</i> , of five persons).	Chiefs.	Taxes (in <i>taels</i>).
11. Wa-shu Ch'ung-hsi.....	{ E. Ming-cheng..... S. Li-t'ang..... W. Li-t'ang..... N. Chan-tui..... }	.....	308	Ch'ang-kuan-ssü.....	26.0.0
12. Wa-shu Mao-ya.....	{ E. Li-t'ang..... S. Yang-la..... W. Lamaya..... N. Dérge..... }	.....	371	Ch'ang-kuan-ssü.....	36.0.0
13. Wa-shu Shan-t'eng.....	{ E. Li-t'ang..... S. Jo-ts'o..... W. Ba-t'ang..... N. Ch'un-ta..... }	.....	243	Ch'ang-kuan-ssü.....	12.0.0
14. Wa-shu Ssü-ta.....	{ E. Keng-p'ing..... S. Lower Chan-tui..... W. Hor K'ang-sar..... N. Hor Chuwo..... }	.....	250	Ch'ang-kuan-ssü.....	7.5.0
15. Wa-shu Keng-p'ing.....	{ E. Ko-shih-tsa..... S. Chang-t'an..... W. Bérim..... N. Ko-chi..... }	.....	300	Ch'ang-kuan-ssü.....	10.0.0

THIRTY-THREE YÜ-T'UNG HSI-FAN TRIBES—Continued

Names.	Boundaries.	Capitals	Population (by families, <i>hu</i> , of five persons).	Chiefs.	Taxes (in taels).
16. Wa-shu Yü-k'o	{ E. Ko-shih-tsa S. Hor Kung-sa W. Wa-shu Ssü-ta N. Ch'o-ssü-chia ..... }	.....	640	An-fu-shih-ssü	24.0.0
17. Huo-erh Chuwo (<i>Hor Chuwo</i>)	{ E. Keng-p'ing S. Upper Chan-tui W. Kan-Ma-ch'ti (<i>Mazur</i>) N. Tung-k'o }	Chuwo	1,660	An-fu-shih-ssü	92.0.0
18. Huo-erh Chang-ku (<i>Chango</i>)	{ E. Tung-p'ing S. Lower Chan-tui W. Hor Kangsar N. Hor Chuwo }	Chango	3,320	An-fu-shih-ssü	182.0.0
19. Huo-erh K'ung-sa (<i>Kangsar</i>)	{ E. Chuwo S. Wa-shu Chung-hsi W. Bérim N. Ko-chi ..... }	.....	923	An-fu-shih-ssü	70.0.0
20. Huo-erh Kan-kung Ma-ch'ti (<i>Kanzé Mazur</i>)	{ E. Ming-cheng S. Yü-k'o W. T'u-ken man-tieh N. Sung-p'an t'ing ..... }	.....	665	An-fu-shih-ssü	57.0.0

THIRTY-THREE YÜ-TUNG HSI-FAN TRIBES—*Continued*

Names.	Boundaries.	Capitals.	Population (by families, hu, of five persons).	Chiefs.	Taxes (in taels).
21. Huo-erh Pai-li (<i>Bérim</i>)	{ E. Ma-chu (<i>Mazur</i>) S. Wa-shu W. Lin-tsung N. Sung-p'an t'ing }	Bérim	315	Ch'ang-kuan-ssü	18.0.0
22. Huo-erh Tsa	{ E. Tung-k'o S. Dérgé W. Lin-tsung N. Sung-p'an t'ing . . . . . }	. . . . .	711	An-fu-shih-ssü	40.0.0
23. Huo-erh Tung-k'o	{ E. Ssü-ta S. Kangsar W. Hor Tsa N. Sung-p'an t'ing . . . . . }	. . . . .	348	An-fu-shih-ssü (A lama appointed from Hsi-ning.)	25.0.0
24. Upper Chan-tui	{ E. Hor Chango S. Maoya W. Dérgé N. Hor Mazur . . . . . }	. . . . .	422	Ch'ang-kuan ssü	16.0.0
25. Middle Chan-tui	{ E. Ming-cheng S. Lower Chan-tui W. Upper Chan-tui N. Na-lin chung . . . . . }	. . . . .	200	Ch'ang-kuan ssü	Not stated.

THIRTY-THREE YÜ-TUNG HSI-FAN TRIBES—Continued

Names.	Boundaries.	Capitals.	Population (by families, <i>hu</i> , of five persons).	Chiefs.	Taxes (in taels).
26. Lower Chan-tui	{ E. Ming-cheng } { S. La-kun } { W. Jo-sang-ni } { N. Hor ..... }	.....	340	An-fu-shih-ssü	Not stated.
27. Ch'un-ko	{ E. Lin-tsung } { S. Upper Na-to } { W. Hsi-ning } { N. Hsi-ning ..... }	.....	588	An-fu-shih-ssü	46.0.0
28. Yü-na-t'u	{ E. Ch'a ch'ü (<i>Mazur?</i>) .. } { S. Lower Chan-tui } { W. Upper Chan-tui } { N. Na-lin-chung ..... }	.....	206	Ch'ien-hu	8.0.0
29. Meng-ko-chieh (<i>Jyékundo</i>)	{ E. Hor tsa } { S. Hsi-ning ¹ } { W. Hsi-ning ² } { N. Hsi-ning ³} ..... }	.....	304	Ch'ang-kuan-ssü ...	23.0.0

¹ Seventy *li* from the Dré-ch'u. ² Two hundred and eighty *li* from Chao-wu. ³ At the Hara-usu (Dré ch'n). (Notes of the Chinese author.)

THIRTY-THREE YU-TUNG HSI-FAN TRIBES—Continued

Names.	Boundaries.	Capitals.	Population (by families, &c., of five persons).	Chiefs.	Taxes (in taels).
30. Lin-tsung	{ E. Hor T'au. S. Dérgé W. Ch'un-k'o N. Meng-ko-ehieh	.....	1,086	An-fu-shih-ssü	64.0.0
31. Upper Na-to	{ E. Ch'un-k'o S. Chamuto (<i>Ch'ando</i>) W. Chamuto N. Na-chi	.....	650	An-fu-shih-ssü	16.0.0
32. Sa-tun-t'u	{ E. Hor Chango S. Wa-shu Maoya. W. Dérgé N. Hor Mazur	.....	50	Ch'ien-hu	16.0.0
33. Wa-shu Mao-mao	{ E. Hor Chango S. Wa-shu Maoya. W. Dérgé N. Hor Mazur	.....	100	Po-hu	8.0.0
Grand Total	.....	.....	49,010	.....	Tls. 3,528.0.5

FAN TRIBES WITHIN THE JURISDICTION OF SSŪ-CH'UAN

(List taken from "Sheng-wu chi")

N. B.—Numbers in parentheses refer to preceding list.

HSŪAN-FU-SHIH.

1. Chiung-pu. 2. Lit'ang (8). 3. Bat'ang (9).

AN-FU-SHIH.

- | | |
|--------------------------------|--------------------------|
| 4. Chang-ning. | 15. Chu-wo (17). |
| 5. Wu-li. | 16. Hor Chang-ku (18). |
| 6. Wa-ssü. | 17. Hor Kung-sa (19). |
| 7. So-mo. | 18. Hor Cha-li (22). |
| 8. Kua-pieh. | 19. Hor Lin-tsung (30). |
| 9. Mu-li. | 20. Hor Kan-tzü (20). |
| 10. Tan-tung ko-shih-ch'a (5). | 21. Ma-shu (20). |
| 11. Pa-li (6). | 22. Tung-k'o (23). |
| 12. Ch'o-ch'i chia (4). | 23. Chun-k'o (27). |
| 13. La-kun (7). | 24. Lower Chan-tui (26). |
| 14. Wa-shu Yü-k'o (16). | 25. Upper Na-to (31). |

CH'ANG-KUAN SSŪ.

- | | |
|-----------------------------|------------------------------------|
| 26. Ching-chou. | 39. Wa-shu T'a-ssü (Ssü-t'a) (14). |
| 27. Lung-chou. | 40. Wa-shu Keng-ping (15). |
| 28. Yo-hsi. | 41. Hor Na-lin chung. |
| 29. Sung-kang. | 42. Hor Pa-li (21). |
| 30. Cho-k'o-chi. | 43. Ch'un-ko-kao-ji. |
| 31. Wei-lung chou. | 44. Upper Chan-tui (24). |
| 32. P'u-chi chou. | 45. Middle Chan-tui (25). |
| 33. Chang chou. | 46. Meng-ko-chieh (29). |
| 34. Shen-pien (1). | 47. Ni-ch'i. |
| 35. Leng-pien (2). | 48. Ping-i. |
| 36. Wa-shu Chung-hsi (11). | 49. Shu ch'uan. |
| 37. Wa-shu Mao-ya (12). | 50. Chiu-hsing. |
| 38. Wa-shu Ch'ü-t'eng (13). | |

FU CH'ANG-KUAN SSŪ.

51. Ma-la.

It is to be noticed that Dêrgé and Ming-cheng (Chag-la or Ta-chien-lu) do not figure in this list, in which also the Horba country is divided into nine districts.

The six Wa-shu tribes, or districts, are subordinate to Lit'ang.

VI

ORIGIN OF THE TIBETAN PEOPLE, AS TOLD IN THE "MANI
KAMBUM," CHAPTER XXXIV

(Translation.)

Om mani padmé hum.

Then the greatest of all the Bodhisattwas, P'apa Shenräzig Wang-ch'yuk, came to the Realm-of happiness (*Déwa-chan*), and the Buddha Nangwa t'ä-yä (*Amitayus*) spoke to him, saying: "Merciful Bodhisattwa, the Buddha Sachya t'upa (*Shakya-muni*) did not convert the Realm of snow (*i. e.*, Tibet), he did not set his foot upon it, did not illumine it with the light of his word, did not show it his bounty. It is for thee to gather together the low-lived creatures of the Abode of snow and bring them into a fit state for receiving the holy truth."

So then the Bodhisattwa P'apa Shenräzig Wang-ch'yuk repaired to the many-jeweled dwelling on the top of Mount Potala,¹ and looked at the living creatures inhabiting the Abode of snow, and saw that they in their ignorance of the religion of the Buddha were plunged in darkness like the black darkness of night; they were like the snow which falls on the surface of a lake and which can rise no more and must keep on going downward, for they were ever getting lower in the evil way. And he saw how there was no freedom for them; they moved as it were in a tightly closed iron coffer.

Then he caused a ray of bright light to come out of the palm of his right hand, and from out it appeared the king of the monkeys, the Bodhisattwa Hilumandju. Bethinking him of making mankind in the Abode of snow, he asked the monkey-king, "Wilt thou be able to give thyself to deep meditation in that snowy realm of the north?" "I will," he replied. Then he bound him by the oath of the five highest duties, and expounded to him the deep and far-reaching doctrine, after which the monkey transported himself by supernatural means to the Abode of snow, and, sitting down on a rock, was soon plunged in profound abstraction.

¹ At Lh'asa, where now lives his incarnation, the Talé lama. This hill is also called Marpori, "Red hill." This god's favorite abodes are Pu-t'o shan. in

the Chusan archipelago: Adams Peak, in Ceylon; Potala, near the mouth of the Indus, and Lh'asa.

Now at that time *Peu-yul* (*i. e.*, Tibet) was divided into nine regions. The first three, called *Rinpoch'é od-gi ling* ("the jeweled light region"), reaching to the highest peaks of slate and ice, were held by elephants and deer. The *Ru-dzi sog-pé ling* ("the region of the four horns") comprised the three middle zones of rocks and alps, and was held by rock-ogres (*drasinpo*) and monkeys. The *Ma-jya od ling* ("the peacock-light region"), comprising the three lowest zones of forests and valleys, was occupied by ogres (*sinpo*). So it was that the very name of man was unknown in that land.—

Some time after the advent of Hilumandju, it happened on a day that a rock-ogress, burning with lust, took the semblance of a she-monkey and went near unto the monkey-king, lost in profoundest meditation, and endeavored by every kind of blandishment and lascivious gesture to excite his passions, but though for seven days she thus bedeviled him she could not arouse him from his abstraction.

So she thought within herself that perhaps her failure was due to the ugliness of her face and form; so she transformed herself into a lovely woman, gorgeously arrayed in jewels, and with bare bosom, and again she tried to arouse his passions. Then the monkey-king stole a glance at her out of the corner of his eye, and she, seeing her opportunity, moved near him and said, "Be mine." "I am a follower of P'apa Shenräzig," he replied, "and I may not be yours."

Then spoke the rock-ogress, saying: "Alas, monkey-king, I love thee passionately. Listen to me my destiny has made me what I am, an ogress, but I pine for thee with all the force of love, and I would clasp thee in these arms. If thou refuseth to be my husband I will call together all the ogres of the realm, and daily we will kill creatures by the tens of thousands, and nightly we will devour them by the thousands. And the ogresses will bear young, and they will be many; and this Abode of snow will be the kingdom of ogres, and they will devour the world. If death overtakes me while in this mind, my punishment will be to fall into the depth of hell. But thou, sin cannot overtake thee, shielded with the power of deep abstraction; fear not, lest it gradually forsake thee. Think of me kindly and spare me, that the voice of love be not changed to that of lamentation."

Then the monkey Bodhisattwa's heart was moved with commiseration as he considered the ogress, and he thought, "If I, in ignorance of possible consequences, take unto myself a wife, my

powers of meditation may become impaired. On the other hand, if I do not take this woman as my wife, and she dies, great will be my sin!" So he resolved to go and question the Bodhisattwa, the knowing P'apa Shenrüzig, and, having transported himself by his power of magic to the dwelling on Mount Potala, he did obeisance to the knowing Shenrüzig, and thus addressed him: "Alas, Lord of creatures, Merciful One, I am thy disciple (*gényen*), and my strength lies in my power of deep meditation, but an ogress of the devil's race, with mind filled with lechery, has assailed me, and my power of abstract meditation is about to depart. What shall I do to preserve my power of meditation? Merciful One, instruct me, I beseech thee. The ogress has said: 'Thou must be my husband; if thou wilt not, I will fling away my life, and it will be counted unto thee as sin.' Tell me, is it proper, or not, that I take her to me as a wife?"

"Highly proper," replied P'apa Shenrüzig, "though it may not be that thou and thy wife become human beings; in the days to come, when thy children's children have multiplied in the Abode of snow, they will become human beings, and the Holy Truth will be diffused among them and it will be mighty in the land."

Then the Lady Drolma (*Jo-mo Drolma*) added, "When men kind shall have multiplied (in Tibet), they will be pillars of religion."

"So be it (*Laso*)," he made answer. Then the monkey Bodhisattwa, fearing lest the rock-ogress should destroy herself, departed in all haste for the Abode of snow, and as soon as he arrived he took her unto him as his wife. When the space of nine months had elapsed she bore him six sons, who participated of the nature of the six classes of sentient creatures subject to birth and death. As their father was a monkey, so their bodies were covered with hair, and as their mother was a rock-ogress, so they had tails;¹ their faces were reddish and they were most unsightly. From the mortal gods, one had gentleness and patience; from the mortal (lit., subject to birth and death) Asuras (*lh'a-mayin*), one of them derived angry passions and quarrelsomeness. One of them had in part great lusts, and love of worldly riches, which qualities he owed to mortal man. One of them owed to hell's mortal fiends, hate, and anger, and great hardness. One partook of the mortal Préta's (*yidag*) characteristics in being deformed,

¹ The text says "no tails" (*mjug-wa mäd-pa*), but the context does not bear out this reading, and a little farther on we find that "their tawny tails disappeared" (*mjug-wa skya-ica bdzin-du song*).

from his cravings for food (lit., bad stomach), and his avariciousness. One partook of mortal brute beasts in not being able to distinguish right from wrong, and in having neither comprehension nor cleverness. When born they were ruddy-faced, had a taste for flesh and blood, and hair covered their heads and bodies, and, moreover, they knew how to speak.

Now when the little ones and their mother, the rock-ogress, became ahungred and in want of food, their father, the monkey Bodhisattwa, took them to a forest in the south, called "The Peacock woods," where there were monkeys for them to live with. And they lived with the female monkeys. After the space of a year the father visited them to see how they fared, and he saw that they had increased by five hundred, and their offspring were neither monkeys nor yet men, and they were exposed to the rain and the sun's rays in summer and to the snow and the wind of winter, and they had neither food nor raiment. Then the monkey Bodhisattwa, their sire and grandsire, was filled with anguish, and the five hundred young monkeys came to him, holding out beseechingly their helpless hands, exclaiming: "Father, what shall we eat? with what shall we clothe ourselves?"

And the monkey, when he saw this the great distress of his progeny and that there was neither food nor clothing for them, was afflicted, and filled with compassion. They had already devoured all the edible fruits, etc., but he got fruits and other things and brought them to them; but hardly had they eaten them, than they were racked with pain, and all the hair on their bodies fell off, the briars pricked their hands and feet,¹ and their tails shriveled up and disappeared. Then the old monkey in anguish and dire distress bethought him, "Why am I in such sorrow and misery? and these young monkeys, why has this befallen them? and the rock-ogress, my wife, why has this come to her, when there is the prophecy of the Knowing One Shen-räzig and of the Jomo Drolma? Alas, it is doubtless on account of my former wickedness. The Venerable One cannot have been mistaken in his forecast. It is not right for me to be angered and disturbed in mind; I will question the Venerable One, himself."

So by magical means he repaired to the palace on Mount Potala, and, having done obeisance to the Venerable One, he

¹ That is, as I understand the text, briars could prick their hands and feet, which were no longer protected by a covering of hair.

stood before him, and spoke as follows: "If I, moved only through compassion and regardless of the poison leaf of passion, have unwittingly brought myself into the prison of the Devil, and have beguiled the woman into the toils of the Evil One, my children and grandchildren into the orb of Māra, and we have all sunk in the mire of lust and are weighed down under a mountain of misery; if we have become wrapped in the smoke of the misery of sin and struck down by the plague of evil deeds; if I myself have been seized with the disease of misery, it is only I who have brought us into the world of transmigration, and have been caught in the net of dark ignorance; protect my (sinless) children and grandchildren. What has happened to me has been at the word of the Venerable One, and I shall without a doubt fall hereafter into hell. But be merciful to me, I beseech thee Knowing One, I and the rock-ogress, our children and children's children, have moreover nothing to sustain life on, and I have sought thee in deep anguish to know what to do."

Then spoke P'apa Shenräzig Wang-ch'yuk, saying: "Peu-yul, the Abode of snow, was in utter darkness and in the power of creatures not human, and was not within the sphere of my conversion; but these (thy descendants) have become men, and thou hast, in bringing this transformation about, opened to them the gate to heaven and redemption. Doubt me not, be single-hearted and despair not, for these thy children and grandchildren have finally become men, and will some day enter the fold of my redeemed. Thou hast done no evil, but only made them take a step in the road towards freedom; it is well. Think not to be in anguish, for these thy progeny shall be provided with both worldly goods and spiritual goods. These thy progeny shall be of two kinds: some of them shall be of their grandsire's race, and have great faith and kind-heartedness, great understanding and application, they shall delight in the subtilities of religion and ever thirst after virtue, they shall have broad understanding and Bodhisattwa great-mindedness; some shall be of the mother's race, and shall delight in killing and will like flesh and blood, they will be fond of trade and lucre, strong in body and mind, given to unrighteousness, liking to hear of others' shortcomings, cruel, prying,¹ butchering animals, and eating meat.

¹ I have translated by these two words the following phrase, *rkang lag-gis hdug mi ts'ugs-pa, mig mi-la lta mi ts'ugs pa*, which appears to mean, literally trans-

lated, "hurting man with hands and feet, looking at men with the eye and hurting them." but my interpretation is conjectural

"And the food portions of thy descendants are these seven varieties of seed"; and he gave him barley, wheat, beans, pease, *soba* (thick-shelled barley), etc., saying unto him, "carry these to the Abode of snow, and these seeds shall fructify and increase. Moreover, to satisfy the longing after riches, which they derive from the rock-ogress thy wife, here are handfuls of precious dust, gold, silver, copper, iron, etc.; scatter them in the Abode of snow, and they shall become treasures in the earth and shall be found in mines, and after a season these thy progeny, become men, shall subsist by this precious gold, silver, etc., and after a time they shall open these precious mines." ¹

And he spat in the direction of the Abode of snow, saying: "After a while there shall arise in the land an incarnate Bodhisattwa, who will be a defender of religion, a man exalted above all others." ²

Then the monkey Bodhisattwa transported himself to the Abode of snow, where he sowed the seed in a part of the land well suited for the purpose, level and warm, and with every qualification. And after that the monkey Bodhisattwa had gathered together in the summer the monkey children in the Peacock woods, the autumn came after the sowing of the seeds, and it was time to look after them, and they were all ripe and fit to eat. Then he called the monkey children and instructed them, saying: "These P'apa Shenrüzig has given you as your food portion; cultivate them; let this be your work. This is the first labor in the land, but later on there shall be treasures found in Tibet, and they will be in mines; these the Bodhisattwa Shenrüzig Wang-ch'yuk has also given you." And they acquired worldly goods, after which for the first time they became bound together by religion. ³

The narrative goes on to state that Shenrüzig caused a ray of light to issue out of the palm of his right hand, and from out it came a youth with all the signs and characteristics of a Buddha, who came among the people of Tibet, described as still being

¹ This is in conformity with the Tibetan idea that minerals grow, that large nuggets are the seeds of which the smaller ones are the fruit as it were.

² An allusion to Srong-tsan gambo, the king of Tibet, in whose reign Buddhism is said to have been introduced into Tibet, and who is the reputed author of this work. He reigned from A. D. 636 to 698.

³ According to East Indian legends given by the Chinese pilgrim Hsüan Chuang, which show some analogy with those here given, the people of Ceylon descended from a lion, who took to wife a daughter of a king of southern India. See "Vie et Voyages de Hiouen-Tsang, trad. par Stan. Julien," I, p. 194.

something between men and monkeys, "with curtailed hind parts and hairy bodies"; and he taught them the profit arising from observing the ten cardinal virtues (*pāramitā*), etc., and they believed him, and the first seeds of the Buddhist faith were sown in Peu-lung-ba (Tibet).

VII

NOTES ON THE LANGUAGE OF EASTERN TIBET

IN the following note I have endeavored to present some of the peculiarities of the pronunciation of the Koko-nor Tibetans, to which I have added a syllabary giving the pronunciation at Lh'asa, Bat'ang, and the Ts'arong, the first being the modern standard of excellence. The pronunciation of the Koko-nor Tibetans is harsher than that in any other section of the country with which I am acquainted, and presents a number of peculiarities which I must leave to philologists to explain. Its vocabulary and phraseology do not differ essentially from those of Lh'asa, nor, for that matter, of any of the other dialects spoken in K'amdo. There are, of course, in each a large number of local expressions, of patois words, many of Chinese, or Turki, some of unknown origin, but so slight are these peculiarities that a native of Lh'asa can master them in a very short time. Prof. Terrien de Lacouperie, speaking of the tribes of eastern Tibet, says: "In the east, near the borders of China, are the numerous tribes called Gyarung or Chen-tui; their language has been studied by Hodgson, who has pointed out its remarkable similarity of structure to that of the Tagals of the Philippines."¹ However this may be, the Mänyak'a from the Chan-tui, like the people of Bat'ang, Ta-chien-lu, Kanzé, and Jyé-kundo, speak Tibetan; and the educated ones among them endeavor to pronounce as much like the Lh'asa people as they possibly can.

I regret that I was unable to collect a vocabulary of the language spoken by the Golók, for, while I feel sure that it is a Tibetan dialect, I believe that in its pronunciation it is even more archaic than that of the Panak'a of the Koko-nor.

¹ "Encyclopædia Britannica," 9th edition, s. v. "Tibet." p. 344.

PECULLARITIES OF THE AMDOWA AND PANAK'A PRONUNCIATION

Transcription.	Meaning.	Pronunciation.	Observations.
Dus	Time	Du	Like French <i>du</i> , "of."
Ch'os	Law	Ch'ua	Lh'asa — pronounced <i>ch'ü</i> .
Dzus	Asked	Dzu.	
K'ro	Anger	Cho	Lh'asa — pronounced <i>tru</i> .
Gus	Garment	Gü.	
K'rag	Blood	Chak	Lh'asa — pronounced <i>tra</i> .
Nyid	Self	Nyit	High tone.
T'us	Heard	T'ü	Like French <i>tu</i> , "thou."
Dag-par	Purely	Dak-war.	
Legs-par	Well	Lek-war.	
P'au ch'en rin-po-ch'é	A title	Hau ch'en rin-po-ch'é	Or <i>P'an</i> — but this is considered Mongol pronunciation.
P'ug	Cavern	Huk.	
P'ul-nas	Having given	Hul-né.	
T'eg-pa	Carriage	T'é-wa.	
Chi smos	Why speak of	Chi rmé.	Lh'asa — pronounced <i>chi mö</i> .
Bu gehig	One child	Vu chik.	
Sha-stag'	Only	Shartak.	
Ma mt'ong	Not seen	Mam t'ong.	
Mi ldau	Not having	Mir-dän	The first syllable pronounced like English <i>mere</i> .
Mi gyo	Unmoved	Mir-yo	" " " " "
Zak-pa	Sorrow	Zak-hua.	
Zla-wa	Moon	Da-va.	
Os	Proper	Eu.	

PECULIARITIES OF THE AMDOWA AND PANAKA PRONUNCIATION—Continued

Transcription.	Meaning.	Pronunciation.	Observations.
Shig	Louse	Shiek.	
Grol	Free	Drol.	
Gtso	Chief	Rtso.	
Gdzan	Other	Rdzan.	
Gso	To cure	Rso.	
Gsum	Three	Rsum.	
Gzugs	Figure	Rdzuk.	
Dkah	Difficult	Rka.	
Dgra	Enemy	Rja.	
Dpag	Fut. of <i>dpoq</i>	Huak	Lh'asa — pronounced <i>pa</i> .
Dpal	Glory	Hual.	
Dpé	Example	Hué.	
Dper-na	For example	Huer-na.	
Dbus-nas	From the midst	Dwu-né.	
Dugos-po	Reality	Rnyö-po.	
Dkyil-hk'or	Circle	Dehyil-k'or	Lh'asa — pronounced <i>chi k'or</i> .
Dpung	Host	Hung.	
Dhen	Solitude	Wen	English <i>when</i> .
Dbyangs	Song	Ryang.	
Dbul-p'ongs-pa	Indigent	Wul-p'ong-va.	
Dbye-dzing	Being divided	Djé dzang	Lh'asa — pronounced <i>jyé-dzin</i> .
Dinal	Low	Ma.	
Bral	Deprived of	Jal.	

PECULIARITIES OF THE AMDOWA AND PANAK'A PRONUNCIATION—Continued

Transcription.	Meaning.	Pronunciation.	Observations.
Bkra	Good	Ja	<i>Tra</i> is also heard.
Bkah hstsal	Spoke	Kuar-tsal.	
Bskvod	Moved	Rshyot	Or <i>Kyot</i> .
Brla	Thigh	Vla.	
Brijed	Spoke	Byot.	
Bgyis	Made	Biye.	
Byams-pa	The Merciful One	Chuum-pa	Or <i>Suum-pa</i> .
Brgyan-pa	Adorned	Rgyan-pa.	
Brgya-ba	The hundredth	Rgya-wa	Or <i>Rya-ra</i> .
Bzla-par	Spoken	Rdiä-par.	
Bkra-shis	Good luck	Chua-shi	Lh'asa — pronounced <i>tra-shi</i> .
Bkag	Forbade	Kusk.	
Bsgral-wa	Cut	Dral-va.	
Bgegs	Hindrance	Hgek.	
Briyan	Reward	Bnyan.	
Brtsegs	Built	Rtsek.	
Mk'as	Learned	K'ua	Lh'asa — pronounced <i>k'é</i> .
Mk'an-po	Abbot	Kuan-bo.	
Mugon	Evident	Won.	
Mt'ah-yas	Endless	Mt'a-yé	Lh'asa — pronounced <i>t'ä-yä</i> .
Mk'ah-hgro	A kind of fairy	K'ua-dru.	
Mngah	Might	Mna.	
Hdi	This	Dé.	

PECULIARITIES OF THE AMDOWA AND PANAK'A PRONUNCIATION — Continued

Transcription.	Meaning.	Pronunciation.	Observations.
Hk'ral	Mistaken	Chul.	
Hdi hdra vai	This kind	Dendra vi.	
Hdus-h'vas	Compound	Dub-ché.	
Hp'os-na	If he died	Hu-na.	
Hjog-pa	Placed	Jok-pa	Or <i>na</i> .
Hber	To burn	Bar.	
Hkrug-med	Peaceful	Chuk met	Lh'asa — pronounced <i>tu-mé</i> .
Hbyang	Clean	Hjyang	Also, <i>ayang</i> and <i>pyang</i> .
Mi gteang	Unclean	Mir-tsang.	
Sdug-bangal	Misery	Rduk-rnal.	
Legs-par	Well	Lek-war.	
Sprin p'ung	A lot of clouds	Driu p'ung.	
Baidürya	Lapis lazuli	Betriyé	Lh'asa — pronounced <i>bendrya</i> .
Od-hpro	Light	Od-cho	Lh'asa — pronounced <i>kö-tro</i> .
Ting-nge-bdjin	Meditation	Teng-en-dzin.	
Pyak-hts'al-lo	Saluted	Shyak-ts'alo.	
Hbrug-sgra	Thunder	Druk-dra.	
Gtong-p'ud	Tuft of hair	Tsuk-but.	
Bkah drin ch'e	Thank you	Kus drin ch'e.	
Bkah hbum	Title of book	Kuam bum.	
Bkah hgyur	Title of book	Kuan jur.	
Bkur-sti	Homage	Kur-ti.	
Blun	Stupid	Blun.	

PECULIARITIES OF THE AMDOWA AND PANAK'A PRONUNCIATION — *Continued*

Transcription.	Meaning.	Pronunciation.	Observations.
Ma ste	Is not	Marté.	
Shākya t'ub-pa	Shakyamuni	Shakcha t'uba	Lh'asa — pronounced <i>Sacha t'upa</i> .
Mi hjigs-pa	Not afraid	Min je-va	Like <i>min</i> in <i>minister</i> .
K'ri-stan	Seat	Chir-tan.	
Sra-brtan	Firm	Sar-tan.	
Kyang	Also	Jang	Lh'asa — pronounced <i>jjang</i> .
Hjam-dpal	Name of a god	Jam-hual.	
Hjog-pa	To place	Jok-wa.	
Hp'ags-pa	Exalted	Hp'ak-wa.	
Sku	Body	Rku.	
Skyong	Defect	Schyong.	
Sgyu-ma	Illusion	Ryü-ma.	
Sgrai	Of the voice	Dri	C: <i>gri</i> .
Sgral	To cut	Jal	Lh'asa — pronounced <i>dral</i> .
Sgrigs-te	Arranging	Drik-té.	
Sna	Nose	Rna.	
Sgrogs-pa	Comrade	Jok-wa.	
Sgo	Door	Rgo.	
Sngar	Formerly	Rnar.	
Smras-pa	Spoken	Rmä-wa.	
Skrag-pa	Frightened	Drak-hua	Lh'asa — pronounced <i>tru-pa</i> .
Slob-dpon	Teacher	Lob-huon	Lh'asa — pronounced <i>lopön</i> .
Sgoms	Meditated	Rgom.	

PECULIARITIES OF THE AMDOWA AND PANAK'A PRONUNCIATION — *Continued*

Transcription.	Meaning.	Pronunciation.	Observations.
Ltar	Like	Rtar.	
Lta	To see	Rta.	
Eta	Horse	Sta.	
Bten-hbrel	Cause and effect	Ten-brel	Lh'asa — pronounced <i>tenndrel</i> .
Rgyal-wa	Victorious	Yal-wa.	
Rgyal-po	Prince	Yaro.	
Rdjing-bu	Pond	Rdjing-vu.	
Rgan-po	Old	Rgan-po.	
Rdju-hprul	Witchcraft	Rdjum-chul	Lh'asa — pronounced <i>dju-tr'ul</i> .
Rgyal-mts'an	Trophy	Ryam-ts'an	Lh'asa — pronounced <i>jyal-ts'an</i> .
Rgyun	Continual	Ryun.	
Rdjogs	Finished	Rdjok.	
Ji akad	Thus	Jir-kad	Lh'asa — pronounced <i>ji kä</i> .

**TIBETAN SYLLABARY, WITH PRONUNCIATION
OF LH'ASA, BAT'ANG, AND THE TSARONG**

Transcription.	Lh'asa.	Bat'ang.	Tsarong.	Transcription.	Lh'asa.	Bat'ang.	Tsarong.
Ka ...	ka ...	ka ...	ka.	k'ra ...	tr'a ...	tra ...	tr'a.
k'a ...	k'a ...	k'a ...	k'a.	gra ...	dra ...	dra ...	dra.
ga ...	ga ...	ga ...	ga.	tra ...	tra ...	tra ...	tra.
nga ...	na ...	nga ...	nga.	t'ra ...	t'ra ...	tr'a ...	tr'a.
cha ...	chu ...	chiä ...	chiä.	dra ...	dra ...	drä (soft)	dra.
ch'a ...	ch'a ...	ch'ia ...	ch'ia.	nra ...	na ...	sha ...	na.
ja ...	ja ...	ja ...	ja.	pra ...	tra ...	tra ...	tra.
nya ...	nya ...	nya ...	nya.	p'ra ...	tr'a ...	tr'a ...	tr'a.
ta ...	ta ...	ta ...	ta.	bra ...	dra ...	drä (soft)	dra.
t'a ...	t'a ...	t'a ...	t'a.	mra ...	ma ...	na ...	ma.
da ...	da ...	da ...	da.	sra ...	sa ...	sa ...	sa.
na ...	ha ...	na ...	na.	h'ra ...	h'a ...	sha (soft)	h'a.
pa ...	pa ...	pa ...	pa.	kla ...	la ...	la ...	la.
p'a ...	p'a ...	p'a ...	p'u.	gla ...	la ...	lä ...	la.
ba ...	ba ...	ba ...	ba.	bla ...	la ...	lä ...	la.
ma ...	ma ...	ma ...	ma.	zla ...	da ...	da ...	da.
tsa ...	tsa ...	tsa ...	tsa.	rla ...	la ...	la ...	la.
ts'a ...	ts'a ...	ts'a ...	ts'a.	sla ...	la ...	la ...	la.
dja ...	dja ...	dja ...	dja.	rka ...	ka ...	ka ...	ka.
wa ...	wa ...	wa ...	wa.	rkya ...	chya ...	chya ...	chya.
dza ...	dza ...	dza ...	dza.	rga ...	ga ...	ga ...	ga.
za ...	za ...	za ...	za.	rgya ...	jya ...	jya ...	jya.
a ...	ä ...	ä ...	ä.	rnga ...	na ...	nga ...	nga.
ya ...	ya ...	ya ...	ya.	rja ...	ja ...	ja ...	ja.
ra ...	ra ...	ra ...	ra.	rnya ...	nya ...	nya ...	nya.
la ...	la ...	la ...	la.	rta ...	ta ...	ta ...	ta.
sha ...	sha ...	shia ...	shia.	rda ...	da ...	da ...	da.
sa ...	sa ...	sa ...	sa.	rma ...	na ...	na ...	na.
h'a ...	h'a ...	h'a ...	h'a.	rba ...	ba ...	ba ...	ba.
a ...	ä ...	ä ...	ä.	rma ...	ma ...	ma ...	ma.
kya ...	chä ...	chia ...	chia.	rtsa ...	tsa ...	tsa ...	tsa.
k'ya ...	ch'a ...	ch'ia ...	ch'ia.	rdza ...	dza ...	dza ...	dza.
gya ...	jya ...	gyü ...	gya.	lka ...	ka ...	ka ...	ka.
pya ...	chu ...	hsiu ...	hsia.	lga ...	ga ...	gä ...	ga.
p'ya ...	chu ...	hs'ia ...	hs'ia.	lnga ...	na ...	nga ...	nga.
bya ...	ja ...	hsia ...	hsia.	leha ...	cha ...	chia ...	chia.
mya ...	nya ...	nya ...	nya.	lja ...	ja ...	jya ...	jya.
kra ...	tra ...	tra ...	tra.	lta ...	ta ...	ta ...	ta.

TIBETAN SYLLABARY, WITH PRONUNCIATION OF
LH'ASA, BAT'ANG, AND THE TSARONG—*Continued*

Transcription.	Lh'asa.	Bat'ang.	Tsarong.	Transcription.	Lh'asa.	Bat'ang.	Tsarong.
lda ...	da ...	da ...	da.	dkra .	tra ..	tra	tra.
lpa ...	pa ...	pa ...	pa.	dgah .	ga ...	gā ...	ga.
lba ...	ba ...	ba ...	ba.	dgyah	jya ...	jya	jya.
lh'a ..	h'la ..	h'la ...	h'a.	dgra .	dra ..	dra	dra.
ska ..	ka ...	ka ...	ka.	dngah	na ...	nga	nga.
skya .	chya .	chya ...	chya.	dpa ..	pa ...	pa	pa.
skra ..	tra ...	tra	tra.	dpya .	chya .	hsia	hsia.
sga ..	ga ...	ga ...	ga.	dpra .	tra ...	tra	tra.
sgya .	jya ...	jya ...	jya.	dbah .	ba ...	ba	ba.
sgra ..	dra ..	dra ...	dra.	dbra .	dra ..	dra	dra.
snga .	na ...	nga ...	nga.	dbya .	jya ..	ya ...	hsia.
snya .	nya ..	nya ...	nya.	dmah	ma ...	ma	ma.
sta ...	ta ...	ta ...	ta.	dinya	nya ..	nya ...	nya.
sda ..	da ...	da ...	da.	btah .	ta ...	ta	ta.
sna ..	na ...	nha ...	na.	bkya .	cha ..	chya ...	chya.
spa ..	pa ...	pā ...	p'a.	bkra .	tra ...	tra	tra.
spya .	ch'ya .	hsia ...	hsia.	bkla .	la ...	la	la.
spra .	tra ...	trā' ...	tra.	brka .	ka ...	ka	ka.
sba ..	ba ...	ba ...	ba.	brkya	chya .	gya ...	chya.
sbya .	jya ...	hsia ...	hsia.	bska .	ka ...	ka	ka.
sbra .	dra ..	dra ...	dra.	bskya	chya .	hsia ...	chya.
sma ..	ma ...	mh'a ...	ma.	bskra	tra ...	tra	tra.
smya .	nya ..	uh'a ...	nya.	bgah .	ga ...	ga ...	ga.
smra .	ma ...	mh'a ...	ma.	bgya .	jya ...	gyā ...	gyā.
stsa ..	tsa ..	tsa ...	tsa.	bgra .	dra ..	dra	dra.
gchah	cha ..	chia ...	chia.	brga .	ga ...	ga	ga.
gnyah	nya ..	nya ...	nya.	brgya	jya ...	gyā ...	gyā.
gtah .	ta ...	ta	ta.	bsga .	ga ...	ga	ga.
gdah .	da ...	dā ...	da.	bsgya	jya ...	gyā ...	gyā.
gnah .	na ...	nā ...	na.	bsgra	dra ..	dra	dra.
gtsah	tsa ...	tsa ...	tsa.	brnga	na ...	nga ...	nga.
gdzah	dza ..	dza ...	dza.	bsnga	na ...	nh'a ...	nga.
gzah .	za ...	za ...	za.	bchah	cha ..	chiā ...	chiā.
gyah .	ya ...	ya ...	ya.	brja ..	ja ...	gyā ...	gyā.
gshah	sha ..	ha ...	shia.	brnya	nya ..	nyā ...	nyā.
gsah .	sa ...	sa ...	sa.	bska .	ka ...	ka ...	ka.
dkah .	ka ...	ka ...	ka.	brah .	ra ...	ra	ra.
dkya .	chya .	chya ...	chya.	brtah	ta ...	ta	ta.

TIBETAN SYLLABARY, WITH PRONUNCIATION
OF LH'ASA, BAT'ANG, AND THE TSARONG — *Continued*

Transcription.	Lh'asa.	Bat'ang.	Tsarong.	Transcription.	Lh'asa.	Bat'ang.	Tsarong.
blta . .	ta	ta	ta.	mch'ah	ch'a . .	ch'ia . . .	ch'ia.
bsta . .	ta	ta	ta.	mjah .	ja	nja	ja.
bngah	na	nga	nga.	mnyah	nya	nya	nya.
bdah .	da	d'a	da . .	mt'ah	t'a	t'a	t'a.
brda .	da	da	da.	mdah	da	nda	da.
blda .	da	da	da.	mnah	na	na	na.
bsda .	da	da	da.	mts'ah	ts'a . . .	ts'a	ts'a.
bsna .	na	na	na.	mdjah	dja	dja	dza.
brna .	na	na	na.	hk'ah	k'a	k'a	k'a.
btsah.	tsa	tsa	tsa.	hk'ya	ch'ya . .	ch'ya . . .	ch'ya.
brtsa .	tsa	tsa	tsa.	hk'ra .	tra	tra	tra.
btsa .	tsa	tsa or sa	tsa.	hgah .	ga	ga	ga.
brdja .	dja	dja	za.	hgya .	gya	gya	gya.
bdzah	dza	dza	dza.	hgra .	dra	dra	tra.
bzah .	za	za	za.	hch'ah	ch'a . . .	ch'a	ch'a.
bzla . .	da	da	da.	bjah .	ja	nja	ja.
brla . .	la	la	la.	ht'ah	t'a	t'a	t'a.
bshah	sha	ha	shia.	hdah .	da	nda	da.
bsah .	sa	sa	sa.	hdra .	dra	dra	dra.
bsra .	sa	sa	sa.	hp'ya .	p'a	p'a	p'a.
bala . .	la	lh'a	da.	hp'ya	ch'a . . .	hsia	hsia.
mk'ah	k'a	k'a	k'a.	hp'ra .	tr'a . . .	t'ra	tr'a.
mk'ya	ch'ya . .	ch'ya . . .	ch'ya.	hbah .	ba	ba	ba.
mk'ra	tr'a . . .	tr'a	tr'a.	hbya .	ja	hsia	hsia.
mga . .	ga	nga	ga.	hbra .	dra	dra	dra.
mgya	gya . . .	gya	gya.	hts'ah	ts'a . . .	ts'a	ts'a.
mgra .	dra . . .	dra	dra.	hdja .	dja	dja	dja.
mngah	na	nga	nga.				

VIII

ITINERARY, AND BAROMETRIC OBSERVATIONS

IN the following table will be found my itinerary, with observed aneroid measures and deduced altitudes. From Peking to the water-shed between the basin of the Yellow River and the Dré ch'u (reached May 17, 1889), I have taken Peking as my lower station, using, in calculating the barometric pressure and temperature, the tables published by H. Fritsche in H. Wild's "Repertorium für Meteorologie," Bd. V, pp. 25 and 35. From the summit of Mt. Rawa to Ta-chien-lu I have taken Ch'ung-ch'ing (Ssü-ch'uan) as my lower station, using the tables prepared by E. C. Baber in his "Archæological Researches in Western China," p. 145.

I claim no great exactitude for the deduced altitudes; such was absolutely impossible under the circumstances, but considering the roughness of my work the results compare fairly well with those obtained by previous travelers wherever our routes have crossed. It will be noticed that the altitudes I have obtained are all about $\frac{1}{10}$ higher than those of Pundit A—K—. The constant difference arises probably from our methods of calculating; had I simply deduced the altitude from the reading of the aneroid without using a lower station or applying corrections for temperature (the method followed in his case, I believe), our observations would be found to agree closely.¹

I repeatedly made observations for altitude by boiling-point thermometer, and have applied the corrections thus supplied to my aneroid readings.

In the column of remarks I have put down altitudes given by Colonel Prjevalsky, A—K—, Lieutenant Kreitner, and Colonel Mark Bell.

¹ A comparison of heights calculated by Captain Wm. Gill with those of A—K— between Ta-chien-lu and Nyach'u-k'a, shows differences ranging from 400 to 800 feet.

ITINERARY, AND CALCULATION OF ALTITUDES

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deducted Altitude (in feet).	Remarks.
1888.	Peking							Alt. 123 ft. (Fritsche, 37 m. 50.)
Dec. 19	Pao-ting Fu	111½	29.40	28.0	30.21	28.0	823	Probably 200 feet too high.
" 20	Fang hstün ch'iao	20	29.25	33.0	30.21	28.0	785	Probably 50 feet too low.
" 20	Ching feng tien	21½	29.05	34.0	30.21	28.0	1150	
" 21	" "		29.25		30.22		975	
" 21	Fu-cheng-i	43½	28.85		30.22		1335	
" 22	Huo-lu Hsien	33½	28.90		30.22		1289	
" 22	Pass W. of town	8½	28.40		30.22		745	
" 22	Yü shui	8½	28.65	32.0	30.22	28.0	1509	
" 23	Pei t'ien men (Gate in Great Wall)		26.85		30.22		3212	
" 23	Huai shui P'u	22	26.70		30.22		3358	
" 23	Pass	8½	25.75		30.22		4305	
" 23	Hsi chiao P'u	16½	26.75		30.22		3309	
" 24	Ch'ang-ch'ing-i	23½	25.75		30.22		4305	
" 24	T'u-hsü ling (Pass)		25.25		30.22		4817	
" 24	Huang men	48	25.95		30.22		4103	
" 25	Shih lieh	25	25.70		30.22		4356	
" 25	Ming tien	15	26.75	23.0	30.22	28.0	3259	
" 26	T'ai-yüan Fu	17	26.80	31.0	30.22	28.0	3240	Col. Mark Bell, 2260 feet.
" 27	Pei ko chen	17	26.80		30.23		3270	
	Carried forward	438½						

ITINERARY, AND CALCULATION OF ALTITUDES—Continued

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deducted Altitude (in feet).	Remarks.
1888.	Brought forward	438½						
Dec. 27.	Kao hua	17	26.80		30.23		3318	
" 28	Hung shan ts'un	28½	27.05		30.23		3058	
" 28	Chang-lan ch'eng	16	26.95		30.23		3124	
" 29	Liang t'u	31½	26.95		30.23		3124	
" 29	Ling shih Hsien	10	26.95		30.23		3124	
" 30	Han Hou ling (Pass)	6½	25.90		30.23		4162	
" 30	Lao ch'ang wan	18	25.95		30.23		4112	
" 30	Huo Chou	15	27.45		30.23		2643	
" 31	Chao ch'eng Hsien	20	27.95		30.23		2272	
" 31	Han-lo Hsien	10	28.05		30.23		2078	
" 31	T'ien hsing	10	28.20		30.23		1939	
1889.								
Jan. 1	Chao ch'ü ch'eng	23½	28.30		30.24		1846	
" 1	Kao Hsien	20	28.30		30.24		1846	
" 2	Nieh kou	17½	28.25		30.24		1902	
" 2	Wen hsi Hsien	20	28.35		30.24		1809	
" 3	Chiang-ch'ün miao	23	28.45		30.24		1717	
" 3	Liu-t'u ch'eng	17	28.60		30.24		1590	
" 4	Yü chih	31½	28.80		30.24		1360	
	Carried forward	778						

ITINERARY, AND CALCULATION OF ALTITUDES—*Continued*

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deduced Altitude (in feet).	Remarks.
1889.	Brought forward.....	773						
Jan. 5	Hai yang ch'eng.....	15	28.85	.....	30.24	.....	1353	
" 5	Bank of Yellow River.....	17	28.90	.....	30.24	.....	1307	
" 5	T'ung kuan.....	1	28.85	.....	30.24	.....	1353	Col. Bell, 1560 feet.
" 6	Hsi yüeh miao.....	11½	28.75	.....	30.24	.....	1443	
" 6	Hua Hsien.....	25	28.95	.....	30.24	.....	1262	Probably 200 feet too low.
" 6	Wei-nan Hsien.....	17½	28.85	.....	30.24	.....	1353	
" 7	Lin kou.....	13	28.65	.....	30.25	.....	1542	
" 7	Lin t'ung Hsien.....	26	28.35	.....	30.25	.....	1817	
" 8	Hsi-an Fu.....	17	28.35	37.0	30.25	24.0	1809	Bell, 1700 feet.
" 10	Hsien-yang Hsien.....	17½	28.00	.....	30.25	.....	2142	
" 11	Li ch'uan Hsien.....	23	27.45	.....	30.25	.....	2660	
" 11	T'ieh Fo ssü.....	15	26.45	.....	30.25	.....	3630	
" 12	Yung shou Hsien.....	17	25.15	.....	30.25	.....	4947	
" 12	Col N. of Yung shou.....	4	24.95	.....	30.25	.....	5125	
" 12	Ta yü.....	9	26.25	30.0	30.25	24.0	3786	
" 13	Ping Chou.....	10	26.95	30.0	30.25	24.0	3141	Bell, 2620 feet.
" 13	T'ing k'ou.....	17	27.00	30.0	30.25	24.0	3092	
" 14	Chang-wu Hsien.....	13	25.80	30.0	30.26	24.0	4289	
" 14	Yao-tien (Kan-su).....	10	25.50	30.0	30.26	24.0	4595	
	Carried forward.....	1051½						

ITINERARY, AND CALCULATION OF ALTITUDES—Continued

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S. at L. S.	Ther. at L. S.	Deducted Altitude (in feet).	Remarks.
1889.	Brought forward	1051½						
Jan. 14	Kao ch'ia niao	10	25.25	17.0	30.26	24.0	4726	
" 14	Ching Chou	16½	26.35	.....	30.26	.....	3738	
" 15	Hua-tê shuang	20	26.10	23.0	30.26	24.0	3918	
" 15	Sek-shih li P'u	20	25.35	44.0	30.26	24.0	4769	
" 16	Ping-liang Fu	13½	25.55	24.0	30.26	24.0	4464	Bell, 4700 feet.
" 16	Hao tien	23½	24.40	.....	30.26	.....	5750	
" 17	Wa t'ing kuan	8	23.75	.....	30.26	.....	6452	Bell, 6000. Kreitner, 5702.
" 17	Wu sh'eng P'u	5	23.05	.....	30.26	.....	7234	
" 17	Summit of Liu p'an shan	5	21.25	.....	30.26	.....	9358	Bell, 8700. Kreitner, 8550.
" 17	Lung-tê Hsien	5	23.05	22.0	30.26	24.0	7092	
" 18	Ching-ning Chou	30	24.30	.....	30.26	.....	5885	
" 18	Kao ch'ia P'u	17	24.20	28.0	30.26	24.0	5852	
" 19	Ch'ing chia i	13½	23.25	.....	30.26	.....	7008	
" 19	Pass west of town	6	23.00	.....	30.26	.....	7290	
" 19	T'ai-ping tien	3	23.40	.....	30.26	.....	6840	
" 19	Ch'ang-ch'eng P'u	15	23.90	26.0	30.26	24.0	6399	
" 20	Hui-ning Hsien	7	23.90	.....	30.26	.....	6288	
" 21	Hsi k'ung-i	20	23.90	.....	30.26	.....	6288	
" 21	An-t'ing Hsien	20	23.55	.....	30.26	.....	6673	
	Carried forward	1309						

ITINERARY, AND CALCULATION OF ALTITUDES—Continued

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deduced Altitude (in feet).	Remarks.
1889.	Brought forward	1309						
Jan. 21	Ts'an k'ou	17	23.75	. . . . .	30.26	. . . . .	6452	
" 22	Pass west of town	10	22.50	. . . . .	30.26	. . . . .	7865	
" 22	Kan ts'ao tien	13	23.60	. . . . .	30.26	. . . . .	6618	
" 22	Ch'eng kou i	13	24.05	36.0	30.26	24.0	6097	
" 23	Tung kuan P'u	23	24.60	33.0	30.25	24.0	5476	
" 24	Lan Chou Fu	5	24.60	32.0	30.25	24.0	5476 ¹	Bell has 5500.
Feb. 3	Hsin ch'eng	23	24.65	27.0	30.23	29.0	5506	
" 4	Mouth of Hsi-ning ho	6	24.55	33.0	30.23	29.0	5648	
" 5	Ho-tui tzū	17	24.20	28.0	30.23	29.0	5948	
" 7	Hsiang-t'ang(mouth of Ta-t'ung ho)	30	23.75	26.0	30.22	29.0	6417	
" 8	Nien-po Hsien	32	23.25	37.0	30.21	29.0	6980	
" 8	Ch'ang ch'i ts'ai	15	23.00	29.0	30.21	29.0	7209	Obs. on 9th gives average of 7115.
" 9	Hsi-ning Fu	22 $\frac{1}{3}$	22.70	29.0	30.21	29.0	7540 ²	Kreitner, 7559.
" 10	Summit of range south of city . . .	2	22.00	22.0	30.21	29.0	8317	
" 10	Summit of range east of Luser . . .	17	21.10	39.0	30.21	29.0	9541	
" 10	Luser (Kumbum)	$\frac{1}{3}$	21.15	39.0	30.21	29.0	9468 ³	
" 24	Serkok gomba (Kuo-mang-ssü)	52	21.10	25.0	30.13	29.0	9278	
March 4	Chen hai P'u	13 $\frac{1}{2}$	22.00	32.0	30.09	41.0	8376	Distance counted from Luser.
	Carried forward	1620 $\frac{1}{2}$						

¹ An average of 14 observations made from Jan. 24 to Feb. 3 gives 5416 feet as the altitude of this city. ² Average of 8 observations in February, 7676 feet. ³ Average of 87 observations from February 10 to March 23, 1889, gives 9285 feet.

ITINERARY, AND CALCULATION OF ALTITUDES— *Continued*

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deduced Altitude (in feet).	Remarks.
1889.	Brought forward	1620 $\frac{1}{2}$						
Mar. 5	Tankar (Tan-ka-erh)	17 $\frac{1}{2}$	21.30	41.0	30.08	41.0	9,320 ¹	
" 25	Gomba soba	13	20.80	30.0	29.96	41.0	9,727	Average with obs. of 26th, 9,495 ft.
" 26	Hsi-ning ho	25	20.35	38.0	29.96	41.0	10,385	Average with obs. of 27th, 10,254 ft.
" 27	Water-shed of Koko-nor	25 $\frac{1}{2}$	19.15	58.0	29.95	41.0	12,248	
" 27	Rongwa gu	6 $\frac{1}{2}$	19.80	18.0	29.95	41.0	10,864	Aver. with obs. of 28th, 29th, 11,023.
" 29	Hargi t'ang	15 $\frac{1}{2}$	19.75	33.0	29.94	41.0	11,113	Aver. with obs. of 30th, 10,960. ²
" 30	Dré ch'u	17 $\frac{1}{2}$	19.60	43.0	29.94	41.0	11,437	Aver. with obs. of 31st, 11,251.
" 31	Chou ch'u	9	19.55	58.0	29.93	41.0	11,400	
" 31	Hata	7 $\frac{1}{2}$	19.30	44.0	29.93	41.0	11,495	Average with obs. April 1st, 11,473.
Apr. 1	Plateau west of Hata	7	18.85	41.0	29.92	56.0	12,524	
" 1	Ch'u-jya gi	23	19.45	33.0	29.92	56.0	11,675	} Average with obs. Ap. 2d, 11,550. } Buha gol 30 to 40 feet lower.
" 2	Kundu lung	15 $\frac{1}{2}$	18.90	38.0	29.92	56.0	12,524		Average with obs. Ap. 3d, 12,329.
" 3	Pass over Dagar té ch'en	6	18.30	28.0	29.91	56.0	13,243	} Prjevalsky, for Pass a few miles } east, 13,500.
" 3	Dorong charu	6	19.45	35.0	29.91	56.0	11,690	
" 4	Tsahan-nor	3 $\frac{1}{3}$	19.55	30.0	29.91	56.0	11,503	
" 4	Dulan kuo	12	19.80	40.0	29.90	56.0	11,283 ³	Prjevalsky, 10,600.
" 8	Dulan (or Hulan)-nor	15	20.15	58.0	29.88	56.0	11,108	Probably 200 feet too high.
" 9	South of Dabesun-nor	3	20.35	40.0	29.87	56.0	10,505	
	Carried forward	1848						

¹ Average of 14 observations from March 5 to 25, gives 9389 feet.

² No perceptible difference of level with Lake Koko-nor. Prjevalsky has for Koko-nor 10,000, 10,495, 10,547, and 10,700. Kreitner has 10,834.

³ Average of 8 obs. from April 4 to 8, gave 11,108 feet.

ITINERARY, AND CALCULATION OF ALTITUDES—Continued

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deducted Altitude (in feet).	Remarks.
1880.	Brought forward	1848						
April 9	Head of KASHU OSU	12	19.60	60.0	29.87	56.0	11,326	
" 9	TALUN TURGEN (Tsatsa gol)	14	20.20	37.0	29.87	56.0	10,660	{ Average with obs. April 10, 10,482. Prjevalsky, 9,700.
" 10	SULIM BOMEN (Tsatsa gol)	5	20.35	72.0	29.87	56.0	10,862	Average with obs. April 11, 10,419.
" 11	ERGETSU (Tsatsa gol)	15	20.45	81.0	29.86	56.0	10,803	Average with obs. April 12, 10,357.
" 12	CAMP IN DSÜN	18	20.65	49.0	29.86	56.0	10,185	Average with obs. April 13, 10,084.
" 13	TSUHU	16½	20.70	45.0	29.85	56.0	10,067	Average with obs. April 14, 9,904.
" 15	VILLAGE OF BARON TS'AIMAM	19½	20.85	32.0	29.84	56.0	9,739	Average with obs. April 16, 9,880.
" 16	SHANG (Village)	32	20.25	41.0	29.84	56.0	10,611	{ Average with 16 obs. April 16 to 24, 10,493 feet.
" 24	YOHURÉ GOL (Upper Bayan gol)	26	19.50	35.0	29.79	56.0	11,512	Average with obs. April 25, 11,439.
" 25	ANYÉ KOR (Pass)	27	16.15	20.0	29.78	56.0	16,222	
" 25	CAMP SOUTH OF PASS	2	16.60	35.0	29.78	56.0	15,831	Average with obs. April 26, 15,786.
" 26	TSELDUN GOL	18½	17.05	33.0	29.77	56.0	15,071	Tosun-nor 500 feet lower.
" 27	CONFLUENCE YOHURÉ AND ALANG GOL.	21	18.25	50.0	29.77	56.0	13,502	Average with obs. April 28, 13,325.
" 28	ALANG GOL (mouth of YUKTU GOL)	30	17.95	35.0	29.76	56.0	13,712	Average with obs. April 29, 13,517.
" 29	ALANG NOR	11	17.80	59.0	29.75	56.0	14,286	Probably 300 feet too high.
" 29	NOMORAN K'UTUL (Pass)	14	16.10	28.0	29.75	56.0	16,521	Prjevalsky has 16,100.
" 30	NORTH SIDE OF PASS	2	17.10	30.0	29.75	56.0	14,944	
	Carried forward	2133½						

ITINERARY, AND CALCULATION OF ALTITUDES — Continued

Date.	Place.	Distance (in miles.)	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deducted Altitude (in feet.)	Remarks.
1889.	Brought forward.....	2133½						
May 1	Narim (Baron dsassak).....	13½	18.90	52.0	29.75	67.0	12,554	Av. 10 obs. May 1st to 5th, 12,354.
" 5	Iké gol.....	13	19.00	36.0	29.72	67.0	12,304	
" 6	Hato gol.....	7	18.25	36.0	29.72	67.0	13,287	Average with obs. May 7th, 13,209.
" 7	Hato k'utul (Pass).....	6½	17.00	34.0	29.71	67.0	15,290	
" 7	Yuktu ulan bulak.....	17	17.85	29.0	29.71	67.0	13,906	{ Prjevalsky for Yamtu ulan bulak, { 10 miles west, has 13,400.
" 8	Bordza kéra k'utul (Pass).....	20	16.80	35.0	29.71	67.0	15,646	
" 8	Dsatsu hosho.....	14	17.15	28.0	29.71	67.0	14,925	
" 9	Camp 200 ft. above Karma t'ang.....	18	17.40	40.0	29.70	67.0	14,619	Av. with obs. April 10th, 14,487.
" 10	Tsulmé tsarang k'utul (Pass).....	12	16.90	45.0	29.70	67.0	15,639	
" 11	Tsulmé t'ang.....	9	17.20	25.0	29.69	67.0	14,828	
" 12	Pass to Lamatolha.....	5½	16.95	42.0	29.69	67.0	15,602	Av. 4 obs. April 10th, 12th, 14,972.
" 12	Dojong valley.....	14	17.00	30.0	29.69	67.0	15,208	Av. with obs. April 13th, 15,147.
" 13	Pass.....	7	16.95	42.0	29.68	67.0	15,473	
" 13	Rajong valley.....	9	17.20	32.0	29.68	67.0	14,881	Av. with obs. April 14th, 14,806.
" 14	South of Rajong.....	11	17.20	34.0	29.67	67.0	14,985	
" 16	North side of Rawa (Pass).....	12	16.80	18.0	29.66	67.0	15,369	
" 17	Rawa la (Pass).....	½	16.55	20.0	29.01	70.0	15,509	Ch'ung-ch'ing as lower station.
" 17	Mar jya kou.....	9½	17.80	42.0	29.01	70.0	18,750	
	Carried forward.....	2332.						

ITINERARY, AND CALCULATION OF ALTITUDES — *Continued*

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deducted Altitude (in feet).	Remarks.
1899.	Brought forward	2332						
May 18	Ser jong	4	17.85	41.0	28.95	73.0	14,180	Av. 5 obs. May 18th, 20th, 13,881.
" 20	Lh'a dang la (Pass)	9	17.30	52.0	29.01	70.0	15,220	
" 20	Ta kou	9	18.35	48.0	28.95	73.0	13,498	Av. with obs. May 21st, 13,259.
" 21	Oyo la (Pass)	10	16.70	56.0	28.90	76.0	15,673	
" 21	South side of Pass	1	17.75	41.0	28.95	73.0	14,335	
" 22	Rungo la (Pass)	7	16.95	54.0	29.01	70.0	15,820	
" 22	Bank of Dré ch'u (Upper Yang-tzü)	5	18.75	43.0	28.90	73.0	13,002	{ Average with obs. May 23d, 12,746. Camp 100 feet above river. ¹
" 23	Yonyik valley	6	18.15	42.0	28.95	73.0	13,721	
" 24	Yonyik la (Pass)	3	16.40	35.0	29.01	70.0	16,308	
" 24	Taglung la (Pass)	1	16.25	43.0	29.01	70.0	16,659	
" 24	Ranyik valley	9	17.95	40.0	28.95	73.0	13,998	Av. with obs. May 25th, 13,869.
" 25	Nyi ch'en la (Pass)	4½	16.55	50.0	29.01	70.0	16,453	
" 25	Jyé kundo	9	18.75	55.0	28.95	73.0	12,999	{ Average 8 obs., May 25th-29th, 12,941. A— K— has 11,800.
" 29	Head of Momé valley	24	17.45	45.0	28.90	75.0	14,283	
" 30	Trugu	16	18.80	54.0	28.95	73.0	12,901	{ Av. with obs. May 31st, 12,880. Village 400 feet above Dré ch'u.
	Carried forward	2449½						

¹ Prjevalsky gives altitude of river, about 30 miles west of this place, as 13,100; and A— K— has 11,990 as height at Tuden gomba (Chudé gomba ?), some 30 miles below it.

ITINERARY, AND CALCULATION OF ALTITUDES — *Continued*

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deducted Altitude (in feet).	Remarks.
1889.	Brought forward	2449½						
May 31	Drenda (Ferry over Dré ch'u)	11½	19.40	52.0	28.95	73.0	12,000	{ Average with obs. June 1, 11,763.1 House 300 feet above river.
June 1	Kaw t'endo	18½	19.75	54.0	28.91	77.0	11,531	{ Average with obs. June 2, 11,461. Village 200 ft. above Dré ch'u.
" 2	Karta	9	18.50	54.0	28.91	77.0	13,363	
" 3	Rigé	17	18.65	51.0	28.84	80.0	13,079	
" 4	Latsé kadri (Pass)	11	17.75	60.0	28.84	80.0	14,596	
" 4	Shéma t'ang	5	18.20	45.0	28.84	80.0	13,672	Average with obs. June 5, 13,463.
" 5	Pass into Muri ch'u valley	7½	18.45	52.0	28.93	75.0	12,881	
" 6	Zoch'en gomba	5	18.60	39.0	28.93	75.0	13,026	Probably 300 feet too high.
" 6	Muri la (Pass)	10	17.00	65.0	28.84	80.0	15,880	
" 7	Muri ts'o (Lake)	4½	18.20	35.0	28.93	75.0	13,572	
" 8	Yi ch'u valley	5	18.55	39.0	28.93	75.0	13,000	
" 9	Yi ch'u valley (facing Ito ri)	17	19.00	39.0	28.93	75.0	12,339	
" 10	Gényi (on Za ch'u)	20	19.45	52.0	28.93	75.0	11,930	Village 300 feet above river.
" 11	Kanzé	16	19.55	54.0	28.93	75.0	11,711	{ Average with obs. June 11 to 13, 11,830. A— K— has 10,200.
" 13	Chuwo	25	19.35	61.0	28.91	77.0	12,197	
" 14	Rantro	15	19.85	60.0	28.91	77.0	11,453	Village on bank of river.
" 16	Chango	17	19.30	60.0	28.93	75.0	11,171	Town 300 feet above river.
	Carried forward	2063½						

¹A— K— has for Seupa, about 5 miles below the ferry, 10,800 feet.

ITINERARY, AND CALCULATION OF ALTITUDES — Continued

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deducted Altitude (in feet).	Remarks.
1889.	Brought forward.....	2663½						
June 17	Ta chai.....	32½						
" 18	Dawo (Jésenyi).....	12					10,500	Estimated.
" 20	Koja.....	16						
" 21	Tsonya.....	18½						
" 22	Kata (Tai-ling).....	12						
" 23	Hsin tien.....	28						
" 24	Ta-chien-lu.....	30						
July 10	Wa-sü k'ou.....	15					8,480	E. C. Baber.
" 11	Lu-ting ch'iao (Bridge).....	16					4,933	Capt. Wm. Gill.
" 12	Hua-lin-p'ing.....	17½					4,515	E. C. Baber.
" 13	Fei-yueh ling (Pass).....	17½					7,073	E. C. Baber.
" 13	Ni-t'ou.....	12½					9,410	E. C. Baber.
" 14	Ch'ung-ch'i Hsien.....	22					5,090	E. C. Baber.
" 16	Kuan-yin P'u.....	15½					5,478	Capt. Wm. Gill.
" 17	She ch'ia P'u.....	16½					3,725	Capt. Wm. Gill.
" 18	Ya-chou Fu.....	16					2,190	Capt. Wm. Gill.
" 20	Mu chin kai.....	16					1,671	Capt. Wm. Gill.
" 21	Chia-ting Fu.....	70						
" 22	Chuo ch'i.....	87						
	Carried forward.....	3134						

ITINERARY, AND CALCULATION OF ALTITUDES — *Continued*

Date.	Place.	Distance (in miles).	Corr. Bar.	Ther.	Bar. at L. S.	Ther. at L. S.	Deduced Altitude (in feet).	Remarks.
1890.	Brought forward.....	3134						
July 23	Sui Fu.....	35						
" 23	Lu Chou.....	60						
" 24	Chiang-ching Hsien.....	75						
" 25	Ch'ung-ch'ing Fu.....	30					845	E. C. Baber.
Aug. 4	Lo chi.....	45½						Distance estimated by Capt. Gill.
" 5	Chung Chou.....	118½						Distance estimated by Capt. Gill.
" 6	Kuei Chou.....	126						Distance estimated by Capt. Gill.
" 7	West of Ta-tung rapids.....	95						Distance estimated by Capt. Gill.
" 8	I-ch'ang.....	30						Distance estimated by Capt. Gill.
" 16	Han-k'ou.....	350						
" 20	Shang-hai.....	600						
	Total.....	4699						