# NOTES ON THE ETHNOLOGY OF TIBET.

BASED ON THE COLLECTIONS IN THE UNITED STATES NATIONAL MUSEUM.

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I.

TION DERIVED FROM TIBETAN AND CHINESE SOURCES.

The word "Tibet," also frequently though erroneously written Thibet, represents two Tibetan words,\* meaning "Upper Bod," by which name the central and western portions of Tibet are occasionally called by the natives, to distinguish them from the eastern portion, which is sometimes referred to as Män-Bod (Sman Bod), meaning "Lower Bod."

As to the meaning of the word Bod, different explanations have been offered by European scholars—that which has been most generally accepted, though on insufficient grounds, I think, derives it from the verb hbod—pa (pronounced bodpa) "to call, to speak," and attention has been called to the fact that the name Slav has a similar meaning.† Schlagintweit says the name is derived from a word meaning "force," and Vigne (Travels in Kashmir, II, p. 248) thinks it comes from the turkic and means nothing less than "the mountains of the people professing the Buddhist religion."‡

However this may be, Tibetans from whatever part of the country they come speak of themselves as Bod-pa, pronounced in some districts Beuba, in others, Bopa, and even Gopa. In colloquial Tibetan the country is called Beu lumba, Beu sa-ch'a or Beu yul, all meaning "the Beu (ba) country."

The earliest mention I have found of the word "Tibet" is in the Arab Istakhri's works (circa 590 A. D.), where it is used under the form Tobbat. Other Arab authors of a later date transcribe the word Tobbat, Tibbat, Tibat, and Thabbat. The earliest use of the

<sup>\*</sup> Stod and Bod (pronounced Teu-beu).

<sup>†</sup>See Amédée Thierry, Histoire d'Attila et de ses successeurs, 1, p. 284.

<sup>†</sup>This paper also embodies the personal observations made by the author during two journeys to Tibet in 1888-'89 and 1891-'92.

word by an European author is found in Plano Carpini's Historia Mongalorum (A. D. 1247), where it occurs under the form *Thabet*; Rubruk in his Itinerarium uses the form *Tebet*, as does also Marco Polo. (See H. Yule, Glossary of Anglo-Indian words, pp. 332, 698.)\*

Mongols speak of Tibet as *Tangut*, and Tibetans they eall *Tangutu*, and this is the origin of another appellation for this people and country sometimes used by European authors, Tangast (Theophylactus) and Tangut (Prjevalsky), which should, however, be discarded as useless and misleading, as the people inhabiting this section of country are pure Tibetans.

Tibet is geographically, roughly speaking, that section of central Asia which extends between the 76° and 102° of east longitude and from the 28° to 36° of north latitude, and, with the exception of its extreme western, southwestern, and southern portions, it forms an integral portion of the Chinese Empire.

Elisée Reclus (Géographie Universelle, VII, p. 20 et seq.) says that Tibet forms a vast half circle with a radius of 800 kilometers, and that it is one of the best defined natural regions in the world. He roughly estimates its area, rightly including in it the Kokonor Tibetan region on the northeast, and the other Tibetan-speaking countries on the west and south, at about 2,000,000 square kilometers.

It would be premature at the present stage of our researches into the question to give any opinion on the varied affinities of the Tibetans. Philologically they belong to the same linguistic family as the Burmese. Their national records have been so badly kept that they are of little service to us in solving the problem of their early home, and the Chinese annals do not enable us to go back earlier than the eighth century, A. D., at which time the Chinese came in contact with tribes of this race, then scattered throughout the northeast corner of Tibet between the upper Yang-tzŭ kiang, the Kokonor, and the western section of Kan-su and Ssŭ-ch'uan as far east as the river Min, in the latter province.

The purest type of Tibetan is still to be found among the pastoral tribes of that race, and when proper allowance has been made for foreign influences, everything points to a time when the whole Tibetan race lead a purely pastoral life, and it would seem that the early home of the Tibetan must be sought, not as they claim, in the valleys to the south of the city of Lh'asa, but to the northeast section of the country, somewhere near the Kokonor, to which region they probably came, as Chinese annals lead us to believe, from the east.

Reference has been made to Tibetan historical works as a guide in the intricate question of their national origin, but it is believed that these works are of little, if any, assistance. As a means of studying

<sup>\*</sup>Throughout this paper Tibetau words are written phonetically, consonants are pronounced as in English and vowels have the sound of the corresponding Italian ones.

the growth of the country and its advance in civilization they are fortunately of a little more use.

I will here briefly give the principal data bearing on the subject which interests us, contained in a "Book of Kings," or Gyal-rabs sal-vai mé-long (Dr. Emil Schlagintweit's edition, 1866), which it must, however, be admitted is of comparatively modern origin and was unquestionably compiled under Chinese influence.

From this work we learn that in the first century B. C. there appeared in Tibet, in the valley of the Tsangpo ch'u and to the sonth of the city of Lh'asa, a marvelously endowed child whom the wild natives thought heaven had sent to rule them, and whom they took as their chief. This would point to intercourse with India during the earliest days of their national existence, but as the work goes on to show that this prince was a direct descendant of the Buddha Gautama, a descent than which none could be higher in the eyes of the devout Tibetans, we may doubt the accuracy of the record on this point.

In the reign of this first prince's seventh successor, consequently sometime in the second century A. D., it is stated that charcoal was made for the first time, and iron, copper, and silver were extracted from the ore, plows were introduced, and the irrigation of fields made known.

In the fifth century A. D., in the reign of Tri-nyan zung-tän, fields were for the first time fenced in, skin garments were made, walnut trees were planted, and reservoirs dug to supply water for irrigating the fields.

In the reign of his successor the yak was crossed with the domestic cow and the valuable cross-breed called *djo* obtained. Mules were imported into the country and the people were taught how to make bundles of hay. From the fact that grass is still at the present day twisted into heavy cables and allowed to dry in this shape and is so kept, both in Kashmir (see W. Moorcroft, Travels, II, 153) and in Tibet, it is probable that this method of bundling hay was learned from the former country.

In the seventh century Srong-tsan gambo ascended the throne of Tibet and in his long reign the country made rapid strides in civilization. Under his rule Tibet became an aggressive power and its armies attacked all the neighboring countries, China not excepted.

The King sent Tonmi Samb'ota to India to there find a system of writing applicable to the Tibetan language, and also to open negotiations for his marriage with a Nepalese princess.

Tonmi brought back an alphabet based on the nagari in use at the time in Kashmir, and composed of 30 consonants, 24 of which reproduced more or less closely their prototypes, and 6 were invented for sounds which did not exist in Sanskrit.

It is recorded in the Bodhimur (I. J. Schmidt, Geschichte der Ost Mongolen, p. 329) that the King wrote a treatise on horse breeding, besides several other lighter works. With the Nepalese consort he had taken to himself, Buddhism, which had probably been known to, though not adopted to any extent by, the Tibetans prior to this date, became the state religion, and the form of that religion obtaining in Nepaul was adopted by the Tibetans, though a number of ceremonies and enstoms peculiar to their national Bönbo religion were retained by them and incorporated in the new faith.

With the Chinese princess who was married to Srong-tsan-gambo, somewhere about 635 A. D., many Chinese enstoms and valuable inventions found their way into Tibet. The Tibetan history from which most of the preceding data are obtained says that rice wine (samshu) and barley wine (ch'ang), butter, and cheese then for the first time became known in Tibet, the people learned how to make pottery, and water mills and looms were introduced into the country.

Chinese history tells us that when the king took the princess Wench'eng to his capital, which he had but recently transferred to Lh'asa from a point further south, at or near the capital of the first king. Nyatri tsanpo, he built her a palace in Chinese style,

But the princess, disliking the reddish-brown color with which the people were in the habit of coating their faces,\* the king forbade the practise throughout the realm. He himself, discarding his felt and sheepskin garments, wore fine silks and brocades, and gradually adopted Chinese customs. He sent the children of his chief men to attend the schools of China, there to study the classics, and his official communications to the Emperor were written in Chinese. He asked the Emperor to send him silkworm eggs, wine presses, paper and ink makers. These things, together with the imperial almanack, were all sent him. (Wei-Tsang t'u chih, in Jour. Roy. Asiat. Soc., n. s., XXIII, p. 191.)

But more than anything else the introduction of, and the rapid conquest of the country, by Buddhist missionaries from Nepal, Kashmir, and China helped to mold the culture of the country into its present form, in which the arts and customs of India and China are found side by side overlaying the rude native civilization, though the latter is never entirely hidden from view.

Under the reign of the grandson of Srong-tsan gambo, Gung-srong du-jé by name, tea was introduced into Tibet from China, and earrings and new modes of hairdressing were brought there from India.

A little later on it is said that works on astronomy and astrology, medicine and surgery, were translated from Sanskrit and Chinese into the stilted, artificial literary Tibetan which had grown up since the introduction of the alphabet and the adoption of Buddhism in the country. (See W. W. Rockhill, Life of the Buddha, p. 201 et seq.)

At this point in the history of the civilization in Tibet, Chinese and native works alike fail us, but enough has been got from them to show

<sup>\*</sup>Tibetan women at the present day cover their faces with a black paste made of catechu and grease, to protect the skin, which in such a dry and windy country would, without it, be badly cracked. (See Jour. Roy. Asiat. Soc., n. s., XXIII, p. 225, and W. W. Rockhill, Land of the Lamas, p. 214.)

us that the present civilization and rather advanced degree of culture is entirely borrowed from China, India, and, I may add, possibly Turkestan, and that Tibet has only contributed the simple arts of the tent-dwelling herdsman. What history has partially disclosed to us will be more fully demonstrated by an examination of the Museum's Tibetan collections, and by a comparison of the habits and customs of the country with those of the people living beyond its eastern and southern borders.

11.

#### CHARACTER OF THE COUNTRY AND PEOPLE.

Tibet is naturally divided into three parts, according to the altitude of the country above sea level and the trend of the valleys:

- (1) The northern plateaux, extending over more than 12° of longitude (from east longitude 80° to 92°) and over 6° of latitude (from 30° north to 36°), which are over an average altitude of 15,000 feet above sea level and are inhabited by a scanty population of seminomadic pastoral tribes called Drupa (*Hbrog-pa.*)
- (2) Valleys which run either parallel to the southern edge of this great northern plateau or which, having their heads on its eastern edge, trend in an easterly direction for a few hundred miles, and which nowhere descend below an altitude of 10,000 feet above the level of the sea.
- (3) Valleys trending approximately north and south in the eastern portion of this country and which descend to an altitude of 6,000 feet above the level of the sea.

In the country comprised in these last two regions permanent habitations and cultivation are found up to an average altitude of about 13,500 feet, which is also approximately the height of the timber line in this latitude.

The northern and southern trend of the valleys in the eastern portion of this third region, opposing no barrier to the moisture-laden clouds driven by the southwest monsoon, the region around the Kokonor and all the country to the southwest of it has probably a much heavier rainfall than any other part of Tibet, and the lower portions of all the valleys in this region are consequently much more fertile than others of the same altitude, but trending east and west, along the northern slope of the Himalaya.

All these natural conditions have exercised marked influence on the degree of culture and on the peopling of the different sections of this country, and must not be lost sight of in any study of the inhabitants and their relationship and intercourse with other tribes and peoples.

With the exception of the extreme northern and northeastern portions of the region here called Tibet, the population belongs essentially to one race, and, as elsewhere mentioned, the purest representatives of this stock are to be found among the pastoral tribes, or Drupa, which,

H. Mis. 184, pt. 2—43

whether found around the Kokonor, in eastern, western, or central Tibet, offer a uniform type which may be called the *Drupa type*.

The second type of the Tibetan race is found in those sections of the country in which there are permanent habitations. It is a mixed race, becoming more Chinese as one goes toward China, or more Indian (Nepalese or Kashmiri) as one travels southward or westward. The reason of the very pronounced departure of this portion of the present Tibetan population from its original type is easily accounted for in the custom of foreign traders, soldiers, pilgrims, or officials inhabiting the country, of never bringing their wives into Tibet, but taking native concubines, a custom, by the way, common in most parts of Asia. In as small a population as that of Tibet, which does not probably exceed 3,000,000 (Journ. Roy. Asiat. Soc., n. s., XXIII, p. 14), where the principal centers of population are and have been inhabited by comparatively large numbers of foreigners for several centuries at least, this profound alteration of the primitive type is easily accounted for in this manner.

Among the Drupa Tibetans the males measure about 5 feet 5 inches; the females not appreciably less.\* The head is brachycephalic; the hair, when worn, is nearly invariably wavy; the eyes are usually of a clear brown, in some cases even hazel; the cheek bones are high, but not as high as with the Mongols; the nose is thick, sometimes depressed at the root, in other cases prominent, even aquiline, but usually narrow, but the nostrils are broad; the teeth are strong, but irregular; the ears, with tolerably large lobes, stand out from the head, but to a less degree than with the Mongols; the mouth is broad, the lips not very full, and among the people in the lower regions decidedly thin; the beard is very thin and, with the exception of the mustache, which is sometimes worn, especially in central Tibet, it is earefully plucked out with tweezers. Though I have seen a few men in central Tibet, at Draya and Ch'amdo, for instance, with tolerably heavy beards and hair all over their bodies, as a general rule Tibetans have no hair on their limbs or chests. The shoulders are broad, the arms normal; the legs not well developed, the calf especially small. The foot is large, the hand coarse.

The women are usually stouter than the men, their faces much fuller; their breasts are not large, nor are they very pendent. They do not appear to be very prolific; I have never seen in any one family more than six or seven children; many are barren. They do not entirely lose their good looks before 30 or 35. They are as strong, or perhaps even stronger than the men; because, obliged to do hard work from childhood, their muscles are more fully developed than those of the men, who neither carry water on their backs, work at the looms, nor tend the cattle. The women's hair is long and coarse, but not very thick; it remains black, or only mixed with a little white to extreme old age. I have rarely seen one with white hair; this remark applies also to the men.

<sup>\*</sup> See Brian H. Hodgson, miscellaneous essays relating to Indian subjects, 11, p. 95.

There is very little, if any, perceptible odor about the Tibetan's person, save that which is readily traced to dirty clothes. Partial baldness in both sexes is not uncommon. Their heads they keep tolerably clean by frequently anointing the han and scalp with butter, but vermin is common among them, especially with the women, and it is a very common sight to see a number of them cronching before their houses in the sun cleaning the head of a husband, a child, or a friend; all captures belong to the original owner, who eats them with relish, saying, "As they live on me, they can not be unclean food for me, though they might be for anyone else." Washing the body is never, or hardly ever, indulged in, except involuntarily when fording a stream or when drenched by the rain.\*

The skin of the Tibetan is coarse and greasy. Its color is a light brown, frequently nearly white, except where exposed to the weather, when it becomes a dark brown, nearly the color of our American Indians. Rosy cheeks are quite common among the younger women.

The Tibetans' voices are powerful, those of the men deep; those of the women full and not very shrill. Their hearing is good, and they can converse freely from one side of a valley to the other, a distance of fully a half a mile, without ever having to repeat phrases or perceptibly raise the voice. In singing their voices are pitched in a lower key than is usual among Chinese or Mongols, and in their church services the voices are always a deep bass. Their sight does not appear to be exceptionally sharp, but I have seen few near sighted persons among them, though blindness, resulting generally from cataracts, is rather common, also opthalmia, attributable in a great measure to their using hats but rarely, and to the pungency of the smoke in their dwellings.

They can endure exposure without any apparent inconvenience. In the coldest weather I have seen them slip the upper part of their bodies ont of their sheepskin gowns to perform any kind of work requiring freedom of motion. The women do nearly all their work with the the right side of the body completely exposed, and they put no clothes on very small children except in the coldest weather, allowing them to move about naked, or with only a pair of boots on.

Hunger they can also endure, and they are at all times small eaters. Eating a little whenever they drink their tea, they never take a hearty meal, but stave off continually the pangs of hunger. Though the nature of the food they use is such that they can not endure absolute privation from all food for any considerable length of time, they can with ease travel for long periods on starvation rations.

The average length of life is not very much shorter in Tibet than among the Mongols, though it is certainly lower than among the Chinese. I have seen but few old men among them, and they were not

Speaking of their neighbors, the Mongols, William of Rubruk remarks: "Vestes nunquam lavant quia dicunt quod Deus tune irascitur, et quod fiat tonitrua si suspendantur ad siccandum. Immo lavantes, verberant, et eis auferunt." (Itinerarium, Edit. Soc. Géog. de Paris, p. 234.)

over 80 years of age. A man of 70 is held to be veryold, and I have not seen a woman of that age. The age of puberty is reached in the males about the fifteenth year, and among the girls possibly a little sooner. The women bear until at least 35. The mothers never wean their babies; a child continues to suckle until another comes to take its place: I have repeatedly seen children of 4 years of age walk up to their mother and take her breast. Among the natives married to Chinese infanticide is sometimes practiced, as I have been assured by the husbands themselves, but as a general rule the Tibetan women are good mothers, and the fathers show great fondness for their offspring.

The most common abnormality I have noticed among Tibetan men is a supplementary finger, usually growing from the thumb, and in one case from the side of the palm nearest the little finger. This is also a common deformity in China. I have seen two cases of men having club feet, or an imperfectly developed foot with a shortened leg. One case of distortion of the spine and one of supernumerary teeth (or double row of lower teeth), have also come to my notice, and Ashley Eden (Report on the state of Bootan, p. 76) mentions three albinos in a family of Tibetans in Bhutan.

Father Désideri, who lived in Tibet for thirteen years (A. D. 1716–1729), says that "The Tibetans are naturally gentle, but uncultivated and coarse" (Markham's Narrative of the mission of George Bogle, p. 306); and Father Horacio della Penna, another missionary to that country in the eighteenth century, says:

The Tibetans, speaking as a rule, are inclined to vindictiveness; but they know well how to dissemble, and when opportunity offers will not fail to revenge themselves. They are timid and greatly fear justice. \* \* \* If, however, they are protected by some great lord, they lay aside all fear and become arrogant and proud. They are greedy of money; \* \* \* they are also somewhat given to lust; \* \* \* they are addicted to habits of intoxication; \* \* \* they are but slightly loyal to their ehnefs; \* \* \* they are also dirty and wasty and without refinement. (Ibid, p. 318.)

Father Desgodins, who has been living in Tibet since 1856, thus describes the Tibetan:

It appears to me that the Tibetan, no matter who he may be, is essentially a slave to human respect. If he believes you great, powerful, and rich, there is nothing he will not do to obtain your good will, your favors, your money, or even a simple mark of your approval. If he has only something to hope for, he will receive you with all the signs of the most profound submission or of the most generous cordiality, according to circumstances, and will make you interminable compliments, using the most fulsome and the most honied expressions that the human mind has been able to invent. In this line he might give points to the most accomplished flatterer of Europe. If, on the contrary, he thinks you of low station, he will only show you stiffness, or at the most, formal, unwilling politeness. Should your fortune change, have you become a beggar in his eyes, abandoned and without authority, he at once turns against you, treats you as a slave, takes the side of your enemies, without being ashamed at the remembrance of his former protestations of devotion and friendship, without listening to the dictates of gratitude. A slave toward the great, a despot to the small, whoever they may be, dutiful or treacherous, according to eircumstances, looking always for some way to cheat, and lying shamelessly to attain his end. In a word, naturally and essentially a false character. Such is, I think, the Tibetan of the cultivated countries of the south, who considers himself much more civilized than the shepherd or herdsman of the north, with whom I have had but little intercourse, and of whom I do not pretend to draw the portrait.

One readily understands that with such a character, with dissolute habits, the Tibetan becomes easily cruel and vindictive. Often discussion, begun in laughter and usually while drinking, ends with drawn knives. If he has not appeased his anger, he never forgives. Revenge alone can pacify him if he believes himself usulted. But he does not show it at first. On the contrary, he affects to live on good terms with his enemy. He invites him, trades in preference with him, but he will put a ball in his chest after a good dinner, during which he has shown himself most friendly and has sworn the other lasting friendship.

Such are the principal faults of the Tibetan. What are his virtues? I believe his mind is instinctively religious, and this leads him to willingly perform certain external devotional practices and even to go on long and trying pilgrimages, which cost him, however, but little money. As to religious convictions, he has absolutely none, a result of the profound ignorance in which the lamas leave the people, either on account of their incapacity to teach them, or perhaps so as to keep the business of worship in their own hands, as it insures them a large revenue. The religious acts of the people are only performed through routine; they do not understand them or care to understand them; hence ignorance in the lower classes, scepticism and indifference in the others, principally among the mandarins and lamas. The Tibetan's other virtues are nearly all material ones, if I may use such an expression; thus, he bears with ease and for long periods cold, fatigue, hunger, and thirst; but if he finds good compensation for his sufferings, he will never overlook it. He is generally active, but less industrious than the Chinese, and arts have advanced much less in Tibet than in China. While at work, he sings without a care; at a feast, he goes gossiping about and drinking with his friends; he sings, dances, and drinks during the night without a recollection of the sorrows of the day before, or without thinking of the cares of the morrow. Such is the Tibetan as I have known him. (C. H. Desgodins, Le Thibet, pp. 251-253.)

Though Father Desgodins has lived longer among Tibetans than any other foreigner of whom I know, still the opinions of other travelers must not be overlooked. Turner (Embassy to the Court of the Teshoo Lama, p. 350) says:

The Tibetans are a very humane, kind people; I have personally had numerous opportunities of observing their disposition.

Humanity, and an unartificial gentleness of disposition, are the constant inheritance of a Tibetan. I never saw these qualities preserved by any people in a more eminent degree. Without being servilely officious, they are always obliging; the higher ranks are unassuming; the inferior, respectful in their behavior; nor are they at all deficient in their attentions to the female sex; but, as we find them moderate in all their passions, in this respect also their conduct is equally remote from rudeness and adulation.

Capt. Turner, it is not amiss to remark, attributes these pleasing qualities of the Tibetan to the much-abused practice of polyandry.

Though I would not care to put up my opinion against men who have had so much more experience than I of the native character, I can not but think that the Tibetan's character is not as black as Horace della Penna and Desgodins have painted it. Intercourse with these people extending over six years leads me to believe that the Tibetan is kindhearted, affectionate, and law-abiding, and that many of the most objectionable features in his character, those on which Desgodins chiefly dwells, only appear in his intercourse with foreigners with whom he has had hardly any relations, and whom he instinctively fears and

mistrusts, in view of the open hostility shown them by the official class throughout the country.

Let us finish this sketch of Tibetan character by quoting what they say of themselves, and we need not judge them more harshly than the author of the Mani Kambum:

The earliest inhabitants of Tibet descended from a king of monkeys and a female hobgoblin, and the character of the race partakes of those of its first parents; from the king of monkeys (he was an incarnate god) they have religious faith and kind-heartedness, intelligence, and application, devotion to religion and to religious debate; from the hobgoblin, their ancestress, they get cruelty, fondness for trade and money making, great bodily strength, lustfulness, fondness for gossip, and carniverous instincts. (Land of the Lamas, p. 359.)

#### HI.

#### ORGANIZATION—CONSANGUINEAL—POLITICAL—INDUSTRIAL.

Our present knowledge of Tibetan society is still too imperfect to justify touching on this subject except with extreme caution.

As far as I have been able to ascertain during my residence among the Drupa or tent-dwelling tribes of Tibet, which, as previously stated, I am led to believe represent the purest type of that race, and in which the earliest form of Tibetan civilization has been well preserved, all the members of a clan have no family name except that of the chief or clan which is prefixed to their own. Thus, there are the Konsa, Chamri, Arik, Nyam-ts'o, Chu, Su, Na, etc., clans, and individuals of these clans are spoken of as Chamri Solo, Nyam-ts'o Purdung, Konsa Arabtan, etc. While a man may marry a woman either of his own tribal name or one of another, he may not a relative within at least three degrees, and chiefs do not marry, I think, in their clans. The looseness of the marriage relations, the difficulty of identifying people who are only known by surnames, such as Lobzang, Dorjé, Drolma, etc., all names of Buddhist origin, together with the habit of never using a person's name when addressing him or her, and the very marked disinglination of this people, in common with most Asiatics, I may remark, of speaking of their families or family affairs, make researches on this subject extremely difficult. The fact that throughout Tibet not only polyandry but also polygamy obtains, adds wonderfully to the confusion in which the question of consanguineal organization is involved.

Sarat Chandra Das (Narrative of a journey round Lake Yamdo, p. 73) says:

In Tibet there are no social restrictions or hindrances to marriage. The rich may bestow their daughters on the poor, the daughter of a poor man may become the bride of the proudest noble of the country.

The Annals of the Tang Dynasty (Tang shu, Bk., 221, quoted in Land of the Lamas, p. 338) speaking of the Tang-hsiang, a pure Tibetan tribe living in the seventh or eighth century, A. D., somewhere near the western border of the Chinese province of Kan-su, says of them:

A son may marry his deceased father's or uncle's wife (or wives); a younger brother his deceased brother's wife, but he may not marry a person of the same cognomen as himself.

Speaking of the Eastern Kingdom of women (*Tung nü kuo*), also a principality of eastern Tibet of the same period, and of which the people may have been Tibetans, the same work remarks that "the sons take the family name of their mothers." (Land of the Lamas, p. 341.)

In the more highly civilized portions of Tibet there is no trace of family or tribal organization, nor is there any of castes. Certain families in each district, town, or city have acquired wealth, and numbers of them have held official positions—some in the church, others in the state—for many generations past. Around them, or on the land granted them by the state (*jaghirs*, they call such grants in India), live numerous tenants, serfs (*misser*), or slaves in some parts of the country, but they are held as members of the family they serve, and the misser at least are not bound to the land, but may move where they please.

Butchers, those who cut up corpses, beggars, and criminals, are the only persons at the present day who do not enjoy the same social privileges as are granted to the highest classes. Dyers and workers in metal are also, in some localities, looked down on, and the ostracism of these two latter classes is in all probability a result of continued intercourse with India.

As further bearing on the subject of relationship, it is interesting to note that, while the Tibetan language is comparatively rich in words expressing "father," "mother," "brothers," in relation to age, or to sisters, uncles, and aunts, it has only one word for "nephew" or "niece," and this is also used for "grandson" and "granddaughter," and it has none to express "cousin," but the word pon (spun), "brothers," or "brothers and sisters," is sometimes used to express this relationship. (Land of the Lamas, p. 213.)

The following table gives all the names for the various degrees of relationship that I have been able to note, in the Lh'asan and the eastern Tibetan dialects:\*

English.	Lh'asan.	East Tibetan.
English.  Grandfather Grandmother Father Mother Storther Mother's brother Aunt Steplather Stepnather Son Daughter Elder brother Younger brother Grandson Granddaughter Husband Wife	Amnyi	Ap'a. Ama. Kuwo ch'e-wa. Kuwo ch'e-wa. Kuwo ch'e-wa. P'aya. Maya. Bu. Bumo. Bui. Lo-ch'ung. Yangtsa. Yangtsa. Jycha. Jyéha.
Cousin	Akeu-gi pugu (lit. "uncle's child"). Ané-gi pugu (lit. "aunt's child").	

<sup>\*</sup> See, however, Jaeschke, Tib. Engl. Diet., s. v. ch'ung, et passim.

Politically Tibet may be divided into three parts: (1) Country under direct Lh'asan rule or influence; (2) country under Chinese rule or influence; (3) country under British or other rule or influence.

The first part comprises all central, western, most of the northern portion of the country, and a few outlying districts in eastern Tibet, such as Märk'ams, Nyarong, Ts'arong, etc. The second part includes all northeastern Tibet, most of eastern, and a long, narrow strip called Jyadé, extending nearly as far west as the Tengri nor. The third part comprises Sikkim, Bhutan, Ladak, etc.

The spiritual and temporal ruler of the Kingdom of Lh'asa (Déba djong is the term usually employed by natives to designate this portion of Tibet) is an incarnation of the god Shenräzig, the patron saint of the land. He is called Jyal-wa jyamts'o or Talé lama. Prior to 1720 the Talé lama was only spiritual ruler of Tibet, but at that date he was also made temporal ruler of the country by the Chinese. (Journ. Roy. Asiat. Soc., n. s., XXXIII, pp. 74, 285 et seq).

Under him is a regent, colloquially called "King of Tibet," or Désri, who is also a lama, chosen in turn from one of the four great monasteries (ling) of Lh'asa, and whose appointment is made, like that of the Talé lama himself and of all other high dignitaries of the state, subject to the approval of the Emperor of China. The Désri is president of the council of ministers, or Kalön, who are five in number, one lama and four laymen. These administer the country and act also in a judicial capacity. (Journ. Roy. Asiat. Soc., loc. cit., p. 239.) The country for administrative purposes is divided into 53 djong or "districts," over which are Djong-pön, appointed by the Council of Ministers; they are both civil and military chiefs of their districts. Besides these there are a number of Déba, some of whom are chiefs of the pastoral tribes, or Drupa, inhabiting the more elevated and open parts of the country.

Certain tracts of land are assigned to officers of high rank for their support, in lieu of salaries, and others are given as endowments to lamaseries. On many, if not all, of these the beneficiaries have not only all the revenues derivable therefrom, but exercise also judicial rights over the people inhabiting these estates, who are their serfs, subject to all such *corvées* as they may see fit to order, such as working the land, going on caravans, on which they have also to supply pack animals or saddle ponies, supplying food to officers when passing through their place of residence, etc., all such service being known as *ula*.\*

Although I do not believe that slavery exists in the greater part of Tibet, and certainly not among the pastoral tribes, beyond, perhaps, a

<sup>\*</sup>For further details on the organization, both ecclesiastical and civil, of this part of Tibet, I must refer the reader to the following works: Sarat Chandra Das, Narrative of a Jonney to Lh'asa in 1881-'82, p. 175 et seq.; Journal Royal Asiatic Society, new series, XXIII, pp. 10-12, 238-242; Land of the Lamas, p. 289 et seq.; C. H. Desgodins, Le Thibet d'après la correspondence des missionnaires, p. 263 et seq.; C. R. Markham, Narrative of the Mission of George Bogle to Tibet, p. 319 et seq.

mild form of domestic slavery or serfdom, in some of the outlying districts where there is a large non-Tibetan population, as in the Ts'arong province in southeastern Tibet, regular slavery prevails, persons becoming slaves through birth, debt, or crime, and their offspring being also slaves. (Land of the Lamas, pp. 285, 286.)

The second part of Tibet comprises that which is under Chinese rule and influence. It consists of the 18 districts of eastern Tibet, whose organization I have described elsewhere (Land of the Lamas, p.,218 et seq.), the Jyadé or "Chinese Province," and the Kokonor Tibetan districts. In the Jyadé there are 36 chiefs or Débas, chosen from among the most influential headmen of the country; they receive their appointment from the imperial Chinese minister resident at Lh'asa, and are in receipt of a yearly stipend from the Emperor of China of 100 ounces of silver. Under them are numerous chiefs of clans whose charges are hereditary. (Geographical Journal, III, p. 377.) The organization of the Tibetan tribes living around the Kokonor is similar to that of Jyadé, but the chiefs receive their commissions from the imperial resident at Hsi-ning (Kan-su). (Land of the Lamas, p. 73 et seq., and Diary of a journey in Mongolia and Tibet, p. 122 et seq. and p. 288.)

The advantages to China of this organization are manifold, and have been demonstrated during many centuries of its history. With a minimum expenditure of forces and money, China attaches the frontier tribes to it through small allowances made to the most powerful chiefs, by granting the people certain advantages in trade (exemption from duties at all Chinese towns along the border), and by giving them liberty as to the administration of the internal affairs of their country. Whenever necessary a Chinese military expedition can vindicate the supreme authority of the Emperor by a small display of force, whether it be in Lh'asa or in the unruly districts of northeast Tibet.

T. T. Cooper (The Mishmee Hills, p. 131), speaking of the application of this system to the wild Indian hill tribes, says:

It is a curious fact that, while we have only for a few years adopted this system of quieting some of the Indian hill tribes, the Chinese Government commenced several centuries ago by a similar system the subjugation of the numerous tribes on her western frontiers, which to-day form one of the finest and most effectual frontier guards formed by any country in the world. Along a hill frontier of over 600 miles the tribes of western China form a complete barrier against ingress from the west. The chief of every clan or tribe has a nominal rank conferred upon him, to which is attached a trifling annual stipend. He is furnished with an official dress, which he wears in the presence of all Chinese officials. He is allowed to visit the court of Pekin every five years at his own expense, if he chooses, as a mark of homage to the Emperor. Such visits, however, are properly discouraged by the Chinese officials, though the nominal privilege of being allowed to go to Pekin is grateful to the pride of the barbarians, and makes them feel that, although subjects paying tribute, they are still persons of consequence and allies of a powerful empire.

Although incorrect as to some details, I think Cooper has accurately weighed the value of this system to China.

The political organization of the third section of Tibet, which comprises Bhutan, Sikkim, and Ladak, is properly beyond the scope of this study. Suffice it to say that in Bhutan the dual organization noticed in Lh'asa of a spiritual and temporal ruler is found in the Dharma Rāja, the spiritual head of the state, and the Deb Rāja or temporal ruler; there is also a council (or Leuchen) of ten members, which has under it a certain number of district officers or Djongpon. (Ashley Eden, Report on the State of Bootan, p. 108 et seq.)

In Sikkim and Ladak a similar form of government obtains, with only slight differences, due to continued intercourse with or subjection by people of different origin.\*

Industrial organization.—In all parts of Tibet, whether among the pastoral tribes or in the towns and villages, the women not only do most of the household work, but they attend to much of the bartering, make the butter, assist in milking the cows and looking after the flocks and go on the ula. The men, aided by the women, work in the fields, or go on distant journeys, hiring out their yaks or mules to carry freight, or hiring themselves out as mule or yak drivers to merchants or to some neighboring lamasery. Those who remain in their town or village sometimes follow a trade which occupies them during a small portion of their time. Some are smiths, working silver, copper, or iron, and, when needs be, becoming carpenters, gunsmiths, or locksmiths; others, again, occupy themselves, when industriously inclined, twisting yarn, weaving garters, or making felt. In the towns nearly all shops are kept by women.

Although the division of labor between the sexes is very unequal, much the greater part devolving upon the women, the position of that sex is not affected injuriously thereby. The wife's opinion is always asked in household matters and in questions of trade, and her authority in the house is supreme. She joins with the men in all discussions with perfect freedom and assurance, and in nearly every walk of life she is held to be on a footing of perfect equality by the male sex. Thus Turner (Embassy to the Court of the Teshoo Lama, p. 350) says:

Comparatively with their northern neighbors, the women of Tibet enjoy an elevated station in society. To the privileges of unbounded liberty the wife here adds the character of mistress of the family and companion of her husband. The company of all, indeed, she is not at all times entitled to expect. Different pursuits, either agricultural employment or mercantile speculations, may occasionally cause the temporary absence of each; yet whatever be the result, the profit of the laborer flows into the common store, and when he returns, whatever may have been his fortune, he is secure of a grateful welcome to a social home.

Father Desgodins, speaking, however, more especially of eastern Tibet, says (Le Thibet, p. 244):

It is not amiss to give here a further sketch of the condition of women in Tibet, where they are not confined to their homes as in India and in China. Here the women go about, look after their household affairs, or trade on the market place, work in the field, spin before their doors while gossiping with their friends, go on long journeys—

<sup>\*</sup> See J. D. Hooker, Himalayan Journals, 11, p. 290 et passim: G. T. Vigne, Travels in Kashmir, Ladak, Iskardo, 11, p. 252 et seq.: W. Moorcroft, Travels in the Himalayan Provinces of Hindoostan, 11, pp. 11, 15, 20, 42, etc.

sometimes on foot, at others on horseback. In this respect the Tibetan woman is very free, but she is, nevertheless, the slave, the drudge of one or more husbands; she is bought like any other goods without asking her consent. In this way she, by right, becomes a kind of household chief, but she has to submit herself to all the wishes, the caprices, the brutal passions of her husbands. \* \* \* In all heathen countries the woman is looked down upon as an inferior creature to man. The Tibetans have even a word to designate her by, which may be translated by "low creature."\*

Father Huc (Souvenirs d'un voyage dans la Tartarie et le Thibet, 11, p. 260) looks at the subject in a different light.

One thing which tends to make me believe that in Fibet there is possibly less depravity than in certain other heathen countries, is the great freedom enjoyed by the women. Instead of vegetating imprisoned in their homes, they lead a laborious life full of activity. Besides having the care of their households, they monopolize all the small commerce of the country. They peddle goods here and there, spread them out in the streets, and keep nearly all the retail shops. In the country they also take a large share in all family pursuits.

Chinese authors have found the cause of this superior position of Tibetan woman over those of most other Asiatic countries in their superior physique (Journ. Roy. Asiat. Soc., n. s., XXIII, p. 230, also Land of the Lamas, p. 211), but it is probably in part due to Buddhism, and still more to polyandry. The former by admitting women into the sangha raised them materially in the social scale; the latter by the important rôle it makes them play in the family life has had the same effect.†

Inheritance.—Property is inherited by the sons or brothers of the deceased. The daughters or wife get nothing. It is common, if not usual, for a wife, on the decease of her husband, to shave her head and become a nun or ani. This custom is also found among the Mongols.

According to Chinese authors (but I have been unable to corroborate their statements), none of the personal property of a deceased person is inherited by his relatives.

One-half of the property of the deceased is given away in charities and the other half is sent to the Lamas, who are invited to read the sacred books to his intent and entertained while so doing. It follows that all the (personal) property of the deceased is disposed of, the parents, children, husband, or wife retaining no part of it whatever. (Journ. Roy. Asiat. Soc., n. s., XXIII, p. 232.)

The real estate remains, however, in the family, and, consisting usually of a large house and some very small and not by any means fertile fields, not sufficient to support several families, it is usual to keep the estate undivided; all the children of the deceased live in the house of their parent, the sons only taking one wife to themselves.

<sup>\*</sup>Sman-ba (pronounced manba). This inferiority is not very noticeable among pastoral or nomadic tribes.

tJaeschke, Tib. Engl. Dict., s. v. spun, says: "Several neighbors or inhabitants of a village, who have a common lh'a and thus become rus-pa-gchig-chig, members of the same family, are called spun or brothers. This common tie entails on them the duty, whenever a death takes place in their number, of caring for the cremation of the dead body."

(Land of the Lamas, p. 211.) Among the pastoral tribes, the sons divide the flocks and herds of their deceased father, after deducting a considerable portion for presents to the clergy, but among them, as in the more civilized regions of the country, the widow does not inherit; she goes back to her family, or, if she has children, becomes dependent on them, or else she becomes an ani.

#### IV.

#### DRESS AND PERSONAL ADORNMENT.

The earliest description I have met with of a Tibetan tribe, the Tang-hsiang previously referred to, is in the Annals of the Tang dynasty of China (A. D. 618–907). It is said of them: "Men and women wear long skin gowns, or gowns of coarse woolen stuff with a rough surface" (Land of the Lamas, p. 338). Of the Tukuhun, who inhabited the Kokonor, and were possibly of Tibetan stock, we read in the Annals of the Sui dynasty (A. D., 581–618) that their women "did up their hair in plaits, on which they sewed beads and cowrie shells; they wore long gowns and the men wore broad-brimmed hats." (Op. sup. eit., p. 336).

Friar Odoric, who visited Tibet in the early part of the fourteenth century remarked that "the women have their hair platted in more than one hundred tresses" (H. Yule, Cathay and the way thither, I, p. 150), and since that time the fashion of dressing and wearing the hair has not materially altered in the wilder parts of the country, although under Chinese and Indian influences the fashion has been slightly changed in parts of the country adjacent to those inhabited by people of these two races.

The national dress of both sexes consists in a very full, high collared, large, and long-sleeved gown called ch'uba (a word of Turkish origin). This gown is of sheepskin in winter, of native cloth (truk or ta)\* in summer. It is tied tightly around the waist with a woolen girdle so as to make it very baggy about the waist, and it reaches down to about the knee when worn by men and to the ankle when worn by women. In a large part of the country this is the only garment worn. The collar and cuffs and hem are sometimes faced with black velvet or red or blue cloth, or striped truk, or with otter or leopard skin. Buttons are not usually used, although those of Chinese make or army buttons obtained from India are much sought after, and small silver coins (half rupees generally) are frequently made into buttons, but more on account of them being ornamental than for any use they are put to.

The cut of the *ch'uba* and the way of wearing it differ in various parts of the country; the pastoral Tibetans wear it much shorter than those living in towns and villages, and who do not pass much of their time riding or climbing. So likewise the trimming of the cuffs and sleeves differs according to the tribe.

<sup>\*</sup>See for a description of these native cloths, p. 699.



GIRL'S CH'UBA OF STRIPED TRUK, TRIMMED WITH OTTER FUR. Cat. No. 131209, U. S. N. M.



In the case of the summer cloth ch'uba, the favorite color for men when it is made of truk is purple. The color of the ch'uba worn by women is blue, or striped throughout eastern Tibet. Ta (or lawa) is an undyed woolen stuff usually of coarser texture than the truk. One ch'uba in the collection (No. 167195)\* is of fine purple truk trimmed with leopard skin. Another is of undyed ta, made at Draya, the collar faced with striped truk (No. 167196).\* In this section of country the people do not usually wear sheepskin chu'bas, and a gown of undyed ta is commonly worn over an inner one of purple or blue truk. The length of the ch'uba shown in pl. 1 is 5 feet 5 inches; this is the average length of all such garments, which have no particular fit, or rather which fit any wearer.

The sheepskin ch'uba (No. 167194)\*, such as is worn by the Tibetans of the Kokonor, is also found in eastern Tibet. The sollar and cuffs are faced with red cloth and otter skin, and the hem with black velvet stitched with silks of different colors. This gown is a very handsome

one of the kind.

Another ch'uba in the collection (No. 131062)\* is of red truk lined with sheepskin. Such gowns are usually worn by lamas, but many laymen also wear red clothes, the color being a favorite one in Tibet and Mongolia.

In pl. 1 is shown a *ch'uba* for a girl of 12. It is made of striped *truk*, in which green, red, white, and blue preponderate. It is trimmed on

the collar and cuffs with otter skin.

In L'hasa and the more civilized portions of Tibet generally. *ch'ubas* of foreign broadcloth or Chinese gowns (*ao-tzŭ* and *p'ao-tzŭ*) of silk or satin are frequently worn by the wealthy of both sexes. These are too well known to require description.

Rain coats made of felt and cut on a pattern similar to the ch'uba, though somewhat shorter (4 feet 8 inches) on account of the stiffness of the material, are worn in the Kokonor district and in some other portions of northeastern Tibet. The museum collection contains one of these (No. 131050).\* A circular cape of felt is worn instead of this in the Horba country. It is especially useful on horseback, covering not only the rider but the horse completely, and is large enough to enable the wearer to wrap himself in it and sleep well protected without any other covering. I do not believe that similar garments are worn in central or western Tibet. Good truk is waterproof, and light ch'ubas are often carried by travelers to use in bad weather.

The girdles worn are usually of woven wool, from 2 to 3 inches broad and 6 or 7 feet long. The patterns vary in color, but little in design, which is always a narrow traverse stripe. The collection contains one of red, blue, white, brown, and yellow wool (No. 167291),\* terminating at either end in a fringe. Another girdle is of red, blue, green, black, and white wool (No. 167289).\* Very frequently a few yards of Chinese silk or a piece of Chinese blue cotton cloth take the place

<sup>\*</sup> Not illustrated in thispaper.

of the home-made girdle. Other specimens in the collection, such as the one from Jyadé, may be compared with this.

A pair of boots (lh'am) completes with the ch'uba the costume of the wild Tibetan. Near the Chinese border, in the Kokonor, these boots are of cowhide and of Chinese make and pattern, as shown in pl. 2. Women and men wear the same kind of boot. It is bound tightly below the knee with a leather thong or a long garter of wool.

In localities more distant from China the national boot is found. It has a sole of raw yak hide which laps and turns up around the sides, which are of several thicknesses of white cotton cloth strongly stitched together with a broad seam down the middle of the top to the turned-up pointed toe. Sometimes, in men's boots, the upper and leg is of red leather, brought to Tibet from western China, the best coming from the Chien-ch'ang, in southwestern Ssň-ch'uan. The legs of most boots are of truk, sometimes of one color, sometimes of pieces of different and somewhat gandy colors, as shown in pl. 2, figs. 1 and 2. The leg of the boot is usually lined with a very coarse woolen stuff, and no socks are worn on the feet. The garters are about 4½ feet long and 1 inch broad, the designs usually very narrow longitudinal stripes. Some of them are beautifully fine and show great taste in the selection of the colors. (See pl. 13.)

Among lamas the legs of the boots are invariably red and the uppers are always of white cotton cloth. Some fine boots are made with the uppers and legs of red leather, or the legs of red and black leather, as in fig. 4. Another very handsome pair of boots in the collection (No. 167179 and Diary of a Journey, etc., p. 14, fig. 5)\* is worn only by high lama dignitaries in the northeast part of the country (Kokonor). This boot is entirely of red russian leather, and the seams are covered with embroidery in different colored silks.

In Lh'asa and among Tibetan officials in the more civilized portions of the country generally the Chinese official velvet or satin boot is frequently worn, as is also a boot of black buckskin of Chinese pattern, as far as the foot and sole are concerned, but with a high Tibetan leg. This latter style is worn with a garter, is made in many localities by Chinese artisans, and is much liked by the natives. (See Diary of a Journey, etc., p. 14, fig. 6.)

Trousers are occasionally worn by the men; they are always made like those worn in China, and are of either sheepskin, native cloth, or coarse cotton, rather baggy, and reach down to about the ankle, where they are held by a garter. The boot is worn over them. In some of the more civilized portions of the country leggings (tuo-ku), like those used by Chinese, are also worn by the wealthy.

Men and women frequently wear a short shirt of raw silk (buré, in Tibetan), reaching to above the waist and with long sleeves. Among the Kokonor Tibetans and in eastern Tibet it is made with a broad

<sup>\*</sup>Not illustrated in this paper.



#### EXPLANATION OF PLATE 2.



TIBETAN BOOTS WITH GARTERS.

- Fig. 1. TIBETAN BOOT AND GARTER, Truk leg, cotton top, yak hide sole.
  (Cat. No. 131045, U. S. N. M.)
- Fig 2. TIBETAN BOOT AND GARTER. Truk leg, leather top, yak hide sole.
  (Cat. No. 131045a, U. S. N. M.)
- Fig. 3. Kokonor Tibetan Boot. Chinese manufacture. Woolen garter. (Cat. No. 131072, U. S. N. M.)
- Fig. 4. TIBETAN BOOT AND GARTER. Leather leg and top; yak hide sole. (Cat. No. 167303, U. S. N. M.)



TIBETAN BOOTS WITH GARTERS.



collar faced with red cloth and edged with otter fur. The style of shirt worn at Lh'asa and in central Tibet generally is similar to the above, except that the collar is narrower. Examples of these shirts are in the Museum collection.  $Bur\acute{e}$  is manufactured in Bhutan.

In central and western Tibet the women frequently wear over their shoulders a shawl (*kadri*), fastened at the neck with a large buckle of gold or silver. In Ladak, instead of this shawl a sheep or lambskin cape is worn.

The Tibetans have adopted the Chinese waisteoat or kan-chien, a rather close-fitting garment buttoning at the neck and down the right side under the arm, with no sleeves, and large armholes. This they make of native cloth (truk) among the less civilized tribes, and in eastern Tibet it is nearly invariably of the striped pattern. It is worn next to the skin under the ch'uba. The Chinese riding jacket  $(ma\ kua-tz\check{u})$ , with short, wide sleeves and reaching down to a little above the waist, made of native cloth or of foreign broadcloth, is also often worn in central Tibet by officials and soldiers.

As previously stated, the *ch'uba* is the garment *par excellence* of all Tibetans, but only the pastoral tribes have strictly adhered to it; elsewhere the women more especially have adopted a modified costume. Thus, in parts of eastern Tibet, Bat'ang, for instance, over the *ch'ubas*, usually made of native cloth, but sometimes of blue cotton, they wear a kind of box-plaited petticoat reaching to the ankle and made of striped *truk*, or else an apron which nearly meets in the back. Others, as in Chala, wear a long sleeveless gown over the cloth *ch'uba*, the two bound around the waist by a sash.

In central Tibet the costume of the women of wealth is most elaborate, frequently of brocaded silk or satin, but the general style of dress is essentially the same, one or perhaps two long gowns, a shirt, and possibly a *kan-chien*. The boots of men and women are the same, though wealthy women also frequently wear Chinese velvet boots.

The men of Ladak wear a cloak (La-pa-sha) of woolen, thick and warm. It is usually white, or rather it has once been white; for as the people only wash themselves once a year, and never wash their clothes, their cloaks are always of a dirty hue. Round their legs, from knee to ankle, they have coarse woolen leggings (rkang phying) of felt, fitting tightly, or else wrapped close round the leg and secured by a garter (rkang-gdub), which is wound spirally round the leg from the ankle upward. The garter is generally black, but sometimes red. On their heads they wear either quilted skull caps, as filthy as their cloaks, or capes of sheepskin with the wool inside, and with a large flap behind, which covers the back of the neck as well as the ears. Those in better circumstances have fur caps of the same shape. Their boots are of felt, with soles of sheep or goatskin, which are turned up all round and sewn to the felt. The upper part of the felt boot is open to the front and is allowed to fall over, something in the manuer of the boots worn in England in Charles II's time. (Alex. Cunningham, Ladak, p. 303.)

In Ladak the women wear a black woolen jacket with a large striped woolen petticoat of many colors, generally green, blue, red, and yellow, reaching below the mid leg. Over all they wear a sheepskin with the wool inside, secured, or rather ewered, in front by a large iron or brass needle. The poorest classes have the outs of the skin plain, but those in better circumstances cover it with coarse woolen

baize, either red, blue, green, or yellow, with a broad border always of a different color. The upper classes cover this sheepskin cloak either with brocade or with silk. (Cunningham, loc. sup. cit.)

In Bhutan the dress is a loose woolen coat reaching to the knees, bound round the waist by a thick fold of cotton cloth. The full front of the coat is used as a pocket, and is well stored with betelnut, prepared chunam, etc. The women's dress is, like that of the Sikkimese, a long cloak with loose sleeves. Their chief ornaments are amber beads, corals with those who can afford them, and large pins. (Ashley Eden, Report on the State of Bootan, pp. 129, 130.)

Hats.—Among the Kokonor Tibetans, on account of the custom prevailing among the men of shaving all the hair off the head, some head cover is invariably worn. A low-pointed cap of green, red, or blue cloth or cotton and faced with lambskin is the most common head cover worn by men and women (pl. 3). This cap is also worn by the Mongols in this region, but the latter usually add to it a red tassel or fringe fixed to the apex and hanging all over the crown.\*

In winter the men wear a pointed cap of felt, sometimes covered with blue or red silk, with ear flaps, a large flap behind and one in front, which is frequently worn slightly inclined forward so as to make a visor. These flaps are covered with fox skin (pl. 4). The women and girls of all ages wear, winter and summer, the low-pointed cap described above, though many always go bareheaded. Some of the wealthy ones wear a round cap wadded or made of felt and covered with silk, with a wide turned-up brim faced with fur, fox, or sable. It is copied on the Mongol hat for women, worn alike among the eastern as well as the western tribes of that race.

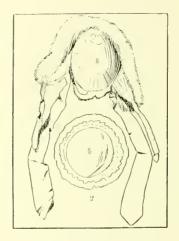
The above are the hats peculiar to the Kokonor Tibetans, and the one shown in pl. 3, fig. 2 appears, from Chinese works, to have been worn by them as early as the eighth century of our era. But besides these national ones, the Chinese felt hat is frequently worn by them, usually dark brown or black, with a brocaded band around the turned-up brim. This hat, which is very popular throughout Tibet, is worn by both men and women. A turban made of a piece of rather coarse raw silk dyed purple, about ten feet long and a foot broad, is also frequently worn by the men among the Kokonor Tibetans and in all other parts of the country.

In those sections of Tibet where the men never trim their hair, and where it forms a thick and tangled mass falling over the shoulders, only cut in a fringe just over the eyes, the poorer people either wear no head cover at all or only a piece of cloth or sheepskin arranged so as to come down over the ears. This rude head cover has no top to the crown; the tangled hair under it is a sufficient protection against the weather. A summer hat of a peculiar form is, however, worn in eastern

According to a Chinese work entitled Hsi-Tsang fn, p. 2, these Kokonor Tibetans are descended from Turkish tribes which used to live in the Altai Mountains, and who at that time wore conical iron helmets shaped like the caps these Tibetans now wear.



#### EXPLANATION OF PLATE 3.



TIBETAN AND MONGOL CAPS.

Fig. 1. Mongol Fur Cap. Wadded; covered with purple satin, trimmed with sable, red ribbons

(Cat. No. 131182, U.S. N. M.)

Fig. 2. Kokonor Tibetan Cap. Red cotton; green rim, faced with lamb-skin. (Cat. No. 131186, U. S. N. M.)



TIBETAN AND MONGOL CAPS.





#### EXPLANATION OF PLATE 4.



TIBETAN CAPS AND HATS.

Fig. 1. Tibetan Winter Cap. Felt; covered with green cloth, trimmed with fox-skin.

(Cat. No. 167193, U. S. N. M.)

Fig. 2. Kokonor Tibetan Winter Cap. Felt; covered with blue satin, trimmed with fox-skin.

(Cat. No. 167189, U. S. N. M.)

- Fig. 3. SUMMER HAT OF TS'AIDAM MONGOLS. Felt; rim faced with red cloth. (Cat. No. 167191, U. S. N. M.)
- Fig. 4. SUMMER HAT OF TIBETANS. Straw; covered with cotton cloth; rim faced with red.

(Cat. No. 167192, U. S. N. M.)



FIBETAN CAPS AND HATS



and northern Tibet, and also by the Mongols of the Ts'aidam. That worn by the Mongols of the Ts'aidam (pl. 4, fig 3) is of felt, the crown a truncated cone about 8 inches high with a flat top and about 41 inches in diameter where it joins the brim, which is some 15 inches in diameter. The brim is usually faced with red or blue cotton, and a string, with a slipknot drawn tight under the chin, holds it on the head. The summer hat worn in Tibet, and called shara or chyar dja, is higher and heavier. The erown and brim are made of blades of coarse grass bound together with woolen thread; over this is sewn white cotton. The inside of the brim is faced with red cloth. A band of felt about an inch broad projects from the base of the crown, and the head fits in it. is held on the head by a throatlatch, on which slides a bead as seen in fig. 4. The specimen in the Museum is an exceptionally fine shara, made in Namru dé, near the Tengri nor. The inhabitants of this district are noted for the quality of the summer hats they manufacture. This hat is not, as far as I am aware, used in central or western Tibet, but I have seen it in common use among the K'amba of eastern Tibet. (Land of the Lamas, pp. 182, 256.)

The common fur-trimmed cap with a large flap behind and broad ear pieces, in general use in northern China and Mongolia (pl. 3, fig. 1), is manufactured in Peking for the trade; it is also in common use in Tibet. The Tibetan form is shown in pl. 4, fig. 1. In Lit'ang the men wear in summer a circular piece of white cotton cloth ornamented on the top with a blue-cloth disk, the center of which is red. A drawing string fixed in the lining enables them to fasten it on their heads, and their heavy queues are twisted around it. (Land of the Lamas, p. 243.)

George Bogle, who visited Shigatsé, in Ulterior Tibet, in 1774, thus describes the dress of the people of that country:

The servants and peasants wear horizontal caps made of locks of sheeps' wool, dyed yellow. They are like the Scotch bonnets, but much larger. I never saw one above 3 feet in diameter. The women in the winter time cover their heads with small, rough caps of the same materials. Sometimes they dye them a deep blood-red, The higher laymen wear tunics of satin, brocaded or plain, lined with sheep and lamb skin or Siberian furs, a round cap faced with fur and crowned with a silk tassel, and Bulgar-hide boots. Red broadcloth tunies are also far from uncommon. The women wear a jacket and petticoat, reaching a little below the knee, of coarse blanket, or serge, striped or plain, or of Chinese satin, according to their condition; Tatar stockings, soled with leather and gartered under the knee. When dressed, they have a piece of cloth thrown cloak-like over their shoulders. All ranks of them are at great pains in adorning their heads, plaiting their hair neatly enough with coral and amber beads, bugles, or pearls. They wear, also, necklaces of them, where the pieces of amber are sometimes as large as a hen's egg. The quantity of the two first kinds of beads that is on the head, even of a peasant's wife or daughter, is amazing. The last two sorts fall to the share only of the ladies. (C. R. Markham, Narrative of the Mission of George Bogle, etc., p. 120.)

Before passing to a description of the ornaments worn by Tibetans, it is necessary to describe the mode of wearing the hair, as most of the ornaments worn by the women are attached to their hair.

H. Mis. 184, pt. 2-44

Among the men the head is either entirely shaved, as among the Panaka of the Kokonor, or they follow, in central and parts of eastern Tibet, the Chinese fashion of shaving all the hair except on the crown, and doing that up into a quene, or else the hair is allowed to hang down naturally over the shoulders and is trimmed over the eyes, as among the Drupas. Among these latter a concession is usually made to Chinese ideas, and while wearing the hair in the last-mentioned way, a portion of it is plaited into a queue, or a queue of false hair is fastened onto the shaggy mop of natural hair and falls down to the ground.\*

Among the women the national mode of arranging the hair, a mode which in slightly modified forms is found from Ladak to the Kokonor, is to make innumerable little plaits falling from the crown of the head down over the shoulders and reaching to the waist. (See Diary of a Journey, etc., p. 266.) In some parts of the country, as in Bat'ang, Chala (Ta-chien-lu), etc., the hair is worn in one big plait hanging down the back, while in central Tibet (Lh'asa, Shigatsé, etc.) it is done up in two or three large plaits, worn either hanging down in front or more usually twisted around the head. In certain parts of Jyadé a combination of the national headdress and the Chinese quene is the style adopted. The mode of dressing the hair does not vary in the same locality among the unmarried and married women, though the ornaments do, the married ones wearing many more, but among the males it is customary to keep boys' heads completely shaved till they are nearly nubile.

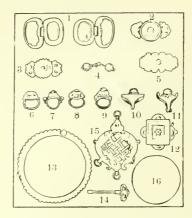
Though the men among the pastoral Tibetans take absolutely no care of their hair, beyond rubbing occasionally a little butter on the scalp, by which means, they say, they keep out vermin and the skin is made healthier, the women devote much time to rearranging their frequently elaborate headdress, combing the hair (they use the coarse heavy wooden Chinese combs) and in plaiting it once or more a week.

The only Tibetan men who wear ornaments on their hair are to be found among the pastoral tribes, where a large queue, usually of false hair, is worn in addition to their full suit of tangled locks. On this queue, which terminates in a tassel of black silk and frequently reaches to the ground, they either string finger rings (pl. 5, figs. 10 and 11) and rings of ivory, or they sew on a narrow strip of red cloth big pieces of turquoise and small charm boxes, similar in shape and size to fig. 12. This band is fastened on the queue at about the height of the shoulders and reaches to the waist or lower. The queue is usually worn wound around the head, and the ornaments on it form a crown, the big ivory ring being always in front.

An earring is worn in the left car by the men in most parts of Tibet. In the Kokonor it is a large gold or silver hoop about 2 inches in diam

<sup>\*</sup>E. H. Parker, China Review, XVIII, p. 57, says: "Long before the Mongols existed as a State the Nüchen Tartars were called *pien-fa-cho* ('quene wearers') by the Chinese, and, like their kinsmen, the Manchus, they made the Chinese they conquered shave their heads."





RINGS, BUCKLES, AND OTHER ORNAMENTS.

- Fig. 1. Pair OF GILT CHATELAINES. Large turquoise in center. (Cat. No. 131180, U. S. N. M.)
- Fig. 2. GOLD SHIRT BUCKLE. Turquoise around coral, representing butterflies. Lh'asa,

(Cat. No. 131399, U.S. N. M.)

- Fig. 3. Silver Shirt Buckle. Coral center; design, butterflies. Kanzé. (Cat. No. 131179a, U. S. N. M.)
- Fig. 4. SHIRT BUTTON. Coral beads mounted in silver. Ta-chien-lu. (Cat. No. 131180, U. S. N. M.)
- Fig. 5. SHAVER SHIRT BUCKLE. Center of coral; body in turquoise. Ta-chien-lu. (Cat. No. 131179b, U. S. N. M.)
- Figs 6-11, SILVER RINGS. Coral and turquoise.

  (Cat. Nos. 167277, 167280, 167278, 167279, 167281, 131677, U. S. N. M.)
- Fig. 12. GILT CHARM BOX. Set with turquoise. Nepalese manufacture. Lh'asa. (Cat. No. 167241, U. S. N. M.)
- Fig. 13. Plaque. Center of silver, border of coral beads. The ornamentation represents butterflies. In the center is the mystic syllable OM. Worn in Chala. (Ta-chien-lu.)

(Cat. No. 167242, U. S. N. M.)

- Fig. 14. Silver Stopper of Snuff Bottle. With sinff spoon. Top set with coral and turquoise. Ts'aidam.

  (Cat. No. 167294, U. S. N. M.)
- Fig. 15. Breast Ornament. Worn by Mongol Women. Copper ornament at top set with turquoise and coral heads.

  (Cat. No. 167340, U. S. N. M.)
- Fig. 16, HEAD PLAQUE OF SILVER. Set with coral and turquoise. Hor Change. (Cat. No. 167243, U. S. N. M.)

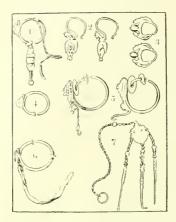


RINGS, BUCKLES, AND OTHER ORNAMENTS.





## EXPLANATION OF PLATE 6.



EAR RINGS AND OTHER ORNAMENTS.

Fig. 1. Man's Ear Ring. Silver; three turquoises set on hoop. Coral beads at base and middle of pendant. Lh'asa.

(Cat. No. 167282, U.S. N. M.)

Fig. 2. Women's Silver Ear Rings. Flower at end of hoop. Pendant Fo shou fruit. Chin ch'uan,

(Cat. No. 131178, U. S. N. M.)

Fig. 3. Women's Silver Ear Rings. Coral bead in lower part. Bat'aug. (Cat. No. 167283, U.S. N. M.)

Fig. 1. Man's Silver Ear Ring. Coral set on hoop. Kokonor.

(Cat. No. 167284 U. S. N. M.)

Fig. 5. Women's Silver Ear Rings. Heart-shaped plaque studded with turquoises. Silver hook holds up ear-ring. Jade ring on hoop; also horn ring to keep the former in place. Ch'amdo and Lh'asa.

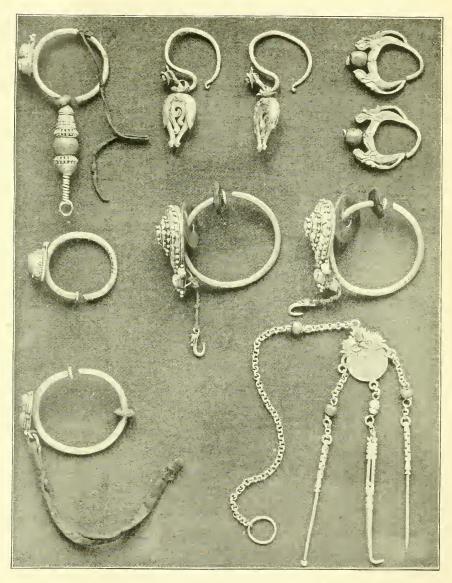
(Cat. No. 167210, U. S. N. M.)

Fig. 6. Man's Ear Ring. Carnelian and two turquoises set on hoop. Korluk Ts'aidam.

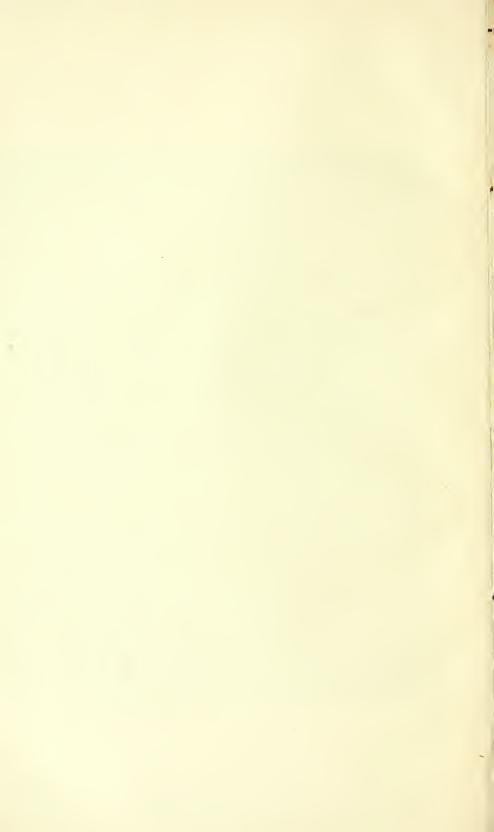
(Cat. No 167212, U.S. N. M.)

Fig. 7. SILVER TOOTHPICK, EAR SPOON, AND TWEEZERS.

(Cat. No. 167272, U. S. N. M.)



EAR RINGS AND OTHER ORNAMENTS.



eter set with a coral or turquoise bead. (See pl. 6, figs. 4 and 6.) Although made in Korluk Ts'aidam, the latter is a Tibetan earring in shape and style. Frequently a little strap passes over the ear and takes the weight of the earring off of the lobe of the ear. A small disk of leather or bone fixed on the hoop presses against the ear, prevents the earring from turning, and keeps the jewels in front, which would without it fall to below the ear by their weight.

Among the pastoral tribes of central Tibet (Namru, Jyadé, etc.) the men, while sometimes wearing the above-described earring, wear also a larger one consisting of a pendant of gold or silver in the middle of which is a large coral bead. The lower part is a hoop, on which is fastened a circular or heart-shaped plaque set with turquoises. (Pl. 6, fig. 1.) This earning is about 3 inches long. A rough piece of turquoise is frequently tied to the right ear, without any setting whatever. This is a favorite ornament all over Tibet, even among the wealthy people in the most civilized parts of the country.

In Lh'asa and other parts of central Tibet, besides the hoop previously described, officials usually wear a plain gold hoop to which is fixed a pendant about 3 inches long, in the middle of which is a large pearl; in this pendant are set turquoises; the lower end is enameled a turquoise blue. (J. D. Hooker, Himalayan Journals, II, p. 271, and Diary of Journey, etc., p. 236.)

Around their necks most Tibetans wear charm boxes (gawo) of wood, silver, copper, or leather, in which are carried charms against the various accidents which may overtake them. These charms are usually unintelligible or meaningless sanskrit words (see Emil Schlagintweit, Buddhism in Tibet, pp. 174, 254, etc.), or sometimes a copy of a short canonical work, as, for example, the "Diamond cutting sûtra" (Dorjé chöd-pai do). A bit of the gown of a saintly lama, a little of the tsamba left over from his meal and which has been molded into a small disk, on which is impressed the image of a god (on one in the Museum the image is that of Tsongk'āpa), are also frequently kept in these gawo, together with painted images of some god or guardian saint, also a piece of peacock's feather, supposed to keep off moths.

Some of these gawo are very elaborately decorated. In the Museum collection is an oblong silver box (No. 130391)\* 4½ inches long by 3 inches broad and 1½ inches deep. On either side of the box is a silver tube, through which the cord passes by which the box is worn around the neck or fastened to a broad strap passed over one shoulder and under the other arm, by which means five or six such gawo are carried, as is frequently the case. The decoration of this box consists in arabesques, Chinese dragons, and the "eight signs of good luck" (trashi tar jyä).† This gawo was made at Lh'asa, but shows Chinese influence in its style of decoration.

<sup>\*</sup> Not illustrated in this paper.

<sup>†</sup> See H. A. Oldfield, Sketches from Nipal, II, p. 179.

On pl. 5, fig. 12, is shown a small gilt gawo set with turquoises. It is 1½ inches square. This gawo is also of Lh'asa make, but is distinctly Nepalese in its filagree style of ornamentation. Other gawos showing this Nepalese style of ornamentation (the best silversmiths in Tibet are Nepalese and Chinese) are shown in Dr. J. D. Hooker's Himalayan Journals, I, pp. 176, 270. A small wooden gawo purchased in Mongolia, containing a gilt terra-cotta image of a tutelary deity, is in the Museum collection. It is probably of Tibetan origin.

The other ornaments worn by the men of Tibet are finger rings, which are the same as those previously referred to as being worn on the queues, or else bands of chased silver in which are set turquoises or coral beads (pl. 5, figs. 6-11). The women frequently wear a smaller gold ring set with a cluster of small turquoises. These Tibetan rings are found among the Mongols of the Ts'aidam, who obtain their jewelry from passing Tibetan travelers or when visiting Lh'asa or Trashilunpo on a pilgrimage. Two of these rings shown on the plate mentioned are known to the Chinese in Tibet as the "Tibetan saddle ring," on account of their shape. They are chiefly made in Dergé, in eastern Tibet (Land of the Lamas, pp. 202, 227).

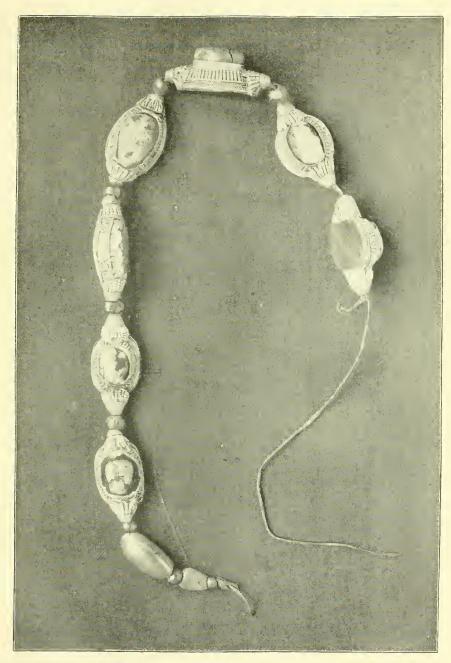
I have seen in certain portions of Tibet (Miri, near Shobando, for instance) the men wearing necklaces of coral beads and a substance which I believe is onyx, and which is called by them zé. (Diary of a

journey, etc., p. 275.)

Most of the ornaments worn by Tibetan women are displayed on their hair. Among the Panaka of the Kokonor, where, as previously explained, the women's hair is plaited in innumerable httle braids falling from the crown of the head over their shoulders and back like a cloak, they have three broad bands of red satin or cloth fastened to the hair. On these are attached embossed silver plates or cowrie shells, pieces of chank shell, and large pieces of red agate called "Chinese cornelian" (Han ma-nao) by Chinese traders, and which are said to be brought from Liao-tung. Besides these they wear turquoises, coral, or glass beads. Two of the bands begin at the height of the shoulders and the middle one at the waist; all of them reach down to the lower hem of the gown. The same kind of hoop earring as previously described is worn in both their ears, but most of the women wear none.

Among the Kamba of eastern Tibet the hair of the women is dressed in the same way as among the Panaka, but the usual ornaments are discoidal pieces of amber, in the center of which coral beads are frequently set. A number of these disks are worn on the crown of the head. On the bands of cloth which depend from the plants hanging down the back are also sewn similar amber disks or silver ornaments. (Land of the Lamas, p. 184.)

In portions of eastern Tibet, more especially the Horba country, Lit'ang and Chala (Ta-chien-lu), the married women wear large gold or silver plaques on their heads, sometimes wearing one set in front or on the back of the head (as in Horba and Chala), sometimes one on either



TURQUOISES, SET IN SILVER AND SEWED ON THE QUEUES OF WOMEN IN MAR K'AMS.

Lower extremity turquoises and coral beads.

Cat. No. 167275, U. S. N. M. Gart'ok.



side of the head and meeting over the crown, as in Lit'ang. Fig. 16 of pl. 5 is a silver one set with torquoises and coral, and is of the pattern worn in Hor Chango (Land of the Lamas, 260). In fig. 13 of pl. 5 is represented the kind worn in Chala where such ornaments are called mélong, pongyii or k'ok'or. In portions of western Tibet, where they are also the fashion, they are known as chir-chir (p'yir-p'yir).

In portions of the country, Mark'ams and the adjacent country, for example, where the women wear a long queue down their backs, large pieces of turquoise set in silver are worn fastened the whole length of the queue; between each consecutive piece is a small coral bead. (Pl. 7.)

Turner thus describes the dress of a Lh'asan lady of high rank, the mother of the infant Panch'en rinpoch'é lama:

Her complexion was somewhat darker than her son's. She had regular features, black eyes, and a character that particularly distinguishes ladies of rank in Tibet, the corners of the eyelids being extended as far as possible, by artificial means, toward the temples. Her hair was black, but scarcely visible, from the vast profusion of ornaments that nearly covered it, consisting of pearls, rubies, emeralds, and coral. Pearls, intermixed with beads of gold, and some relics, constituted the ornaments of her ears. Chaplets of larger gems hung round her neck, among which were balas rubies,\* lapis-lazuli, amber, and coral in numerous wreaths, one chaplet beneath the other, descending to the waist. Her vest was close buttoned round the neck. A girdle embraced it round the waist, which was fastened by a golden buckle, having a large ruby in the center. A garnet-colored shawl, wrought with white stars, completed her dress, which descended to the knee. She wore bulgar boots. (Capt. Sam. Turner, Embassy to the Court of the Teshoo Lama, p. 336.)

Huc (Souvenirs d'un Voyage, II, p. 257), speaking of the women of Lh'asa, says:

The Tibetan women's dress is very like that of the men. Over their gowns they wear a short jacket of many-colored stnif. They divide their hair in two plaits, which they let fall down on their shoulders. Women of low class wear a little yellow cap, resembling somewhat the liberty cap which used to be worn under the French Republic. The grandes dames only ornament their heads with an elegant and graceful crown made of pearls.†

The fashion in earrings among women varies considerably in Tibet from one locality or district to another. Besides those referred to on preceding pages, the Museum's collections contain several other varieties. On pl. 6, fig. 5, is shown a favorite style in central Tibet, Ch'amdo, and other districts. It is a large silver hoop over 2 inches in diameter, on the front of which is a heart-shaped plate thickly set with bits of turquoise. A small hook is attached to the plate and to the wearer's hair so as to take the weight of the ring off the ear. The pair in the Museum was worn by the native wife of a Chinese soldier stationed near Ch'amdo, and jade rings, such as are worn on earrings in

<sup>\*</sup>A balas or balass ruby. The word balas is a corruption of Balakhshi, a popular form of Balakhshi, because these rubies came from the famous mines on the upper Oxus, in one of the districts subject to Badakhshan. See H. Yule, Glossary of Anglo-Indian Words, p. 39.

<sup>†</sup>For further details, see Journ. Roy. Asiat. Soc., n. s., XXIII, pp. 121-133 and pp. 222-226, where I have translated all that is to be found in Chinese works on the subject. Also Dr. L. A. Waddell, The Buddhism of Tibet, p. 572.

China, especially in the south, have been added to these by the Chinese husband.

In fig. 3 of this plate is shown the Bat'ang style of earring, also worn in all Tibetan localities east of that district. It approaches more the Chinese style of earring than any other worn by Tibetans. It is frequently made of gold, but is invariably of the form here shown. The jewel in the lower part of it is also invariably a red coral bead.

The silver earrings worn by the women of the Chin-ch'uan, a border district of Ssŭ-ch'uan inhabited by Tibetans, are shown in fig. 2. They are made by Chinese silversmiths, and represent the peculiar form of citron called in Chinese Fo-shou, on "Buddha's hand."

The shirts described previously (p. 686) are buckled at the throat in eastern Tibet, when worn by women, with gold or silver buckles set with coral beads and turquoises. This buckle is sewn on to the shirt. A very fine specimen in gold, of Nepalese workmanship, is shown in fig. 2 of pl. 5. It was made in Lh'asa for a wealthy woman of Ta-chien-lu (Chala). Figs. 3 and 5 of pl. 5 are of silver set with turquoises and small coral beads. The design is in one case butterflies, in the other an open lotus flower. These were purchased in the Horba country in eastern Tibet.

Two small buttons of coral linked together by a gold or silver ornament are also much used in eastern Tibet on the shirts worn by women to fasten them at the shoulder and take the place of buttons. Fig. 4 in pl. 5 shows one of these linked shirt buttons.

In central and western Tibet the shawl (kadri) worn by the women is held together in front by a broad breastpin of gold or silver, called, I believe, chab-pang. A picture of one of these buckles is given by Dr. Hooker. (Op. cit., II, p. 195.)

Capt. Gerard, speaking of the people of Spiti in the extreme western part of Tibet, says:

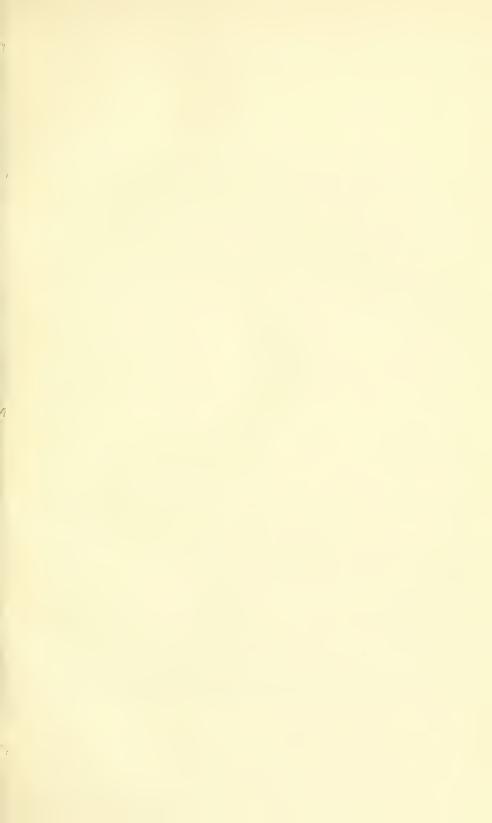
The women were literally almost weighed down and groaning under a load of ornaments, such as immense anklets and bracelets of silver or pewter, heavy earnings, metal chains of various kinds, beads of silver, precious stones, colored glass, and cowrie shells strung around the necks, ankles, and arms, and attached to different parts of their dress.

The Tartars of both sexes are very fond of ornaments, and they wear as many as they can afford to purchase, some laying ont large sums upon their pipes, knives, and trinkets of all sorts. They have necklaces upon which are strung large irregular pieces of a yellow substance called Poshel,\* which looks like amber, and when rubbed attracts feathers. They have beads of coral and other precious stones which resemble rubies, emeralds, and topazes, and have tassels of red beads hanging from the back part of their caps. (Capt. Alex. Gerard, Account of Koonawar, Vol. 111.)

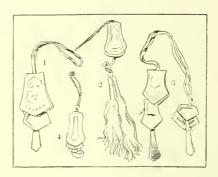
Capt. Alexander Cunningham (Ladak, p. 304), speaking of the Ladaki women, says:

Their heads are always bare, the hair being arranged in a border of narrow plaits, which hang round the head like a long fringe. From the forehead, over the division

<sup>\*</sup>Spos-shel (pronounced pö-shel) is the Tibetan word for amber. It means literally "perfumed crystal."



## EXPLANATION OF PLATE 8.



NEEDLE CASES.

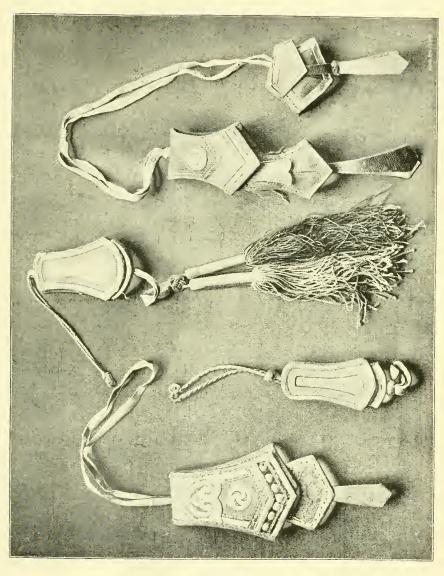
Fig. 1, NEEDLE CASE. Red and green leather. Brass nails along lower edge. Kokonor.

(Cat. No. 167157 U. S. N. M.)

Fig. 2. NEEDLE CASE. Red leather. Gold lace. Silk tassels. Upper part trimmed with silver thread. Chala.

(Cat. No. 131054, U.S. N. M.)

- Fig. 3. NEEDLE CASE. Red leather. Ring pouch of red leather. Lit'ang. (Cat. No. 167158, U. S. N. M.)
- Fig. 4. NEEDLE CASE. Red and black leather. Derge. (Cat. No. 167156, U. S. N. M.)





of the hair, they all wear a long narrow band of cloth studded with coarse many-flawed turquoises, which hangs down behind as low as the waist, and is usually finished off with a tassel of wool or a bunch of cowries. The ears are covered with semicircular woolen lappets, fastened to the hair and edged with brown or black fur, generally of the otterskin, called Kunduz.\* These ear flaps are always red, the inside being woolen, and the outside brocade. These are made coarse or fine according to circumstances, for the Ladaki women seem to pride themselves upon the style and material of these lappets just as much as European ladies do upon the fashion of their bonnets.

These "ear lappets," I may add, are commonly worn in northern China, where they are known as *erh mao*.

Although rosaries (treng-wa) belong properly to the chapter on objects used in religious worship and will be more fully described in that connection, they are considered by all Tibetans as not only indispensable in their daily devotions, but as ornaments, and are also used by many as a means of reckoning sums. (Land of the Lamas, p. 253.) They are worn by both men and women around the neck or on the wrist, and have invariably 108 beads. Some are made of ivory, others of seeds, of wood, of bone, of coral, turquoises, crystal, or glass.

Throughout northern and eastern Tibet most people carry a needlecase (kab-cho), suspended to a silver or brass chatelaine frequently of elaborate workmanship, to which is attached a short broad leather strap, through which the belt or sash passes. (Land of the Lamas, p. 166 and pl. 11.) A Chinese chatelaine (No. 167222)† is in the Museum collection. These needlecases are usually flat, bell-shaped, and made of red leather. The interior case can be pulled out by means of a strap or tassel from the cover, which is open along the lower edge (pl. 8.) Another form of needlecase, manufactured in Dergé, is a narrow iron case with a sliding top held in place by a spring, and is often highly ornamented (pl. 10).

Another article, frequently most elaborately ornamented and worn by all Tibetans and hanging from the same chatelaine to which the needlecase is attached, is a tinder‡ and flint pouch on the lower edge

<sup>\*</sup> Probably the name of the country from which they are obtained.

<sup>†</sup> Not illustrated in this paper.

<sup>†</sup> The tinder is made from the flowers of a small plant of the edelweiss family. It is called *pai pao-tzā* in Chinese. Moorcroft (Travels, 1,408) thus describes the preparation of tinder in Ladak:

<sup>&</sup>quot;At Undar or Shak-than Ring-mo (in Ladakh) I witnessed the preparation of a peculiar kind of tinder. A small shrub, not above an inch and a half high when in flower, was gathered and placed on the bottom of a dry iron vessel over a fire. As the hairy heads expanded they were plucked off and thrown away. The plants were repeatedly turned over to prevent their being burnt. When considered sufficiently dry the pan was inverted, and the leaves, placed on its blackened under surface, were beaten upon it with a small stick until well impregnated with the soot, any loose dirt being earefully blown off. In this state the slightest spark was sufficient to ignite the preparation. This substance, wrapped up in a thin roll of paper, is also used as moxa, or as actual cantery, pieces about three-fourths of an inch thick being laid upon the skin and set fire to. This is a favorite application for pain in the stomach." I have myself seen it prepared in exactly the same way among the Panaka of the Kokonor and the K'amba of eastern Tibet. Instead of soot they mixed a little very fine gunpowder with the parched and crushed plant.

of which is a steel. These are called mé-chay (written mé lchags) and are in common use all over Tibet, China, and Mongolia. The Chinese style of tinder pouch shown in Dr. Hooker's work (Himalayan Journals, II. p. 219) as existing in Sikkim, has been found by other travelers in Bhutan and even among the Abors and Mishmis. The Tibetan mé-chaq is of two styles, the Dergé and Pomäd forms. The first is always decorated with silver bosses, coral, and turquoise beads, and is of either red cloth or leather. (pl. 9, fig. 2.) The Pomäd kind, as shown in the specimen in the Museum collection, is a beautiful piece of work in open gold and silver, in which are set 3 large beads, 2 of coral, and 1 of turquoise. The pouch is of red cloth, and is 53 inches long and 24 inches broad. An embroidered cloth case fits over it to protect it from the weather (pl. 9, fig. 4) In pl. 9, fig. 3, and another specimen not here illustrated\* are mé-chay of Mongol manufacture, and were probably made in eastern Mongolia among the Halhas, though the former is Tibetan in its style of decoration.

Another ornament sometimes worn in eastern Tibet by women is shown in pl. 9, fig. 1. It consists of a toothpick, ear spoon, and tweezers, the latter, however, being only used as a toothpick. It is attached to the gown by a ring at the end of a silver chain; the implements hang by a few links of chain to a half rupee surrounded by silver work, in which are set coral and turquoise beads.

A short knife is carried suspended from the belt of all Tibetans; with it they cut their meat. The scabbard in some cases is highly ornamented; especially is this the case with knives of Dergé make (pl. 10).

A finely-ornamented belt with knife, needlecase, and strike-a-light, belonging to the writer, and of Dergé manufacture, is shown in pl. 10.

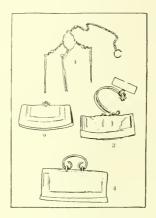
The knife used in the Kokonor region is 9\frac{3}{2} inches long—the blade, which is of iron, 5\frac{1}{4}. The handle is of horn, and iron and copper wires are inlet into it; the scabbard is of iron. These knives are made in two or three localities along the Kokonor border by Chinese blacksmiths. The knives from Shang-wu-chuang (about 20 miles from Hsi-ning in Kan-su) are especially prized, as are also the swords coming from the same locality (see Diary of a Johnney, etc., p. 104). The products of this locality are recognizable by the damascening on the blades. The people in this locality are a mixed Chinese-Turkish race, and this industry was probably brought here from Turkestan.

In the more civilized portions of Tibet the Chinese knife and chopsticks are frequently used, the case often richly ornamented with embossed silver, the handle of the knife and the ends of the chopsticks being also covered with worked silver (pl. 11, right-hand figures).

As a general rule Tibetans allow no hair to grow on their faces, but pluck out the few hairs growing on them as they appear with tweezers (chyamutser), which they earry suspended around their neek or from their



## EXPLANATION OF PLATE 9.



TOOTH-PICK AND STRIKE-A-LIGHTS.

- Fig. 1. SHAVER TOOTHPICK, TWEEZER, AND EAR SPOON. Attached by a silver chain to a half rupee. Upper ornament, butterfly with turquoise body. Chala. (Cat. No. 167272, U. S. N. M.)
- Fig. 2. TINDER AND FLINT POUCH. Red cloth. Silver nails around the edge.

  Three coral beads in the center. Dergé.
  - (Cat. No. 131024, U. S. N. M.)
- Fig. 3. TINDER AND FLINT POUCH. Russia leather. Ornamented with silver, turquoises, and coral. Jade cylinder to pass through belt. Eastern Mongolia.

(Cat. No. 167262, U. S. N. M.)

Fig. 4. Tinder and Flint Pouch. Red cloth. Gold and silver ornamentation.

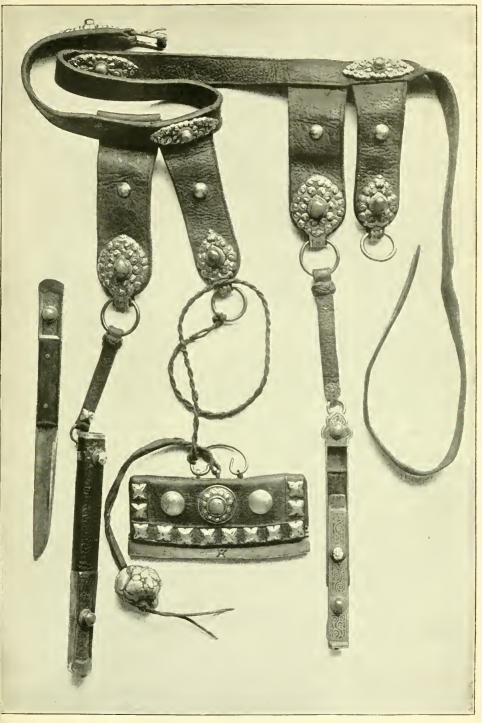
Thrquoise and coral beads in the center. Poyul.

(Cat. No. 167260, U.S. N. M.)



TOOTH-PICK AND STRIKE-A-LIGHTS.

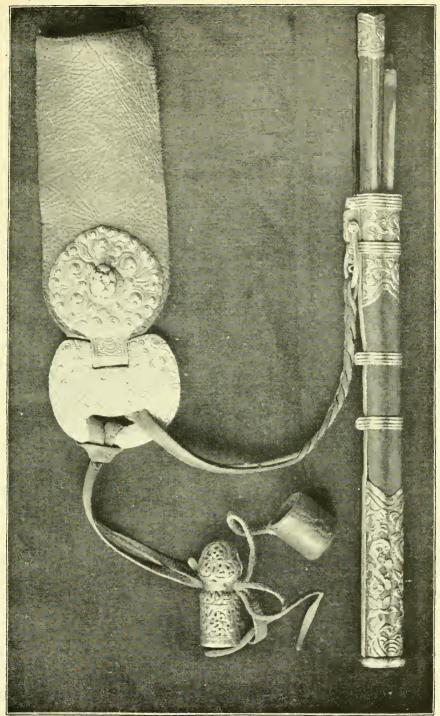




BELT OF RED LEATHER, WITH ORNAMENTS IN SILVER AND CORAL:

Kuife:—scabbard of iron and gold; coral and turquoise beads in handle and on scabbard. Tinder and flint pouch, with silver studs, large turquoise at end of thoug. Needle-case of iron and gold, set with turquoise and coral beads. Dergé.





Chatelaine of silver: Turquoise set in center. Chopsticks and knife in case, with silver mountings. Iron seal with leather cover.

Cat. No. 131230, U. S. N. M. Eastern Tibet.



belt or prayer beads.\* In the more civilized portions of the country, especially in the south and near China and India, it is not uncommon to see men wearing a mustache, and in some instances, among lamas especially, I have seen men wearing full beards, some quite thick and long. Chinese razors, or the sheath knives above referred to, are used to shave the head and face. I have seen no razor of native manufacture.

Dr. Griffiths, speaking of the ornaments worn by the women of Bhutan, says that they "wear a plate of silver fastened round the head and crossing on the upper part of the forehead, wire earrings of large dimensions, and peculiar rings fastened to a straight silver wire, and worn projecting beyond the shoulder." (William Griffiths, Journal of the Mission to Bootan in 1837-38, p. 166.)

Dr. Hooker (Himalayan Journals, II, p. 86) describes as follows the dress of some Tibetan women from K'amba djong,† a district to the north of Sikkim, within the confines of Ulterior Tibet (Tsang):

The men were dressed as usual in the blanket cloak, with brass pipes, long knives, flint, steel, and amulets; the women wore similar but shorter cloaks, with silver and copper girdles, trousers, and flannel boots. Their headdresses were very remarkable. A circular band of plaited yak's hair was attached to the back hair, and encircled the head like a saint's glory, at some distance round it. A band covered the forehead, from which coins, corals, and turquoises hung down to the eyebrows, while lappets of these ornaments fell over the ears. Their own hair was plaited in two braids brought over the shoulders, and fastened together in front, and a little yellow felt cap, traversely elongated, so as not to interfere with the shape of the glory, was perched on the head.

This mode of dressing the hair, as well as that of Bhutan referred to by Griffiths, are but modifications of the crowns worn at Lh'asa.

Tattooing as a means of ornamentation is hardly ever practiced by Tibetans. I have seen a few men from Lh'asa, or the adjacent countries, who had a "hooked cross" (yung-drung) tattooed on the back of their hands near the thumb, and some others with a round dot or two tattooed at the same place, but beyond this I have neither read nor heard of any tattooing among this people. The persons on whom I saw tattooing were traders, who had frequently visited China and India, where tattooing is known and practiced to a limited extent, and in either one of these countries, or by a man from one of these countries residing in their own, they may have had the marks on their persons done.

Wearing.—Although according to Tibetan accounts (see p. 672) the art of weaving was only introduced into this country in the seventh century, after intimate relations with China had been established, we may on good grounds doubt the accuracy of this tradition, for the Sui shu, or Chronicles of the Sui dynasty (A. D. 589-618) Bk. 83. speaking of the Tibetan Tang-hsiang tribes, says: "They weave yak and goat

<sup>\*</sup> Du Plan Carpin (Historia Mongalorum, 658) says of the people of Tibet (his Terra Burithabet): "Isti pilos in barba non habent: imò quoddam ferrum in manibus portant, sicut vidimus, cum quo semper barbam depilant, si forte aliquis crinis crescit in ipsa."

<sup>†</sup>These Tibetans are black-tent dwellers and originally came from northeast Tibet,

hair and sheep's wool, and make tents," and the Annals of the T'ang dynasty (T'ang shu, Bk. 221), which covers the period from A. D. 618 to 907, says of these same people, "Men and women wear long skin gowns, or gowns of coarse woolen stuff with a nappy surface."

Among the pastoral Tibetans of the present day cloth is woven from the hair of yaks and goats and from the wool of sheep. The wool is cut off the sheep with a knife and is of very irregular staple; very generally it is not washed before it is spun into yarn. The usual occupation of pastoral Tibetan men and women, or perhaps one may call it their usual amusement, is spinning yarn. They carry a small package of wool or yak hair in the bosom of their gowns and twist the yarn as they walk along herding their sheep, or when sitting in their tents over their tea. The spindle, of which a specimen is in the museum (see Diary of a Journey, etc., p. 132), is about 11½ to 12 inches long and consists of a straight wooden rod with a notch at the end in which the yarn is caught, and terminates at the lower end in a flattened clay whorl about 2 inches in diameter.

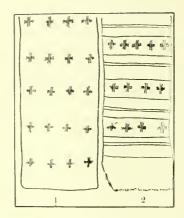
Sometimes the elay whorl is replaced by two sticks at right angles, and a little iron hook is fixed in the end of the rod instead of the notch above referred to. There is in the collection even a more primitive spindle, in which the whorl is a short bone and the rod has a fork at the end on which the yarn eatches. This spindle was collected among the Ordos Mongols, who spin and weave, by the way, exactly as the Tibetans do, though they practice the latter art to a much less extent (see Diary of a Journey, etc., p. 22).

The loom usually used in Tibet is of extreme simplicity; it is also in use in Mongolia and generally in the border country of northern China. The warp, which is hardly ever over 10 inches to a foot broad and about 40 to 50 feet long, is fastened to the ground by large pegs at either end; the weaver squats over this and pushes the balls of thread through the warp; two or three blows from a heavy wooden batten are given on each thread of the woof, and the alternate threads of the woof are kept separated by two small sticks and the batten itself. The part of the warp near the weaver is kept raised to a convenient height from the ground by either a little rounded piece of wood raised on feet and placed under it, or else by a big stone. The woof, according to Jaeschke (Tib. Engl. Diet., p. 331), is called pun (spun), the spindle, (pang) and the whorl (pang-lo). In this primitive fashion the material for the black hair tents of the pastoral tribes is woven, and also the woolen material used to make clothes, boot-linings, bags, etc. This latter stuff, which is always used undyed, is called la-wa, or ta in some sections of the country, and is sometimes quite fine. The coarser varieties, all manufactured by the Kokonor Tibetans, are represented in the Museum's collections by Nos. 131208, 167202, and 167203,\* in the last there are narrow bands of black wool.

<sup>\*</sup> Not illustrated in this paper.



## EXPLANATION OF PLATE 12.

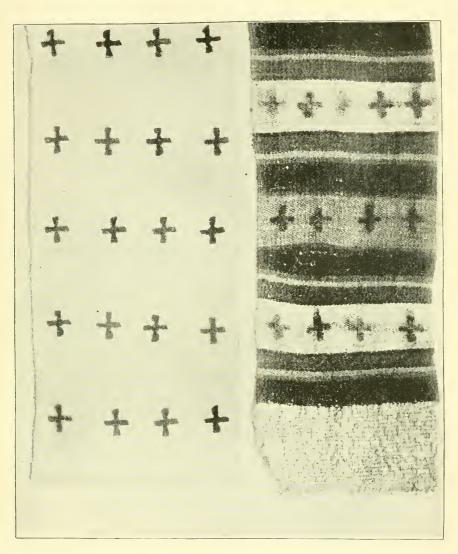


SPECIMENS OF TIBETAN CLOTH (TRUK).

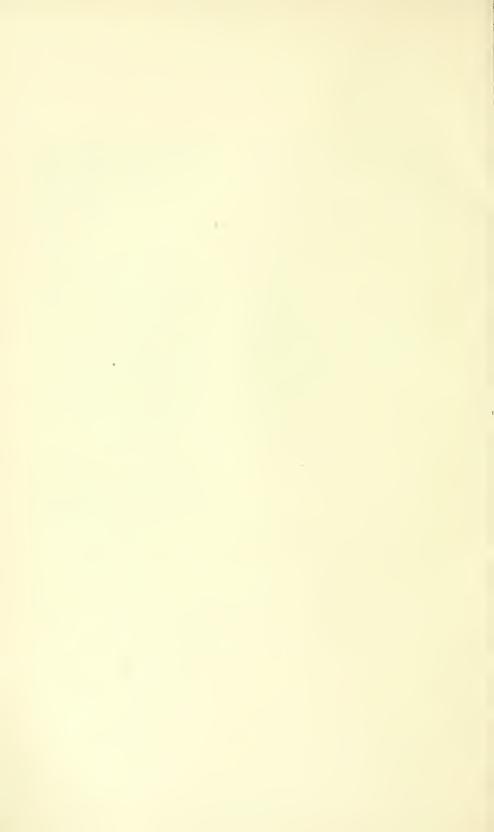
Fig. 1. FINE WHITE TRUK.—Stamped with red and blue crosses.
(Cat. No. 131205, U. S. X. M.)

Fig. 2. Ordinary Striped Truk. Yellow, blue, green, and red, with blue and red crosses.

(Cat. No. 167201, U. S. N. M.)



SPECIMENS OF TIBETAN CLOTH (TRUK).



In some parts of the country a rude vertical loom (called, I believe, tagtan written htag-stan) is used, but, as far as my unpracticed eye could discern, it showed no material difference in the mode of weaving from that above described. Jaeschke (Tib. Engl. Dict., s. v. dong no) speaks of a shuttle made of a piece of bamboo called dong po. This implement, which I have never seen used, may be common in western Tibet, where that missionary resided, but in all parts visited by me the yarn was made up into balls. The woof in the vertical looms is wrapped around two rollers so that the weaving may be done in a confined space, but I noticed no such mechanical devices as I was expecting to find for drawing up the parts of the warp as required, but only small sticks, varying in number, as in the ruder loom previously referred to. This loom has unquestionably been borrowed from China, and it is highly probable that in many parts of Tibet the one in use is of the pattern usual in China; unfortunately, I can find no description of one in any works to which I have access, and my own knowledge of the subject is too limited to make a description of it intelligible.

Father Desgodins says:

In Tibet the profession of weaver, called Ta-ken (htag-mk'an), is confined to the women. The loom employed is not complicated; it has only the essential elements usually found in such appliances.

Nearly all the woolen stuffs are diagonals. The pieces are from 30 to 35 centimeters broad, often less, and 10 meters long. They are thick and rather coarse, for the surface is not shorn as is done with cloth with us, but they are very warm and nearly waterproof.

I have been told of a woolen stuff, very fine and rather loosely woven, called tirma. It is a very fine texture, and resembles somewhat the stuff we call serge; it is frequently used to make the scarfs worn by the lamas over their shoulders during prayers; it is, I believe, the most expensive tissue they manufacture. They do not know how to weave wide stuffs as in Europe, but all the little narrow strips are afterwards sewn together with woolen thread, and look very well, though they would not suit French taste. (Desgodins, Le Thibet, p. 390.)

The cloth most commonly used in Tibet is that called *prug* (pronounced *truk*), but which is perhaps better known under its Chinese name of *pulo*, a transcription, I take it, of the native name. It is chiefly manufactured in Ulterior Tibet, near the city of Shigatsé (see Turner, Embassy to the Court of the Teshoo lama, p. 225), whence it is exported to all parts of Tibet, to Mongolia and China. The principal colors are red, purple, blue, white stamped with crosses, narrow stripes of blue, yellow, green, etc., running across the stuff, or a combination of the stripes and crosses. (Pl. 12.)

The price of *pulo* varies from an ounce of silver a piece to 30 or 40 ounces for the finest kinds. It is usually 10 or 11 braces (*dambā*) long.

The variety of cloth called *tirma*, mostly used, as Father Desgodins remarks, for lamas' shawls, is invariably dyed red. It is of the same width as the *truk*, about 9 inches, a good sample of it is in the Museum collection.

In Po-yul, in southern Tibet, a very closely woven stuff, which is

quite waterproof, is woven by the natives. It is extremely narrow, about 4½ to 5 inches in breadth, and in it are narrow stripes of red, white, green, blue, and yellow. This stuff is very much prized. The women make their aprons and skirts of it in some portions of the country (Mark'ams and Bat'ang for instance), and blankets of it are in great demand, 13 bands of the stuff being sewn together to make a blanket, never more or less.

I have found but few notices concerning Tibetan weaving in books accessible to me. William Moorecroft, however, gives some interesting details on the methods of weaving of the northern Ladakis:

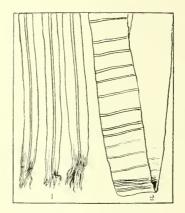
To the northward a coarse loom is in use, little unlike in its parts to the one common in Europe. Here the two ends of the warp are fastened together, and it is then stretched upon two rods, one fixed to the body of the weaver (who is invariably a woman) by a cord, which admits of the work being loosened or tightened at pleasure, and the other well fastened to some stones at a distance equal to half the length of the cloth. The whole is close to the ground, on which the work woman sits, but the portion close to her is slightly elevated by a third rod. Loops, each including a thread, and received upon a small stick like a rattan, supply the place of a heddle; of these there are three sets, which draw up parts of the warp alternately as required. A large heavy mash, into which a thin bar of iron is inserted, is a substitute for the reed, and three or more heavy strokes are made with its armed edge upon every thread of the woof. The last instrument must be taken out after the insertion of each piece of yarn, and when placed perpendicularly, with its two edges separating the warp, abundance of room is given for the passage of the balls of worsted made use of, without the covering of a shuttle. This part of the process is tedious, but the warp is prepared in a quick and simple way. Several pegs are driven into the ground so near each other that the whole may be reached without any material movement of the body; the yarn is fastened to one of them, and carried on round the others till a sufficient quantity has been wound; all are then taken off except three, which have their places supplied by rods, and the warp only requires spreading. - Each piece is about 17 inches broad, and the average length may be stated at 7½ yards. \* \* \* Very good sacking is also made of the hair and wool taken from the yak. (Travels in the Himalayan Provinces of Hindoostan, etc., II, pp. 72-74.)

Felt (chying-pa) is also largely used in Tibet. Its mode of manufacture is extremely simple. The wool, having been first picked over, is spread out a handful at a time on a large piece of felt on the ground, each handful overlapping the preceding one in such a way that a piece of uniform thickness and of whatever size is desired is made. This is rolled up tightly and with much pounding of the closed fist and then unrolled, and this work is kept up for an hour or more; then the roll is soaked in water and the work of rolling, unrolling, kneading, and beating with the closed fist goes on for another hour or two. I was told that a piece of felt had to be kneaded at least 1,000 times before it was ready for use. After the roll has been left to dry for a while it is opened, and by pulling it slightly in different directions the surface is made smooth, and the edges are trimmed with a knife. Sometimes it is bleached. Altogether, Tibetan and Mongol felt is vastly inferior to that made by the Chinese.

<sup>\*</sup> The Navajo loom, I take it, resembles this one very closely.



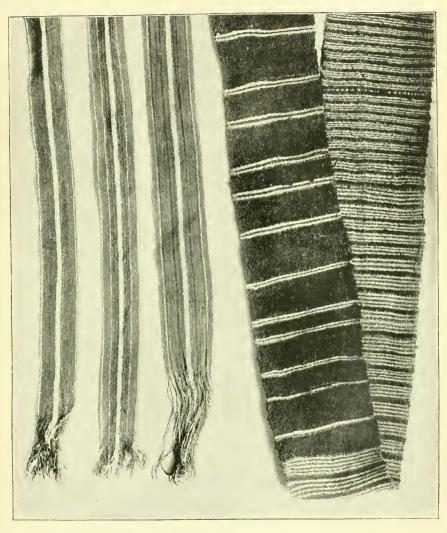
## EXPLANATION OF PLATE 13.



SPECIMENS OF TIBETAN WEAVING.

Fig. I. Garters. Woven in the Ts'arong.

Fig. 2. Belt. Woven in Jyadé. (Cat. No. 167200, U. S. N. M.)



SPECIMENS OF TIBETAN WEAVING.



There are fairly good specimens of Tibetan, Chinese, and Mongol felts in the Museum's collection. A specimen of fine Chinese felt formed into a pair of socks by the Eastern Mongols is also in the Museum. It was made at Chang-chia k'ou (Kalgan).

All the cotton stuffs used in Tibet are brought there either from China or India, as are also the silks, satins, broadcloths, etc., there made use of.

Dyeing.—Desgodins says:

The profession in which Tibetans excel is that of dyeing; not that there are artists specially given to this work, for every family can dye the stuffs woven in the house. Vegetable dyes are nearly exclusively used, and they know how to fix the colors so well that they are practically permanent. \* \* \* To dye red they use a kind of garance ten and ka, which imparts to the former a deeper but very fine color. I am unable to say what this latter substance is. With the refuse of ka they make sealing wax laguia.\* For dyeing yellow a very bitter root is used, which is also used in medicine for inflammatory diseases; they call it ching-tsa and the Chinese huang-lien. Indigo, which they call ram, comes to them from India, but they can also get it from certain of the warm valleys of their country. \* \* \* Sometimes they paint on the stuffs flowers and principally crosses. These colored stuffs are then called Laouachra-cha or chru-cha according as the stuff is laoua or chru. (Desgodins, Le Thibet, pp. 391, 392.)

The dye called teu by Desgodins is possibly the teŭ-ts'ao of the Chinese (Anchusa tinctoria?), and huang-lien is the Pierorhiza kurroa (Royle). Dr. Hooker (Himalayan Journals, p. 41) says that the leaves of a shrub (symplocos) are dried in Sikkim to be sent to Tibet, where they are used as a yellow dye. I have seen in parts of Tibet (west of Ch'amdo) people gathering a yellow gooseberry which, I was told, supplied a yellow dye, and the root of the rhubarb plant is also used to supply that color in parts of Tibet and in the Ts'aidam. I have been mable to learn where the Tibetans get their brown or green colors. The latter are especially fine. In northwest China a fine brown is obtained from the acorns of the holly-leafed oak (ching k'ang in Chinese). Possibly this is used by Tibetans, for the tree is very abundant in many places of eastern and southern Tibet.

According to Abbé Huc (Souvenirs, 11, p. 268), the Nepalese at Lh'asa do most of the dyeing, but, he adds, they are only allowed to dye native cloths, and all imported stuffs must be used as received there, this being done to encourage the consumption of native products.

V.

#### HABITATIONS-HOUSEHOLD UTENSILS-FOOD-TOBACCO.

The pastoral Tibetans throughout the country inhabit tents made of yak hair. The Tibetan tents are rectangular, with a flat roof. Some of them are not more than 10 or 12 feet long, but I have seen many 50 feet long by 30 feet broad. A space about 2 feet wide is left open along the center of the top to admit light and let smoke escape. Under it is a

<sup>\*</sup>It is the lac produced by the Coccus lacca.

ridge pole supported at each end by vertical posts. These are the only posts used for holding up the tent. The roof is stretched by cords which are fastened outside to the sides and corners, and which, passing over short poles some distance from the tent, are pegged to the ground. The lower edge of the tent is held down by iron pins or by horns of the Antilope Hodgsoni. Huc most felicitously compares these tents to huge black spiders with long thin legs, their bodies resting upon the ground. Sometimes to keep off the wind and snow the inmates build a low wall of mud and stones, or else of dry dung, around the outside of the tent, or, when large enough, inside of it; but they do not frequently resort to this expedient in the Kokonor section, where there is but little snow.

In the center of the tent is a long, narrow stove made of mud and stones, with a fireplace in one end and a flue passing along its whole length, so that several pots may be kept boiling at the same time. These stoves, in which only manure is burnt, have sufficient draft to render the use of bellows needless, and are altogether a most ingenious contrivance (see Diary of a Journey, etc., p. 123). Around the walls of the tents are piled up leather bags in which the occupants keep their food; also saddles, pieces of felt, and innumerable odds and ends, of which only the owner knows the use and value. A small stone or birchwood mortar for pounding tea, a wooden tea churn about 2 feet highmade of a hollowed log and hooped with wood (pl. 14, fig. 9), or out of a joint of bamboo, which are, in some parts, used also to churn butter in-a few small and very dirty wooden milk pails with handles of plaited vak hair (see Diary of a Journey, etc., p. 204), a log or two of wood roughly squared, and which take the place of tables, and a small quern are the principal articles of furniture in these "black tents."

Food.—The food of the tent-dwelling Tibetans consists principally of tea and parched barley or tsamba; the barley they buy from the agricultural Tibetans in exchange for butter, hides, or wool. The preparation of tsamba is not difficult. The grain is parched in a pan and winnowed, when most of the husk falls off; after this it is ground in a small quern, when it is ready for use. The flavor of tsamba depends on the browning or roasting of the grain, and on the fineness of the meal. When it is too fine it is not considered good, nor is it liked when it is ground in a large water mill, although large quantities of it are prepared by the Chinese for the Kokonor Tibetans in this way. The Museum has several samples of tsamba. The meal when ready for use is kept in small bags (tsam kuk), some of cloth, others of red leather, the lower part of the bag being sometimes covered with marmot or leopard skin (pl. 14, fig. 4). The other articles of diet of these people are mutton and, oceasionally, game, sour milk (sho or tarak), granulated cheese (chura), cream cheese (pima), the root of the potentilla anserina (chouma), and, occasionally, vermicelli (kua-mien) and wheaten cakes (palé or koré). (See also Diary of a Journey, etc., pp. 239, 274, and 278.)



#### EXPLANATION OF PLATE 14.



ARTICLES USED IN MAKING TEA.

- Fig. 1. Brass Pot.—Used by Kokonor Tibetans.—Made by Chinese. (Cat. No. 131189, U. S. N. M.)
- Fig. 2. Bamboo Tea Strainer. Eastern Tibet. (Cat. No. 131039, U. S. N. M.)
- Fig. 3. Wooden Bowl. Batang. (Cat. No. 167230, U. S. N. M.)
- Fig. 3a. SILVER SPOON. Lh'asa. (Cat. No. 131020, U. S. N. M.)
- Fig. 4, TSAMBA BAG. Made of red leather and striped cloth. Dergé. (Cat. No. 167211, U. S. N. M.)
- Fig. 5. COPPER TEAPOT. Silver spout. Handle and spout, dolphin-shaped; neck and lid finely chased. Dergé.

  (Cat. No. 467176, U. S. N. M.)
- Fig. 6. Wooden Butter Box. Lh'asa. (Cat. No. 131061, U.S. N. M.)
- Fig. 7. BRICK TEA. Known as go-mang-chapa variety. Ta-chien-lu. (Cat. No. 131033, U. S. N. M.)
- Fig. 8, SMALL TEA DASHER. Jyadé. (Cat. No. 167216, U. S. N. M.)
- Fig. 9. Wooden Tea Churn and Dasher. Made of two pieces of a hollowed log; hoops of willow twigs. Kanzé.

(Cat. No. 131040, U. S. N. M.)



ARTICLES USED IN MAKING TEA.



Tea is, however, the principal article of food among all Tibetans. It is not simply the beverage but the food of this people, for it is nearly invariably taken mixed with butter and tsamba and the leaves are not infrequently eaten. For a full description of the "brick tea" used in Tibet and its mode of preparation I must refer the reader to the account I have published elsewhere.\* The Museum collection contains a number of specimens of brick tea of various grades (pl. 14, fig. 7, shows one). I shall only describe here the way in which the beverage is prepared.

Tea, previously reduced to powder in a mortar, is put in the kettle (Diary of a Journey, etc., p. 96, figs. 1 and 4) when the water is hot, but before it is boiling, and is left to boil for about five minutes. Frequently a little concentrated extract of tea, kept for the purpose in a small teapot, is added to give additional flavor, and a little salt or soda is also thrown in. Sometimes it is partaken of at this stage of its preparation, but much more generally it is poured through a small bamboo strainer called ja-ts'ag (pl. 14, fig. 2) into one of the previously described tea churns (dong-mo), and a chunk of butter and a little tsamba having been added, it is vigorously churned for a minute or so, when it is poured into tea-pots of earthenware or metal (pl. 14, figs. 1 and 5, and pl. 15) and is then ready to be drunk. Each one draws from the bosom of his gown a little wooden bowl (purba), frequently lined or otherwise ornamented with silver (pl. 14, fig. 3), and, a little tea having first been sprinkled toward the four cardinal points as an offering to the gods, the bowls are filled. Taking with his fingers a chunk of butter from a sheep's pannel in which it is kept, or from a wooden butter box (marpa) (pl. 14, fig. 6), the drinker lets it melt in his bowl, drinking the while some of the tea and blowing the melted butter to one side. When but a little tea is left in the bottom of the bowl, a handful of tsamba is added, and the tea, butter, and meal are deftly worked into a ball with the right hand, the bowl being meanwhile slowly turned around in the left. The resulting lump of brown dough, which is of a rather agreeable taste, if the butter is not too rancid, is then eaten, and enough tea is drunk to wash down the sodden lump. When dried cheese (chura) is eaten it is first soaked in tea and then eaten with buttered tea and tsamba.

The Tibetans of all parts of the country make tea as above described, and eat their *tsamba* in this way. They have no regular meals; the kettle is always kept full of tea and each one takes tea when he is hungry.‡ Those who, like lamas reading the sacred books and others, are continually employed during the day, keep beside them a pot of

<sup>\*</sup>Land of the Lamas, pp. 278-281 and p. 310, and also to E. Colbourne Baber's Travels and Researches in Western China, p. 192 et seq.

tFrequently, also, the tea is drunk plain with the addition of about a fifth its volume of milk.

<sup>‡</sup>In Kunduz the people use *Keimuk chah* or cream tea; fat is sometimes added and salt is the uniform substitute for sugar. (Wood, Journey to the Source of the Oxus, p. 143, 2<sup>4</sup> edit.) Milk tea is or was served a taudiences given by the Emperor of China.

tea on a heap of hot ashes or a little *brasero*, and occasionally give it a stirring up with a small churning stick (pl. 14, fig. 8) resembling that used in chocolate pots with us.

When one has eaten sour milk (sho or tarak), or anything which soils the bowl, it is customary to lick it clean before putting it back in the gown.

If mutton or any other meat forms part of the meal, it is boiled in the same kettle in which the tea is prepared, and each one picks out a piece from the pot and holds it in his hand, cutting mouthfuls off it with his sheath knife and carefully removing every particle of meat from the bone. The Kokonor Tibetans and the K'ambas have a saying to the effect that one can judge of the way a man will manage important business by seeing him pick a bone. (Land of the Lamas, 79–80.)

Butter is made either in the teachurn or in a goatskin bag roughly shaken about. Dr. Hooker (Himalayan Journals, 11, p. 77), speaking of some black-tent Tibetans he visited in Upper Sikkim, says:

The churns were of two kinds, one being an oblong box of birch bark, or close bamboo wickerwork, full of branched rhododendron twigs, in which the cream is shaken. \* \* \* The other churn was a goatskin, which was rolled about and shaken by the four legs. The butter is made into great squares and packed in yak hair cloths; the curd is eaten either fresh or dried and pulverized (when it is called "Tschenzip").

Wherever I have traveled in Tibet I have found the butter made into balls, sometimes weighing 20 pounds or more; it is sewed up in a sheep's paunch or wrapped in a bit of goatskin with the hair left on. Dr. Hooker's Tschenzip is perhaps better known as *chura*; it is not used to any great extent except among the tent dwellers.

Moorcroft (Travels, 11, p. 79) says:

At Kinar (in Ladak) I first learned that dahi, or cardled milk, is charned into butter, and found a pail employed as a churn, the churning stick being supported by two arms fastened to a post and turned by a rope, as in Hindostan. The natives affirm that butter made from milk in the first instance disagrees with them.

The teapots used by Tibetans are of earthenware or metal, and, though the ornamentation on them varies somewhat in different localities, the general shape is everywhere the same—a very narrow neck, a large globular body, and a rather small base. The spout is most frequently ornamented so as to represent a dragon's head, the extremity of the spont projecting from out the mouth. A metallic cover is attached by a chain to the handle, in which, in the case of earthenware teapots, a hole is made for the extremity of the chain. In some of the earthenware teapots, especially those from Lit'ang and farther east, irregular cubes of broken chinaware are pressed into the parts so as to form a rough kind of ornamentation. The mouth, spout, and handle of these teapots are luted on, and there are lines grooved around the neck and body of the pot, the lines on the latter part being usually vertical. Some pots are made of black earth, but most of them of coarse reddish clay, in which there is a good deal of mica, and all are very porous. Before being used, earthenware pots are slightly heated



#### EXPLANATION OF PLATE 15.



EARTHENWARE TEAPOTS.

- Fig. 1. Earthenware Teapot. Jyadé. (Cat. No. 167231a, U. S. N. M.)
- Fig. 2. Red Earthenware Teapot. Lh'asa. (Cat. No. 167231b, U. S. N. M.)
- Fig. 3. BLACK EARTHENWARE TEAPOT. Having small pieces of Chinaware pressed into the surface. Stamped brass top. Lit'ang.

  (Cat. No. 167231c, U. S. N. M.)



EARTHENWARE TEAPOTS



and well rubbed with butter. Good specimens of earthenware teapots are shown on pl. 15.\* The best metal teapots are made in Dérgé in eastern Tibet, and in many of them brass, copper, and silver are combined so as to produce a highly ornamental effect. A Dérgé pot of wrought brass is in the collection, and on pl. 14, fig. 5 is shown a teapot of copper with chased spout and handle; both have highly ornamental tops. Several teapots in my private collection are of silver and brass, and show much taste and great eleverness in execution.

Throughout Tibet it is not uncommon to now and then find poor people reduced to using a substitute for tea—chips of wood, roasted pease, or willow leaves, anything, in fact, which can impart a little color and slight astringent taste to their drink.

Among the Rongwa Tibetans of northwest Kan-su it is customary to eat *tsamba* dry, with a small spoon. (Pl. 14, fig. 3a.) They throw a little meal into their mouths, taking it from a large bowl placed before them, and then wash the dry stuff down with a gulp of tea from their wooden bowls.

Dr. Griffiths says of the people of Bhutan:

They use brick tea from Tibet and make rungapah, a substitute prepared from the leaf of a pear or medlar; also chang, made from rice. (Dr.W. Griffiths, op. sup. cit., p. 167.)

In the more civilized parts of Tibet tea and tsamba are used in the same way and nearly to the same extent as among the tent dwellers, and vegetables form a very small portion of the diet of any of the Tibetan people. Rice, imported from China and Bhutan, is occasionally used, sometimes boiled with milk, sometimes made into a pillaw (dré-sil in Tibetan), in which is put melted butter (marku), raisins, and sugar. Spaghetti (in Chinese, mien) is also eaten by the house-dwelling Tibetans, by whom it is known as jyat'ug, and this dish, as well as vermicelli (kua-mien), has been introduced into the country by the Chinese. Chinese condiments are also used by the wealthy Tibetans, who frequently have their meals served in purely Chinese fashion.

While pork is never eaten by the tent-dwelling Tibetans, it is used to a considerable extent by the people of central and some parts of eastern Tibet, but mutton and yak flesh supply by far the largest part of the animal food eaten by them. The pastoral Tibetans export in winter to Lh'asa and elsewhere frozen sheep's carcasses, and they themselves use large quantities of dried mutton (sha kam). The meat is cut in strips, boiled, and then dried. In this shape it will keep for nearly a year, and is much used while traveling.

Cabbages, turnips sometimes dried, radishes and potatoes, pease, and several varieties of beans are eaten, but in very small quantities, the people preferring tea and *tsamba* to any other diet which can be placed before them.

<sup>\*</sup>I have never seen pottery manufactured in Tibet, and the only reference to the subject I have found in any work on Tibet is in Captain Pemberton's Report on Bootan, p. 74.

H. Mis. 184, pt. 2—45

The only alcoholic drink of the Tibetans is barley wine, or näs ch'ang. Jaeschke (Tib. Engl. Diet., p. 154, s. v. ch'ang) thus describes its preparation:

When the boiled barley has grown cold some pabs (or yeast) is added, after which it is left standing for two or three days, until fermentation commences, when it is called glum. Having sufficiently fermented, some water is poured on it, and the beer is considered ready for use.

In some parts of the country this näs ch'ang is distilled, and a very strong colorless liquor of considerable strength thus obtained, which is called arrak.

Houses.—Tibetan homes are so much alike throughout the whole country that a description of one will serve for all. They may, however, be divided into two classes, those of the rich, in which there is a central court, around three or more generally four, sides of which rise buildings usually three stories high, and those of the poorer class, which are two storied, and have a courtyard in front or behind them. In both classes of houses the ground floor is used as a stable and godown. The following description of the houses of East Tibet will apply, with such slight differences as the scarcity or abundance of timber in the different localities must occasion, to houses throughout Tibet:

The walls of the houses are generally made of flat stones, held together with mud mortar. I do not believe that lime is ever used. Often the walls are of beaten earth, The ground floor is ordinarily given up to cattle: On the first floor are the rooms, usually large, and lit by means of little square or oblong windows divided by a bar in the shape of a cross. There is no glass in the window frame-not even paper, as in China. The windows have wooden shutters, which are earefully closed at night. Around the doors and windows is sometimes a molding painted in red, white, and blue, consisting of the ends of the projecting rafters, and frequently on this kind of cornice are flat stones, on which are written the famous prayer Om mani peme hum. In large buildings the first-story apartments form three sides, and sometimes even a square around an interior courty and, which is always disgustingly dirty. In the better sort of buildings there is always a covered gallery opening onto the courtyard in front of the rooms. The roof forms a terrace, is of earth, and is used as a thrashing floor. On the uppermost terrace there is usually a little pavilion, or idol room, surmounted by a terrace, where are planted la-der, long poles to which are attached narrow pieces of linen covered with superstitious sentences.\* As a general rule, at each corner of the house there is a small tower, on the top of which is an earthen vase, in which every morning the devont burn in honor of the devil, sweet-smelling wood, little twigs of cypress or pine. Ninety-nine times out of a hundred the stairway is only a long log of wood 6 or 8 inches broad and 4 or 5 thick, on one side of which and 7 or 8 inches apart are notches about 2 or 3 inches deep, just enough to rest half the foot in when going up sideways. The people prefer these ladders to ordinary stairways because in case of an attack by robbers they can draw them up and defend themselves better. It is also as a measure of safety that they are careful to have only one door leading into the courtyard, and no windows on the ground floor. (C. H. Desgodins, Le Thibet, pp. 379-381.)

Cunningham, speaking of the houses of Ladak, says:

<sup>\*</sup>Georgi, Aphabetum tibetanum, p. 509, calls these "tarpoch'é arbor salutaris, depulsoria mali."

<sup>†</sup> Conf. Land of the Lamas, p. 248.

The houses usually consist of 2 or 3 stories and sometimes of 4. The foundations and lower parts of the walls are built of stone, the upper walls of large sun-dried bricks, 20 by 10 by 6 inches. In the better houses some of the rooms are of considerable size, 25 feet long and 18 broad, but they are always very low, the highest not exceeding  $7\frac{1}{2}$  or 8 feet. The roofs of these large rooms are always supported by plain wooden pillars. The roof is formed of poplar spars 5 or 6 inches in diameter, peeled white, and laid only 1 to  $1\frac{1}{2}$  feet apart. The beams are covered in with small, straight pieces of poplar branches about 1 inch in diameter, peeled white, and placed touching each other.\* Generally they are laid straight across the beams, but sometimes at different angles, in the alternate intervals, so as to form a pattern lake herring bones. The whole is then covered with a layer of leaves and a thick coat of well-beaten clay. The floors are generally of earth, but the better sort are paved with small slit pebbles, about the size of turkey's eggs, set in clay with the flat surface upward. They form a clean, hard, smooth, and lasting floor.

The principal room generally has a balcony toward either the sonth or the west from 10 to 20 feet in length and usually about  $2\frac{1}{2}$  feet in width, where the family sit to enjoy the sun in the winter season. The doors are mere rough planks of wood, joined together by wooden tenons, and sometimes strengthened by crossbars fastened by wooden pins. Purdahs or wadded curtains are also used as an additional means of excluding the cold wind,† but when the doors are shut there is only a dim light admitted into the apartments through one or two loopholes, which are closed with small shutters at night. \* \* \* In Ladak the upper story is usually reached by a flight of earthen steps, but in Lahul by the sloping trunk of a tree notched into steps. (Alex. Cunningham, Ladak, pp. 313, 314.)

In the mountainous and well-timbered regions of western Kan-su, inhabited by Tibetans, log houses of one story are much used, and in portions of eastern Tibet the second story of many of the houses is made of logs. This work is, in most cases, done by Chinese carpenters.

As regards the houses of eastern Tibet and such other portions of the country as I have visited, there is absolutely no furniture in them. Sometimes a log of wood, roughly squared, or a low Chinese table is found near the hearth, the smoke from which escapes as best it can through a hole in the ceiling or by the low door and little windows. Some houses contain furnaces or cooking stoves, similar to those used in the black tents, on which the kettles boil over a dung or wood fire. In others there are large, open hearths, in the center of each of which are three stones to rest the pot on. The simplicity of the nomad is found in all the appointments of the agricultural Tibetan's house. (Land of the Lamas, pp. 191–195, Comp. C. R. Markham, Narrative of the mission of Geo. Bogle, p. 122.)

The houses of the people of Bhutan differ principally from those previously described in the roofs, which are made of "shingles of pine, 5 or 6 feet in length, laid over a framework and kept in their place with stones. The slope is, of course, very inconsiderable, otherwise the stones would roll off. \* \* \* The appearance of the houses is precisely that of Swiss cottages. They are singularly pictures que and comfortable, and

<sup>\*</sup>When a house has been used for a year or more the ceilings become a shining black color from the smoke of the fires.

<sup>†</sup>These are also used in parts of eastern Tibet, where they have been introduced by the Chinese. Felt or wadded door curtains are used all over northern China.

the only drawback is a want of chimneys; but the Bootanese do not know how to construct these, and the smoke finds its way out as best it ean." (Ashley Eden, Report on the State of Bootan, p. 121.)

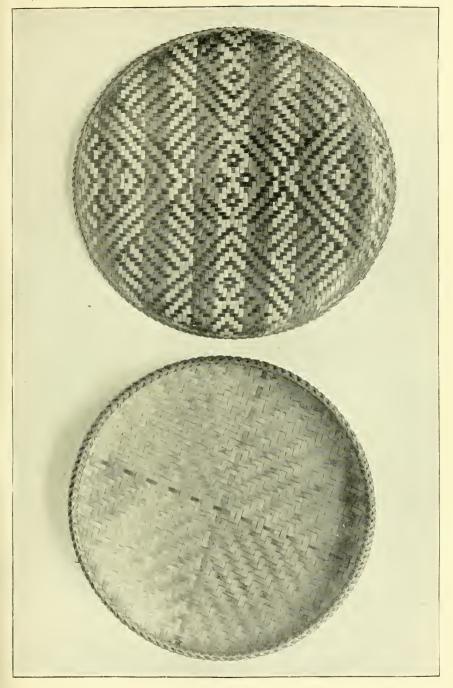
Tibetan houses are lit by means of small lamps (mar mé or zumar) filled with butter in which a little cotton wick is stuck. Sometimes this lamp is of brass or copper and is about 3½ inches high. Lamps of the same pattern are used on altars in temples, where one will frequently see long rows of them, several hundred in number, burning before the sacred images. Other lamps are but small earthenware saucers or cups, in design similar to the brass ones. Besides this mode of lighting the house the only other which I have seen consisted in chips of pitch pine burnt on a flat stone, put in the middle of the room. As a general rule, Tibetans go to sleep as soon as it becomes dark, and in many houses there are not even to be found the primitive lamps above described.

The kettles used in Tibetan households, whether it be among tent dwellers or people living in houses, are the same; they are usually rather flat and thin so that they can be easily heated by a dry dung fire, as dung is the only kind of fuel available in the greater part of the country. These kettles, several of which are in the Museum collections, vary in size from 8 to 10 inches in diameter to 24 inches or even more. The Shigatsé kettles, which are all tapering from the middle toward the bottom so as to fit in the holes on the cooking stoves, are frequently of very large dimensions in the houses of the rich and in lamaseries. I have seen some over 2 feet in diameter. The rounded form is in general use in Mongolia, northern and eastern Tibet, though in the two latter countries it is usually without handles. Most of the copper kettles in use in eastern Tibet, Bat'ang, Lit'ang, etc., are made in China in the Chien-ch'ang (in southwest Ssu-ch'uan). Those used in the Kokonor and adjacent countries are also made by the Chinese of Hsining and Sung-p'an (see Diary of a Journey, etc., p. 96).

In some parts of the country near Ladak, and which are inhabited by tent dwellers, large stone vessels are also in use. In the report of Nain Singh's journey of 1873, when speaking of the people inhabiting the tablelands in northwest Tibet, it is said—

At the permanent camps they had large caldrons, generally made of stone; in these they used to make a very weak soup, into which they threw a handful of flour. At their smaller camps they cook in smaller vessels made of stone or copper, both of which are imported from Ladakh. All articles of copper or iron are very much valued. \* \* \* (Jour. Roy. Geog. Soc., XLVII, p. 93; Conf. Wm. Moorcroft, Travels, I, p. 397.)

Among the other household utensils represented in the Museum collections are small birch bark pails, in use wherever the tree is found growing, in northwest Kan-su, in Bat'ang and Sikkim, and closely resembling those made by the Ainu. There are also small, round wooden boxes with tops, turned by the Chinese in Yiin-nan, and used to keep salt or red pepper (latzé) in, brass ladles, and bellows made of



WICKERWARE BOX.

Pattern, red and black; made of mountain bamboo.

Cat. No. 167287, U. S. N. M. Poyul.



tanned goatskin. In this latter implement an iron nozzle about 18 inches in length is tied in the skin of one of the legs, the skin is cut off at the fore legs, and the opening left by the other hind leg is sewed up. The mouth of the bag is held with the left hand stretched out from the body, and with the right hand the open end is opened and shut; when filled with air the right hand is held firmly against the body and the left arm, against which the closed mouth of the bag presses, is lowered, and the air thus expelled through the nozzle. These bellows, called kumo, are used throughout Tibet in camp as well as in the houses. In some of the lower valleys near regions where the bamboo grows, a simple bamboo tube is used instead, and through it the cook blows the fire, applying the tube against his mouth. This simple contrivance is used also throughout Ssű-ch'uan.

The Lh'asan iron padlock (dongpa) has the hasp armed with 4 springs, and slides inside the lock until the springs have passed 2 shoulders on the inside which catch and secure it. By means of a forked key worked horizontally on slides along the under side of the lock, the springs of the hasp are pressed down from the shoulders and the hasp flies out. The key is quite complex, owing to the number of guides along which it must pass in order to move the spring. These guides vary in each lock, and the lock is copied on those in general use throughout China (see Diary of a Journey, etc., p. 281).

Wickerware is never used among the tent-dwelling Tibetans, and none of that which I have seen in other parts of the country was made by the people themselves. In Poyul, in southern Tibet, the people of which are not pure Tibetans, very pretty wickerwork is made. Pl. 16 shows the usual shape of a little covered basket which comes from that country. It is made of white, black, yellow, and red strips of cane woven in diagonal pattern. In shape the basket is cylindrical, 11 inches in diameter and 1 inch deep; the cover fits over the bottom. I have also seen joints of bamboo covered with similar wickerwork and made in the same country. They are used to keep ch'ang in.

The Tibetans in some parts of the country make very coarse erates of a truncated pyramidal form which they carry on their backs; they use them principally to collect dry dung in. The tea strainers previously referred to are made either by the Chinese or by the people living near the Indian border. In the various books of travel to which I have had access, I have found no mention of wickerware in Tibet, and the various names giving different forms of baskets by Mr. Jaeschke in his dictionary (pé-ra, "a flat basket;" gzed-ma, "a box-shaped basket with lid;" tsé-po or tsél-po, "a basket carried on the back;" bag-tsé, "a little basket for wool or elews of wool,") are nearly all peculiar to portions of the country in close proximity to India.

Tobacco.—Tobacco is in general use in Tibet, but probably from the fact that lamas are only allowed to take it in the form of snuff, this mode of using the weed is much more popular than smoking. The

tobacco used comes from either China, Bhutan, Sikkim or Nepaul, that from Bhutan being, as I understand it, greatly preferred. This tobacco is, however, rather expensive and strong, so it is frequently used for smoking either mixed with the leaves of the rhubarb plant, or the latter substance is even used pure in its stead. This substitute for tobacco is in great demand in Tibet among smokers, and is exported from Lh'asa, or the countries to the southwest of it rather, where the plant is found, all over eastern Tibet where it is called Lh'asa t'ob-cho. Snuff is made in the country or imported from China; the latter variety is, however, too much perfumed to suit the Tibetan taste. Frequently, to make the snuff milder, ashes are mixed with it. In the northeastern part of Tibet well-polished ox horns are used to hold the snuff, several examples of which are shown on pl. 17.\* One of these is handsomely ornamented with silver bands, bits of coral, and turquoise. In other parts of the country (among the K'amba of northeastern Tibet for example), the coarsely pounded tobacco is put in a leather pouch, and when a pinch is wanted the finer particles are scraped off the sides with a knife.

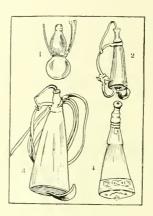
In Lh'asa a snuffbox is made of wood of oblate-spheroid shape, across the interior of which is stretched a fine cloth sieve. The coarse tobacco is put in the top of the box through a hole made for that purpose, and by lightly striking the box on the knee the finer parts are sifted through into the lower compartment. By a little hole in the lower part of the box the snuff is poured out onto the nail of the left thumb held against the index, and is thus inhaled daily in enormous quantities. Pl. 18 shows a fine specimen of this kind of snuffbox. Women use snuff, but rarely smoke; when they do, they use the Chinese water pipe.

The tobacco pipes used by the Tibetans are usually of Chinese make, the bowls of brass, iron, or white copper (pl. 19, figs. 1 and 2), the stem of bamboo and about 2 feet long. Monthpieces are not usually used. I have only seen three kinds of pipes of purely Tibetan manufacture; one, in use among the Panaka, is made of the horn of the antelope (huang yang), with a metallic monthpiece and a metal bowl. Some of these pipes, in which they only smoke Chinese water tobacco, and which are a modification of the short bamboo pipe in use in Ssu-ch'uan for the same purpose (as seen in fig. 4), are ornamented with coral and turquoise beads. Another pipe, in use in Jyadé, is made of a forked twig; the larger part is hollowed out, then lined with iron, and this forms the bowl; in the smaller and longer branch the pith is removed, and this constitutes the stem. In southeastern Tibet, in the Ts'arong and among the Mishmis and the hill tribes along southern Tibet, the root of a small mountain bamboo is used to make the bowl of the pipe, and the same plant supplies the stem. (Fig. 3).

<sup>&</sup>quot;Similar mulls or snuff horns are in use not only in Scotland, but among the Wachaga of Kilimanjaro, in East Africa. (See Cat. Nos. 151242, 151243, and 151244, U.S. Nat. Museum.)



# EXPLANATION OF PLATE 17.



SNUFF HORNS.

Fig. 1. Chinese Snuff Bottle. Made of a small gourd. Stopper and spoon of ivory.

(Cat. No. 167256, U. S. N. M.)

Fig. 2. SMALL SNUFF BOTTLE. Made of ox horn; band of copper around lower edge. Ts'aidam Mongols.

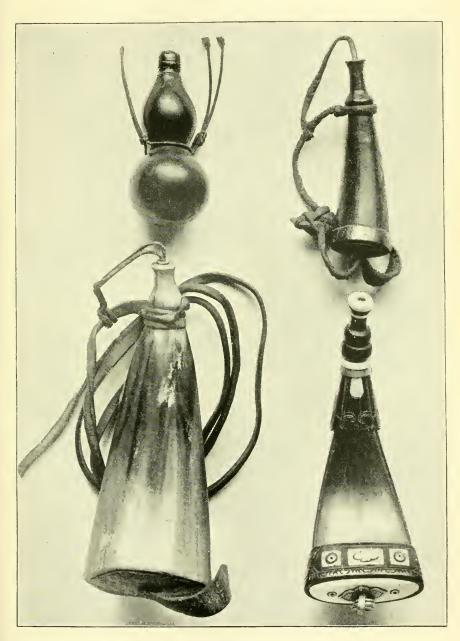
(Cat. No. 167255, U. S. N. M.)

Fig. 3. Yak Horn Snuff Bottle. With leather thong to fasten it to the gown; bottom, of wood: stopper, of leather. Kokonor Tibetans.

(Cat. No. 167263, U. S. N. M.)

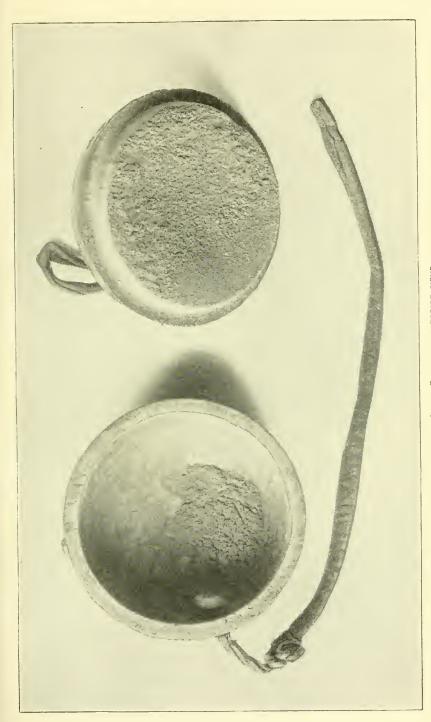
Fig. 4. Snuff Bottle. Made of light colored horn. Extremities, of black horn in which is set ivory, coral, and turquoise beads. Stopper, of ivory with silver rings. Kokonor.

(Cat. No. 167183, U. S. N. M.)



SNUFF HORNS.



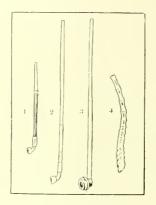


WOODEN SNUFF BOX, WITH INTERIOR SIEVE. The smiff is poured out through a hole shown at the top of the left-hand figure.



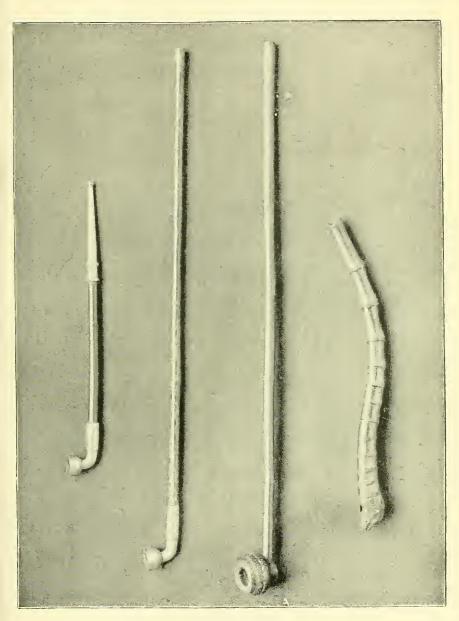


## EXPLANATION OF PLATE 19.



TIBETAN PIPES.

- Fig. 1. MONGOL PIPE. Bowl, of white copper (Peking manufacture): Stem of bamboo. Monthpiece of silver (Mongol manufacture). Ts'aidam. (Cat. No. 167152, U. S. N. M.)
- Fig. 2. Tibetan Pipe.—Chinese white copper bowl.—Bamboo stem.—Bat'ang. (Cat. No. 131319 U. S. N. M.)
- Fig. 3. Lissu Bamboo Pipe. Bowl, of bamboo root. Southeastern Tibet. Cat. No. 131190, U. S. N. M.)
- Fig. 1. Ssč-cu'uan Bamboo Pipe. For smoking water tobacco. Ya-chon Fn. (Cat. No. 167257, U. S. N. M.)

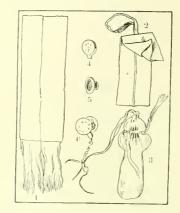


TIBETAN PIPES.



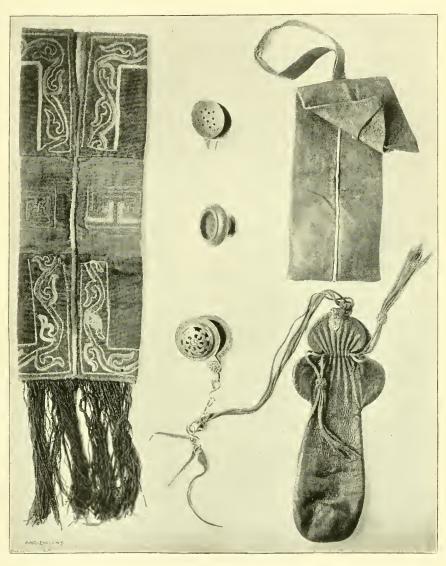


# EXPLANATION OF PLATE 20.



TOBACCO POUCHES AND FIRE HOLDERS.

- Fig. 1. Embroidered Tobacco Pouch. Red and black cotton. Ts'aidam. (Cat. No. 167258, U. S. N. M.)
- Fig. 2. Tibetan Tobacco Poucii. Red leather Kanzé. (Cat. No. 131019 U. S. N. M.)
- Fig. 3. CHINESE TOBACCO POUCH. Black leather. Bat'ang. (Cat. No. 167176, U. S. N. M.)
- Fig. 1. Brass Fire Cup. Provided with lid. Ts'aidam. (Cat. No. 131204, U. S. N. M.)
- Fig. 5. Wooden Fire Cup. Kan-su. (Cat. No. 167253, U. S. N. M.)
- Fig. 6. Wrought-Iron Fire Cup. Provided with hid and pipe cleaners. Dergé. (Cat. No. 131319, U. S. N. M.)



TOBACCO POUCHES AND FIRE HOLDERS.



Smokers carry their tobacco in long red leather pouches (pl. 20, fig. 2), or in the black leather pouches in general use in China (fig. 3). To these are suspended a small metal or wooden fire bowl (figs. 4-6) and a pipe cleaner. The pipe is usually carried passed through the belt, in front of the person, and the pouch either hangs from the belt, or, when a short pipe is used, it is stuck in the pouch and both are carried inside the gown.

Those among the Tibetans who smoke the water pipe use the Chinese pipe, or else the short wooden hubble-bubble in use in Kashmir. The tobacco used in water pipes is prepared in China, in Ssǔ-ch'uan and Kan-su, that coming from Lan-chou, in the latter province, being considered the best; its preparation I have described in Land of the Lamas (pp. 34–35). Dr. Hooker, in his Himalayan Journals (II, p. 152), tells us that the Phipun of Lamteng, in Sikkim, "was an inveterate smoker, using a pale, mild tobacco, mixed largely with leaves of the small wild Tibetan rhubarb, called 'chula.' Snuff, he says elsewhere (II, p. 232), is little used, and is principally procured from the plains of India."

#### VI.

#### AGRICULTURE-WEAPONS-HUNTING-MUSIC-DANCING.

Throughout Tibet the only instruments of husbandry are the hoe and the plow. The former is usually made entirely of wood. The handle, about 30 inches long, is slightly curved, and on the natural bend at the end of the handle is tied a pointed wooden blade (see Diary of a Journey, etc., p. 362). The plow is of the same rude description, and is without even a share in most parts of the country. It is drawn by one yak; a yoke or stick resting on its neck is fastened to the plow. A man leads the yak and another guides the plow, scratching slightly the soil. For harvesting a rude sickle is used, consisting in a handle about 18 inches long, in which a short iron blade is set at right angle. The flail is in use in some parts of the country, but as a general rule the grain is thrashed out by goats or ponies driven over it, and is afterwards winnowed on the housetops. (See, for further information on the subject, C. H. Desgodins, Le Thibet, p. 397.)

Irrigation is well understood in Tibet and is extensively used. (See Pemberton's Report on Bootan, p. 66.) Among the Tibetans of Northwest Kan-su water is carried considerable distances across valleys in troughs dug in logs supported by light trestlework, and this system is also found in many portions of southern Tibet. The fields are usually fenced either with brush, poles, or low stone walls.

Weapons.—The bow is apparently not a Tibetan weapon, as all those in use in the country are imported from China or Bhutan. The quiver, bow ease, and all the accounterments are purely Chinese or Bhutanese in style. The usual length of the Chinese bow (dzu in Tibetan) is about 5 feet, and the arrow (du), 2 feet 6 inches. Pl. 21 shows the best arrangement of these articles. This specimen is a beautiful piece of

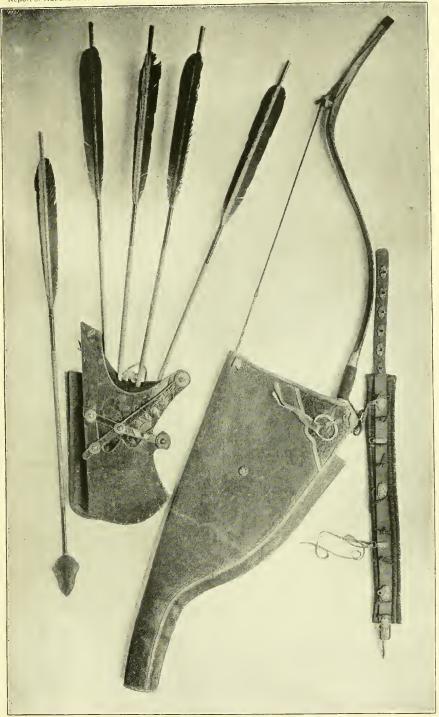
workmanship; the leather used is red Russian (bulgar in Tibetan), and the metal work very highly finished and thickly gilt.\*

The Tibetan sword is of two kinds. Both are straight and of iron, but in one kind the extremity of the blade runs to a sharp point; in the other (copied from the Chinese) the point is oblique, like the Japanese and Chinese swords. The average length of the blade of Tibetan swords is 25 inches. Fig. 3 of pl. 22 shows a fine sword of the latter pattern, made in Poyul. The hilt is covered with shagreen, and in the pommel, which is of iron, wires of brass and copper have been set in the metal. The scabbard is of wood covered with shagreen and plain bands of silver extend half its length. The upper half of the scabbard is covered with red cloth, a strap fastened to the scabbard near the hilt passes around the wearer's waist, and the sword is worn in front of the person, as are nearly all Tibetan swords. In Lit'ang, Ch'amdo and a few other localities, however, a variety of sword is made which is worn in Chinese fashion, hanging from the left side (see Diary of a Journey, etc., p. 330), but the usual Tibetan mode of earrying a sword is passed in the belt in front so that the right hand rests on the hilt. Fig. 2 represents a sword with a rough wooden scabbard, and was manufactured in the Horba country, in eastern Tibet. It is in shape like the preceding.

In Land of the Lamas (p. 257) is figured a fine sword of Dérgé make. The scabbard and hilt are highly ornamented with repoussé silver work, in which are set coral beads. The edges of the scabbard are protected by a rim of iron. This style of sword is the most highly prized of any in Tibet, and large sums of money (\$100 to \$150) are frequently paid for them. (Pl. 22, fig. 1.)

The Tibetan matchlock gun (mé-da or pao; the latter is a Chinese term) has a barrel about 48 inches long with a half-inch bore. The stock is of wood, sometimes covered with wild ass skin, and extends to near the muzzle of the barrel. This gun and the accouterments to be described are shown on pl. 23. A wooden ramrod fits in the stock, and the barrel is fastened into it by either rawhide thongs or brass wire. Through the stock, about 6 inches behind the breech of the gun, passes a trigger, the upper end of which is forked so as to hold a slowmatch of plaited cotton soaked in powder and then dried. The lower end of the trigger projects slightly beyond the lower side of the stock so that the match can be depressed onto the pan. The unused part of the slow-match is held in a leather case on the right side of the stock from which it passes out by a small iron tube. It is held firm in the fork of the trigger by a strap fixed on the left side of the stock to a small ring. The powder in the pan is in like fashion protected by a leather cover. Attached to the muzzle of the gun by a bolt is a long wooden fork (ra-jo) with iron or antelope horn tips. When the gun is

<sup>\*</sup>See also Capt. Turner's remarks, p. 714 of the present paper.

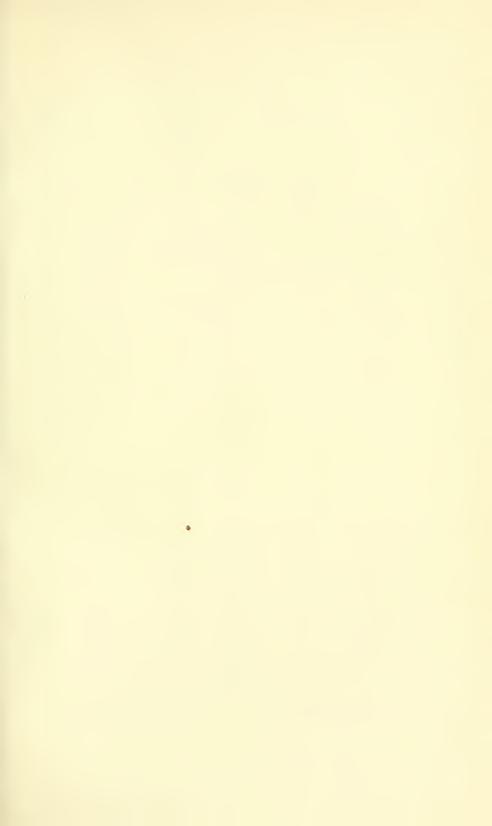


ARCHER'S EQUIPMENT.

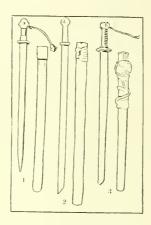
Bow and arrows, of Chinese make. Quiver, bow-case and belt of Russian leather. Quiver lined with red cloth. Upper part, of stamped leather, decorated with gold nails, having coral beads in center. Belt wadded.

This form of bow and arrows is used in China, Mongolia, and Tibet.





## EXPLANATION OF PLATE 22.

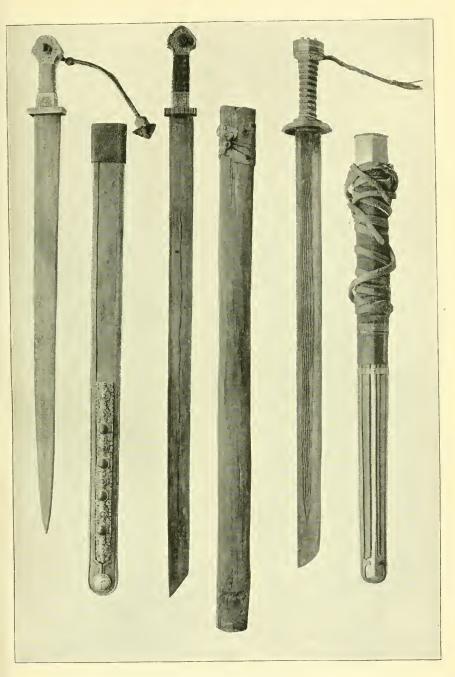


SWORDS AND SCABBARDS.

Fig. 1. Dergé Sword and Scabbard. Large coral beads set in handle and scabbard. Ornamentation in silver. Iron gnards along the edge of the scabbard. Dergé.

(Cat. No 131321, U.S. N. M.)

- Fig. 2. SWORD AND WOODEN SCABBARD. Handle, of reponssé brass. Dawo. (Cat. No. 131041, U. S. N. M.)
- Fig. 3. SWORD AND SCABBARD. Scabbard and handle of sword covered in shagreen. Scabbard ornamented with bands of silver and with iron guards. Poynl. (Cat. No. 167301, U. S. N. M.)

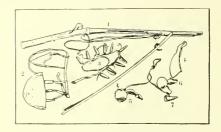


SWORDS AND SCABBARDS.





## EXPLANATION OF PLATE 23.



GUN AND ACCOUTREMENTS.

Fig. 1. MATCHLOCK WITH FORK. Ts'aidam. (Cat. No. 131042, U. S. N. M.)

Fig. 2. Red Leather Belt. Studded with brass nails, with bullet pouch and bag for powder horn, etc. Dergé.

(Cat. No. 167261, U. S. N. M.)

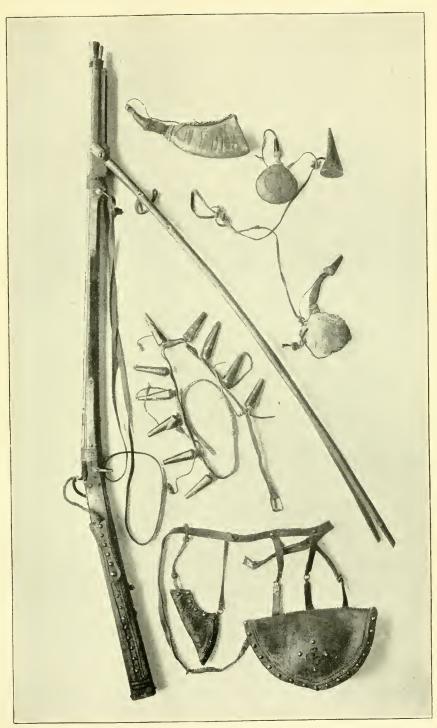
Fig. 3. Brass Chargers. Ts'aidam.

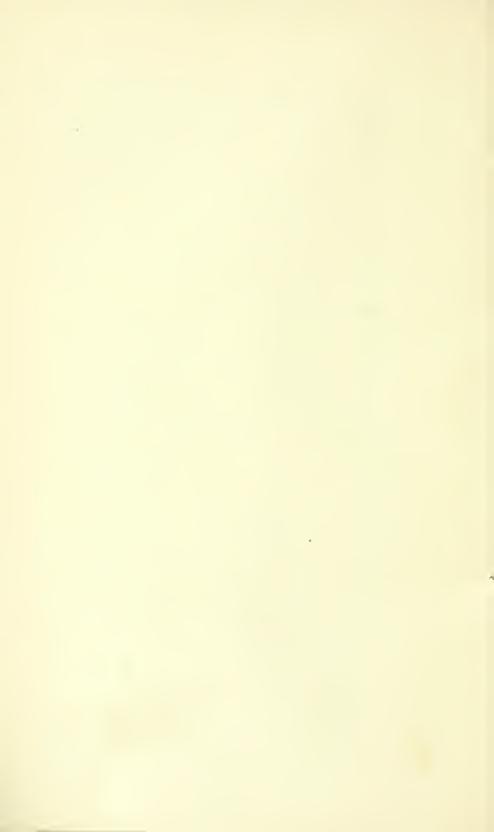
Fig. 4. POWDER FLASK. Made of Oris poli horn. Ts'aidam. (Cat. No. 167260, U. S. N. M.)

Fig. 5. POWDER HORN, LEATHER. Covered with felt. Ts'aidam. (Cat. No. 167285, U. S. N. M.)

Fig. 6. Powder Horn. Made of boiled leather. Ts'aidam. (Cat. No. 131183, U.S.N.M.)

Fig. 7. Horn Primer. Eastern Tibet. (Caf. No. 167285, U. S. N. M.)





being used this fork rests on the ground and the marksman shoots kneeling or even lying down.

Most Tibetans carry a number of horn or brass chargers around their necks or in their bosoms, and in a leather bag hanging from a belt on their right side is a horn primer, which can be opened by a bit of thin elastic horn which covers the end, also a powder horn, frequently made of the horn of an *ovis poli*, or of wood covered with leather. In another small pouch hanging from the same belt, but on the left side, is kept a supply of leaden bullets.

The gun described is a good specimen of the matchlocks used in eastern Tibet and among the Ts'aidam Mongols. Guns mounted by these latter people are much prized in parts of Tibet, as they are much

lighter than any others.

The stock and lower end of the gun are kept wrapped in a waterproof case of different colored woolen cloths or in a case of pulo or one made of marmot skin or simply in a piece of felt.

The barrels of all Tibetan guns are imported from either China or India, the Tibetans not being able apparently to make them, though those I have seen were of very rough workmanship and far from being true.\*

Dr. Griffiths (Journal, p. 166) says that the matchlocks used in Bhutan are of Chinese manufacture but gnn forks are not used among this people. Nain Singh, speaking of the nomads of northwestern Tibet, says:

Most families possess a matchlock, generally of Nepal manufacture, and the men of the Rudokh district seldom move about without either a gun or a bow and arrows, in the use of which latter they are very expert. (Journ. Roy Geog. Soc., XLVII, p. 93.)

To the fork of their gun Tibetans often attach a small piece of white cotton cloth on which are printed magic formulas, and it is customary among the wilder tribes to smear the stock of the gun with some of the blood of any animal they may kill. This, as explained to me, was "for good luck."

The spear (dung) is a weapon in common use in Tibet, especially among the black-tent people. It varies in length from  $7\frac{1}{2}$  feet to 10 or 12 feet. One in my possession (See Diary of a Journey, etc., p. 170), made in Poyul, has a shaft 5 feet  $7\frac{1}{2}$  inches long; the point is of iron, the shaft fitting into a socket at its end. The point is a long, narrow two-edged blade. The butt of the shaft has a heavy iron shoe. A strong band of iron is coiled around the shaft its whole length; this device is resorted to throughout the country to strengthen the shaft, for making which the country supplies no good wood. The shaft of the spear in my possession appears to be of cocoanut wood.

<sup>\*</sup>Kashmir produces fine gun barrels. In all likelihood many are imported into Tibet. On their manufacture, see Moorcroft, Travels, 11, 203-213.

The Tibetans are very expert in using the sling (orta, or gudo, according to Jaeschke), and among the tent dwellers and the people of the more remote localities, one is always seen hanging from the belt of both men and women. It is made of wool and hair mixed; one string terminates in a leash, and the instrument is also used as a whip in driving sheep or eattle (see Diary of a Journey, etc., p. 264). I have seen time and again a stone thrown a distance of over 300 yards from one of these slings.

Hunting is not allowed in many parts of Tibet, it being forbidden by the religion of the country to take animal life. In the remoter parts and in eastern Tibet generally, the people hunt, however, yak, deer, antelope, and especially musk deer.

Nain Singh says:

The Champas are keen in the pursuit of game, which they kill in large quantities, partly with firearms and bows and arrows, but chiefly with a kind of trap called Redokh chum, very similar in principle to an English rat trap. It consists of a ring made of rope, to whose inner surface are attached elastic sharp-pointed slips of wood converging toward the center of the ring, where a space is left sufficiently large to allow the passage through it of the animal's foot. Small holes are dug in the ground near the water which the wild animals are known to frequent. These traps are placed at the top, hidden from view by a covering of earth, and attached by a strong rope, also concealed from view, to a stont peg, which is driven into the ground at a considerable distance off. The animals on their way to the water pass over the holes, and the weight of the body drives the foot through the ring. Once through, it is impossible for the animal to free his foot from the trap, and he soon falls a victim to the sword and spear of the hunter, who lies concealed somewhere in the neighborhood. Great numbers of wild horses, sheep, and antelopes are killed in this manner. (Journ. Roy. Geo. Soc., XLVII, p. 94.)\*

Capt. Samuel Turner says of the father of the then Panchen Rinpoché lama of Tashilunpo:

I found Gyap to be not only a lover of manly sports and martial exercises, but also a perfect connoisseur on the subject of arms. His collection was exhibited, and he liberally descanted on the peculiar merits of each weapon. There were arrows famed for their remote and steady flight, which had names inscribed on each of them, and places assigned to them in a quiver, in separate cells. He honored me with a present of three of these, and a large Chinese bow, near 5 feet in length, made of the horns of buffaloes, which he had used, he said, for many years. His own favorite bows were of bamboo, a species produced in the mountains bordering upon Tibet, of great strength, and almost entirely solid. The bow is framed from two pieces of bamboo, split off next the outside; the inner sides of which, after being well fitted, are united together by many strong bands. Gyap put one of these bows into my hands, which, when bent, was of extreme tension. I was unable to draw the arrow, but taking it himself, he pointed it at a mark upon the opposite hill, at a distance, as I judged, of 500 or 600 yards. I could not trace the flight of the arrow, though steadily intent upon it, when he discharged it. mentioned also the dexterity with which a horseman here would dismount his adversary, particularly when in pursuit, by means of a running noose. (Turner, Embassy to the Court of the Teshoo Lama, pp. 341, 342.)

<sup>\*</sup>One of these traps is figured in Capt. H. Bower's Diary of a Journey through Tibet, p. 117. From this we further learn that the converging slips in the trap are not of wood but of horn. It is interesting to find an identical trap used by the Shuli near Khartum on the Nile. (F. Ratzel, Völkerkunde, 1, p. 504.)

Musical instruments.—Exclusive of the musical instruments used in religious worship, which will be described in another section, the only instruments I have seen or heard of among the Tibetans are, first, the whistle (ling-bu), (pl. 24, figs. 1-3) made of bamboo or the bone of an eagle's wing, and with 6 or 7 keyholes; second, the jew's-harp (k'a-pi) (figs. 4-6) and third, the banjo or guitar (piwang, kopong, or dra-nyan), with 3 or more strings.

The jew's-harp is made not by the Tibetans, but by the Lissus and other non-Tibetan tribes inhabiting southeast Tibet, and is a favorite instrument in eastern Tibet, where nearly all the women carry one suspended from their girdles. Three harps are used simultaneously, each giving a different note; the deepest note is called p'o kä or "male sound," the intermediate one ding kä or "middle sound," the sharpest one mo kä or "female sound." They are held the one below the other in the order above given between the thumb and the index of the left hand, and struck with all the fingers of the right hand, the one after the other. These k'api are carried in small bamboo cases ornamented with little rings of bamboo, often dyed, and also with geometric carvings, which are also colored. They are shown in the lower portion of this plate.\*

The banjo or guitar is similar to that instrument in China and Kashmir, being round-bodied and long-armed. Desgodins (Le Thibet, p. 393) mentions a rude one with only 2 strings, which are struck by means of a plectrum.

Capt. Turner, in the work previously cited (p. 343), says:

Gyap gave into my hand a flageolet, and desired me to use it. I was unable. He then took it, and accompanied Gyeung upon the cittaur (a stringed instrument, something resembling a guitar) and they played several pleasing airs together. At length, Gyeung accompanied the instruments with her voice, which was by no means inharmonions; and I am not ashamed to own that the song she sung was more pleasing to my ear than an Italian air. \* \* \* Gyap regretted his inability to entertain me with a great variety of instrumental music, saying that he was obliged to leave behind him his collection on leaving Lassa. \* \* \* He told me that their music was written down in characters, which they learnt.

The statement made at the end of the preceding quotation is highly interesting, but I fancy that Turner's host only referred to church music, which is recorded by an ingenious system of descriptive notation. (See Land of the Lamas, p. 88.)

Vocal music is an amusement of which all Tibetans are very fond, and the power and sweetness of their voices have been noted by most travelers. (Dr. J. D. Hooker, Himalayan Journals, 1, p. 304, C. H. Desgodins, Le Thibet, p. 393, etc.)

Tibetan dancing (tra-chyam or chyam) is of the most primitive kind.

<sup>\*</sup> Jew's harps similar to those used in Tibet are found among the Ainu and in New Guinea, but in many other countries where a bamboo harp is used, the sound is produced by jerking the harp by a string—this is the case in Assam, in parts of Sumatra, among the Yakuts, the tribe of Torres Straits, etc.

Single female dancers sometimes perform while playing on the jew's-harp. In this dance they shuffle slowly about, without raising the feet, and keeping time to their music. In other dances five or ten men stand on one side holding hands, and facing them stand as many women. One line sings a verse while slowly moving forward and backward, then the other side does likewise. (See C. H. Desgodins, op. sup. cit., 394, and Land of the Lamas, p. 247.)\*

George Bogle thus describes a dance he witnessed near Shigatsé.

The court held about 30 dancers, half of them men, half of them women. The men were dressed in different and party-colored clothes, with their large sheep'swool bonnets, a bit of colored silk in one hand, and a leather machine, something in shape of, but rather less than, a fiddle at their side. The women had their faces washed, and clean clothes, abundance of rings upon their fingers, and of coral, amber beads, bugles, etc., on their heads and necks, and each wore a small round hat, covered with circles of white beads. They formed a ring, the men being altogether, the women altogether, and five men were in the middle of it. They danced to their own singing, moving slowly round in a sort of half-hop step, keeping time with their hands, while the five in the center twisted round and cut capers, with many strange and indescribable motions. The second part of the entertainment was performed by four or five men, with winged rainbow-colored caps, who jumped and twisted about, to the clashing of cymbals and the beating of tabors. Among the rest was a merry Andrew with a mask stuck over with cowries, and a clown with a large stick in his hand. These two men were more alike than the others, and between whiles carried on a dialogue, and the grimace and conversation gave great entertainment to those who understood it. (C. R. Markham, Narrative of the Mission, etc., p. 92.)

# VII.

Wheeled vehicles are practically unknown in Tibet; all traveling is done on horse or mule back or on foot, and freight is carried by yaks, mules, horses, donkeys, or sheep, hardly ever by men, except for short distances over exceptionally rough or steep ground.

TRANSPORTATION.

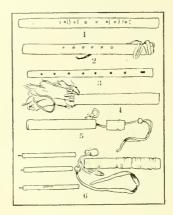
The Tibetan riding saddle (taga) differs but little from that used in China; in eastern Tibet those most prized are made in Dergé (see Diary of a Journey, etc., p. 192.), and in central Tibet saddles of Chinese make, but ornamented with silver and precious stones in Tibetan style, are much sought after.

Pl. 25 shows a Kokonor pony equipped with a good Dérgé saddle. The tree is made of four pieces of birchwood, covered on the outside before and behind with shagreen and trimmed with polished iron bands. The seat is of several thicknesses of felt covered with pulo. The stirrup straps are of plaited rawhide, the stirrup irons of Chinese make. The girth passes over the saddle; frequently a hind girth is used. A broad crupper and a breast band are generally used. From the latter hangs, when the rider is an official, a long red tassel or dom, (called ch'i-hsün in Chinese), such as are worn in China by military

<sup>\*</sup> The religious dances of Tibet, of which there are quite a large variety, have been so frequently and minutely described by different writers that they require no mention here.

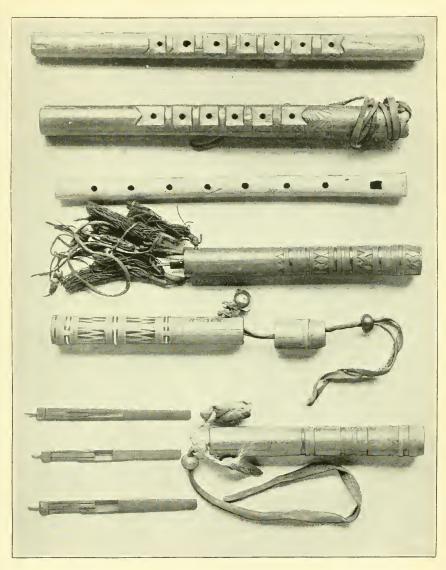


#### EXPLANATION OF PLATE 24.



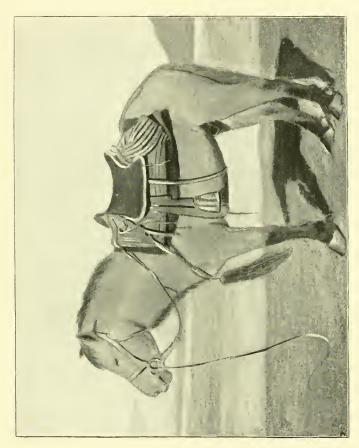
WHISTLES AND JEW'S-HARPS.

- Fig. 1. Bamboo Winistle. Bat'ang. (Cat. No. 167165a, U. S. N. M.)
- Fig. 2. Bamboo Whistle. Bat'ang. Strap to tie to girdle. (Cat. No. 167165b, U. S. N. M.)
- Fig. 3. Eagle Bone Whistle. Kokonor Tibetaus. (Cat. No. 167166, U. S. N. M.)
- Fig. 4 and 5. Bamboo Jew's-Harp Cases. Bat'ang. (Cat. Nos. 16716se and 16816se, U. S. N. M.)
- Fig. 6. Bamboo Jew's-Harp and Case. Bat'aug. (Cat. No. 167168b, U. S. N. M.)



WHISTLES AND JEW'S-HARPS.





KOKONOR PONY, WITH TIBETAN SADDLE AND HARNESS.

From a photograph by the author:



officers. The bit used throughout Tibet is a very light, large-ringed snaffle, and the headstall and reins are of either rawhide or plaited hair. A long plaited rawhide rope is usually carried, tied to the saddle, one end attached to the ring of the bit. Under the saddle are two pads made of felt and covered with ornamented leather facings; those of this saddle were made in Poyul. These pads, which do not quite touch along the upper edge, keep the saddle well off the horse's back. Underneath them is a large blanket or a felt rug which extends nearly to the horse's tail. Sometimes, especially in eastern Tibet, the whole saddle is covered with a green cloth cover with a felt lining.

Woolen saddle bags (sata), varying in size and in fineness of texture, are used by most Tibetans when traveling; in them they carry all their provisions. Some of them are so closely woven that they are quite waterproof.

The Tibetans use rawhide and yak hair hobbles, with which they fasten the two fore feet and one hind foot of their horses and mules. Sometimes iron chain hobbles fastened with a padlock are used. This latter kind of hobble is of Chinese make.

The pack saddle, used alike on mules, horses, and yaks, consists of two light wooden wings with a light wooden arch at each end, as seen in pl. 26. On either side are two parallel sticks projecting about.3 inches beyond the arches. The girth, which is of wool, is fastened to the lower stick, and the hair or rawhide ropes with which the load is fastened on, passes over and under the upper one. When carrying loads done up in rawhide so as to protect them from the weather (and in this way all the tea and other valuable merchandise is carried), short rawhide loops fastened to the loads by means of sticks fitting in small slits made in the rawhide are passed over the end of the upper stick of the saddle and the load hung by them. Crupper sticks, as well as cruppers and broad breast straps of wool, are always used. The form of pack saddle used in eastern Tibet and the Kokonor is a little larger and heavier than that used in other parts of the country. Two rectangular felt pads covered with coarse cloth (lawa) are tied to the saddle, and under these again are one or more felt rugs. (See Diary of a Journey, etc., p. 108.)

The Tibetans do not generally use riding whips; the end of the rope tied to the bridle is used in its stead; when they do, it is made with a short wooden handle to which is tied a heavy lash about, 18 inches long.

Pilgrims traveling on foot usually have on their backs a light wooden framework about 20 inches high, made of a couple of small twigs bent into a rectangular shape; on this they tie their small load of baggage, a similar frame tied to the lower part of the first one folds up against it and holds the load in place, and woolen straps pass over the bearer's shoulders. This contrivance is called a kurshing.

Women carrying water in the long narrow wooden barrels in use throughout Tibet for that purpose, rest the bottom of the barrel on the thick folds of their gown gathered above the waist, and passing a strap around the top of the barrel and across their breasts, thus ascend the steepest hills, their arms folded before them.

Boats.—The only purely Tibetan boat I have seen or heard of is the skin coracle or kn-dru. It is composed of yak hides stretched over a few bent twigs with a slightly heavier piece of wood bent around the top to which the skin is firmly sewn. So frail is it that one must be careful not to put one's foot on the hide, but only on the ribs, for the least direct pressure on the skins makes the seams give way. A man kneeling in the bow paddles or stears with a short paddle, crossing the river diagonally, and then carrying his boat on his back upstream so as to come back to his starting point when swept across again. These coracles are about 5 feet long, 4 broad, and 30 inches deep; two or three men and a couple of hundred pounds of goods can be carried in one. When leaking slightly the holes are filled with butter. With these skin boats we may compare the "bull boats" used by the Mandans on the Upper Missouri, which are, however, slightly smaller than the Tibetan ones, though identical with them in all other respects.

All other boats used in Tibet are made by the Chinese. On some of their rivers the Tibetans use heavy rafts, which four or six men paddle across. They are about 12 feet long and 6 feet broad, made of heavy squared logs held together by a pinned crosspiece in front and behind.

#### VIII.

MONETARY SYSTEM—MEDIUMS OF EXCHANGE—WRITING—PRINT-ING—TIME RECKONING—MEDICAL KNOWLEDGE—MISCELLANEOUS OBJECTS.

A Chinese author, ealled Wei Yiian, in his work entitled Sheng-wu chi (Book XIV, p. 53), says that in ancient times the Tibetans used cowrie shells and knife-shaped coins, but that since the Sung, Chin, and Ming periods (i. e., since the twelfth century) they have used silver. He further adds that since the Cheng-tung period of the Ming (A. D. 1436) they have paid their taxes (or tribute to China) in silver coins.

As far as my information goes the present coinage of Tibet has been in use since the middle of the eighteenth century. It comprises only one coin, a silver one called tranka, of the nominal value of about 16 cents of our money. Fractional currency is made by cutting the tranka into pieces. (Land of the Lamas, p. 207.) The only mint I know of in Tibet is at Lh'asa. The trankas minted there bear on the obverse the inscription Jyal-wai Gadän p'odrang chyog-las, "From the Jyal-wa's castle of Gadan,"—Jyal-wa standing for Jyal-wa jya-mts'o, the usual title of the Talé lama. On the reverse are the eight signs of good luck, each inclosed in a small circle, and in the center is what I take to be a lotus flower. These trankas are colloquially called Gadän tranka.

Coins of similar value, but minted in Nepaul, Indian rupees and Chinese bullion, are also in use, and rupees, from their purity and the impossibility of counterfeiting them, are in much greater demand than

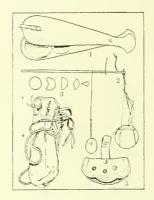


HALF BREED YAK, WITH PACK SADDLE. KOKONOR TIBETANS. From a photograph by the author.





## EXPLANATION OF PLATE 27.



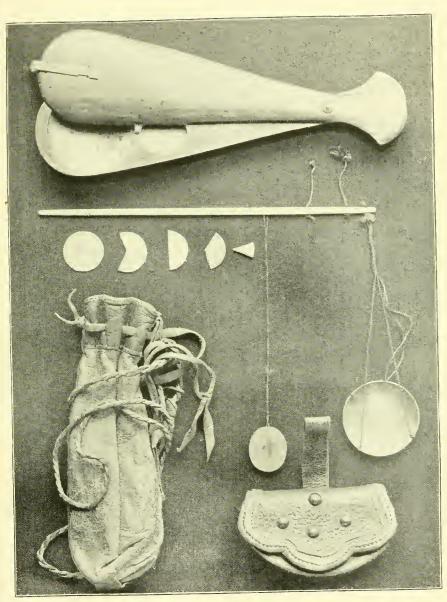
Money, Money Scales and Pouches.

Figs. 1 and 2. Money Scales and Wooden Cases. China. (Cat. No. 131027, U. S. N. M.)

Fig. 3. Tanka and Fractions of Tanka. (Cat. No. 131027, U. S. N. M.)

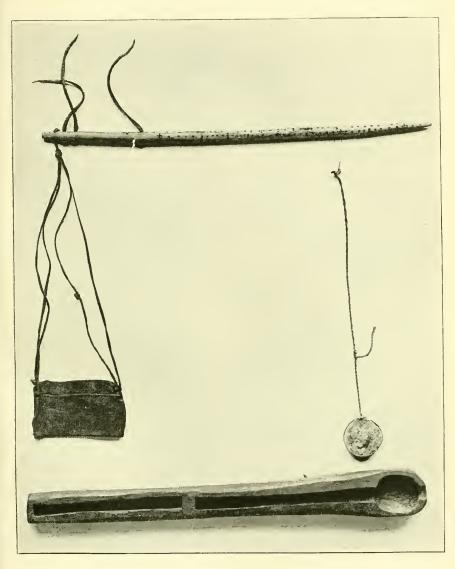
Fig. 4. Buckskin Money Bag. Dergé. (Cat. No. 131028, U. S. N. M.)

Fig. 5. Red Leather Pouch. Ornamented with brass studs. Dergé. (Cat. No. 167153, U. S. N. M.)

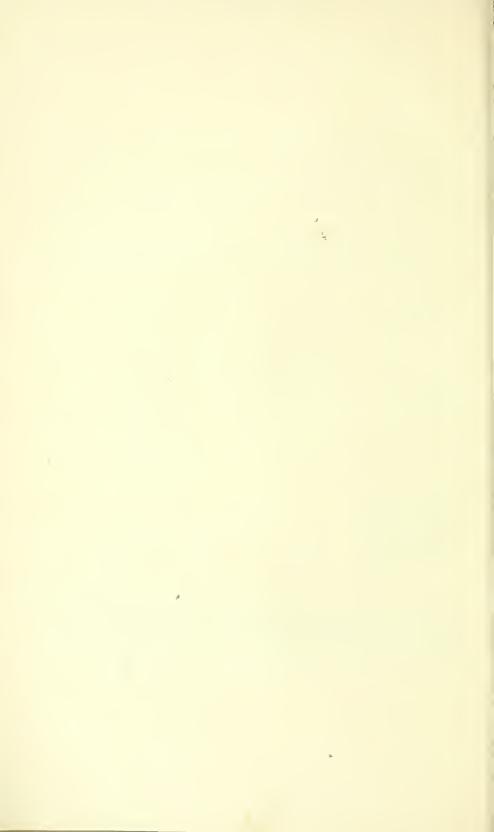


Money, Money Scales, and Pouches.





Mongol Money Scales and Case. Cat. No. 167249, U. S. N. M. Taichinar Ts'aidam.



the native coins or even Chinese bullion, the purity of which the people have no means of testing.

In the Museum collection is a full set of Tibetan goins (see also pl. 27, fig. 3); all the older ones, bearing Chinese and Tibetan inscriptions, are plaster casts obtained from the British Museum cabinet.

Chinese money scales (*jama*) are used by the Tibetans and in Mongolia. The formmet with throughout China is shown on pl. 27, fig. 1, and pl. 28 shows a rough copy made in Taichinär Ts'aidam. In the latter the wooden beam is roughly indented to indicate ounces, tenths, and hundredths of ounces (in Tibetan called *srang*, *djo*, and *karma*); instead of a brass tray one of buckskin suspended by horse-hairs is used, and the weight is a bullet roughly flattened out. These scales fit in a wooden trough roughly whittled out with a knife.

Money (see fig. 3) is carried either in a small leather bag (pl. 27, fig. 4) with a long buckskin string by which it is tied to the gown, or in a small ponch with a leather loop through which the girdle passes (fig. 5). At Lh'asa the people use portemonnaies of semicircular form made of red leather embossed and with an ornamental border. They have two pockets and close with a hook, with a large silver boss on the flap.

In most parts of the country money is but little used, the people bartering for most of the things they require. Brick tea is used to such an extent in their, mercantile transactions that it is, for all practical purposes, a unit of value. Salt, tsamba, boots in the Kokonor, pulo, cotton cloth, and even walnuts (in the Bat'ang country), are accepted without a murmur instead of silver, and in most places one or any of these articles are preferred to it.

Writing.—Tibetans write from left to right in horizontal lines, using a bamboo pen or nyugu (pl. 29, fig. 8), which they carry in pen cases (nyu-shu) of metal, brass, copper, or silver (figs. 6 and 7), in form like a sheath, with a sliding top and rings on either side, by which it may be suspended by a cord from the girdle. Hanging from the same string is a small ink pot (napang) also of metal, in which they carry dissolved india ink (natsa). In fig. 7 is shown a Lh'asan silver pen case and ink pot finely chased. The brass pen-case shown in fig. 6, made at Lit'ang, has the eight signs of good luck in repoussé work on it. A small cast brass ink pot from Lh'asa is shown in fig. 3.

Chinese paper is usually used for letter writing, but when copying books or when printing the Tibetans use paper made in Nepaul and Bhutan from the bark of various species of Daphnea, and especially of Edgeworthia gardneri, which has been previously washed with a little milk and water, so that it may not blot. They also manufacture themselves a paper from the root of a small shrub, which is of a much thicker texture and more durable than Daphne paper. In western Tibet this paper is manufactured with a species of Astragalus, the whole shrub being reduced to pulp. (J. D. Hooker, Himalayan Journals, 11, 162.)\*

<sup>\*</sup> See also B. H. Hodgson, Miscellaneous essays relating to Indian subjects, 11, p. 251.

Printing.—Printing is done in Tibet exactly as in China. The manuscript, written on very thin paper, is pasted over a smooth, thin block of wood, and with a small chisel the surface of the block around the letters is carefully removed to a depth of about one-eighth of an inch. Ink is rubbed lightly over the block, a sheet of paper is then placed on it and a brush lightly passed over the sheet, which is, when removed, left to dry, when the other side is printed in like manner from another block.

The Tibetans distinguish nine or ten different styles of writing, but these may be reduced to three, capitals (ww-chän), small capitals (ww-méd), and running hand (chyug-yig). Books are usually written in the first, and the two other forms are used in correspondence and for all the ordinary purposes of life.\*

Like most Asiatics the Tibetans never sign their letters but seal them, nearly every one, even those who can not write, carrying a small seal (titsé) suspended from his girdle. These seals have on them a letter or a religious symbol surrounded by an ornamental design. They are cut in iron and are frequently of very delicate workmanship. In pl. 29, fig. 4, is shown a seal made in Dérgé; it is cylindrical,  $2\frac{1}{8}$  inches long, terminates in a knob head, and is bored out, chased, and fretted. The design is a swastika or "hooked cross" in the center of a foliated motive.

Letters and packages are sealed with wax (*lajya*) made of lae, and on the wax is an impress of the sender's seal. A piece of wax is carried suspended to the girdle with the seal, as shown in the figs. 1, 2, and 5.

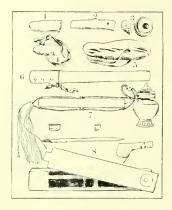
Time reckoning.—"The Tibetans received their astronomical science from their neighbors in India and China, the Chinese also becoming their teachers in the art of divination. Their acquaintance with the astronomical and calendrical systems of these nations coincides with the propagation of the Buddhist religion by the Chinese and Indian priests, to whom they are also indebted for the respective systems of defining the year. Both systems are based upon a unit of sixty years, differing, however, in the modes of denominating the years." (Emil Schlagintweit, Buddhism in Tibet, 273.)

In these cycles of sixty years, when numbered according to the Indian principle, each year has its particular name, but when the Chinese mode is used, the names used in the Chinese duodecimal cycle are used five times, coupled with the names of the five elements or their respective colors, each of the latter being introduced in the series twice in immediate succession. A masculine and feminine are also frequently added to the above, represented alternately by p'o (male) and mo (female).

<sup>\*</sup>For further details on the subject and for specimens of all the various Tibetan scripts, I must refer the reader whom the subject interests to Sarat Chandra Das' paper on "The sacred and ornamental characters of Tibet," in Journal Asiatic Society of Bengal, LVII, part 1, pp. 41-48, and to the Appendix in Csoma de Körös' Tibetan grammar.



### EXPLANATION OF PLATE 29.



WRITING IMPLEMENTS.

Figs. 1 and 2. Sealing Wax. Ts'arang. (Cat. No. 131022, U.S. N. M.)

Fig. 3. Brass Ink Pot. Wooden stopper. Lh'asa. (Cat. No. 16716), U. S. N. M.)

Fig. 4. SEAL OF WROUGHT IRON. Dergé. (Cat. No. 131317, U. S. N. M.)

Fig. 5. SEALING WAX.—Provided with thong to hang to belt.—Ts'arong. (Cat. No. 131022, U. S. N. M.)

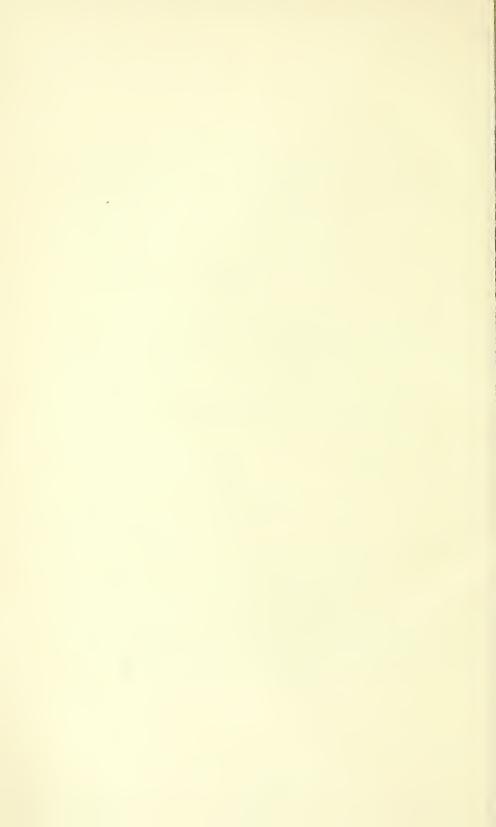
Fig. 6. Brass Pen Case. Lit'ang. (Cat. No. 167162, U. S. N. M.)

Fig. 7. Chased Silver Pen Case and Ink Pot. Lh'asa. (Cat. No. 130401, U. S. N. M.)

Fig. 8. Bamboo Pen and India Ink; Wooden Pen and Ink Case. Ts'aidam. (Cat. No. 167163, U. S. N. M.)



WRITING IMPLEMENTS.



The first year of the first cycle of sixty years is A. D. 1026, consequently 1894 is the twenty-ninth year of the fifteenth cycle, or the "Wood Horse" (shing ta) year of the fifteenth cycle.

The cycle of twelve years is copied on the Chinese, and needs no description here. This cycle is, in Tibet as in China, the one most commonly used, and in both countries to ask a person's age they say "to what sign (of the duodecimal cycle) do you belong?"

Schlagintweit (Op. cit., p. 276) says:

In books as well as in conversation, the dates of past events are not unfrequently determined by counting back from the current year. For instance, the present year being 1863, the birth of Tsongkhapa, which occurred in 1355 A. D., would be said to have taken place five hundred and eight years ago.

I may add that in conversation events which have occurred more than three or four years ago are invariably spoken of as having happened in "olden times" or "a long while ago." Sometimes an event is referred to such and such a year of the reign of such and such a Talé-lama. On the whole Tibetans care very little about chronology of any kind.

Another method of counting, but very little used, is that based on a cycle of two hundred and fifty-two years made by a combination of the five elements, 12 animals of the duodecimal system, and the masculine and feminine particles previously referred to. (Schlagintweit, p. cit., p. 287.)

The Tibetan year (lo) is divided into twelve lunar months (dawa), named "first month," "second month," etc. Every three years an intercalary month (da lh'ag) is added to compensate for the difference between the solar and the lunar year. The days are divided into twelve hours, as they are among the Chinese, from whom they have borrowed these divisions.\*

Medical knowledge.—As with their astronomy and other sciences, so with their medical science, the Tibetans have borrowed it from India and China. While nearly all their medical works are translations from Indian originals (see Csoma de Körös, Journ. Bengal Asiatic Soc., IV, 1 et seq.), their pharmacopæia is largely borrowed from China, and is nearly entirely vegetable. The Chinese derive a great number of their most valued simples from Tibet, and the large lamaseries of that country have medical faculties and pharmacies attached to them which supply not only their own people with drugs, but nearly the whole of Mongolia.

The Museum contains a few samples of Tibetan drugs, among which I will only mention the *chyar-tsa gong-bu* (Cordyceps sinensis), tsampaka seed, or pod of the orxylum (Colosanthus indica, Blum.), and the yadro (Anemarhena asphodeloides, Hanbury).

<sup>\*</sup>For further details on Tibetan chronology and astrology I must refer the reader to Emil Schlagintweit, Buddhism in Tibet, pp. 273-328; Csoma de Körös, Grammar of the Tibetan Language, 148 et seq.; Ph. E. Foucaux, Grammaire Tibétaine, and Journ. Roy. Asiat. Soc., n. s., xxiii, p. 206.

H. Mis. 184, pt. 2-46

Rhubarb (djim-tsa), though used sometimes for a dye, is never employed as a medicine in Tibet. Among the Mongols its medicinal properties are known, but its use is confined to camels.

Ophthalmia is one of the commonest diseases in Tibet. When so affected the sufferer either wears Chinese smoked glasses or eye shades (migra) of horsehair (pl. 30, fig. 1). These eye shades consist in a band of closely-woven horsehair about  $2\frac{1}{2}$  inches broad. The ends are sewed into bits of embroidered flannel. Some of these shades are convex over the eyes, but 1 believe that these are not made in Tibet, but on the Kan-su frontier, by Chinese. The eye shades are carried suspended from the girdle in a cylindrical cotton case, which can be pulled out of another case of similar material, but usually handsomely embroidered, which slides over it.

Pl. 30, fig. 1, shows a *migra* and case made in eastern Tibet. The Chinese form of eye shade (fig. 2) is also occasionally used by Tibetans.

It is interesting to note that a similar horsehair shade is worn by Persians in some parts of their country. (John Bell, Lives of Celebrated Travellers, II, p. 133.)

Miscellaneous objects.—In Tibet sewing is about equally divided between the two sexes, the men making most of their own clothes and all tailors being men. They use seissors and needles of Chinese make and woolen thread which they twist themselves. They sew toward the body. The men do not use a thimble, but women have a small ring made of copper resembling a seal ring, but where the stone should be there is lead. They put this ring on the forefinger and press the needle against it. It is used in parts of Mongolia (Ts'aidam) as well as in Tibet, but the Chinese thimble, in shape like our tailor's thimble, is rapidly superseding it in popular favor.

A fly brush, made of the tail of a small yak, is shown in fig. 2, pl. 31. The hair of the upper part of the tail has been scraped off and a handle made of the hardened hide. The hair is dyed a light red. The other fly brush (fig. 1) is of coir, and is in use in China.

Rouge pads of felt which have been soaked in a red coloring matter are used by Mongol and Tibetan women. A portion of this is readily transferred to the cheek by slightly moistening the pad. These pads are prepared in China. The Mongols use them much more commonly than do the Tibetans, who have naturally rosy cheeks.

Loosely woven scarfs of silk, called in Tibetan katag (ka-btags), are in common use. Some of them have Buddhist symbols or images of the Buddha woven in the texture; others are of less value and are stiffened with plaster or rice powder. The usual color of these katag is light-blue or white. The smaller ones are about 20 inches long and 6 inches wide, and are worth a few copper cash apiece. The largest are frequently 40 or 50 feet long and of proportionately greater value. Most of these katag are made in Ch'eng-tu in Ssū-ch'uan for the Tibetan and Mongol markets. Hue thus describes the use of the katag:



# EXPLANATION OF PLATE 30.



EYES SHADES.

Fig. 1. Horsehair Eye Shade and Case. Eastern Tibet. (Cat. No. 131053, U. S. N. M.)

Fig. 2. Chinese Eye Shade and Case.
(Cat. No. 167159, U. S. N. M.)



EYE SHADES.





## EXPLANATION OF PLATE 31.

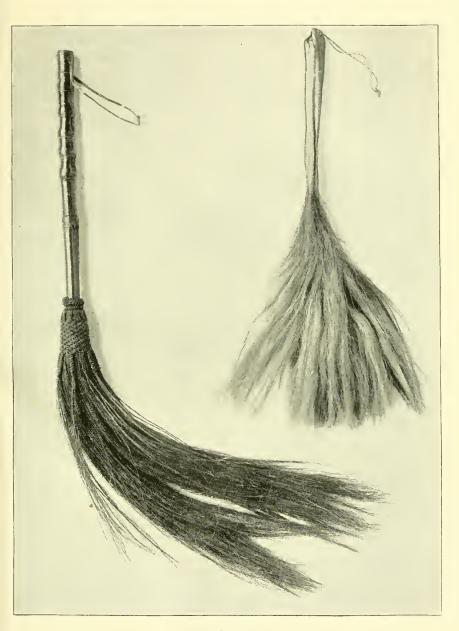


FLY BRUSHES.

Fig. 1. Colr Fly Brush with Bamboo Handle. Used by Buddhist priests in China.

(Cat. No. 151283, U. S. N. M.)

Fig. 2. YAK TAIL FLY BRUSH. Hair dyed red. Bat'ang. (Cat. No. 151283, U. S. N. M.)



FLY BRUSHES.



The khata or searf of felicitation plays such an important role in Tibetan life that it is in place to say something of it. The khata is a piece of silk, nearly as fine as gauze. Its color is a bluish white. Its length is about three times its width; the two extremities usually terminate in fringes. There are khatas of every size and price; for it is an object that the poor as well as the rich can not do without. No one ever goes anywhere without carrying a small supply of them with him. When one pays a formal visit, when one has a service to ask of some one, or to thank a person, the first thing to do is to unroll a khata; it is taken in both hands and offered to the person one wishes to honor. If two friends, not having met for some time, suddenly run across each other, the first thing they do is to offer each other a khata. It is done with as much empressement and as promptly as one shakes hands in Europe. It is also customary when one writes a letter to fold up in it a little khata. It is incredible what importance the Tibetans, Si-Fan, Hung-Mao-Eul, and all the people living to the west of the Blue Sea attach to the khata ceremony. It is among them the purest and sincerest expression of all noble sentiments. The finest words, the most costly presents, are nothing without the khata. With it, on the contrary, the most ordinary object acquires immense value. If some one asks a favor of you, a khata in his hand, it is impossible to refuse it, unless one wishes to show contempt for all rules of propriety. (Hue, Souvenirs d'un voyage, 11, p. 88.)

Besides these everyday usages referred to by Hue to which the *k'atag* is put, it is the most ordinary form of offering to the gods. Hundreds and thousands of them are suspended on the statues of the gods in every temple or shrine in Tibet and Mongolia, and in some sections of the country a *k'atag* of a certain quality, called by the Chinese wu chai show-pa, is a recognized standard of value in commercial transactions. (Land of the Lamas, pp. 66, 105, and p. 122, note.\*)

Ceremonial scarfs appear to have been at one time used among the Chinese. In 1575 Mendoza visited Fu-chou, in the province of Fu-kien, and was received with several other missionaries by the viceroy, who—

commanded in his presence to put about the neckes of the friers, in manner of a scarfe, to eyther of them sixe peeces of silke and unto the shoulders of their companions, and unto Omoncon and Suisay, each of them foure peeces and to every one of their servantes two a peece \* \* \* so with the silke about their neckes, and with the branches in their hands, they returned out of the hall and downe the staires the way they came, and through the court into the streetes. (Mendoza, History of China, Hakluyt Soe. Edit., II, p. 83.)

A similar custom would appear to have existed in India in olden times; for we read in early Buddhist works of a piece of light stuff being put over the shoulders or around the neck of an honored person.

Games and toys.—I have given much time, while traveling in Tibet, to inquiring concerning toys for children and games, and have also carefully examined nearly all the works of Asiatic and European travelers for information on these subjects, but I have failed to hear of or learn anything of any importance on these subjects. What I wrote in The Land of the Lamas (p. 248) concerning the Tibetans of the Horba country seems applicable to the whole land:

<sup>\*</sup>See also Journ. Roy. Asiat. Soc., n. s., XXIII, p. 228, and Turner, Embassy to Court of Teshoo Lama, p. 233.

I noticed but few games of chance among them. Dice they have, but they are for divining purposes, not for gambling. A few men who had passed much of their time among the Chinese played cards, and chess is also known among them, but both are of foreign importation, and I could hear of no national game. •

I have seen children amusing themselves with rag dolls and little bows and arrows, and Dr. Hooker (Himalayan Journals, 1, p. 317), speaking of a place in upper Sikkim, says:

I was much amused here by watching a child playing with a popgun, made of bamboo, similar to that of quill, with which most English children are familiar, which propels pellets by means of a spring trigger made of the upper part of the quill.

Jack stones, or knuckle bones, is the only game I have seen played in the country, and that only on two or three occasions. This game is also known in China and Mongolia and, in fact, throughout eastern Asia. (See Bergmann, Voy. chez les Kalmuks, p. 151.)

In Ladak and Balti the men play polo, which some authors say is a game of Tibetan origin. It was once very popular under the name of chaogan in India, in which country it was introduced by the Mussulman conquerors toward the end of the twelfth century, but after Baber's time it gradually became obsolete. (Alexander Cunningham, Ladak, p. 311.)

Dr. Hooker (Himalayan Journals, I, p. 317) says that the Lepchas play at quoits, using slate for the purpose, and at the Highland game of "putting the stone" and "drawing the stone." The game of quoits is also played in the adjacent country of Bhutan and, I believe, in other portions of southern Tibet. Wrestling is also a popular amusement in most parts of Tibet; it is, I believe, that known among us as Greco-Roman.

#### IX.

## BIRTH-MARRIAGE-DEATH.

Birth.—"They (the Tibetans) do not wash and bathe a newly-born child, but the mother licks it as soon as it is born. After three days they smear the child's body all over with butter and expose it to the sun's rays for several days. Children are fed on parched meal (tsamba) mixed with soup, the greater part of them getting no milk whatever." (Journ. Roy. Asiat. Soc., n. s., XXIII, p. 231.)

As a general rule the name given the children is chosen by a lama, who also casts the child's horoscope, and no festivities attend this naming. The name chosen is usually a Buddhist term, such as Lozang, "the intelligent," or Dorjé, "the thunderbolt (radjra)," for a boy, while Padma, "the lotus," and Drolma, the name of the goddess Tārā, who was inearnated in the Chinese and Nepalese consorts of King Srong-tsan gambo, are favorite names for women. Frequently two sons of a same mother will have the same name, and Ch'en, "the big one, senior," and Ch'ung, "the little one, junior," will be added to their names. There are no family names.

Cunningham says that in Ladak they celebrate a "birth feast" (Tsas-Ton) and a "naming feast" (Ming-Ton).

The birth-feast (Tsas-Ton) is held one week after the mother's confinement, when all the relatives assemble at her home to celebrate the child's birth. All the guests make presents to the mother, according to their means, of pieces of cloth and food, and occasionally of money. The party then dines, and the entertainment ends with a bowl of chang. The mother remains at home for one month.

The naming-feast (Ming-Ton), which answers to our christening, is held just one year after the birth. The child is then taken before some great lama, to whom an offering is made of a rupee or a quantity of wheat or barley, according to the means of the parties. The lama pronounces a name, and the relatives retire to the usual entertainment of dinner and chang. (Alex. Cunningham, Ladak, p. 307.)

Marriage.—Marriage by capture still survives in portions of western Tibet, in Spiti, in Sikkim, and Bhutan, where the bridegroom and his friends, when they go to bring the bride from her father's home, are met by a party of the bride's friends and relations who stop the path; hereupon a sham fight of a very rough description ensues, in which the bridegroom and his friends, before they are allowed to pass, are well drubbed with good thick switches.

In other parts of Tibet the preliminaries of marriage are very similar to those of China. Go-betweens (Bar mi or Long mi) on the part of the man make overtures to the family of the girl, and if these are well received, astrologers are consulted to see whether the horoscope of the man and woman do not antagonize each other, and "if the good and evil of the life of the male harmonize in the calculation with those of the life of the female, longevity is counted upon. If not, the happiness of the couple will be short-lived."

As soon as the astrologer declares that the *Thun-tsi*, i. e., the circumstances of harmony necessary in the marriage, are favorable, the parents consult their friends and relations in order to ascertain the suitability of the match, and send one or two *Bar mi* (go-betweens) to ascertain the views of the maternal uncle of the maiden selected regarding her marriage. He generally withholds his opinion under various excuses. According to the customs of the country the *Shangpo* (maternal uncle) of a maiden is the real arbiter of her fate in the matter of marriage. Nothing can be settled without reference to him. When his leave is secured the marriage proposal can be formally made to the maiden's parents.\*

The Bar mi, with the permission of the Shangpo, on an auspicious day during the increasing lunation of the month, proceed to the home of the parents of the maiden to present them with the Long chang, and therewith formally make the proposal of marriage. \* \* \* The parents of the maiden receive the Bar mi with politeness, and serve them with wine and tea. After emptying one, or two cups of tea the Bar mi present them with a searf, and beg leave to state their mission. Then they pour out chang, but before the parents will partake of it, the maternal uncle of the girl must be got to give his consent, and as soon as he has, the parents drink the chang and the betrothal is made.

The marriage festivities generally last for three days at the home of the bride's parents, when the friends and relatives make her presents and the parents give her a dowry of cattle, elothes, jewelry, furniture, etc.

Before leaving the bridesmaid's house the domestic dieties are propitiated by a Boubo lama, and here also is performed the ceremony of trashi tré-wa, or ealling down blessings and long life on her. After this the bride rides to her husband's house

<sup>\*</sup>This seems to point to a survival of the custom of reckoning descent through the females.

preceded by a man in white riding a white horse.\* On arriving there she is received with other ceremonies, especially noticeable among which is that of driving away any evil spirits which may have accompanied her from her parents' house. The mother of the groom advances now toward the bride and presents her with a k'atag, tsamba mixed with butter, and a jar of milk.

There is after this a marriage dinner and the friends and relatives of the groom present them with k'atay and presents, and it is they who supply the provisions for the marriage feast.

After this a Bonbo priest gives the bride a new name which she is henceforth to bear, connecting it in some manner with the name of her mother-in-law. When this is performed a small piece of wood about 6 inches long is held to the lips of the bridegroom. The bride now sits in front of her husband, and takes the other end of the wood between her lips.

In the meantime a tuft of wool is placed in the hands of the bridegroom, who draws out the fibers to some length. The bride takes it from his hands and twists it into a thread. This is called the eeremony of the first work of harmonious union. Then the party of the bride separate from that of the bridegroom, and sitting in rows of seats facing each other sing repartee songs. When the festivities terminate the bridegroom dismisses the kyel mi (the men who have escorted the bride from her home) with suitable presents. (Sarat Chandra Das, Marriage Customs in Tibet, Journ. Asiat. Soc. Bengal, 1, 1893, Pt. III, pp. 6-31.†)

Although the ceremonies in different parts of Tibet vary somewhat from the above, they are analogous, as the betrothal and the marriage ceremonies, which are nothing but a long feast, are their essential features. Chandra Das, in the interesting articles from which the preceding facts are derived, describes the ceremonies as they are performed in Ladak, Sikkim, and central Tibet, and I must refer the reader whom the subject interests to his paper for further details on the subject.

So much has been written about Tibetan polyandry that it is only necessary to touch on it here.

As far as my information goes the husbands of a given woman are always brothers, the elder brother choosing the woman and the younger brothers cohabiting with her. Whatever may have been the origin of polyandry, there can be no doubt that poverty, a desire to keep down population and to keep property undivided in families, supply sufficient reasons to justify its continuance. The same motives explain its existence among the lower castes of Malabar, among the Jat (Sikhs) of the Punjab, among the Todas, and probably in most other countries in which this custom prevails.

Polygamy is not uncommon among the wealthier classes of Tibet throughout the whole extent of the land, and monogamy is, naturally enough, frequently met with, especially among the Drupa tent dwellers, where it is in fact the invariable rule, I believe.‡

<sup>\*</sup> Among the Mongols it is deemed proper when inviting a guest to one's tent to send him a white horse to ride.

<sup>†</sup>See also Journ. Roy. Asiat Soc., n. s., XXIII, pp. 228-230, and Alex. Cunningham, Ladak, p. 207.

<sup>‡</sup>See, on this subject, Sarat Chandra Das, Narr. of First Journey to Tashilhunpo in 1879, p. 34; Col. Edw. Parke in Journ. Anthropol. Institute, VIII, 195 et seq., and Land of the Lamas, pp. 190, 212 et seq.

Sarat Chandra Das, in his paper on Marriage Customs of Tibet, says (quoting Crooke's Notes and Queries):

In Spiti polyandry is not recognized, as only the elder brother marries and the younger ones become monks. But there is not the least aversion to the idea of two brothers cohabiting with the same woman, and I believe it often happens in an unrecognized way, particularly among the landless classes, who send no sons into the monasteries.† \* \* \* In Spiti there is a regular ceremony of divorce which is sometimes used when both parties consent. Husband and wife hold the ends of a thread, repeating meanwhile, "Our father and our mother gave, another father and mother took away. As it was not our fate to agree, we separate with mutual good will." The thread is then severed by applying a light to the middle. After a divorce a woman is at liberty to marry whom she pleases.

I do not believe that in other parts of the country divorce or second marriage exist, though among the Kokonor Tibetans, at least, it sometimes happens that a wife deserts her husband to cohabit with another man or a husband his wife for another woman.

Death—Mortuary ceremonies.—Speaking of the Tang-hsiang, the Sui shu says:

When people of eighty or over die the relatives do not mourn, for they say that they 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. (Sui shu, Book, 83; Conf. T'aug shu, Book, 221.)

The Tang shu (Book, 221), speaking of the Tung nii kuo, which embraced in the seventh or eighth century the greater part of north-eastern Tibet, says:

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.

Early European travelers in eastern Asia tell us that the Tibetans used to devour the bodies of their dead parents. Thus William of Rubruk (Itinerarium, Edit. Soc. Geo. de Paris, p. 289) says:

Post istos sunt Tebec, homines solentes comedere parentes suos defunctos, nt causa pietatis non facerent aliud sepulcrum eis nisi viscera sua. Modo tamen hoc demiserunt, quia abhominabiles erant omni nationi. Tamen ad huc faciunt pulcros ciphos de capitibus parentum, ut illis bibeutes habeant memoriam eorum in jocunditate sua. Hoc dixit michi qui viderat.

Plano Carpini (Historia Mongalorum, 1x, p. 658) says:

Venit ad terram Burithabet \* \* \* qui sunti pagani. Qui consuetudinem mirabilem imo potius miserabilem habent: quia cum alicujus pater humanæ naturæ debitum solvit, omnem congregant parentelam, et comedunt eum sicut nobis dicebatur pro certo.

Friar Odoric, who was the first European traveler to visit Tibet, gives a different account of their mortuary customs, and one more in

<sup>\*</sup>It is a difficult matter to say where polyandry begins and cohabitation ends in Tibet. These terms seem nearly interchangeable.

accordance with what we know to have obtained among the Tibetans for some centuries back. Charges of cannibalism against a remote people only known to the informants of the writer of a narrative by hearsay are not uncommon. To only mention one, I find that the early Arab travelers in China charged the Chinese of the 7th century, A. D., with eating all their enemies killed in war.\* Altogether, I think there is very little foundation for the charge made by Rubruk and du Plan Carpin. It is probably the result of a jumbled-up account of the true methods of disposing of the dead, which will be described farther on. Friar Odoric says (H. Yule, Cathay and the Way Thither, I, p. 151):

Suppose such an one's father to die, then the son will say, "I desire to pay respect to my father's memory;" and so he calls together all the priests and monks and players in the country round, and likewise all the neighbors and kinsfolk, and they carry the body into the country with great rejoicings. And they have a great table in readiness, upon which the priests cut off the head, and then this is presented to the son, and the son and all the company raise a chant and make many prayers for the dead. Then the priests cut the whole of the body to pieces, and when they have done so they go up again to the city with the whole company, praying for him as they go. After this the eagles and vultures come down from the mountains, and every one takes his morsel and carries it away. Then all the company shout aloud, saying, "Behold! the man is a saint. For the angels of God come and carry him to paradise." And in this way the son deems himself to be honored in no small degree, seeing that his father is borne off in this creditable manner by the angels. And so he takes his father's head and straightway cooks it and eats it, and of the skull he maketh a goblet, from which he and all the family always drink devoutly to the memory of the deceased rather. And they say that by eating in this way they show their great respect for their father.

Colonel Yule, commenting on the preceding passage, says:

Klaproth quotes passages showing a knowledge of this mode of disposing of the dead from Strabo, Cicero's Tusculan Questions, and Justin. Strabo also ascribes to the Caspii the opinion that those whose bodies the birds appropriated were blessed. Herodotus and Mela ascribe such practices to the Issedonians and Scythians, "Corpora ipsa laniata et casis pecorum visceribus immista epulando consumunt. Capita ubi fabri expolivere auro vincta pro poculis gerunt." (Pomp. Mela, II, p. 1.)†

I have shown in my paper "On the use of skulls in lamaist ceremonies" (Proc. Amer. Orient. Soc.. Oct., 1888, p. XXII) the notions prevailing in Tibeton this subject. As further elucidating the above passage from Odoric's travels, I may mention that the rapidity with which the body of the dead is devoured by the birds or other animals to whom it is fed is held to be a proof of the good luck (or *karma*) of the deceased, and therefore the skull of one who has been so devoured is a good one out of which to make a libation bowl.

Chinese authors describe as follows Tibetan mortuary customs:

When a person dies in Tibet the corpse is tied up with ropes, the face being put between the knees and the hands stuck under the legs. The body is wrapped in the everyday clothes of the deceased and put in a rawhide bag. The men and women having lamented in common over their loss, suspend the corpse by means of

<sup>\*</sup>See Reinaud. Relation des voyages faits par les Arabes, etc., 1, pp. 52, 63, 70. †Conf. Strabo's remarks about the Hibernians and the Massagetæ. Bk. v. 4 and Bk. xi, 8. Also Ammianns Marcellinus, xxvii. 4, and Herodotus iv. 65.

ropes from the rafters and request the lamas to come read the sacred books. A few days later the body is carried to the corpse cutter's place, where it is tied to a stake and the flesh cut off and given to dogs to eat. This is called a "terrestrial burial." The bones are crushed in a stone mortar, mixed with tsamba, made into balls, and also given to the dogs or thrown to the vultures, and this latter mode of disposing of them is called a "celestial burial." Both these methods are considered highly desirable.

The poor dead are buried in the streams, the corpse being simply thrown in. This is not an esteemed mode of burial. The bodies of lamas are burnt and cairns erected over their remains. (Jour. Roy. Asiat. Soc., n. s., XXIII, pp. 231-232; Conf. Land of

the Lamas, pp. 81, and 286-287.)\*

Georgi (op. cit., p. 443) gives some interesting details, which I have not seen noticed elsewhere. He says:

Mos est etiam, ut Summorum Lhamarum, aliorumque paucorum cadavera vel sandalo, quodeum aloes ligno nonnulli confundunt, comburantur, vel balsamo condita sacris in loculis reponantur. \* \* \* Vulgaris quoque ac fere quotidiana consultudo in Civibus, honestisque hominibus sepeliendis ist haec servatur. Lhama, vel Traba quivis aninam, ut somniant, e summo capite cadaveris ad huc tepescentis primum educit. Educit autem hoc paeto cutem verticis digitis arcte prehendam, et corrugatam tam celeriac vehementi succussionis impetu attrahit, ut eam uno momento subsilire, ac crepitare faciat. Tum vero, inquiunt, anima defuncti erupisse creditur.

Capt. Samuel Turner (Embassy, p. 260) says:

It is the custom of Tibet to preserve entire the mortal remains of their sovereign lama only; every other corpse is either consumed by fire or given to be the promiseuous food of beasts and birds of prey. As soon as life has left the body of a lama it is placed upright, sitting in an attitude of devotion, his legs being folded before him, with the instep resting upon each thigh and the soles of the feet turned upward. \* \* \* The right hand is rested with its back upon the thigh, with the thumb bent across the palm. The left arm is bent and held close to the body, the hand being open and the thumb at right angles with the fingers touching the point of the shoulder. This is the attitude of abstracted meditation.

If we seek for mortuary customs similar to those of the Tibetans we have not far to go to find them among other Buddhist people, who may probably have seen in the custom of having their dead bodies fed to birds or beasts a supreme act of charity, for which Gautama Buddha himself set the example when, in several of his births, prior to his reaching Buddhahood, as related in the Jātaka, he gave his body as food to hungry tiger whelps or other famished animals.

In Siam it is not uncommon for a person to direct that his body after death shall be cut up and fed to vultures and crows (Sir John Bowring, The Kingdom and People of Siam, I, p. 122), and in Korea it is customary, after the bodies of lamas have been consumed by fire, to mix the ashes with rice flour and feed them to birds. The "towers of silence" of the Parsees in which the bodies of the dead are devoured by birds is another analogous method, but the reasons which have called this custom into existence with them, are, of course, quite different.

<sup>\*</sup> For a vivid description of a "terrestrial burial," see Annales de la Propagation de la Foi, 1865, p. 289; Conf. also Georgi, Alph. Tibet., p. 441 et seq.

The Kafirs put their dead in boxes and expose them on the tops of high mountains (Sir P. Lumsden, Jour, Anth. Inst. III, p. 361.

In Ladak bodies are burned fifteen or twenty days after death, during which time prayers are said by lamas. In the case of a very wealthy man or a chief, after the body has been burned in a metal vessel, the ashes are carefully collected and made into an image of the deceased. A ch'ürten or pyramid is erected for the ashes, and in it are placed various kinds of grain, precious stones and metal, rolls of prayers and incense.

The body of a great lama is interred in a sitting posture with his clothes and all the implements of worship he was accustomed to use daily. The coffin is deposited in a ch'iirten, before which for some time food and water are offered daily, and a light is kept burning every night. (Alex. Cunningham, Ladak, p. 309.)

As to their signs of mourning, Chinese authors tell us that the Tibetans, both "men and women put on mourning clothes, and for one hundred days they wear no colored clothes, and during that period they neither comb their hair nor wash. The women do not wear their earrings and put away their prayer beads, and these are the only changes (in dress) they make. The rich invite lamas at short intervals to come and read the sacred books, so as to procure for the deceased the joys of the nether world. After one year it is all at an end." (Journ. Roy. Asiat. Soc., n. s., XXIII, p. 233.)

Χ.

# RELIGION-LAMAS-RELIGIOUS ARCHITECTURE-OBJECTS CONNECTED WITH RELIGIOUS WORSHIP.

It does not enter into the plan of this paper to describe even cursorily the religious beliefs of the Tibetans. Many works have already been written on the subject, but much remains yet to be done before we possess a thorough knowledge of it. Buddhism, which was introduced into the country in the seventh century A. D., has remained since then the religion of Tibet. It is that form of Buddhism which is known as Mahāyāna Buddhism, in which magic demondatry and mysticism have become such commanding features that it is with difficulty that we can trace in the forms of worship obtaining at present in Tibet any of the simplicity characteristic of early Buddhism and still to be found, to a certain extent, among the Buddhists of Southern Asia.\*

The Buddhism of Tibet is usually called Lamaism, the word "lama," written bla-ma and meaning "the superior one," being that given by Chinese and foreigners generally to the members of the Buddhist monastic order in Tibet. In Tibet, however, this word is reserved for

<sup>\*</sup> Primitive Lamaism may be defined as a priestly mixture of Shivaic mysticism, magic and Indo-Tibetan demonolatry overlaid by the thinnest veneer of Mahāyāna Buddhism. And to the present day Lamaism still retains these features. \* \* \* But neither in the essentials of Lamaism itself nor in its sectarian aspects do the truly Buddhist doctrines, as taught by Sakya Muni, play any leading part. (L. A. Waddell, Lamaism and its Sects, in Imp. and Asiatic Quarterly Review, vii. and his Buddhism of Tibet, p. 17.)

those monks who have not only taken the highest theological degrees, but who have also led a saintly life and become famed for their knowledge. The word *draba* is used by Tibetans as a generic term for all persons connected with the order, monks as well as lay brethren.\*

The usual dress of the lamas consists in a kilt reaching down to a little above the ankle, a close-fitting waistcoat, similar to that wore by the laity (see p. 687), and a shawl passed around the body, and the left arm, the end thrown over the right forearm, so as to leave the right shoulder and arm uncovered. The head is shaved and the lamas wear no head covering except during church ceremonies or when traveling; in the latter case they wear the same kind of hats as the laity and also the same kind of clothes; and in the former, hats of yellow or red color, varying in shape according to the school or sect to which their convent belongs. Gélugpa lamas usually wear a high yellow hat with a fringe, closely resembling the helmets worn by carabiniers. (pl. 32.) It is called dja-ser or "yellow hat." † The clothes of the wealthier lamas are made of tirma (see p. 699), on which are neatly sewed a few little patches, as it is forbidden them to wear any but torn or worn-out stuffs. Those of the poorer lamas are of pruk ‡

Emil Schlagintweit (Buddhism in Tibet, pp. 170–173) says of the dress of lamas (he in all probability refers to those of Ladak) that "their caps are made of double felt or cloth, between which are put charms. The shape of the cap varies considerably, but it is curious that they are all of Chinese or Mongolian fashion, whilst the form of the robes has been adopted from the Hindus.' Most of the caps are conical with a large flap, which is generally doubled up, but is let down over the ears in cold weather. The head lamas wear a particular cap, generally low and conical, and some head priests of western Tibet have an hexagonal hat formed of pasteboard, and showing four steps diminishing toward the top." §

Others wear a miter of red cloth ornamented with flowers of gold worked in the stuff. This latter kind of cap bears a remarkable resemblance to the miters of Roman Catholic bishops.

The gown reaches to the calves, and is fastened round the waist by a slender girdle; it has an upright collar and is closely buttoned up at the neck. In Sikkim the lamas occasionally wear, slung round the shoulders, a kind of red and yellow striped woolen stole.

The inner vest has no sleeves and reaches to the haunches. The trousers are fastened to the waist by a sort of lace running in a drawing hem. In winter they

<sup>\*</sup> For a general knowledge of lamaic worship, I must refer the reader to C. F. Kæppen, Die Religion des Buddha, Vol. II. and Emil Schlagintweit, Buddhism in Tibet, where a full account of the various religious ceremonies will be found; also, for various interesting details, to Sarat Chandra Das, Indian Pundits in the Land of Snow, and to Dr. L. A. Waddell's, The Buddhism of Tibet, now the standard work on this subject.

<sup>†</sup>Dr. Waddell, op. cit., p. 196, shows 20 styles of lama's hats and cowls.

On the Gelugpa Sect, see Dr. Waddell, op. cit., p. 38.

<sup>§</sup> See for an illustration of this cap, Alex. Cunningham, Ladak, pl. 26.

are worn over the larger gown as a better protection against the cold. In Bhutan the lamas wear, instead of trousers, philibegs hanging nearly as far as the knee.

The cloak is worn, in the way previously described, by all lamas; it is their distinctive ecclesiastical dress.

The costume of the nuns (ani) is in all essential particulars the same as that of the monks; in fact, it is quite difficult to tell an old ani from a man when one meets her with shaved head, a prayer-wheel in one hand and alms bowl in the other, wandering from house to house begging.

Other styles of headdress, as worn in eastern Tibet, are described in my Land of the Lamas, p. 238. (See also Alex. Cunningham, Ladak, p. 372.)

The boots of lamas are of the kind previously described (p. 686), the only peculiarity being as there stated, that the vamps are of white cloth and the tops of red *pulo*.

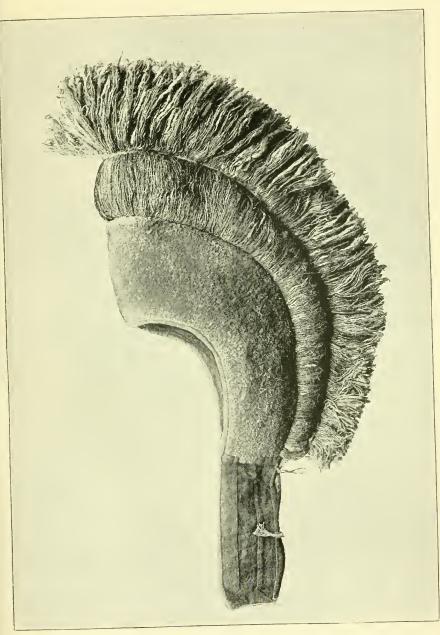
The costume worn by lamas in Tibet is, with slight modifications, the same as that still worn in Nepal by Buddhist monks, and which was originally the national costume of the inhabitants of that country, and was probably borrowed from the latter by the early Tibetan monks.

At religious ceremonies the priests wear \* \* \* a close-fitting jacket called the "chivasa" and a long skirt or petticoat called the "nivasa," which reaches to the ankles, and which is gathered at the waist into a number of small plaits or folds. The chivasa and nivasa are joined together into one dress at the waist, round which there is wrapped an ordinary "kammerband" or thick-rolled waistcoat. (H. A. Oldfield, Sketches from Nepal, II, 140.)

Religious buildings.—Religious buildings and monuments in Tibet comprise, (1) Gonba or monasteries; (2) Lh'a-k'ang or temples; (3) Meh'od-rten (pronounced ch'ürten), literally "offerings receptacle," and perhaps better known by their Indian name of chaitya, and tsa-tsa k'ang, receptacles for offerings called tsa-tsa; (4) Māni walls, or piles of stones on which are incised prayers or magic formulas; (5) Lab-tsé, or heaps of stones on the summits of mountain passes.

The monasteries usually consist of rows of small houses of the usual Tibetan style of architecture, built in close proximity to, and commonly around, one or more temples. These houses consist of a dwelling, generally two stories high, a storehouse and a small courtyard. The ground floor of the dwelling is used as a stable. The outside walls of the houses are painted white, and those of the dwellings of high lama dignitaries red. These houses belong to individual lamas, who rent portions of them to pilgrims or to resident lamas who have no homes of their own.

Around the whole monastery is usually a high wall, and the approach to the main entrance is marked by rows of ch'irtens and māni walls. All lamas residing within a gonba are entered on a register, and are obliged, when duly qualified after a period of study, to take part in the daily ceremonies performed in the house of assembly (duk'ang). In



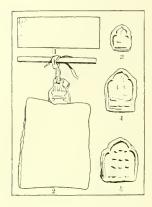
YELLOW HAT, WORN BY LAMAS OF THE GÉLUG SECT IN CHURCH CEREMONIES.

Cat. No. 131181, U. S. N. M. Kumbum.





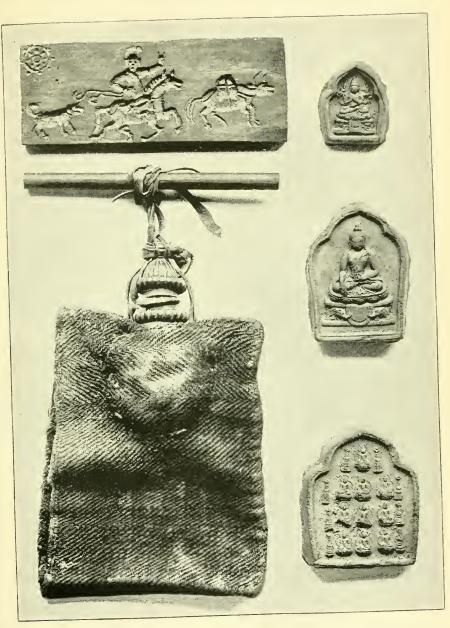
## EXPLANATION OF PLATE 33.



CEREMONIAL OBJECTS.

- Fig. 1. WOODEN MOLD. Used in certain religious ceremonies, depicting a man driving a loaded yak and followed by a dog. Ts'aidam. (Cat. No. 131013, U. S. N. M.)
- Fig. 2. Copper Water Bottle. With red truk cover; used by Lamas. Kumbum. (Cat. No. 167167, U. S. N. M.)
- Fig. 3. CLAY TSA-TSA. Image of Tsongkapa. (Cat. No. 167170c, U. S. N. M.)
- Fig. 4. CLAY TSA-TSA. Image of Tsépamed. (Cat. No. 167170a, U. S. N. M.)
- Fig. 5. CLAY TSA-TSA. Ten images of Tsépamed (?) ch'urtens on either side of each row of images.

(Cat. No. 167170b, U. S. N. M.)



CEREMONIAL OBJECTS.



consideration of this they are supplied daily with tea, and also receive an annual allowance of barley. The lamas partake of their first meal after noon, until which time they are only allowed to moisten their lips with water. For this purpose they carry in their belts a little copper or silver bottle sewed in a bit of truk (see pl. 33, fig. 2). This one has two brass bands around the mouth; it has a brass stopper, on the top of which is a hole, through this passes a leather string, by which the stopper is held in place.

The temples (*lh'a-k'ang*) are throughout Tibet of a Chinese style of architecture, the roofs being, however, flat, dirt covered ones, except in some of the larger and more famous temples, where Chinese tiles, yellow or blue, have been used. The orientation of the temples does not appear to be a matter of much importance, as I have seen some facing south, others facing east, but I do not remember having ever heard of any

tacing west. Schlagintweit (op. cit., p. 188) says:

The walls of the temples look toward the four quarters of heaven, and each side should be painted with a particular color, viz, the north side with green, the south side with yellow, the east side with white, and the west side with red, but this rule seems not to be strictly adhered to.

Most temples, as a matter of fact, are painted red, and the columns in front of them are also frequently painted of the same color.

As to the interior arrangement of the temples, I must refer the reader to Dr. Waddell's work (p. 287 et seq.) and to Georgi's Alphabetum Tibetanum (p. 406 et seq.), in which latter work will be found a very detailed description of the great temple of Lh'asa (the Jo k'ang).

The ch'ürten or "receptacles for offerings" are built over the remains of revered lamas, or else they are simply decorative or commemorate some important event. When simply used as receptacles for offerings they are filled with tsa-tsa, that being the name given to a small clay cone which the Tibetans make in incalculable thousands in molds and deposit in these ch'ürtens. In some parts of the country they build little hutches of rough logs for this purpose. These are called tsa-tsa kang.

These tsa-tsa are usually conical, in imitation of the form of the ch'üren. In figs. 3, 4, and 5, of pl. 33, are depicted another variety of tsa-tsa, flat and in the shape of a shrine. In one of these, which is 3 inches long and about 2 wide, are 10 figures of gods in relief; in another is Tsépamed (Amitayus), and in a third Tsongkapa is represented.

The form of the chortens varies much more than that of their prototypes, the stupas. The base of the stupa is a cylinder or cube, upon which a body shaped like a cupola is set up. Stupas which have been broken down have been found to be solid buildings, with a little shrine in the center only, in which has been deposited the burnt bones of a human being, together with coins, jewels, and inscribed slabs. The bones are sometimes inclosed in small cases made of the precious metals.

In the Tibetan chortens this form has in general undergone considerable modifications. The unaltered ancient type has remained limited to the smaller chortens put up in the temples. The principal difference between a stupa and chorten is that in the latter the cupola is either surmounted by a cone or that it is inverted. The most general style is the following: The base is a cube, upon which rests the inverted cupola. This cupola is the principal part. It incloses the objects enshrined, and in it is the hole leading to the space for the offerings. A graduated pinnacle rises above it, and this is either a cone of stones or a wooden spire. It is surmounted by a disk placed horizontally and a spear-shaped point, or, instead of it, by a crescent supporting a globe and the pear upon that. \* \* \* \*

The materials used for the chortens in the open air are rough stones, bricks, or clay; they are almost all of solid masonry. The outer surfaces are thickly plastered with mortar, which is colored red with the dust of pounded bricks. \* \* \* The height of the chorten is in general from 8 to 15 feet, though a few considerably exceed this latter height. \* \* \* Those set up in the temples are molded from metal, or, more generally, from clay mixed with chopped straw. Occasionally they are carved of wood, but such chorten scarcely ever exceed 4 feet. They are often not higher than as many inches. (Emil. Schlagintweit, Buddhism in Tibet, pp. 192-196.)

There is in the Museum collection a photograph of the celebrated lamaist sanctuary of Wu-t'ai shan (Ri-vo tsé na), in Shan-hsi, in northern China, which shows a very fine ch'ürten, probably 60 feet high, with a large gilt spire of the horizontal circle and vertical disk and crescent style described by Schlagintweit. In this ch'ürten is said to be kept a body relic of the Buddha Gautama.

 $M\bar{a}ni\ walls$ .—This name is given to long, low walls of rough stones, on the surface of which are incised sacred formulas, usually the famous six-syllable formula  $Omi\ m\bar{a}ni\ padm\'e\ h\bar{u}m$ . The name given the wall is derived from the name of this prayer, which is colloquially called "the māni." They are also known as mendong, probably written  $mang\ dong$ , "many stones." Frequently images of gods are incised on the stones, and I have also seen long passages of the Scriptures on them. Frequently a whole  $m\bar{a}ni$  wall will be covered with slabs on which are inscribed one of the long theological works in which lamas so delight, sometimes the Prādjna paramīta in 8,000 verses. Plate 34 shows an inscribed stone from a  $m\bar{a}ni$  wall in a Bonbo country of northeastern Tibet (Jyadé). It is of slate, is painted red, and the mantra incised on it is Om,  $matrimuy\acute{e}$  sale hdu, a favorite one of the Bonbos.

Schlagintweit (op. cit., p. 197) says the longest mani wall known of is 2,200 feet long. Some, he says, have a kind of tower at either end, occasionally in the form of a ch'iirten, with a sacred image in front, and a large pole to which flags with prayers are attached are also not unfrequent at the ends of mānis. Travelers, when passing along these māni walls, leave them on their left side if they are true believers, and on their right if they belong to the Bonbo faith.†

Lab-tsé or heaps of stones, also called dobony, and in Mongol obo, are to be seen on the summit of every pass in Tibet, and frequently at the

<sup>\*</sup>The shape of the ch'ürten is symbolical, but I can not enter into an explanation of it here. See Dr. Waddell, op. cit., p. 262 et seq.

<sup>†</sup> See also on ch'ürtens, H. A. Oldfield, Sketches from Nipal, II, 211.





mouths of the valleys leading up to them. Though in all probability they had no religious signification originally, they have acquired one, and the stone which every traveler as he passes by does not fail to throw on the heap, is now put there as an offering to the gods, and when throwing it down each one makes a short prayer, which ends with, "Lha jya-lo, lha jya-lo" "Gods, (give me) a hundred years; gods. (give me) a hundred years."

In these stone heaps are usually stuck large bunches of brushwood and also frequently huge wooden arrows, the meaning of which latter I have failed to ascertain. Bits of wool, rags, and pieces of cotton on which are stamped mantras and dhāranis flutter from the branches or hang in long rows from strings tied to them and to some big stone fifty or more feet off.\*

Stone heaps similar in shape and built for similar purposes are found in the Navajo and Moqui countries in Arizona. Speaking of the Moqui, Fewkes says:

Ma-sau-wuh shrines are simply heaps of sticks or piles of stones, and it is customary for an Indian toiling up the trail with a heavy bundle of wood on the back to throw a small fragment from the load upon these shrines or to cast a stone upon them as he goes to his farm. These are offerings to Ma-sau-wuh, the fire god, or deity of the surface of earth. (J. Walter Fewkes, Journ. Amer. Ethnology and Archæology, 1V, p. 41.)

The custom of making offerings on mountain tops is too common in other countries, especially in South America, to require more than a passing reference here. Acosta, in his History of the Indies (II. p. 309, Hakluyt Soc. Edit.), says of the Peruvians;

They have used as they goe by the way, to cast in the crosse ways, on the hilles, and toppes of mountaines, which they call Apachitas, olde shooes, feathers, and coea chewed, being an herb they use much. And when they have nothing left, they cast a stone as an offering, that they might passe freely, and have greater force, the which they say increaseth by this means. \* \* \* \* They used another offering no lesse absurd, pulling the hair from the eyebrowes to offer it to the Sunne, hills, Apachitas, to the winds, or to any other thing they feare.

We also find this custom of offering rags at sacred shrines in Ireland and among the Mohammedan peoples of northern Africa.

The custom of walking around a sacred building or monument, a custom called *korwa* in Tibetan, was followed in India in the early days of Buddhism as well as by the wild Turkish tribes which inhabited northern and northeastern Asia in the second century B. C. Thus in the Ch'ien Han shu, book 94, it is said that the Hsiung-nu and the Sien-pi, at the great autumnal sacrifice to heaven, rode three times around a little clump of trees. It is also common in parts of Africa, as, for example, among the Oromo of Abyssinia (Borelli, L'Éthiopie méridionale, p. 210), and was followed centuries ago in northern Europe and in other parts of the world. (See Land of the Lamas, p. 67.)

<sup>\*</sup>Ou this subject the reader should also consult Emil Schlagintweit's valuable work, pp 198-200.

A Tibetan history of the sandal-wood image of the Buddha, known as the Tsandan Jovo and now preserved in the Chan-tan ssǔ at Peking, referring to the benefits to be derived from walking round sacred monuments, says (p. 14 et seq.):

He who walks around a ch'ürten, In all circumstances of life, By gods, nagas, and yakshas, As by rakshas, shall be houored.

Whoever makes a ceremonial circle
Of the ch'irten of the Lord of the world [i.e., the Buddha]
Acquires more [wight] than by reciting
Charms during a million of world periods.

Fire and poison and weapons
Shall never bring about his death;
Living in wisdom, in the fullness of time—
When his life is run, he shall die.

He who circumambulates a ch'ürten Shall have wealth of castles, wealth of land, Of villages a goodly store; He shall reach the summit of worldly bliss.

While walking round the ch'ürten he must repeat the following Sanskrit charm:

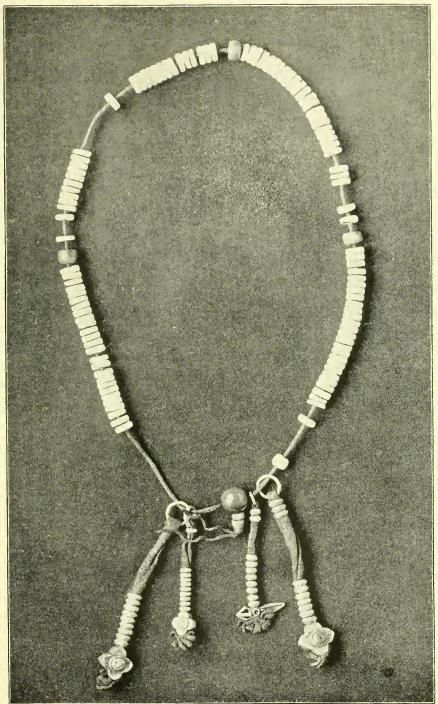
Namo Bhagavate ratna ketu radjāya Tathāgathāyu aryate samyak-sam-Buddhāya tatyathā. Om ratne, ratne, mahā ratna, ratna vidzaya. Swāha.

Objects connected with religious worship.—The rosary (treng-wa) is not only an essential part of the lama's dress but of that of nearly all the laity, male and female, in Tibet.

As a Buddhist article [says Dr. Waddell] the rosary is especially peculiar to the northern school of Buddhists, and the outcome of the esoteric teachings of the Mahāyāna school, instilling belief in the potency of muttering mystic spells and other strange formulas. (L. A. Waddell, Jour. Asiat. Soc. Bengal, LXI, p. 24, et seq.)

On pl. 35 is shown the form of rosary in common use among lamas. It contains 108 discoidal shell beads, of uniform size, divided into four groups of 27 beads each by 3 red coral beads; where the two ends of the string of beads come together they are passed through a large amber bead, a smaller discoidal, and a conical one, so that the two look like a fat, long-necked vase. These last two beads are called do-dzin (rdog-hdzin), "retaining or seizing beads."

Four short leather thongs strung on the rosary beside the *do-dzin* by silver rings have silver beads on each of them, and at the lower end of one there is a little silver *dorjé*. These strings are used as counters (*drang-dzin*) in the following fashion: When a certain charm has been recited 108 times the first bead on the string, to which is attached the *dorjé*, is slid up the string, and so on for each series of 108 repetitions till the tenth time; then the first bead on the string next to the *dorjé* string is slid up, and so on for the four strings of counters. Usually the string

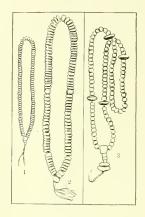


ROSARY OF SHELL BEADS; COUNTERS OF SILVER. Cat. No. 167271, U. S. N. M. Kumbum.



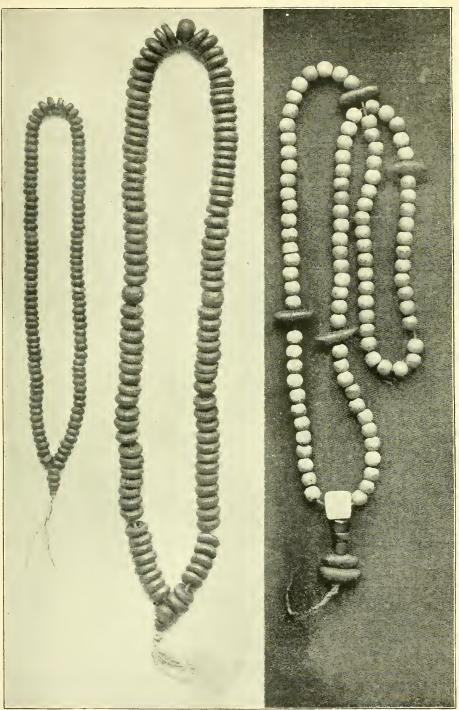


# EXPLANATION OF PLATE 36.



ROSARIES.

- Fig. 1. ROSEWOOD ROSARY. Ta-chien-ln (Cat. No. 167267, U. S. N. M.)
- Fig. 2. Yellow Wood Rosary. Bat'ang. (Cat. No. 131058, U. S. N. M.)
- Fig. 3. Mohammedan Rosary. Of bone and date seeds. Hsi-ning Fu. (Cat. No. 167300, U. S. N. M.)



ROSARIES.



next to the one on which is hung the  $dorj\acute{e}$  has a bell (drilbu) attached to it; the third string has a magic peg (purbu) on it, and the fourth a wheel (k'or-lo).

Rosaries are frequently ornamented with small coral or turquoise beads hanging from them, and it is usual to put narrow silver rings on either side of the large coral beads dividing the successive groups of beads in the string.

Another treng wa, the beads of which are sections of human skulls, and the dividing beads pieces of conch shell, is in the Museum collection. The do-dzin are two in number, a large amber bead and a small wooden one. Such rosaries, Dr. Waddell remarks (loc. sup. cit.), are especially used for the worship of Dorjé jig-ch'é (Yāma), the King of the Dead.

One set of small beads, of narrow discs of rosewood, with four red coral beads, is shown in fig. 1 of pl. 36. In this set the coral beads have to be counted, so as to complete the number of 108. This string is as it came from the dealer, and has no counters on it. Such rosaries are apparently of the class called "red sandal-wood rosary" by Dr. Waddell, which, he says, are used only in the worship of the fierce deity Tamdrin, a special protector of lamaism.

Fig. 2 shows a rosary of discoidal beads of yellow wood, in which narrow lines of lighter color radiate from the center to near the circumference. The dividing beads are of the same material as the rest of the rosary but slightly larger and thicker. This rosary belongs to the class called *ser-treng*, or "yellow rosary," and is the special rosary of the Gélupa, or reformed school of lamaism. It may be used for all kinds of worship, including that of the furies.

On pl. 37 is shown a Chinese rosary of 18 olive-shaped beads of some hard, light-brown wood (or seeds); each bead is cut into an image of one of the 18 Lohan (Arhats). This is the usual number of beads used in rosaries (su-chu) in China. Another Chinese rosary, made of some kind of rough brown seed, possibly the same as that used in Tibet for rosaries, and there called Bodhi shing, is in the Museum collection.\* Dr. Waddell (op. sup. cit., 28) says the tree which bears this seed grows in the outer Himalayas.

Besides the materials used in the manufacture of rosaries mentioned by Dr. Waddell, I found that the Tibetans greatly prized for this purpose two varieties of seeds, the one, called by the Chinese feng-yen po-ti mu or "Bodhi wood with phænix eyes," the other hsing yüch mu or "wood with the stars and moon on it." These seeds are turned spherical and then polished. The feng-yen kuo is, I believe, the same as the Pin-po of the Cantonese, identified, if I am not wrong, with Sterculia lanceolata.

Rosaries made at Wu-t'aishan, the famous lamaist sanctuary of northern China, are turned from pieces of poplar wood and stained

<sup>\*</sup> Not illustrated in this paper.

yellow. Great quantities are carried away from this place every year by Mongol and Tibetan pilgrims.

Pl. 36, fig. 3 shows a rosary of 99 bone beads divided into three series of 33 beads each by date stones. The two ends of the string pass through a large bead made of a piece of conch shell. This is the style of rosary used by Mohammedans in China. The number 99 corresponds to the number of the names or attributes of Allah.\*

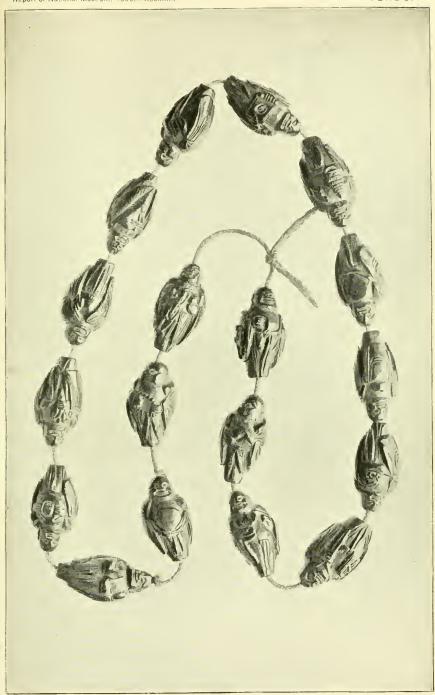
Prayer wheels.—The same teachings which caused the northern Buddhists to believe in the efficacy of continually mumbling unintelligible formulas must be held responsible for the invention of the ingenious mechanical contrivance known as a "prayer wheel" or "prayer-barrel," which, when turned the right way—from left to right—is as efficacious as if the person turning it, or who had it built, recited himself all the prayers inclosed in it on printed slips of paper. Each complete revolution of the wheel counts as one repetition of all the prayers contained in the barrel.

Alexander Cunningham (Ladak, p. 375) says that the earliest mention of the prayer-wheel is found in the Records of the Western World of the Chinese Buddhist pilgrim Fa-hsien, who visited India in the fifth century of our era. This, however, is an error resulting from a mistranslation in Abel Remusat's rendering of the Chinese text. Gen. Cunningham also gives a medal of Hushka (first century A. D.) on which is a man holding in his hand what he takes to be a prayer wheel. At all events the prayer wheel is and has been for five or six centuries at least a popular instrument in not only Tibet but in Korea and Japan, in which two latter countries, however, only the larger ch'ös k'or-lo are found. (See on this subject Emil Schlagintweit, Buddhism in Tibet, p. 229 et seq. and Land of the Lamas, p. 334.)

The prayer-wheel is of two kinds: The first comprises hand wheels, wheels turned by the wind or by water, and small stationary wheels or barrels placed either in a house or in rows near a temple or along an interior gallery of a house or the base of a ch'iirten. The second class are much larger machines and are only found in temples. They are sometimes 30 or 40 feet high and 15 or 20 feet in diameter. In them is placed a collection of the canonical books of lamaism (Kandjur), and by means of bars fixed in the lower extremity of the axis of the barrel it is put in motion. These wheels, from the works in them being "the law" (ch'ös), are called ch'ös k'or-lo, while the first class of wheels having usually only the formula om mani padme hām (colloquially called "the mani") printed on the pages wrapped up in them, are known as mani k'or-lo.

The prayer-wheel consists of a cylinder of metal, or, in the larger wheels, of leather or even wood, through which runs an axle of wood or iron around which it pivots. In the interior are arranged, one on

<sup>\*</sup> On Burmese Buddhist rosaries, see Dr. L. A. Waddell, Proc. Asiatic Soc. of Bengal, December, 1892.



CHINESE ROSARY.
Each bead cut to represent one of the eighteen Lohan.
Cat. No. 130388, U. S. N. M.





PRAYER WHEEL COVERED WITH RED COTTON CLOTH.

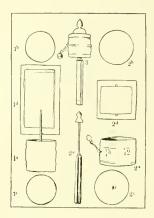
Roughly carved wooden handle.

Cat. No. 167169, U. S. N. M. Ts'aidam.





#### EXPLANATION OF PLATE 39.



### PRAYER-WHEEL AND PARTS OF PRAYER-WHEEL.

- Fig. 1a. Stationary Prayer-wheel. Drum of brass. (Cat. No. 130393, U. S. N. M.)
- Fig. 1b. Top of Stationary Prayer-Wheel. (Cat. No. 130393, U. S. N. M.)
- Fig. 1c. BOTTOM OF STATIONARY PRAYER-WHEEL. (Cat. No. 130393, U. S. N. M.)
- Fig. 1d. Prayer Sheets. (Cat. No. 131014, U. S. N. M.)
- Fig. 2a. Body of Bronze Prayer-wheel. With silver ornamentation. (Cat. No. 130392, U. S. N. M.)
- Fig. 2b, Top of Bronze Prayer-wheel. With silver ornamentation. (Cat. No. 130392, U. S. N. M.)
- Fig. 2c. Bottom of Bronze Prayer-wheel. (Cat. No. 130392, U. S. N. M.)
- Fig. 2d. Prayers Wrapped Round Anle. (Cat. No. 130392, U. S. N. M.)
- Fig. 2e. Handle of Prayer-wheel. With knob of silver on top. (Cat. No. 130392, U. S. N. M.)
- Fig. 3. Brass Hand Prayer-wheel. From Darjeeling. (Cat. No. 74493, U. S. N. M.)



PRAYER WHEEL AND PARTS OF PRAYER WHEEL.



top of the other, sheets of paper or leaves of a book on which "the mani" or some other spell is printed in very fine characters, the finer the better. The sheets are wound on the axle from right to left, 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 to read, i. e., from left to right.

A roughly made hand prayer-wheel with a felt barrel covered with coarse woolen cloth is represented in pl. 38. An iron pivot runs through the barrel and fits in a roughly carved wooden handle. The cylinder is covered with a piece of red cotton cloth, to the corners of which are attached glass beads.

On pl. 39, fig. 2 is shown a hand prayer-wheel. The cylinder is of bronze, the top being ornamented with a silver wheel decorated with coral and turquoise beads. The bottom has four *dorjé*, and on the sides is the six-syllable spell in landza characters in silver. On a band above this are *dorjé*, and on a band around the bottom are lotus leaves. On the top is a wheel in silver in which are set coral and turquoise beads. This is a very fine specimen of Tibetan workmanship. The top of the axis terminates in a silver ornament of pineapple shape.

On this plate is also represented a small stationary table or wheel (fig. 1), the axle of which projects above the top, so that it may be put in motion without moving it from the stand on which it rests. The cylinder is of bronze with raised ornamentation of dorjé, and the mani prayer in Nepalese Sanskrit characters.

In fig. 1 there is also represented a strip of Chinese paper on one side of which is printed the formula Om,  $mani\ padme$ ,  $h\bar{u}m$ . This formula is repeated nearly 400 times on this sheet, and in one of the small prayer-wheels previously described about 100 pages can be wrapped in the cylinder. Consequently a complete revolution of the wheel is equivalent to repeating the formula 40,000 times. A prayer-wheel complete, from Darjeeling, Iudia, is also shown in fig. 3.

The cups used with the small prayer-wheels turned by the force of the wind are cut out of pieces of pine wood and are in shape exactly like the cups of an anemometer. (See Smithsonian Report, 1892, p. 676, where is also shown a prayer-wheel turned by water.)

Bits of cotton with prayers printed on them and tied to strings or to high poles placed over houses, and known as la-der, belong to the same class of objects as the prayer-wheels; each time these bits of stuff flutter in the breeze it is as if the prayer written on them had been recited. The figure of a horse is frequently stamped on these pieces of cloth and around it is a long formula. These are called lung ta, or "wind horses," and are, among many other uses, for the special protection of travelers. (See Emil Schlagintweit, Buddhism in Tibet, p. 253 et seq., and Waddell, op. cit., p. 408 et seq.)

The principal objects used by lamas in church ceremonies, or while reading the sacred books, are the small hand drum (damaru), frequently made of children's skulls and covered with snake skin, the bell (drilbu),

and the  $dorj\acute{e}$  (the Indian rajra or Indra's thunderbolt). Next in importance to them come the holy-water vase (bumba), the mirror  $(m\acute{e}$ -long), the triangular nail (purbu), and the skull bowl  $(t'\ddot{o}dpa)$ .

On pl. 40, fig. 2 is shown a damaru, made of two skulls attached together by a wooden disk cemented to them. Heads of devils and skulls are painted on them in red and blue. A small cotton band covers the disk between the two heads and projects a few inches, so that the person using the drum may hold it in his hand, his thumb and forefinger being placed around the disk of wood between the drumheads. There are two small knobs covered with cloth depending from this band by short strings of such length that when the drum is twirled sharply around they strike the heads. This damaru was collected by Rev. C. H. A. Dall.

The other figure on the same plate represents a *damaru* rather smaller than the preceding one. The skulls of which it is made are not decorated, but the band by which it is held in the hand is of embroidered satin decorated with elaborately knotted silk tassels of Chinese make.

The bell  $(dril\cdot bn)$  of the ramas is of bronze and usually about  $2\frac{3}{4}$  inches in diameter. In pl. 41, fig. 4 is shown a bell having on its outer surface near the handle certain mystic syllables, eight in number. On the interior surface are three mystic syllables and a 7-petalled flower in the dome. The handle is cylindrical and has a head of *Dharma* surmounted by a *dorjé*. This bell was made in Dérgé, which country is famous for the clear toned bells cast there.

Similar to the preceding, except that the head of *Dharma* does not appear in the handle, which is only a half *dorjé*, is the bell shown in fig. 5. This bell comes from the famous lamasery of Dolon nor, in eastern Mongolia.

The usual position in which the bell is held is in the left hand, the opening of the bell pointed towards the body, the thumb against the handle and the fingers around the body of the bell. (For description of lamaist bells see Alex. Cunningham, Ladak, p. 373.)

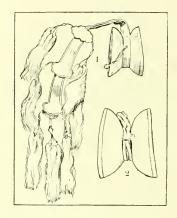
The dorjé, or thunderbolt, is generally used with the bell, it being customary to hold it in the right hand between the thumb and index, the other fingers extended. It was looked upon in early times in India as a sacred symbol of Indra, and in Nepal it has become symbolical of the Buddha and his religion. Possibly this symbolism is known to the Tibetans, but I have not seen it mentioned in any of their sacred books

The Nepalese scriptures say that a contest once occurred between Buddha and Indra, in which the latter was defeated, and had wrested from him his chief and peculiar instrument of power, the vajra or thunderbolt, which was appropriated as a trophy by the victor, and has ever since been adopted by his followers as the favorite emblem of their religion.

The Vajra and the ghanta or bell have a peculiar symbolic meaning attached to them by Buddhists, similar to that attached by Hindus to the Linga and Yoni. The Vajra represents Buddha and corresponds to the Linga; the ghanta represents Prajna Devi or Dharma, whose head is often figured on its handle, and corresponds to the Yoni. (H. A. Oldfield, Sketches from Nipal, II, 199—200.)



## EXPLANATION OF PLATE 40.



DRUMS MADE OF HUMAN SKULLS; USED IN RELIGIOUS CEREMONIES.

Fig. 1. Damaru, or Hand Drum of Skulls. Silk tassels. Kumbum. (Cat. No. 130385, U. S. N. M.)

Fig. 2. Damaru. Painted white and red with heads of demons, skulls, etc. (Cat. No. 153363, U. S. N. M.)

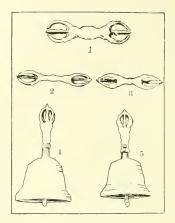


DRUMS MADE OF HUMAN SKULLS, USED IN RELIGIOUS CEREMONIES.





### EXPLANATION OF PLATE 41.



DORJÉ AND BELLS USED IN RELIGIOUS CEREMONIES.

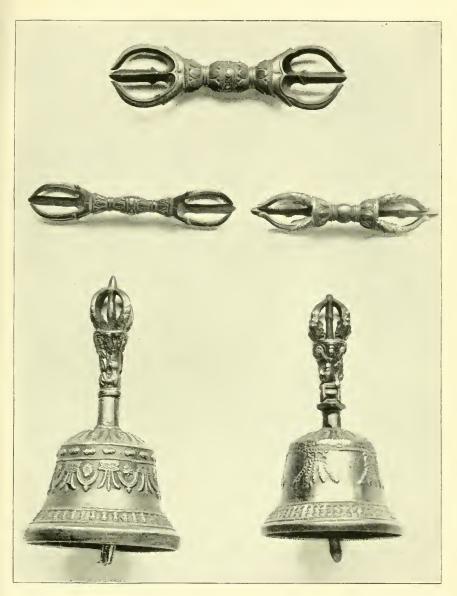
Fig. 1. Japanese Dorjé. (Cat. No. 130390, U. S. N. M.)

Fig. 2. Japanese: Dorjé, (Cat. No. 167172, U. S. N. M.)

Fig. 3. Tibetan Dorjé. (Cat. No. 167268, U. S. N. M.)

Fig. 4. Church Bell, Dergé, (Cat. No. 131011, U. S. N. M.)

Fig. 5, CHURCH BELL. Dolon nor. (Cat. No. 130389, U. S. N. M.)

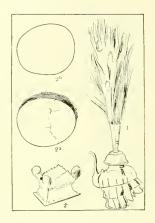


DORJÉ AND BELLS USED IN RELIGIOUS CEREMONIES.





### EXPLANATION OF PLATE 42.



LIBATION BOWL AND HOLY-WATER VESSELS.

Fig. 1. HOLY WATER VASE. Kumbum. (Cat. No. 130402, U. S. N. M.)

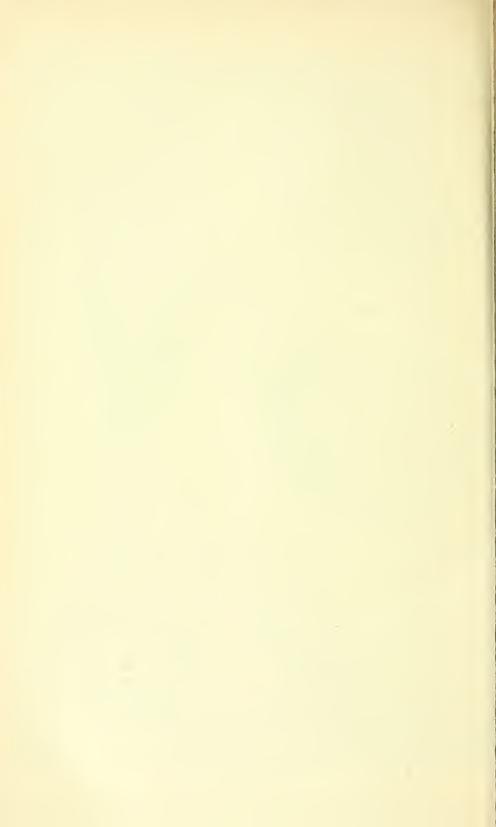
Fig. 2a. Skull Bowl. Kumbum. (Cat. No. 130384, U. S. N. M.)

Fig. 2b. Cover of Bowl. Made of copper, gilded (Cat. No. 130384, U. S. N. M.)

Fig. 2c. Base of Bowl. Made of brass, gilded. Heads at corners painted. (Cat. No. 130384, U. S. N. M.)



LIBATION BOWL AND HOLY-WATER VESSEL.



The usual form given the  $dorj\acute{e}$  in Tibet is shown in fig. 3. It is of bronze and about 5 inches long. Exactly the same form is found in Japan (fig. 2).

Fig. 1 is another form of the *dorjé* used by certain sects in Japan. Here there are but three prongs at each end instead of five, as in the more commonly used one.

The holy-water vase (bumba or ts'é bum) is used in certain lamaic ceremonies connected with the worship of Ts'é-pa-med.\*

On pl. 42, fig 4, is shown one of these vases made of brass, with the spont, top, and base heavily gilded. The vase is of Persian shape, with a large spherical body and slender bent spont. The neek is short and narrow and terminates in a flaring mouth, in shape like an overturned bowl. In the top of this is a small circular opening, in which a chased metal tube fits, reaching far down into the vase and having in its upper end a bunch of kusa grass and some peacock feathers—this instrument is the aspergil. The vase has a covering of silk fastened around the neck so as to completely hide the vase. Such coverings are not only put on these vases but on most objects used in church worship, on the sacred images, books, etc., probably as a mode of honoring these sacred objects. The water used in these vases has a little saffron in it and sometimes a little sugar. The vase is 64 inches high and claborately chased where exposed to view. The portion of the vase under the silk covering (nabzé or "gown") is roughly beaten copper. Frequently these vases are of silver and finely chased over the whole of their surface.

The Tuisol, "to pray for ablution," ranks among the most sacred of the Buddhist rites, and is performed at every solemn assembly for the washing away of sins. Water is poured out from a vessel similar to a teapot, called mangh, and also bumpa, over the vessel's well-cleaned cover, called yanga, or a particular metallic mirror, melong, which is held so that it reflects the image of Sakyamuni, which stands on the altar. The water falls down into a flat vessel, called dorma, placed upon a tripod. (Emil Schlagintweit, Buddhism in Tibet, p. 239, and T. W. Rhys Davids, Buddhism, p. 248 et seq.) See also Waddell, loc. sup. cit., in which he describes the ceremony called "The obtaining of long life;" also W. W. Rockhill, On the lamaist ceremony called "The making of mani pills" (Journ. Amer. Orient. Soc., XIII), which is a ceremony of the same class as that described by Dr. Waddell.

The purbu or nail is a triangular nail ending in a sharp point. The handle is in the shape of a half dorjë, with a human head terminating it. It is used in exorcising evil spirits. (See Waddell, Buddhism of Tibet, pp. 483 and 488).

The skull bowl is used in worshiping Ts'é-pa-med, when it is filled with nectar brewed from ch'ang. After the ceremony it is drunk by those present. It may be noted that various gods—among others Ts'é-pa-med and Paldän-lh'amo—are represented with skulls in their hands filled with ambrosia (dud-tsi, literally "devil's juice"). The custom of using skulls as holy vessels, or even as eating bowls, is a very old one in Asia;

<sup>\*</sup>See L. A. Waddell, The so-called "encharist" of the lamas, in Asiatic Quarterly Review, April, 1894, and Buddhism of Tibet, p. 298, 444 et seq.

a certain class of lamas use them for the latter purpose at the present time. We find, however, in the Buddhist *Vinaya* or canon law, which dates from the early days of Buddhism, that monks were forbidden using skulls as alms-bowls as being then used by devil worshippers. (Sacred Books of the East, vol. XX, p. 89.)

Fig. 2, on pl. 42, represents a libation bowl made of a human skull(a); it has a lining of iron, with an ornamented copper gilt rim fitting on it. The cover (b) is finely and intricately chased; on each side is a landza character—or rather monogram—the mystic syllable om, with an arabesque design surrounding it. The top is surmounted with four half dorjé at right angles, a fifth and larger one forming a handle. The stand (c) on which the skull rests is of gilt copper and triangular in shape. At the three angles are human heads painted white, red, and green. The triangular design on the face of the base seems to be flames, and the Chinese symbol of the yang and the yin (the two principles of nature) appear in the middle of each side. For further particulars bearing on the mode of selecting and consecrating such skulls. I must refer the reader to my paper "On the use of skulls in lamaist ceremonies." (Proc. Amer. Oriental Society, Oct. 1888, p. XXIV, et seq.)

The Museum collection contains also a few images of gods of the finest workmanship. They are made of copper, east and then very finely gilt, chased, and polished. The interior, which is hollow, is filled with some of the same articles as are put in ch'iirtens (see Cunningham, Ladak, p. 309). When the image rests on a circular base of the open lotus flower style, these articles are inclosed in it. These images are all distinctly Brahmanie—a peculiarity of nearly all lamaist images—with the exception of the heads, which are usually made with terrifying features colored red, blue, or green.

Pl. 43 represents a small gilt image of Jambyang, the "sweet singer" (Manjushri) of the Indians. He is here represented seated, holding in his right hand the sword of wisdom with a flaming point, to dissipate darkness among men, and a noose in his left. Behind his left arm is an open flower, in which rests a book.

Jambyang is the god of wisdom, and his principal sanetuary is at Wu-t'ai-shan, in the Chinese province of Shan-hsi.

Pl. 44 is an image of Drolma, "The Savioress," called in Sanskrit Tārā.

It is [says Dr. Waddell] to this attribute of being ever ready to help and ever approachable that she owes her popularity; for most of the other deities of "northern Buddhism" can not be approached without the mediation of a lama, while the poorest layman or woman may secure the immediate attention of Tārā by simply appealing to her direct.

She has the attributes of a female Avalokita, and in Tibet she is expressly regarded in her most popular forms as the *Sakti* or female energy of Avalokitesvara. (Dr. L. A. Waddell, Journ Roy Asiat Soc., 1894, p. 63 et seq.)

This image was made at Ch'amdo in eastern Tibet.



GILT IMAGE OF JAMBYANG (MANJUHSRI. Cat. No. 130396, U. S. N. M. Lh'asa.





GILT IMAGE OF DROLMA (TÁRÁ), Cat. No. 130395, U. S. N. M. Ch'amdo





GILT IMAGE OF TS'É-PA-MED (AMITAYUS). Cat No. 130400, U. S. N. M. Dolon Nor



Pl. 45 represents an image of Ts'é-pa-med, the "god of endless life;" in Sanskrit, Amitayns. This god is also known as Wu-pa-med, or "Endless light;" in Sanskrit, Amitabha. Under the name of Ts'é-pa-med he is implored for longevity. The god is represented seated, holding before him in his right hand a bowl (often a skull) filled with the water of life; the left hand rests with upturned palm in his lap under the right.

Pl. 46 represents Tamdrin; in Sanskrit, Hayagriva. This god is one of the Drag-shed or gods who protect man against evil spirits. He is here represented with three faces of hideous expression and on his head is a crown of flames. He has six arms and two legs, and around his waist is a girdle of leaves. In his upper right hand he holds a noose, and in the lower an arrow; in his upper left hand is a 3-leaved flower(?) and in his lower left a bow. The middle right hand, which he holds before him, has in it a cross dorjé. The middle left hand is empty, the thumb touching the second and third fingers, the index and little finger held extended. A long rosary hangs around his neck, and he is kneeling on his left knee. He has three eyes in each face, the third eye upon the forehead being that of wisdom.\*

Pl. 47 shows a remarkably fine specimen of work, representing the god of wealth or god protector of treasures (Gunkar yijin norbu), also a Drag-shed. The god is three-faced, with a crown of flames. He stands erect on two elephants, and has six arms. The middle ones are held before him with offerings in them. The upper right hand holds a dorjé, the upper left a béchon or club. The lower right holds a damaru or small hand drum, and the lower left a snare (dzagpa). This image was made at Lh'asa.

Pl. 48 is supposed to represent Ch'ös-bjin jamba. The saint is clothed in a mantle falling over the arms, while his hands are held in the position of prayer or supplication. The earrings are peculiar and unusual. This image and the following were bought at the great lamasery of Kumbum, and are not of as fine workmanship as the three preceding ones.

Pl. 49 represents the image of some holy man, apparently a Chinese; but I have not been able to identify him.

One of the principal treasures of the great lamasery of Kumbum is the so-called white sandal wood, sprung from the hair of Tsongk'apa, the founder of the "Yellow church," who was born at this place toward the middle of the fourteenth century of our era. The leaves of this tree are carefully collected and sold to pilgrims, who use them as medicine or wear them as charms in their gawo. Abbé Huc says that when he saw the tree, characters of the Tibetan alphabet were visible on every leaf and in the bark. At present it is said that images of Tsongk'apa are sometimes visible on some of the leaves, when the person

<sup>\*</sup>Wherever seen in images of gods, the third eye in the middle of the forehead is the eye of wisdom, or foreknowledge.

looking for them has sufficient faith.\* The tree is probably a lilac. (Syringa rillosa, Vahl.)

A lot of leaves of this tree were bought by me at Kumbum in 1891.

Trees sprung from the hair of saints are quite numerous in Tibet. Explorer U—G—saw, on the left bank of Tsangpo ch'n, below Chét'ang and near the Sangri Khama monastery, a hill overshadowed by cypress trees, "all of which sprung from the scattered hairs of a saint, which were cast to the winds hereabouts." (Report of Explorations in Tibet, Bhutan, etc., p. 28.) Sarat Chandra Das saw at Tashil'unpo a juniper bush in which the hair of Gédundrub, the founder of the lamasery, is still "said to exist."

The Arab traveler 1bn Batutah saw, in the fourteenth century, at Deh Fattan, on the Malabar coast, a tree on the leaf of which there appeared every year. "written by the pen of divine power," the words, "There is no god but Allah, and Mohammed is the envoy of Allah." (Ibn Batutah, Travels, Defrémery's edition, IV, p. 88.) This last-mentioned tree was probably, according to Mr. T. Dyer, a graftophyllum.

A small mold of wood with a number of figures of a loaded yak, of a man, a dog, etc., and Buddhist emblems cut in it, may be found in pl. 33, fig. 1. It is used to mold figures in *t'samba*, which are afterwards colored and figure in certain ceremonies for expelling the demon of sickness.†

The two most commonly used kinds of incense (spös) are the larger sticks of the shakama pös or saffron-colored incense, also known as jambling kun-jyab or "world pervading," on account of the great strength of the perfume, and a smaller variety which is of a deep violet color, and is in common use in all temples and for household worship. Great quantities of it are manufactured in central Tibet (Lh'asa and Shigatsé) and exported to China, Mongolia, and every corner of Tibet.‡

A frequently used substitute for incense consists in dried spines of the juniper (shuka) mixed with a little butter and salt, these ingredients making the spines burn more readily and completely. This kind of incense is very extensively used throughout Tibet and parts of Mongolia.

Pl. 50 shows a pitcher 6 inches high, of cast brass, in the shape of an ewer. It is roughly ornamented with a series of lines and dots, and around the base is written in Tibetan characters a mantra. The handle is large and cast at the same time as the body. The use to which this ewer is put is not known, but it is certainly not a household utensil. It is a rough piece of work; probably in an unfinished state.

Musical instruments.—Music, both instrumental and vocal, is a prominent feature in lamaic ceremonies. The principal instruments used are the drum, trumpet, flageolet, cymbals, and couch shell. The drums

<sup>\*</sup>See Prince Henri d'Orleans, Le père Huc et ses critiques, pp. 34-42.

<sup>†</sup>For a full account of these ceremonies, the reader is referred to Emil Schlagintweit, Buddhism in Tibet, p. 269 et seq.

<sup>‡</sup> See also Jonrn. Roy. Asiat. Soc., n. s. XXIII, p. 281.



Gilt image of Tamdrin (Hayagriva). Cat. No. 130398, U. S. M. N. Lh'asa.





GILT IMAGE OF THE GOD OF RICHES (GUNKAR YIJIN NORBU). Cat. No. 130399, U. S. N. M. - Lh'asa.





GILT IMAGE OF CH'ÖS-BJIN-JAMBA. Cat. No. 167270, U. S. N. M. Kumbum.





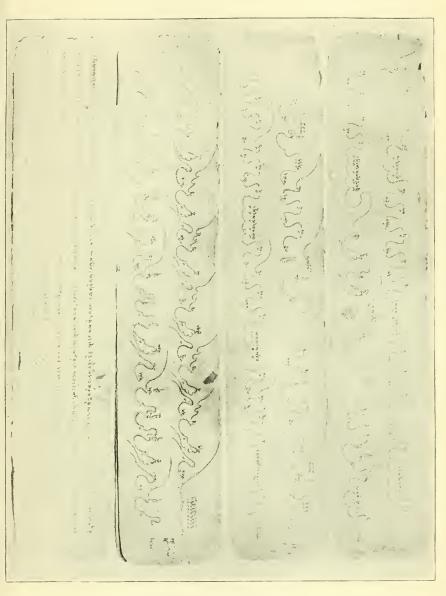
GILT IMAGE OF A HOLY MAN—PROBABLY CHINESE BUDDHIST. Cat. No. 167269, U. S. N. M. Kumbum.





PITCHER OF CAST BRASS. Cat. No. 167292, U. S. N. M. Lh'asa.





DESCRIPTIVE SCORE, USED IN LAMAIST CHURCH SERVICES. (at. No. 130877, U. S. N. M. Kumbum.



are of two kinds—the small hand drum previously described, and the large drum (ch'örna), which is cylindrical, about 2 feet in diameter and 8 or 10 inches high. To it is fastened a handle about 3 feet long, by which it is held erect. It is struck by means of a stick shaped like a sickle, with a long handle. This drum and also the hand drum are apparently copied from two well-known kinds of Chinese drums. (See J. A. Van Aalst, Chinese Music, p. 76.)

The big trumpet or dung-ch'en is from 6 to 8 feet long, made of copper, and is slightly bent so that the end may rest flat on the ground. A smaller trumpet is made of a human tibia, and is called kang-dung "leg-bone trumpet." No. 130386 is one of these.\* A piece of skin (supposed to be human) is sewed around it, and a plaited lash about 20 inches long hangs from its end. Such trumpets are used in exorcising ceremonies. Another form of kang-dung is made with the mouthpiece and the lower portion of chased copper, the central part only being of bone.

The hautboy (*jyeling*) used by the lamas is of Chinese origin and pattern, and calls for no particular remark beyond stating that most of them have loose or sliding tubes by which means the sounds are modulated. The cymbals (*sinyen*) used are also Chinese in shape and probably manufacture. A small kind of cymbal called *ding-sha*, the disks of which are about 2 inches in diameter and suspended horizontally by a short string so that their edges may be struck together, is also used by the lamas—not in church ceremonies, but only when reading prayers in their houses. This latter instrument is the Indian *mandira*, used to measure time in musical performances.

Conch shells are used to call to prayers and for other purposes similar to those for which the big trumpets are used. They have frequently a metallic mouthpiece and are handsomely ornamented around the rims. There is a most beautiful specimen of such a conch shell with inscriptions on it in Chinese, Tibetan, Mongol, and Manchu in the British Museum. Conch shells with whorls turning to the right are especially prized, and a lamasery which is so fortunate as to possess one is famed throughout the land. (Land of the Lamas, p. 110.)

A system of musical notation is used by the lamas to teach chanting and accompanying liturgies. These books, called yang yig, "hymnor song books," contain a kind of descriptive score, consisting of wavy lines, showing when and for what space of time the voice should rise or fall. Plate 51 shows several pages of this music. Where the conch shells should be sounded or the drum beaten is shown by a figure of a shell or a drumstick. This system of notation is specially interesting from the fact that it is, so far as I am aware, the only one found in eastern or central Asia. (Plate 51, and Land of the Lamas, p. 88, also Waddell, Buddhism of Tibet, p. 432.)†

<sup>\*</sup>Not illustrated in this paper.

t On lamaic musical instruments, see also Georgi, Alphabetum tibetanum, p. 404.

## MISCELLANEOUS OBJECTS FROM THE CHINESE BORDER LANDS.

In fig. 1 of pl. 52 is shown a shoe made of oxhide and in shape somewhat like an Indian moccasin. The sole is turned up all round the vamp, which latter has a tongue coming over the instep. These shoes, called *p'i-hai* in Chinese, are worn in the extreme western part of Kan-su by the poorer classes.

Inside these shoes coarse woolen socks, knit of sheep's wool, are worn (fig. 2). These socks are invariably knit by the men. It is, by the way, no uncommon thing in Mohammedan countries for the men to knit. I have noticed it in Algeria, and Friar Odoric, speaking of the people of Huz in Khuzistan (Persia), remarks of them "and 'tis the custom for the men to knit and spin, and not the women." (H. Yule, Cathay and the way thither, I, p. 53.)

Sandals made of hemp (figs. 3 and 4) are known as ma hai in western Kan-su where they are made and worn. They closely resemble the Ssŭ-ch'uanese sandal (figs. 5 and 6), woven of rice straw over hempen cords, with some slight difference in the width of the piece in front to protect the great toe. The Kan-su sandal is in all respects like the Korean one. In all these sandals a string passes through loops fastened to the sole and heel and is tied around the ankle.

In western Ssň-ch'uan, where these sandals are the only foot gear worn by hill porters, iron clamps or crampons, consisting in an oval plate of iron with four short flat points on them, are tied to the middle of the foot when the ground is wet or slippery.

The collection contains a brass saucepan 9 inches in diameter, the back and handle beaten out of the same piece. It is used by Mongol and Chinese traders when traveling, not only as a pan but as a ladle.

A copper tea-kettle with top fitting closely in it is also in the collection. It is egg-shaped, with a rude handle, and is without a spout. It is manufactured by the Chinese of Hsi-ning and Tankar in western Kan-su for the Tibetans and Mongols of the Kokonor.

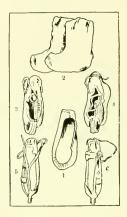
A wooden pail in the collection, made of numerous wooden staves held together by three brass hoops, is from the Ordos Mongols. It has a brass ear and ring on each side and through this passes a yak hair handle. It is a little larger at the bottom than at the top. Such pails are very much valued by these Mongols, and the handles are frequently decorated with cowrie shells or beads.

In the collection is a fine blanket of mixed goat hair and sheep's wool dyed a clear brown color. It is made of four strips, each 18 inches wide. Such blankets are woven by the border Chinese for travelers and are practically waterproof. This one was bought in Kuei-hua Ch'eng (eastern Mongolia).

Fig. 15 of pl. 5 represents a breast ornament worn by Mongol women. It is in the shape of two of the eight signs of good luck, "the fishes," and the "chest-mark" (or "intestines," as the Chinese call them). It



## EXPLANATION OF PLATE 52.



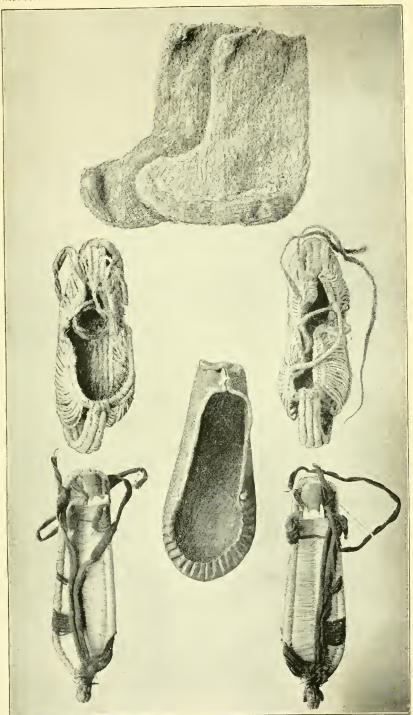
TIBETAN FOOT WEAR.

Fig. 1. LEATHER MOCCASIN. Kan-su. (Cat. No. 131202, U. S. N. M.)

Fig. 2. Woolen Socks, Kan-su. (Cat. No. 131199, U. S. N. M.)

Figs. 3 and 4. HEMPEN SANDALS. Kan-su. (Cat. No. 131198, U. S. N. M.)

Figs. 5 and 6. Straw Sandals. Ssű-ch'uan. (Cat. No. 167181, U. S. N. M.)



FOOTWEAR OF KAN-SU AND SSU-CH'UAN BORDER LANDS.



is of brass, heavily gilt, and in the center of it is an ornament in coral and turquoises. Three rings are fastened to it: by one a string passes by which it is suspended around the neck, and to the other two are fastened the ends of long strings of coral beads, the other ends of which are attached to the earrings.

The Museum collection also contains a curious picture executed by some Chinese painter, probably in the latter part of the eighteenth century. It represents a town in Chinese Turkestan, and gives a vivid picture of the people of that province, their mode of living, their various occupations and amusements. It is 30 feet long and about 30 inches broad, and deserves careful and detailed study, it being replete with valuable ethnological data. It was purchased in Peking in 1887.