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CURRENCY IN CHINA.

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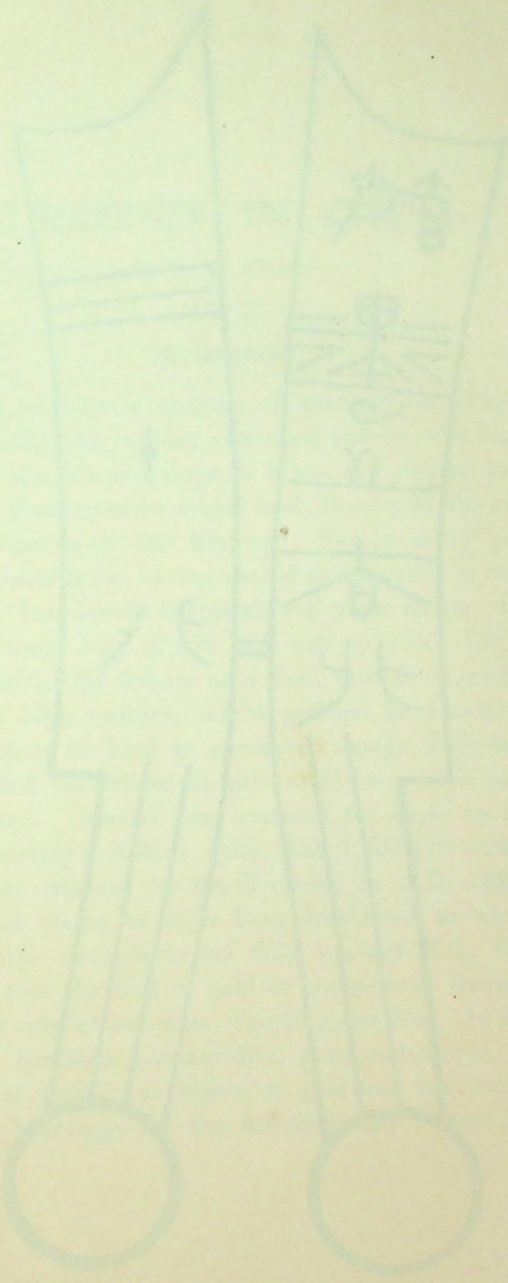
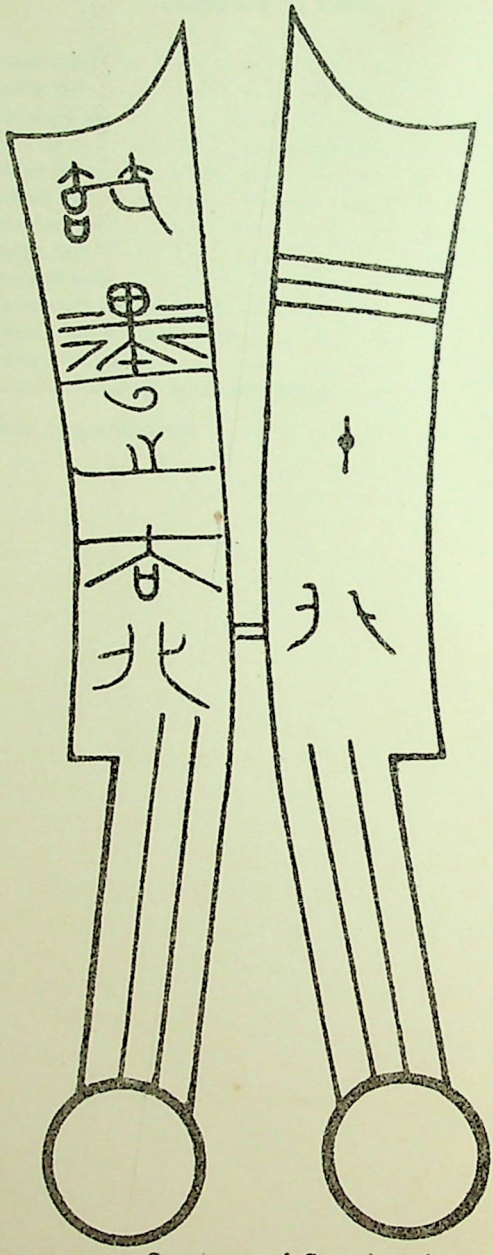




Specimen of Sword cash.

CURRENCY IN CHINA.

By H. B. Morse.

PRELIMINARY.

Of the prehistoric systems of currency in China, the inscribed skins, the tortoise shell and cowries, the axes and spades, the armlets and rings, it is not my purpose to treat, but only of those systems which lead directly to the modern currency practice of the Empire. Nearly every possible material is recorded as having served this purpose at one time or another; but, outside the metals and paper money, we hear in historic times only of silk rolls and cowries. Silk rolls, though received for tribute at a fixed rate of conversion as late as the 13th century, might perhaps be considered as much a tribute in kind as currency, though Edkins notes *ad* A.D. 1206 that silver or silk could be used in payment of the salt tax. Cowries were received for taxes as late as the 14th century; Edkins notes that 1,133,119 strings of cowries were received by the Treasury in A.D. 1329. Of metals, gold seems to have been considered as currency, only from the eleventh to the third century B.C., the law providing that the unit of gold in commercial transactions should be a cube of one *tsun* weighing one *kin*. In modern times gold has been a commodity, pure and simple, and in the shape of jewelry or ingots or gold-leaf has been used chiefly for hoarding—for the Asiatic family reserve against

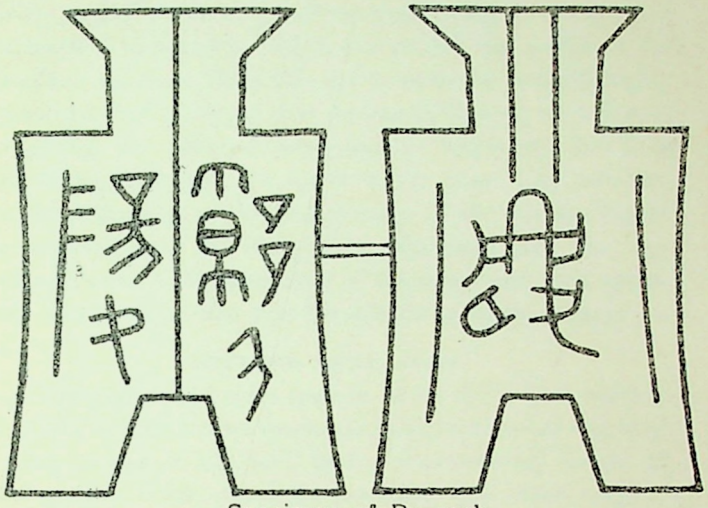
times of want or of oppression. Iron has been used for coinage during the Han dynasty (B.C. 206) and by various kingdoms in West China, and in the tenth century iron coins were the ordinary currency in what is now Szechwan. In modern times iron was used to further depreciate the coinage of Hienfeng (A.D. 1851-1861), pieces of iron having then been issued during the time when the mints were cut off from their supplies of copper from Yunnan. These, however, are all intermittent and eccentric currencies which have not endured; and for present-day discussion we need only consider three kinds, copper, paper and silver.

COPPER CURRENCY.

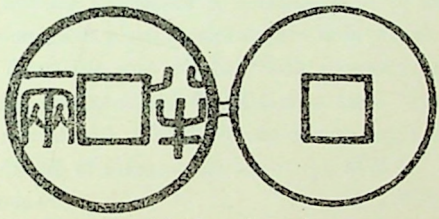
EARLY COINS.

It is only in copper (or bronze) that currency and coinage are synonymous terms in China. Disregarding the archaic uninscribed tokens of rulers before the true historic period, we find the earliest recorded legislation on coinage about a century after the beginning of the Chow dynasty (*circa* B.C. 1122) the B.M.C.[1] stating that the sovereign "established in 1032 B.C. certain rules for currency, and enacted that metallic pieces should henceforth be exchangeable according to their weight." Inscribed coins then came in, but for over three centuries the inscriptions contained no reference to weight or value. Then, in the first half of the seventh century B.C., the enactment of certain rules led gradually to the habit (coinage not being yet, not until B.C. 135, a government prerogative —B.M.C.) of casting coins of regular shapes and sizes and of constant weights; but even then the earliest known specimen inscribed with weight or value is assigned doubtfully, on the authority of the B.M.C., to *circa* B.C. 375. The coins

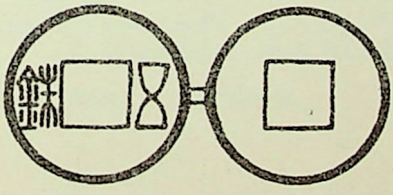
[1] Catalogue of Chinese coins in the British Museum.



Specimen of Pu cash.



Half-tael cash.



5-chu cash.

circulating from this time were of the shapes called knife[2] and spade or *pu*[3], both being tokens representing for purposes of barter the implements which constituted the wealth of the people. Of these the knife coins represent a more highly developed civilisation, in that the inscriptions are more precise in giving the place of issue and in indicating that they are token currency; the issues of the latest type, ascribed to the beginning of the first century of our era, are highly conventionalised, the blade being shortened and the ring having become a thickened copy of the round coin with square hole which had by that time become the common coinage.

INSCRIBED ROUND COINS.

Inscribed round coins came in about the seventh century B.C., the earliest known specimens being inscribed as weighing 1 liang 14 chu or $1\frac{14}{24}$ tael, having a present-day weight of 171 grains; while others are inscribed with other weights, such as $1\frac{12}{24}$ liang, or with the place of issue and the number of 斤 *kin* or hoes they stood token for. The earlier round hole in the middle (probably a reminiscence of the armlets and rings) soon gave place to the square hole which we know to-day, and from the end of the Chow dynasty (*circa* B.C. 255) the coins[3] are inscribed 半兩 Half a tael. Here it may be useful to repeat the table of approximate dates for each of the regular shapes of coins, as given in the B.M.C.

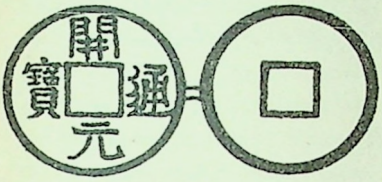
Knife money	B.C. 670-221
,, ,, thick and short ...	A.D. 7-10
Spade money (consisting of little hoes with hollow handles ...	B.C. 600-350
Pu money (variant of Spade) ...	B.C. 475-221
,, ,, small and thick ...	A.D. 10-14
Round coins, with round holes ...	B.C. 660-336
,, ,, ,, square holes	from B.C. 221.

[2] Plate I. [3] Plate II.

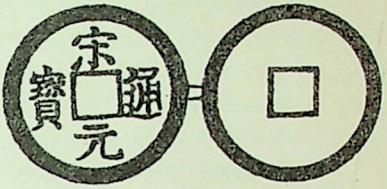
China has had a copper coinage for 25 centuries and a coinage of the shape we know to-day uninterruptedly for 21 centuries.

The issues of Half-tael coins must have been very large since they are in our time by no means uncommon in the trays of the petty hucksters who are found on every street of every city of the Empire. In course of time they degenerated in size and weight, and (B.C. 118) were replaced by the coins[4] inscribed in seal character 五銖 *Wu chu* ($\frac{5}{24}$ tael), which remained in circulation, side by side with all other issues, for upwards of 700 years. This coin, also easily obtainable to-day, is beautifully cast, 0.95 inch[5] in diameter, weighing to-day from 46 to 51 grains. Coins with other inscriptions, all in seal character and none of them dynastic, were issued from time to time, until we come to the Golden Age of China, the Tang dynasty, A.D. 618. Then began the issue of the coins[6] inscribed in square modern character 開元 *Kai-yuan*. Coins with this inscription are recorded as having been issued by the first Tang Emperor (A.D. 618-627), by the Emperor who took those characters 開元 for his reign title (A.D. 713-742), by the Emperor 德宗 Teh Tsung (A.D. 780-785) and by the Emperor 武宗 Wu Tsung (A.D. 841-847), a total of 53 years. The first coins to be inscribed with the title of the reigning Emperor, thus giving an exact date, were issued in the reign of 乾封 Kien-feng (A.D. 666-668). This new currency introduced by a strong and wise government in sufficient quantities for the needs of the people, supplied a type which has endured to this day. With a diameter of 0.95 inch they were of the same dimension and weight as the coins which, until the great melting down of the past twenty years, constituted the 制錢 *chih-tsien* or standard coinage of the Empire; and thirty

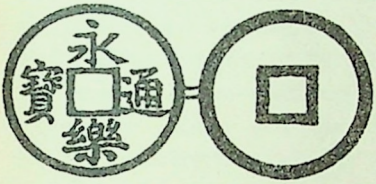
[4] Plate II. [5] Here and later the English inch. [6] Plate III.



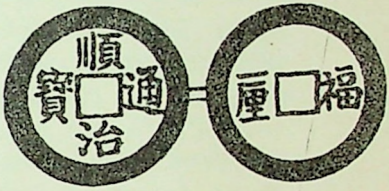
Tang, A.D. 618–906.



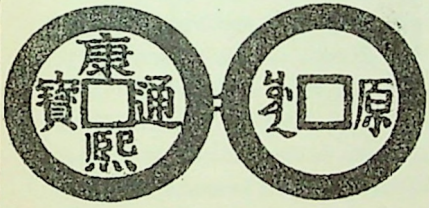
Sung, A.D. 960–1126.



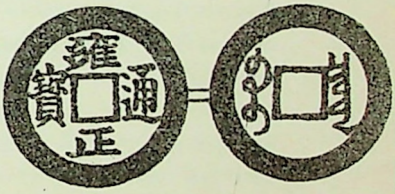
Ming, A.D. 1368–1643.



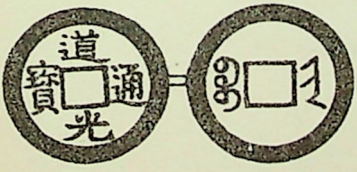
Shun-chih, A.D. 1644–1661.



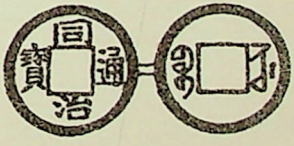
Kang-hi, A.D. 1662–1722.



Yung-cheng, A.D. 1723–1735.



Tao-kwang, A.D. 1821–1850.



Tung-chih, A.D. 1862–1874.

外交部藏書

years ago Mr. G. M. H. Playfair and myself, searching critically through hundreds of strings of cash in every-day circulation, found among them not a few of these coins which had formed part of the ordinary currency of the people for eleven to thirteen centuries, minted before the time of Alfred of England, before Charlemagne was crowned at Rome, and long before a King of France reigned in Paris. The type persisted through the Sung[7] dynasty (A.D. 960-1126) varied by occasional issues of coins of larger size, but generally were of standard size. These issues also were made in sufficient quantities for the needs of the people, and these, too, I have found among coins in present circulation. Speaking of thirty years ago, in every thousand coins there would be two or three of the Tang and ten or twelve of the Sung mintage. The Golden dynasty of Nüchen Tartars (A.D. 1115-1234) and their contemporaries the Southern Sung (A.D. 1127-1280) issued few coins; and the Mongols, the Yuan dynasty (A.D. 1260-1368), ruling the China that Marco Polo knew, issued still smaller quantities, subsisting as it did mainly on fiduciary issues of paper money. The Ming dynasty then came in (A.D. 1368-1642) and found itself confronted by this financial difficulty. The early rulers were compelled for a time to continue the paper issues of their predecessors, and in addition there was during the first reign, 洪武 Hung-wu (A.D. 1368-1399), some issue of copper token coinage; but by the time of 永樂 Yung-lo (A.D. 1403-1425), the reign during which the capital was moved to Peking, the finances had been restored from the condition to which they had been reduced by the unlettered and warlike Mongols, and the currency established on a sound basis. For two and a half centuries the Ming government kept the people fully supplied

[7] Plate III.

with circulating medium of standard size and weight, the general average of the diameter of the coins ranging from 0.90 to 1.05 inch, and the standard weight from 46 to 57 grains; making ample allowance for the longer time that the surviving specimens of Tang and Sung coinage have been in circulation, the Ming coins[8] must be adjudged to be superior to them, and fully equal in appearance to the coinage of the first century of the present Tsing dynasty, though less in weight. When the Manchus came to the throne, they continued the civil government of their predecessors, merely superadding the military control represented by the now innocuous Tsiang-kün (Tartar Generals) stationed at certain strategic points throughout the Empire, and creating a few milking posts, such as the Hoppo at Canton, a post abolished only in 1904; their rule has been in the main a government of the Chinese, by the Chinese, for the Chinese, and in nothing has this been shown more than in their continuance for nearly two centuries of the financial and monetary systems of the Mings. The earliest issues of coinage[8] by the first Emperor to establish himself at Peking 順治 Shun-chih (A.D. 1644-1661), bore inscriptions only in Chinese, the first issues having on the reverse only the mint name, the second having in addition the value 一厘 one thousandth of a tael (of silver); then, toward the end of his reign, the coins bore the mint name in Chinese and Manchu. His successor 康熙 Kang-hi (A.D. 1662-1722) continued[8] the bilingual inscriptions through the whole of his reign, but toward the end of the reign, the two mints at Peking, those of the Board of Revenue (Hu-pu) and the Board of Works (Kung-pu) issued coins bearing on the reverse the mint name and the word "currency" in Manchu only. The coins[8] of 雍正 Yung-cheng

[8] Plate III.

(A.D. 1723-1735) are inscribed on the obverse in Chinese and on the reverse in Manchu only, and this practice has continued to this day. It is in this reign that the coinage of China may be considered to have reached its highest point, in size and weight, in quality of metal and in elegance of inscription; previous dynasties and previous reigns had equalled it in some one or more of these qualities, but not in the combination of all. The Shun-chih coins were generally 0.95 to 1.05 inch and those of Kang-hi 1.00 to 1.10 inch in diameter, and both were made of a bright yellow brass; the Yung-cheng coins were generally 1.00 to 1.10 inch in diameter, made of a rich light-brown bronze. It was from this time that the degeneration of the coinage began, and it will be well here to interpolate a note on the standard of weight and value.

STANDARD OF WEIGHT AND VALUE.

Leaving to one side the 半兩 (half-tael) and 五銖 ($\frac{5}{24}$ tael) coins, the standard introduced by the Tang dynasty and continuing in theory until to-day was a part of a bimetallic system, or even (although gold formed no part of the currency) of a trimetallic system, by which, in weight, 1 gold = 10 silver = 1,000 copper, these being the metallic exchange equivalents in China 13 centuries ago. The copper coin of this system was made to weigh one tenth of a tael, making it in value (一厘) one thousandth of a tael of silver. This theory has continued to the present time, and was definitely asserted by the inscription, ten centuries later, on the coins of the first Manchu Emperor. The copper coinage being a government concern, while silver was left to the tender mercies of the bankers, the fixed exchange equivalence, or value, of the coins was treated with relative disregard, while the weight was more or less adhered to. We get into

quite another question when we go into the weight of the tael; the 五銖 coins may be assumed to have weighed 5 chu or $\frac{5}{24}$ tael when first introduced[9] (though this may be an erroneous assumption), and, as far as numismatics can tell us, they continued to be of the same weight down to the time when they were displaced by the Tang coins, of about the same size, and of a statutory weight of $\frac{1}{10}$ tael. Disregarding any difference of tael, this continued to be the desideratum of the mints, the actual weight of the issues varying, however, according to the laws of supply and demand, to the varying ratio between silver and copper, and to the ostensible necessity of maintaining a bimetallic proportion in the currency, but seldom falling below $\frac{8}{100}$ tael. During the first reign of the Tsing dynasty the weight was $\frac{1}{10}$ tael, afterwards raised to $\frac{125}{1000}$ tael, and under Kang-hi, A.D. 1684, the weight was again reduced to $\frac{1}{10}$ tael, to be again raised, A.D. 1702, to $\frac{14}{100}$ tael, and again reduced to $\frac{12}{100}$ tael. This continued to

[9] Under the Chow dynasty, on the evidence of the coins, the liang of 24 chu was probably 97.5 grains, giving 4.06 grains as the weight of the chu. The "First Emperor" Shih Hwang-ti, in the 26th year of his reign as Prince and the 1st year of his assumption of the Imperial dignity (B.C. 221), issued an edict increasing the weight and fixing the standard. On the authority of Mr. F. H. Chalfant (*Journal N.C.B.R.A.S.* 1903-04) the standard was as follows:—

1 chu 銖 ... ... 0.68 grammes = 10.5 grains.
24 chu=1 liang 兩 ... 16.35 grammes =252.5 grains.

This standard was probably continued into the Han dynasty, which soon (B.C. 206) followed the Tsin; and the first ruler of the Northern Tsi (A.D. 550) enacted that a hundred 5-chu coins should actually weigh 500 chu, "otherwise 1 kin, 4 liang, 20 chu." The actual weight (46 to 51 grains) of surviving specimens of 5-chu coins corresponds closely with the theoretic weight (52.5 grains) of this standard. When the standard was again raised is not on record; but the first Tang coins issued seventy years later (A.D. 618) were presumably one-tenth of the modern liang of 570 to 580 grains.

be the statutory weight through the reign of Yung-cheng and into the beginning of Kien-lung (A.D. 1736), when it was again made $\frac{1}{10}$ tael. During this long reign of sixty years degeneration made progress, in appearance and in quality, and in the size and weight of the coins; the government was still vigorous, with no sign of dry rot, and we may assume that it was the struggle between the mints and the illegal melter down of too-full weight coins, and that, to keep the currency from the melting crucible, the mints were driven to reduce the intrinsic value more and more. Whatever the cause, the coinage became by degrees smaller and lighter, issues at the beginning of the reign having a diameter of 1.10 inch and weighing $\frac{12}{100}$ tael, while at the end of the eighteenth century official issues (no account being taken of illicit coining, so common in China) were as small as 0.85 or even 0.80 inch, and weighed no more than $\frac{75}{1000}$ tael. A memorialist just a century ago reported to the Throne that, of the coins in common circulation, from 1 to 2 per cent weighed $\frac{12}{100}$ tael and over, while 30 to 40 per cent weighed the full legal $\frac{1}{10}$ tael. The coins of the period Kia-tsing (A.D. 1796-1820) were of light weight, but ordinarily were still well minted; it is in the following reign, Tao-kwang[10] (A.D. 1821-1850), that the rough crude issues of the mints, which we see to-day, made their first appearance; and the present tendency[10] we see in a memorial from the Governor-General of Shengking, dated November 1899, in which he reports to the Throne that coins weighing $\frac{8}{100}$ tael such as were issued in other provinces, involve a loss, and that he is therefore minting them at $\frac{5}{100}$ tael weight. It is safe to say that there will be no profit from melting down such coins, and that the illicit issues of counterfeiters will not be

[10] Plate III.

much less attractive in appearance, or appreciably less in value.

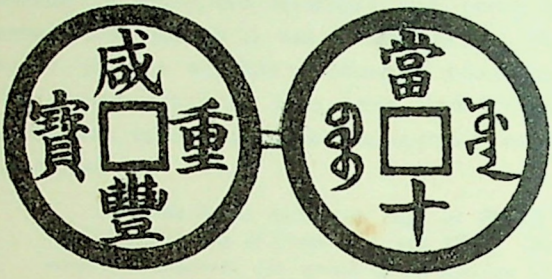
TOKEN COINAGE.

In the reign of Hien-feng (A.D. 1851-1861) the government fell on troubled times, with revenues reduced by wide-spread rebellion; and, partly from this cause, partly because it was unable to get supplies of copper, recourse was had to issues of token coins. On these I cannot do better than quote Bushell[11] who made a searching investigation into the currency conditions of the capital.

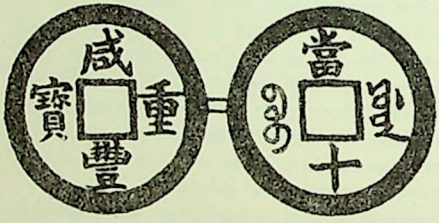
> "The coins issued during the reign of 文宗 *Wén-tsung* (1851-1861), the title of whose reign was 咸豐 *Hien-fêng*, are much more numerous. On account of the rebellion in the central provinces the supply of copper which is mainly derived from Yunnan was cut off, and the government was reduced to great straits. In 1853 Ch'i Chün-tsao the minister in charge of the Board of Revenue memorialised to advise the issue of large coins equal to ten of the ordinary small cash. Then iron furnaces were founded and large quantities of iron coins thrown into circulation. Soon after large coins of the nominal value of 50 and 100 were cast. These were so successful that the princes and high officials of the Council constituted to put down the rebellion recommended the issue of larger tokens each one representing 500 and 1,000 units, and these circulated together with the rest and a new currency of iron and zinc small cash.
>
> "At first both officials and common people are said to have united in praise of the convenience of these large coins, but the large margin of profit tempted false coiners who swarmed like bees, and though executed in crowds, others took their place, including even the Buddhist monks. The result was a rapid depreciation of the large coins and finally nobody would take them at any price. Only those of the nominal value of 10 remained in circulation and these still constitute the actual currency of the capital. Their value, however,

[11] *Coins of the Present Dynasty of China*, by S. W. Bushell, M.D. *Journal N.C.B.R.A.S.*, Vol. XV (1880).

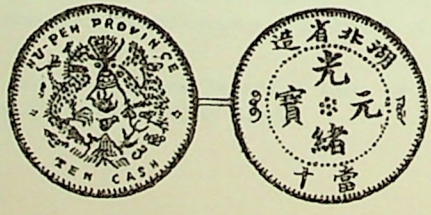




10 cash, A.D. 1853–1861.



10 cash, A.D. 1853–1861.



10 cash, A.D. 1905.

has sunk to that of two of the small cash and a tael of silver exchanges for about eight hundred.

"The iron money held its ground till 1857 during the first Chinese month of which year there was a popular rising in Peking and it became, at one bound, so much worthless metal. Some of the provincial mints issued iron and zinc coins which had a yet shorter life.

"At the time of the issue of the large tokens in the capital orders were sent to the provincial governors to have similar coins made in the various mints, after models which were distributed by the Board of Revenue. In some of the mints the coins were cast but never circulated; in others they circulated for a short time and were then withdrawn; in the rest the receipt of the models was acknowledged, and some pattern coins were duly forwarded for the inspection of the Emperor, but no mint was opened."

The first tokens[12] issued were 10-cash pieces with a diameter of 1.50 inch, but these were soon reduced to a maximum diameter of 1.20 inch and a minimum for official issues during the present reign of Kwang-hsü which may be put at 1.00 inch. The provinces soon followed suit and 10-cash pieces were issued (*auct.* Bushell) by all the provincial mints except those of Hunan and Kwangtung. Other values also followed, the list given by Bushell including coins of a face value of 5, 8, 10, 20, 30, 50, 100, 200, 500 and 1,000 cash. The issues of the Fukien mint (bearing in mind that they were cast, and not rolled or stamped) are beautiful specimens of numismatology, and heavier than the contemporary coins of other mints; and I give here the particulars of a series which lies before me.

Value	Diameter	Thickness	Weight.
10-cash	1.45 inch	0.11 inch	321 grains[13]
20-cash	1.80 „	0.12 „	591 „
50-cash	2.22 „	0.20 „	1,410 „
100-cash	2.63 „	0.25 „	2,200 „

[12] Plate IV. [13] Weight inscribed on rim 0.50 tael.

These token coins took no hold in the provinces and may be said not to have entered into the currency system of the Empire, except that, curiously enough, in Peking itself, though not in the province of Chihli, immediately around it, the patriotism, or the self-interest, or the timidity of the people led to their immediate adoption, and the 10-cash pieces (but none of the others) have continuously for fifty years past constituted the sole circulating medium of the capital. It must not be supposed however that, even at Peking, the 10-cash piece is considered to be worth, or is accepted for, ten cash.[14] The Chinese never have treated their coinage as coins, passing on their face value irrespective of their intrinsic worth, but have always looked beneath Cæsar's superscription; and the token currency of the capital is rated closely to the value of the metal contained in it. An estimate of the true intrinsic value of a copper coinage in China must depend upon the gold exchange with silver, the gold price of copper and spelter, and the exchange between silver and the copper coinage, and the resultant of this triangular calculation will never be the same from day to day; but taking all the conditions as they were at a certain time in 1905, I found that for one Mexican dollar I received at Shanghai 880 ordinary cash in common circulation, containing an ordinary proportion of illicit coins, of an intrinsic value of 26.4 pence; and that for one Mexican dollar at Peking I received actually 405, being nominally[15] 413 pieces of 10-cash, with an actual face value of 4,130 and a nominal[16] face value of 8,260 cash, having an intrinsic value of 29.45 pence. The actual value in each case is somewhat, but proportionately, smaller, since

[14] Cash, from the Sanskrit Kārsha, Kārshāpana (Giles, Dict. s.v. 錢), the translation in English of the Chinese (銅) 錢 "Copper."

[15] *v. infra* page 15.

[16] *v. infra* page 17.

I took as the basis of the fourth element in the estimate—the alloy of metal in the coins—the standard proportion of 60 parts of copper to 40 of spelter, while the proportion of copper is sometimes as low as 55.

We come now to the latest issue of token coinage, the cent.[17] This was issued to supply a real deficiency in the circulating medium, due to extensive melting down of the regular coinage and the impossibility of the government to supply the wastage, both occasioned by the increasing intrinsic value of the copper contents. This coin was a close imitation of the Hongkong cent ($\frac{1}{100}$ of a silver dollar) and the issues from the Kwangtung mint are inscribed "100 to a dollar," but those from all other mints are inscribed "represents 10 cash." While their workmanship differs, their intrinsic value is fairly uniform; with a diameter of 1.10 inch, some are of pure copper and weigh 112 grains, others contain 95 per cent of copper and weigh 115 grains, having an intrinsic value (on the date in 1905 referred to above) of 12 pence for 100 coins or 10.5 pence for the then exchange equivalent of one dollar. There were also some limited issues of brass "cents" containing 80 per cent of copper and 20 per cent of spelter. At first the cents passed for their full face value of 10 cash or 88 to the silver dollar, but they have now (July 1906) depreciated to a value of 7 cash, or 112 to the dollar.

MINT STATISTICS.

The people of China are voracious in their consumption of cash, but it is not easy to get statistics, the only fact I can note of earlier periods being that at the beginning of

[17] Plate IV.

the ninth century A.D. the quantity issued annually was 135,000,000. From Edkins[18] I give figures of the quantities issued by the mints for certain years of the first century of the present dynasty

Shun Chih	1	A.D.	1644	71,663,900	cash	Kang Hi	20	A.D. 1681	231,398,600	cash
,,	2	,,	1645	443,751,760	,,	,,	25	,, 1686	289,936,700	,,
,,	3	,,	1646	624,823,960	,,	,,	30	,, 1691	289,925,400	,,
,,	4	,,	1647	1,333,384,194	,,	,,	35	,, 1696	237,063,050	,,
,,	5	,,	1648	1,449,494,200	,,	,,	40	,, 1701	238,065,800	,,
,,	7	,,	1650	1,682,424,510	,,	,,	45	,, 1706	238,075,800	,,
,,	9	,,	1652	2,097,632,850	,,	,,	50	,, 1711	374,933,400	,,
,,	10	,,	1653	2,521,663,740	,,	,,	56	,, 1717	399,167,300	,,
,,	11	,,	1654	2,488,544,460	,,	,,	60	,, 1721	437,325,800	,,
,,	12	,,	1655	2,413,878,080	,,	Yung Cheng	1	,, 1723	499,200	,,
,,	17	,,	1660	280,394,280	,,	,,	4	,, 1726	675,160	,,
,,	18	,,	1661	291,584,600	,,	,,	5	,, 1727	723,528,000	,,
Kang Hi	5	,,	1666	295,879,800	,,	,,	6	,, 1728	746,304,000	,,
,,	10	,,	1671	290,475,870	,,	,,	8	,, 1730	757,865,000	,,
,,	15	,,	1676	231,365,360	,,	,,	9	,, 1731	1,048,759,660	,,

At three periods of the nineteenth century we have figures giving the issues of each mint.

—	1800-1830 *Fixed quota.*	1831[18]	1865[19]
Peking	899,856,000	...[20]	1,349,784,000
Chihli	60,666,000	60,666,000	60,756,840
Shansi	17,472,000	17,472,000	17,472,000
Shensi	87,360,000	94,584,000	94,589,040
Szechwan	194,127,000	194,127,000	157,733,333
Hunan	47,880,000	47,880,000	48,054,000
Hupeh	84,000,000	84,000,000	84,420,000
Kiangsi	41,928,000	41,928,000	42,037,992
Kiangsu	111,804,000	111,804,000	111,992,052
Chekiang	129,600,000	129,600,000	129,600,000
Fukien	43,200,000	43,200,000	43,200,000
Kwangtung	34,560,000	34,560,000	34,560,000
Kwangsi	24,000,000	24,000,000	24,000,000
Yunnan	179,784,000	5,760,000	170,569,080
Kweichow	94,860,000	4,464,000	89,773,200
Ili	1,122,000	1,122,000	1,122,000

[18] *Chinese Currency*, by J. Edkins, Shanghai, 1901.

[19] S. W. Bushell. *Ubi supra.*

[20] Probably the same as in the period 1800-1830.

A close correspondence in the issues of certain mints in the three columns will suggest the danger which always confronts the investigator in China, from the common habit of reporting that which should be as being that which is. Of the "cents" the estimate[21] is that 10,500,000,000 were issued up to the end of 1905, and it appears probable that over a third of these came from the Hupeh mint.

VARIABILITY OF TIAO.

Cash are strung on strings, in rolls of 100, of which 10 go to the string or 吊 *tiao*, or 串 *ch'uan*, formerly called 貫 *kuan*. Nothing is ever done in China for nothing, and no opportunity is ever lost of making a little extra profit, or lagniappe; and the money-changers have always charged for their trouble in stringing, and for the cost of the string. This charge is made by deducting one, or two, or three, or four cash from each hundred; the deduction is more or less (as everything in China is "more or less") recognised and fixed for each place, with the result that the *tiao* of 1,000 cash contains in one place 970 and in another place 980 actual coins, the full *tiao* passing however for 1,000 cash. The local quota is fixed, and the peasant who should receive 980 but actually gets only 975, will feel that he is not receiving his due and will enter at once upon that war of wits which delights the heart of every Chinaman. The following newspaper cutting[22] will give a clearer picture of the situation than anything I can write, what is said of the cent being true also of the cash.

Wusueh, Hupeh, 1st May 1906.

This particular part of the Hupeh province has long been distinguished for its variety of rates of exchange. A nominal 100

[21] *Report on the Trade of China for* 1905.
[22] *North-China Daily News*, May 11th, 1906.

cash has for a long time been worth 97 in actual cash at Wusueh, 98 at Lungping ten miles away, 97 or 98 in different classes of transactions at Hsingkuo ninety miles away, and 99 at Chichou the same distance away in another direction. To complicate matters, the only cash bills which are popular are issued by a Wusueh bank and are current in all these towns, but not at face value. At Wusueh a bill equals 1,000 cash, at Lungping one has to give ten cash and a bill for a thousand, at Chichou one must add twenty cash to the bill. When the copper ten-cash pieces became current (and the only currency, for cash is not now to be had at the banks) the banks had to settle all these monetary problems afresh. At the mint the copper pieces are sold at 98, *i.e.*, 100 copper pieces equal 1,000 cash, reckoned at 98 to the hundred, so that when paying 100 cash one pays ten pieces, but when paying 99 or 98 cash one also pays 10 pieces. At Chichou the banks decided to issue 100 copper pieces for a cash bill, thus saving money on the transaction as they bought the pieces at Wuchang at 98 and paid them out instead of 1,000 copper cash at 99. At Lungping they had to be content without gains. At Wusueh the banks pondered, for if they bought the copper pieces at 98 and then gave 100 for a bill in a place where the rate was 97 they would lose ten cash on each hundred. They therefore decided to take one coin out of each packet they got from the mint. Had they stopped here all would have gone smothly, for the shopkeepers would have deducted one cash from each ten copper pieces which they paid out, and no one would have lost anything. But old time custom has allowed the banks to charge two cash for the piece of string on which the cash were threaded, and the banks did not like to yield this squeeze, so they proceeded to take a second copper piece out of each packet from the mint and put eight cash back, thus getting the two cash for the string which they no longer provided. Of course the shopkeepers objected, for they could not divide up two cash among a hundred coins. If they allowed this deduction, the loss of the two cash must inevitably fall on the man who broke the parcel of copper pieces. The result was that the matter was referred to the officials, and after plea and counter-plea, the shopkeepers have won, and by proclamation the rate in Wusueh from to-morrow will be 98 to the 100, so that the banks will hand over unbroken packets of copper coins. Does not the commercial strength of the Chinese lie just in this pertinacious struggling against the smallest losses?

DOUBLE VALUE OF CASH IN NORTH-CHINA.

In the north (Chihli, Shantung) one cash counts for two. The price of an article being there quoted at 100 cash, you hand over 50 coins, at 2 *tiao* you give what in the south constitutes 1 *tiao*. The same rule of deduction holds here too, and the *tiao* nominally of 1,000 and nominally-actually of 980 cash contains actually 490 coins. At Peking, too, the rule holds good, and the *tiao* nominally of 1,000 cash, *i.e.* nominally of 100 and nominally-actually of 98 pieces of 10-cash, actually contains 49 pieces of 10-cash = 20-cash. In Manchuria the *tiao* consists of 160 ordinary (small) cash.

I make no excuse for devoting so much of my space to this part of my subject. The copper coinage is the currency of the people, in which the daily transactions of four hundred millions are carried on. The importer and the exporter have an exchange question ever present; the wholesale dealer buys and sells with taels of silver bullion; but the shopkeeper sells his commodities, and the artisan and the farmer sell the produce of their labour, for copper coins, and with these copper coins buy what will suffice for their daily needs. The basis of the currency system of the Empire is the copper cash, which was originally $\frac{1}{1000}$ of a tael of silver, worth only a generation ago the third of a pound sterling; and of this copper cash, at the exchange ruling a couple of years ago, it took approximately 10,000 to equal a pound sterling, 2,000 an American dollar, 500 a mark and 400 a franc.

PAPER MONEY.[23]

Paper money comes to be considered next, since, speaking generally and *exceptis excipiendis*, it is in China

[23] In my historical notes on paper money I avail myself freely of Klaproth (*Mémoires rélatifs à l'Asie*) and Edkins (*Banking and Prices in China*), the latter a rich mass of conglomerate for the patient student.

based on copper and not on silver. There is no record to show when bank issues first began, and to-day the notes of money-changers circulate readily within a radius limited only by the credit and reputation of the issuing firm. It is not my purpose, however, to consider private issues, but only the fiduciary issues of fiat money made by the government.

TANG AND SUNG NOTES.

The first government notes of which the issue is recorded were of the Tang dynasty. The Emperor 憲宗 Hien-tsung (A.D. 806-821) on account of the scarcity of cash, issued an edict prohibiting the manufacture of copper utensils, such as basins and kettles; and, to provide for the monetary stringency, opened offices at the capital at which merchants could deposit their coin, receiving in exchange government notes, called 券 "bonds" or 飛錢 "flying money"; the offices represented the different provinces, and the notes were redeemable at the proper provincial capital. Translated into modern terms, this means that the government began to issue paper money. These issues continued to the end of the Tang period. The first Emperor of the Sung period (A.D. 960) followed the custom of the Tang dynasty and issued government notes at large commercial centres, redeemable at other large centres. As described, these notes served rather the purpose of bills of exchange, but it is hard to believe that the government did not avail itself of the opportunity to get something for nothing, and to pay some portion of its obligations in this form. In A.D. 997 the amount of these notes outstanding was 1,700,000 strings (tiao) of cash, and in A.D. 1017 was 2,930,000 strings.

It was in the state of Shuh, the present province of Szechwan, that the true paper money was first introduced; these were notes issued without being guaranteed by some

hypothecated value. A certain *Chang Yung* 張詠 introduced them to take the place of the iron money, which was inconveniently heavy and troublesome. These bills were called *chih-tsi* 質劑 or *evidences*. During the reign of Chengtsung of the Sung Dynasty (A.D. 997-1022), this practice was followed, and the notes were called *kiao-tze* 交子 or *changelings*. They were made payable every three years; thus, in 65 years they were redeemable 22 times; each note was worth a thousand cash, or a tael of pure silver. Fifteen of the richest houses managed this financial operation; but in course of time they were unable to fulfil their engagements, and all became bankrupt, which gave rise to many lawsuits. The emperor annulled the notes of this company, and deprived his subjects of the power to issue bank-bills, reserving it to himself to establish a bank of issue at Yih-chao. By the year 1032 there were more than 1,256,340 taels' worth of "changelings" in circulation in China. In 1068, having ascertained that counterfeits were issued, the government made a law that persons making false bills should be punished the same as those who falsified government orders. Later than this, and at different applications, banks for the issue of the *kiao-tze* were established in many provinces, and the notes of one province were not circulated in another. Their terms of payment and modes of circulation, too, varied at different times.[24]

SOUTHERN SUNG NOTES.

For the 12th and the first half of the 13th centuries the country was divided between the Southern Sung and the Golden dynasty of Nüchen Tartars, and both ran a mad race in the issue of assignats. Of the latter government we have

[24] Klaproth.

few records, but of the doings of the southern kingdom Klaproth gives us the following note:—

"Under the Emperor Kiaotsung in A.D. 1131, it was attempted to make a military establishment at Wuchow, but as the requisite funds did not come in without great difficulty, the officers charged with the matter proposed to the Board of Revenue, to issue *Kwan-tze* 關子 or due bills, with which they could pay the sutlers of the troops; and which should be redeemable at a special office. Abuses soon crept into the details of this plan, and the people began to murmur. Later, and under the same reign, similar due bills to these were put into circulation in other provinces. During the reign of this same monarch, the Board of Revenue issued a new sort of paper money called *hwei-tze* 會子 or exchanges; these were, at first, payable only in the province of Chekiang and thereabouts, but they soon extended to all parts of the Empire. The paper of which they were made was originally fabricated only in the cities of Hweichow and Kichow in Kiangnan; subsequently, it was also manufactured in Chengtu-fu in Szechwan, and Linan-fu in Chekiang. The *hwei-tze* first issued were worth a string of a thousand cash but under the reign of Hiao-tsung in 1163, they were issued of the value of 500, 300, and 200 cash each. In five years, *i.e.* up to the 7th month of the year 1166, there had already been sent out more than 28,000,000 taels worth of these notes; and by the eleventh month of this year, this sum had been increased 15,600,000 taels. During the further sway of the Sung dynasty, the number of the *hwei-tze* was constantly on the increase; and besides this description of note, there were some of the *Kiao-tze* still extant, and notes of private individuals current in the provinces; so that the country was inundated with paper notes, which were daily depreciated in value in spite of all the modifications and changes the government adopted to augment their circulation.

"At last, under the reign of Li-tsung of the same dynasty, in 1264, the minister Kia Sze-tau, seeing their value so small, endeavored to substitute for a part of *hwei-tze* some new assignats which he called *yin-kwan* 銀關 or silver obligations. Those *hwei-tze* which were technically named "seventeen terms" were withdrawn entirely; and three of those called "eighteen terms" were exchanged for one note of the new currency which bore the character *kia* 貫. But although even those bills which were torn were received in pay for taxes, the minister was not able to get the treasury paper into circulation, nor to lessen the price of commodities."

MONGOL NOTES.

The Mongols then came in (A.D. 1260) and founded the Yuan dynasty. An unlettered race of warriors, they could devise no better means of providing for the needs of their government than to continue the practice which they found in vogue and issue paper money. Copper cash and silver had been driven from their dominions; and with the chief sources of supply of both metals in the southern provinces, it would require a longer period of peace and a higher development of commerce than was possible under Mongol rule, for the ways to be opened to allow the deficiency to be made good. From Marco Polo we hear much of the great wealth and the high development of commerce in the Mongol realm, but we must recall what was the state of the Europe of that day with which alone he could make comparison; apart from the record of history, the coinage alone would tell us that China from the seventh to the eleventh century was far more prosperous and more highly developed than in the thirteenth century. To show the available resources of the Treasury at a time a little later but during the same (Mongol) dynasty, the following note from Edkins, showing the tribute actually received, in a year of great prosperity, is illuminating:—

> A.D. 1329: 989 ting (= 49,450 taels) of silver *and notes*; 1,133,119 strings of cowrie shells; 1,098,843 catties of raw silk; 350,530 rolls of woven silk; 72,915 catties of cotton; 211,223 pieces of woven cloth; 3,255,220 piculs of rice.

The first issue of Mongol government notes was made in the first year (A.D. 1260) of Kublai Khan, the title of whose reign was 中統 Chung-tung, and the successive issues in this and the following reigns must be briefly summarised.[25]

[25] Summarised from Edkins' "*Banking and Prices.*"

A.D. 1260. *Kiao-chao* (交鈔) representing silk, a continuation of the issues then in vogue; fifty taels of silver would buy 1,000 taels of silk, represented by notes of the face value of 1,000 taels. (So stated by Edkins.)

A.D. 1260, November. Issue of notes *Chung-tung-chao* (中統鈔) of 10, 20, 30, 50, 100, 200, 500, 1,000 and 2,000 cash. A note for 1,000 cash was worth a tael in *Kiao-chao* currency, and 2,000 cash in *Kiao-chao* currency represented one tael in silver.—(N.B. one cash = 一厘 $\frac{1}{1000}$ tael.)

A.D. 1264. Treasury established in each province; notes representing 12,000 ting (錠) = 600,000 taels constituted bank note reserve.

A.D. 1275. *Li-chao* (鑑鈔) notes issued, of 2, 3, and 5 cash, but soon withdrawn.

A.D. 1287. *Chih-yuan-chao* (至元鈔) notes issued of eleven denominations from 5 to 2,000 cash. A tael of silver exchanged for 2,000 cash and a tael of gold for 20,000 cash in these notes.

A.D. 1309. *Chih-ta-chao* (至大鈔) notes issued of thirteen denominations from 2 cash (二厘) to 2 taels of silver. One *chih-ta-chao* (tael of silver) was equivalent to 5,000 *chih-yuan-chao* cash, a depreciation in 22 years of 60 per cent.

A.D. 1312–1321. During the reign of 仁宗 Jen-tsung there was over issue of notes, and the issue of the Chih-ta notes for silver was stopped. The Chung-tung and Chih-yuan notes continued to circulate to the end of the Mongol dynasty.

We have a record of the issues (which must include re-issues for obliterated notes) for the first seventy years from A.D. 1260.

Year.	Chungtung-chao.	Chihyuen-chao.	Chihta-chao.	Year.	Chungtung-chao.	Chihyuen-chao.	Chihta-chao.
	ting.	*ting.*	*ting.*		*ting.*	*ting.*	*ting.*
1260	73,352	...	...	1298	...	299,910	...
1261	39,139	...	...	1299	...	900,075	...
1262	80,000	...	...	1300	...	600,000	...
1263	46,000	...	...	1301	...	500,000	...
1264	89,280	...	...	1302	...	2,000,000	...
1265	116,208	...	...	1303	...	1,500,000	...
1266	77,252	...	...	1304	...	500,000	...
1267	109,488	...	...	1305	...	500,000	...
1268	29,880	...	...	1306	...	1,000,000	...
1269	22,886	...	...	1307	...	1,000,000	...
1270	96,768	...	...	1308	...	1,000,000	...
1271	47,000	...	...	1309	...	1,000,000	...
1272	86,256	...	...	1310	...	...	1,450,363
1273	110,192	...	...	1311	150,000	2,150,000	...
1274	247,440	...	...	1312	100,000	2,222,336	...
1275	398,194	...	...	1313	200,000	2,000,000	...
1276	1,419,665	...	...	1314	100,000	2,000,000	...
1277	1,021,645	...	...	1315	100,000	1,000,000	...
1279	788,320	...	...	1316	100,000	400,000	...
1280	1,135,800	...	...	1317	100,000	480,000	...
1283	610,620	...	...	1318	100,000	400,000	...
1284	629,904	...	...	1319	100,000	1,480,000	...
1287	83,200	1,001,017	...	1320	100,000	1,480,000	...
1288	...	921,612	...	1321	50,000	1,000,000	...
1289	...	1,780,093	...	1322	50,000	800,000	...
1290	...	500,250	...	1323	50,000	700,000	...
1291	...	500,000	...	1324	150,000	600,000	...
1292	...	500,000	...	1325	100,000	400,000	...
1293	...	260,000	...	1326	100,000	400,000	...
1294	...	193,706	...	1327	100,000	400,000	...
1295	...	310,000	...	1329	30,500	310,920	...
1296	...	400,000	...	1330	40,000	1,192,000	...
1297	...	400,000	...				

It is to be observed that the Chih-ta notes for silver, the issue of which was stopped because of the over-issue of notes in general, were given out only in the one year A.D. 1310; but I have to take the facts as I find them recorded. Not including Kublai's issue of *Kiao-chao*, this table gives us a total issue of irredeemable paper money in 64 of the first 70 years of Mongol rule amounting to 47,611,276 ting or 2,380,563,800 taels nominal face value, the tael being always taken as equivalent to 1,000 cash. This is an average of over 37 million taels a year; and, as the coach gains in speed in running down hill, we may assume for the whole dynastic period of 108 years an annual average of 40 million taels, at a time when the richest of the sovereigns of Europe, placed inexorably upon a cash basis, counted himself passing

rich in any year in which his budget exceeded the equivalent of a million taels. How this situation struck an intelligent European, ignorant of the use of instruments of credit and bewildered by the apparent signs of wealth around him, is shown in Marco Polo's comment; and I reproduce it here to demonstrate how changed is Europe and how unchanged is China in the six centuries which have elapsed since it was written.

> "The Emperor's Mint then is in this same City of Cambuluc, and the way it is wrought is such that you might say he hath the Secret of Alchemy in perfection, and you would be right! For he makes his money after this fashion.
>
> "He makes them take of the bark of a certain tree, in fact of the Mulberry Tree, the leaves of which are the food of the silkworms—these trees being so numerous that whole districts are full of them. What they take is a certain fine white bast or skin which lies between the wood of the tree and the thick outer bark, and this they make into something resembling sheets of paper, but black. When these sheets have been prepared they are cut up into pieces of different sizes. The smallest of these sizes is worth a half tornesel; the next, a little larger, one tornesel; one, a little larger still, is worth half a silver groat of Venice; another a whole groat; other yet two groats, five groats, and ten groats. There is also a kind worth one bezant of gold, and others of three bezants, and so up to ten[26]. All these pieces of paper are [issued with as much solemnity and authority as if they were of pure gold or silver; and on every piece a variety of officials, whose duty it is, have to write their names, and to put their seals. And when all is prepared duly, the chief officer deputed by the Kaan smears the Seal entrusted to him with vermilion, and impresses it on the paper, so that the form of the Seal remains stamped upon it in red; the Money is then authentic. Any one forging it would be punished with death]. And the Kaan causes every year to be made such a vast quantity of this money, which costs him nothing, that it must equal in amount all the treasure in the world.

[26] The bezant is taken to equal one tael of silver, or 1,000 cash. One bezant = 20 groats = 133⅓ tornesel.

"With these pieces of paper, made as I have described, he causes all payments on his own account to be made; and he makes them to pass current universally over all his kingdoms and provinces and territories and whithersoever his power and sovereignty extends. And nobody, however important he may think himself, dares to refuse them on pain of death. And indeed everybody takes them readily, for wheresoever a person may go throughout the Great Kaan's dominions he shall find these pieces of paper current, and shall be able to transact all sales and purchases of goods by means of them just as well as if they were coins of pure gold. And all the while they are so light that ten bezants' worth does not weigh one golden bezant.

"Furthermore all merchants arriving from India or other countries and bringing with them gold or silver or gems and pearls, are prohibited from selling to any one but the Emperor. He has twelve experts chosen for this business, men of shrewdness and experience in such affairs; these appraise the articles, and the Emperor then pays a liberal price for them in those pieces of paper. The merchants accept his price readily, for in the first place they would not get so good an one from anybody else, and secondly they are paid without any delay. And with this paper-money they can buy what they like anywhere over the Empire, whilst it is also vastly lighter to carry about on their journeys. And it is a truth that the merchants will several times in the year bring wares to the amount of 400,000 bezants, and the Grand Sire pays for all in that paper. So he buys such a quantity of those precious things every year that his treasure is endless, whilst all the time the money he pays away costs him nothing at all. Moreover several times in the year proclamation is made through the city that any one who may have gold or silver or gems or pearls, by taking them to the Mint shall get a handsome price for them. And the owners are glad to do this, because they would find no other purchaser give so large a price. Thus the quantity they bring in is marvellous, though those who do not choose to do so may let it alone. Still, in this way, nearly all the valuables in the country come into the Kaan's possession.

"When any of those pieces of paper are spoilt—not that they are so very flimsy neither—the owner carries them to the Mint, and by paying 3 per cent. on the value he gets new pieces in exchange. And if any Baron, or any one else soever, hath need of gold or silver or gems or pearls, in order to make plate, or girdles or the like, he goes to the Mint and buys as much as he list paying in this paper-money.

"Now you have heard the ways and means whereby the Great Kaan may have, and in fact has, more treasure than all the kings in the World; and you know all about it and the reason why."[27]

MING NOTES.

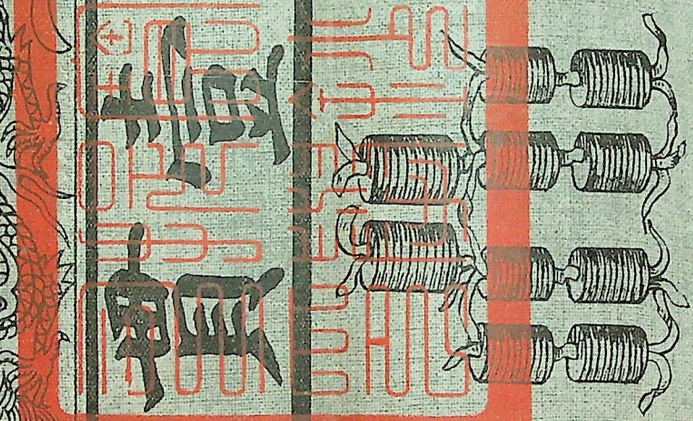
Bayonets form a poor seat for the throne of a ruler, and a constant diet of irredeemable assignats is not nutritious. With all the warlike prowess and rough hardihood of the Mongols, weakened though they may have been by a life of luxury, their throne, which endured for three centuries in India, fell after a single century of dominion in China before the assault of the unwarlike Chinese, driven to rebellion by the burden of heavy taxation and by the evils of an irredeemable and depreciated paper currency. The first Ming Emperor 太祖 T'ai Tsu, whose reign title was 洪武 Hung-wu (A.D. 1368-1398) found himself confronted by a financial situation of grave difficulty, and was compelled for a time to continue, with all its evils, the currency system of his predecessors. Government notes were therefore issued, but other steps were taken to place the Imperial finances on a sound basis, and it redounds to the credit of the government that, in a single reign and a single generation, they were able to "resume specie payments."

I have been unable to obtain a copy of a Mongol government note, which would have had a special interest as illustrating the currency, the benefits of which Ser Marco Polo described in such glowing terms to an open-mouthed and open-eared Europe. I give, however, a reproduction[28] of a note for 1,000 cash issued by the first Ming Emperor (Hung-wu

[27] The Book of Ser Marco Polo translated by Col. Henry Yule. London, 1871. Book II. Chap. XXIV.

[28] Plate V.

大明通行寶鈔



壹貫

戶部

奏准印造

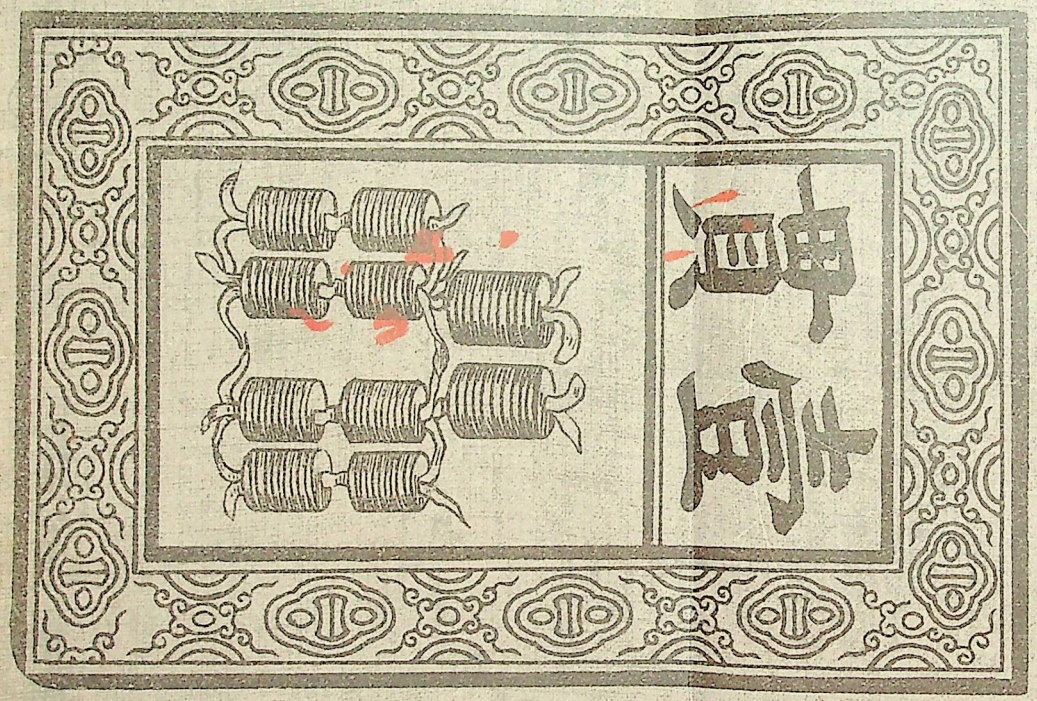
大明寶鈔與制錢通行

使用偽造者斬告發

者賞銀貳伯伍拾兩

仍給犯人財產

洪武　年　月　日



A.D. 1368-1399), who may be assumed to have followed closely the procedure and copied the forms of his predecessors. This 500-year-old instrument of credit has a curious history, furnishing an absolute guarantee of its authenticity. During the foreign occupation of Peking in 1900-01 some European soldiers had thrown down a sacred image of Buddha, and, deposited in the pedestal (as in the corner stones of our public buildings), found gems and jewelry and ingots of gold and silver and a bundle of these notes. Contented with the loot having intrinsic value, the soldiers readily surrendered the bundle of notes to a bystander who was present "unofficially," Surgeon Major Louis Livingston Seaman, U.S.A., of New York, and he gave to the Museum of St. John's College at Shanghai the specimen which is here reproduced.

The note is printed on mulberry-bark paper, which now is of a dark slate colour, the "something resembling sheets of paper, but black" of Marco Polo's description. The sheet of paper is 13.5 by 8.75 inches, and the design on the face is 12.6 by 8.3 inches. The border 1.4 inch wide is made of extended dragons filled around with an arabesque design, and is surmounted by a panel with the inscription (from right to left) 大明通行寶鈔 "circulating government note of the Ming Empire." The space within the border is divided into two panels. The upper has on the two sides in conventionalised square seal characters, on the right 大明寶鈔 "government note of the Ming Empire," on the left 永遠通行 "circulating for ever and ever"; between these two inscriptions, above in large ordinary characters 壹貫 "one *kwan*," (or *tiao* or string), and below a pictorial illustration

representing ten hundreds of cash. The lower panel contains the following:

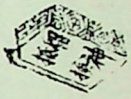
戶部 奏准印造 大明寶鈔與制錢通行 偽造者斬 告發使用者賞銀貳百伍拾兩 仍給犯人財產 洪武 年 月 日

"The Imperial Board of Revenue having memorialised the Throne has received the Imperial sanction for the issue of government notes of the Ming Empire, to circulate on the same footing as standard cash. To counterfeit is death. The informant will receive 250 taels of silver and in addition the entire property of the criminal. Hung-wu.....year.....month.....day."

A seal 3.25 inches square is impressed in vermilion once on the upper panel, once on the lower panel, bearing in square seal characters the legend 寶鈔提舉司印 "The Seal of the Government Note Administrators." On the back of the note, above is impressed in vermilion a seal bearing in square seal characters the legend 通行寶鈔之印 "Seal for Circulating Government Notes"; below within a border 6.2 by 4.1 inches is repeated the middle part of the upper panel of the face—壹貫 one *kwan*, with a pictorial illustration representing ten hundreds of cash.

HIEN-FENG NOTES.

From A.D. 1403, it may be said, or at any rate from some time in the reign of Yung-lo (A.D. 1403-1425), there

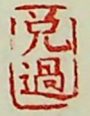


又廿六辛酉

祥和
潤孫

祥和
潤孫

丁巳成









辨

大清寶鈔

辨字第四百二十六號

準足制錢壹千文

咸豐柒年製

此鈔即仿制錢行用並准按成交納地丁錢糧一切稅課捐項京外各庫一概收解每錢鈔貳千文抵換官票銀壹兩

三益知

平 出 入 天 下 通 行

were no fiduciary issues by the government, either of the Ming or the Tsing, until we come to the troubled times of Hien-feng (A.D. 1851-1861), when the necessities of the Treasury drove it to this method of replenishing its depleted reserves. To describe these notes I reproduce the excellent account of Bushell (*ubi supra*), reproducing also the notes themselves from his paper.

> In the third year of Hien-fêng (1853), when the large copper tokens were coined, the government paper currency of preceding dynasties was also revived. The notes of two kinds, cash-notes and silver notes, were issued by the Board of Revenue and forced into circulation by paying part of the salary of officials in the new currency and by compelling the banks and large pawnbroking establishments to accept it in lieu of more solid money. The value of these notes, however, depreciated rapidly until, in 1861, they were sold by Dutch auction in the streets of the capital at a discount of 97 per cent (*see* Dr. Rennie's *Peking and the Pekingese*). Soon after this they disappeared altogether from circulation.
>
> The cash-notes[29] are of four denominations equivalent to 500, 1,000, 1,500, and 2,000 cash respectively. They are printed from wood-blocks with blue ink on thick whitish paper. The specimen figured is of the value of 1,000 cash. It is headed *Ta ch'ing pao ch'ao* "Money note of the great Ch'ing (dynasty)." The ornamental border has above two dragons striving for a pearl, below the fabulous mountain of precious stones with coral-trees in the midst of sea waves, and at the sides clouds interrupted by medallions containing, on the right the character *Tien hsia t'ung hsing* "To circulate throughout the empire," on the left *Chun p'ing ch'u ju* "Issued and accepted at equal value." Within the border are three lines; the central specifying the value "Equivalent without deduction to 1,000 pieces of government cash;" the right the number 426 in black, partly stamped partly written, classified under the character *pien* (one of the words of the thousand character classic used numeratively); the left the date "Made in the seventh year of Hien-fêng (1857)," the number of the year stamped in blue with a separate stamp. Below these is printed: "These notes shall circulate in place of government

[29] Plate VI.

"cash and will be received in the proportion fixed for the different "taxes, for all the customs dues, and for the purchase of rank. The "treasuries both of the capital and provinces shall alike accept and "forward them. The cash-notes shall be exchangeable for government "silver-notes in the proportion of 2,000 cash for one tael of silver." The large square vermilion seal in the centre is that of the Revenue Board in Manchu and Chinese, *Ta ch'ing pao ch'ao chih yin*. The small oblong seal in black under the date is that of the official in charge put on when the number is written. There is also at the side a round seal (differing in design in different notes) and blotched lines made with a brush before the note has been cut from the tally.

The silver notes[35] are printed on fine Corean paper, also from wooden blocks, in blue. I have examples of 1, 3, 5, 10 and 50 taels and figure the first. The ornamental border has five dragons traversing clouds in the direction of a pearl emitting rays of brilliance like flames, and waves of the sea below with precious emblems floating upon them. Within this border there is at the top an oblong frame containing, in Manchu, *Poihun ni churhan ni alpan temket'u*, in Chinese *Hu pu kuan piao* "Government note of the Board of Revenue." The central line has "Equivalent by the two tael scale to one tael of pure silver," the number impressed in black with a large stamp. On the right "Number 29643 of the numeral kung," the first character stamped in black, the number written. On the left the date "Hien-fêng 3rd year (1853), 11th month, 9th day," the year and month printed in black by separate stamps, the day in manuscript. There is printed below: "The Board of Revenue has "memorialized to recommend the circulation of government notes. "All shall willingly take these government notes in exchange for "silver and for copper money, and they shall be equivalent in all "cases to silver. In accordance with the regulations fixed by the "Board, they shall be accepted in definite proportion in payment of "government dues. Those who counterfeit them shall be punished "according to the statutes and shall not be pardoned." Outside the border on the left near the top is printed "Each tael is 6 per cent less than that of the treasury scale." There are two vermilion seals with inscription in Manchu and Chinese, the small square one in the centre being *Hu pu kuan piao yung yuan t'ung hsing* "The Board of Revenue government note for everlasting circulation." The large oblong one on the edge *Hu pu kuan piao so kuan fang* "The official

[35] Plate VII.

每兩比庫平少陸分

戶部官票

宮字第二萬九千六百四十三號

咸豐叁年拾壹月初九日

準二兩平足色銀壹兩

戶部奏行官票凡願將官票兌換銀錢者與銀一律並准按部定章程搭交官項偽造者依律治罪不貸

seal of the Board of Revenue government note office." The third large square crimson seal on the right edge with the Chinese inscription *Hu pu chih yin* "Seal of the Board of Revenue" indicates that the note is for provincial circulation. The figure below to the left is the private signature impressed when the number is written.

For nearly forty years from the accession of Tung-chih (A.D. 1862) the issue of paper instruments of credit was left entirely to private hands, banks and money-changers; but recently some provincial governments, driven by the steady absorption of their revenues for Imperial purposes, have resumed the issue of government notes. Their re-introduction is of too recent a date to permit any extended comment upon the wisdom of the step, or upon the precautions adopted to secure their convertibility; but the partial acceptance which they have obtained is based on reasons which carry us back eleven hundred years. The circulation of the notes of private banks is limited to the radius of credit of the issuing bank; the Tang government notes were acceptable chiefly because they furnished a safe and convenient means of transferring funds from place to place; and rather to the dismay of the authorities, this facility of transferring funds provides the chief reason for the circulation within the limits of a given province of present issues of government notes.

SILVER CURRENCY.

BIMETALLIC RATIO.

There has always, for thirteen centuries at least, and in theory, been a more or less recognised correspondence and fixed ratio of convertibility between the copper and the silver currency of the Empire; and among the many facts which show this, I need only refer to the few which have been mentioned above. The Tang coinage of the seventh

century A.D. was based on the trimetallic ratio of 1 gold = 10 silver = 1,000 copper; in the paper money issues of the Southern Sung and the Yuan, from the twelfth to the fourteenth centuries, the *tiao* or string, or thousand, of paper-money cash and the tael of silver are always regarded as synonymous terms (*cf.* Marco Polo, *ubi supra*), notwithstanding the fact that the paper money was much depreciated; and the first Manchu Emperor (A.D. 1644), in his desire to conform in every way to Chinese theory and practice, inscribed on his coins their theoretic silver value (一厘) $\frac{1}{1000}$ of a tael.

SILVER COINS.

Five centuries after the Tang rulers had either fixed the bimetallic ratio or had adopted that which they found in existence, silver had appreciated to double its value in its relation to copper cash, one shoe of 50 taels of silver exchanging for 100,000 cash; and about A.D. 1183, during the reign of 孝宗 Hiao-tsung, the second Emperor of the Southern Sung, China for the first, and (until a few years ago) last and only time, minted silver coins.

> "There were five kinds, weighing one, two, three, five and ten taels respectively, each tael passing for 2,000 cash. They could be used as official and commercial currency, and served equally as metallic reserve for the paper notes. Singularly enough, this silver coinage only lasted three years. It was called 承安通寶 Cheng-an Currency."[31]

I am uncertain whether we should regard this as a true silver coinage of which the face and intrinsic values should correspond, or whether it was not an issue of depreciated silver token currency intended to serve mainly as metallic reserve to support the still further depreciated paper currency,

[31] Edkins, *Banking and Prices.*

the issues of which under the same dynasty had begun fifty years before ; a fair parallel, were it not for the relative credit of the two governments, might be found in the silver reserve of the Bank of France, which, being based on gold, is counted at the ratio 1 : 16. A silver coin, an exact model of the cash of the reign, was issued during the reign of the Ming Wan-li (A.D. 1573-1619), but this was probably a mint sport, much like the English silver pennies issued to-day. The silver coins of the nineteenth century in the collections of Wylie[32] and Glover[33] can hardly be regarded as official. This, so far as is known, is the complete record of the silver coinage of China up to A.D. 1889.

CURRENCY A WEIGHT.

With these insignificant exceptions, China has never had a government coin of other metal than copper ; other than copper, the currency of the country is not a coin, but a weight. This weight is the "tael,"[34] as it is called by foreigners, the Chinese name for it being 兩 *liang;* and when an operation in international trade, a wholesale purchase, Government indebtedness or Customs duties have to be liquidated, payment is effected by weighing out the required number of "taels" of the stipulated quality of silver. A century ago Germany was the paradise of the money-changer with its numerous coinages, each circulating in its own principality ; but that was simplicity itself when compared with China. In China every one of the hundreds of commercial centres not only has its own tael

[32] *Journal N.C.B.R.A.S.*, 1858.

[33] The Glover collection, etc., by J. H. Stewart Lockhart.

[34] Tael—from the Hindu "tola" through the Malayan word "tahil." H. A. Giles. *Glossary of Reference.*

weight, but in many cases has several standards side by side; and these taels of money will be weighed out in silver which, even in one place, will be of several degrees of fineness.

VARIABILITY OF STANDARDS.

One town may be taken to typify many, the town of Chungking, in the province of Szechwan, in the far west of China. Here the standard weight of the tael for silver transactions is 555.6 grains, and this is the standard for all transactions in which the scale is not specified. Frequently, however, a modification of the scale is provided for, depending in some cases upon the place from which the merchant comes or with which he trades, and in others upon the goods in which he deals. A merchant coming from Kweichow, or trading with that place, will probably, but not certainly, use a scale on which the tael weighs 548.9 grains; a merchant from Kwei-fu, a town on the Yangtze, a hundred miles from Chungking, will buy and sell with a tael 562.7 grains; and between these two extremes are at least ten topical weights of tael, all "current" at Chungking. In addition to these twelve topical "currencies," there are others connected with commodities. One of the most important products of Szechwan is salt, and dealings in this are settled by a tael of 556.4 grains, unless it is salt from the Tze-liu well, in which case the standard is 557.7 grains. A transaction in cotton cloth is settled with a tael of 555.0 grains, but for cotton yarn the tael is 556.0 grains, and for raw cotton the tael is 547.7 grains.

This seems confusion, but we are not yet at the end. Up to this point we have dealt only with the weight on the scale, but now comes in the question of the fineness of the silver with which payment is made. At Chungking three

qualities of silver are in common use—"fine silver" 1,000 fine current throughout the empire, "old silver" about 995 fine, and "trade silver" between 960 and 970 fine; and payment may be stipulated in any one of these three qualities. Taking the score of current tael weights in combination with the three grades of silver, we have at least sixty currencies possible in this one town.

This is characteristic of the Empire. The traveller, even a private individual, journeying from place to place in China, will be careful to take with him a small steel-yard and a string of a few selected "cash," the exact weight of which on his home scale is known to him. His first step in cashing a draft or exchanging the silver he brought with him is to ascertain the weight of his string of cash on the scales of the strange bank in the strange place; and, having done this, he is able to work out the parity of exchange between his home and the place of his temporary sojourn. Even then, however, he is dependent on the banker in the matter of the quality of silver; fortunately, the commercial honour of the Chinese bankers stands high, though it is hardly to be expected that they should not profit by their expert knowledge.

In China you must prove your axioms. We are accustomed to currencies in which the unit of value is a defined and accurate weight of an alloy of a precious metal (commonly gold) of an exact and known degree of fineness. In China the silver currency is an article of barter, of which neither the weight nor the quality is anywhere fixed; and in treating of the tael of silver, we must answer two questions: What is a tael? and What is silver? Since "tael" connotes both a weight and a value, and since an essential element in value is the quality of the silver, we must first answer the question What is silver?

SILVER.

Silver is most commonly current in oval ingots called "shoes" from their resemblance to a Chinese shoe ; but what may be called fractional currency is in obovoid lumps weighing up to two or three taels. At Mengtsz[35] the sycee most commonly current is the *chieh-ting* 解錠, more commonly known as the *pai-fang* 牌坊 ingot ; when laid flat on a sheet of paper and traced with a pencil, it has eight curvilinear lines, a figure not unlike the brass pieces inserted in doors to protect key-holes ; in weight the pieces vary from two taels up to five taels. At Peking the Sungkiang ingot is about 10 taels. The standard ingot of China weighs about 50 taels (from 49 to 54) and, formerly called *ting* 錠, is now called *pao* 寶 (jewel, article of value, as in the inscription on the copper cash 通寶 *tung-pao* = "current coin") and more commonly *yuan pao* 元寶 probably standing for 圓寶 "round ingot" from its shape, oval in plan ; but Edkins,[36] I think by inadvertence, ascribes the name to the (not proven) fact that the oval shape originated in the Yuan (元) dynasty A.D. 1260-1367.

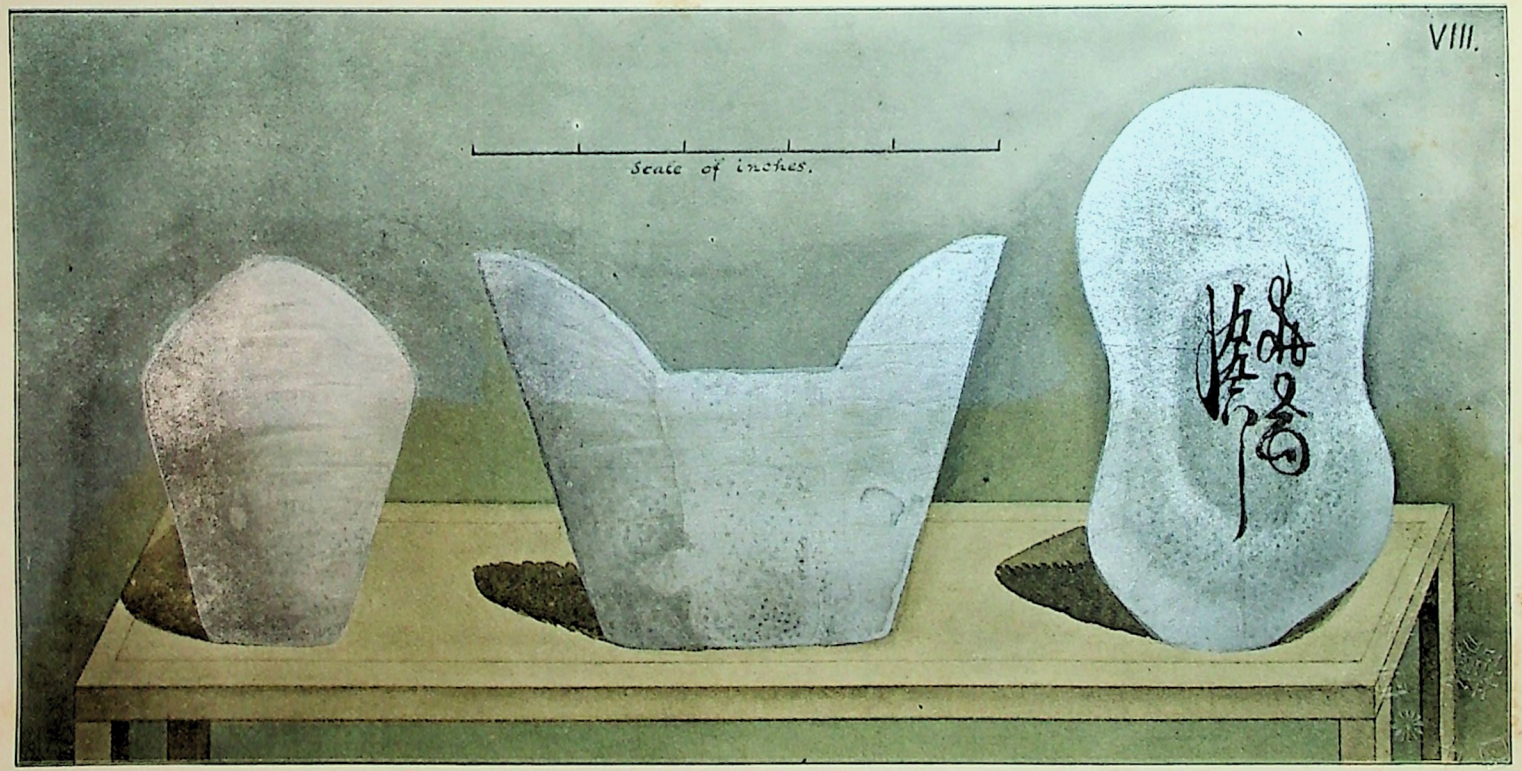
The shoes of Shanghai are as shown in Plate VIII, which represents a shoe inscribed in ink by the Assay Office of the Foreign Settlements as weighing 49.94 taels and as being of silver for the quality of which 2.75 must be added ; it is also stamped with dies at the Melting Establishment[37] with the place (上海 Shanghai), the name of the Establishment (萃源 Sui-yuan) and a numeral (叁 3) for the number of the furnace, of which the Establishment has six. Shanghai

[35] A. P. Happer in *Journal N.C.B.R.A.S.*, Vol. XXIV, 1889-1890, page 72.

[36] *Banking and Prices.*

[37] For an account of this *see* Dr. Ferguson's Paper on Banking in *Journal N.C.B.R.A.S.*, 1906.

VIII.



shoes weigh close on 50 taels each ; a lot of 60 of which I saw the weighing and touching, had 54 between 49.81 and 49.90 taels, 5 between 49.91 and 50.00 taels, and one of 50.04 taels ; other lots might have the larger proportion just over 50 taels. Hankow and other Yangtze ports also cast oval shoes close on 50 taels in weight, and Tientsin as well. The shoes of Kiangsi are rectangular, with the lip projecting at each end only half an inch, weighing also about 50 taels. The shoes ordinarily have the top of the solid part parallel to the bottom ; but in the Newchwang shoe it is inclined, so that at one end the solid part is only two-thirds the thickness of the other end ; Newchwang shoes weigh from 53 to 54 taels, and quotations for "transfer money" (*v. infra*) are per shoe of nominally 53 taels. Except to make change the small lumps of silver are seldom seen at Shanghai, and when received from other cities are sent to be cast into shoes.

The silver contained in the shoe is called sycee, the Cantonese pronunciation of 細絲 *hsi-sze* "fine silk" ; when it is theoretically standard silver of a fineness of 1,000 it is called 足色紋銀 *tsu-seh wen-yin*. I give here a note which I wrote last year for Dr. Ferguson's paper on Banking.[38]

> *Quality of Silver.*—Throughout China generally, except at Shanghai and in the country subordinated to it, silver is rated for quality by millièmes of a standard of "pure silver." Thus, at Tientsin all silver is reduced to a theoretic local standard of 992 ; at Chefoo, to one of 976 ; at Hankow, to one of 967. At Shanghai and, if not throughout Kiangsu, at least in that part lying south of the Yangtze, and, if not throughout Anhwei, at least at Anking and Tatung, silver is rated, not by millièmes of a "pure silver" standard, but by the addition, to each shoe of about 50 taels weight, of a quantity to indicate the degree of superiority of quality over a presumed standard which (subject to a certain degree of confusion between premium and discount) is 944 of the China standard of "pure silver." By this scheme of notation 2.8 silver (*i.e.*, silver for the quality of which is

[38] Chinese Banking System at Shanghai, *Journal N.C.B.R.A.S.*, 1906.

added 2.8 per shoe, or 5.6 per 100) represents silver 1,000 fine, 2.7 silver is 998 fine, 2.4 silver is 992 fine, or thereabouts.

In Western countries the standard of 1,000 represents silver chemically pure, with no admixture of gold or of copper and lead. American quotations of bar silver are reduced to a basis of 998, and British quotations to a basis of 925 of this standard. In China the standard of 1,000 seems to refer to a silver commercially pure, as shown by the crude methods of the touchstone or of crucible assaying. This is the standard of K'u-p'ing; it is the standard to which are referred all local millième standards, and in the Shanghai notation it is 2.8 silver. Even at Shanghai, however, super-pure silver is known in Chinese circles, and in the make-up of the Haikwan tael the requisite quality of silver is rated, not at 2.8 as for the "pure silver" of the K'u-p'ing tael, but at 3.084 (*i.e.*, at 6.168 per 100 taels) to represent a higher degree of purity. Even this, however, does not graphically represent a quality of silver corresponding to what is called 1,000 fine in Western countries. It has been ascertained in transactions in foreign bar silver that "pure silver" of the K'u-p'ing tael touch is actually 987 fine when reduced to the Western standard of chemically pure silver; and on this basis silver of the Haikwan tael touch recognised at Shanghai is actually 992.3 fine.

Working on these figures it will be found that the Shanghai tael contains 525 grains of silver of the K'u-p'ing tael touch, 522⅛ grains of silver of the Haikwan tael touch, and about 518¼ grains of silver of the Western standard 1,000 fine.

I shall have more to say on the definition of the quality of silver when I come to treat of the Shanghai tael.

THE TAEL.

It is not always possible to keep them apart in writing, but in reading it is necessary always to bear in mind the distinction between the tael of value and the tael of weight. At Tientsin, by "Tientsin tael" is meant one *Hang-ping* 行平 tael in weight of silver of the *Hwa-pao* 化寶 standard 992 fine; by "Hangping tael" is meant one Hangping tael in weight of silver or any other commodity, and, if of silver, it may be of Hwapao or any other stipulated standard; to

express fully what the foreigner calls the "Tientsin tael," the Chinese would say "Hang-ping tael of hwa-pao silver." It is not possible to use different words for the two meanings thus connoted, since they are interwoven; and always to distinguish them otherwise would involve the use of much circumlocution. It must be left to the reader to make the distinction, since, even without this, there will be found to be enough of "proving axioms" to break constantly the thread of thought.

THE TAEL OF WEIGHT.

The tael is the "ounce" of China, of which, as in England and America, 16 make one catty,[39] or Chinese "pound." In weighing the precious metals, however, the tael is the heaviest unit, and it has decimal subdivisions, each with its own name, down to the one thousand-million-millionth ($\frac{1}{1,000,000,000,000,000}$) part of a tael, as follows:—

10	Hsü,	須	= 1	Hsün,	巡.
10	Hsün		= 1	Chün,	逡.
10	Chün		= 1	Ai,	埃.
10	Ai		= 1	Mo,	漠.
10	Mo		= 1	Miao,	渺.
10	Miao		= 1	Ch'ên,	塵.
10	Ch'ên		= 1	Sha,	沙.
10	Sha		= 1	Hsien,	纖.
10	Hsien		= 1	Wei,	微.
10	Wei		= 1	Hu,	忽.
10	Hu		= 1	Sze,	絲.
10	Sze		= 1	Hao,	毫.
10	Hao		= 1	Li,	釐 (Cash).
10	Li		= 1	Fên,	分 (Candarin).
10	Fên		= 1	Tsien,	錢 (Mace).
10	Tsien		= 1	Liang,	兩 (Tael).

[39] Catty or Kati—Malayan for pound.

Seven places of decimals (the ten-millionth part) of a tael are frequently, even regularly, seen in statements of account of revenue and expenditure submitted to the Throne. This is the tael of the arithmetics, but its actual weight will best be considered under the head of the tael of currency; it is sufficient here to say that the weight ranges, at different places and in the same place, from 540 to 583 grains.

THE TAEL OF CURRENCY.

Of the various taels of currency two may be considered to have a universal range, the Haikwan, or "Customs" tael, and the Kuping, or "Treasury" tael; and a third, the Tsaoping, or "Tribute," tael, is current over a wide area.

HAIKWAN TAEL.

The Haikwan tael is the currency in which duties are levied by the Imperial Maritime Customs, but it is a purely fictitious and non-existent currency. Inquiry leads to no indication that it ever has been an existent currency at any time since the opening of the Inspectorate General of Customs, and it is certain that it is not in current use at the present day. At no Custom House does any merchant tender Haikwan taels in payment of duties, and the invariable practice is to pay all Customs obligations in local currency at a rate of conversion settled on the opening of each of the several Customs offices, now 40 in number. The actual theoretic weight, apart from any question of the quality of silver, is not ascertainable with any degree of certainty. The present Statistical Secretary, using an official weight of 100 taels dated 1867, which had been verified at Canton by a weight of 1846, found it to be 581.55 grains. The result of independent tests at Canton in the same year (1905) gave a weight of 581.83 grains, while the estimates of other Commissioners range

from 581 to 589 grains. Mr. Pascal Martin, in 1880, after very careful inquiry, decided on 581.47 grains ; Mr. H. Kopsch (Statistical Secretary, 1891-97) found it to be 587.66 grains ; and Mr. E. C. Taintor (Statistical Secretary, 1873-76) fixed it at 582.94 grains. The only outside authority to which appeal can be made is in the Treaties. By the Trade Regulations annexed to the British Treaty of 1858 the "picul of one hundred catties is held to be equal to one hundred and thirty-three and one-third pounds, avoirdupois," giving a catty of $1\frac{1}{3}$ lb av. and a tael of $1\frac{1}{3}$ oz. av., equal to 583.3 grains ; while the Regulations annexed to the French Treaty of 1858 fix the picul at 60 kilos. and 453 grammes, which gives a resultant tael of 37.783 grammes or 583.1 grains.

Taking the Haikwan tael, then, as being purely a money of account, and not an existing currency of the Empire, the place at which its value may be most conveniently found is Shanghai, at which port were paid in 1905 duties to the extent of 34 per cent. of the total Customs collection of the year. Here since the opening of the port, half a century ago, the rate of conversion has been Haikwan taels 100 = 111.40 Shanghai taels, worked out, as reported by Mr. James H. Hart, Commissioner at Shanghai in 1879, as follows:—

Weight on local scale	100.0.0.0
Add for difference in weight	2.8.0.0
Add for touch	6.1.6.8
Add for expenses of melting, etc.	0.2.0.4
Divide by the "Shanghai Convention," 0.98	109.1.7.2
	111.4.0.0

(*N.B.*—The proper name for the Shanghai tael is "Convention Currency," referring to the convention, or understanding, by which 98 taels on the scale settle a liability of 100 taels in money of account.)

It remains to ascertain the true value of the Shanghai tael. The weight used as the basis of this is the Tsaoping (漕平) tael, and the equivalence is worked out as follows:—

Weight on scale	100.0.0.0
Add for touch	5.6.0.0
Divide by the "Shanghai Convention." 0.98	105.6.0.0
Tsaoping taels 100 = Shanghai taels	107.7.5.5

The Tsaoping tael has been found to weigh 565.85 grains; and if in 100 Tsaoping taels of pure silver there are 107.7.5.5 taels of Shanghai convention currency, then the latter will contain 525 grains of pure silver of Kuping standard. On this basis the Haikwan tael is the equivalent of 584.85 grains of pure silver; but note has now to be taken of the quality of the silver. (*V. supra.*, page 37).

Introduced under the treaty of Nanking (1842), the lapse of sixty years has not sufficed to create modifications in this standard, which, moreover, is current for revenue purposes in all the ports open to foreign trade. Even with this currency, however, this immutability has to be taken with some reservation. It seldom happens that the merchant has at hand to pay his duties the fine silver (1,000) which is, theoretically, the standard for all payments to Government: and tendering other silver, commonly the ordinary trade silver of the place, the rate at which it shall be accepted becomes a matter of arrangement with the banker; the latter, having to account to the Government for a certain weight of silver 1,000 fine, will be careful to receive an amount in other silver fully sufficient in value to cover his liability. Another element of variation, even in this currency, is the difference between the receiving and paying rates in force in all Government

treasuries, all banks, and with those merchants of sufficiently strong standing to make their own counting-house rules; this difference, usually between a quarter and a half of one per cent., is made not by charging a commission, but by boldly using two sets of weights, one for receiving and one for paying, and is intended to compensate for the labour of weighing ingots and lumps of silver of no fixed weight, and for the risk incurred and expert knowledge requisite for taking in silver of unknown degrees of fineness. The practice is defended on the same ground as that of the foreign exchange banks in quoting different buying and selling rates for bills of exchange.

KUPING TAEL.

The Kuping tael is the currency in which are collected all other dues to the Government than Customs duties, excepting only those which are levied in kind (such as the grain tribute) or in copper cash. Theoretically uniform throughout the Empire, there are still differences to be observed apart from the differentiated receiving and paying rates referred to above. In one aspect this tael may be considered as "bank money"—a fictitious medium of exchange from one currency to another—as when we find that (with normal exchange at 1,200 cash to the tael) 2,000 or 3,000 or 4,000 cash or more are levied where a tax, assessed in taels, is collected in cash, while the exchange is fixed at 800 cash or less where a tax, assessed in cash, is collected in silver. This however, from another point of view, may be taken as an eccentricity of the Chinese taxing offices. The normal standard Kuping tael is 575.8 grains of silver 1,000 fine; this is the receiving rate (the paying rate being 0.2 per cent. lighter) at the Imperial Treasury, and the several provincial treasuries vary from this standard in some instances as much as one per cent. Where

the foreign obligations of the Imperial Government are concerned the equivalence of the several currencies is taken as follows:—

100 Haikwan taels = 101·642335 Kuping taels.
100 Kuping taels = 109·60 Shanghai taels.

TSAOPING TAEL.

As the weight element of a currency tael, the Tsaoping (漕平) tael is current throughout the provinces contributing tribute in kind (mainly rice) which is forwarded to the capital, either by sea or by the Grand Canal, *viz.* in the provinces of Kiangsi, Anhwei, Kiangsu and Chekiang; it it is also the regular tael in use at Chefoo, on the sea route to the north, but is not known at Tientsin, the northern terminus of the Grand Canal and the port of disembarcation by the sea route. It may be stated with some degree of confidence to weigh 565.65 grains, subject always to the possibility of oscillation in the standard, referred to by Dr. Ferguson. While the weight is more or less constant, varying between one place and another by no more than a tenth to a half per cent (100 Soochow Tsaoping taels = 99.90 Shanghai Tsaoping taels by weight), the tael of currency is based in different places on different standards of silver. At Chefoo the standard is 976, at Kiukiang and Wuhu 994, at Hangchow 997. In places where the standard of silver is quoted by degrees of betterness, as at Shanghai and on the lower Yangtze[40], the standard for Tsaoping is 川七兩 or 2.75 silver, which, referred to a Kuping standard, is 999.

LOCAL TAELS.

It may be said that every commercial place has, apart from the various government taels, its half-dozen, or dozen,

[40] *v. supra*, page 37.

or score of local taels, all generally recognised and all current; *i.e.* each of them is a recognised currency when it is so stipulated, as we have seen in the case of the currencies of Chungking. Usually, however, if not generally, among these various taels there is one which is recognised as the currency of the place, in which payments would be made when there is no stipulation to the contrary, which will be commonly stipulated, and into which remittances are made from other places; for even in China the necessity is felt for some limitation on the kaleidoscopic varieties which would otherwise perplex the minds of even Chinese bankers. Sometimes, but by no means generally, this recognised local tael will extend its influence over the surrounding country within a limited radius; but ordinarily the right of even the country banker to live is fully recognised, and every place is privileged to adopt its own standards. I have notes of 170 well recognised and different currencies, gathered mainly from the Treaty ports and their immediate vicinity.

PEKING TAELS.

The capital, Peking, is one place, it may be said the one place of importance, in which no one currency has emerged as the one local tael. Being the capital, the Kuping tael is of course much in evidence as the currency of all official government transactions. Besides this there are three standards of tael weight—the Kung-fa (公砝平) of 555.7 grains, the Market (市平) of 552.4 grains, and the Metropolitan (京平) or Two-tael[41] scale (二兩平)

[41] The addition of 2 taels in the hundred, 2 per cent., will bring this to the value of the Market tael; hence probably the name.

of 541.7 grains—and two recognised standards of silver, 1,000 and 980 fine respectively. Each standard of weight (except the Kuping) is expressed in each of the two standards of silver, with the result that there are at Peking seven taels all equally current. The foreign banks established there have within a few years adopted the Kung-fa tael of 1,000 silver as their currency of account. Each of these currencies, except the Kuping and Kung-fa, is further subject to a difference of 0.6 to 0.9 per cent. according as it is "equalised" 準 or "empty" 虛 or "mercantile" 行 or "complete" 足; thus 100 Kung-fa taels are equivalent to metropolitan taels 102.80 if mercantile, 102.70 if empty, 102.60 if equalised, but only 102.00 if complete.

TIENTSIN TAELS.

At Tientsin I have note of nine taels generally known, and two standards to which silver is reduced. Of these, the tael which for forty years past has been recognised as "the Tientsin tael" is the Merchants (行平) tael weighing 557.4 grains of 化寶 silver 992 fine. For some occult reason there has lately (since 1900) been introduced a "New Merchants" tael of 557.6 grains, differing from the old-established local tael by only 0.00038 part of itself or less than $\frac{4}{100}$ of one per cent, the standard of silver remaining the same; this new tael has not yet worked its way into general acceptance. As an illustration of the ordinary Chinese rough-and-ready methods of banking it may be noted that the true equivalence of 100 Haikwan taels is 105.215 Tientsin taels; and that for many years, in paying Customs duties, for every 100 Haikwan taels Chinese merchants paid Tientsin Tls. 106., foreign merchants in general paid Tientsin Tls. 105., and Russian merchants for tea paid Tientsin Tls. 104.

HANKOW TAEL.

At Hankow one tael stands out above the rest as "the Hankow tael"; and, though the triple city at Hankow is a great commercial emporium not created by foreign trade, this is the "Foreign rule" (洋例) tael, weighing 554.7 grains, of "Foreign rule" (洋例銀) silver 967 fine.

CANTON TAEL.

At Canton, and for a considerable area commercially tributary to it, extending beyond the limits of the province of Kwangtung, the standard tael is the Sze-ma (司馬平) tael, weighing 579.85 grains, being the heaviest mercantile tael in the Empire; silver was originally, and is in theory, reduced to the standard of 紋銀 1,000 fine. This sounds as if we had here a departure from the prevailing diversity of currency, and could point to a tael, uniform in weight and value, not confined to one city, but current through a large commercial area. The bankers must, however, be reckoned with; and, both in Canton and throughout the whole area, while we find the Sze-ma to be the standard of weight, it is usually varied by being subject to discounts, fixed for each sub-standard, but supplying that variability which is demanded for all transfers in China from place to place, from bank to bank, or from account to account. These sub-standards are known by the per-mill proportion to the Sze-ma standard; and I have note of taels of the 998, 996, 995, 993, 992, 990, 988 and 986 scale (九九八 and other 平), being respectively 0.2, 0.4, 0.5, 0.7, 0.8, 1.0, 1.2 and 1.4 per cent lighter than standard Sze-ma in weight. Formerly the silver was always taken as 1,000 fine, but in the last half

century dollars, mainly Mexican, more or less battered and chopped, have entirely supplanted ingots ; for large transactions payment is always made by weight, and never by count. The result is a curious medley, it being always necessary to express clearly if the tael is of "foreign silver" (900 fine) or of "pure silver" ; in the latter case payment is effected by weighing out 10 per cent. additional of the dollar silver. The question is even further complicated by a practice, which has crept in of recent years, of making 20 per cent. of payments in subsidiary silver coins (800 fine), with perhaps some bargaining as to whether the proportion shall be 15 or 25 per cent. Here we have a case of degeneration within the memory of men now living. Disregarding any question of what constitutes "pure silver," a tael containing 579.85 grains of fine silver becomes one of 574.1 grains, and ultimately one of 561.4 grains ; and, as there is a tendency now (1906) to substitute 20-cent pieces entirely for dollars, the tael is on the way to become one containing 510.3 grains of fine silver. These figures are all subject to proportionate reduction for each of the various sub-standards of weight.

SHANGHAI TAEL.[42]

I come now to the consideration of the currency at Shanghai, the commercial metropolis of China. Omitting the government and other exceptional taels, I must first note the exclusive use of the Canton standard (tael = 579.85 grains) for dealings in foreign bar silver; a practice originating when foreign trade was centered at Canton and

[42] For a more detailed account of the Shanghai Tael than can be given here, reference must be made to Dr. Ferguson's paper on the Banking System of Shanghai. *Journal, N.C.B.R.A.S.*, 1906.

continued when the foreign banks and merchants brought Cantonese as their first compradors and shroffs to Shanghai, has been sanctified by use and by the ingrained habit of introducing, whenever possible, further elements of conversion into all dealings with the precious metals. Then the Tsaoping tael, described above, is fully current and fully recognised at Shanghai and in a large area around, and is the ordinary currency for Chinese remittances through Chinese banks to places in China, *e.g.* a remittance to Hankow is converted from "Shanghai taels" to Tsaoping taels and thence to "Hankow taels." Finally the legitimate banking and trading currency of the place is the "Shanghai tael" 申元 or "Shanghai convention currency," 申規元, which is also the standard of international exchange for the trade of North China and the Yangtze basin, all other quotations in local currencies being re-conversions from the rate for Shanghai currency. The rate of the day is accepted by merchants as the rate of conversion between two fixed currencies; and yet, if we take exchange on London as an example, one of the currencies stands for the immutable in finance, while in the other it is doubtful if many of the foreign merchants who so blindly base their operations on this exchange quotation could go into the treasury of a Chinese bank and weigh out for himself a Shanghai tael, assuming even that he could read the inscriptions on the weights he used. The value of the Shanghai tael is made up of three elements, the weight, the quality of silver, and a convention. The weight on the scale is the Ts'ao-p'ing tael of 565.65 grains, the silver is reduced to a standard of 944 fine on the Kuping basis of 1,000 fine, and the convention is that 98 taels of this weight and this silver settle a liability of 100 taels "Shanghai convention currency." In order fully to understand what is a Shanghai tael, how it may be

ascertained, and what may be done with it when once ascertained, let us consider the processes to be gone through in an exchange operation under present conditions. Of course, in Shanghai as in London, the merchant will ordinarily draw his cheque, against which the bank will give him its bill of exchange; but somewhere, and some time, there will be a cash transaction; and thoroughly to understand the situation we must see what, in Shanghai, corresponds to the act of a London merchant who takes a thousand sovereigns to the bank and gets a draft on Paris for 25,150 *f.* or 25,175 *f.* according to the exchange. Let us assume the simple case where our Shanghai merchant wishes to remit the contents of a box full of silver (if he wishes to make up an exact sum in Shanghai currency, certain complications are added). The silver in the box will be in the shape of "shoes" of "sycee" of about 50 taels each, and of varying "touch" (degrees of fineness). If these shoes are marked, in ink, with the results of a previous assay at the Assay Office for the Foreign Settlement, the preliminary stage becomes unnecessary; but if they have come in the course of trade from another port, or if their last previous assay was made by the Assay Office for the Chinese City, then all existing marks are washed off and the silver must be sent to the proper office. Here each shoe is weighed and the result written on one side; it is then "touched" and the difference (usually an addition) from a certain standard, as indicated by the colour on the touch stone, is written on the other side. This difference for touch is so much for the shoe irrespective of its exact weight, which is anything between 49 and 54 taels, but an allowance of Tls. 0.05 is added for each tael by which the weight of the shoe exceeds 50 taels; thus if the quality of the silver is 2.70, the addition for a shoe weighing 49.75 or one of 50.05 taels is 2.70, for one of 51.25 taels

is 2.75, for one of 52.15 taels is 2.80, and so on. Let us take two such shoes weighing 50 and 51 taels and having 2.60 and 2.40 respectively added for touch, making for the two 50 + 2.60 + 51 + 2.40 = 106.00 ; this result, divided by 0.98 (the Shanghai "convention") gives 108.163 as the number of Shanghai taels in our two shoes. If the transaction is one in Shanghai currency only, this ends it, the whole operation corresponding to the single action of the London merchant who takes £108 3*s.* 4*d.* from his cash to pay a bill ; but we have now to connect this with foreign exchange. First, it is to be noted that at the present day no other currency is used at Shanghai, all others being reduced to Shanghai taels. The Government, for example, in making payments for indebtedness or indemnity, does not use the Kuping ("Treasury") tael weights or the pure silver (1,000 fine), which make up the Kuping tael currency, but pays in Shanghai currency at the rate of 109.60, calculated as follows :—

Kuping taels 100 weight = Tsaoping taels	101.800
Add for touch of pure silver on two shoes	5.600
	107.400
Divide by the "convention" 0.98 ...	109.592
Add for meltage fee	.008
	109.600

So with Customs duties, merchants pay in Shanghai taels at the fixed rate 111.40 and never tender the "Haikwan tael weight of pure silver" specified by treaty, the calculation being as given before (page 41).

Coming now to the exchange operation, we have first to find our parity of exchange, and to do this we must get the equivalence in foreign notation. The weight used for

Shanghai currency is the Tsaoping tael, and this is 565.65 grains; for pure silver the addition for touch is 2.8 per shoe, which the Chinese treat as if it were 5.6 per cent.; and the "convention" is 0.98. One Tsaoping tael of pure silver is, therefore, 1.07755 Shanghai taels; and one Shanghai tael contains 524.93 grains of fine silver. In one ounce of silver British Standard (0.925) are 444 grains of fine silver, or 84.6 per cent. of the amount in the Shanghai tael; and to get the parity of exchange for the latter the London price of bar silver must be divided by 0.846.[43] The actual rate of exchange is, of course, affected by the demand and supply of bills wanted and offered, but in the great and frequent fluctuations in the value of silver bullion we have an ever-present element of instability which must be taken into account. Our Shanghai merchant, who has once gone through such a series of manipulations and calculations, is likely to consider his time of too much value to repeat the transaction, and, as is actually the case, will leave such operations in future to his comprador, until such time as he is put on the same footing as his London brother.

NEWCHWANG TRANSFER MONEY.

One currency practice, recalling the "bank money" of the old Amsterdamsche Wisselbank, must be referred to. At Newchwang the local tael is 555.1 grains of silver 992 fine. Except of copper there is (or, as the war may have caused a change, has been) little of the metals in circulation, silver being commonly deposited at the banks, which permit removal only on the first days of the 3rd, 6th, 9th and 12th months, but allow transfers from account to account. This

[43] Subject to modification by consideration of the true standard of quality of silver (*v. supra*, page 37).

"transfer money" is exclusively used in the settlement of all mercantile transactions. On deposit, and for renewal on each quarter day, the depositor is credited with a premium which varies with the demand for money, but which in ordinary, peaceful times ranges from 0.20 to 6 per cent. Exchange quotations also are always quoted in transfer money, not in hard silver. An ordinary exchange operation would be as follows:—

Silver deposited, Newchwang taels ...	100.00
Premium on deposit, 1.60 per shoe ...	3.00
Transfer money credited	103.00
Exchange premium 3¼ per cent	3.35
Shanghai taels	106.35

It may be noted that the parity of exchange is 100 Newchwang taels of silver equal 104.89 Shanghai taels. The rates of premium given above are, as has been stated, those of ordinary conditions; the effect of the stress of war on the money market and the financial position of the bankers may be seen from the quotations of the last day of 1904: Silver taels 1,000 = transfer-money taels 1,358.50 (quoted Tls. 72 per shoe); Transfer taels 1,000 = Shanghai taels 785.

These figures show the banker protecting his reserves, giving 36 per cent premium for deposits and charging 22 per cent discount for withdrawals instead of giving a premium. This works out to a rate of exchange of Ng. Tls. 100=Sh. Tls. 105.65.

INTRODUCTION OF FOREIGN COINS.

A foreigner, as an individual, objects to carrying around in his pocket a 4lb. lump of silver which he cannot

subdivide, and he equally objects to carrying 6lb. weight of coppers as the only fractional equivalent of the silver dollar to which he is accustomed; he also objects to ignorance of the quality of the silver which he will take from his pocket to make minor payments. All this seems axiomatic to people at home, but it is necessary to state the axiom in order to explain why foreign coins have been introduced into China. In the north and in Mid-China these coins have remained the housekeeping currency of the foreigner, never having been admitted into the trade of the Chinese, and the foreigner is made to pay for his luxury of a coin in which he can have confidence. The same weight in a coin (the silver dollar) with the same inscription is worth at Shanghai from 3 per cent to 5 per cent more than at Canton, whether the value is expressed in gold, in silver taels, or in commodities; but at Shanghai the coin remains as it came from the mint, and at Canton it is chopped. In the south the quicker-witted Cantonese and Fukienese have accepted the foreign coin, but have done so in a peculiarly Chinese manner. A coin is an officially guaranteed weight of a certain metal; the Chinese accept that for what it is worth, but the first banker or merchant into whose hands the foreign coin comes "chops" it with an impressed ideogram about an eighth of an inch square, thereby giving the tradesman and the private individual his certificate of *bona fides* of the guaranteeing Government. This is repeated by each succeeding banker, until in the end the chopped dollar resembles a disc, or rather a cup, of hammered silver work.

FOREIGN DOLLARS.

The first dollar to be introduced was the Carolus (Spanish) dollar, also called the "Pillar" dollar from its

design—the Pillars of Hercules. This for many years was the only foreign coin accepted by the Chinese; and a curious survival of its former vogue is seen at Wuhu, on the Yangtze, where the few remaining unchopped specimens of the eighteenth and early nineteenth century, estimated not to exceed 400,000 in all, form a favourite medium of exchange and command a premium generally of 30 or even 40 per cent over their intrinsic value. For fully eighty years the dollars of Charles IV (A.D. 1788-1808) have commanded a premium of at least 30 per cent, but not those of his predecessor or his successor, and originally over a considerable area of country from Canton to the Yangtze. One lies before me as I write, bought at Wuhu for 1.40 Mexican dollar. With a diameter of 1.56 inch, it weighs 26.08 grammes= 402.5 grains, over 3 per cent lighter than the Mexican dollar. On the obverse it bears the King's head wreathed with laurel and the inscription .1808. CAROLUS. IIII. DEI. GRATIA. On the reverse is a shield quartered with the arms of Castille and Leon, countercharged with three fleur-de-lys, the shield surmounted by an Imperial crown and standing between two columns (the Pillars of Hercules) bearing a scroll inscribed PLUS ULTRA; the inscription reads .HISPAN. ET IND. REX. M. 8 R. T.H. The milling is as usual and the reeding-o-o-o-. The obverse is stamped in black with a design having the character 滴 in the middle, constituting the guarantee of some Chinese banker. In Formosa[44] the chopped Carolus remained the ordinary currency at its intrinsic valuation up to the time of the Japanese occupation in 1895. The next to be accepted was the Mexican, called by Chinese the "Eagle" dollar from its design—an eagle grasping a cactus in its talons. This has never been displaced from

[44] Two and a quarter millions of these dollars were imported at Tamsui in 1895 for the tea season.

popular estimation, though various attempts have been made. Thirty years ago an American "trade dollar" was introduced, but the wisdom of Congress decreed that it should displace its rival by its weight—420 grains instead of the 416½ grains of the Mexican; the natural result, when these two coins were put into circulation side by side among this shrewd people, was that the heavier coin went at once into the melting-pot. The Japanese dollar (the yen) followed, and attained a moderate degree of popularity, but the establishment of a gold basis for this coin put an end to its issue as a monometallic silver coin. The later British and French trade dollars have not met with any great degree of success, except perhaps since the outbreak of the Russo-Japanese war.

CHINESE DOLLARS AND SUBSIDIARY COINAGE.

The Chinese themselves have seen the utility of coins and have established large plants for minting at several of the provincial capitals. Their time-honoured copper coins, cast from moulds, are crude productions; but the fine stamped copper cash, which were the first product of the mints, met with no favour; and, as their issue involved a loss to the Government, it was not continued. The mints then turned their attention to the dollar, and many millions of these coins were turned out. These Chinese dollars were not freely received for taxes, and when taken were accepted by weight, and not by count; they had not the prestige of the Mexican, but had only a provincial guarantee, and outside the province of issue circulated only at a discount; they would have disturbed, had they any vitality, the calculations of money-changers; they gave no seigniorage to the mint; and of late years the annual output has been thousands instead of millions. The energy of the mints has in recent

years been devoted to the issue of subsidiary coinage. First 10c. and 20c. pieces, which, consisting of silver 800 fine, while the dollar was 900 fine, could be sold from the mint at 110c. for the dollar and still show a profit; these pieces became popular with the smaller money-changers because of the margin between the rate of issue and the intrinsic value, and because of the petty speculation permitted by the margin of value. Then followed the copper cent which is now the popular coin, since it has an exchange value greater than the hundredth part of a dollar, and the money-changer, who makes his profit from the depreciated silver coinage, will make it also from appreciated copper coin. The tourist who draws on his letter of credit at a foreign bank in Shanghai, having to receive so many dollars and so many (say 74) cents, for the odd cents will be given 70c. in depreciated silver, but for the 4c. he will receive three copper cents and two copper cash, since by the exchange of the day 32 cash are the equivalent of four-hundredths of a dollar. I leave the last two sentences as they were written in 1905, in order to show how great has been the depreciation in this coin within twelve months. Now (July 1906) the tourist will still receive his 70c. in depreciated silver, but for the 4c. he will no larger be given 3 copper cents and 2 cash, but will receive 4 copper cents—actually worth $0.0357.

GENERAL CONSIDERATIONS.

In China the currency is at the top a weight pure and simple, in the middle a combination of weight and token currency, and at the bottom a coin which stands on its own feet, and neither receives support from nor absolutely gives it to any other unit in the series. At the top is the tael (call it the "ounce," and it will be better realized), in which payments

are made in precisely the same way that delivery is taken of a lot of silver bars. Then comes the dollar, which, though a coin, is nowhere legal tender, and of which the specimens from the Chinese mints are inscribed, not generally dollar or "yuen," but merely 72 hundredths of a tael; though so inscribed, dollars of silver are nowhere fixed in terms of taels of silver, but are quoted at rates which vary from day to day according to the demand and supply, fluctuating within a range of six or more per cent. Then come subsidiary silver coins fractional to the dollar, but subject to a fluctuating rate of exchange such that the dollar may this year change for 110 cents and next year for only 95 cents in small coin. Next comes the copper cent, inscribed at the mints of some provinces as worth "one-hundredth of a dollar," and of others as worth "ten cash," but never treated as correlated to the dollar; whether considered in its relation to the dollar or to the cash, it is a token coin worth intrinsically less than half its nominal value. Last comes the copper cash, the currency of the people. Into this series of non-related currencies, each unit of which is in a state of unstable equilibrium, fixed neither in itself nor in relation to other units, China is now required to introduce system and uniformity and to give a legal tender character to any coin or currency which she may adopt, while the inborn disposition of her people is to accept no coin and no currency as legal tender, but to make them all except the lowly cash the subject of barter. Where shall she begin? Is she to take her fundamental coin, the cash, with a present day value of the ten-thousandth part of a pound sterling, and build upon it? This seems the natural course to those who consider first the well-being of her patient, industrious people, whose householders maintain their families on sixpence a day, and through the existence of this mite of a mite are enabled to maintain them in comfort. Or

shall she consider first the broader interests of her international exchanges and of the powerful body of bankers and merchants active in the distribution of goods through the Empire?

Multiply what has been written above a hundredfold, and some idea will be conceived of the currency question in China. To reform it would naturally appear no more difficult than to introduce the metric system into England; it should even have behind it a greater weight of popular support, in proportion as the simplification of the currency of 400 millions should give ten times greater relief than the simplification of the measures of 40 millions. This presupposes that the 400 millions are crying for relief, but we must first see who it is that call for currency reform. The foreign merchant stands in the first place, with his crying need for fixity of exchange between gold and silver, which requires for its establishment a fixed unit of currency, which in turn can only be attained by coinage. That he will also be freed from bondage to his comprador does not appeal to him, since he is unlikely to realize their relative positions, and the activity of his advocacy will be weakened by so much; moreover, there are in China less than a thousand firms of European and American nationality, even including the protected races, such as those from British India, and including branch firms. Then come the foreign banks, ten in number, standing like Isacchar between two burdens; they *may* consider that their profits from rapid fluctuations in exchange, of the causes of which they have prior knowledge, will be made good by the development of legitimate trade resulting from certainty of exchange; and they *may* set against their profits from changing funds from one standard of currency to another their newly acquired ability to keep their own treasuries. The Government of China will welcome any measure which

will set a limit to the amount which it must take from its revenues to pay the indemnities due to the Foreign Powers; and, as a corporate entity, may be willing to have a uniform currency in which the revenue may be paid and received. No other element of support can be brought in by any flight of the imagination. All the vested interests in China will be against the change. The members of the Government as individuals, from the highest Minister of State in Peking to the humblest assistant-deputy sub-district magistrate, will give it their tacit, if not openly-expressed, opposition. The tax-collector, with his assistants and his servants, and backed by his family to the third and the fourth generation, will fight strenuously against any obligation to pay into the Treasury the exact coin which he has received from the taxpayer. The powerful body of Chinese bankers, organized as such when Europe did not yet know the science, will accept the change only if they are shown the possibility of greater profits than under existing conditions. The compradors and shroffs may be trusted to do their best to resist any attempt to curtail their privileges and profits. Even the native merchants and tradesmen, who will benefit enormously by simplification of the currency, will also oppose a change from the present system, in which each man counts confidently on getting the better in the encounter of wits. Ordinarily the proletariat remains neutral in such a question; but in China the merest coolie, earning sixpence by a long day of hard work, will spend an hour of his time to gain on exchange the equivalent of ten minutes' work.

Witchcraft in the Chinese Penal Code.

By E. T. Williams.

The practice of witchcraft has characterized all races of men in the lower stages of culture. It is the logical outcome of the rudimentary philosophy by which the savage seeks to account for the mysterious phenomena of life, and is a necessary step in the progress of humanity towards a control of the forces of nature and their utilization for the benefit of mankind.

Dr. Eitel found in the superstition of *feng-shui* the rudiments of natural science.[1] It may be said, at least, that natural science has sprung from the same spirit of inquiry that has given birth to this pseudo-science. We should look upon all forms of sorcery and magic as but gropings of the human mind after the reasons of things, and as bungling attempts to subdue natural forces to the service of man. We make a great mistake if we conceive of witchcraft as originating in intentional imposture. Tylor tells us that "magic has not its origin in fraud, and seems seldom practised as an utter imposture. The sorcerer generally learns his time-honored profession in good faith, and retains his belief in it more or less from first to last; at once dupe and cheat, he combines the energy of a believer with the

[1] *Feng-shui or the Rudiments of Natural Science in China.* Hongkong: Lane, Crawford & Co., 1873.

cunning of a hypocrite. Had occult science been simply framed for purposes of deception, mere nonsense would have answered the purpose, whereas, what we find is an elaborate and systematic pseudo-science. It is in fact a sincere but fallacious system of philosophy, evolved by the human intellect by processes still in great measure intelligible to our own minds, and it had thus an original standing-ground in the world."[2]

Though witchcraft seems to us to-day so foolish a superstition, if we look aright, we may find in it the origin of many of our sciences; the beginnings of meteorology and astronomy, of physics and chemistry, the commencement of that movement, indeed, which has given us the steam engine and the telegraph, the telephone and the electric light, and which has wrought the still greater miracles of modern medicine and surgery.

But, while believing thoroughly in the power of witchcraft, even the primitive man distinguished between the use of that power for the welfare of men and its employment to do him injury. When, from the thirteenth to the seventeenth centuries in Europe the Church manifested such great zeal in hunting down and punishing witches, it still permitted the practice of what it called "white magic" for the cure of sickness or to protect the fields and flocks from injury by storm or disease. When this occult power was used, as was believed, to blast the crops, injure the herds, or bring sickness or other calamity upon men, it was called "black magic," and its employment, unless it might be for the destruction of the enemies of the tribe or state, was always forbidden by primitive law, and thus naturally also by the unenlightened Church of the Middle Ages.

[2] Tylor's *Primitive Culture*, vol. I, p. 134.

Nothing but the progress of science, which has given men a knowledge of the laws in accordance with which the forces of nature operate, has ever been able in any land to dispel the dread of sorcery and witchcraft, and it is no more than we ought to expect, therefore, to find this fear still operating with great power in the minds of the Chinese of to-day, among whom, for the most part, the elements of science are only just beginning to be known.

It is no less to be expected that the laws of China should provide the severest penalties for the practice of those evil arts which are believed capable of securing the aid of diabolical powers to work injury to the individual or bring calamity upon the State. This is all the more to be anticipated in the case of such a code as that of the Ta Ch'ing Dynasty, which is practically that of the Ming Dynasty, and which may be said to date in many of its provisions from a very much earlier period.

In this expectation we are not disappointed. We find in the fourth volume of the Code a definition of the Ten Great Crimes.[3] The fifth of these is called *Pu Tao*,[4] which may be freely translated *Inhuman Crimes*, and is defined as including such offences as (*a*) the murder of three or more persons in one household who have not been guilty, themselves, of any capital crime; (*b*) mayhem; (*c*) the mutilation of the living body to obtain certain members or organs for use in witchcraft; (*d*) the manufacture of the *ku* poison, or witch's potion, keeping it in one's possession, or teaching the art of its preparation to others; and (*e*) the employment of incantations and charms to inflict the curse of the nightmare demon.[5]

In the section of the Code which provides for the punishment of these crimes a very careful distinction is made

[3] 十惡 [4] 不道 [5] 魘魅

between ordinary mayhem and the mutilation of the human body for purposes of witchcraft.[6] The one is a crime originating in enmity and inspired by a desire for revenge; the other is not prompted by any ill-feeling towards the victim, but is committed in the most cold-blooded fashion with no other object than to secure parts of the body for magical uses. The full text of the fundamental law relating to this crime is as follows. The authoritative notes interspersed, which in the original are printed in smaller type, I have indicated by placing in parentheses :—

"A principal in the crime of collecting vitality by mutilation of the human body (no matter whether resulting in the death or the wounding of the victim) shall be executed by the slicing process, his property, personal and real, given to the family of the victim, and the wife of such principal, his sons, and all who dwell in the same house with him, even though ignorant of the facts, shall be banished for life to a distance of 2,000 *li*. (The offence of collecting vitality by mutilating the human body, that is by taking the ears, eyes, viscera or other parts of the living man or by cutting off his limbs, may be said to be like the crime of mayhem, but the latter is done with the object of killing the victim, while the former, though it may result in the death of the victim, is done with intent to practice magic in order to delude men, and therefore has a special gravity.) Accomplices (taking an active part) shall be beheaded. (Their property shall not be disturbed nor their families subject to banishment. Accessories not taking active part shall be sentenced to a penalty one degree lighter than that provided for the crime of plotting murder.)"[7]

[6] *Code of the Ch'ing*, vol. XXVI ; under 採生折割

[7] The law for plotting murder provides that, if the premeditated murder be accomplished, the principal shall be sentenced to decapitation, subject to revision at the Autumn Assize, and the active accomplices to strangulation, subject to revision at the Autumn Assize. Other accessories are punished by 100 blows of the heavy bamboo and banishment for life to a distance of 3,000 *li*. If the victim be not killed, the punishment of the principal varies from strangulation subject to revision in case of wounding, to 100 blows and three years exile in case no injury is done. Accomplices correspondingly lighter.

"If the attempt do not result in injury to anyone, (the principal) shall be beheaded, and his wife and sons be banished for life to a distance of 2,000 *li*, (but other persons dwelling in the house with him shall not be punished; nor shall the property of such principal be confiscated). Accomplices (taking an active part) shall receive 100 blows of the heavy bamboo and be banished for life to a distance of 3,000 *li*. (Accessories not taking an active part shall receive sentence lighter by one degree.) Any village headman who is cognizant of the facts and takes no action shall receive 100 blows of the heavy bamboo, but, if ignorant of the facts, shall not be punished.

"Any person giving information leading to arrest shall be rewarded by the local authorities with a gift of Tls. 20."

The notes which follow the text of the Law still more clearly differentiate the crime from that of mutilation, as described in the preceding section of the Code, and from the crime of premeditated murder, both of the latter being defined as due to malice and undertaken to secure vengeance, conditions which are wanting in the crime treated of in the present section.

The solitary Statute annexed to this Law provides that relatives of the criminal who give information against him or arrest him and send him to the authorities shall secure for themselves and for the wife, and sons of the criminal, as well as the other inmates of the house, immunity from punishment.

The Commentary gives us to understand that it is not merely the crime of maiming or murder that is punished, but rather the witchcraft in whose practice mutilation and murder are but incidents.

"The gravity of the crime of mutilation for purposes of witchcraft," says the Commentary, "lies in the practice of the witchcraft. Therefore those who exercise it, even though they have injured no one, are nevertheless beheaded and their wives and sons are sent into banishment."

It is because this law is directed against witchcraft rather than the crimes to which witchcraft may lead that no distinction is made in the punishment of those who maim and those who kill, both alike being subject to the full penalty—the awful death by slicing, the confiscation of property, and the banishment of wives and sons for life. "For," says the Commentary, "although the victim may not have died, the criminal has exercised his black art and is equally guilty with him whose victim has been killed." . . . . "The harm done by murder falls upon one family and one generation, but the injury done by witchcraft is that it poisons a whole community and bequeaths calamity for after generations to dread. Therefore it is the more serious crime."

The arts of the sorcerer are exercised not only in manufacturing remedies of magical power out of the organs of the mutilated body, but also beforehand in deluding his victim, as is commonly believed, and bringing him into his power so that the limbs or organs needed may be obtained. Sometimes the object is to enslave the victim's ghost and thus secure a spiritual attendant who can come and go unseen and do his master's evil will. The Commentary acknowledges the reality of the sorcerer's power in these words:—"There are those who by obtaining the year, moon and day of one's birth are able to bewitch him and lead him into a mountain forest where they deprive him of his vital vapor and capture his soul, of which they make a spirit-slave to serve them."

The *Tu Lü P'ei Chieh* says:—"Those guilty of the crime of collecting vitality by mutilating the human body are such as seize a living person, and, putting him to death, take his sense organs for use in magic; or such as by the use of some magic art and evil principle, having secured the year, moon and day of one's birth, bewitch him and cause him to

wander into some lonely spot deep in the mountains, where they kill him, cut off his limbs, scoop out the vital vapor of his five viscera and capture his soul which becomes a spirit-slave and does their bidding. Those persons in the two Kuang Provinces, in Fukien, and in Honan, who deal in spirit revelations are of this class. There is another sort, comprising those who delude and kidnap the young, and roast their sense organs and their bones for the manufacture therefrom of medicine, a marvellously efficacious remedy for diseases of the various organs.

"There is still another class, comprising those who, perhaps by drugs, stupefy and delude pregnant women, causing them to wander deep into the mountains where the fœtus is taken from the womb to be made into a most reliable remedy for barrenness. There are others still who use human beings as sacrifices to evil spirits."

The eight cyclical characters which express the year, moon, day and hour of one's birth are used in the calculation of one's horoscope, and it is easy to see that if a sorcerer were to get possession of them he might be credited with power to affect the destiny of the person involved.

It is the common belief of the Chinese to-day that men and women may be bewitched and compelled unconsciously to do the will of others. This belief reflects itself not only in this Law, but in the provisions of the Statute, as revised so recently as 1870, relating to kidnapping, which declares that, "if drugged cakes, or any sort of sorcery or magic be used to befool and kidnap young boys or girls, the principals shall be decapitated immediately, and the accomplices sent into military servitude for life on the extreme frontiers of the Empire, a full four thousand *li's* distance."

Many illustrations could be given from Chinese literature of the belief in the power of sorcery to call the soul out

of the living body as well as to control the spirits of the dead and avail themselves of their service.[8] The use of various organs of the human body in the manufacture of magical remedies for disease is quite in harmony with the orthodox theories of disease and medicine.[9] All residents of China are familiar with attempts of dutiful sons or daughters, by cutting pieces of flesh from their own arms or thighs, to prepare a remedy that may save the life of a dying parent.[10] One of the most popular stories related of the Goddess of Mercy, Kuan-yin, is that of her sacrifice of a hand and an eye to save her father.

The Commentary cites a case referred to the Board of Punishments in the XIV Year of Ch'ien-lung (1749 A.D.) in which one Ku Ching-wên of the province of Kiangsu was convicted of the boiling of the bodies of certain children in order to manufacture medicine of them. In one instance it was the corpse of a child, taken from the grave by a man named P'an Ming-kao, who delivered it to Ku; in another a living child kidnapped by another confederate, Li Yüan-fang, was put alive into the cooking vessel and boiled to death.

Another case was that of a leper, Liu Kung-yo of Hsiang-shan Hsien, Kuangtung, who, having heard that

[8] De Groot in his *Religious System of China*, vol. IV, p. 101 relates how T'ang Pao-hêng obtained from Chang T'ao-ling, the Taoist Pope, some charms which enabled him to capture souls of living beings and cause them to serve him.

It is a common practice in China to-day to attempt to call back the souls of the dying. I have myself witnessed the ceremony. As for pretended communion with the dead, that is more common in China than in the West where also it still lingers, a survival from an earlier and less enlightened age.

[9] For a detailed discussion of this subject, consult De Groot *Religious System of China*, vol. IV, chapter xiv.

[10] *Vide* file of *Peking Gazette*, September 5th, 1881, and elsewhere.

human gall mixed with rice was a cure for his disease, mentioned the matter to Liu Jui-wei, who saw a chance to make a little money. After a few days the latter came to the leper and said that he could get some gall and rice, and asked what price would be paid for it. The leper said he would give Tls. 120 if a cure were effected. Liu Jui-wei then attempted to secure the gall bladder of Yüan A-chu. He succeeded in cutting open the abdomen of the unfortunate victim, but failed to find the gall bladder, and two days later Yüan died. The criminal Liu Jui-wei suffered death by *ling-ch'ih* and the leper was sentenced to 100 blows with the heavy bamboo and three years exile, but, being diseased, was permitted to compound for a money payment. All this occurred in Ch'ien-lung XII (1747 A.D.)[11]

The use of the organs of living persons as medicine is based upon the belief that the vitality of one person can be made to prolong the life of another. This belief has led to other crimes than mutilation. A most revolting case is cited in the Commentary, into the details of which it is not necessary to enter. For sixteen years from 1796 to 1810 A.D. a certain Chang Liang-pi had followed a practice, well understood

[11] While engaged in writing the above my attention has been called to an article in the *Peking and Tientsin Times* of September 19th, 1906, quoted from the *Kobe Herald* of the 6th of September, which relates how a miller, Katustaro Baba of Hirade, Shinano Province, Japan, had made a practice of killing women and selling their livers which were held to be effective remedy for certain diseases. Three women were said to have been murdered by him in 1905 and one in 1906. Recently he attempted to kill another, but the woman made such resistance that he had to desist, and then to escape arrest he tried to commit suicide. He is reported to have made a full confession.

The liver as being the supposed seat of courage is highly prized by the soldiery and we often read in Chinese literature of the eating by warriors of the livers of their enemies.

among the Chinese, by which he derived, as he believed, the vitality of little girls, bought or otherwise secured by him. Eleven of the children died in that time as the result of these practices, and one other was in an enfeebled condition when the trial occurred. The criminal paid the full penalty, being executed by the process of *ling-ch'ih*, his head exposed, and his property confiscated and given to the families of the victims. In this case the Edict directed that notice of the execution should be circulated to a distance of 400 *li* from scene of the crimes and that the families of the children injured should stand around the criminal while he was being slowly cut to pieces.

Another use of the organs taken from the bodies of living persons is that of communicating vitality to an image used for magical purposes. The Commentary says :—

> "Those who practice witchcraft take the eyes and ears of human beings, cut off their hands and feet and fasten these members upon the image of a man either carved out of wood, or moulded of clay, which image they then by their evil arts cause to do work for them."

This cruel practice finds its origin in that animism which seems to have swayed the minds of all races in their earlier history, the belief that by the observance of a certain ceremonial stocks and stones and graven images could be made to be the habitation of spirits and thus to become miracle-working agents. As the blood was commonly held to be the vehicle of life, a part of the ceremonial usually consisted in smearing the stone or the image with blood, and to this day in China when the idols in a temple are dedicated a little blood, or its substitute red paint, is placed in the eyes, ears, nostrils and mouth of each image, by which it is supposed to be quickened. If the blood of animals can give life to an image made by man, the blood of a human being ought to be much more efficacious. Thus no doubt

early men reasoned themselves into the practice of human sacrifice. The attempt to give the image the sense organs and the limbs of a human being is certainly one of which little has been heard, but it is easy to see that those who believe that images can be quickened could persuade themselves without difficulty that the possession of the real organs of sense and not their likenesses merely would make the image still more powerful. The early Christians did not deny that the idols of the heathen were sometimes quickened by spirits; they merely claimed that they were evil spirits. Nor has Christian Europe yet freed itself from the belief in miracle-working images. It is hardly proper for us, therefore, to throw stones at China because some of her people believe that their idols are animated and can perform wonderful cures or work other marvels. But the crime of the sorcerer is not that he possesses a miracle-working image; it consists in securing power for his image at the expense of his fellows, and the Chinese Law, though not denying the reality of the power, supposed to be working through such an image, regards the profession and practice of the black art by which such results are believed to be secured as hostile to the best interests of society, and therefore prohibits such pursuits under the awful penalties cited.

The text of the law regarding magic potions, spells and charms, is as follows, authoritative notes in parentheses:—

"Anyone who makes or keeps *ku* poison capable of destroying human life, and any person who instructs others in the art (of making or preserving it) shall be beheaded. (It is not necessary to prove intent to kill.) The property, personal and real, of those who make and those who keep it (No matter whether or not anyone has been killed) shall be confiscated to the State, and the wives and sons of the criminals and all inmates of the same house with them, although ignorant of the facts, shall be banished for life to a distance of 2,000 *li*. (The property of the person, who instructs in the art, and his wife and sons are not included.) If the *ku* poison be used

to poison an inmate of the same house with the criminal, the father, mother, wife and concubines of the victim, and his sons and grandsons, if ignorant of the fact that *ku* poison has been made, shall be exempt from sentence of banishment. (If one have knowledge of the facts, even though poisoned, he shall still suffer the penalty.) If any of the headmen of the hundred, or village, have knowledge of the facts and neglect to give information, they shall each be beaten with one hundred blows of the heavy bamboo. If they have no knowledge of the facts, they shall not be liable to punishment. Anyone giving information leading to arrests shall be rewarded by the official with Tls. 20.00. If anyone make a nightmare demon enchantment, or write any charm or curse with desire to commit murder thereby, he shall be punished (according as he may be unrelated to the intended victim, or related as son, grandson, slave, hired servant, elder or junior relative) under the provisions for plotting murder (execution of the plot attempted but without injury).

"If anyone should die as the result of such efforts the criminal shall be punished under that clause of the Law for (premeditated) murder, which is applicable to his case. But, if the desire be merely to bring distressing illness upon another, (*i.e.* there is no intent to kill), the penalty shall be two degrees lighter (than that for plotting to kill with attempted execution of the plot but without injury to anyone). But a son or grandson thus plotting against his parents or grand-parents (wives and concubines plotting against parents-in-law or grand-parents-in-law are not mentioned but they are in the same category as sons and grandsons), or slaves or hired servants plotting against a master, shall not be allowed any reduction of the penalty. (They shall suffer the penalty for plotting murder with attempted execution of the plot, that is, decapitation.)

In the translation of the above Law, I have left the word, *ku*, untranslated, because a word or a phrase would hardly convey the meaning. Giles says that it is "a virulent poison prepared by putting all kinds of poisonous insects and reptiles together in a box and letting them eat each other (*sic*) until only one remains." This definition is incomplete. If the *ku* poison were nothing more, there would be no reason for giving it special treatment in the Law; it could be classed with other poisons, and the user of it for criminal purposes be punished as any other poisoner. The definition fails to take note of the magical character of the compound. The notes

appended to the text of the Law call particular attention to the distinction between *ku* poisoning and ordinary cases of poisoning. Of common poisons it says:—"They are such substances as arsenic, already prepared for use, and not like the *ku* poison which must wait to be manufactured. Ordinary poisons are sometimes needed in the treatment of disease; they are unlike *ku* poison which is made especially for murder, and is not allowed to be kept on hand." The notes point out also that no distinction is made by the Law between principal and accomplice in the use of the *ku* poison, while such distinctions must be made in the case of those who employ ordinary poisons for criminal purposes. It states further that it is not necessary to prove that the *ku* poison has been used with intent to kill but merely that it is a deadly poison, in which case the maker or keeper of it, and the instructor in its manufacture, must all pay the full penalty, whether the poison be used or not. The provisions with regard to ordinary poisons are quite different, make a distinction between accidental and intentional poisoning, and require dealers to inform themselves as to the character of the purchaser and his purpose in buying.

The Commentary enters into an explanation of the manner in which the *ku* poison is made. It says:—"*Ku* poison is made in many ways, though mostly of a mixture of poisonous insects or reptiles. There is snake *ku*, goose *ku*, *ku* made from young children, and the golden caterpillar *ku*. In some cases the use of the *ku-tu* produces immediately death, and in others does not result in death until after a number of years. But the golden caterpillar *ku* is said to be the most virulent, and those who take it cannot escape death. It is found in Fukien, Kuangtung, Szechuen, and Kueichou." A Chinese friend explaining to me the nature of the *ku-tu* or *ku* poison, said that a woman might prepare

such a potion for her husband, and administer it to him without his knowledge as he is about to leave home for a term of years with the purpose of killing him only if he shall prove unfaithful or neglect to return within the specified time. The potion in such case would not take effect until the period of years had elapsed, and not even then unless the husband should prove unfaithful. This agrees with the statement of the Commentary that death may not result until after a number of years, and it is evident that we are here dealing with a species of witchcraft. This is evident too from its place in the Code between the section on mutilation for purposes of magic and that on invocation of demons and preparation of charms and curses.

With reference to this last-mentioned crime, the Notes say :—"The Laws of the T'ang Dynasty tell us that there are many who, having grudges against others, invoke the nightmare demon or write some charm or curse. The invoking of the nightmare demon and the use of spells and curses are two different things. The invoking of the nightmare demon is the use of sorcery to put one under the power of a devil or an evil spirit, such practice, for instance, as drawing a likeness or carving an image of a person and then piercing its heart or eyes, or binding its hands and feet.[12]

By a spell or curse is meant the writing of a charm or the drawing of a cryptogram by the methods of witchcraft, which is then either buried in order to summon devils or burned so as to secure the aid of evil spirits. It includes also the taking of the year, moon and day of the birth of the person whom it is desired to kill, and writing the characters for the same in such a way as to work them into a curse.

[12] Tylor, *Early History of Mankind*, pp. 118 and 119, mentions similar practices among the Indians of North America, the ancient Peruvians, the Hindus and Karens.

All who employ such methods with intent to kill, have murder in their hearts and must be dealt with according to the Law provided for plotting to murder. Hence this Law says such criminals are to be punished according as they may be related or unrelated to the victim, under the clause providing for plotting to kill with attempted execution of the plot but without injury to any person, if, notwithstanding the desire to invoke the nightmare demon or employ a spell, or curse with intent to kill, the intended victim shall have escaped injury. But if the process shall have resulted in the death of the victim, then he shall be punished according to the clause providing for murder accomplished (after deliberate planning), due distinction being made between the murder of relatives and of other persons.

With regard to the invocation of demons, and the use of spells and curses, the Commentary says:—"But examination must be made as to the method employed to kill by invoking demons, or by use of spells and curses, all of which are black arts, but not all intended to produce death directly. Of these some aim first to injure one's ears, eyes or other member of the body; others to first render one crazy or confused, and cause him gradually to die. If the original intention be to kill, and the process have already resulted in injury to the eyes, ears or other members of the body, or in the insanity of his victim, then he shall be punished under the Law providing for plotting to kill resulting in wounding." The penalty for this offence is sentence to strangling subject to revision at the Autumn Assize.

The Commentary mentions another form of witchcraft whose punishment is provided for in an Edict of Chia-ch'ing, XXII, which says:—"Anyone who, in cherishing a grudge, shall take a peg of peach or ailanthus wood and

attempt therewith to spoil the *feng-shui* of another person's ancestral tombs, shall suffer the same penalty as one who, with desire to bring sickness or distress upon another, invokes the nightmare demon or uses spells and enchantments, *i.e.* two degrees lighter than the penalty for plotting murder, resulting in assault but without injury to the person attacked; that is exile for two years."

The retention of these laws in the Chinese Code in spite of recent revision indicates for China a stage of culture similar to that which prevailed in Europe in the seventeenth century. Whether we look East or West, in short, we find the same law of progress holding good, and similarity of belief marking similar degrees of advancement.

Primitive man was not troubled by distinctions of animate and inanimate; to him all nature was animate. He found no difficulty in ascribing to stocks and stones, to sun and wind, to stars and clouds, the lightning and the sea, both intelligence and will. Storm and sunshine, rain and drought, the earthquake and the pestilence, all the processes of nature, gracious or malevolent, were to him the manifestations of the power of other beings, good or evil—probably capricious; gods, it might be; angels, perhaps, or demons; or, perchance, the spirits of the dead. To win the favor of such powerful beings meant life; to incur their hatred meant destruction. To be able to control such powers and command the assistance of such intelligences—this was the aim of the savage medicine-man, fore-runner of the priest, the physician, and the man of science. It was Herbert Spencer who pointed out this connection between the modern man of science and the primitive medicine-man. Of the latter he said:—"Ever striving to maintain and increase his influence over those around, (he) is stimulated more than others to obtain such knowledge of natural phenomena as may aid him in his efforts." . . .

"He speculates as to the causes of the striking things he observes in the Heavens and on the Earth; and whether he regards these causes as personal or impersonal, the subject-matter of his thought is the subject-matter which in later times is distinguished as philosophical. . . A further reason why he becomes distinguished from men around by his wider information and deeper insight is that he is, as compared with them, a man of leisure. From the beginning he lives on the contributions of others; and, therefore, he is better able to devote himself to these observations and inquiries out of which science originates." [13] Among the Mexicans at the time of the discovery of America the medicine-men had already become an organized priesthood, and we learn that there as well as among the priesthoods of ancient Egypt, India, and elsewhere, there was preserved much knowledge of astronomy, mathematics and medicine.[14] Such knowledge was of course much mixed with superstition, and employed to increase and strengthen the influence of the priesthood over the people, but it cannot be denied that, in so far as it was a real knowledge of facts, it greatly aided the progress of civilization. But as the medicine-man pondered the problems committed to him for solution, and sought to discover satisfactory theories for the explanation of the phenomena of the natural world, and invent means for controlling and directing natural forces, he fell into many errors.

Any unusual event, such as the appearance of a comet, if followed by war or other calamity, would thenceforth be

[13] "Professional Institutions: VI, Man of Science and Philosopher," *Popular Science Monthly*, October 1895, p. 739.

[14] Prescott's *Conquest of Mexico*, vol. I, pp. 70, 101, 122 ff. *Vide* also Fiske's *Discovery of America*, vol. I, p. 119, and Bancroft's *History of the United States*, vol. I, p. 133.

considered as an omen of disaster ; the *post hoc* would become a *propter hoc*. Dreams were messages from the dead ; for did not the dead appear and speak ? Fanciful resemblances between various parts of a plant and certain organs of the human body led to the doctrine of signatures. We derive strength from the food which we eat, and man is variously affected by the varying qualities of that food ; it is an easy step to conclude that by eating the heart or liver, already regarded as the seat of courage, of a brave enemy, one may acquire his courage. The name of a friend at once calls up a mental picture of that friend ; at an objective portrait of him we will gaze as tenderly as though the man himself were there. To a child her doll is a real person ; so to the child-mind of the primitive man the connection between the real object and its name or the mental picture of it is a very close one, and it is not difficult to understand how the belief arose that one could be injured through his name or an image called by that name.[15] Thus through imperfect observation, fallacious reasoning from the sequence of events, and a confusion of the subjective processes of the mind with objective realities, a great number of superstitions arose. Civilized man has travelled very far from some of these early superstitions, for the reasoning faculties of the enlightened mind are much keener than those of the savage ; but great as the progress may be, a very little observation will show that superstition is by no means eradicated from the minds even of the highly cultured, while in out-of-the-way corners of the most highly civilized countries and among the uneducated classes we may find numerous survivals of primitive belief and practice.

So long as astrological almanacs find purchasers in Great Britain ; so long as relics of the dead are touched for healing

[15] *Vide* Tylor's *Early History of Mankind*, pp. 116 and 117, and *Primitive Culture*, vol. I, p. 116.

in other European countries, and so long as spiritualism and occult Buddhism find numerous adherents in the United States, while charms and quackery are resorted to for protection against evil and the cure of disease in all parts of the Western world, so long must we refrain from claiming that the West has emancipated itself from the magic which was the pseudo-science of our forefathers. Multitudes of persons in all lands are still influenced by dreams and by supposed communications from the dead; miracles of healing are reported by faith-cure establishments and by the Christian-Science adepts in the United States, as well as by pilgrims to the holy shrines of Europe; and even in recent years the world has been shocked by horrible crimes committed in the most highly civilized states of the West under the delusion that some magical results were to be accomplished thereby, or to avenge some injury believed to have been inflicted by witchcraft. We need not linger over the voodooism of the negroes in the United States or the West Indies, since the black race is but a few generations removed from savagery, and as "witchcraft is part and parcel of savage life"[16] we cannot be surprised to find survivals of it among the negroes of to-day. It is worth noting, however, that a witch was burned at Camargo in Mexico as late as 1860.[17] It is still more remarkable to read that in 1877 an Irish immigrant and his wife in New York City burned their child to death under the delusion that it was not their child but a changeling. A more horrible case resulted in the murder of two children, who were beaten to death by their mothers under a similar delusion at a village in Prussian Posen on

[16] Tylor's *Primitive Culture*, vol. I, p. 138.

[17] "Superstition and Crime," by E. P. Evans, in *Popular Science Monthly* for December 1898, p. 210.

November 19th, 1871.[18] In 1881 a village community in the interior of Russia tried and burned a witch;[19] and in October 1889 a Samoyede, Jefrern Pyrerka was tried in the Criminal Court of the province of Archangelsk in Northern Russia for the murder of a maiden named Ssavaney. It appeared during the trial that he had lost all his children the previous winter through illness and had become possessed of the notion that some devil was angry with him. He therefore strangled the girl and offered her in sacrifice to an image of the devil which he had made out of wood and set up on a hillock.[20] In the article from which the last incident is quoted there will be found a long list of such crimes committed in various parts of the Western world, some of them as recently as 1896. Some of the crimes mentioned are very similar to those referred to in the Chinese Commentary, such as the opening of a grave in Poland by a shepherd who mutilated the corpse in order to obtain the liver for magical purposes; or the murders committed in various parts of Europe with the object of securing the fat of the human body for the manufacture of candles, much in demand among thieves for their supposed soporific powers. Where such a candle is used it is believed that the household will fall into a deep sleep and the thief be able to rob with impunity. The Chinese crime of securing unborn children for purposes of magic is also paralleled by numerous instances given. It is quite evident therefore that it makes no difference whether we look East or West, in certain stages of culture we shall find the practice of witchcraft. There is this to be said for the West, however, that the number of its people who still

[18] "Superstition and Crime," by E. P. Evans, in *Popular Science Monthly* for December 1898, pp. 211, 212.

[19] *Schaff-Herzog Encyclopædia*: Article "Witchcraft."

[20] Evans on "Superstition and Crime," *vide* above.

linger in the lower stages of culture is much smaller than that of the Chinese in the same condition. The instances that have been given above show that the superstition in question is found only among the uneducated and in out-of-the-way places to which modern learning has scarcely penetrated as yet. But a more important difference between the East and the West is the attitude of the State toward the practice. Penal Codes in the West long since refused to recognize any power in magic to help or to injure; witchcraft as an offence in itself indictable does not exist. In China the mere practice of sorcery with intent to injure, even if no one be injured, is a capital crime. Science is still in its swaddling clothes in China, and therefore all forms of witchcraft flourish, and believers in the reality of its power are found not only among the ignorant peasantry but among the gentry and scholars as well, and in some of its forms it finds recognition in the rites and ordinances of the State. On every street corner you find the physiognomist and the diviner; the booths of the fortune-teller and the medical quack abound in the market-places; and the walls are placarded with advertisements of spirit mediums. Demon possession is a phenomenon of frequent occurrence and its reality is vouched for by a Christian Doctor of Divinity.[21] The State locates its palaces, temples and tombs by geomancy; astrologers determine the lucky days for the commencement of its important public works; the highest officials are deputed to rescue the sun and moon from the dragon or the dog that is causing an eclipse, and the Son of Heaven prays to the magical iron tablet that can bring the long-desired rain. Charms and amulets protect the home from calamity and the body from disease, and the mumbled

[21] *Demon Possession and Allied Themes.* By Rev. J. L. Nevius, D.D.

incantations of the lamas at the new year's season, as they make their offerings in the skull of an executed criminal and dance in masques about the image of a demon, are still depended upon to frighten away the evil spirits whose malignant power might disturb the harmony of the State or cause the husbandman to toil in vain. The river god is invoked to stay the ravages of the flood, and votive offerings are decreed by Imperial Command to multitudinous saints and deities whose intervention has brought success in arms or opposed the march of the pestilence. Are not all these superstitions close akin to witchcraft? There can be no doubt that for the Chinese the Age of Miracles still continues, and that for the most part they still linger at a stage of culture wherein witchcraft cannot but flourish. If it be said that the laws against witchcraft are perhaps obsolete; that they are but survivals from the legislation of an earlier age when fear of the black art was more common, we have only to turn to the files of the *Peking Gazette* to show that belief in the power of witch potions and magical incantations and spells is still a living principle affecting judicial decisions in some of the highest courts of the Empire. On September 8th, 1873, a memorial was submitted to the Throne, transmitting a report from the Prefect of Ch'eng-te, in Jehol, concerning the crimes of two men who had been accused of witchcraft and who had confessed *under the severest tortures* that they were engaged by a third person to supply hearts and eyes taken from living persons at fifty taels a set, and that they had decoyed children either by blowing a powder into their eyes or giving it to them to eat in red jujubes; that such children would then follow them in a trance, and that when a solitary place was reached they would cut the child's body open with a sickle and take out the heart; that they would also gouge out the eyes, and that the child would

neither bleed nor cry. In two attempts, one in Shantung and one in Chihli, they had succeeded, and had been paid for the hearts and eyes ; but in the third they had been caught before the child was seriously injured. The men were both ordered to immediate execution.

That murders are committed with the purpose of securing certain organs of the human body needed in magic or quack medicine cannot be doubted, but that such has been the case in any particular instance confessed to only under the severest tortures may well be doubted. During the trials for witchcraft in Europe in the sixteenth and seventeenth centuries thousands of innocent persons confessed under torture to the performance of all sorts of crimes, even the creation of storms and the manipulation of the lightning. The torturer has only to suggest the confession wanted and it will be made, for men and women will acknowledge the truth of any charge however impossible in order to secure release from the agony being suffered. That children can be bewitched by a little powder into following perfect strangers in a trance and submitting to mutilation without bleeding and without crying is of course absolutely incredible, yet the judge had no hesitation in believing such a tale.

On February 25th, 1877, the Governor of Kiangsu submitted a memorial, reporting the trial and execution of certain witches and wizards who had during previous months disturbed the quiet of the province by use of incantations and the manufacture of paper men, through which means queues were cut off and various injuries inflicted upon the bodies of the victims of such sorcery. One man arrested was put to torture to discover his confederates. Under such conditions he accused a neighbor and his wife of supplying him with the paper men and the words of the incantation. These neighbors were then arrested, but very stubbornly refused to

confess their guilt. They were then subjected to rigorous interrogation without intermission day or night. Is it not easy to foresee the result? The woman finally yielded to such persuasion and confessed that she had met a stranger whose speech indicated that he was from foreign parts, who gave her some foreign money and taught her the words of an incantation and the art of making paper men that would become able to attack and injure human beings. This secret they had communicated to the recently executed criminal who had accused them. The woman was at least more merciful than her neighbor, since she implicated no one by name save the dead man, and made it impossible to extend the chain of unfortunate victims. Her husband, being confronted with the confession of his wife, admitted its truth, but to make sure that the truth had been told the prisoners were again put to the torture three times and confirmed their previous statements, upon which they were promptly executed. The Governor gravely comments that such crimes are scarcely expiated by death, and he gives solemn assurance that no relaxation of vigilance will be allowed, but that all such offenders will be arrested and punished. All this occurred less than thirty years ago and in one of the most enlightened provinces of the Empire.

It is only fair to say that, as there were men in Europe in the sixteenth century who dared to oppose the popular delusion respecting witchcraft, even at the loss of their liberty or life, as in the case of Loos, Flade and others,[22] so there have been enlightened officials in China, less credulous than the Governor of Kiangsu in 1877, who have refused to cater to popular prejudice, and who have either acquitted the

[22] White's *History of Warfare of Science with Theology*, vol. I, p. 356, and II, p. 119.

accused or remanded the prisoners from time to time, apparently in the hope that the superstitious fears of the people would subside and make it possible to release the suspected persons. In the case of Chang Liang-pi, cited above,[23] the Commentary states that the District Magistrate and the Prefect had refused to punish the accused, and the memorialist quoted had recommended that they be cashiered. A more recent case is one that occurred in Uliasut'ai in 1881. A certain Mongol noble was accused by the Deputy Lieutenant-General of assembling a number of lamas to utter diabolical incantations resulting in the death of the Lieutenant-General's son. After a preliminary trial the case came before a Military Secretary, who after much wavering found the accused guilty and sent them with the evidence to the Military Governor, where the prisoners denied their previous confessions and refused to admit their guilt. The Governor then investigates, and finds the whole case based upon mere hearsay evidence, and obtains proof that the Secretary had been bribed to secure a conviction. The case then turns against the Secretary and the prosecutors, who are recommended for various punishments.

So long, however, as the State ritual, official customs and the Imperial Statutes recognize certain superstitions and magical practices as legitimate, it will be impossible for magistrates and judges to make public declaration of their disbelief in the power of magic. On July 22nd, 1882, for instance, the Viceroys and Governors were commanded by Imperial Decree to resort to the traditional methods for expelling the scaly dragon which causes floods. This was in response to a memorial submitted by a Censor, Kuang-hsi, who declared that the position of the dragon in the ground

[23] p. 69.

would be indicated by the color of the soil, the light emitted by it or the sounds sent forth, and by the fact that in winter no snow lies on the spot, and no herbage appears there in spring. The animal will always be discovered after digging to a depth of five feet or so. The Censor asks:—"Would it not be better to destroy the hidden evil than merely to provide against the floods which it causes, especially since such floods are worse than those caused by the overflow of the rivers?" [24]

The so-called Imperial College of Astronomy is really a college of astrology, and the almanac prepared by it for the use of the Government contains a great deal of information as to lucky days, signs, omens, etc. Eighteen official professors of *feng-shui* are employed and must be consulted before building enterprises are undertaken. Attention to the requirements of *feng-shui* is necessary, not only to secure the present prosperity of the Empire but to preserve it to the Dynasty in the future. When the Comptroller of the Imperial Household in 1878 appropriated for a family burial ground certain lands belonging to a temple where prayers were sometimes offered for rain, it was held that he had interrupted the dragon pulse, and that the prayers for rain had therefore become inefficient. When the Emperor Yung-cheng began to plan a tomb for himself, the professors of geomancy informed him that the site which had been selected near the sepulchres of Shun-chih and K'ang-hsi was not a felicitous one, and, after various places had been examined, it was decided to establish another Imperial Cemetery to the west of Peking, at a place which was extolled in the highest terms by the geomancers consulted as capable of insuring the prosperity of the Dynasty for a myriad years.[25]

[24] *Vide* Translation of *Peking Gazette*, *North-China Herald*.
[25] *Vide* De Groot's *Religious System of China*, vol. III, pp. 1293-1296.

The *Hsi Yüan Lu*[26] is a work which has been made by Law an authoritative guide to magistrates in the discharge of their duties as coroners. A part of it, indeed, is embodied in the Code itself. The last edition, issued in 1891, has omitted none of the anatomical misinformation which its authors compiled, and none of their curious prescriptions.

Among other directions are the following for identifying the bones of a deceased parent, when there is some doubt upon the subject:—"Drop a little of the child's blood upon the supposed bones of the parent; if the bones be really those of a parent the blood will soak in, but if otherwise it will not do so. Care must be taken, however, that the bones be not washed in brackish water, lest in that case the blood and bones refuse to unite, even though they be related. Elder and younger brothers have a common origin, and may prove their relationship by dropping a little of the blood of each in a vessel of water. If the persons concerned be really brothers the drops of blood will flow together. But if by any chance vinegar or salt be mixed with the water, the union will take place, even though there be no relationship. Some say that husbands and wives may establish the fact of such relationship by the blood and water test; others say that the blood and bone test cannot be made to apply to such a relationship, so that there is some room for doubt upon this point. If, however, the vessel of water be too large, or the quantity of water too great, the drops of blood, being too widely separated, may not unite; and if an interval elapse between the dropping of one person's blood and that of the other, there will be a difference of temperature in the two drops which may prevent their union."[27]

[26] 洗冤錄

[27] 寶鑑編, 7 and 8. Incorporated in vol. V of *Hsi Yüan Lu*.

A number of instances from Chinese history are given of the employment of the blood test to establish relationship between long-separated kinsmen, and between children and their deceased parents. Other instances are given in which the blood test is used to defeat the schemes of impostors who claim relationship with the dead in order to levy blackmail. How easy it would be in China to dispose of the pretences of a Tichborne claimant! In the fourteenth year of Ch'ien-lung a wife is held to have been probably guilty of unfaithfulness to her husband, and her daughter to have been born of an illicit connection, because neither the blood of the wife nor that of the daughter would unite with the bones of the deceased husband and father.[28] The test is a recognized one in the courts to-day. The *Peking Gazette* of November 25th, 1882, records its use to identify the bones of a deceased parent by a young man in Chehkiang. The grave had been opened and the bones scattered by a cousin who wished to revenge himself in a family quarrel.

More remarkable is the method prescribed by the *Hsi Yüan Lu* for the discovery of the location and character of wounds on a body which has already been entirely destroyed, or of which but a few odd bones remain. This method is referred to and described a number of times in the work just mentioned. In one case the grave was opened and but a few bones were found. These were taken out and a hot fire made in the grave pit. Sesamum seed was then thrown in and scattered about. The grave was covered over for an hour, and afterwards the sesamum seed was swept out with a broom. But some of the seed clung to the soil, and on examination it was found that there was outlined by it, on the bottom of the grave, the image of the dead man.

[28] *Hsi Yüan Lu*, vol. I, 57.

A clot of the sesamum seed was found at a spot corresponding to the navel. The remainder of the seed was then taken out and another fire built in the pit. Some dregs of grain from a still were mixed with water and thrown in. The fire was then increased in intensity and later some hot vinegar was poured in. A new table, lacquered with gold lacquer, was then placed top down over the grave and left there for a few moments. When it was taken off there was found outlined on its surface the image of the dead man, and just over the navel was the mark of a stab, an oblique wound 1.3 inches in length, a mortal wound inflicted by a wooden instrument.[29] In Volume V of the work another instance is given in which a man had been killed and his body burned, so that no trace of it could be found. The grass and weeds had grown over the spot where the corpse had been consumed. This was all cut down and cleared out even to the roots. Kindling was brought and a hot fire built on the spot. This was kept burning until the ground was thoroughly heated. Several pecks of sesamum seed were then scattered over the place, the oil of the seed being extracted by the heat and absorbed by the earth. When the seeds had been swept away, the image of the dead man was seen outlined on the surface of the ground, the wounds which had been inflicted upon his body being indicated by clots of sesamum seed, large or small, square or round, according to the shape and size of the wound. These seeds were then all swept away and another hot fire built. Dregs of fermented grain mixed with water and hot vinegar were poured over the place, and a lacquered table placed upside down on the spot as in the previous case, and the image of the dead man with the wounds in his body appeared upon the surface of the table.[30]

[29] *Hsi Yüan Lu*, vol. V, 3.

[30] 寶鑑編, 8, also *Hsi Yüan Lu*, vol. I, 60.

Another case is cited in which two men were killed and their bodies burned. The images of both men were produced upon the table at the same time, showing the wounds inflicted upon their bodies.[31]

Even more marvellous are the directions given in Vol. I for procedure in a case in which the body of the dead had been burned and the very site of the burning forgotten by the criminal himself, except that it was near a certain village and in a certain direction from a temple in the village. The spot was a wild and lonely one, but in obedience to the directions given examination of the district was made until a spot was found where the grass had grown much higher and more luxuriant than elsewhere. This growth outlined the image of the dead man, thus indicating the spot where the corpse had been burned.[32] That this method of discovering the wounds upon a body which cannot be produced is believed in to-day is evident from the fact that the latest edition of the Penal Code embodies in its instructions to coroners a list of articles needed at inquests, among which we find the sesamum seed, the vinegar and the lacquered table.

Still another illustration of authorized magic is that in Volume V, where directions are given for finding a corpse that has been lost in the river:—"Take a piece of reed matting and place on it an old pencil; put them on the surface of the river, and allow them to float away. When they pass over the spot where the body is lying, the pencil will move and point to the place. Let those who are searching for the corpse then drag the river at that spot, and the body will be recovered." [33]

[31] *Hsi Yüan Lu*, vol. I, 62.
[32] *Hsi Yüan Lu*, vol. I, 60.
[33] 石香秘錄, 7. Incorporated in vol. V of *Hsi Yüan Lu*.

It is well known that the Chinese Code permits a husband to avenge his honor by killing an unfaithful wife and her paramour. Sometimes, however, there is doubt as to the guilt of the wife. In such a case the *Hsi Yüan Lu* prescribes an infallible method for determining the fact:—"Take a water-jar and fill it with water, one half from the river and the other half from the well. This is called 'yin-yang' water. Take a stick and stir the water into a swiftly whirling eddy. Then take the heads of the decapitated corpses of the man and woman and place them without delay in the water. If the pair were really guilty, the heads will turn nose to nose; but, if they were innocent, they will turn back to back, one above and the other below in the jar."[34] Antidotes to various poisons are given by the *Hsi Yüan Lu* and many prescriptions for the cure of wounds. Some of these are very good, but others are to be compounded on certain days and at certain hours only, as on the 5th of the fifth moon, or the 9th of the ninth moon, at high noon, or otherwise, thus showing the magical character of the prescription. Thus in the directions for the rescue of a person from the effects of the *ku* poison, the witch's potion, described above, the medicine, which among other things contains two centipedes, one alive and one roasted, is to be compounded on the 5th of the fifth moon or the 9th of the ninth moon, and the patient must entirely avoid the other sex.[35] Another section of the work warns the reader against incautiously entering an empty house or a grove that has been closed for a long time. Great care must be exercised, for lascivious fox-spirits or dangerous demons may have made such a house or grove their lurking-place. Serpents and wild beasts, too, may have made it their lair. If the grove be in a very retired spot it is all the more dangerous. One should shout before

[34] 石香秘錄, 6. [35] *Hsi Yüan Lu*, IV, 21.

entering, or carry a torch with which to frighten the uncanny creatures.[36]

Many more illustrations might be given to show that a certain kind of magic is regarded by law and by public opinion as quite legitimate. The same distinction exists, indeed, as was made in Europe in the sixteenth century, that between "white" and "black" magic,—that which promotes the general welfare being "white" or good magic, and that which is employed to bring evil upon a man or a community being regarded as "black" or unlawful. Among all primitive peoples the latter has fallen under the condemnation of the law, save, perhaps, when employed to injure the enemies of the State.

In the Code of Hammurabi[37] the person accused of sorcery was allowed the privilege of establishing his innocence by throwing himself into the water. If the water overcame him, he was held to be guilty and his property was given to the informer. If, on the other hand, he escaped from the water [swimming must have been a valuable accomplishment in those days] his accuser was put to death for making a false charge. This was much more merciful than the ordeal by water prescribed by old English custom, which enabled the accused to establish his innocence only by getting drowned, for it was the common belief of all Europe in the Middle Ages that the conscious water would reject the witch, and King James in his *Dæmonology* says:—"It appears that God hath appointed for a supernatural sign of the monstrous impietie of witches, that the water shall refuse to receive them into her bosom that have shaken off them the sacred water of baptism."[38]

[36] *Hsi Yüan Lu*, III, 50.

[37] *The Code of Hammurabi*. Edited by Robt. F. Harper, p. 11, §2.

[38] Tylor's *Primitive Culture*, I, p. 140.

The Code of Manu was the most merciful of all the old codes. It provided a fine of 200 *panas*[39] for all incantations intended to destroy life, for magic rites with roots, and various kinds of sorcery.[40]

By the Twelve Tables of Rome, magical incantations were punishable with death.[41] The Hebrew Law was equally severe, for it said:—"Thou shalt not suffer a witch to live."[42] Nor was this law a dead letter, for we read of various attempts made by the kings of Israel and Judah to exterminate the wizards and those that had familiar spirits.

By the time of Charlemagne the European world began to grow more enlightened. His laws were "directed against such as should put men or women to death on the charge of witchcraft."[43] But five hundred years later the world had slipped backward into darkness. At no other time in history has there been such a sacrifice of innocent men and women on the charge of witchcraft as during the period embraced between the thirteenth and seventeenth centuries in Christian Europe, when the dread of ghost and vampire, and the fear of the black arts of the sorcerer were increased by the religious superstition of the age. A wave of madness seems to have swept over the Western world, and thousands upon thousands of inoffensive people were imprisoned, tortured and burned or hanged for an imaginary crime. After the Reformation, Protestants rivalled Catholics in the zeal shown in this awful persecution. "The giving up of witchcraft is in effect the giving up of the Bible," said John Wesley.[44] "I

[39] A *pana* was equal to 150 grains of copper: *Sacred Books of the East*, XXV, p. 277.

[40] *Sacred Books of the East*, XXV, p. 394.

[41] Gibbon, III, p. 709.

[42] Exodus, xxii, 18.

[43] Tylor, *Primitive Culture*, vol. I, 139.

[44] White's *Warfare of Science with Theology*, I, 363.

would have no pity on these witches," said Martin Luther, "I would burn them all";[45] and Richard Baxter,[45] after writing *The Saints' Rest*, found time to urge a revival of witch persecutions' in England, where it had already died away. Fortunately his efforts were in vain. Throughout Europe during that period witchcraft was a felony without benefit of clergy, and punishable with death by burning. Being felonious, it naturally brought forfeiture of lands and goods, so that the punishment was scarcely lighter than that in China, though there may be some who regard burning as less terrible than death by the slicing process. European law, however, did not condemn the relatives of the witch to suffer any other punishment than that entailed by the loss of the property belonging to the accused, and by the social ostracism of the community.

Burning was chosen in preference to some other form of execution in Europe in order to avoid bloodshed, for the holy men engaged in this war with the devil had no scruples about subjecting delicate women to the rack, or condemning them to the flames, but they shrank from bloodshed. Blackstone says:—"To deny the possibility, nay, actual existence, of witchcraft and sorcery, is at once flatly to contradict the revealed word of God in various passages both of the Old and New Testament: and the thing itself is a truth to which every nation in the world hath in its turn borne testimony, either by examples seemingly well attested, or by prohibitory laws, which at least suppose the possibility of commerce with evil spirits. The civil law punishes with death not only the sorcerers themselves but also those who consult them, imitating in the former the express law of God, 'Thou shalt not suffer a witch to live.' And our own laws, both

[45] Tylor, *Primitive Culture*, I, 137, 138.

before and since the Conquest, have been equally penal, ranking this crime in the same class with heresy, and condemning both to the flames. . . . Our forefathers were stronger believers when they enacted by Statute 33, Henry VIII, c. 8, all witchcraft and sorcery to be felony without benefit of clergy; and again by Statute 1, Jac. I, c. 12, that all persons invoking any evil spirit, or consulting, covenanting with, entertaining, employing, feeding, or rewarding any evil spirit, or taking up dead bodies from their graves to be used in any witchcraft, sorcery, charm, or enchantment; or killing or otherwise hurting any person by such infernal arts, should be guilty of felony without benefit of clergy and suffer death."[46]

We are also told by Blackstone that unsuccessful attempts to injure anyone by witchcraft, or to provoke unlawful love, restore goods, discover treasure, etc., were punished, if the first offence, by the pillory, if a second, by death. These English laws were repealed in 1736, but an unrepealed Statute of 28 Elizabeth remained in force in Ireland until 1821, in accordance with which witchcraft, sorcery, etc. were liable to capital punishment.[47] In Prussia the last execution for witchcraft took place in 1796.

For over a hundred years, therefore, the Western world has been free from legal prosecutions for witchcraft. While they still occur occasionally in China, the pages of Chinese history have never been stained by such a mad epidemic of witch-killing as disgraced Europe and America in the seventeenth century.

The Chinese law has been greatly modified by recent rescripts, which substitute decapitation for the *ling ch'ih* and forbid the punishment of the relatives of a criminal and the

[46] Blackstone, IV, 61. [47] Blackstone, IV, 62.

members of his household, unless they are also accomplices in the crime. In spite of these improvements, however, it still remains possible in China to put a man to death upon a charge of witchcraft, even though no one can be shown to have been injured by his arts.

The Commission appointed to revise the Penal Code of China has had for its most influential member H.E. Wu T'ing-fang, under whose guidance great changes have already been made in the Statutes of the Empire. Death by the *ling ch'ih* has been entirely abolished. The punishment of the household of a criminal for no other offence than that of their unfortunate relationship is also done away. Branding and flogging are no longer permitted ; fines and imprisonment at hard labor are substituted for them. Torture to secure confession in criminal cases is prohibited, except in case of murder where the guilt of the prisoner is established. The Commission has also secured an edict commanding the establishment of workhouses, and these are being rapidly built throughout the Empire. Humane prison regulations, the establishment of law schools, and the admission of attorneys to practice in the courts,—these too are notable achievements of the Commission. This is a splendid catalogue of reforms for the brief time in which it has been at work.

We know that the more enlightened officials in China have no faith in the professed powers of the sorcerer and the magician, and we can but hope that before the Commission completes its work the Code may be so amended as to make future prosecutions for sorcery and witchcraft impossible.

Contribution to the Nomenclature of Chinese Plants.

By the late Dr. Ernst Faber.

The identification of Chinese plants by their Chinese names is a matter of no small importance. The conflicting names given to the same plant or fruit in different parts of China, or even in adjacent districts, makes it difficult to ascertain with any degree of certainty what plants are meant by any given Chinese name. Dr. E. Faber undertook this work and endeavoured to get the local names of plants, which he could identify with the plants mentioned or described in Chinese books. The executor of Dr. Faber's will handed the list of Chinese plants given below to Dr. S. P. Barchet with a view to its publication, and Dr. Barchet has gone carefully through it. It has been arranged by the Editor of the Journal in an alphabetical order so as to facilitate the finding of the names. The plants mentioned were classified under their orders by Mr. D. Macgregor, Superintendent of Parks and Open Spaces, Shanghai Municipal Council. The classification is placed first, the alphabetical list follows and then there is given a list of Chinese names of plants which Dr. Faber had not been able to identify. It is to be hoped that this work of identification may be continued by others. Dr. Faber's list of names was taken by him from the Chinese Book 本草綱目, first brought out in the seventeenth century and again in several later editions.

In the Classification Mr. Macgregor has placed the names used by Dr. Faber, which are now considered synonyms, in roman type; thus

Clematis chinensis
C. sinensis
C. minor.

As many of the names are purely local, Mr. Macgregor has added the names of the provinces in which they are found, using the *Index Florœ Chinensis* as his authority. Where it was found that Dr. Faber had collected the plant in a province only this one province is given and Dr. Faber's name is added in brackets.

The work done by Dr. Faber in collecting specimens of Chinese plants and in identifying the names has been recognized by botanists in the long list of plants specifically named after him. The genus Faberia was so named as a compliment to his work.

Former papers on this subject have been published in this Journal as follows:—

1. Sorgo or Northern Sugar Cane, by V. D. Collins, N.S., 2, V.
2. Early Researches into the Flora of China, by E. Bretschneider, N.S., 15, I.
3. Botanicon Sinicum, by E. Bretschneider, N.S., 16, III; and 25.
4. List of Ferns found in the Valley of the Min River, by G. C. Anderson, N.S., 16, Misc.
5. Ginger in China, by G. M. H. Playfair, N.S., 20, N. & Q.
6. Chinese Names of Plants, by Augustine Henry, N.S., 22.
7. General Remarks on Dr. Bretschneider's Botanicon Sinicum, by Dr. E. Faber, N.S., 25.

Editor of the Journal.

Classification of the List of Plants given on page 133.

By D. Macgregor.

DICOTYLEDONS.

POLYPETALÆ.

THALAMIFLORÆ.

NAT. ORD.—**Ranunculaceæ,**

Tribe I.—CLEMATIDEÆ.

Clematis.

C. chinensis, Retz.

C. sinensis, Lour.

C. minor, D.C.

C. sinensis and C. minor are considered merely forms of C. chinesis, the Chinese name for C. minor being however different from that of sinensis, and though not recognised as a variety it may for the sake of its Chinese name here be classed as such and be written

C. chinensis

Var. minor.

C. florida, Thunb.

This is the first known record of this species being Chinese; it is generally considered as being a native of Japan. On the other hand it may have been a naturalized plant Faber collected.

C. paniculata, Thunb. Kiangsu, etc.

Tribe II.—ANEMONEÆ.

Anémone.

A. japonica, Sieb. and Zucc. Kiangsu, Fokien, etc.

"Commonly cultivated in China and Japan, and it is uncertain where it is indigenous and where only naturalized" [Hemsley in *Index Florœ sinensis*]. From the amount of it obtainable on the Kuling mountains, there at least it would appear to be indigenous.

Adonis.

A. amurensis Reg.

Tribe III.—RANUNCULEÆ.

Ranunculus.

R. acris, Linn. Northern Provinces.

R. sceleratus, Linn. Chihli to Kwangtung.

Tribe IV.—HELLEBOREÆ.

Coptis.

C. Teeta, Wall. Kwangtung.

Aconitum.

A. Fischeri, Riechb. Shantung to Chekiang.

Cimicifuga.

C. davurica, Maxim. Chihli.

Pœonia.

P. albiflora, Pall. General all over.

P. Moutan, Sims. Kansuh.

Calycanthaceæ.

Chimonanthus.

C. fragrans, Lindl. North and Central Provinces.

Magnoliaceæ.

Magnolia.

M. conspicua, Salisb. North and Central Provinces.

"*Yulan.*"

M. hypoleuca, Sieb. and Zucc.

This is generally considered to be a Japanese species.

M. obovata, Thunb. Szechuen, Kiangsu.

Michelia.

M. fuscata, Blume. Cultivated.

Magnolia fuscata, Andr.

Berberideæ.

Berberis.

B. nepalensis, Spreng. Kiangsu, Szechuen, Kansuh.

B. Thunbergii, D.C. Shensi.

Nandina.

N. domestica, Thunb. North and Central Provinces.

Epimedium macranthum, Morr. North and Central.

Nymphæaceæ.

Euryale.

E. ferox, Salisb. Chihli, Formosa, Hainan.

Nuphar.

N. japonica, D.C.

Nelumbium.

N. speciosum, Willd. Cultivated.

Papaveraceæ.

Papaver.

P. rhœas, L. Cultivated in gardens, also naturalised.

P. somniferum, Linn. Cultivated.

Bocconia.

B. cordata, Willd. Central Provinces.

Fumariaceæ.

Corydalis.

C. ambigua? Cham. Schl.

Cruciferæ.

Draba.

D. nemorosa, Linn. North Provinces.

D. nemoralis, D.C.

Sisymbrium.

S. Sophia, Linn. North Provinces.

Brassica.

B. crenua, Thunb. Chihli.

B. juncea, Hook. Chihli, Kansuh, Szechuen.

B. rapa, Linn.

B. sinapis, Linn.

B. campestris. Var. chinensis.

Capsella.

C. Bursa-Pastoris, Mœnch. Common all over.

Raphanus.

R. sativus, Linn. Cultivated.

Vilarieæ.

Viola.

V. pinnata, Linn. North Provinces.

Bixineæ.

Xylosma.

X. racemosum, Miq. Fokien, Kwangtung.

Pittosporeæ.

Pittosporum.

P. Tobira, Ait. Central and South.

Polygaleæ.

Polygala.

P. sibirica, Linn. Common all over.

P. japonica, Houtt.

P. ricini, Tr. and S.

Caryophylleæ.

Dianthus.

D. chinensis, Linn. North China.

D. superbus, Linn. North China.

Saponaria vaccaria, Linn. North China.

Lychnis.

L. coronata, Thunb. Chekiang, Kiangsi.

L. grandiflora, Jacq.

L. senno, Sieb. and Zucc. Chihli, Kiangsi.

Stellaria.

S. aquatica, Scop. Common all over.

Portulaceæ.

Portulaca.

P. oleracea, Linn. South.

Tamariscineæ.

Tamarix.

T. chinensis, Lour. Kwangtung, Fokien, Kiangsu.

Hypericineæ.

Hypericum.

H. chinense, Linn. Common all over.

Guttiferæ.

Garcinia.

G. morella, Siem? Hongkong.

Ternstrœmiaceæ.

Actinidia.

A. chinensis, Planch. Chekiang.

A. polygama, Sieb. and Zucc. Japan.

Stachyurus.

S. præcox, Sieb. and Zucc. Kiangsi.

Camellia.

C. japonica, Linn. Corean and Luchu Archipelago.

C. Sasanqua, Thunb. Central Provinces.

C. Thea, Link. Cultivated.

Malvaceæ.

Malva.

M. sylvestris, Linn. Chihli, Shensi.

M. verticillata, Linn. Chihli, Shensi, Kiangsi.

Abutilon.

A. avicennæ, Goertn. North and Central.

Hibiscus.

H. mutabilis, Linn. Cultivated.

H. rosa-sinensis, Linn. Kwangtung.

H. syriacus, Linn. Common all over.

Gossypium.

G. herbaceum, Linn. Cultivated.

Sterculiaceæ.

Sterculia.

S. platanifolia, Linn. Chihli to Yunnan.

Tiliaceæ.

Tilia.

Lineæ.

Linum.

L. perenne, Linn. Yunnan.

L. usitatissimum, Linn.

Zygophylleæ.

Tribulus.

T. terrestris, Linn. Common all over.

Geraniaceæ.

Geranium.

G. nepalense, Sweet. Shingking, Shantung, Yunnan.

Oxalis.

O. corniculata, Linn. South.

Averrhoa.

A. Carambola, Linn. Kwangtung, Hongkong.

Impatiens.

I. Balsamina, Linn. Shantung, Fokien, Kwangtung.

外交部藏書

Rutaceæ.

Ruta.

R. graveolans, Linn. S. Europe [probably an escape].

Evodia.

E. rutæcarpa, Benth. Kiangsi.

Zanthoxylum.

Z. acanthopodium, D.C. Central Provinces.

Z. Bungei, Planch. Central and North Provinces.

Murraya.

M. exotica, Linn. Luchu Archipelago, Formosa.

Clausena.

C. Wampi, Oliv. Cultivated generally for fruit.

Citrus.

C. Aurantium, L.

C. Decumana, Lour.

C. japonica, Thunb.

Var. fructu-globosa.

Var. ?

C. Medica.

Var. chirocarpus.

Var. ?

Var. acida.

C. nobilis, Lour.

Ægle.

A. sepiaria, D.C.

Simarubeæ.

Ailanthus.

A. Glandulosa, Desf. Shanghai, etc.

Burseraceæ.

Canarium.

C. Album, Rœnsch. Cultivated. Kwangtung.

Meliaceæ.

Melia.

M. Azedarach, Linn. Shanghai, etc.

Cedrela.

C. sinensis, A. Juss. Chihli, Kansuh.

Ilicineæ.

Ilex.

I. latifolia, Thunb. A Japanese species.

CALYCIFLORÆ.

Celastrineæ.

Euonymus.

E. alatus, Thunb. A Japanese species which, however, is found in Shanghai—probably naturalised.

E. japonicus, Thunb. Shanghai, Chefoo, etc.

E. Thunbergianus, Blume. Kiangsi to Chihli.

Rhamnaceæ.

Zizyphus.

Z. vulgaris, Lam. Shanghai to Chihli.

Z. sinensis, Lam.

Hovenia.

H. dulcis, Thunb. Kwangtung to Chihli.

Ampelideæ.

Vitis.

V. Coignetiæ, Pul. and Planch. A Japanese species.

V. pentaphylla, Thunb.

V. serianæfolia, Maxim. Kiangsi to Chihli.
V. vinifera, L. Cultivated.
V. bryoniæfolia, Bunge.
V. sp.

Sapindaceæ.

Nephelium.
N. Litchi, Camb. Kwangtung and Hongkong.
N. Longana, Camb. Formosa. Cultivated in S. China.
N. lapaccum, L.
Xanthoceras.
X. sorbifolia, Bunge. Chihli.
Acer.
A. palmatum, Thunb. Chekiang.
A. trifidum, Hook and Arnot. Shanghai, Ningpo, Kiukiang.

Anacardiaceæ.

Rhus.
R. Semialata, Murr. Kwangtung to Chihli.
R. Succedanea, L. Hongkong, Kiangsi to Kiangsu.
R. Toxicodendron, L. America and Japan.
Var. radicans.
R. vernicifera, D.C. Hupeh, Shensi, Szechuen.
Pistacia.
P. chinensis, Bunge. Ningpo to Peking.
P. vera, L.?
Spondias.
S. dulcio, Trst.
S. amara.

Leguminosæ.

Papilionaceæ.

Thermopois.
T. fabacea, D.C. Shanghai, Luchu to Corea.

Medicago.

M. denticulata, Willd. North temperate regions.

M. lupulina, L. Common all over China.

M. sativa, L. Northern China.

Lotus.

L. corniculatus, L. Widely spread.

Indigofera.

I. tinctoria, L. Cultivated.

Astragalus.

A. hoangtchy ? Fr.

Glycyrrhiza.

G. echinata, L. Shantung.

G. glabra, L.

Desmodium.

D. sp.

Vicia.

V. hirsuta, Koch. Shanghai, Kiukiang, Corea.

V. Faba. Largely cultivated.

Abrus.

A. precatorius, L. South China.

Glycine.

G. hispida, Maxim. Cultivated.

G. soja, Sieb. and Zucc. North and Central China.

Erythrina.

E. indica, Lam. South China.

Canavalia.

C. ensiformis, D.C. Kwangtung.

Phaseolus.

P. radiatus, L. Cultivated.

Pueraria.

P. thunbergiana, Benth. Hongkong to Chihli.

Dolichos.

D. Lablab, L. Cultivated extensively.

D. umbellatus, Thunb.

Cajanus.

C. indicus, Spreng. Cultivated.

Dalbergia.

D. hupeana, Hance. Ichang, Ningpo.

Pterocarpus.

P. indicus, Willd. South China.

P. flavus, Lour.

P. hupeana, Hance.

P. santalina, L.

Sophora.

S. flavescens, Ait. Kiukiang to Peking.

S. Kroni, Hance.

S. japonica, L. Kwangtung to Peking.

Sub-Order Cæsalpineæ.

Cæsalpinia.

C. minax, Hance. Seeds. Kwangtung.

C. Sappan, L. Kwangtung.

C. sepiaria, Roxb. Widely spread in tropical Asia.

Gleditschia.

Cassia.

C. tora, L. Kwangtung and Hongkong.

C. Sophera, L. Hainan, Peking.

Cercis.

C. chinensis, Bunge. Ichang, Shanghai, Peking.

Tamarindus.

T. indica, L. Hainan.

SUB-ORDER MIMOSEÆ.

Albizzia.

A. Julibrissin, Durazz. Peking to Amoy.
A. Lebbek, Benth. Peking to Ichang.

Rosaceæ.

Prunus.

P. Armeniaca, L. Peking, North China generally.
P. japonica, Thunb. Yangtsze Valley.
P. mune, Sieb. and Zucc. Japanese species.
P. Pseudo-Cerasus, Lindl. North China.
P. persica, Sieb. and Zucc. Cultivated.
P. spinulosa, Sieb. and Zucc.
P. tomentosa, Thunb. North China.
P. triflora, Roxb. China.

Spiræa.

S. japonica, L. North China.
S. prunifolia, Sieb. and Zucc. North China.
S. Thunbergii, Sieb. Ningpo and Kiukiang.

Kerria.

K. japonica, D.C. Kiukiang and Ichang.

Rubus.

R. cordifolia, L.
R. coronarius, Sims.
R. incisus, Thunb. Kiangsu and Kiangsi.
R. Thunbergii, Sieb. and Zucc. South China generally.
R. tokkura, Sieb.

Fragaria.

F. indica, Andr. Formosa to Corea.
F. wallichii, F. and S.

Potentilla.

P. discolor, Bunge. Formosa to Chihli.

P. Wallichiana, D.C.

P. Cryptotæniæ, Maxin. Hupeh.

Rosa.

R. Banksiæ, R. Br. Hupeh, Yunnan.

R. indica, L. Formosa, Hupeh, Kwangtung.

R. lævigata, Michx. South China.

R. hystrix, Lindl.

R. rugosa, Thunb. North China.

R. sempervirens, L.

Pyrus.

P. betulæfolia, Bunge. Ichang to Peking.

P. cathayensis, Hemsl. Hupeh.

P. cydonia, L.

P. malus, L. Cultivated North China.

Var. tomentosa.

P. pygmæa, Maxin.

P. sambucifolia, Ch. and Schl.

P. sinensis, Lindl. North China.

P. spectabilis, Ait. Hupeh to Peking.

Cratægus.

C. cuneata, Sieb. and Zucc. Chekiang, Hupeh.

C. pinnatifida, Bunge. North China.

Eriobotrya.

E. japonica, Lindl. Generally cultivated.

Photinia.

Saxifragaceæ.

Astilbe.

A. chinensis, Franch. Chihli, Kiangsi, Hupeh, Corea.

Deutzia.

D. sieboldiana?

Crassulaceæ.

Cotyledon.

C. fimbriata, Turcz. Chihli, Shantung, Kiangsu, Chekiang.

Sedum.

S. lineare, Thunb. Luchu Archipelago.

S. Telephium, Linn. North China.

S. erythrostictum, Miq.

Hamamelideæ.

Corylopsis.

C. spicata, Sieb. and Zucc. Kiangsi.

Hamamelis.

H. japonica, Sieb. and Zucc. Kiangsi.

Liquidambar.

L. formosana, Hance. Kiangsi, Fokien, Hupeh, Kwangtung.

Haloragеæ.

Myriophyllum.

M. spicata, Linn. Chihli and Kiangsu.

M. verticillatum, Linn. Chihli.

Callitriche.

C. stagnalis?

Myrtaceæ.

Bæckea.

B. frutescens, Linn. Kwangtung, Hongkong, Lantao, Hainan.

Lythraceæ.

Lagerstrœmia.

L. indica, Linn. Kwangtung, Fokien, Hupeh.

Punica.

P. granatum, Linn. Cultivated.

Onagrarieæ.

Trapa.

T. natans, Linn. Chihli, Formosa, Hupeh.

T. bispinosa, Roxb.

Passifloraceæ.

Passiflora.

P. cærulea, Linn. Introduced.

Cucurbitaceæ.

Trichosanthes.

T. Kirilowii, Maxim. From Hongkong to Peking.

T. Palmata, Clarke.

T. multiloba, Miq. Hupeh.

Luffa.

L. acutangula, Roxb. Kwangtung.

Benincasa.

B. cerifera, Savi. Cultivated.

Momordica.

M. balsamina?

M. Charantia, Linn. Cultivated [probably indigenous].

M. cochinchinensis. Collected by Faber. Ningpo mountains.

Thladiantha.

T. dubia, Bunge. Chihli.

Cucumis.

C. Melo, Linn. Cultivated [probably indigenous].

C. sativus, Linn. Cultivated.

Cucurbita.

C. Maxima, Duch. Cultivated.

C. moschata, Duch. Cultivated.

C. Pepo, Linn. Cultivated.

Citrullus.

C. vulgaris, Schard. Cultivated. A native of South Africa.

Begoniaceæ.

Begonia.

B. Evansiana, And. Ningpo mountains. (Faber.)

B. discolor.

Umbelliferæ.

Nothosmyrnium japonicum, Miq. Kiukiang.

Hydrocotyle.

H. asiatica, Linn. Kwangtung, Hongkong.

Bupleurum falcatum, Linn. North and Central China.

Cryptotœnia.

C. canadensis, D.C. Kiangsi, Hupeh, Kwangtung.

Seseli.

S. Libanotis, Koch. Chihli, Shantung.

Œnanthe.

Œ. stolonifera, D.C. Chihli, Kiangsu, Chekiang and Hupeh.

Siler.

S. divaricatum. Chihli, Shingking, Shantung and Chefoo.

Selinum.

S. Monnieri, Linn. Kwangtung to Chihli.

Angelica.

A. anomala, Lallem. Chihli, Kiangsi.

A. decursiva, Franch.?

A. kiusiana, Maxim. Corean Archipelago.

Peucedanum.

P. decursivum, Maxim. Kiangsi, Hupeh, Corea.

P. japonicum, Thun.?

Coriandrum.

C. sativum, Linn. Cultivated.

Daucus.

D. Carota, Linn. Cultivated, and if not indigenous it is apparently naturalised, as Dr. Faber gives a different Chinese name to the wild form.

Fœniculum.

F. vulgare, Gærth. Commonly cultivated.

Araliaceæ.

Aralia.

A. cordata, Thun.?

A. spinosa, Linn. Collected at Ningpo by Faber.

A. quinquefolia, A. Gr. Corea.

Panax Ginseng, Walp.

Fatsia, papyrifera, Benth and Hook. Hupeh.

Eleutherococcus sp. Ningpo. (Faber.)

Cornaceæ.

Marlea.

M. begoniæfolia, Roxb. Kiangsi, Fokien, Hupeh, etc.

M. plantanifolia, Sieb. and Zucc. Hupeh.

M. Macrophylla, Sieb. and Zucc.

Cornus.

C. Kousa, a Japanese species.

C. officinalis, Sieb. and Zucc. Corea.

GAMOPETALÆ.

Caprifoliaceæ.

Sambucus.

S. javanica, Blume. Central China.

S. chinensis, Linn.

S. Thunbergiana, Blume.

S. racemosa, Linn. North and Central China.

Viburnum.

V. dilatatum, Thunb. Collected in Hupeh by Faber.

V. Opulus, Linn. Chihli, Shingking, Corea.

V. sieboldi, Miq.

Lonicera.

L. gracilipes, Miq.

L. japonica, Thunb. North and Central China.

Diervilla.

D. floribunda, Sieb. and Zucc. Wuhu, Hupeh.

D. Versicolor, Sieb. and Zucc.

D. Grandiflora.

Rubiaceæ.

Gardenia.

G. florida, Linn. South and Central China.

Pavetta (*Ixora*).

P. stricta, Roxb. South China.

Damnacanthus.

D. indicus, Gaernt. Collected by Faber in Kiangsi.

Serissa.

S. fœtida, Comm. South and Central China.

Rubia.

R. cordifolia, Linn. North and Central China.

Galium.

G. Aparine, Linn. All over China.

Dipsaceæ.

Dipsacus.

D. aspera, Wall. Hupeh.

Compositæ.

Eupatorium.

E. Lindleyanum, D.C. Generally spread over China.

E. chinensis, Linn.?

E. sp.

Solidago.

S. Virgaurea, Linn. Common all over China.

Callistephus.

C. hortensis, Cass. Chihli, Shingking and generally cultivated.

Aster.

A. fastigiatus, Fisch. North and Central China.

A. tartaricus, Linn. Chihli, Jehol.

A. trinervius, Roxb. Common over China.

Erigeron.

E. acris, Linn. Hupeh.

E. kamtschaticus, D.C.

Blumea.

B. balsamifera, D.C. Hainan.

Gnaphalium.

G. multiceps, Wall. Common all over.

Carpesium.

C. abrotanoides, Linn. Kiangsu, Hupeh, Kwangtung.

Xanthium.

X. strumarium, Linn. Common in the warmer parts of China.

Eclipta.

E. alba, Hassk. South China.

Bidens.

B. parviflora, Willd. Chihli, Shingking, Hupeh.

Calendula.

C. officinalis, Linn. European species.

Chrysanthemum.

C. coronaria, Linn. A European species, probably naturalised.

C. sinensis, Sabine. Chihli, Hupeh, Hongkong.

Myriogyne.

M. minuta, Less. Chefoo, Kiangsi, Hongkong.

Artemisia.

A. annua, Linn. North and Central China.
A. anspholis ?
A. apiacea, Hance. Chihli to Kwangtung.
A. capillaris, Thunb. Kwangtung.
A. giloescens, Miq.
A. japonica, Thunb. North and Central China.
A. keiskeana, Miq. Corea.
A. vulgaris, Linn. Chihli to Kwangtung.
A. indica, Willd.

Gynura.

G. pinnatifida, D.C. Hupeh, Kwangtung.

Senecio.

S. campestris, D.C. Collected in Szechuen by Faber.
S. Stenocephalus, Maxim.

Echinops.

E. dahuricus, Fisch. North China.

Atractylis.

A. ovata, Thunb. Chihli, Shantung, Corean Archipelago.

Carthamus.

C. tinctorius, L. Cultivated.

Saussurea.

S. Japonica, D.C. General all over China.
S. chinensis, Turcz. ?

Lactuca.

L. albiflora, Maxim. ?
L. debilis, Maxim. Central and South China.
L. stolonifera, Maxim. Shantung, Corean Archipelago.

Arctium.

A. Lappa, Linn. North and Central China.
A. Major.

Carduus crispus, Linn. Szechuen. (Faber.)

Campanulaceæ.

Lobelia radicans, Thunb. Mount Omei. (Faber.)
Wahlenbergia gracilis, A.D.C. Shanghai. (Faber.)
Adenophora remotiflora, Miq. Chihli, Shingking, Shantung.
A. Polymorpha, Ledeb. North and Central provinces.
A. verticillata, Fisch. North and Central provinces.

Ericaceæ.

Leucothœ gargana, Max.?
Rhododendron Metternichii, Z. and Z.
R. sinese, Sweet. Chekiang, Kiangsi, Hupeh.
R. indicum, Sweet. South and Central China.
Pyrola media, S. and Z.
Pieris ovalifolia, D. Don. Chekiang, Hupeh.

Primulaceæ.

Lysimachia clethroides, Duby. Shingking, Kiangsi, Hupeh.
L. sikokiana, Miq. Luchu Archipelago.

Myrsineæ.

Maesa Dorœna, Blume. Central and South.
Ardisia chinensis, Benth. Hongkong.
A. crenata, Sims. Ningpo, Fokien, Hupeh, etc.
A. japonica, Blume. Kiukiang and Ningpo. (Faber.)
A. portovum, Max.

Ebenaceæ.

Diospyros kaki, Linn. Chihli, Kiukiang, Shantung, Shensi.
D. Lotus, Linn. Chihli, Hupeh, Shantung.

Styraceæ.

Symplocos prunifolia, S. and Z. Kiukiang. (Faber.)
Styrax benzoin.
S. japonicum, S. and Z. Hupeh, Corea.
S. Obassia, S. and Z. Corea.

Oleaceæ.

Jasminum officinale, Linn.
J. Sambaca, Ait. Cultivated.
J. nudiflorum, Lindl. Chihli, Shensi.
Forsythia suspensa, Vahl. Shantung, Kansuh, Hupeh.
Fraxinus pubinervis, Blume.
Osmanthaus fragrans, Lour. North and Central China.
O. aquifolia, Benth.
Ligustrum japonicum, Thunb. Chihli, Kiangsu, Hongkong.
L. lucidum, Shanghai. (Faber.)

Apocynaceæ.

Tabernæmontana coronaria, R. Br.
Apocynum venetum, Linn. Chihli, Shingking, Shantung.
Trachelospermum jasminoides, Lemaire. Szechuen. (Faber.)

Asclepiadeæ.

Cynanchum caudatum, Max. Shantung.
Vincetoxicum purpurascens, Mor. and Decn.
V. stratum, M. and D.
Metaplexis Stauntoni, Roem. Shanghai. (Faber.)

Loganiaceæ.

Gelsemium elegans, Benth. Yunnan, Kwangtung, Hongkong.
Buddleia curviflora, Hook. Luchu Archipelago.
Strychnos Nux Vomica.

Gentianaceæ.

Gentiana scabra, Bunge. Kwangtung. (Faber.)
Limnantheumum nymphoides, Hoff. Shanghai, Kiangsi, Hupeh, Fokien.
L. peltatum, Gn.

Borragineæ.

Trigonotis peduncularis, Benth. Chihli to Kiangsi.
Lithospermum officinale, Linn. Chihli, Shingking, Shantung, Hupeh.

Convolvulaceæ.

Ipomœa Batatas, Lam.
I. natans.
I. aquatica, Forsk. Cultivated.
I. hededaceæ, Jacq. Shanghai. (Faber.)
Convolvulus japonicus, Thunb.
Cuscuta japonica, Choisy. Chihli, Hupeh, Hongkong.

Solanaceæ.

Solanum Dulcamara, Linn. Chihli to Kwangtung.
S. Melongena, Linn.
S. nigrum, Linn. General all over China.
Lycium sinensis, Mill. General all over China.
Datura alba, Nees. South China.
Scopolia japonica, Maxim. Corea.

Scrophularineæ.

Scrophularia Oldhami, Oliver. Chihli.
Paulownia imperialis, Sieb. and Zucc. Chekiang, Hupeh.
Mazus rugosas, Lour. Kiukiang. (Faber.)
Rehmannia glutinosa, Lib. Chihli, Chekiang.
Veronica agrestis, Linn. Kiukiang. (Faber.)
Siphonostegia chinensis, Benth. Common all over China.
Pedicularis resupinata, Linn. North and Central China.

Orobanchaceæ.

Orobanche anmaphila, Mey. Chihli, Shantung.

Bignoniaceæ.

Catalpa Kæmpferi, Sieb. and Zucc.
Incarvillea sp.

Pedalineæ.

Sesamum indicum, Linn.

Verbenaceæ.

Verbena officinalis, Linn. Common all over China.
Callicarpa mollis, Sieb. and Zucc. Corea.
Vitex negundo, Linn. Common all over China.
Clerodendron squamatum, Vahl. Chungking. (Faber.)
Porphyra coccinea.

Labiatæ.

Elsholtzia cristata, Wild. Chihli and Corea to Hupeh and Kiangsi.
Perila ocymoides, Linn. Shanghai. (Faber.)
Mentha arvensis, Linn. Common all over China.
Mosla grosseserrata, Maxim. Kiangsu.
M. punctata. Ningpo. (Faber.)
Salvia multiorrhiza, Bunge. North and Central Provinces.
S. japonica, Thunb. Common all over China.
Lopanthus rugosus, Fisch. Mount Omei. (Faber.)
Scutellaria baikalensis, Georgi. Chihli, Shantung.
Stachys aspera, Mick. Shanghai. (Faber.)
Leonurus macranthus, Maxim. Chefoo. (Faber.)
L. sibiricus, Linn. Common all over China.
Teucrium stoloniferum, Roxb. Ningpo. (Faber.)
Ajuga sinnuata.
Rosmarinus officinalis, Linn. Cultivated.

MONOCHLAMYDEÆ.

Amarantaceæ.

Celosia argentea, Linn. South and Central China.
Amarantus Blitum, Linn. North and Central China.
A. spinosus, Linn. South China.
A. melancholius, Var. rubra.
Achyranthes bidentata, Blume. Ningpo. (Faber.)

Chenopodiaceæ.

Chenopodium sp.
Kockia scoparia, Schard. Shanghai. (Faber.)

Polygonaceæ.

Polygonatum.
Polygonum aviculare, Linn. North and Central China.
P. Bistorta, Linn. North China.
P. cuspidatum, Sieb. and Zucc. Central Provinces.
P. cymosum, Trevir. North and Central China.
P. Fagopyrum, L. Cultivated.
P. multiflorum, Thunb.
P. Thunbergii, Sieb. and Zucc. Ningpo.
P. Thunbergii, Sieb. and Zucc. Ningpo. (Faber.)
P. tinctorium, Lour. Szechuen. (Faber.)
P. virginianum, Linn. (*P. filiforme.*) Kwang-tung. (Faber.)
Rheum officinale, Bail. Hupeh.
Rumex Acetosa, Linn. Shanghai. (Faber.)
R. crispus, Linn. (*A. japonicus.*) Chungking. (Faber.)

Aristolochiaceæ.

Asarum Forbesi, Maxim. (*A. Blumei.*) Chekiang.
A. Sieboldi, Miq. Shingking, Corea, Hupeh.
Aristolochia debilis, S. and Z. Kiangsi, Hupeh.

Piperaceæ.

Saururus Loureiri, Decne. Central and South.
Piper longum.
P. sarmentosum, Roxb. (*Chavica Betle.*) South China.

Thymelæaceæ.

Daphne Genkwa, S. and Z. Shantung. (Faber.)
D. odora, Thunb. Chekiang. (Faber.)
Edgeworthia Gardneri, Mesin. (*G. papyrifera.*) Central China.
Wikstræmia sp.
Aquilaria agallochia, Roxb.

Elægnaceæ.

Elægnus multiflora, Thunb. (*E. longipes.*) Kiukiang. (Faber.)

Loranthaceæ.

Loranthus Yadorki, S. and Z. Mount Omei. (Faber.)

Santalaceæ.

Buckleya.
B. lanceolata, Miq.

Balanophoreæ.

Balanophorea sp.

Euphorbiaceæ.

Euphorbia humifusa? Willd. Chihli and Shingking to Hupeh and Formosa.
E. pekinensis, Rupr. (*E. lasiocaula.*) Ningpo. (Faber.)
E. sieboldiana.
E. teliosopia.
Buxus chinensis, Link.
Phyllanthus sp.
Antidesma Bunius, Spreng. Kwangtung, Hongkong.
Aleurites cordata, Steud. Central and South China.
A. triloba, Forst.
Croton Tiglium, Linn. Szechuen. (Faber.)
Mercurialis leiocarpa, S. and Z. Hupeh and Corea.
Ricinus communis, Linn.

Urctiaceæ.

Ulmus campestris, Linn. North and Central Provinces.
Zelkova acuminata, Planch. (*Z. Keaki.*) Shanghai. (Faber.)
Humulus japonicus, S. and Z. Ningpo. (Faber.)
Cannabis sativa, Linn. North and Central China.
Broussonetia papyrifera, V. Chekiang. (Faber.)
Morus alba, Linn. North and Central Provinces.
Ficus Carica, Linn.
F. chlorocarpa, Benth. Kwangtung, Hongkong.
F. erecta, Thunb. Common all over.
F. pumila, Linn. South and Central China.
F. retusa, Linn. South Provinces.
Artocarpus integrifolia, Linn. Hongkong, Hainan.
Conocephalus conica.
Urtica Thunbergiana, S. and Z. Hupeh, Yunnan.
Pilea sp.
Bœhmeria nivea, Goud. South and Central Provinces.

Juglandaceæ.

Juglans regia, Linn. Shantung, Kiangsu, Yunnan.
J. sieboldiana.

Myricaceæ.

Myrica rubra, S. and Z. (*M. sapid.*) South Provinces.

Cupiliferæ.

Betula alba, Linn. Chihli.
Corylus heterophyla, Fisch. North Provinces.
Quercus dentata, Thunb. North Provinces.
Q. glauca, Thunb. Central Provinces.
Q. serrata, Thunb. Central Provinces.
Castanea sativa, Mill. (*C. vulgaris.*) Ningpo. (Faber.)
Gagus sp.

Salicaceæ.

Salix purpurea, Linn. North China.
Populus alba, Linn. North China.
P. balsamifera, Linn. Kansuh.

Coniferæ.

Cupressus funebris, Endl. North and Central Provinces.
Juniperus chinensis, Linn. North and Central Provinces.
Glyptostrobus heterophyllus, Endl. Canton.
Cunninghamia sinensis, R. Br. Mount Omei. (Faber.)
Pinus Bungeana, Zucc. North and Central Provinces.
P. massoniana, Lambert. Common all over China.
Abeis firma, S. and Z. Shensi, Yunnan, Corea.
Pseudolarix Fortunei, Mayr. (*Larix leptolepis.*) Chekiang, Kiangsi.
Torreya nucifera, S. and Z. Hupeh, Szechuen.
Ginkgo biloba, Linn. (*Salisburia adiantifolia.*) North and Central Provinces.

Cycadaceæ.

Cycas revoluta, Thunb. South China.

MONOCOTYLEDONS.

Hydrocharidaceæ.

Vallisneria spiralis, Linn. Chihli, Kiangsu.

Orchidaceæ.

Bletia hyacinthina, R. Br. Mount Omei. (Faber.)
Cymbidium ensifolium, Sw. Kwangtung, Hongkong.
Luisia teres, Blume. Szechuen.
Habenaria sagittifera, Reichb. Ningpo. (Faber.)
Angræcum falcatum, Lindl. Chekiang, Ningpo.

Scitamineæ.

Kæmpferia Galanga, Linn. Kwangtung.
K. pandurata, Roxb.
Curcuma Longa, Linn. Formosa.
Zingiber Mioga, Roxb.
Z. officinale, Roxb. Formosa.
Alpinia officinarum, Hance. Hainan.
A. globosa, Horan.

Hæmodoraceæ.

Liriope spicata, Lour. (*Ophiopogon spicatus.*) Common all over China.

Irideæ.

Iris ensata, Thunb. North Provinces.
Belamcanda punctata, B. (*Chinensis* and *Pardanthus Chinensis.*) Central and South Provinces.

Amaryllideæ.

Hypoxis aurea, Lour. Hupeh, Fokien, Kwangtung.
Narcissus Tazetta var. Chinensis. M. Roen. Chihli, Shantung, Kiangsu.

Dioscoreaceæ.

Dioscorea japonica, Thunb. Ningpo. (Faber.)
D. quinqueloba, Thunb. Chihli, Hupeh, etc.

Roxburghiaceæ.

Stemona tuberosa, Lour. Fokien, Hupeh, Formosa.

Liliaceæ.

Smilax China, Linn. Chefoo and Mount Omei. (Faber.)
Asparagus gibbus, Bunge. North Provinces.
A. lucidus, Linn. Central and South Provinces.
Polygonatum latifolium, Var. commutatum, Baker. (*P. canaliculatum*)—(*P. giganteum.*) Corea.
P. officinale, Allioni. (*P. vulgare.*) North and Central Provinces.
Reineckia carnea, Kunth. Mount Omei. (Faber.)
Hemerocallis flava, Linn. North and Central Provinces.
H. minor, Mill. (*H. graminea.*) North and Central Provinces.
Funkia subcordata, Spreng. North and Central China.
Aloe vulgaris?
Cordyline terminalis, Var. ferra, Baker. (*C. jacquinii.*) Kwangtung.
Anemarrhena asphodeloides, Bunge. Chihli.
Allium Cepa, Linn.
A. odorum, Linn. (*A. tuberosum.*) Shanghai. (Faber.)
A. japonicum, Regel. Chefoo.
A. sativum, Linn.
Lilium concolor, Salis. North and Central Provinces.
Fritillaria Souliei, Franch. Szechuen.
Tulipa edulis, Baker. Central Provinces.
Tricyrtis hirta, Sieb. and Zucc.

Paris polyphylla, Sm. Kiukiang. (Faber.)
Veratrum album, Linn. Mount Omei. (Faber.)
V. nigrum, Linn. North and Central China.

Pontederiaceæ.

Monochoria vaginalis, Presl. Mount Omei. (Faber.)
Juncus effusus, Linn. Common all over.
J. communis.

Palmœ.

Areca Catechu, Willd. Hainan, Formosa.
Caryota sp.
Trachycarpus excelsus, H. Wendl. Central and South Provinces.
Calamus.
Cocos nucifera.

Typhaceæ.

Typha orientalis, Presl. (*T. japonica.*) Chihli, Hupeh.

Aroideæ.

Arisæma heterophyllum, Blume. Chekiang. (Faber.)
A. Thunbergii, Blume. Hupeh, Corea.
A. suratum, Thunb.
Amorphophallus sp.
Colocasia antiquorum, Schott. Kiukiang, Szechuen.
Acorus Calamus, Linn. Shanghai, Ichang.
A. gramineus, Ait. Mount Omei. (Faber.)

Lemnaceæ.

Lemna triscula.

Alismaceœ.

Alisma Plantago, Linn. Chihli, Shingking, Shantung.
Sagittaria sagittifolia, Linn. Szechuen. (Faber.)

Naiadaceæ.

Potamogeton polygonifolius, Pour. Chihli, Shantung.

Cyperaceæ.

Cyperus rotundus, Linn. Ningpo. (Faber.)

Scirpus cyperinus.

S. lacustris, Linn. Common all over.

S. tuberosus.

Carex macrocephala, Spreng. Chekiang. (Faber.)

C. pachygyna.

Gramineæ.

Digitaria sanguinalis, Scop. (*Panicum sanguinale.*) Ningpo. (Faber.)

Panicum Crus Galli, Linn. Shanghai. (Faber.)

Var. frumentaceum, Trimen. Szechuen. (Faber.)

P. miliaceum, Linn. Cultivated in the North and Central Provinces.

Setaria italica (*Panicum italicum.*) Kweichau. (Faber.)

Zoysia pungens, Willd. Central and South Provinces.

Oryza sativa, Linn. (*O. glutinosa.*) Cultivated all over China.

Zizania aquatica, Linn. Chihli, Kwangtung.

Coix Lachryma-Jobi, Linn. Cultivated.

Zea Mays, Linn. Ningpo. (Faber.)

Imperata arundinaceæ, Cyrill. Common all over China.

Saccharum officinarum, Linn. South Provinces.

Pollinia nuda, Trin. (*P. japonica*, Miq.) Luchu.

Heteropogon contortus, Beauv. (*H. hirtus.*) Hupeh, Hongkong.

Sorghum vulgare, Pers. Shanghai. (Faber.)

Sorghum var. glutinosa.
S. "Black variety."
S. "Yellow variety."
Phalaris arundinaceæ, Linn. Chekiang, Ningpo, Shanghai. (Faber.)
Hierochlœ borealis, L. Tientae mountains, Chekiang. (Faber.)
Alopecurus æqualis, Soliol. (*A. geniculatus.*) Shanghai. (Faber.)
Lophatherum gracilis, Ron. (*L. elatum.*) Ningpo. (Faber.)
Beckmannia erucæformis, Host. North and Central Provinces.
Eleusine coracana, Gaertn. South Provinces.
Bromus japonicus, Thunb. Nanking. (Faber.)
Phyllostachys bambusoides, Sieb. and Zucc. Fokien, Hupeh.
P. aurea, A. and C. Rivière. (*Bambusa aurea*) *Bambusa latifolia.*
Arundinaria pygmæa, Kurz. (*Bambusa pygmæa*).
Nardus indicus.
Hordeum vulgare.
Triticum sativa.
T. vulgare.

CRYPTOGAMS.

Filices.

Adiantum sp.
Aspidium lacerum.
Davallia tenuifolia, Sw.
Drymoglossum carnossum, Hook.
Gymnograme japonica, Hook.

Gymnogramme pinnulata.
Lomaria sp.
Osmunda regalis, Linn.
Polypodium Fortunei.
P. Lingua? Kze.
Pteris Aquilina, Linn.
Woodwardia radicans.
Botrychium sp.

Equisetaceæ.

Equisetum hyemale.
E. ramossissimum, Desf.

Lycopodiaceæ.

Lycopodium Sieboldi.

Selaginellaceæ.

Selaginella kraussiana, A. Br.
S. involvens, Spring.
Isoetes japonica.

Marsileacea.

Marsilea quadrifolia?

Fungi.

Algæ.
Hepatica.
Agaricus Fungi.
Lycopedron bovista.
Peziza namune?
Polyporus japonica.

Alphabetical List of Plants.

[*For Classification see p. 99.*]

A

Abies firma, S. and Z.	樅
Abrus precatorius, L.	相思子
Abutilon avicennæ.	檾麻
Acanthacea.	蓁艽
Acer trifidum, Th.	三角風
Acer palmatum, Th.	槭
Achyranthes bidentata, Bl.	牛膝
Aconitum.	天雄草
Aconitum fischeri, Reich.	附子, 烏頭, 白附子.
Acorus.	蘋, 薡董
Acorus calamus, L.	菖蒲
Acorus graminius, Ait.	雀舌草
Actinidia chinensis, Pl.	萇楚, 羊桃
Actinidia polygama, Pl.	木天蓼
Adenophora.	薺苨
Adenophora polymorpha, Ledel.	杏葉沙參
Adenophora remotiflora, Miq.	薺苨
Adenophora verticillata.	沙參
Adiantum.	石長生
Adiantum flabellulatum, L.	鐵線草
Adonis amurensis, Reg.	側金盞
Agaricus.	土茵, 中馗茵, 地蕈, [雷蕈
Ailanthus glandulosa, Desf.	樗, 山樗
Ajuga sinuata, Fr. and S.	金瘡小草
Albizzia julibrissin (Bois), Durozz.	合歡
Albizzia Lebbek, Bth.	有情樹, 夜合

Aleuritis cordata, Dl.	岡桐, 罌子桐
Aleuritis triloba, Forst.	石栗
Algæ.	石蕊, 海根, 龍舌草,
Algæ, Saryassum sili quastrum, Agaritt.	海藻 [垣衣屋遊
Alisma plantago, L. 4 fig.	澤瀉
Allium ascalonicum.	薤
Allium cepa, L.	葱
Allium japonicum, Reg.	諸葛韭, 山韭
Allium tuberosum, Reg.	韭
Allium sativum, L. S.	蒜, 水葱
Alliaria (Entruna) wasahi, Prentt.	葎菜
Alocasia macrorhiza, Schott.	海芋
Aloe vulgaris, Lam.	盧會
Alopecurus æqualis, L.	看麥娘
Alpinia globosa.	豆蔻
Alpinia officinarum, Hce.	山薑
Althæa rosea, Cor.	蜀葵
Amarantus blitum, L.	莧菜
Amarantus spinosus.	刺莧
Amarantus melancholicus, L. Var. tricolor, Lam.	老少年
Amelandun asiatica, Koch ?	移楊
Amomum amarum.	益智
Amomum cardamonum, L.	白豆蔻
Amomum melancholicus, S. Var.	老少年
Amomum mioga, Th.	蘘荷
Amomum xanthioides, Wall.	縮砂蜜
Amorphallus, Schott.	蒟蒻
	綟木
Anemarrhena asphodeloides, Bge.	知母
Anemone.	白頭翁
Anemone japonica, S. and Z.	秋牡丹
Angelica.	都管草

Angelica anomala, Pall.	白芷
Angelica decursiva, Bth.	前胡
Angelica kiusiana, Max.	獨草
Angræcum falcatum, B. and H.	風蘭
Anisonia elliptica?	水甘草
Anplia?	都管草
Antidesnea bunius, Sp.	五味子
Apocynum venetum, L.	澤漆
Aquilaria agallocha, Roxb. (Thym)	蜜香樹
Aralia cordata, Th.	土當歸
Aralia quinquefolia.	人參
Aralia spinosa, L. Var. canesceus, S. & Z.	楤木
Arctium major, Gaertn.	牛蒡
Ardisia crispa, A. Dl. chinensis.	硃砂根
Ardisia japonica, Bl.	紫金牛
Ardisia portovum, Max.	百兩金
Areca catechu, L.	檳榔
Arisæma, diff. sp.	天南星
Arisæma heterophyllum, Bl.	鬼臼
Arisæma suratum, Th.	攀倒甑
Arisæma thunbergii, Bl. Var.	虎掌草
Aristolochia ichilis, S. and Z.	馬鈴
Artabotrys adoratissima, R. Br.	鷹爪花
Artemisia.	著，野蓬蒿
Artemisia anapholis.	荻蒿
Artemisia anuna, L.	黃花蒿
Artemisia aperacca.	青蒿
Artemisia capillaris, Th.	茵蔯蒿
Artemisia giloesceus, Mig.	蔞蒿
Artemisia indica, Max.	艾
Artemisia japonicum.	牡蒿
Artemisia keiskiana, Mig.	茵蔯

Artemisia vulgaris, L.	千年艾
Artocarpus integrifolia, L.	波羅蜜
Arundinaria pygmœa.	黃金間碧玉竹
Asafœtida, Indian and Mongol names.	阿魏
Asarum forbesi.	杜衡
Asarum sieboldi, Mig. 3 fig.	細辛
Asparagus gibbus, Bge.	龍鬚草
Asparagus lucidus.	天門冬
Aspidium lacerum.	緜馬
Aspidium lacerum, Sw.	緜馬
Aster.	馬攔頭
Aster fastigiatus, Fr.	女蔎
Aster tataricus, L.	紫菀
Aster trinevius, Roxb.	馬蘭
Astilbe chinensis, Max., etc.	升麻
Astragalus hoangtchy, Fr. ?	黃蓍
Atractylis ovata, Th.	朮
Averrhoa carambola, L.	五歛子
Azalea indica, L.	杜鵑

B

Bæckia frutescens, L.	香草, 薰草
Balanophera, sp.	鑽陽
Balsamodendron myrrha ?	沒藥
Bamboo sprouts.	筍
Bambusa.	籣, 竹
Bambusa aurea, S.	凰尾竹
Bambusa latifolia.	箬
Bambusæ sprouts.	竹笋
Barella subra, L. ?	蔣蒭
Bean sprouts.	豆芽
Beckmannia erucæformis, Host.	茵草
Begonia Discolor, R. Br.	秋海常

Belamcanda chinensis, Lam.	射千篇竹
Belamcanda punctata.	射千
Benincasa cerifera, Savi.	冬瓜
Berberis nepalensis, sp.	黃芩
Berberis thunbergii, Dl.	小檗
Beta vulgaris.	恭菜, 着蓮, 甜菜
Betula alba, L.	樺木
Bidens parviflora, Willd.	鬼緘草
Bidens tripartita, L.	狼杷草
Bletia hyacinthina, R. Br.	白及
Blumea balsamifera, Dl.	艾納香
Bocconia cordata, Willd.	博落廻
Boehmeria nivea, Hk. Arn.	苧麻
Bosirellia, sacra.	乳香
Botrychium.	陰地厥
Brassica.	白菜, 芥菜, 塌科菜,
Brassica ceruna, Th.	芥 [擘藍, 芥藍
Brassica chinensis, L.	芸薹菜
Brassica juncea.	油菜, 烏菘
Brassica rapa, L.	雪裏蕻, 蔓菁
Brassica sinapis.	芥
Bromelia ananas, L.	波羅花
Bromus japonicus, Th.	雀麥, 燕麥
Broussonetia papyrifera, Vent.	楮, 穀樹
Bucetoxicum atralum, Morr. Dce.	白前
Buckleya lanceolata, Miq.	都念子
Buddleia curviflora, Hk.	醉魚草
Buds of magnolia.	辛夷
Bupleurum falcatum, L. 4 fig.	柴胡
Buxus sempervirens, L. Var. microphylla, H. F.	黃楊

C

Cæsalpinia minax, Hce. Seeds.	石蓮
Cæsalpinia Sappan.	蘇枋
Cæsalpinia sepiaria, Roxb.	雲實, 倒掛藤, 馬豆
Cajanus.	解毒子
Cajanus indicus, Sp.	木豆, 山豆根
Calamus draks, Willd. (Palm.)?	麒麟竭
Calendula officinalis, L.	金盞草
Callicarpa mollis, S. and Z.	白棠子樹
Callistephus chinensis, Nees.	翠菊
Callitriche stagnalis, Scop.	水馬齒
Camellia japonica, L.	茶花, 皐盧, 山茶
Camellia sasanqua, Th.	茶梅
Camellia thea, L.	茶
Camellia thea, L. Var. macrophylla. S.	皐蘆
Camphor.	樟腦
Canaphallus kongak, Schott.	蒟蒻
Canarium album, Raeusch.	橄欖
Canavallia ensiformis, Dl.	刀豆
Cannabis sativa, L.	大麻
Capsella bursa-pastoris, Morr.	薺菜
Capsicum longum, L.	番椒
Carduus crispus, L.	飛廉
Carex macrocephala, Willd.	薷草
Carex pachygyna, F. and S.	崖椶
Carpesium abrotanoides, L.	地葵, 天名精
Carthamus tinctorius, L.	紅花, 紅藍
Caryophyllus aromaticus, L.	丁香
Caryota.	桄榔
Cassia Sophera, L.	決明
Castanea vulgaris, Lam.	栗

Catalpa kæmpferi, S. and Z.	楸, 梓
Cedrela chinensis, Juss.	椿
Celosia argenta, L.	青葙
Celtis sinensis, Pers.	樸
Cerasus.	雀梅
Cercis chinensis, Bge.	紫荆
Chamoch tenera, Mig.	竹菜
Charica betel, Mig.	蒟醬
Chenopodium.	藜, 蔏薹, 羅漢菜, 野菠
Chenopodium album.	灰莧 [菜
Chimonanthus fragrans, Ldl.	蠟梅
Chloranthus monostachys, R. Br.	及已
Chrysanthemum sinense, Sab., etc.	菊花
Chrysanthemum coronarium, L.	蓬蒿菜, 茼蒿
Cimicifuga davurica, Max.	升麻
Citrullus vulgaris, Schrad.	西瓜
Citrus.	代橘
Citrus acida.	黎檬子
Citrus aurantium, L.	橙
Citrus decumana, L. Also Ægle.	枳
Citrus japonica, Th. Var.	金豆
Citrus japonica, Th. Var. fructuglobosa.	金橘
Citrus medica, L. Also Ægle Sepiaria, Dl.	枸橘
Citrus medica, L. Var. acida, H.K.	柚
Citrus medica, L. Var. Chirocarpus, Lour. Sacrodactylis, Gaertn.	佛手柑
Citrus medica, L. Var.	香櫞
Citrus nobilis, Lour.	柑
Clausena Wampi, Oliv.	黃皮子
Clematis.	黃藥子
Clematis florida, Th.	鐵線蓮
Clematis minor, Lour.	威靈仙

Clematis paniculata, Th.	仙人草
Clematis sinensis, Lour.	木通
Clerodendron squamatum.	臭梧桐
Cnicus nipponicus, Max.	鉤芙, 苦芙
Cnicus ovalifolius, Fr. and S.	苦芙
Cnicus spicatus, Max.	大薊
Cocos nucifera, L.	椰子
Coix lachryma, L.	薏苡
Colocasia antiquorum, Schott.	芋, 土芝
Conocephalus conica.	地錢
Convolvulus japonicus, Th.	纏枝牡丹
Coptis teeta, Wall.	黃連
Corchoropsis crenata, S. and Z.	田麻
Cordyline jacquinii, Kth.	鐵樹
Coriandrum sativum, L.	蒝荽, 胡荽, 芫荽
Cornus kousa.	四照花
Cornus officinalis, S. and Z.	山茱萸
Corydalis ambigua, Chanc. Schl.	延胡索
Corylopsis spicata, S. and Z.	蠟瓣花
Corylus heterophylla, Fisch.	榛
Cotyledon fimbriata, Turcz.	瓦松
Cratægus cuneata, S. and Z.	山裏果兒
Cratægus pinnatifida, Bge.	山楂
Croton tiglium, L.	巴豆
Cryptotænia canadensis, Dl.	當歸
Cucumis melo, L. Var.	稍瓜, 越瓜, 甜瓜, 生瓜,
Cucumis sativus, L.	黃瓜 [楚瓜, 筲瓜
Cucurbita.	瓜
Cucurbita maxima, Duch.	胡蘆, 壺蘆, 匏
Cucurbita moschata, Duch. C. Pepo, L.	南瓜, 飯瓜, 倭瓜
Cudrania triloba, Hce.	柘, 桑花
Cuninghamia sinensis, Br.	杉
Cupresus funebris, End.	柏

Curcuma longa, L.	薑黃, 鬱金
Cuscuta chinensis, Lam.	兎絲
Cuscuta japonica, Chois.	女羅
Cycas revoluta, Th.	無漏子, 鳳尾草
Cyclamen.	海芋
Cymbidium ensifolium, Sw.	蘭蕙
Cynanchum candutum, Max.	白兎薑
Cyperus Iria, L.	莎
Cyperus rotundus, L.	荊三稜, 香附子
Cytisus scoparius, Lk.	金雀

D

Dalbergia hupeana, Hce.	檀
Damnacanthus indicus, Gærtn. Anatiaspinosa, L.	虎刺
Daphne genkwa, S. and Z.	芫花, 悶頭花
Daphne odora, L.	瑞香
Daphnidium myrrha.	烏藥
Daucus carota, L.	胡蘆菔
Daucus. Wild plant.	野蘆蔔
Davallia tenuifolia, Sw.	烏韭
Datura alba, Nees.	曼陀羅
Dendrobium nobile.	石斛
Desmodium.	金錢
Deutzia sieboldiana, Max.	溲疏
Dianthus chinensis, L.	石竹
Dianthus superbus, L.	瞿麥
Dictamnus albus, L.	白鮮
Diervilla grandiflora, S. and Z.	錦帶花
Diervilla versicolor, S. and Z.	楊槲
Digitaria sanguinalis, Scop.	蕃, 馬唐
Dioscorea japonica, Th. Var. bulbifera.	黃獨, 土芋

Dioscorea quinqueloba, Th. and D.	
Dioscorea Sativa, L.	草薢
Dioscorea quinqueloba, Th.	山藥即薯蕷
Diospyrus kaki, L.	柿, 椑柿, 漆柿, 軟棗
Diospyrus lotus, L.	君遷子
Dipsacus asper, Wall.	續斷
Dolichos lablab, L.	扁豆
Dolichos umbellatus, Th.	豇豆
Draba nemoralis, L. 3 fig.	葶藶
Drymoglossum carnosum, Hk.	螺壓草

E

Echinops sphærocephalus, L.	漏盧
Eclipta alba.	鱧腸
Edgeworthia papyrifera, S. and Z.	結香
Elæagnus longipes, A. Grey.	胡頹子
Elatostemma umbellatum, Bl.	赤車使者
Eleusine coracana, Gærtn.	雞穀
Eleutherococcus heuryiolio or spinosum?	五茄
Elsholtzia cristata, Willd.	香薷
Epigæa Asiatica, Max.	山枇杷
Epimedium macranthus, M. and Dce.	淫羊草, 淫羊藿
Epiphytes.	蔚草
Eptedna vulgaris, Rich. Var. helvetica, H. R. and Thom.	麻黃
Equisetum hyemale, L. Var. jap. etc.	木賊
Equisetum romosissimum.	節草
Eragrostis ferruginea.	知風草
Erigeron acris.	蓬
Eriobotrya japonica, Lde.	枇杷
Eriocaulon, diff. sp. (Anthrosace).	穀精草

Erythrina indica, Lam.	刺桐花
Eucommia ulmoides, Oliv.	杜仲
Euonymus thunbergianus, Bge.	衛茅
Euonymus alatus, Hbg.	衛矛
Euonymus japonica.	杜仲
Eupatorium, sp.	澤蘭
Eupatorium Lindleyanum.	蘭草
Eupholia Litchi, Desf.	龍荔
Euphorbia.	蔥茹
Euphorbia humifusa, Willd.	地錦
Euphorbia lathyris, L.	續隨子, 蔥茹
Euphorbia pekinensis, Rup.	大戟
Euphorbia sieboldiana, M. and Dc.	甘遂
Euphorbia telioscopia.	五洞頭草
Euryale ferox.	蕅薟
Evodia rutæcarpa, Bth.	茱萸

F

Fagus.	棲
Fatsia papyrifera, Bth.	通脫木
Fern.	迷蒙, 蘇
Fern and Lycopodium spores.	海金沙
Ficus.	優曇鉢
Ficus carica, L.	無花果
Ficus chlorocarpa, Bth.	無花果
Ficus erecta, Th.	天仙果
Ficus pumila, Bl.	木蓮, 薜荔
Ficus retusa, L.	榕
Fœniculum.	小茴香
Fœniculum vulgare.	茴香, 蒔蘿
Forsythia suspensa.	連翹
Fragaria indica, Andr.	蛇苺

Fragaria wallichii, Fr. and S. 地楊梅
Fraxinus pubinervis, Bl. 秦皮
Fritillaria roylei, Hk., etc. 貝母
Fungus. 豬苓, 地耳
Funkia subcordata, Spreng. 玉簪

G

Galium aparine, L. 猪殃殃
Gallia japonica, Harnst. (Commel.) 杜若
Galls of Celtis sinensis. 木桃兒樹
Garcinia morella (Siam). 藤黃
Gardenia florida, L. 卮子
Gastrodia elata, Bl. 赤箭, 天麻
Gelseminum elegans, Bth. 鉤吻
Gemu jap., Th. 水楊梅
Gentiana scabra, Bge. 龍胆
Geranium nepalense, Lor. 牛扁
Gleditschia. 皂角
Glycine hispida, Max. 黃豆, 大豆
Glycine soja, S. and Z. 穭豆, 蹲豆
Glycyrrhiza echinata, glabra, etc. 3 fig. 甘草
Glyptostrobus heterophyllus, Endl. (Taxodium). 水松
Gnaphalium. 尝
Gnaphalium multiceps, Wall. 鼠麴草
Gomphrena globosa, L. 百日紅
Gossypium herbaceum, L. 棉花, 枲之屬
Gymnogongrus pinnulata, Havey. (Algæ). 鹿角菜
Gymnogramme jap., Desf. 蛇眼草
Gymnothrix. 稂
Gynocardia odorata (fr. Siam) (Bixin) R. Br. 大風子
Gynura pinnatifida, Dl. 三七

H

Habenaria sagittifera.	鷺毛玉鳳花
Hamamelis japonica, S. and Z.	金縷梅
Hattymenia dentata, S. and Z.	鶏足草
Hemerocallis flava, L.	黃花菜, 鹿葱
Hemerocallis minor, Mill.	萱花
Hepatica.	地衣
Heteropogon contortus.	地筋
Hibiscus mutabilis, L.	木芙蓉
Hibiscus mutabilis, L.	秋葵
Hibiscus rosa sinensis, L.	扶桑
Hibiscus syriacus, L.	木槿
Hierochlœ borealis, Rom. and Sch.	白茅香
Hordeum vulgare, L.	大麥
Hovenia dulcis, Th.	雞距, 枳椇, 樹蜜, 金鉤
Humulus japonica, S. and Z.	葎草 [子
Hydrocotyle asiatica, L. Fig. diff.	積雪
Hypericum.	金絲
Hypericum chinense, L.	金絲桃
Hypoxis aurea, Lour.	仙茅

I

Ilex pedunculosa, ollig Ligustrum lucidum.	冬青
Ilex latifolia, Th.	天師栗, 波羅樹
Illicium religiosum, S. and Z.	莽草
Impatiens balsamina, L.	指甲花, 鳳仙
Imperata arundinacea, Cyr.	茅
Incarvilla.	角, 蒿
Indigofera tinctoria, L.	大青
Institia procumbens.	爵狀
Ipomœa aquatica, For.	蕹菜

Ipomœa batatas, Lam.	甘藷
Ipomœa batatas, Lam. Bat. edulis, Chois.	山芋
Ipomœa natans, Pau.	蓊菜
Iris ensata, var. chinensis, Max.	蠡實
Isatis japonica, A. Br.	水韭
Ixora.	胡黃連
Ixora stricta, Roxb.	賣子木

J

Jasminum nudiflorum.	迎春
Jasminum officinale, L.	素馨
	茉莉
Jasminum sambaca, Ait.	三白草
Juglans regia, L., Var-sinensis, Lanch.	核桃
Juglans sieboldiana, Max.	山胡桃
Juncus communis, E. Meg. Var. effusus	燈心草
Juncus.	夫王
Juncus effusus, L.	燈心草
Juniperus chinensis.	檜

K

Kæmpferia.	山奈
Kæmpferia Galanga, L.	三賴草
Kæmpferia pundurata, Roxb.	遂菽茂
Kerria japonica, Dl.	棠棣
Kochia scoparia, Schrad.	地膚, 荄
Koelreuteria paniculata.	欒華

L

Lactuca albiflora, Max.	生菜, 白苣
Lactuca debilis, Maxim.	剪力股

Lactuca sativa, L.	萵苣 苦菜
Lactuca stolonifera, Max.	胡黃連
Lagenaria vulgaris.	壺盧
Lagerstrœmia indica, L.	紫薇, 枸那花
Laminaria saccharina, Lam.	綸
Laptantus sugorus, Fisch.	藿香
Larix leptolepis, Good.	落葉松
Lemna trisulca, L.	苔
Leonurus macranthus, Max.	蟹菜
Leonurus sibiricus, L.	益母草
Leucothoe gragana, Max.	水蔡蘆
Ligustrum.	杻
Ligustrum japonicum, Th.	女貞
Ligustrum lucidum, Ait.	女貞
Lilium.	百合花
Lilium concolor, Salisb.	山丹
Limnanthemum nymphoides, Sk.	荇
Limnanthemum peltatum, Gr.	灰藋
Lindera strychnifolia.	烏藥
Linum perenne, L.	亞麻
Linum usitatissimum, L.	脂麻
Liquidambar.	楓香
Liquidambar formosana, Hce.	山楸
Lithospermum officinale, L.	紫草
Livistonia chinensis, Br.	蒲葵
Lobelia radicans, Th.	半邊蓮
Lonicera gracilipes, Mig.	驢駝布袋
Lonicera japonica, Th., etc.	金銀藤
Lophanthus rugosus, T. and Mag.	藿香
Lophaternum elatum, Zoll.	淡竹葉
Loranthus, Viscum.	松蘿
Loranthus yadoriki, Sieb.	桑寄生

Lotus corniculatus, L. 百脉根
Luffa acutangula, Sw. 絲瓜
Luffa cylindrica, Röm. 絲瓜
Luisia teres, Bl. 釵子股
Lychnis. 虞美人, 剪草
Lychnis grandiflora, jap. 剪春羅
Lychnis semo, S. and Z. 剪秋羅
Lycium sinense, Mill. 枸杞
Lycoperdon borista, L. 馬勃
Lycopersium esculentum. 蕃柿, 六月柿
Lycopodium sieboldi, Mig. 仙人綰
Lycoris radiata, Herb. 石蒜
Lysimachia eleutheroides, Duby. 珍珠菜
Lysimachia sikokiana, Mig. 排草

M

Mæsa doræna, Bl. 杜莖山
Magnolia conspicua, Salisb. Buds. 辛夷
Magnolia conspicua, Salisb. Tree. 玉蘭
Magnolia fuscata, Andr. 含笑
Magnolia hypoleuca, S. and Z. 厚朴
Magnolia obovata, Th. 木蘭
Malva sylvetris, L. 錦葵
Malva verticillata. Amarantus Blitum, L. 天葵, 莧
Manna. 甘露子
Marlea begoniæfolia, Roxb. The root. 白龍鬚
Marlea begoniæfolia. 大空
Marlea plantanifolia, S. and Z. 大空
Marsilea quadrifolia, L. 蘋
Matthiola incana, R. Br. 紫羅蘭

Mazus rugosus, Var. Macranthus, Tr. S.	通泉草
Medicago denticulata.	草頭, 金花菜
Medicago lupulina, L.	牛芸草, 黃華
Medicago sativa, L.	茵蓿
Melia azedarach, L.	苦連樹, 楝花
Menispernum dahurium, Dl.	防已
Mentha arvensis, L. Var. vulgaris, Bth.	薄荷
Mercurialis leiocarpa, S. and Z.	透骨草
Metaplexis Stauntonii, Kæm. and Sch.	芄蘭
Micium anisatum, L.	八角茴香
Mirabilis jalapa, L.	火炭母草, 臙脂, 紫茉莉, 火炭子
Mœnschinidium verticellatum, F. and L.	徐長卿
Momordica balsamina.	錦荔子
Momordica charantia, L.	苦瓜俗名, 錦荔子
Momordica cochinchinensis, Sp.	木鱉子
Monochoria korsakowii, Reg.	萍
Monochoria vaginalis, Presl.	浮薔, 鴨舌草
Morus alba, L.	桑
Morus alba. Fruit.	桑椹
Mosla grosseserrata, Max.	薺薴
Mosla punctata, Max.	石薺薴
Murraya exotica, L.	九里香草
Musa sapientum, L.	芭蕉
Muscus.	垣衣
Myrica rubra, Sand.	楊梅
Myriogyne minuta, Less.	石胡荽
Myriophyllum.	石帆
Myriophyllum spicatum, L.	藻
Myriophyllum verticillatum, L.	牛尾瘟
Myristica fragrans, Houtt.	肉豆蔻
Myristica moschata.	肉豆蔻

N

Nandina domestica, Th.	南燭, 天竺
Narcissus tazetta, L.	水仙花
Nardus indica, L.	甘松香
Nathosmyrnicum japon., Mig. (Neub)	檮本
Nelumbium speciosum, L.	荷花, 蓮
Nephelium lapacum, L.	韶子
Nephelium lichi, Camb.	荔子
Nephelium longana, Camb.	龍眼
Nicotiana tabacum, L.	烟草
Nucavia rhynchophylla, Mig.	鉤藤
Nuphar jap., Dl.	萍蓬草

O

Oak galls.	無食子
Oenantha stolonifera, Dl.	芹
Olea aquifolium, S. and Z.	枸骨
Omithia (tulipa) edulis, Mig.	金燈
Ophiopogon spicatus, Gaertn. Communis, Max.	麥門冬
Opuntia ficus, L.	仙人掌
Orange peel.	橘皮, 陳皮
Orixa japonica, Th.	常山
Orobanche ammophila, Meg.	肉蓯蓉, 列當
Oryza sativa, L.	糯稻 稻, 秔稻
Osmanthus fragrans, Lour.	桂, 木樨
Osmunda regalis, L.	猫耳朵
Oxalis corniculata, L.	酢漿

P

Pæonia albiflora, Pall.	芍藥
Pæonia moutan, Sims.	牡丹
Pachyma cocos, Fries.	茯苓
Panicum crusgalli, Beans.	水稗草, 柿稗
Panicum frumenticcum, Roxb.	穄子
	粱
Panicum Mil, L.	稷
Panicum miliaceum, L.	黃穄
Panicum suitiaceum, L. Var. Glutinosa.	黍
Papaver rhœas, L.	麗春花
Papaver somniferum.	罌粟花
Paris polyphylla, Cham.	蚤體
Parmelia, Sp.	石耳
Passiflora cœrulea, L.	西番蓮
Paterium officinale, L.	地榆
Patrinia scabiosæfolia, Lk.	苦蕺, 敗醬
Paulownia imperialis, S. and Z.	桐
Pedicularis resupinata, L.	馬先蒿
Perilla ocymoides, L.	紫蘇
Perrea namune, Oliv.	栟
Peucedanum decursivum, Max.	前胡, 獨活
Peucedanum japonicum, Th.	防葵
Peziza auricula, L.	木耳
Phabitis hederacea, Chy.	牽牛
Phalaris arundinacea, L.	藕蘿
Phaseolus.	紫羅豆
Phaseolus radiatus, L.	赤小豆, 菉豆
Phatinia.	醋林子

Phragmites communis, Trin.	蘆
Phyllanthus.	餘甘子
Phyllostachys bambusoides, S. and Z.	紫竹
Physalis alkekengi, L.	酸漿
Phytolacca acinosa, Roxb.	商陸
Pilea.	水英
Pinellia tuberifera, Tenore.	半夏
Pinus bungeana.	白松, 栘松
Pinus massoniana, Lamb.	松子
Piper foriqu.	胡椒
Pipet longum, L.	蓽菱
Pieris ovalifolia, D. Don.	綟木
Pistacia chinensis, Bge.	楝
Pistacia vera, L.	胡榛子, 阿月渾子
Pistosporum tobira, Ait.	折桐
Pisum sativum, L.	豌豆, 小寒, 戎菽
Plantago major, L.	車前
Platycodon grandiflorum, A. Dc.	桔梗
Platycarya strobilacea, S. and Z.	櫰木, 櫰香, 兜婁, 婆香
Poberisun officinale, L.	地榆
Podocarpus macrophylla.	羅漢木
Podocarpus nageia, R. Br.	竹柏
Pogonia ophioglossoides, Mitt.	朱蘭
Pollia japonica, Hornst.	杜若, 土鹵杜衡
Polyanthus tuberosus.	晚香玉
Polygala japonica, Hornst.	遠志
Polygala ricini, Tr. and Sev.	巴戟天
Polygonatum (11 figs.) canaliculatum, Pursh.	黃精
Polygonatum giganteum, Dce. Tr.	萑精
Polygonatum officinale, All.	葳蕤
Polygonatum vulgare, Desf.	萎蕤
Polygonum.	藍

Polygonum aviculare, L.	萹蓄
Polygonum bistorta, L.	紫參, 拳參
Polygonum cuspidatum, S. and Z.	小山藥, 虎杖
Polygonum cymosum, Fr.	赤地利
Polygonum, diff. sp.	蓼花
Polygonum fagopyrum, L.	蕎麥
Polygonum filiforma, Th.	金絲草
Polygonum jap., Meisn.	蠶繭草
Polygonum multiflorum, Th.	蛇繭草,何首烏
Polygonum tartaricum, L.	苦蕎麥
Polygonum thunbergii, S. and Z.	苦蕎麥
Polypodium fortunei, Kze.	骨碎補
Polypodium lingua, Sw.	石韋, 金星草
Polypodium.	金星草
Polyporus jap.	芝
Populus alba, L.	白楊
Populus balsamifera, L. Var. genuine, Wesm.	海桐
Porphyra coccinea, J. Ag. (Algæ.)	紫菜
Portulacea abocia, L.	馬齒莧
Potamogeton polygonifolius, Pours.	眼子菜
Potentilla cryptotænia, Max.	狼牙
Potentilla discolor, Bge.	翻白草
Potentilla wallichiana, Dl.	蛇含
Prunella vulgaris.	夏枯草
Prunus, S. and Z.	梅
Prunus armeniaca, L.	杏花
Prunus japonica, Th.	常棣花, 郁李, 栒木
Prunus munu, S. and Z.	梅花, 紅梅
Prunus persica.	桃花
Prunus pseudocerasus, Lde.	櫻桃花
Prunus spinulosa, S. and Z.	櫻木
Prunus tomentosa, Th.	梅桃
Prunus triflora, Roxb.	李花

Psoralea corylifolia, L.	補骨脂
Pteris.	紅茂草
Pteris aquilina, L.	蕨
Pterocarpus hupeana, Hce.	紫檀
Pterocarpus indicus, Willd.	黃檗
Pterocarpus santalinus, L.	紫檀
Pueraria thunbergiana, Bth.	鐵葛
Punica granatum, L.	石榴花, 安石榴
Pyrola media, Sw.	鹿蹄草
Pyrus.	迷穀
Pyrus betulæfolia, Bge.	棠黎花
Pyrus cathayensis, Hce.	木瓜
Pyrus cydonia, L.	榲桲
Pyrus malus, L., var. tomentosa, Roch.	花紅, 林禽, 來禽柰
Pyrus pygmæa, Max.	櫙
Pyrus sambucifolia, Ch. and Schl.	闢天竹
Pyrus sinensis.	禎櫨
Pyrus sinensis, Ldl.	梨花, 沙棠
Pyrus spectabilis, Ait.	海棠, 海紅
Pyrus tomentosa, Roch.	林禽, 來禽

Q

Quercus.	石岡橡, 柯樹
Quercus dentata, Th.	櫟
Quercus glauca, Th.	櫧
Quercus serrata, Th.	櫟
Quisqualis indica, L.	使君子

R

Ranunculus.	野芹菜,狼毒
Ranunculus acris, L.	毛茛
Ranunculus sceleratus, L.	苦菫, 石龍芮

Raphanus sativus, L.	蘿蔔
Raphanus var.	水蘿蔔
Rehmannia glutinosa, Libosch. 3 fig.	地黃
Reineckia carnea, Kth.	吉祥草
Rheum officinale, Baill.	大黃
Rhododendron metternichii, S. and Z.	石楠
Rhododendron sinense, Sw.	黃杜鵑
Rhus semialata.	鹽麩子
Rhus succedanea, L.	黃櫨
Rhus toxicodendron, L., var. radicans.	鈎吻
Rhus vernicifera, Dl.	漆
Ricinus communis, L.	蓖麻
Rosa anemonæflora, Fort.	月季
Rosa banksiæ, R. Br.	木香
Rosa indica, L.	薔薇
Rosa lævigata, Mich.	金櫻子
Rosa rugosa, Th.	玖瑰
Rosmarinus officinalis.	迷迭
Rottlera jap, Sp., Catalpa Kæmpferi, S. and Z.	梓
Rubia cordifolia, L.	茜草
Rubus coronarius, Sims.	酴醾
Rubus incisus, Th.	懸鈎子
Rubus thunbergii, S. and Z.	蓬藥
Rubus tokkura, Sieb.	覆盆子
Rumex.	諸葛菜, 蔓菁, 紫花菜, [杜大黃, 牛蘤, 蘵
Rumex acetosa, L.	莫, 酸模
Rumex japonicus, Meisn.	酸漿, 羊蹄
Ruta græcolans, L.	玉藥花

S

Saccharum officinarum, L.	甘蔗
Sagittaria sagittæfolia, L.	慈菇
Sala tree.	娑羅樹
Salinum, cridium.	蘼蕪
Salisburia adiantifolia, Sw.	銀杏
Salix.	柳, 楊柳
Salix purpurea, L.	水楊, 蒲
Salvia multiorrhiza, Bge.	丹參
Salvia japonica, Th.	鼠尾草
Sambucus javanica.	陸英
Sambucus javanica, Bl.	蒴藋
Sambucus racemosa, L., Var.	接骨木
Sambucus thunbergiana, Bl.	蒴藋,
Santalum album, L.	檀香
Saponaria vaccaria, Schrad.	王不留行
Sapindus mukorossi, Gærtn.	無患子
Saraca indica, L.	無憂花
Saururus Loureiri, Decne.	三白草
Saxifraga sarmentosa, L.	虎耳草
Scapolia jap., Max. (Sol.)	黃若
Scirpus cyperinus, Kth. or Erisphorum, Mich.	蒯豆, 盂, 狼尾
Scirpus lacustris, L.	水葱
Scirpus tuberosus, L.	荸薺, 地栗, 鳧茨
Scrophularia oldhami, Oliv. 3 fig.	元參
Scutellaria macrantha, Fisch.	黃芩
Seaweed.	海帶, 龍鬚菜, 麒麟菜
Sedum.	石松
Sedum eryothrostictum, Miq.	景天
Sedum limare, Th.	佛甲草
Selaginella involvens, Sp.	卷柏
Selaginella kraussiana, A. Br.	翠雲草

Selinum.	蘼蕪
Selinum monnieri, L.	蛇牀
Senecio.	薇銜
Senecio campestris, Schott.	狗舌草
Serissa fœtida, Corn.	曲節草, 六月凌, 六月[霜
Sesamum indicum, L.	青蘘
Seseli libanotis, Koch.	邪蒿
Setaria italica, var. glutinosa.	秫
Setaria viridis, Beans, Var. germanica.	粟
Shorea robusta, Roxb.	娑羅木
Silex divaricatum, Bth. and Hk.	防風
Sinapis alba, L.	銀絲菜, 俗名芥辣
Sinapis chinensis, L.	水菜
Siphonstagia chinensis, Bth.	菥蓂
Sisymbrium sophia, L.	蘼蒿
Skinnuia japonica, Th.	茵蔯
Smilax, sp.	土茯苓, 革薢
Smilax biflora, Sieb.	山梨兒
Smilax china, L.	菝葜
Soja hispiola, Mœnch.	白豆
Solanum dulcamara, L.	白英, 蜀羊泉
Solanum melongena, L.	茄子, 落蘇
Solanum nigrum, L.	龍葵
Solidago virgaurea, L.	劉寄奴草
Sophora flavescens, Ait. 2 fig.	苦參
Sophora japonica, L.	槐
Sophora kromi, Hce., etc.	苦參
Sorghum vulgare, Pers. Black kind.	蘆粟
,, ,, Yellow kind.	高粱
Sorghum vulgare, L., Var. glutinosa.	蜀黍
Spiegesbeckia orientalis, L.	豨薟
Spinacia olearacea, L.	菠菜
Spiræa japonica, L.	繡線菊

Spiræa prunifolia.	笑靨花
Spiræa thunbergii, L.	眞珠花
Spondias.	餘甘子
Spondias amara.	餘甘子
Spondias dulcis, Forst.	人面子
Stachyurus præcox, S. and Z.	旌節花
Stachys aspera, Mich., Var. jap., Max.	水蘇
Stemona tuberosa, Lour. Also Roxb.	百部
Stauntonia hexaphylla.	野木瓜
Stellaria aquatica, Scop.	蘩蔞
Sterculia plantanifolia, L. f.	梧桐
Stillingia sebifera, Mich.	烏桕
Strychnos nux vomica, L.	番木鱉
Styrax benzoin.	安息香樹
Styrax japonica, S. and Z.	薺瞰
Styrax obassia, S. and Z.	玉鈴花
Symplocos prunifolia, S. and Z.	山礬, 春桂

T

Tabernæmontana coronaria, R. Br.	雪瓣, 狗牙
Tamarindus indica, (mango tree).	菴羅樹
Tamarix chinensis, Lour.	赤檉, 檉柳
Tanarius major of Sumatra.	降眞香
Taraxacum officinalis.	蒲公英, 耩耨草, 白鼓丁
Tecoma grandiflora.	凌霄
Tenerium stoloniferum, Ham.	假蘇
Terminalia chebula, Roxb.	訶黎勒
Thea.	榎
Thermopsis fabacea, Dl.	黃花
Thladiantha dubia, Bge.	黃瓜

Thorn.	棘
Thatinia.	醋林子
Tilia.	菩提樹
Tilia, diff.	椴木
Torilis anthriscus.	蔦蓼
Torreya nucifera, S. and Z.	榧
Trachelospermum jasminoides, Bth. and Hk.	芫蘭
	絡石
Trachycarpus excelsa, Th.	棕櫚
Trapa bispinosa, Roxb.	菱
Tribulus terrestris, L.	蒺藜
Trichosanthes multiloba, Mig.	栝樓
Trichosanthes palmata, Roxb.	白藥子
Tricyrtis hirta, S. and Z.	油点草
Trigonellafœnum graecum, L.	胡盧巴
Trigonotis peduncularis	雞腸草
Trislærigata, Fisch., Var. Kæmpferl.	石蟬花
Triticum sativum.	麥
Triticum vulgare, Willd.	小麥
Tropæolum majus, L.	金蓮
Tulipa edulis, Bkr.	山慈石
Tunla.	長春花
Tussilago farfara, L.	款冬
Twiners.	藤
Typha orientalis, Presl.	香蒲

U

Ulmus.	無夷
Ulmus campestris, Sw., Var. vulgaris., Pl.	榆
Umbilicus malacophyllus, Dl.	屋遊
Urtica.	蝎子草
Urtica thunbergiana, S. and Z.	蕁蔴

V

Vallisneria spiralis, L.	苦草
Veratrum album, L., et nigrum. 2 fig.	藜蘆
Veratrum nigrum, L.	藜蘆
Verbena officinalis, L.	馬鞭草
Veronica arvensis, L.	破破衲
Viburnum dilatatum, Th.	檕蒾
Viburnum opulus, L.	榮, 雪毬
Viburnum sieboldi, Mig.	土欒樹
Vicia hirsuta, Koch.	搖車, 薇
Vicia faba, L.	蠶豆, 寒豆
Vincetoxicum purpurascens, Morr. and Decu.	白前
Vincetoxicum stratum, M. and D.	白微
Viola pinnata, L.	胡堇草
Viscum.	柳寄生
Vitex negundo, L.	荊, 楚, 牡荊, 蔓荊
Vitis, sp.	野葡萄
Vitis bryoniæfolia, Bge.	蘡薁
Vitis coignetiæ, Pall.	紫葛
Vitis pentaphylla, Th.	烏蕨莓
Vitis serianæfolia, Bge.	白蘞
Vitis vinifera, L.	葡萄

W

Wahlenbergia marginata, Dl.	細葉沙參
Wickstrœmia japonica, Meisn.	莞花
Wickstrœmia, sp.	甘遂
Wordwardia radicans, Sw.	狗脊
Wordwardia radicans ? Lomaria.	貫衆

X

Xanthium strumarium, L.	蒼耳草, 卷耳
Xanthoceras sorbifolia, Bge.	文光果
Xylosma racemosum, Mig., Ligustrum lucidum.	冬青

Z

Zanthoxylum.	椒
Zanthoxylum acanthopodium, Dl.	
Zanthoxylum bungei, Pl.	崖椒, 蔓椒
Zanthoxylum, diff. sp.	椒
Zea mays, L.	玉蜀麥
Zelkova keaki, Sieb.	櫸柳
Zingiber mioga, Roxb.	蘘荷
Zingiber officinale, Rox.	薑
Zizania aquatica, L.	菰, 茭白
Ziziphus Jujuba.	酸棗, 星星草
Zizyphus vulgaris, Lam.	棗
Zoysia pungens, Willd.	結縷

List of Plants for which the English equivalent is not known.

根 根草 草蘆 草草辛郵 草草雷羅香 條 餘 藿蓉條草楮 植

參果馬菩坐海陰虱格木鬼草吉艮辟錦蜘徐廉水羅祝條黃蕎無蔜

草 草草 草草 草

樹 樹 木 樹 樹 國 樹
春多衆厨櫥子食浮 娑樹羅樹佗樹 木 葛青木木木竹
恒搖文摩石櫨大春菩菴婆毘歌嬰咀綸不木葛佛夜萬水越錦葉華蓳朱屈延紫美 菊

花 花 花 花 杯 蘭 花 花 羅 花
春羣瓊網霞蹄棋枝樂鉢王瑰翁爛香蝶提帶手黃漆堂仙春水兒春十羅羅雀絲花
醉鵞海寶紫馬地鸞長優戎冬燕玉杏萬闍御王小蘭滿御壽散孩練長波叠藍繅紫 兒

麥 花
篩 花
子 花
女 山 曇 梅 鸞 花
和 優 金 青 撚 蠟 山 旌 節 草
黃 瓔 瓚 海 蕊 仙 覆 查 紫 傲 山 絳 叠 襄 金 紅 迎 金 都 瘴 那 提 拘
蓓 花
蔭 花
珞 桃 圓 珠 都 杯 蒲 鐸 雲 釵 頴 雪 環 薹 綬 聲 步 勝 川 伽 羅 尼
花 花 花 花

木木木 骨 皮 香香 草 草
木陀癆落樹馬毋屑木神木納山伯妳盧牛
栅乾馬角芙白慈黃大茯神兜藿麻益對九

椰子椰 皂莢莢 得子木木木木核
檳腹檳藥斯皂皂角羅腰雉新蒲楊木核核皮
山大馬研波鬼肥酸娑豬新合俳遂學狗木荻

片兒菜菜菜菜菜菜
鞋抓子芽葉脖蹟高花 芋苣茄頭茅兒息哥 回只兒撒兒
草抓根籠杏歪龍河蓮芹香蒿緬墓羊阿阿奴

羅紗 蓮 跡
金紅蓮日花猱籬腸落耳灼蛾兒蕎藕鸛觀絲
剪剪山朝瓊猢籌雁野羊油燈芽板天老鴛兎 脚頭子籬禿灼兒拳蕎兒筋草根

THE TWO ZODIACS

(SOLAR AND LUNAR)

Their Origin and Connections.

A STUDY IN THE EARLIEST DAWN OF CIVILISATION.

By Thos. W. Kingsmill.

It has been accounted a fact by many historians in all ages that important historical secrets lay hidden behind the Zodiacs which have divided between them the suffrages of civilised humanity; and that if we could discover the true origin of one or the other we should have gone a long way towards ascertaining the conditions and locality of our earliest civilisation. Many attempts have been made from time to time to solve the tempting enigma, but from want of the necessary knowledge, geographical, historical or ethnographical, none have quite succeeded; though thanks to recent explorations in Egypt, Babylonia and elsewhere, and to increased knowledge of ancient Asiatic literatures, the boundaries of the disputed territory have been much narrowed.

Tradition, and the constant repetition of the numbers twelve and sixty, have generally pointed to old Babylon as the birthplace of the Solar Zodiac at least. That of the

Lunar Zodiac, with its twenty-seven or twenty-eight mansions, has remained a much more open question, and Arabia, India and China have been confidently named as its place of origin. It is sufficient to say that no one of these propounders of theories had a sufficient grasp of the subject in its entirety, and they were for the most part dependent on ridiculous mistranslations of original documents in one or other language concerned, or had an insufficient acquaintance with the astronomical principles entailed. Proctor, Burgess and, more recently, Miss Plunket have attacked the subject from an astronomical point of view and have thrown considerable light on it, and to all three I am much indebted. So also a better knowledge of the earliest antiquities of Egypt and Babylonia has been acquired by the numerous excavations into ancient sites which have marked the past ten years; and more than all these have been the improved methods of study, and the better understanding of the canons of historic criticism which these archaic studies have provoked.

Some thirty years ago R. A. Proctor drew attention to the importance in historical studies of realising the position of the heavenly bodies in past times. By restoring these for the third millennium B.C. he showed that the constellations as we still depict them must, for the most part, have had their origin about the time of the great Babylonish king Khammurabi. King Khammurabi, according to the most trustworthy calculations, died in or about the year B.C. 2231, and during his long reign succeeded in raising Babylon to the highest pitch of power and influence amongst the nations of the earth. It was under his instructions that his scribes committed to writing the great Epic of the Creation; and it was likewise by his orders that his astronomers placed in the sky, for everlasting record in the new constellations,

the legend of the Deluge and the destruction of the elder race of men. Such seems to have been the origin of the mighty constellations, the Ship Argo, the Kentaur, the Altar and the Raven.

The story of the Deluge was of course already old ages before the time of the great king, but it could only have been in his time, or within a few years backwards or forwards, that the great Ship Argo could have been seen by all in the latitude of Babylon majestically crossing the southern horizon on an even keel, with her mast upright and her sails all set.

The division of the ecliptic into the twelve great zodiacal constellations took place long before the period of Khammurabi. It may with certainty be traced back to the time of the Akkadian monarch known as Sargon I, when it was already almost in universal use. From the beginning the Babylonians and their predecessors seem to have adopted a sidereal rather than a tropical calendar, possibly at the first in ignorance of the progress of the seasons, and, when this was discovered, from disinclination to alter what had already become sacred. Thus it happened that the commencement of the month Nisannu, with which the Babylonians commenced their year, was in the reign of Sargon I nearly two months in advance of the Vernal Equinox, and in Khammurabi's time it was actually a month in advance of the same period. It was not till the epoch of Hipparchus [*cir.* 130 B.C.] that the entrance of the sun into the constellation of Aries, commonly called the First Point of Aries, coincided with the Vernal Equinox.

Now in the latitude of Babylon, about 32° N. Lat., the most natural division of the year would be by the Vernal Equinox, marking the change from the raw, wet winter to returning spring, when the labours of the field begin. The

change, sufficiently well marked in the plain about the city itself, is still more conspicuous in the neighbouring lands. But curiously enough, as we have seen, in Khammurabi's time the commencement of the year, following as it did the stars, did not mark any tangible period seasonably, nor coincide with either the solsticial or equinoctial colures. It certainly then would not have recommended itself to the practical astronomers, who had just mapped out the heavens and done their work so effectively that after more than four thousand years their scheme remains in working order. But long before King Khammurabi's time the Zodiac with its twelve signs, and the division of the year into twelve corresponding months, had been in use ; and in Sargon's time, fifteen hundred years previously, fitted in equally badly with any scheme of dividing and commencing the year which could have recommended itself to any practical observer.

To arrive at any epoch for commencing the Zodiac which would have corresponded with any important astronomical period we would have to go back nearly three thousand years before the reign of Sargon I, when the entrance of the sun into the constellation Aries coincided with the winter solstice. Against this there are several important objections to be raised. In the first place we have no authority of any kind to refer to so high an antiquity the dawn of civilisation in Chaldea, our earliest date for the very earliest records scarcely going back beyond 4000 B.C., and a very considerable period being required before the study of astronomy was sufficiently far advanced to enable the first generalisation of the annual track of the sun to be worked out. In the second place the most primitive cult in Chaldea and the neighbouring countries of Asia Minor and Syria was centred in the annual death of the sun under the deadly tusk of winter and his rebirth at the Vernal Equinox. We are

thus effectually debarred from looking to Chaldea for the origin of a Solar Zodiac beginning with the winter solstice.

To Miss Plunket belongs the honour of having been the first to point out from astronomical combined with chronological data the necessity of carrying back the introduction of the Solar Zodiac to so early a date as, at least, 6,000 years B.C.,—the date 6750—6500 would answer better the astronomical necessities of the case. We have also to look for its commencement to some locality where the winter solstice formed the most natural date for the commencement of the annual cycle. Geographically the fertile lands of Shomer and Nejed in Central Arabia answer the requirements of the case. Here the extremes of winter and summer are far less felt than in the Syrian and Mesopotamian lands, and the change from winter to spring is hardly noticeable. The great event of the year is the solstice, when the sun makes his furthest excursion to the south, when the days are slightly shorter, and vegetation momentarily, but only momentarily, receives a check.

Recent discoveries in Egypt and the adjacent lands have afforded us many glimpses into the earliest history of civilised man, which even a few years ago were absolutely unattainable; and these all tend to connect the introduction of its earliest civilisation into Egypt with the land of Arabia.

With some degree of confidence the reign of Menes, with whom began the long line of Egyptian monarchs known to history as "dynastic," may be put down as approximately 5000 B.C. Professor Petrie, indeed, from his latest researches adopts the date B.C. 5590 for the commencement of the reign. Menes was the first king of united Egypt, but there was before his time a period of unknown length, not altogether unlike the Anglo-Saxon Heptarchy, during which kings of the same race held sway in kingdoms more or less

isolated. These monarchs were of a different race from the aboriginal Egyptians and possessed of a culture considerably in advance of theirs.

According to all tradition the ancestors of this race had landed as immigrants at or about Koseir on the Red Sea, and partly by force and partly through the influence of a superior culture had succeeded in making themselves the ruling caste throughout the greater part of the land from the Cataracts to the Delta. There is no doubt, from the monuments which they have left behind them, that they introduced the use of bronze implements and weapons, the cultivation of the cereals wheat and barley, the use of bricks for building and, above all, the art of hieroglyphic writing. So far is allowed by all Egyptologists. That they came from the eastward is also admitted.

Having appeared first at Koseir we can trace them by the monuments which they left behind them through the Wadi Hammâmet to Koptos, where they entered the land of Egypt proper, and here they seem to have made their first permanent settlement. There are a few traces of a serious battle having taken place hereabouts, but from the inferiority of their weapons the natives were easily overcome, and the subsequent occupation seems to have been for the most part bloodless. The occupation, and the subsequent growth of the monarchy, must have occupied some centuries at least, so that we can hardly place the arrival at Koseir later than 5500 B.C.—more probably it took place nearer to 6000.

There are then no chronological difficulties in attributing the first introduction of the Solar Zodiac to so remote a period as the sixth millennium before Christ. The people who landed in Egypt, and established there the first Empire, were already well advanced in the arts. They were metal workers, were acquainted with the use of bronze, cultivated wheat and

barley and used bricks in their buildings ; and all this implied a long period of settled residence in their former home. Moreover, they were acquainted with writing, so that they could keep records and make calculations, and so were in a position to hand down their observations and conclusions to their successors. Their country must have been at least reasonably fertile and well watered and suited to the production of cereals ; and all these we meet with in the highlands of Central Arabia ; which moreover produce in abundance, and of quality elsewhere unsurpassed, large crops of dates, here an important article of food.

Now persistent tradition has always associated these immigrants with the east, and the land of Punt is equally persistently spoken of as their original home, and it is always mentioned in connection with the gods as a semi-divine land. But where was this holy land of Punt? Here we seem to have indications from two separate sources, both external and both perfectly independent of each other and of Egypt. One is the legend of the Æthiopians and their chief Memnon, as told by Homer in the *Odyssey*, the other the list of the descendants of Ham as given in the tenth chapter of Genesis. Besides we learn that it lay to the east of Egypt, and is spoken of as a southern land. Reasoning from these two statements it is sometimes assumed that it was in some way connected with Somali land. The evidence on this head does not, however, amount to much.

Homer calls Memnon the son of Eos, the Dawn, and equally associates his Æthiopians with the gods, going to the banquet on equal terms with Zeus and Poseidon. Memnon in Greek myth is associated not only with the land of the Æthiopians but also with Kissia or Susiana (*i.e.* the lands of Kush or Çush, for the two are identical), and as well with Egypt. Homer likewise speaks of his Æthiopians as the most distant

of men, dwelling afar off, and divided into two parts equally associated with the rising and the setting sun. It was not, indeed, until the time of Herodotus that these bright-eyed Æthiopians came to be confused with the sooty tribes of the Sudan ; and even with him the tradition of their semi-divine character lingered, and we find him relating how Cambyses planned an expedition to explore their land, now supposed to be in that part of Libya which lies on the South Sea, and sent his messengers to spy out the "Table of the Sun," still fabled to exist amongst them.

It is generally allowed, as stated by Dr. Budge,[1] that these immigrants came from the east across the Red Sea, and that the land whence they came was somehow connected with Babylonia. Two routes have been suggested : according to one they entered Egypt from the north-east by way of the peninsula of Sinai and the Delta; according to the other, starting from some point in Southern Arabia they crossed over the Straits of Bab el Mandeb to the African shore, which they followed northward until they arrived at Kuseir at the entrance of the Wadi Hammâmet. The first of these may be partially, but only partially, true, as we shall see further on ; to the second there are such grave objections that we may dismiss it briefly. From the landing opposite the Straits of Bab el Mandeb to arrive at Kuseir but two ways could have presented themselves—either by land or by sea. The former would have entailed a march of considerably over a thousand miles along a rugged sea-coast or through a howling desert, in both cases without water. The way is, in fact, trackless, and probably has never been essayed even by small parties, much less by a regular migration. For the sea voyage the early Egyptians certainly had no equipment ; their boats at best

[1] *A History of Egypt*, I. 43, *seq.*

were mere punts, and their use was confined to catching fish or digging roots in the marshes about the Nile. Beyond this, ancient migrations never took place from predetermination on the part of the emigrants to better their condition: they were always the result of pressure from behind, owing to the invasion of some hostile tribe, and were matters of necessity, not deliberation, and accordingly invariably took place along the lines of least resistance. The most natural course for a party of fugitives to take after crossing the Straits would have been to make for the highlands, where they could at least have met food and water.

The migrants, whatever they were, fugitives or free settlers, at all events landed or found themselves at Kuseir, and the presumption is that they had taken refuge there: in such a case we are justified in concluding that they made their way there by the nearest way. This would have pointed to El Widj as their place of departure, and plainly suggested that they were fugitives who had been expelled from their native homes by some hostile invasion. Now behind El Widj were the comparatively fertile and productive highlands of Central Arabia, eminently suited both by climate and productions for the residence of a highly civilised and intelligent people. Even at the present day, after centuries of Mohammedan and, more recently, Wahabee dominion, the inhabitants of this portion of Arabia are distinguished for the superiority of their physical and mental development.

We gain little precise information from the Egyptian monuments as to the exact site of Punt. Some indications would place it northward about the Sinaitic peninsula, some in Arabia generally, and the last and most definite, the expedition of Queen Hatshepsu, in Afar near the Gulf of Aden. As a fact Punt was of continental extension and

included the Arabian country generally. We seem to learn a good deal about it from outside sources.

Although there is abundant evidence that the genealogical chapters of the Book of Genesis were recensed, if not written, after the Skythic invasion of Syria in the 6th century B.C., the most confirmed sceptic has not doubted that they contained authentic and ancient legends which throw a flood of light on the earliest history of these countries, from Elam to Egypt. Now all modern authorities have noticed the very large admixture, even in Central Arabia, of non-Semitic strain in the population, and the conditions under which this non-Semitic element occurs would seem to indicate that it was the older. One of the most important of these legends is that of Ishmael, who is made a son of Abraham by an Egyptian [*cir.* B.C. 2000]. As ordinarily accepted the story is made to imply that the whole population of Arabia was Semitic and descended from the stock of Eber. The tale does not naturally bear this interpretation, and Arabia long before the time of Abraham was a settled and apparently populous country. Ishmael, it states, was to be a "wild man, his hand will be against every man, and every man's hand against him"; yet he shall continue to exist in spite of his contumacy. The Semitic Ishmael, in the person of his modern representative the Bedawin, still contrives to exist in the presence of his pre-Semitic brethren, a perpetual menace to his settled neighbour.

Equally consistent is the so-called genealogy of the Noachids given in the tenth chapter. Leaving out Japhet, who represents the mixed peoples of Asia Minor and Northern Syria, who do not now concern us, Noah is represented as having two sons—the elder Ham, the younger Shem. Ham, the eponym of the settled agricultural peoples who inhabited the Gharmsir, the warm fringes where civilised life first

sprung, and Shem of the pastoral dwellers in the open country who wandered hither and thither in search of fodder for their flocks. This habit of representing in a genealogical form the ethnic connections of closely allied peoples is natural with all primitive folk, more especially Asiatic, and we meet it all the way from Greece to China. In fact unconsciously almost we use it every day in our natural history nomenclature of families and genera. Ham, then, had four sons—Kush, Mizraim, Phut and Kanaan. Kush, always identified with Æthiopia, was the land on the upper portion of the Persian Gulf, known to the Greeks as Susiana (really Çushiana, the Syriac Kushan) otherwise Kissia, the modern Khuzistan. Josephus [Antiq. viii, xii, 1, and again ix, v, 3] identifies Kush with the lands of Arabia, closely adjoining the territories of Judæa, so that we have not to go to Abyssinia in every case for the identification. It in fact was like Punt, a general term applying to Arabia and Arabic lands in their widest extent. Regarding Mizraim there never was any misunderstanding; it applied to the "Two Egypts," Upper and Lower. Equally certain is the identification of Kanaan with the "low" countries along the Mediterranean coast of Syria. The only one remaining, then, is Phut. The word occurs but seldom in the Old Testament—in the recapitulation of the generations in 1st Chronicles, and in the prophets of the time of Ezekiel. Ezekiel [xxx, 5] classes together Æthiopia (Kush), Phut and Lydia, and [xxvii, 10] he tells us Persians, Lydians and men of Phut were in the armed crews of Tyre; we thus are quite justified in looking for Phut as in not very distant communication with Tyre. Now we find at this period that east of the lands of Palestine lay the country of the Na-bat-æans. According to a widespread tradition these Nabatæans once extended from the borders of Judæa to Chaldea, and we find them in Strabo reaching along the Gulf

of Akaba down to Leuke Kome. Nabatæan influence to the present day reaches as far as El Hasa, and even, according to Palgrave,[2] to Oman. The Nabat, as they are called by the modern Arabians, were distinctly Saban in their religious ideas, and the pre-Semitic form of versification known as Nabti is still current in all these parts of Arabia. There is then little difficulty in identifying the Phut of the Generations and Ezekiel with the original home of the Nabatæans. If so much be allowed, and there is apparently no reason why it should not be, we shall for very similar reasons be compelled to see in them the originals of the people of the Egyptian Punt. Phonetically the introduction of the *n* before the final *t* creates no difficulty; and the traditional connection of the Nabatæans with the worship of the Host of Heaven offers a full explanation of the association of these people of Central Arabia with the old gods in both Egyptian and Greek myth. In agreement with this may be mentioned the discovery in these regions of the ancient solar temple of Eyun on the borders of Kasim, this besides being only one amongst others reported as still existing.

Returning, however, to the migration into Egypt at the very dawn of history, and to the fact that we hear of no emigration in ancient times having been known to take place willingly and of set purpose, we may enquire under what conditions did the present originate? We seem to find an answer in one of the oldest of the Hebrew legends—that of the quarrel between Cain and Abel. The narrative tells us plainly in so many words the origin of the dispute. "Abel (or rather Habel) was a keeper of sheep, but Cain (Qain) was a tiller of the ground." It was, indeed, the sempiternal quarrel between the husbandman and the nomad, which continues with

[2] *Central and Eastern Arabia*, II. 158, *seq.*

almost equal virulence to the present day in the everlasting antipathy between the wandering Bedawin and the city dweller.

As we have mentioned above, the crossing of the Red Sea by the immigrants must have occurred somewhere about 6000 B.C., so that something unusual must have occurred about that period in the Æthiopian land, or land of Punt, for the two, as we have seen, were practically synonymous. History in ancient, as in modern, times repeats itself, and we may reason as to what occurred at the earlier date from what we know happened within historic times. Somewhere about the year 2200 B.C. these Semite wanderers, who called themselves sons of Eber, where the phonetic element is seemingly identical with that in Abel (Habel, the strait-waistcoat of modern written Semitic speech not then existing), were making themselves objectionable to the settled people of the Euphrates valley and were forced to move. They journeyed first to Haran in Mesopotamia, and from that moved on to the land of Kanaan: still continuing their depredations, Khammurabi, the powerful king of Babylon, organised a league of the settled kingdoms, and undertook with varying success, but on the whole successfully, a campaign against the desert tribes. These latter were gradually forced back, part into Central Arabia and part into the Sinaitic peninsula along the borders of Egypt. Egypt was at the period under the weak rule of the later monarchs of the decaying 14th dynasty, and the end was that there was no force at hand to prevent the entrance of the intruders into the Delta, and finally the remainder of the empire, which they overran, and superseded the native line of rulers. These raiders were known to the Egyptians as Hyksos. Not the least interesting part of the narrative is that we find Abraham himself going down to Egypt at this very period, the chronicler tells us on account of a famine,

at all events there was some trouble: we find the Egyptians "plagued," and suspiciously Abraham is said to have returned from Egypt, "very rich in cattle, in silver and in gold." The story throws a strange light on the circumstances of the time.

A little more than four thousand years previously a similar condition of affairs seems to have existed in Central Arabia. The wandering Semite tribes had been attacked by the settled agricultural Hamites, in their rear, and been driven on to the settled and thriving communities who occupied the lands now known as Shomer and Nejed, where they upset the existing rule and drove a considerable number of the inhabitants down to the sea-coast, whence they were fain to escape by crossing the Red Sea to Koseir. The impelling cause of the movement had doubtless been an unrecorded irruption of the Oghuz peoples of Northern Asia, who, driven by the deteriorating conditions of their home-lands, broke on the Athwyan tribes lying along their southern flank and impelled them in turn on to the already settled peoples of Elam, Sumer and Akkad, amongst whom civilisation had already made considerable progress. The friction induced by the irruption seems to have given a fresh start to the growing culture in these lands; at all events we owe to this early time the very first recognisable traces of its beginning.

In the Æthiopic region of Central Arabia the effect was momentarily disastrous; the governments were upset, the country ravaged and the greater part of the settled population either destroyed or driven to take refuge elsewhere. For a time civilisation itself seemed to have come to an end; but, as has happened in many cases since, a new impulse was given to it through the enforced migration of the Æthiopians: they set up a new civilisation in Egypt and gave the needed impulse to the incipient culture of the valley of the Euphrates.

This is the true explanation of the many similarities of the early cultures of the lands of Egypt and Chaldea—neither took theirs from the other direct, but both derived it from the antecedent Æthiopic culture of Central Arabia.

The claim to the invention of the Zodiac has during all historical time been a subject in dispute between Egypt and Babylon, and it is not wonderful to find the contention carried down to modern times. Herodotus [2. 4.] makes the claim boldly in favour of the Egyptians: he tells us that the Egyptians were the first of all men to invent the year, which they divided into twelve parts, and they profess to have made the discovery from the stars. Sayce in his *Herodotus ap. hoc.* as stoutly denies the claim, making it on behalf of the Babylonians. It is more consonant with the conclusions arived at above, founded on a reconsideration of the entire ground, to decide in favour of the old Æthiopian dwellers in Central Arabia, especially as both Egypt and Babylon before the beginnings of history were in communication with these districts. Egyptian and Babylonish civilisation lasted well into the Greek period and was handed on direct through Rome to modern times; Æthiopian culture died in giving birth to that of Egypt.

That, as Herodotus represents, the "discovery" was made from the stars is borne out by the fact that both the Egyptian and Babylonian years were sidereal; but the suggestion is even more far-reaching. Myth, tradition, and history so far as it reaches, all concur in placing in this Æthiopian land the origin of the primitive religion known as Sabaism, or the worship alongside the one deity of the Host of Heaven, the Hebrew Tsaba Hashimaim, צבא השמים

The situation was thus eminently favourable for the initiation of the sidereal calendar. Now, the Supreme God of these early immigrants was Horus (the overarching sky), and

appropriately his symbol on the earliest inscriptions is the hawk, the bird for ever soaring aloft in the firmament of heaven. His followers, too, are the Mesniu or Mesenti (the *metal-workers*) who introduced into the land of their adoption the art of metal working, more especially that of bronze. Accompanying him was the Sun God Osiris with his sister-wife Isis, known elsewhere by the names of Ptah, Ra, or Tum. Now in Horus we meet with the same attributes, if not the same name phonetically as in Greek Οὐρανός Sanscrit Varuna, Zoroastrian Varana and Chinese Yao. More remarkable still: as Horus has eventually to make way for Ptah or Osiris, or for his second self as son of Osiris and Isis, so has Οὐρανός to yield to Zeus, Varuna to Indra, Yao to Wushun, while the prime deity Varana, himself, amongst the Zoroastrians becomes degraded into the chief demon of the sky.

A like tale comes to us through Sanchoniathon from ancient Phœnicia:—"Contemporary with these was one Elioun, called Hypsistus (*i.e.* the most high), and his wife named Beruth, and they dwelt about Byblus (the Hebrew Gebal). By these was begotten Epigeus or Auchthon, whom they afterwards called Ouranos (*i.e.* Heaven); so that from him that element which is over us, by reason of its beauty, is named heaven. And he had a sister of the same parents, and she was called Ge (*i.e.* Earth), and by reason of her beauty the earth was called by the same name. . . . Ouranos, succeeding to the kingdom of his father, contracted matrimony with his sister Ge (the Earth) and had by her four sons—Ilus, who is called Kronos, and Betylus, and Dagon, which signifies Siton (*corn*), and Atlas. But by other wives Ouranos had much issue; at which Ge, being vexed and jealous, reproached Ouranos, so that they parted from each other. But Ouranos, though separated from her, still by

force came and had intercourse with her whenever he pleased, and then went home again. But when he attempted to kill the children he had by her, Ge also often defended or avenged herself, gathering unto herself auxiliary powers. But when Kronos came to man's estate, by the advice and assistance of Hermes Trismegistus, who was his secretary, he opposed his father Ouranos, avenging his mother. . . . . And thus Kronos, overcoming Ouranos in in battle, drove him from his kingdom and succeeded him in the Imperial power." The legend, then, of the supreme god, be he Horus, Uranos, Varuna or Yao, superseded by his son or assistant, pervaded all the countries in which the Saban worship had once prevailed; and we cannot but attribute it to the inability of the primitive man to grasp the idea of a deity too etherialised for his conception.

But of these Saban or Æthiopian worshippers, for the two words appear to have a distinct connection phonetically, we learn something incidentally. According to Pliny [no great authority it is true], Æthiops was the son of Vulcan (Hyphæstus), and the myth falls in curiously with others of more respectable parentage. The immigrants who crossed the Red Sea were, as we have seen, Mesniu or metal-workers, and Qain, the settled agriculturist, had for his descendant Tubal, the first worker in metals. According to the story as told in Genesis, he was a worker in brass, i.e. *bronze*, and iron; and it was bronze, as we have seen, that the immigrant Æthiopians introduced into the land of Egypt. Bronze is an alloy of copper and tin; copper is a comparatively widely distributed metal, whereas tin is confined to comparatively few localities, and it is still a moot point where it was first obtained. S. Laing names the valley of the Upper Oxus about Bamian, but in any case we first hear of it in connection with these or kindred tribes. The

first trade-route, too, of which we have any notice stretched across Arabia from El Hasa to Widj, and it must have been along this road that the new occupiers obtained their supplies of tin. This brings us to the land of Kissia or Kush, and it is instructive to find amongst the most ancient nations that tin is invariably called the Kushite metal. The Greeks knew it as κασσίτ-ερος, the Akkadian in the plain of the Euphrates as *Id-Kasdaru*, the Assyrian *Kasugeteira*, the Sanscrit-speaking Indian as *Kastîra* and the Arabian *Kasdir*. The first vendors of the metal in the Mediterranean regions were the Phœnicians, and they were situated at the extremity of this road, where it forked off to the N.E. through the Wadi Sirhan.

Philologically as well as ethnologically there seems some reason to connect the Homeric Æthiopes with the Saban or Tsaban worshippers, somewhat incorrectly spoken of ordinarily as Sabæan ; Αἰθοψ, of course, has to be translated as "sparkling-eyed," not as by the later Greeks rendered "sooty-complexioned" : it is more likely merely an attempt to domicile in Greek the Semitic *Tsaba*.

Ethnologists, till very recently at all events, have been unable to realise the geologic fact that the advent of man on the earth was antecedent to the present distribution of land and sea. In Egypt and Libya, as well as throughout Arabia and Central Asia, the change in the relative position of continent and ocean has been specially marked. It has been long established as a geological fact that as late as pleistocene times there was complete land connection between Europe and Northern Africa, the modern Mediterranean being then represented by two lakes. At the same period the Sahara was wholly or partially the bed of a great sea which cut off communication with Southern Africa, by most of our modern authors, led astray by Herodotus, confounded

with Ethiopia. At a slightly earlier period, geologically, the ocean penetrated through Arabia into Central Asia, and on its receding the new lands, including what is now North Africa, became the resting-place of the Æthiopic race. In the higher fauna we notice the same distribution: in this new land were the homes of the lion, the African? elephant which we find in Babylonian lands as late as the eighteenth dynasty, the ostrich, and apparently the buffalo, and these only became residents of South Africa after the departure of the intervening sea. That these changes took place while early man was an inhabitant of these regions is abundantly proved by the remains of flint weapons found over the regions adjoining Egypt on both sides, distributed by water in regions now rainless, and high above the level of the greatest floods, and when the drainage system was entirely different from the present.

Now it was over these lands, too, that extended the ancient Saban cult of the Lord of the Empyrean, as Milton describes him, with his Heavenly Hosts:—

> Almighty Father from above,
> From the pure empyrean, where he sits,
> High throned above all height.

and we find plain traces of the cult, whether amongst the Egyptian immigrants, the ancient Greeks, or even as far as the ancient kingdom of Yima Kshaêta, in the happy Airyano Vaêjo in the very heart of Asia; and this in its turn served as a second point of dispersal, after its destruction at the hands of the plundering Oghuz—the Azhi Dahâka of the Zoroastrian legends, had dispersed his Aryan people south, west and east.

But as Horus, god of the Empyrean, was associated with the Host of Heaven, so we find Mazdao, the modern

substitute for the older Varana, having for his helpers the sun and moon, the five planets, and the four celestial asterisms—Tistrya (Sirius), Vanant (apparently, Vega) the Haptoiringa (the seven stars of Ursa Major, then [*cir.* 6000 to 2500 B.C.] there being no polestar, fairly representing the north pole), and the Çatavaêça (Crux and Musca, then conspicuous in the southern sky), and, possibly, the earth. Later on these became the twelve superior gods, the *Dii Superi* of the Romans, but who in one form or other appear in all the cosmogonies from the Tiber to far distant China. In the scheme of the ancient Solar Zodiac these became naturally the twelve Zodiacal Signs of the dwellers in ancient Arabia, with which our notice began.

Nor do these analogies fail us when we come to the more detailed developments. Thus *bennu*, the bright bird of the sun, that occupies so conspicuous a position in connection with the Central Arabian land, is in one form or other found pervading all the others. Herodotus [ii. 73] has a wonderful story to tell of him, in which we can trace the familiar likeness. The bird, he tells us, he has seen only in a picture, but the likeness he draws is unmistakeably that of the legendary fenghwang of China; the plumage of his wings is partly golden-coloured and partly red; in outline and size he is very like an eagle. He only appears at rare intervals, and not to everyone—only once, in fact in five hundred years, at the great temple of the Sun at Heliopolis, when he carries the body of his father, embalmed in an egg-shaped ball of myrrh, and deposits it in the temple. Herodotus clearly identifies him with the Phœnix of the Greeks, and the phœnix in the myth is associated with the ravished maiden Europa and the brilliant land of Phœnicia, and one very clear tale associates him with the introduction of the alphabet into Greece, the invention of which by all

authorities, ancient or modern, is allowed to have taken place in Arabia or its immediate confines.

But, if with Herodotus we must identify the *Bennu* of old dwellers in the land of Arabia with the Phœnix of Greece, we shall similarly find him occupying a conspicuous place in the Zoroastrian myths of old Iran. We meet him in the Varenjana bird of the Bahrâm Yasht, one feather of whom had so great an effect on the demons that Zarathustra had only to stroke his body with it to render himself invincible by the powers of darkness[3]; we also meet him in the Varaghna, who on the fall of Yima bore away on his pinions the *glory* of the departed hero.

In China, again, we discover him in the mysterious Fenghwang,—for the word is indivisible,—the exact rendering of old Persian Varenj, and who in the Chinese version of the myth is still the bird of Hwangti and Wushun, the Chinese sun god, who gambols in the courts of virtuous princes, and only appears when a sage is to be glorified. When the myth arrived in China we know not, but it appears fully fledged in the Confucian literature, *e.g.* in the *Lūnyü*, where the sage himself is represented as telling his disciples:—"Not for me does the Fenghwang soar on high, nor the River God display his mysterious chart: I am but a fardel bearer."[4]

In the original myth the Dragon, again, was the "far-seeing" one who conducted the sun on his annual course through the twelve Zodiacal Signs, and who reappears in the story of the dragons given to the wise woman Medeia by Helios. Going to the extreme verge of Asia, we find the Dragon reappearing with all his original attributes in the Lung, a word which, however unlike in external appearance,

[3] Verse 35. [4] Ch. Cl. An., IX. viii.

contains identical phonetic elements. The Lung, then the great Dragon of China, most famous of its family, possesses in itself the power of transformation, and ascends with its correlative, the sun himself, in the spring to heaven, while in autumn it as regularly descends to hybernate on earth; it desires to mount, and it rises till it affronts the clouds; to sink, and it descends till hidden below the fountains of the deep. Unlike the serpent, the emblem of evil, it is eminently beneficial, and is peculiarly symbolical of all that pertains to the Son of Heaven, the T'ientse—*now* the Emperor, but once the Sky God, leader amongst the celestial deities, and the correlative of the Indian Indra. In the Tibetan Drug, the counterpart of the Chinese Lung, the initial *d* is still preserved, and hence we can phonetically connect it with the old Persian Drvan*ts*, Dvaran*ts*, or Dregvan*ts* of Zoroastrian lore, changed, like the other devas of the Vedic faith, into the destructive daêvas, or demons, of the later Zoroastrian cult.

We are still ignorant of the processes at work which were effective in transforming the simple nature worship of the Vedas into the highly abstract and spiritualised religion preached by Zoroaster. There is, however, little doubt that they were intimately connected with the break-up of the proto-Aryan people in their original homes in the old Airyano Vaêjo in the Oxian Mesopotamia on the western flanks of the great Pamîr ranges. Here were the happy lands ruled over by Yima Kshaêto, first of mortals, where during his long reign "there was neither cold nor heat, neither decay nor death, nor malice produced by the demons; father and son walked out together, each a youth in appearance." But Angro Mainyu came, and with the aid of his demons brought on the winter, till in those once happy lands cold reigned supreme for ten months of the year; and in the end came the Azhi Dahâka (Gnawing Serpent), in

other words the fierce Oghuz tribes from the north—the Diks of the Chinese version—who, forced ever southwards by the increasing cold of their steppes, finally broke up the earthly paradise and drove south, east and west its Aryan inhabitants, to carry the old civilisation into the distant lands of India, China and Persia.

This secular lowering of the mean temperature of Northern and Eastern Asia since the retreat from North-west Europe of its ice-age is, in fact, one of the most prominent phenomena that strike the geologist in his study of the later geological features of Eastern Asia, and has left an indelible mark upon not only its fauna but upon its ethnology as well.

We are at the moment more immediately concerned with the western stream of this migration consisting of the Iranian and Salyan (Hellenic) branches. These crossed the Parætakênian ranges; and the Iranian branch in Southern Persia found itself thrown in contact with the Proto-Semitic peoples who still, in part at least, occupied the lands of Elam, and amongst whom traditions of the earlier Saban worship still lingered. Of these was Zoroaster, under whose teaching a religion, in the main founded on the old Saban worship of the Host of Heaven, came to be adopted by the Iranians. The new religion raised the powers of darkness to an eminence not far removed from that of the Lord of Light himself, who under the title of Ahura Mazdao succeeded to the attributes of the primeval Lord of Hosts. It retained practically all the old nature deities of the Vedic cult, but with the remarkable change of position that what before had been Devas, or deities, now became Daêvas, or demons; and in place of the old deities a number of abstract conceptions were made the coadjutors of Ahura Mazdao (Ormazd) in the rule of the universe. Amongst them were such abstractions as Haurvatât and Ameretât (Health and Life),

Vohu-mano (Good-thought), Khshathra-vairya (Perfect sovereignty), Asha-vahista (Excellent holiness), Çpenta-armaiti (Divine piety), etc. While, as Ormazd had his antitype in Ahriman, each subordinate deity had also his in a demon, whose special task it was to undo all the good done by the other in the interest of humanity.

The Salyan family never in their long journey came under the same influences; they seem to have passed westward to the north of the other, but as yet no trace of their passage has been discovered, and when we first meet with them they were already domiciled in the west of Asia Minor. They in consequence carried with them their old nature worship, and we find in a great measure the old Vedic faith in its main features reproduced in the deities and myths of ancient Greece.

PART II.

THE LUNAR ZODIAC.

Between the Oghuz land and the Airyano Vaêjo had spread in primitive times a fair-haired people, or rather series of peoples, roughly known by the ancient Greeks as (1) Skyths—more definitely as Getæ or Çakæ, for the two words are synonymous; (2) Asii or Asiani, the Wusuns of the Chinese; and (3) Tokhars, who to the west faded imperceptibly into Daæ or Dahæ, the Ta hia of the Chinese. According to the old Iranian tradition these people, equally with the Aryans proper and the Çauromats or Sarmatians, were descendants of the great hero Thraêtaona, the Feridun of Firdusi's epic the Shahnameh, through his three sons named respectively Tura, Airya and Çairima. The myth runs parallel with the very similar genealogy of the Noachids given

in the tenth chapter of Genesis, each being an attempt to classify the races with which the writers were respectively in contact. The immediate effect of the southward pressure from the impending Oghuz tribes was to force these Turanian peoples down on the Airyano, so that while in the more primitive tradition it is the Azhi Dahâka that is the great and deadly foe of the entire Airyano, in the later Iranian version the strife narrows down to a sempiternal struggle between Iran and Turan. This confusion of the myths has led to an entirely erroneous ethnic classification of the relations of Oghuz and Turk, both of whom (the former under the fantastic title of "Mongols") are made to do duty as Turanians. As a fact we must confine that designation to the ancestors of the Getic and Teutonic peoples who in the third century and onward poured down on the Roman Empire and finally destroyed the old civilisation of Europe, to give place at the Renaissance to our modern cult.

Associated with a distinctly different series of climatal phenomena from that which underlay the primitive worship of the Lord of Heaven and his celestial Hosts, was the more northerly cult of Osiris, Attys or Adonis. As the worship of Horus was the natural outcome of a residence in a tropical or subtropical land, where the cold of winter was not sufficiently severe to interfere to any serious extent with the growth of vegetation, the other cult, whose most distinguishing feature was the commemoration of the annual death of the Sun beneath the deadly tusk of winter, could only have arisen in districts where the approach of winter was accompanied by an entire cessation of vegetation. Asia Minor, the more lofty parts of Syria, the highlands of Elam and Central Asia were accordingly the countries where this peculiar cult most prevailed. The Egyptian worship of Osiris is a more or less conscious intermingling of both forms.

This climatic distinction is again marked in the different Zodiacs in the evolution of which the climatic differences were the most efficient factors. In all these northern lands, and in those that owe their civilisation to emigration there-

from, we find the annual course of the seasons regulated by a Zodiac founded on the position of the moon amongst the ecliptic stars; and, notwithstanding that the year is still divided into twelve months, the ecliptic itself is parted into twenty-seven or twenty-eight portions known as "mansions" or resting-places. This Zodiac is of very considerable antiquity, and at one time certainly spread from China to the confines of Arabia, having left its traces through the intermediate lands, and in a few cases even as far as ancient Greece. It is still in current use amongst the peoples in China and India; and at one time, as seen from the notices of it in the Bundahish, must have prevailed thoughout all the Zoroastrian regions.

Allusions to this Zodiac are frequent in the old balladry of China. The Tatung [*Shi King*, ii. v. 9], describing the miseries of the retreat of the people of Cheo from their old home in the valley of the Wei in Shensi to the banks of the Lok in Honan, when the old appanage of Cheo was destroyed by the Hiung Nu [*circiter* 770 B.C.] thus sings:—

Once in good wine the jests we flung,
Now skilly is our only brew:
Once from our girdles jewels hung,
Now nought but tatters meets our view.
Unmoved athwart the autumn sky
The Milky Way walks with disdain.
The Weaving Maids their shuttles ply,
As round the Pole revolves the Wain.

Now in the north the Wain reclines,
And bending low its shaft descends,
While from aloft proud Altair shines,
But careless still no help he lends.
Then rising bright the Star of Day
Our way-worn exiles calls from sleep,
To still once more their tasks essay,
Ere o'er the east the Hyads creep.

The Southern Sieve is sinking low,
No grain to sooth our woes it bears,
No liquors from the Ladle flow,
As useless still its stem it rears.
The Sieve, indeed, may show its lips,
Its lazy tongue vibrating still;
While towards the north the Ladle dips,
But from its brim no hopes distil.

We gain but little information from the ballad, which has perhaps been recensed out of knowledge. The north pole at the period was between κ Draconis and β Ursæ Minoris, and was distant about 14° from α Ursæ Majoris, but the allusion is too obscure to enlighten us as to its position or appearance. The Wain then circulated in a close circle round the pole, and was called by the early Chinese the T'si(t)siang ("Seven Goers"), equivalent to the Haptaoiringa with like meaning of the Zoroastrians. The "Weaving Maid," or Maids, was Vega and its companions in Lyra, then much nearer the pole than at present; the Ox-leader, Chinese 牽牛 K'ien-niu, Altair and his companions—all these with the Milky Way, would at the period have been conspicuous in the autumn sky, and need no further explanation.

The other two groups require some notice. The Ladle in the north is identified in the Chinese astronomical work, the *Sing King*, with the stars ω (n, 49, 54 and 292 Flamstead) in the arm and club of Hercules. It is coupled with the four well known and conspicuous stars, τ, δ, ε and β, in the bow of Sagittarius. This asterism has a long and interesting history, occurring, as it does, in the earliest Indian and Zoroastrian lore. In Zend it is the Çufra. The 2nd Fargard of the Vendidad [v. 7], speaking of the Airyano of King Yima, tells us:—"I, Ahura Mazdao, brought two implements unto him, a golden çufra and a goad inlaid with gold." His territory had been becoming too straitened for the growing people, and these he was to use to increase its capacity. Differences regarding the Çufra have risen high: Ferdinand Justi translated it simply *plough*. The root is çif (to strive, wound, overturn), and this corresponds with Sanscrit kship, with similar meaning: but in Sanscrit the same word, here spelled çurpa, is taken to mean "winnowing tray," and a like meaning is

given to its Chinese representative ki, and this interpretation it undoubtedly must carry in the ballad quoted. At some former period the word had a much wider distribution westward, and we meet it in Latin in an almost identical form as *hirpex*, the English *harrow*, both connected with Greek συρμός, from σύρω (to drag along). The later Persians, apparently under Sanscrit influence, translate the Zend Çufra as *ring*, but mask thereby the plain intention of the narrative. Continuing in verse 10, Ahura is made to say :—"I brought two implements to Yima, the harrow and the boring rod, whereupon Yima stepped forward to meet the sun ; he pressed his earth with his golden harrow, and bored it with his rod, addressing it thus :—O Çpenta Armaita, open asunder, and spread thyself afar to bear flocks and herds and men." It is evident that any such words as golden ring and poniard, as rendered by Darmesteter, completely destroy the plain meaning of the myth.

It is noteworthy that in the imperial state-worship of China the whole ceremony is preserved to the present day. Each year, at the Vernal Equinox, the Emperor goes before dawn to meet the sun at the Sien Nung T'an, the Altar of the "Genius of Agriculture," and with his plough opens the first furrow of the year.

Another allusion to this same group of stars occurs in the ancient Ballads [*Shi*, I. i. 10, 3.], where the Ju fen thus sings :—

> The Scorpion in the west descends,
> Antares red the Archer flies ;
> The Royal Chamber downward bends,
> As in the east the Pleiads rise.

The verse in the current version has been recensed almost out of recognition : the ballad is a simple country ditty, on the same theme as the Scotch ballad "There is nae luck

about the house," and the last verse, quoted, simply implies that the good-man's return takes place in the early summer. To any student acquainted with the old Chinese names of the constellation, and without in any way altering the sound, the task of restoration is not difficult: I give an amended version.

畢 雖 王 房
昴 則 室 於
孔 如 如 頳
邇 毀 毀 尾

In the modern text for 房 fang (the four stars forming the claws of Scorpio) has clearly been substituted the modern character 魴 fang (the bream), and yü (preposition) has been converted into 魚 yü (fish); the other two characters in the first line then naturally stand for Antares the "Red" and the "Tail" respectively. In the second line the ordinary character 毀 wai (to fall) has by the addition of the fire radical been converted into an imaginary symbol, 燬, and translated "blazing"; the real translation is simply the "Royal House" is descending [in the sky]. The *Sing King*, according to Schlegel, states that in primitive times the name applied to the two asterisms the Tail and the Ki was that of the "Royal House." In the fourth line the expression Fu-Mu father and mother is absolutely meaningless; the characters, as suggested, must have been Pi-Mao (the Hyads and Pleiads). In Northern China, in the second half of August, these are seen to rise as the others are about to set, and three thousand years ago the same phenomenon would have been noticed at the beginning of July.

But how did the Çufra become connected with the Vernal Equinox? The answer is interesting, if sufficiently simple. The Solar Zodiac, we have seen in the first part, could only

have originated far to the south, where the most marked feature in the year was the winter solstice, introducing in Central and Southern Arabia its comparatively cool winter season. This division would seem in the last degree unnatural in the less favoured (climatically, at least) countries of the Airyano Vaêjo, along the 40th parallel of north latitude, where there were practically but two marked seasons, winter and summer, the others, spring and autumn, gradually fading into their successors. The most marked of these divisions was, of course, the Vernal Equinox ; and here we find most of the northern peoples placed the commencement of their year. Then the sun commenced to have sufficient power to melt the accumulated ice and snow of winter, and then the soil, loosed from the ice and frost, commenced to break up in readiness for the harrow of the agriculturist.

Now it happened that *quam prox.* 4750 B.C. the full moon at the Vernal Equinox shone amongst these very four stars in the bow of Sagittarius ; the stars themselves plainly enough represented the Çufra (harrow), so that the pious agricultural population of the land, which as we can recognise from the language itself included the entire, could not but see that the sign itself had been placed there by Heaven to indicate the time to commence their annual labours. Apparently, amongst these people at least, the harrow had been anterior to the plough ; and there aloft the Celestial Harrow in conjunction with the full moon shone down upon them just to notify that now was the time to begin to break up the fallow ground. It was plainly fitting then that the full moon, in all northern languages and by all northern peoples recognised as the celestial measurer, should mark the beginning of the new year, and no more suitable conjunction could be found than that wherein her temporary stay with the Harrow denoted that the storms of winter had fled, and the husband-

man might once more fetch out his harrow and prepare to sow his seed.

Even so late as the time of Vergil the husbandman is found attentive to the motions of the stars :—

> Nor must the ploughman less observe the skies,
> When the Kids, Dragon and Arcturus rise,
> Then sailors homeward bent, who cut their way
> Thro' Helle's stormy straits, and oyster-breeding sea.
> But when Astrea's balance hung on high
> Betwixt the nights and days divides the sky,
> Then yoke your oxen, sow your winter grain,
> Till cold December comes with driving rain.[5]

In the time of Vergil, the husbandman had for ages been provided with a regular calendar, and the reckoning of time had been reduced to a science. In the days before the flight of the old inhabitants of the Airyano, the husbandman was entirely dependent on the celestial movements to regulate his daily labours; and his desire to discover the secret of the annual rotation of the stars must have been all the stronger that his more advanced neighbours in Babylonia had already a calendar to work from. Such a calendar did not, however, agree with his own conceptions of the nature of things, and he anxiously sought for something more suited to his daily needs. This must have been the origin of the Lunar Zodiac, which while still retaining the twelve months of the other, made those months lunar, and divided the ecliptic into the varying twenty-seven or twenty-eight stations.

Of course it is impossible to ascertain the exact period when the primitive husbandman first began to regulate his agricultural labours by the position of the moon amongst the stars; that must have been almost contemporary with the invention of the plough: it is significant, however, that in almost every nation, from the shores of the Atlantic to those of the Pacific, we find the name of that implement referable

[5] *Georgic, I.* Dryden's translation.

to the still existing root *ar*. Even Chinese, which it was the fashion till yesterday to refuse association with the more highly developed tongues of more westerly Asia, preserves it still in the form 犁 *li*, or in the older southern dialects *lai* (to *plough*). So the name of the moon as the "measurer" (of time) occurs in all the (so-called) Aryan tongues as far as the Pamirs, and though the Chinese 月 yuet has no connection with this root, it has (as likewise the Sanscrit *vidhu*, also a name of the moon) a very intimate connection with the equivalent root *vidh* (to rule).

When, possibly under the influence of their more advanced neighbours, these people commenced to plan out their zodiac as divided into recognisable groups of stars, there would naturally have arisen a desire to mark the other annual periods, especially the solstice. Thus *quam prox.* 4780 B.C. the solsticial colure passed through the star γ Pegasi, and at midnight of midsummer's day the full moon would have been in conjunction with Algerib, while at the winter solstice it would have shone just north of Corvus. We accordingly find in the names attached to the two some recognition of the fact: thus the stars γ and δ Pegasi are still known to the Chinese as 壁 pik, *i.e.* the "*Partition*" wall between the old and the new years; as likewise in the Bundahish they are called Miyan, Zend midhyana, i.e. "*middle*." So Corvus is with the Chinese known as 軫, the "Crossbar" or threshold over which the chariot of the year must pass before entering the new: this in Indian lore is called Hasta, generally translated "hand," but which we may well compare with Greek Χάσμα, the "chasm" lying between the two years—a similar idea, apparently, to that of the Romans when they placed their deity Janus in the passageway between the two.

So much for the mysterious realm of the Airyano, which as yet we only know from the myths, and a few

genuine traditions which have survived. Its connection with the beginnings of civilisation in China equally rests on a few old traditions fortunately preserved in the old Classic of Ballads, the Homer of the Chinese, and the remains of Mencius. Neither of these can, it is true, be looked upon as history, but they agree so completely with what we learn from other sources, especially Indian and Zoroastrian, that we cannot reject the evidence for their authenticity. This by no means binds us to accept the *ipsissima verba* of the ballads, but with this reservation they are more valuable than the so-called records of history, which for the most part are brazenfaced forgeries. In this respect the records of ancient China may be compared with those of ancient Rome—both profess to be founded on ancient records, which on investigation prove non-existent; both have been built on a foundation of ancient ballads, which in both cases have been misinterpreted and wantonly falsified. In both the (so-called) original rulers of the state have been dragged into the service from abroad, and are of a period long anterior to any trustworthy local tradition; and in consequence whole so-called dynasties, existing only in the imagination of their inventors, have had to be inserted to fill in the gaps.

Thus, if the Roman romancers found it necessary to invent a long line of Alban kings to fill in the gap between the Trojan Anchises and the twins Romulus and Remus, where the first trace of local myth comes in, the Chinese history embroiderer found that to bridge the space between the old Aryan deities, Yao and Wu-shun (Varuna and Vishnu), he had to spin out a Hia (? Tokhar) dynasty, and, this not being sufficient, to insert the whole of the twenty-eight lunar constellations *en bloc*, to fill in the vacant space between the world-marked epoch of the twenty-fourth century

B.C. and the advent of the Chinese twins, the Cheokung [*circiter* B.C. 1200], where likewise commences the first genuinely local myth.

In one respect China has the advantage over Rome; the old ballads and stories from whose tatters Q. Fabius Pictor and his successors patched together the romance of the foundation of the ante-Roman state have all perished, so that the scientific student of ancient history has no means of probing into the past of Rome prior to the foundation of the Republic. In China, mainly owing to the archæological mind of Confucius, a good many fragments of the ancient ballad poetry have bridged the gulf of the period of disturbance anterior to the establishment of order under the Hans, at the commencement of the second century B.C. These were patched together and recensed by the wise men of the Hans, from one to two hundred years after that date. As the ballads had never been committed to writing, but had been handed down by oral tradition; and as during the period of anarchy incidental on the successful invasion of the old hegemony by the rude and uncultured princes of T'sin, the language had undergone radical change, these wise men made but a poor show for their task. Still it is possible with the aid of comparative philology to restore in part the original. Here, however, a still more serious stumbling-block comes in the way. The pretended scholars of the eleventh century, conceited in the ratio of their ignorance, took upon themselves the ungrateful task of a second recension, in order to make the old ballads conform to their conceptions of what they should have been. The result is bizarre, and it is only with uncertain and timid steps that the modern explorer can pick his way through the ruins.

Now the consensus of these old ballads, and of what traditions have descended the stream of time, goes to

connect the ancestral stock of the tribes amongst whom the first historical indications open with these very lands of Central Asia. The Sipak K'anli [*Shu King*, IV, x], "Western-chief's occupation of Li," is an evidently much decayed fragment: it simply describes the new chieftain from "the west" as already in occupation of the agricultural land. As in the *Shi-ki* this territory of Hosi was occupied by the Hwanyas, a considerable tribe, it was apparently on the frontiers of history more fertile than at present. The Hwanyas about 120 B.C., we learn from chap. cxxiii, submitted to the Emperor Wu, and this enabled him to clear of the Hiung Nu the entire country from Sining to the Lop Lake. Immediately to the west of this, and actually abutting on the waters of the lake, then far more extensive than at present, was the territory of 姑師 Kusse, or 車師 Ch'esse, now Gash, and in the oasis now known as Charkhlik, at the foot of the Altyn Tagh, was the site of the semi-mythical 岐 K'i, the first settlement of the Cheo people after their weary plod across the plains of the Tarim Basin. According to a tradition of uncertain age the Western Chief, whose name is not mentioned in the fragment preserved, is to be identified with Ch'ang, the "glorious," who, like King Tyndareus of Sparta, is afterwards to become the father of the Chinese Dioskuri, the renowned Cheo-Kung, for the word is really plural. Ch'ang's holiday name was Wan or Man, the "coloured" or the "spotted," perhaps the tattooed, but at all events here we begin to touch ground.

With his sons Fat (the Flasher) and Tan, *Dan* (the Dawn), comes forth in full panoply the great Chinese myth of the bursting of the day, and the celestial Twins. Cheo 周, the name adopted for the new kingdom, is but a slightly condensed form of the ideograph 晝 with identical sound, denoting the daylight, a word stretching from China to the

Ægean and identical with the *dios* in Dioskuri. Even in the emasculated version put forward in Legge [*Shu*, v. iii.] this is prominent:—"On the day kia-tse at early dawn Sheo led forth his hosts like a forest, and ranged them in the wilderness of Muk; but they would offer no opposition to our army. Those in front inverted their spears and attacked those behind them till they fled; and the blood flowed till it floated the pestles about!" *i.e.* the dawn reddened the sky higher than the heads of their spears. There is no need here to enter on detail: various of the old ballads enlarge on the theme, but always with the same accompaniments of the dawning day and the reddening sky. The *Shu* further tells us that the great battle appropriately took place on the crossing of the "Ford of Mang," *i.e.* at the Vernal Equinox, when the parting of the years is crossed.

The land now reached was the upper part of the valley of the Wei in Shensi, near where is now the city of Feng-t'siang fu, "where the phœnix soars," so that the Mangtsin (ford of Mang) crossed had no relation with the geographical Mangtsin on the Yellow River in the province of Honan, that name in fact only dating back to the Kin Dynasty.

But a distinct tradition carries us back long beyond the appearance of the Celestial Dioskuri on the frontier of Shensi. The tale of the wanderings occupies a distinct place in the epic lore of the ancient Chinese. Fortunately we possess the story in its almost primitive condition, divided into many ballads not yet worked up, like Homer's great epic, into a single poem. If we lose, then, in the case of China the grandeur of the *Iliad* or *Odyssey*, we have in some slight measure a consolation, inasmuch as we have a few of the original ballads on which the epic was founded. It is true that the fragments are, as they appear, sadly corrupted by the ignorance of the early scribes, who wrote them down from the

vernacular idiom in which they had been handed down for nearly a thousand years; and worse even than this by the subsequent ignorant recensions of the medieval commentators. Yet, in the main, amidst the varying changes of the language, written and oral, the ancient ballads of China, even in the incomplete and ruinous condition in which they have descended to our days, in the light which they throw on ancient history and ancient lore, remain amongst the most valuable records of the past. The main body of them have been handed down in the collection known as the *Shi King*, or "Classic of Ballads," which owes its preservation to the piety of Confucius, though not committed to writing till 650 years after his death. But in addition to these many other fragments are to be found in the *Shu King* concealed in a mass of verbiage, and even in the reputed conversations of Confucius and Mencius, as well as a few other writings which came to the front in the search after the ancient remains in the days of the early Hans. It is not to be supposed that at any time prior to the commencement of the reign of Kao Ti in B.C. 202 there was any body of current literature in China. Nor are we to attribute any striking loss to the ordinances of T'sin Shi-hwang-ti. It is likely that a few highly prized manuscripts were burnt which were in the hands of the recalcitrant scholars of the Poksse, but there is no trace of any general persecution nor of any wholesale *auto-da-fé* such as the prejudiced scholars of the Hans would have us believe. As a fact the greater part of the so-called literature of the third century B.C. only existed orally, and the first real attempt to reduce it to writing was due to Li Sse, the well known minister of the terrible T'sin Shi-hwang-ti himself.

A ballad quoted by Mencius [I. ii. 15] tells of the ancient wanderings of the Cheo people before arriving at K'i, which

is worth quoting as it curiously agrees with the Zoroastrian legends in the *Vendidad* :—

> Of old King T'ai dwelt in Pin ;
> The people of the Diks harried him.
> He paid them tribute of furs and gems,
> But could not satisfy them :
> He gave them hounds and horses,
> But they were not content :
> He presented them pearls and jade,
> But still they had not enough.
> He assembled his elders,
> (And told them) :
> What these Diks want is our land ;
> It is not meet that your prince should thrive,
> To the detriment of his people.
> Why be distressed at having no prince?
> I will leave you and Pin ;
> Will cross the Liang mountain, and
> Plant a home at the foot of Mount K'i.
> (His folk said) :
> This is a man who cares for us ;
> We cannot desert him.
> They followed him (in crowds) as folk going to market.

Now it is especially noteworthy that the Zoroastrian legend preserved in the *Vendidad* enables us to throw some light on the position of this land of Pin, and connect it with the Iranian "Varena of the Four Corners."

"The fourteenth of the good lands and countries which I. Ahura Mazdao created was the four-cornered Varena, for which was born Thraêtaona, who smote the Azhi Dahâka. Thereupon came Angra Mainyu, who is all death, and he created by his witchcraft untimely issues and the oppression of foreign rulers." [Fargard, 1. 18.]

Now Pliny places his town of Cartana, "hereinafter called Tetragona" (four-cornered), opposite Baktria under the Hindu Kush; and this we must identify with the Karnasa of

Ptolemy [vii. i. 43] as if Sanscrit Chatur-karna (four-eared), The name is still preserved in the plain of Charikar near Kabul, where the Panjshir and Ghorband rivers join; from this the fugitives to gain the basin of the Yarkand River must have crossed the mountains of Dardistan, which with the usual phonetic changes we find in the Liang Shan of the Chinese story.

The third book of the *Shi King*—the *Ta-ya*, or Greater Epic—contains most of the surviving ballads relating to the Great Migration. Appropriately it opens with the Apotheosis of King Wan (the "Spotted") where he is represented in Heaven, sharing on equal terms the life of the devas. We have in the *Shi King* no trace of the pretended dynasty of Yin-shang, which looms so conspicuously in the *Shu King*.

The tribes of Cheo have already crossed the mountains and descended into the great plain of the Tarim, now Eastern Turkestan, but which before the irruption of the Hiung Nu had been inhabited by fair-haired tribes of Turanian affinity. In these ballads the people then resident in the plain are given the general title of Yin-shang—a word of doubtful meaning and pronunciation; we must, however connect the former syllable with a root *ar* and so with *arj* (white), as if Arjun or Arghun. Now Yule, on the authority of Cunningham [*Marco Polo*, 3rd ed., 290] says that *arghun* in Turki means *fair, white*; and the name survived for the inhabitants of Tangut as late as the time of Polo. The word as a proper name is found in connection with these original inhabitants of the plain in Arjunas, the third of the Pându princes; in Kuru, apparently a Turanian form of *gaura* (yellowish, white); in Kuntî the Turanian form of Gandhârb-a, always associated with fair complexions, and in Pându (the white), also seemingly a Turanian form of Sanscrit Bhârata, connected with *bharga* (radiance, lustre).

There was naturally a good deal of fighting when the Aryan immigrants descended from the Dard mountains into the Yarkand plain, and the Hwang-i ballad [iii. i. 7] describes the capture of T'sungyung (Cherchen) by Wan Wang :—

> Fierce in his wrath our king uprose,
> Quickly his armies raised, and now
> The foes in vain his arms withstand.
> Thus he from ruin saved our Cheo,
> And from dire strife preserved the land.

So the *Shu King*, in the passage already quoted, describes the mythical battle at the Mangtsin ; so that we find here, as elsewhere in the case of the Airyano and the Indian immigration, that the meeting of the Aryan and Turanian elements was not to take place without a fierce struggle. The fighting in the Tarim basin may not have been as fierce as elsewhere, but at all events it ended, according to the first ballad of the series, in the submission of these tribes :—

> Magnificent was King Wan,
> As with his robes gathered around him he did his reverence,
> And acknowledged the decree of Heaven.
> The children of Shang
> Enjoyed themselves without thought of the future,
> But when the gods gave the command,
> They submitted to the rule of Cheo.

It was a branch of these Turanian Pre-Turkish inhabitants of the Tarim basin who under the name given to them by the Aryan immigrants of the Lunar Race, the Chandra Vança, crossed Western Tibet and settled on the Upper Jumna, where they gave to the new home the name of Kurukshetra (the "Plain of the Kurus"). Here was founded the city of Hastinapura, whose origin is traced to the imaginary Hastin, son of an imaginary Su-hotra, but which is simply the Turanian Gastburh ("Stranger-town"). Slender as are the

Chinese tales of the relations of the two peoples, the Indian are even more slender. Tradition does, however, throw a single ray of light on the subject. The *Vishnu-Purana* thus describes the contest:—"Paraçu-Rama cleared the earth thrice seven times of the Kshatriya caste, and filled with their blood the five large lakes of Samanta-panchaka, from which he offered libations to the race of Bhrigu. Offering a solemn sacrifice to the king of the gods, Paraçu-Rama presented the earth to the ministering priests. Having given the earth to Kaçyapa, the hero of immeasurable prowess retired to the Mahendra mountain, where he still resides; and in this manner was there enmity between him and the race of the Kshatriyas, and thus was the whole earth conquered by Paraçu-Rama." [*History of Ancient Sanscrit Literature*, 17.]

But who are these Kshatriyas? There is little doubt that they must be connected with the "aurva Hunavo Vaêçkaya,"[6] the gallant Hunus of Vaêçko, the Wusun of the Chinese, who were undoubtedly a fair race of pure Turanian blood—the Asii or Asiani of the Greeks, who dwelt about the upper waters of the Jaxartes. With Kurus and Pândavas these tribes entered India, but jealousies arising between the two branches we find them at open war, and this war becomes the groundwork of the great Indian epic of the Mâhâbhârata. A part of these peoples remained, however, in the Tarim basin, and here we find both living at the opening of history, the Kurus as Kiang and the Pândavas as Yuet-ti, the latter the exact translation of the Indian Chandra Vança ("Lunar Race"). Philologically Kshatriya here is not to be derived from kshayat (*ruling*) but from the very similar (in appearance) form kshaya (*dwelling*). It was a translation, in fact, of Asiani or Wusun, *i.e.* Turanian *wason* (dweller), denoting the fixed Hunavo Vaêçkaya as contrasted with their wandering neighbours.

[6] *Âbân Yasht*, ver. 57.

Now all myth and tradition has connected the primitive seats of the Aryans, the Airyano Vaêjo, with the Sogdian mesopotamia; and here, when the *Vendidad* opens, we find the home of King Yima on the "good river Daitya." In the primitive geography of the plain we find the four great rivers, the Irgai, the Chui, the Syr (Jaxartes), and the Amu (Vaksh or Oxus), all uniting and flowing through the mesopotamia into the Caspian Sea, which then stood at a somewhat higher level than at present. The two principal of these were the Jaxartes and the Daitya. Now it is noteworthy that Herodotus always calls the Jaxartes the Araxes, and modern authors, unaware of the reason, have supposed that he copied the name from the Armenian river of that name. As a fact the converse was the case. In all ages emigrants have indulged in the habit of carrying with them to their new abodes old names and old recollections. These names have actually been carried in the stream of migration to all the intermediate countries between Armenia and Western China. The original name of the Upper Jaxartes was undoubtedly the Saraç, and the more modern name of the Jaxartes apparently arose from a confusion between the Saraç and the Daitic. Wherever, then, these Aryan emigrants migrated we find the recollection of the old sacred names: thus in Armenia we meet the Araxes and the Kyrus, as if Çyrus; in the old Seistani country about the Hamun, inhabited by Iranian tribes, we have the Haraqaita and the Daraya, and in the sacred land of Sthanesvara, along the Upper Jumna in the region of Kurukshetra itself, we find the holy rivers of the Saras-vati and Dhrishad-vati, still venerated and still places of pilgrimage for the pious Hindu. Finally, in the *Shu King*, in the "Tribute of Yü," we find the two sacred rivers, now in modern Chinese pronounced the T'su and Tsai, removed to the almost sacred precincts of

Singan, the ancient capital of the Cheo state in modern Shensi.

The name of the Oxus, Veh or Vaksh, is not so far reaching, but we meet it still in the Wei 渭, the main river of Shensi, and the great affluent of the Hwangho, on which was founded the first of Chinese capitals.

We have then an unbroken stream of myth and tradition leading from the early settlers who founded in North-western China the first hegemony, afterwards to develop into empire, up to the original seats of Aryans, Iranians and Salyans, in the then fertile and well-wooded lands of the Sogdian Mesopotamia. And as we have established a *primâ facie* case for the original invention in these regions of the Lunar Zodiac, and we find that that Zodiac has spread to the principal, at least, of the countries settled by the emigrants, and that it still exists as a living entity in both India and China, we have made a fair claim for placing here the first beginnings of our Athwyan cult as distinguished from the, undoubtedly more ancient, civilisation which had its origin on the table land of Central Arabia.

NOTE.

There does not seem to be any clear reason why the two bands of immigrants into India should have adopted the distinguishing names of the Solar and the Lunar families. There is no doubt that at the first contact of the two races there was a very considerable difference in complexion between the two, and that this difference of complexion—both, however, being blonds—it was that led to the application of the word varna (*tint, stain*) to distinguish the two castes of the Brahmans and the Kshatriyas. As we have seen, the two races belonged to the two sub-families of the Blonds, the Aryan and Turanian respectively, and so far the indications seem to be that while the former were more especially marked by hair of a bright golden hue, the Turanian, like their Scandinavian kindred in modern Europe, were distinguished by flaxen, almost white, hair. This would at once render intelligible the epithet of Lunar which we find consistently

applied to them. Thus while the white edible water-lily blossoming during the night is called the chandra-kântam (the *moon-loved*), the corresponding sun-desired (*surya-kamala*) is the yellow sunflower.

There are few more obscure chapters in human history than that which tells of the entrance of the blond races into the story. There is little or no doubt that at some remote period, apparently towards the early part of the second millennium before Christ, certain restless tribes in Northern Asia commenced to make inroads on their more settled neighbours who lived in the then more fertile lands which were watered by the Oxus, the Jaxartes and the Chui. These rivers seem in those days to have united and, flowing in a channel somewhat to the east of the present Aral Sea, to have—somewhere in the neighbourhood of the present Khivan oasis—turned westward and discharged into the Caspian Sea. These restless tribes were probably racially connected with the dark, swarthy folk known as the Oghuz, into whose history it is unnecessary here to enter; but from whatever cause, at the very beginnings of history we find them pressing on their more southern neighbours—so much so, indeed, that the districts north of the water-parting between the Chui and the Irtish came many centuries ago to be known as the "Officina gentium" (the "Workshop") of nations. South of these Proto-Turkish or Pre-Turkish peoples extended a long range of fertile lands, reaching from the Caspian on the west right up to the Pamir Highlands, and from these latter up to the borders of China on the east. These regions, as we learn from various sources, but more especially Chinese, were inhabited by blond peoples of settled agricultural habits, who had advanced a considerable way on the road towards civilisation. Within the immediate district they consisted mainly of two families who, from the Iranian story of their common descent from the hero Feridun, have been classed by modern ethnographers as respectively Aryan and Turanian. The choice of these names was ingenious, and quickly superseded the clumsy nomenclature of Caucasians introduced at the beginning of the last century; and had it been founded on a little more knowledge, and been used with a little more consistency, would have suited admirably all purposes.

Unfortunately, almost from the beginning, while Aryan was made to include all the peoples from Iceland to Northern India who had fair skins and spoke languages as diverse as Celtic (including Welsh and Gaelic), Teutonic, Slavic, Finnic, Iranian and Sanscritic, the correlate Turanian was made to cover an equally diverse group of Oghuz, Turk, Mongol, Tartar, Manchow, Tibetan, and, with some, even Chinese,—every people, in fact, whom they could not find it in their heart to dub as Aryan. The confusion was as great as prevailed at the beginning of the nineteenth century, when every people that had not a black skin, nor could lay claim

to the extremely narrow family of the Semites, was forthwith classed as a descendant of Japhet. The position was not much improved when the two new terms Indo-European and Ural-Altaic were introduced, and the latter was formed out of a select circle of those previously called Turanian.

According to the old Zoroastrian tradition, Çairim, Airya and Tura were three brothers, and notwithstanding the fact that a blood feud subsequently sprang up between Airya, the youngest, and Tura, the quarrel was always classed as a fraternal one, and never assumed the shape of national antipathy, as did the contest between their father Feridun and the Azhi Dahâka.

The three brothers had, in fact, very much in common: they were all blonds; their speech, though it differed so much that they were not mutually intelligible, belonged to one family; they were all on much the same level of civilisation, and all equally hated their swarthy neighbours, to whom they gave the appellation of Azhi Dahâka ("the Gnawing Serpent"). They had, according to their old tradition, all three been once common residents in the Airyano Vaêjo, under the equable rule of the fabled king Yima Kshaêta ("the Shining"), and it was only on the ruin of this fair land that they had to take up separate abodes. On the north-east the land of Rum (the Rhymmi of Ptolemy) became the home of Çairim, stretching from Turgai to the plains of the Volga. Along the northern part of the great nesopotamia of the Chui-Jaxartes-Oxus and about Yarkand Tura took up his abode. While to the south, resting on the Hindu Kush and the northern ranges of the Himalayas, were the temporary homes of the descendants of Airya.

How long the three families continued in these positions we have no means of ascertaining, but it was in all probability for a considerable time. The Oghuz tribes, however, did not cease their encroachments, and the consequence was that in the end the Turanians were forced on to their Aryan neighbours, and this led to hostilities. In the subsequent legends of the Iranians the place of the Azhi Dahâka—the Oghuz Diks—is taken by the hosts of Tura, and the contest becomes that of Iran against Turan. This episode has contributed to a large extent to cause the confusion between Oghuz and Turanian.

Meanwhile the Aryan stock became differentiated into three main sub-families:—the Aryans proper, who for a time remained in Baktria and adjacent lands; the Iranians, who crossed the Parætakenian mountains into Media and Persia; and the Salyans (Wanderers), who passed westwards and finally appeared on the Ægean as Hellenes. Subsequently the Aryan branch again divided, a part crossing the Hindu Kush into the basins of Parashawar and the

Panjab, while the others, under the name of Cheos, crossed the highlands of Dardistan and found themselves in the basin of the Tarim, whence their eventual route to China has been explained within.

When these Aryan Cheos arrived in the upper basin of the Yarkand River they found the land already occupied by people of a type even more decidedly blond than themselves, as fair indeed as the fairest of the Low German folk about the mouths of the Elbe and Weser. These people were divided into several tribes, but would seem to have recognised a common appellation recalling the Argon of Marco Polo and the Arjuna of the Sanscrit-speaking peoples—not improbably some such form as Arghun, meaning simply "White"—and this gave origin to the name by which they are known in the ancient Chinese ballads of the Taya [*Shi King*, III], namely *Yinshang:* the word is connected with the Sanscrit root ark (to *shine*) and forms the foundation of such words as argentum (the "white" metal), Chinese 銀 yin, etc. As a tribal name Argun still survives in Ladak, where it is the ordinary designation of the peasantry.

A story very similar to the Chinese appears in Indian myth. Arjuna, the third of the Pândavas (White) princes, was a son of Indra, the Sky-God, and Kuntî, the Turanian form of Sanscrit Gandhâra: Arjuna falls in love with the lady Draupadi, and is at once accepted by her of her own free will; and this practice of permitting the lady to have a say in the selection of her husband seems so extraordinary to the Brahman relater of the tale that a special word Swayamvara is invented for the custom—which, it is superfluous to add, has survived amongst all our Teutonic Turanians to the present day. The rest of the tale becomes so mixed with Brahmanic corruptions that it throws little further light on the subject. The tale of Nala is, however, more to the point. Nala belongs to the Solar race but falls in love with Damayanti, the pearl of the other. At her swayamvara Damayanti accepts Nala in preference to her other suitors, rejecting even Indra, who determines in consequence to ruin Nala. He encourages Nala in gambling, and when he has lost everything else proposes he should stake Damayanti herself. This is indignantly refused, whereupon the pair are driven out into the wilderness. In his misery Nala advises her to go back to her father's house, but she is unwilling to desert her husband, whereupon, she sleeping heavily, Nala in pity leaves her.

Deprived of his kingdom, and in despair, Nala accepts menial service and is appointed to the office of charioteer, and in that low position tries to conceal himself from his devoted wife, who is seeking him everywhere. Finally Nala becomes cook in the service of the king at whose court Damayanti is residing, thinking he is now so black that he will not be

recognised; but his wife recognises his driving, and after some further byeplay they are again united, and Nala restored to his kingdom greater than ever.

A recollection of a similar myth is to be noticed in the Chinese ballad, the Ta-ming [*Shi King*, III. i. 2]. Contrary to all rule the new monarch of Cheo must find his bride amongst the despised race of Yinshang:—

Heaven is not easily moved,
Nor lightly bestows the throne.
Heaven was not satisfied with the rule of Yin,
And determined it should not attain the kingship.
Chosen was the lady Yam
From the land of Yinshang (Arghun).
She came as the bride of Cheo,
To be his wife in the citadel.
She and King Ki
Were capable in their administration.
T'aiyam conceived,
And gave birth to King Wan.

Curiously, as we find in the Indian story Nala relying on his begrimed countenance for concealment, so here the son of T'aiyam is called the "spotted," for so—or the tattooed—we must translate the title Wan. Again, forgetting apparently the story of the wedding of King Ki, in the latter part of the ballad the myth is duplicated in the person of Wan Wang himself:—

On lower earth High Heaven looked down,
Who'twas the great Behest should gain:
King Wan, our chief of high renown,
Did from the Gods the gift obtain.
Then far away by Hiah's tide,
Where changeful Wei still gnaws the land,
In happy mood the scene he scanned,
And there he found a peerless bride.

In yon wide land a lady lies,
Of T'ientse's realm the richest prize:
Propitious were the omens then,
As by the Wei he claimed his bride!
His skiff he steers athwart the tide—
Too dazzling bright for mortal ken.

From Heaven aloft the word has come,
Worthy alone King Wan the throne!
In Cheo's fair land shall be his home,
And Ushas as his wife he'll own.
The eldest born of Nature she:—
In time she'll bear a worthy heir.
Guardian and stay the Doom he'll bear;
And faithless Yin shall own his sway.

The whole of the ballad is unmixed myth, but consorts well with the daylight story of the celestial Twins. I have translated the Chinese character 辛 sin, by Ushas. The word is intimately connected with *uro*—Sanscrit *ush* (to burn); and in the similar myth in Mencius [V. i. 7. 2.), where Iyin (the planet Mercury) is represented as ploughing in the land of Sin, can only thus be explained as referring to Ushas (the Dawn land).

Appropriately the ballad ends with the triumph of the rising sun over the mists of darkness and the establishment of the bright kingdom of the Daylight Cheo :—And so, some 1,200 years before Christ began the long history of China. I give below the conclusion of the song :—

See ! where across yon eastern sky,
O'er pastures wild the banners fly :
Dark as a forest spreads the line !—
So spake our prince ; and speaking rose :—
Stay not your hands to smite our foes ;
To crush Yinshang is Heaven's design.

Dauntless as heaves the ocean's surge,
So onwards swift the chariots urge,
And prancing proudly speed the teams !
Aloft the star of morning gleams,
Like eagle, poised at heaven's gate,
Our king's triumphant march to grace,
And smite proud Yinshang's impious race.
Thus Heaven with vict'ry blessed our state !

Incidentally, by comparing Indian and Chinese lore, we learn a good deal of these peoples and the various tribes into which they were divided, and here I must acknowledge my indebtedness to the late General Alexander Cunningham [*Archæological Survey of India*, Vol. II]. As represented in the Mâhâbhârata the two main divisions of the Lunar Race had been the Yâdavas and the Kurus, or Kauravas. The Yâdavas, descendants of Yadu, were still a pastoral people, and were accustomed to move about a good deal in search of fodder and water ; and a portion of the tribe had at an early period migrated into India, where according to tradition they fixed their head-quarters at Mathura, now Muttra on the Jumna. Of this section of the tribe came the divine hero Krishna, with whom, according to one account, the tribe became extinct. There is no doubt whatever that with these Yâdavas we must identify the ancient folk known to the Chinese as the Yueh-ti, *i.e.* "Moon-Family." When we first meet these in the pages of the *Shi Ki* they were residents in the present

Kansuh, but extended on the east into Shensi and on the west reached as far as Shacheo, and even to the pastures by Lake Lop. When history opens they are described in the 110th chapter as a formidable people, and seem to have ranged indefinitely towards the West.

About the year 176 B.C. they were utterly defeated at the hands of the Hiung Nu Turks and compelled to flee from their ancient abodes in the basin of the Tarim. A portion made their way across the mountains by Tashkurgan into the valley of the Upper Oxus, where after a struggle they joined a kindred race, the Wusuns of the Chinese—the Asii or Asiani of the Greeks—and the two, as "Indo-Skyths," soon became formidable. The smaller portion escaped apparently across the mountain range into Western Tibet, and later on acquired a domicile in Kophêne. This route had centuries before been followed by their predecessors in their first immigration to India; and there is little doubt that this later movement must have considerably added to the strength of the Jat families in the Panjâb. The *Shi Ki* describes these Yueh-ti in the second century B.C. as eminently fair, with great beards and blue eyes. Modern research identifies them with the people called by the Greeks "White Huns," and who are also described as having fair complexions, handsome, of lively dispositions and given to mirth and enjoyment, in strange contrast to their neighbours.

At the period told of in the Mâhâbhârata another branch of these light complexioned people was, however, more in evidence. This was divided into the two closely allied families of the Kurus and Pândavas, whose family strife forms the subject of that epic. Garrett's *Classical Dictionary of India* thus describes them :—"Kurus,—A very ancient people, who seem to have been originally situated in Central and Northern Asia, as the *Vishnu Purana* says they inhabited the middle districts of Bhârata. They probably entered India with the Aryans or were a branch of that great race, and settled in Kurukshetra. With this meaning the name applies to both Kurus and Pândawas—hence Arjuna is called the best of the Kurus."

We are in complete ignorance of the period when this ancient immigration of the Lunar Races took place, but the indications are that it occurred after, though not at a long interval of time, the great Aryan immigration which brought the Solar peoples into the Peninsula. That migration did not transfer the entire of the Kauravas from their ancient homes to India, indeed in all probability the greater part of the tribe still remained in possession of their original homes. Ptolemy speaks in his day of Ottorokorrhas and Ithaguri in connection with his Serica on the northern flanks of the Himalayas, and these we must render as "Upper and Lower Kurus" respectively; while equally the early historical notices of the Chinese place in these regions their 羌 Kiang, which according to the usual

phonetic rules of interchange we must render in Sanscrit as Kuru. At all events the indications are that leaving the plain of Eastern Turkestan above Khotan they made their way to Rudok in Western Tibet, and from that by way of Gartok they arrived at the foot of Mount Meru, present Mount Kailas, the holy land of Hinduism and Buddhism alike. From that their way was clear into the Gangetic plain, where they founded the City of Hastinapura, —apparently the Sanscritic rendering of the Turanian Gastburh, *i.e.* "Stranger-Town."

Other tribes noticed in these regions are called in the *Shi King* Mâts, or at greater length Matsus, whom we meet in the *Hwang I* ballad [III, i. 7]. There is no doubt that these, who dwelt about the site of the present Cherchen, must be associated with the name of Madhu which occurs several times in connection with the Indian legend of the Pândavas. The Matsu of the Chinese version may be read as Maddhal, and this will account for another name given by the Greeks to the old Yuehti tribes of "Ephthalites," also described as a fair complexioned, handsome and light-hearted folk.

From a comparison of the various sources of information available, we find the following peoples, all belonging to closely allied tribes of the light complexioned Turanian family, of which the Massagetæ of Herodotus may be taken as the type, inhabiting these regions now roughly classed as Eastern Turkestan :—(1) The Tahia of the Chinese, the Tokhari of the Greeks—more to the West known as Dahae, Daae, or Daki. (2) The Getæ, the Çakas of the ancient Persians, in Greek mouths converted to Sakæ or Skyths. These formed the basis of the inhabitants of Çugdh (Sogdiana) and had their Indian connections in the Kathæi of Arrian. (3) The Yuehti of the Chinese, Yâdavas of the ancient Indian legends; the Ephthalites, White Huns, and Iatii of the Greeks, now represented by the various Jat peoples of the Panjâb. (4) The Matsus or Maddhals of the old Chinese, the Madhus of the Mâhâbhârata, and represented in modern times by the Meds of the Panjâb, and (5) The Kiang of the old Chinese, the Kurus of the Mâhâbhârata, afterwards divided into the two allied stocks of Pauravas and Kauravas. The successors of the last appear in the Tang-hiang of the Wei Shu, where they appear as the predecessors of the inhabitants of Marco Polo's province of Tangut, the Ta Hia of the Chinese chroniclers.

Even at this early period the speech of the two branches of the Athwyan peoples had been differentiated on the same lines as in modern times. According to the myth, Kuntî was the adopted father of the Yâdava Kuntî and was the eponym of the race of Kuntîs. The meaning was plainly not understood by the Brahmanic author, or authors, of the Mâhâbhârata. Kuntî was the Turanian form of the Aryan Gandhâra, whence came the Gandarii of Herodotus, whom again we must associate with the

Gandharas of the Indians, a section of whom we find about Attock on the Indus. Herodotus associates these Gandarii with the Dadikæ—the modern Tadjiks—and the Aparytæ, whose name we find in the Greek Paropanisus (Hindu Kush). These fair-haired Kuntîs were the originals of the mythical Gandhârbhas, and the name is found all the way from Khorâssân, where they appear in the Farvardîn Yasht as Çaênas, to Marco Polo's Caindu, the modern Kienchʻang in Southern Ssechʻwen.

A similar instance is found in the Yâdavas. These in Indian lore are made descendants of Yadu, a name without connections in Sanscrit: it can, however, be explained by Getic Hwet ("White"), which becomes çveta in Sanscrit. Colloquially these Hwetas came to be called in Sanscrit Yadus, whence the adjectival form Yâdavas.

But the words Pându, Pândava may be traced far to the west, in fact all along the line of the Salyan (Hellene) migration. The Sanscrit cerebrals *n* and *d* are, as usual, in the other Athwyan languages represented by liquids, and so Pândava stands as the representative of the Greek Πελλός (not *dark*, but *ashen grey*)—the Latin pallidus. The word we find repeated in Πελαργός (the stork) and in the predecessors of the Hellenes in the Grecian lands, the people called by them Πελασγοί (more correctly Πελαργοί), both words meaning *grey*, as well as in Πελοψ, (the "grey-eyed" immigrant from Lydia).

As in ancient Central Asia we find these words interchangeable with Turanian forms, in old Greece we meet a similar phenomenon. Thus we may compare the Aryan form Πελαργός with the Turanian Φαληρός, both meaning *white* or *grey*, and discover why Phalerus was one of the heroes of the Lapithæ, (the glistening [with oil]), in their contest with their half-brothers the Kentaurs,[6] Turanian Kuntîs, and Sanscritic Gandhârbhas.

The points in common with the Argive legends of the Peloponnesus are suggestive, but too numerous to discuss here.

[6] *Hesiod*, "Shield of Hercules."

NOTES AND QUERIES.

Professor Giles's "Adversaria Sinica," Nos. 4 and 5.

Dr. Giles has continued during the year his useful little brochure *Adversaria Sinica*, the notes in which touch on many points in Chinese literature and practice. Perhaps he is best in the period between the fall of the Hans and the beginning of the Mings, which is, however, the very period that most needs elucidating. No. 4 consists of four separate notices—three by Dr. Giles himself and one by Dr. A. Forke; the latter consists of a translation of Wang Ch'ung's essay on the Magic Arts, forming an introduction to an extended notice of the works of the philosopher, on which Dr. Forke is engaged. Wang Ch'ung lived in the 1st century, and this chapter entitled "On Exorcism" is a valuable contribution to our knowledge of the progress of Chinese thought.

The other three notices touch on subjects of varied interest. The first is on "Football and Polo" in China. While Football may be called an all-round-the-world game, Polo had really a distinctive place of origin, and this Dr. Giles brings out in his notice. The former game was probably played by the original immigrants into China hundreds of years before our era. A similar game was played by the ancient Romans. In all these cases, including China, the game was played with an inflated leather ball, and the object was to force it between a pair of upright poles, as in the modern game. Dr. Giles gives a translation of a poetical inscription composed for a football ground during the later Han, which is remarkable in the modernity of its moral.

Polo stands on quite a different footing, and seems on the other hand to have had a very definite origin. According to Dr. Giles it is first heard of in the early days of the T'angs, in the beginning of the 7th century. We may therefore attribute its introduction to the Turkish rulers of the Northern Wei who held sway over Northern China from the latter end of the 4th to the middle of the 6th century. These rulers were essentially Turks, and the ruling family called itself Tobar, which is but a form of Turkish *toprak* (earth). They, in fact, despised any long line of ancestry, and gave out that they were themselves children of the soil. From this quarter the game passed to Persia and the West, as well as to the military

caste of the Rajputs in India. Under the warlike dynasty of the Kitan Tartars the game, as might be expected, flourished exceedingly.

The third is also by Dr. Giles and professes to give an account of the origin of the Mariner's Compass. Amongst the inventions which the Chinese—the least inventive of all the nations who have attained to a high level of civilisation—have with more than usual persistency claimed, is that of the mariner's compass. So long ago as 1865 the usually credulous Legge, in the 3rd volume of his *Chinese Classics*, showed the utter untenableness of the position. This was followed up by Mayers, the most judicious of scholars, whom we quote [*Notes and Queries on China and Japan*, 1870, No. 11].

"To summarize in a few words, however, the information collected by Dr. Legge, it may be stated that certain ancient works of dubious authenticity declare that the Prince of Suh-shin, having come to offer tribute to King Wen (the father of the Duke of Chow), and 'there being a fear lest he should lose his way home, the Duke of Chow made the south-pointing chariot to conduct him safely.' This story is found in a fragment ascribed to Kwi Kuh Tsze, a Tauist mystic of the fourth century B.C., and is the earliest of all the legends with reference to this subject. It occurs again, amplified and told of ambassadors from Yueh-shang (the modern Kwangtung and Tonquin), in the *Kŭ Kin Shu*, a work dating from the fourth century; but neither in the *Shoo King*, in the writings of Sze-ma Ts'ien, nor in any other serious historical work of antiquity does any mention of the south-pointing chariot occur."

Mayers, indeed, mentions a somewhat questionable notice, claiming to be of the fourth century, of a certain mechanician named Ma Kiun, who, the Emperor being incredulous as to the existence of a "south-pointing chariot," got an order to make one. "This was the first of a series of marvels; and from this time forth the whole empire acknowledged his skill." Commenting on this, Mayers said:—"The passage seems conclusive in proving, firstly, that in the middle of the third century of our era the legend of the south-pointing chariot was discredited and looked upon as a mere fable at the court of the principal dynasty among the Three Kingdoms; and, secondly, that at this period a device was brought forward which achieved the results attributed to the legendary invention."

Dr. Giles claims to have discovered new evidence, which he imagines vindicates the claim of the Chinese. Unfortunately, Dr. Giles's ideas of historical evidence are very vague. He has called in the official history of the Sung dynasty, written by a well known scholar and statesman, Shen Yo, *cir.* 500. There is every reason to accept Shen Yo's evidence in the case of contemporaneous events; and in this light what he does say with regard to

the compass is most important. Like all other sinologists, Dr. Giles finds a difficulty in sifting the evidence as to the past. Shen Yo writes what professes to be a history of the compass from the time of "Cheo Kung," say seventeen centuries prior to his own birth, and Dr. Giles accepts this in good faith as history. If Shen Yo had discovered any fresh evidence bearing on the past, his story might have been worthy of examination. As a fact he had no more evidence to go on than Sze-ma Ts'ien six hundred years antecedently, or than is at the present moment available, and Ssema knew nothing of the existence of the compass. Dr. Giles a good many years ago made an admirable translation of the travels of Fa Hien in the early part of the fifth century. Fa Hien crossed from Ceylon to Java in an Arabian ship, and in the course of the voyage encountered a cyclone. Dr. Giles's translation of the work is excellent; he tells us: "The expanse of ocean is boundless; east and west are not distinguishable; only by observation of the sun, moon and stars is progress to be made. In cloudy and rainy weather [the ship] moved according to the wind without keeping any definite course." Verily the Professor has sadly degenerated from the student! But we do gain valuable information nevertheless from Shen Yo, which seemingly it was beyond Dr. Giles's critical ability to assimilate. Dr. Giles [presumably quoting Shen Yo] says, [p. 112]: "The Emperor Shun Li at the close of the Shengming period [A.D. 477-479], when the Prince of Ch'i was his minister, ordered him to make a chariot; and when completed it was tested by Wang Sengch'ien, military governor of Tanyang, and by Liu Sio, president of the Censorate. Its workmanship was excellent, and although the chariot was twisted and turned in a hundred directions, the hand never ceased to point south."

We have not Shen Yo's work by us, but if the above quotation be authentic, and from the work of Shen Yo, Dr. Giles has proved that in the latter part of the fifth century the Chinese were already acquainted with the practical use of the compass, or loadstone, as invariably pointing northwards or southwards. Of course the Chinese never have been a practical nation, so the discovery was never made use of as a practical guide. Regarding the "south-pointing chariot," its explanation we must seek in the land of myth. From the *Shi King*, the *Shu King* and the works of Mencius we are able to trace out pretty distinctly the path of the old immigrants who first brought its culture to China. We can, in fact, trace them up to the hero Kereçaspa of the Zoroastrian legend. Flying before the Turkish tribes of Northern Asia (the Azhi Dahâka of the Iranians, the Diks of the Chinese) we find them settling in Varena, the Pien of the Chinese legends. But there they were not allowed to stay; their leader Kungliu, or Kungt'anfu (merely differing forms of the one word) led them across the Liang Shan (the

Mountains of Dardistan) into the Tarim basin, where after passing along the flanks of the Nanshan (the Altyn Tagh) they settled at Kʻi, not far from Cherchen. Then the *Shu* takes up the story, and we find the Prince of the West invading Kansuh. Here we are suddenly surrounded with a brilliant coruscation of pure myth. The leaders of the new people appear as the Cheo Kung—for the word is plural and carries the same construction as the Dioscuri of Greek myth. The twins of the Chinese version are Fât and Tân, the Shooter [of light] and the Dawn, and in the euhemerized story are translated into King Wu and the Duke of Cheo.

Wu (the Warrior) becomes the founder of the Kingdom of Cheo and, as the representative of his house, assumes the title of Wang, *Anax*, whilst his brother becomes his minister with the title of Kung, *Dux*. A later story makes Tân go eastward to Shantung, where he becomes the founder of the great ducal house of Lu, the foremost and most cultivated in the old hegemony of Cheo.

We then see the appropriateness of the Cheo Kung becoming the authors of the "South Pointing Car," *i.e.* the chariot of the sun himself ever climbing towards his daily culmination in the south.

It is not necessary, after this somewhat protracted explanation of the South Pointing Chariot myth to mention at any length Dr. Giles's story of the two Yangs, further than to point out that they are largely mixed up with a similar mythical element.

As usual we have been looking for No. 5 of Dr. Giles's interesting contributions to old Chinese lore, and have not been disappointed. The present number is perhaps not so controversial as usual, but will probably not be found the less pleasant reading. It contains three separate notices on "The Dance in Ancient China," "The Home of Jiu Jitsu," and a review by Mr. Lionel Giles of Dr. Bushell's valuable work on Chinese Art.

Regarding the first, Dr. Giles, speaking of the modern "posturing" at the yearly sacrifices to Confucius, correctly tells his readers that the accessories are the "additions of later ages." In reality they are an apt illustration of the manifold blunders of the self-satisfied Chu Hi and his equally ignorant compeers. The ceremonies now practised at the Confucian sacrifices only date back to the times of the Sungs, and by this time the inner meaning of the old literature had been forgotten, or overlaid with a mass of ignorant rubbish: a curious illustration of this is to be found in the "posturing" intended to represent the ancient "mimes." In these the actors are made to posture in certain meaningless attitudes, holding all the while one or more long feathers of the Reeves pheasant. The authority for this is supposed to be found in the Kien-hi ballad (*Classic of Ballads*,

[*Shi King*,] I. iii. 93) where, by a blunder of the school of Chu Hi, the third verse is represented as beginning 左手執籥, 右手秉翟.

"In my left hand I grasp a flute,
In my right I hold a pheasant's feather."

The ballad is worth quoting at some length :—

The court is prepared,
The hall ready for the mime.
The sun is at its height,
Shining full in front of the stage.

Well dressed are the actors.
Prepared the hall for the mimers :
Active are they as tigers ;
They handle the ropes as silken strings.

In their right hands they grasp the *yok*,
In their left they hold the *tik :*
Splendid are they in their vermilion paint,
As their leader presents the sacrificial beaker.

The fact was that the instrument played at the ancient mimes was the double flute, the yoktik, and was practically identical with the zeugitæ (as if, zeugtikæ) of the Greeks. There is of course no question about the first character in the ballad, 籥 yoh, the ordinary character for the flute; the second was plainly 笛 tih, and is still used as an alternative. The supremely ignorant yet self-assured improvers of the text about the Sung period substituted for the second 翟 tik, also, but meaning a feather,—as if any one could play the flute with his right hand while his left was engaged flourishing a long pheasant's plume! The double flute, as we learn from old Greek representations, was played with both hands, exactly as described in the Chinese ballad.

In ancient China, as in ancient Greece, the Mime was originally of a sacred character, and was employed in the ceremonies attending the worship of the shades of the heroic departed. The very word 舞 mu, used by the Chinese for the sacred dancing, is phonetically the same as the Greek *mimos*, and the verb *mimeomai* may be taken as a reduplicated frequentitive. Dr. Giles's interesting description is mainly confined to the medieval development of the practice of dancing amongst the Chinese—a practice which, however, lasted in both private and court life well up to the ninth century. Like that amongst Greeks and Romans, it had long descended to the level of buffoonery.

Equally interesting is the second notice on the origin of Jiu Jitsu (in Chinese, the "Gentle Art") of self-defence, 柔術 Jao-shu(t). After describing various games practised in China before the Han dynasty, Dr. Giles sets himself to describe the real origin of the so-called gentle art, which he finds amongst the Buddhist priests of the Shaolin monastery, and quotes à propos of this the *Wei Shu*.

"A Shaman from the western states, by name Pot'o, who was profoundly devout, became such an object of veneration and faith to the Emperor Kaotsu [died A.D. 500] that his majesty gave orders for the Shaolin monastery to be built on the north side of the Sheoshin mountain for him to dwell in, food and raiment being supplied at the public expense."

Probably as a measure of precaution in troublous times, and remembering the very isolated locality of the monastery, the monks of the new foundation early associated themselves with the art of boxing, including in that term wrestling, quarter-staff and fencing with spears; and this, Dr. Giles suggests, may have been the architype of the modern Japanese art of Jiu Jitsu.

So far so good; but the mention of the Shaman from the west, and the connection with the Northern Weis, suggests that the term may have had something to do with the warlike race of the Uwars, or Avars, who called themselves, according to the *Wei Shu*, Jao-yen 柔然 and who were closely associated with the Turkish tribe of the Tobars, from whom sprung the imperial line. The title, then, of the "Gentle Art," by which it has become known amongst the Japanese, may have originally meant the "Avar" art, and is only one of the curious accidental coincidences which strike one everywhere in old Chinese lore.

The third notice is an interesting and in many respects able review of Dr. Bushell's recent work on Chinese Art. Dr. Bushell has gone so thoroughly into the artistic portion of his work that one may well forgive him an occasional historic slip, or even now and then an error in translation. It is but fair to remember that he conceived himself called on to avoid all subjects of controversy, and so has accepted in their fulness the absurdities of so-designated Chinese chronology, as well as the ordinary crudities of Chinese literates and modern translators. The result is not quite satisfactory for the Chinese student, but answers sufficiently well, perhaps, for the class for whom the work was intended.

T. W. KINGSMILL.

Miscellaneous Notes.

By a slip Mayers [p. 258] makes Liang Wu Ti die in B.C. 549 instead of A.D. 549. He was 86, and the only Chinese Emperor who died in harness over 80. The other two who reached that age, Sung Kao-tsung (81) and K'ienlung

both abdicated some years before they died. Liang Wu Ti was one of the characters (*typards*) of Chinese history and one of the few true gentlemen by instinct. He was always as polite to a coolie or punkah-boy as to a statesman, never touched women after 50, lived on the simplest food, was a strict teetotaller, and was never seen otherwise than neatly (though always poorly) dressed by mortal eye.

The Liang dynasty really consisted of him alone and his two sons; 簡文, who was deposed and murdered in 551 (*after* the murder of 豫章王) and 元帝 his brother, who informally reigned at King Chou, and never recognised the reign style of 大寶 but continued to use 太清 up to the 11th moon of 552, when his own formal reign of 承聖 began. The reign style 天正 (which in any case could not have lasted many days) is not mentioned in the *Kang Kien* or the *Liang Shu* or the *Ch'ên Shu*, so far as I can see. Yüan Ti was killed by the Wei Tartars at the end of 554, which is not, however, the correct accession date of his son 敬帝, for that monarch's brother, the heir, was killed at the same time as his father. King Ti was set up by his minister the Founder of the Ch'ên dynasty, to whom he abdicated in 557, and 貞陽侯, who was the Ts'i (Tartar) candidate, was killed by the said founder *before* King Ti's formal reign period of 紹泰 began in the 10th moon of 555. Hence it may be said that all Mayers' *nien-hao* are correct, and the only accession date wrong is 550 (should be 549). But he fails to mention the *after* Liang Dynasty, which, with *nien-hao* 天定 555 and 天保 562, reigned till 585 at 荆州.

追至黯黮而還; the two middle ones meaning "till dark," but Giles, under 70, 9845, and 13,131, does not help us much. Another expression I have come across in history is 卒受 | | 而去.

Neither Giles nor Williams give the character 褲, which, with 襠, means "trousers," because Chinese trousers (like the Confucian rule of Mark Twain) "work both ways" 共一當胷共一當背. Probably European trousers faced both ways once, until boys began to come home instead of going to school, under the plea that "when they cast their eyes down it was difficult to discover from their trousers whether they were walking to or from school."

Personally my reading leads me to believe that *liang-tang* means "the lap"; for instance, 韜在 | | 角 "slip [the letter] into the corner of his lap or? trousers." The Chinese have an unnecessary number of words, such as 褌, 褲, 緄, 裩, 袴, 袴 for "trousers." In the *Kin-p'ing Mei* occurs the sentence 紅裩之初褪 "when she first took off her red breeches."

Mayers' *nien-hao* for the South Ts'i dynasty are correct. But three of the eight accession dates are wrong: 483 should be 482; the *first* 494 should be 493; and 499 should be 498.

The following from the *Shên Pao* of the 20th April 1901 will interest readers :—"The daughter of the Manchu Fujun, three years ago Governor "of Shan Tung, was approved by the Empress-Dowager as a wife for Prince "Ch'un, but had not yet consummated the marriage by entering his house. "When the allied troops entered Peking, she threw herself into a well. "Fujun's mother, over 80 years of age, also committed suicide ; and, in fact, "the whole family of 15, including Fujun himself, perished in one way or "the other. In the hurry and confusion of war and flame they were but "lightly buried in the family courtyard, and not formally so until the "second moon (March 1901) of that year, a long string of coffins being "taken through the streets to the family cemetery outside the P'ing-tsê Gate, "amid the sobs of innumerable bystanders." I have full accounts of innumerable other equally distinguished suicides, and I hope the "Huns" are now satisfied with the vengeance they have wreaked upon a foolish, wrong-headed but not ignoble caste. The published correspondence of the Manchu Tingyung, executed at Pao-ting Fu, appears to clear him of complicity with the "Boxers," and to point to a judicial murder on the part of the too hasty allies. We seem to need a second Luther to modify and purify all prevailing forms of Christianity. I am sure neither Cardinal Newman nor Dr. Winnington-Ingram would approve of the specimens of it Europe carried to China in 1900-1.

In 238 a female impostor gave out that she had been sent by God 爲天神所下 to protect the Emperor.

There are not many mentions of surgery : the Tsin Emperor 司馬師 had a 瘤 on his eye, and he caused a 醫 to 割 it : from the way *i* is written, it would seem that surgery and sorcery were akin.

Eclipses of the sun incline to virtue, of the moon to clemency 日食修德月食修刑

The following laconic note of A.D. 276 may explain the movements of the Yangtsze. "The 臨平 Lake had been silted up ever since the Han dynasty, but now it opened of its own accord. Old men used to say when this lake is blocked, anarchy reigns in the Empire, but when open, peace obtains." The lake in question is in modern 湖州, which probably derives its name therefrom.

Giles (following Williams) places 着 under 羊, but K'ang-hi does not place it under either, and simply says that in Chih Li it is a vulgar form of 著. Chalmers places it under 目 and (like Williams) says it is a mere popular form. Giles gives no explanation.

Giles (following Williams) gives 冏 a place under 冂, but K'ang-hi places 冏 回 and 囲 all under 口.

In 318 was first prohibited burial with the form of "recalling the spirit" 初禁招魂葬.

Burying suicides at cross-roads may be connected with burning noxious creatures at the same 四達之衢.

The modern practice of styling Emperors by their reign names is occasionally met with in ancient times: for instance in A.D. 24 始貳於更始 "he began to fall off (in his allegiance to the Emperor) Kêng-shï."

The *Peking Gazette* often says the Emperor goes to witness the wrestling 看蹺跤. The second character is unauthorised, but Williams gives 貫跤 under 貫, and omits 跤 from his index. Giles follows suit.

The bell-man (who used to be such a familiar figure in small English towns) was known to the Chinese 2,000 years ago 行人振木鐸. The *to* was a large bell, and the 木 was its 舌, *i.e.* tongue or clapper: the messenger or herald, 行人 or 遒, went his rounds 徇于路 making announcements and "calling for libels" or accusations.

In the struggles between the north and south empires towards the end of the sixth century, the Liang dynasty made use of elephants in battle, tying swords 束刃 to their trunks.

The Tungusic 周 Emperor, on his conquest of a rival 齊 in 577, enjoyed a "triumph" in quite Roman style. The Ts'i Emperor was put in front; his princes, dukes, etc. followed the conquered man's car; after which came flags, banners and various objects 器物 in order. The triumphant car 大駕 was surrounded by troops 布六軍, and bands playing pæans of victory 備凱樂, the conquered captives being offered up at the Temple of Janus 獻俘於太廟 amid the popular shouts of *Ave Imperator!* 萬歲.

加元服 (B.C. 77) is the proper term for "coronation." The religious Emperor Liang Wu Ti was accused of "taking out men's livers to feed the heavenly dog," so that the modern missionary yarns have a good pedigree.

There is little doubt that the *Siabo* 蛇婆, so often seen carrying manure at Foochow, are the ancient race conquered by China in B.C. 210. The people of 閩 were so called from a tradition that they were derived from 虫, or "snakes," 本蛇種. The 虫 character is here read as 虺, i.e. '*hwei*.

The walling of all cities was first commanded in B.C. 202.

The 孛星 of Williams (and Giles) is not a comet, but "savours" of one: the historical record always runs 孛於〇〇, or 有星孛入〇〇, thus making it a verb: it seems to mean "burst out" or "throw out side rays."

In speaking of the Emperor's industry in 850, the historian says 率漏下十一刻, which means "usually until the 11th quarter-hour." The "quarters" were then, not the 96th but the 100th part of a day, and therefore this would mean nearly three hours after the first watch.

Of the eight last T'ang monarchs seven were set up by eunuchs, the Mamelukes of those days. Never in the history of the world has there been such slaughter and misery as during the latter part of the 9th century of Chinese history.

丌, pronounced *ki*, is a surname, and occurs in the *T'ang Shu* 丌志沼, a military rebel, A.D. 808. The character may also be used for *k'i* 其. Giles gives *chi*, *ch'i* in his index, and the same sounds in his list of single and double surnames; but he does not give the character in his dictionary: otherwise I might pay him the compliment of saying that he had at least *one* new character which was not in Williams. K'ang-hi puts this information under 元, and he also makes a mess of Ki Chï-chao's name. Moreover 元 is stated by some to be a form of 上, used in the double surname 上官 (wife of Confucius). All this information comes from my own reading, and therefore more competent masters of 小學 should find the proper references: all I can do is to 發下.

The *ondanique* which Marco Polo mentions in his 42nd chapter is almost certainly the *pin t'ieh* or "*pin* iron" of the Chinese, who frequently mention it as coming from Arabia, Persia, Cophene, Hami, Onigour-land and other High Asia states.

On page 391 of Volume II, Colonel Yule discusses the Chinese trade with Malabar. The first mention of this place and of Bussorah seems to be in 1073, when an Arab trader described the sea route as passing first Wuh-sün (Cantonese *Mĕt-ts'un*, Amoy, probably *But-sun*), and then Ma-lo-pah, on the way to Canton. Lambri (Lam-li) is mentioned as being two-fifths of the whole distance from Zaitun (Ts'üan-chou) to the Caliphate (Ta-shih).

E. H. PARKER.

The Review of the Far East. The first copy of this new Journal was issued in November 1906, and contains an introductory note by the editor, Mr. A. Cunningham, in which he explains the aim and scope of his venture. At the time of this writing three issues have appeared. A wide circle of contributors has been obtained, among whom are M. Paul Beau, Governor-General of Indo-China, Mr. Kingsmill, Mr. Playfair, Mr. A. E. Moule, Mrs. Little. Religion, politics,

research, travel have been discussed in these three numbers, and although no new information has been given to the world many facts, already known, have been stated in new ways. There seems to be no bias in this Review and it is open for all shades of opinion. We cannot commend its first numbers more highly than by saying that it is a worthy successor of the *China Review* and that no one who wishes to be *au courant* with the best thought of the Far East can afford to be without this Review.

J. C. F.

The China Society.

The China Society, which has recently been founded in London somewhat on the lines of the Japan Society, to acquire and diffuse a better knowledge of the Chinese people, their ancient and pacific civilization, their history and folklore, and their social and economic conditions, past and present, held its first ordinary meeting on January 28th, 1907, at the Caxton Hall, Westminster. The Chinese Minister in London, Wang Ta-sieh, and Sir Robert Douglas, Professor of Chinese at King's College and Keeper of Oriental Books and Manuscripts at the British Museum, are the Presidents of the Society; and amongst its Vice-Presidents are Sir Claude Macdonald, Sir John Jordan, Sir Edward Seymour, Sir Alfred Lyall, Sir Cecil Clementi Smith and Sir John McLeavy Brown. Mr. George Jamieson is Chairman of the Council, Sir Walter Hillier is Vice-Chairman. Mr. Ivan Chên, Secretary of the Chinese Legation, and Mr. Byron Brenan have undertaken to act as Honorary Secretaries. Among those present at the first meeting were Rev. W. Gilbert Walshe, Rev. S. Owen and Mr. Lionel Giles. The Chinese Minister, His Excellency Wang, gave an address on Early Democracy in China which was translated by Mr. Brenan and published at length in *The Times*. The formation of this new Society is another indication of the increasing interest in Far Eastern questions which is being taken in Western lands.

J. C. F.

LITERARY NOTES.

Western Tibet and the British Borderland, the sacred country of Hindus and Buddhists, with an account of the government, religion and customs of its peoples. By Charles A. Sherring, M.A., F.R.G.S., Indian Civil Service, Deputy Commissioner of Almora.

I.

This somewhat lengthy title exactly describes the book and prepares the reader for the extreme care with which it is written. When it is added that the author's companion, T. G. Longstaff, a member of the Alpine Club, has written a chapter describing his attempt to climb that remarkable mountain Gurla Mandhata there is little left the reviewer but to praise and thank the writer. Again and again in reading his descriptions and dwelling with delight upon the beautifully clear photographs with which they are very liberally illustrated—there are 175 in all—the reader feels as if he too were traversing this interminable ascent or slipping, stumbling, struggling down that rocky defile, experiences that very sensation of *bien être* one never feels so fully as after a long day's travel and snuggles under warm bedclothes thinking how delightful to be at rest for the night, almost feeling by anticipation the cold breath of the early dawning when he should struggle out again. Then we realise a little sadly that we are in the Shanghai flatland and that for such mountain travel as Mr. Sherring's much strength is needed. Seldom has traveller brought the scenes he has traversed so vividly before the reader as in this volume, in which Mr. Sherring treats of geography, ethnology, comparative religions, political science and more particularly of trade routes. He visits the sacred lakes Mansarowar and Rakas at the foot of the sacred mountain of Kailas, the birthplace of Siva, and answering to the Olympus of Homer. In the original instance probably these lakes were held sacred owing to their being fresh water (their outlet to the sea being by the Sutlej) in opposition to the barren salt lakes with no outlet on the high plateau. British territory touches Tibet at three points only—Spiti in the Kangra district of the Punjaub, Assam where the Brahmaputra enters the Indian peninsula, Almora, a district forming part of the Kemaon division of the united provinces of Agra and Oude. It is an interesting fact not usually appreciated that Southern Tibet,

the only really habitable part of the country, was undoubtedly originally peopled from Northern India, Bhotia or the land of the Bhots having given its name to Tibet, *i.e.* Ti-böd, meaning Upper Bhot. This latter with British Garwhal forms the home of the Bhotias, life habitats and customs are minutely described, being similar to those of the Tibetans across the border, which are again similar to those of the Tibetans on the Chinese border 1,000 miles to the east. The principal advantage in opening Gartok, in Western Tibet, lies in facilitating the Hindu pilgrimages into the sacred places from which their divinities are supposed to originate, pilgrimages which always ultimately bring increased commerce in their wake. As stated here, it is a curious coincidence that the British-Indian troops who invaded Tibet in 1904, and were solemnly cursed by the Lamas, were those who in 1905 were killed or injured in the terrible earthquake at Dharmasla. The cruelty of the Tibetans is dwelt upon, so much greater than that among Chinese, they torturing horribly their prisoners in war, dacoits and criminals. There is a very thorough and detailed description of Tari or Western Tibet, separated from Central and Eastern Tibet by the Thailes range crossed by the Mayum Pass (16,900 ft.), the Divide in which the Sanpur Brahmaputra rises.

Taklakot is the only place with stone and adobe houses and so worthy the name of town, the other inhabitants being mainly seminomads who in winter quit Gartok and the high tableland. Irrigation is in small patches in which barley, peas and mustard are grown, manure is scarce, animal dung being the only winter fuel. Misgovernment puts large tracts out of cultivation and drives large numbers of Tibetans over into British territory; the population of Pargana Darma has doubled during the last thirty years. Of the present Dalai Lama Mr. Sherring tells us: "The Dalai Lama at Lhassa is supreme in church and state. The latter has been hitherto a minor; the ages of the last four incumbents being 11, 18, 18 and 18 years respectively. A regent (Gyalpo) is consequently a perpetual necessity, and he makes it his business to see that his ward never attains his majority. On the death of a Dalai Lama his soul reincarnates into a newborn infant, and, curiously, this infant generally belongs to a wealthy family: Tybdan Gyatso, the present Dalai Lama, took the precaution to poison his regent, and so has survived to the age of thirty years—the first to attain majority in the last one hundred years." There is a very clear account of the origin and tenets of Buddhism in cap. 13, but surely the death ceremonies and marriage customs are described at rather tedious length in cap. 7, indeed the beginning of the book somewhat exceeds in detail. One seems to see the Commissioner of Almora with the late Viceroy of India ever in his mind's eye, there is a slight tendency towards

the style of a Blue Book. But those who surmount the first few chapters will be fully repaid. The photographs are a real joy; we would especially mention those glorious reproductions of the beautiful Nanda Devi, from which breathes the very air of the mountain rare and inspiriting. Those on page 31 we have never seen surpassed nor even equalled in a book.

It is rather tiresome to find customs usual over China occasionally described as curiosities, such as wearing fur inside, the skin outside, but is only another reminder how comparatively unknown Eastern Asia still is, speakers at British Association meetings and the like almost always saying "all through Asia" whilst ignoring everything East of India.—[Compiled by Alicia Little from Notes by Archibald Little, F.R.G.S.]

II.

This, both from a geographical and an ethnological point of view, has been one of the most valuable and interesting books of the season. Mr. Sherring gives us the results of a summer tour from British Garhwal and Almora into the comparatively untraversed south-west corner of Tibet, where rise the three great rivers of India, the Indus, the Ganges and the Brahmaputra; and where the modern Mount Kailas dominates the ancient land of Meru, sacred to Buddhists and Hindus alike.

As Deputy Commissioner of Almora, Mr. Sherring had special facilities for visiting these districts, and speaks in the highest terms of the kindness shown to him by the Tibetans, officials and people alike. This is one of the most agreeable issues of the expedition of 1904, and indicates that the restraints put upon the conduct of the expedition, and the entire absence of plunder, have had the effect of establishing confidence between the two peoples. Probably not much trade is to be expected, in the near future at all events: but it is well to remember that in skins, as well as in borax, which occurs plentifully in Western Tibet, as well as in gold, which is widely distributed and with more settled government will be largely mined, there is room for a fairly extensive trade; the main Indian elements of which will be, of course, cotton cloths and, above all, tea, the latter in universal use amongst the Tibetans and hitherto supplied, of very inferior description too, by China.

To residents in China who are not likely to have much direct intercourse with Western Tibet the chief interest of the book will be its physiographical and ethnological descriptions of the land and its people, and their religions and traditions,—for in Western Tibet will be found to linger many of the oldest traditions of the race. Here in the still holy Mount Kailas is the original Meru, sacred to both Hindus and Buddhists;

here are the sacred lakes Rakas Tal and Mansarowar, and from the flanks of the holy mountain flow off the three great rivers, the Indus, Ganges, and mystic Brahmaputra.

When Brahma conceived the desire that the universe should be created [so the tale goes] he assumed the visible form of Vishnu. The whole universe was covered with water on which floated Vishnu: from his body sprang a lotus, from which issued Brahma, who then created the continents of which Jambu is one, in whose centre is the glorious mountain Meru. Meru is of divers colours; on the east it is white, on the south yellow, on the north red, and on the west dark. Four mountains form buttresses to Meru, and there are also four lakes, one of which is Mansarowar, and the gods drink their waters. "There are the regions of Paradise (Swarga), the seats of the righteous, and there the wicked do not arrive even after a hundred births. There is no sorrow nor weariness, nor anxiety, nor hunger, nor apprehension; the inhabitants are exempt from all infirmity, and live in uninterrupted enjoyment for twelve thousand years." Hereupon Mr. Sherring aptly quotes Tennyson's description of Avilion in the "Passing of Arthur":—

> The island valley of Avilion,
> Where falls not hail nor rain, nor any snow,
> Nor ever winds blow loudly; but it lies
> Deep-meadowed, happy, fair with orchard lawns
> And bowery hollows crowned with summer sea.

As the Buddhism of Tibet was derived from India it is only natural to find that this country of Kailas and Mansarowar should be also regarded by the Tibetans as most sacred; so that to both peoples, in spite of the difficulties of the road, it has become a place of devout pilgrimage. Referring to this Mr. Sherring, relying on Atkinson's *Himalayan Districts*, falls into a characteristic mistake. Adjoining Western Tibet is the British district of Garhwal and Almora, the northern flanks of which constitute the country of Bhot, inhabited by the Bhotias, a people closely allied with the Tibetans. With the curious leaning towards the term Mongol, supposed, like Turanian, to include everything in Eastern Asia, of which the narrator knows nothing, Mr. Sherring follows the vulgar error of calling these people "Mongolians." Now the Chinese historians, especially the author of the *Wei Shu*, writing almost contemporaneously, explains at some length the origin of the term Mogul, which does not appear till it was given in the latter part of the fourth century to the leader of a body of outlaws who under the name of Mukula, or "Bald Head," terrorised Western Mongolia. On the other hand the ethnic name of Böt, under the form Batæ or Betæ,

occurs in Ptolemy and Ammianus Marcellinus, as well as in Sanscrit Bhotta. The fact is, of course, that the Böts are the real aboriginal inhabitants of the Tibetan plateau, their name appearing in the very word Tubot, as well as in Bhot. Bhutan, and the Chinese T'ufan for Tuput. As an ethnic title Mongol never existed out of the imagination of some two or three crude ethnographic writers at the beginning of the last century.

But this Böt race must at one time have had a far wider distribution. Of closely allied race are the Ghoorkas of Nepaul and the people of Bhutan, and the resemblance of the Ghoorka troops quartered in North China during the troubles in 1900 to the Japanese was a subject of general remark. It is curious to find that Mr. Sherring notes the resemblance equally of the women folk of the two peoples. "We are," he says, "amongst women who, like the little Japanese, laugh at everything and everybody, and do not rush away to hide, or draw their veils over their heads as the southerners."

The confident statement made by Mr. Sherring [page 69] that the "Bhotias are of Tibetan origin" must be exactly transposed, and made to read that "the Tibetans are then of undoubtedly Böt origin, even though they themselves have current among them the belief that they were originally Hindus." One of the most interesting of Mr. Sherring's chapters is the fifth, where is made a comparison of the religions of Tibetans, Hindus and Bhotias. It is difficult, says our author, to understand the freedom of these last from Tibetan influence. A sufficient reason is, however, to be found a few lines lower down: the religion of the Bhotias is in fact far older amongst the Tibetans than that of Buddha, the earliest introduction of Buddhism into Tibet dating from the year 641 A.D. To find the nearest analogue of the Bhotia religion we have to go to the head waters of the Yalong river, where we meet it in the primitive practices of the so-called Bon worshippers. Here Mr. Sherring has been misled by some of his pretended Chinese authorities, who have told him a cock-and-bull story of the imaginary sage Laotse having founded this sect in China, which spread rapidly into Tibet. As a fact the tenets put forward in the apocryphal *Taoteh King* are early Buddhistic, and certainly never penetrated from China into Tibet. Except that the inhabitants of Bâdi and Bâwang, where the Bon development is most in evidence, are true nature-worshippers, they never have experienced the more humane influence of the Indian cults, and the native culture is of even more rugged and degrading type than in Bhot.

But there are other, and to the ethnologist more interesting, topics discussed in Mr. Sherring's work.

Quoting again from Atkinson's *Himalayan Districts*, he proceeds [page 38]: "It is not difficult to picture the Aryan immigrants arriving at the Ganges and sending adventurous spirits to explore its sources. After

traversing the difficult passes across the snowy range and the inclement tableland of Tibet, they discovered the group of mountains called Kailas, and the lakes from which flowed the great rivers to water and give life to the whole earth. The rugged grandeur of the scene, the awful solitude and the trials and dangers of the way itself, naturally suggested to an imaginative and simple people that they had at length rediscovered the golden land, true home of the gods whom they had worshipped, when appearing under milder forms, as storm and fire and rain, in the plains below. In the course of time, Brahminical innovations caused the worship of the Vedic gods of natural forces to give place to a system where the intervention of a sacerdotal caste between the worshipper and his creator was essential. Brahma in the Vedas gave way to Brahma, Vishnu, and Siva, the trio of the new revelation, who took possession of the Himalayas, and Mount Meru became the Olympus of the Indian gods." Here again Mr. Sherring has been misled by his authorities. There is nothing plainer from both Indian and Chinese legend than that there were two distinct immigrations into India—one of the Aryans proper, the Solar Race—who, coming from the western slopes of the Pamir highlands, entered modern Afghanistan by the Hindu Kush; whence by the Kabul river they found their way into the Punjab. The second—the Lunar Race—had according to ancient tradition their homes in Eastern Turkestan, where we find them in the Yâdavas and Kurus, respectively the Yuehti and Kiang of Chinese story, the latter being moreover the Ottorokorrhæ of Ptolemy.

The affinities of these latter immigrants were as distinctly Turanian as were those of the Solar race Aryan. Here, however, it is to be distinctly understood that the term Turanian is used in its primitive, and only correct, sense as indicating the Eastern or Getic branch of the blond family. This family has been usually by an inadvertence classed under the general heading of Aryan. Çairim, Tura and Arya were all three sons of Feridun: Çairim was, according to the legend, the eponym of the Çairimyans (Sauromats, or Sarmatians, and Kimmers); Tura of the Sakæ or Getæ (progenitors of the Skyths and Goths); and Arya of Aryans, Iranians, and Hellenes. All these races were fair, and together may be classed as Athwyan—that being the term by which Feridun is always described in the ancient legends. We have then the three main divisions—Aryans to cover the western immigrants into India, and their congeners the Iranians; Çairimyans to cover the Slavic peoples; and Turanians the modern Teutons and their various allies. This arrangement, following as it does natural lines, is more satisfactory than classing under the one head of Aryan peoples so distinct as Teutons, Slavs, and the fair immigrants into the Punjab.

In was, then, these Turanian Lunar tribes who crossed Western Tibet from the head waters of the Yarkand river to those of the Ganges, and established their head-quarters at Hastinapura (not to be translated as Elephant-Town, but rather as Gast—or Stranger-Burh). It was also they who brought into Indian mythology the stories of the fabled Meru and its wonders as the sacred abodes of the gods. These stories, indeed, it is worthy of notice, bear a closer resemblance to the tales of the Scandinavian Asgard than to the Aryan legends preserved, *e.g.* amongst the Iranians. That the two immigrant streams did not at first mingle peaceably there are many traces in Indian mythology; amongst which may be mentioned the fabled wholesale destruction of the Kshatriyas at the hands of the Brahmanic tribes under their chief Paraçu Rama, the hero of the Râmâyana.

Mr. Sherring is of course in no wise responsible for these misreadings. They underlie the whole story of the immigration as told by the Sanscritists, and have been hitherto received as the fundamental materials for the early history of India. It is only, indeed, by a diligent study of the same legends as told from Chinese sources that any approach to the true history of these primitive events can be arrived at.

THOS. W. KINGSMILL.

Géographie de l'Empire de Chine: cours supérieur, par L. Richard.
Géographie de l'Empire de Chine: cours inférieur, par L. Richard.
Catholic Mission Press, Shanghai.

This work, primarily intended as a manual for use in the schools of the Catholic Mission, has been carried out with all the care for accuracy of detail and thoroughness of plan that distinguish the educational work of the Jesuit Missions. Whilst not professing to be anything more than a compilation it is really very much more. It is a very careful piece of constructive criticism, for as one reads its pages one hears the echo of many a disputed question and one realises that in the selection and rejection of authorities considerable first hand knowledge has been brought to bear. This latter feature is particularly in evidence at those places which prove, as the preface reminds us, that the time for a rigorously scientific geography of China has not yet come.

The work is divided into two books, the first of which deals with the Eighteen Provinces and the second with the Dependencies. In the opening chapters of Book I we have sketched for us a broad outline of the features of Chinese geography—relief, climate, flora, fauna, and an excellent résumé.

accompanied by a sketch map, of the geology of the Empire. In this chapter the three great natural divisions—North, Middle and South,—are indicated, but unfortunately these divisions are not strictly adhered to in the subsequent chapters, for a fourth division is introduced, namely, "Coasts." This leads to considerable repetition and to some quite unnecessary dissection of natural units. Thus what might have been made a compact treatment of the Yangtsze basin is rendered incomplete by the treatment of the delta in the section on Coasts. This is unfortunate as it dissociates in the mind of the student what ought to be two intimately connected ideas, the commercial importance of the Yangtsze basin and the dependent importance of Shanghai as a distributor for the whole area.

Another unfortunate result of the introduction of the section on coasts is the relegation to that section of the bulk of the meteorological matter. The matter in question is admirable, nothing could be more so than the exposition of the variation of the winds and the changes in the monsoon season; but while admitting that they have a special interest on the coast they have a still larger bearing, and being casually connected with various continental features one would have preferred to see the chapter dealing with them placed in some more general relation.

A second defect—the more serious in a book intended to be used for educational purposes—is the failure to correlate the historical with the geographical matter. True there is an excellent synopsis of the history of China—though as the preface reminds us, the school history of China has still to be written—but it is not linked up with the geographical determinations of history. There are in Chinese history many excellent examples of the physical configuration of the country determining the course of human events, the most notable perhaps being the determination of the route of the invading Chews by the Tarim valley, the Gobi desert, and the valleys of the Wei and Yellow Rivers.

This is only one of the many instances the study of which might be made so valuable in the hands of a thoughtful teacher and the relegation of the historical matter to a separate chapter, if it has not prevented the following out of this line of thought has at any rate failed to suggest it. The same remarks apply to the detached treatment of lines of communication and trade routes.

When one turns, however, from general to detailed criticism there is little fault to find. The fund of information which the book supplies is greater than that of any text-book we know, and no pains have been spared to secure accuracy. The individual provinces are treated very fully, and in a systematic fashion which makes the book valuable also as a work of reference.

At the commencement of each chapter there is a survey of the characteristics of the region about to be studied. These surveys are exceedingly well done and admirably adapted to throw into relief the salient facts and features of each region, each statement made being borne out in the succeeding details.

The text is illustrated by a large number of sketch maps, specially prepared for the volume. Mention must also be made of the excellent bibliographies appended to each chapter, copious, full and well-selected.

W. S. R.

Hangchow, the "City of Heaven," with a Brief Historical Sketch of Soochow, "The Beautiful." By FREDERICK D. CLOUD, Vice-Consul, U.S.A. Printed by the Presbyterian Mission Press, Shanghai.

The author of this book wisely prefaces his work by an acknowledgement of an obligation to a number of sinologues who have "helped to clear up many obscure points." His data have been extracted from various Chinese histories, among which are the numerous 志 with which every Chinese city of note extensively abounds. We find that the first important event of Hangchow recorded in the Annals concerns a necessary structure: it is stated that "in the tenth year of K'ai Huang (591 A.D.) Yang Su built a wall around this *chou* which was thirty-six *li* and ninety paces in length, and was in the district of Yu-hang." In the second year of Ching Fu (894) this wall was extended to seventy *li* and was perforated with eight gates. Present knowledge of the exact location of this wall is extremely doubtful. It is evident that modern Hangchow is not situated in the same spot as the old city, for mention is made in these early records of a flood which inundated the entire place and swept away the long stretch of wall along the river front.

Hangchow reached the meridian of its splendor in the fourteenth century, when it was the capital of the Empire. It was visited by merchants, travellers and missionaries. One of these last, Friar Odoric, who visited China about 1325, describes it as follows: "I have met in Venice people in plenty who have been there. It is a good hundred miles in compass, and there is not a span of ground which is not well peopled. . . . . And there lie also the great suburbs which contain a greater population than even the city itself. This city is situated upon lagoons of standing water, with canals, like the city of Venice, and it hath more than 12,000 bridges. . . . .

for 'tis the greatest and noblest city and the finest for merchandise that the whole world containeth." Looking at the place to-day with its white-washed mud walls scattered irregularly over a wide inter-mural area, its insanitary, stagnant pools and its general down-at-the-heel appearance, one cannot but feel that the imagination of optimistic writers like this Friar must have been stretched according to the square of the distance from home. And as one holds his nose *en passant* he cannot believe that any possible Chinese accumulation of dwellings either past or present could rival Rome or Venice. The Yuan Dynasty ousted the Sung, and Hangchow began to decline in magnificence until we now have the city in the bottom of a cup surrounded by a wall about eleven English miles in circumference and populated by a heterogeneous mass of individuals who originally came from Ningpo, Foochow, Canton and other cities: so that the student who attempts to acquire "Hangchow" is beset with peculiar difficulties.

A very entertaining description of the principal points of interest in and around this famous city is given in this book, and many old legends have been translated. We mention especially "The White Snake," which has been popular among the Chinese for generations. These translations are well done and with the fine photographs greatly enhance the value of the book. The reader will find an accurate account of the philanthropic work established by the missionaries in Hangchow and much other useful matter which will both instruct and inform. The sketch of Soochow is too short, and perhaps the author will see his way clear to enlarge this part in a second edition. When this is done Mr. Cloud will, no doubt, correct the few awkward sentences that mar the book. The printing and material make-up of this volume leave little to be desired and its facts possess considerably more than a local value.

S. ISETT WOODBRIDGE.

Ways that are Dark. By W. G. WALSHE, M.A. Published by Kelly and Walsh, Ltd. 1906.

This is the unfortunate title given to an eminently useful and readable book. That the author felt this is evident from the fact that he enters a *caveat* against the interpretation of "dark" as "shady." But no author can expect to use one of the best known and oft quoted phrases of the English language in a sense other than that of its original setting. For every one who reads the preface of this book hundreds will see the title and connect it and its misleading impliation with the name of the author. It is the more regrettable in that the book deals with matters Chinese in an admirably sympathetic spirit.

For all those whose business or interest brings them into close relationships with the Chinese, whether they be commercial or missionary, the information given in these pages is most valuable. Should you desire to know what behaviour is expected from you in the streets of the native cities, or what are the chief requirements of polite society at a Chinese dinner party, or what is the desirable attitude to be adopted if you wish to stand well with the gentry of your place of residence (and their friendship or enmity is no light thing), you will find it laid down here. The earlier knowledge of some of the elementary courtesies explained in this book would have saved many a young missionary numerous *mauvais quatre d' heures* the remembrance of which bring him in after years a sensation of shame or amusement, according to the measure of his capacity for impersonal self analysis. It will remain a continual source of wonder to all conscious of their mistakes that the amazing gaucheries of the well-intentioned but ignorant foreigner are not made to tell against him more than they do. The impression, for instance, that a missionary visitor made recently, who, in his desire to find some coign of vantage from which to address a few Chinese gathered to meet him, stepped, uninvited, on to the dais beneath the ancestral tablet, was more striking than he imagined. To the fortunate residents of the Treaty Ports, where it is more or less understood that foreigners have a form of polite behaviour all their own, and their apparent vagaries are condoned, some of these chapters will seem to contain counsels of perfection. For instance, under "In the Street," to be told that persons of opposite sexes should not shake hands in public; that care should be taken not to wrap up a parcel in paper having on it printed Chinese characters, and that in passing through the streets it is desirable to walk sedately, might suggest *Alice in Wonderland* to some—not to those who had lived inland in China however. More necessary, perhaps, and, at the same time more difficult of realization, is the advice to appear unmoved at the reviling of small children (even to wear a benevolent aspect so far as nature, and grace, permit) and, above all, to refrain from every temptation to interfere in street rows or domestic squabbles. There is generally more in them than meets the eye.

Householders will read with interest as well as amusement, even if they do not accept, the golden counsel given for the proper management of servants. All employers of Chinese labour might read, mark, learn and inwardly digest this part of Mr. Walshe's volume. Deal firmly but kindly with them . . . vacillation and fickleness are great enemies to authority. Accounts should be taken frequently and regularly. It is not correct to say "Thank you" (謝謝) to a servant . . . the proper thing to say is "You must be tired" (辛苦).

One or two things that are found in this very recently published book emphasize the rapidity of the changes that are coming over the "unchanging" East. Take the paragraph concerning the wearing of a moustache by those who patronise the native dress: this decoration is utterly incompatible with their youthful appearance. Just now very many progressive young Chinese are not finding it so. And the whole problem of clothes is advancing so rapidly that the native or foreign dress controversy is likely to die a natural death soon enough. On this question the author holds very decided opinions and expresses them almost with vehemence, certainly with decided animus. Reading the chapter "On wearing native dress" one is in inclined to ask "Why all this kicking?" The soundness of the general argument is weakened by over emphasis. On the cognate and even more vexed question of the presence of unmarried foreign ladies in the interior, to which as a member of the C.M.S. the author should bring inside knowledge, some things well worth repeating are said. This "monstrous regiment of women" is a fact and has come to stay, the question is "how make the best of it?" "The presence of foreign ladies in the country districts . . . is so inexplicable to the natives that such visits should be conducted with the utmost caution and scrupulous regard to decorum." . . They are likely to be identified with the three maids and six dames "which include all classes of females engaged in disreputable pursuits . . . and this will be found to be very deep-rooted and persistent." The reviewer well remembers a discussion which shook an inland city after the visit there of a foreign lady of generous proportions, dressed in a Chinese gown covering Western garments and crowned with a wide brimmed foreign hat, as to whether, after all she was not a man in disguise. Opinion favoured the suggestion as much as did appearances. The actual amount of good that visit did is very problematical. The following extract should be taken to heart by those responsible for the sending of unmarried foreign ladies into the interior as well as by the ladies themselves. "It is astonishing what enthusiastic ladies will sometimes do when they secure a pupil or an enquirer, and cases have frequently happened where a lady made a practice of shutting herself up in the same room with some young man who professed an interest in Christianity or desired a knowledge of English, and this in a country where the *Book of Rites* deprecates the hanging of male and female garments on the same rack . . . . and where a brother is not permitted to sit at the same table with a sister above the age of seven." This chapter may well serve to raise again in the minds of missionary leaders the whole question of whether the use of young unmarried foreign ladies for evangelistic work has been in the net result productive of good.

Mr. Walshe remarks in his chapter "On Funeral Customs" upon their constant evolution in a place like Shanghai. In confirmation of this a funeral was observed recently in the streets of this City where the whips of the mourning coaches had bows of black crepe attached to them. Not the least value of a book such as this is the increased interest it gives to sights that have become familiarized into contempt.

The concluding chapter dealing with "The Treaties and Christianity" suffers from its *ex parte* nature. It is made too entirely from the missionary point of view. For instance, to speak of the clause fraudulently inserted by Père Delamerre in the translation of the French Convention of 1860 in this way: "In the Chinese copy of the treaty . . . . this complementary clause was, however, discovered" is glossing over a dishonourable act from which the reputation of the Christian Church in China is still suffering. Mr. Walshe rightly draws attention to the folly of expecting the occasional Edicts in favour of toleration to carry any weight with the people while the inhibitory clauses of the Sacred Edict are being read and expounded all over the Empire. These are as direct an incitement to international trouble as are, say, some of the clauses of the Declaration of Independence.

On page 57 there is an explanation of the Chinese aversion to beef and dog's flesh which is, to say the least, something unusual, and one more than a little suspects that the author's wit, which adds largely to the charm of the book, is here directed at the reader.

In the matter of style Mr. Walshe shews a constant inability to bring his paragraphs to a close, which mars the pleasure of the reader at times more than a little. A Ruskinian length of sentence is not desirable in most authors. On page 178 there are but two full stops, and the two opening sentences of chapter 21 shew the author's involved method at its worst. These things, however, are but the slight blemishes of a book which for its general excellence should be added to the libraries of all those who are interested in, or affected by, the customs and habits of the Chinese.

W. NELSON BITTON.

American Consular Jurisdiction in the Orient. By FRANK E. HINCKLEY, Ph.D. Washington, D.C. W. H. Lowdermilk & Co. 1906.

No student of the history of the foreign relations of China or of her international status in the world can afford to be without this book. It gives a reasoned historical and legal account of that Consular jurisdiction over subjects of the several treaty powers, which has at various times in the last half century been called "exterritoriality" and "extraterritoriality."

Piggott (*Exterritoriality*. By F. T. Piggott. London. 1892) decided that "exterritorial" was the adjective applicable to the privileges of Envoys, Consuls and subjects of foreign powers resident in the Orient, and "extraterritorial" to the "government of the privileged persons by their own authorities from home;" but, notwithstanding this dictum by so good an authority, the more orotund form has prevailed and is now generally applied to governors and governed alike.

Dr. Hinckley begins with the Capitulations (*capitula*, chapters or articles in a grant or treaty) between the sovereigns of the Levant, Emperor or Sultan, and Occidental powers, the earliest being with the Italian commercial cities. The first granted at Constantinople was the *chrysobulum* of privileges conceded in 1199 by the Emperor Alexius III to Venice, followed a century later, in 1304, by a similar grant, *privilegium aurea bulla nostra munitum*, by the Emperor Andronicus II to Genoa. The first capitulations with the Moslem power were obtained at an earlier date, in 1154, by Pisa to secure her community at Alexandria. The Imperial Court might have lofty pretensions, but at bottom was feeble and helpless. Not so the Moslem power; there pretension and strength went hand in hand, and in the early days the syndics or the consuls exercising jurisdiction under the Capitulations were regarded as hostages for the good conduct of their nationals, and to secure this end they might even be thrown into prison. We find an echo of this in the only reference to Consular jurisdiction in the British treaty of Nanking, 1842, by Art. II of which Consuls are to "see that the just duties and other dues of the Chinese government . . . are duly discharged by H.B.M.'s subjects." Whether granted by weakness or by strength, however, the privileges accruing to the Occidental are, in form, concessions enjoyed on suffrance of the granting power, in the same way that a treaty, designed to terminate a war in which one power has been decisively defeated, is declared as intended to cement the friendship which has long subsisted between the negotiating powers. These early Capitulations, with all their differences, contain the germ of all that is included under "extraterritoriality." In one of the earliest, indeed, the *chrysobulum* of 1199, is contained a stipulation, the want of which has often, of late, seriously hampered the administration of justice by Consular courts in China, by which "the plaintiff was required to give bond to answer a counterclaim."

After a succinct account of the Oriental treaties concluded by the United States, Dr. Hinckley gives a valuable note on the present extent of American extraterritorial jurisdiction, which is worth reproducing in full.

> "The extraterritorial jurisdiction has been formally relinquished in Algiers and Tunis, Servia, Madagascar, Japan, and a

portion of Samoa, and impliedly relinquished in Roumania; it is suspended as to certain civil cases in Egypt, and fully suspended within the areas of North China leased to European Powers"; (Dr. Hinckley appears, as do so many others, to have overlooked Kwangchow-wan) "it is subject in greater or less degree to modification or suspension in the protectorates of Zanzibar, Borneo and Tonga," (in Tonkin, if it ever existed there, it has been suspended) "and in the special spheres of influence of France and Italy extending over Morocco and Tripoli; it is still exercised in Persia, Maskat, Siam, Korea," (Korea is doubtful) "China and Turkey; and in Turkey and China it is frequently exercised and of great importance."

It would be no easy task to give a résumé of Dr. Hinckley's work, to further condense the compact narrative in which, in less than two hundred octavo pages of the author's text, are described the origin, the foundations and the procedure of Consular jurisdiction in the Orient. His examples are drawn generally from Turkey and China, but his reasoning is applied chiefly to China, as is natural from the way in which Chinese questions now loom up in the eyes of the world, and from Dr. Hinckley's own position as Clerk, then, at the time of writing, designate, now actual, of the newly constituted United States Court for China. The chapter headings show the scope of the work, and are as follows:

I. Historic forms of Extraterritoriality.
II. The Unites States Oriental Treaties.
III. American statutes and official opinions on Consular jurisdiction.
IV. Legal rights under the jurisdiction.
  i. Nationality.
  ii. The rule of domicil; marriage; inheritance.
  iii. Persons accused of crime.
  iv. Missionaries.
  v. Real property.
  vi. Taxation.
  vii. Commercial privileges.
V. International tribunals of Egypt; mixed cases in China.
VI. The Foreign Municipality of Shanghai.
VII. Grounds for relinquishing jurisdiction.

Dr. Hinckley wrote under great disadvantage, when he had only the *animus eundi*, but had not yet visited China. The greatest praise which can be said of the book is that this disadvantage is not manifested in any

important respect. An indication of the complete way in which he has assimilated his authorities is found in the short summary, in one paragraph of 23 lines (pp. 193-194), of the principles of the Chinese civil law, by one who had never seen it in actual working. It is, however, this "actual working" which is the vital element. English and American statute laws do not stand by themselves, but are amplified and elucidated by legal arguments and judicial interpretations; and neither in the United Kingdom nor in the United States is safety to be found in study of the letter of the law alone. In China this is even more true, in a country which has no statutes on civil law, in which civil cases are seldom allowed to come under the cognizance of the judges of the land, but are commonly settled by arbitration of the guild concerned or of the village elders, *i.e.* by custom; when a civil suit is brought before the judicial tribunal, it is safe to look for the criminal, the malicious, or the fraudulent intent underlying it. Longer residence in China, with diligent and intelligent study of which he is capable, will enable the author to complete his knowledge of the Chinese legal atmosphere which surrounds Consular jurisdiction, and without an adequate knowledge of which that jurisdiction cannot be exercised wisely or justly. His ignorance of the Chinese language, which the customary American tenure of office will probably impose upon him, will debar him from going to original sources; but in certain branches of the field there have been pioneers, such as Jamieson, von Möllendorff and Alabaster, whom he may safely follow. While in the generality of this Consular jurisdiction, even in commercial cases, the *lex fori* must apply, in the jurisdiction over real property it has been held (pp. 97, 128) that the principle that the title to realty is governed by the *lex loci rei sitæ* is not affected by the rights of extraterritoriality; in effect no other decision is possible, if complications are to be avoided when, *e.g.*, British and German are claimants for the same property or owners of adjoining properties. In one recent land case the judgment was even made to depend upon the right interpretation of the symbolism of the Buddhist religion.

When Dr. Hinckley has been long enough in the Orient to acquire that local knowledge, which is sometimes derided—by those who do not possess it—he will himself see the necessity for a second edition of his work on a much larger scale. One of his first tasks will be to look behind the letter of the law, in the light of which alone he could write on the Mixed Court and on the Municipal Government of Shanghai, and to give full weight to the mass of custom and precedent on which, by the unremitting efforts of fifty years of merchants and their consuls, have been built up the government of a population which has now come to exceed half a million, a great vested interest in land and house property exceeding two hundred

million taels in value, and a turn-over of annual trade which is over six hundred million taels in value. The law on which these rest is not to be found in the treaties, but in the files of the newspapers since the day, now more than fifty years ago, when the Chinese were driven in their thousands by the Taiping rebellion to seek under the foreign flags the protection which was denied to them under their own.

No review is complete without detection of errors, and this constitutes the hardest part of the present task; still even in this work a few corrections of fact are called for. On p. 33 the extraterritorial jurisdiction of Russia, under the treaties of 1689 and 1727, is alluded to; but on p. 15 we find the statement: "With the exception of restricted privileges enjoyed by the Russian caravans . . . these treaties (1842-1858) marked the very beginning of extraterritorial jurisdiction in that country." This is almost true, but it is none the less true, generally that from one to two centuries before the earliest of the treaties with the maritime powers, Russian criminals were invariably to be judged by "leurs juges naturels" and according to the laws of their native land.

On p. 15 he begs a very important question by his reference to the "Opium War"; the use of this term is perfectly legitimate for a pamphleteer or a politician, but not for an historian and a lawyer. See also p. 31.

On p. 31 we find "The [American] goods sold to the Chinese were, for the most part, skins and furs . . ." This should read: "The very scanty imports consisted, in great part, of skins and furs . . ." Quicksilver probably exceeded furs in value as a component part of American trade; the fact was, however, that China then wanted very little that the West could supply, and even up to the very last days of the Co-hong the largely preponderating lading of [American] ships arriving at Canton consisted of Spanish dollars. On the same page it is misleadingly cautious to say that "The abolition of the hong system was due, *it is believed*, to the desire of foreign merchants to break its monopoly"; all the wars and treaties made in the last seventy years, the assumption of extraterritorial rights, the imposition of a fixed tariff, and the numerous safeguards thrown around foreign residents, are one long protest against the system of which the Co-hong was an essential element.

P. 60, note 1. The foreign Ministers were certainly not "in residence at Peking" in 1857.

P. 86. "But foreign protection does not in the slightest degree extend to native converts to Christianity as such." This has been further dealt with very judiciously on pp. 121-2; but there is no reference to the difficulties which would be created by a strict and literal interpretation of

Art. X of the German treaty of 1861: "Die Bekenner und Lehrer der christlichen Religion sollen in China volle Sicherheit für ihre Personen, ihr Eigenthum und die Ausübung ihrer Religions-Gebräuche geniessen." It must be remembered that what is claimable by one power, may be claimed by all.

P. 95. Divorce. Since the work appeared, the Court of which Dr. Hinckley is an officer has decided that it has no jurisdiction in divorce, since that is not provided for by the common law.

P. 97. Succession to real property. While the title to realty may be governed by the *lex loci*, the succession must surely be settled by the law affecting the probate of a will, the *lex fori*, even with heirs of different nationalities.

P. 127. Reference is made to the famous interpolation in Art. VI of the French Convention of Peking, 1860, giving missionaries the right to acquire property in the interior. When the Emperor Taokwang in 1846 issued his Edict restoring to the missions the property which had been confiscated during the persecutions of more than a century before, the restoration to be effected by the intermediary of the French Envoy, it may fairly be asked to whom the property was restored and with what object.

P. 137. The control of the "Native Customs" was assumed by the Commissioner of Customs at each port in November 1901, under the International Protocol of 7th September 1901.

P. 148. Claims against China. Dr. Hinckley omits mention of the payment to American merchants at Canton of their proportion of the compensation awarded for the opium seized and destroyed in 1839.

P. 163. "The only considerable foreign communities are at the [three] ports of Canton, Shanghai and Tientsin"—and Hankow; the last port, at which American interests are small, is more important than Canton, and probably about equal to Tientsin.

P. 164. "Directly across the narrow bay or river northward from Macao is . . . Hongkong." Lord Salisbury's advice has been forgotten, not to rely on small scale maps. Macao (lat. 22° 11′ N.) and Hongkong (lat. 22° 18′ N.) are 50 miles apart. Kowloon was ceded in 1860, not in 1850.

P. 165. "Previous to 1842 foreign ships trading at Canton were not allowed to approach the city nearer than a point several miles below." Nature forbade and forbids ocean shipping from proceeding further up than Whampoa. The "factories" endured until their destruction in 1856, and it was after that date that Shamien was created, not in 1844.

These corrections are few in number, and in matters of slight importance, their paucity attesting to the thoroughness with which the

work has been done. Were it not for the perfecting of a second edition, they would not be worth recording, and, in fact they detract but little from the general accuracy of the book; their chief importance is in the evidence they furnish that light on the subject has been obtained from the midnight lamp and not from the Oriental sun.

H. B. MORSE.

Early Chinese History. Are the Chinese Classics forged? By HERBERT J. ALLEN, sometime H.M. Consul at Newchwang. London, Society for Promoting Christian Knowledge, 1906.

The Society for Promoting Christian Knowledge has before this shown itself superior to that vulgar credulity which would retard the progress of Christian knowledge in the future, through the ill-founded fear of, through a frank acknowledgement of the errors of the past, destroying the foundations of religious belief. There is therefore no reason to express surprise at the Society having given its exequatur to this somewhat crude production of Mr. Herbert Allen's. Hitherto credulity from various causes, principally ignorance and remoteness from the schools of modern thought, have reigned supreme in China, so that sinology has come to be a byeword in the historical and philological world. If Mr. Allen had shown himself an adept in historical criticism, or had made a deep study of the canons of philological research, we could have welcomed his little work as a valuable assistance to our knowledge of the past of extreme Oriental history. Mr. Allen is unfortunately a tyro in both these sciences, and so his attempt to introduce some measure of commonsense into that very bizarre subject, Chinese scholarship, will, in the first instance at least, have rather the contrary tendency. In the long run it is doubtless a gain to the cause of knowledge in general that the very suspicious fabric on which has been erected the structure misnamed Chinese History, should be exposed, but in seeking to demolish one unsubstantial structure Mr. Allen has only succeeded in erecting another equally flimsy and unsubstantial. While it may be affirmed without fear of contradiction that the fabric which has up to the present passed current as "History" in China is a thing of invention and barefaced forgery, it does not necessarily follow that all the evidences on which it is pretended to be founded are equally untrustworthy.

There are a few pious and sincere Christians who would fain believe that the truth of the entire Christian religion is bound up with Archbishop Ussher's chronology, which a less critical age than the present has placed on the margin of our Bibles. According to the Archbishop the Flood

happened exactly in the year 2348 B.C., while the Chinese chronographers placed the reign of the "Emperor" Yao at the same period, making it to begin 2356 B.C. and lasting precisely a century. The missionaries who came to China in the seventeenth century fancied that in the days of Yao there was a flood; the legend talks of the "overspreading waters," indeed, but does not indicate in any way that there had been antecedently any different condition. The spreading waters were, in fact, but a version of the primeval ocean which in so many of the primitive cosmogonies, including that of the Book of Genesis, are represented as covering the face of the earth. It was perhaps not an unnatural thing that knowing nothing whatever of contemporary history, and being utterly devoid of a particle of historical acumen, they should have connected the two, and come to look upon Archbishop Ussher's chronology and the Chinese history-mongers' tales as both equally inspired. That but half-informed men like the late Dr. Legge should therefore declare that he would as soon question the existence of Abraham and the other Hebrew patriarchs as have any doubts as to the bodily reality of the Chinese worthies Yao, Shun and Yu, is then quite consistent with the modes of thought still current in the earlier part of the nineteenth century. The invention of writing in China is a thing of comparatively late growth, and was even in the days of Confucius in so embryonic a state that though it might be made to represent facts to a certain extent, it could not express the corresponding words, nor act as a medium for thought. It was not indeed till some three or four generations after the death of the Master that his historical "lectures" contained in the *Tso Chwen* were reduced to writing; and the record of the "conversations" of the sage contained in the *Lünyü* bear on their very face the evidence of still later, probably Han, reduction to writing. Writing during the time of T'sin Hsi Hwangti was, as we learn from the nearly contemporary record in the *Shi Ki*, in but an inchoate condition; and Ssema T'sien records how the minister Lisse was the first to introduce a method which could be intelligible in the various languages and dialects then current.

We must dismiss as little more than a fable the pretended burning of the ancient "literature" put foward by the literates of another age as a screen to their own barefaced, and generally ignorant, forgeries. That in a moment of anger at the tirades of the scholar Shun Yuyueh, who essayed to teach him how to rule the State his prowess had won, Shi Hwangti did order his books to be burnt is likely enough, but Ssema T'sien does not add that the hasty order was ever carried out. The absence of the books was, in fact, mainly brought about by their prior non-existence, added to the general confusion of the times. It is perhaps a piece of good fortune, in some respects at least, that the recension of the ancient literary remains

should have fallen to the lot of the ignorant scholars of the Han, inasmuch as the style of the few genuine remains still existing is in marked contrast to the productions of the forgers. It is, however, unfortunately a fact, owing to the primitive and imperfect system under which the ordinary student, more especially should he belong to one of the "services," learns Chinese, that the personal study of style is not encouraged, and the text is generally droned out in a vernacular paraphrase wherein all consciousness of the rhythm of the original is completely obscured.

Mr. Allen has thus been led to confuse the few genuine remains of antiquity in the Chinese Classics with the vast and preponderating mass of verbiage in which they are concealed. Another disability arises from the very nature of the medium. The authentic works of antiquity had all been handed down orally, many of the ballads of the *Shi King* for close on a thousand years, before at last they were committed to writing. During this period the language underwent a profound change; from being like its neighbours in the West an inflected speech, it suffered the usual decay to which language is subjected when learned by an alien race, and became reduced to what may be best described as a "pidgin," wherein first all inflections were sloughed off, and secondly the remains of the speech which survived became reduced to one of monotonous monosyllables. Regarding the antiquity of these fragments it may be said that the oldest do not date back more than a thousand years before Christ.

The earliest figure that emerges from the mass of myth and tradition is the so-named Prince of the West, who was the forerunner of the petty Kingdom of the Cheos, whom about 1200 B.C. we find appearing in the then comparatively fertile land between Sha Chow and Lake Lop. That there exist a few fragments of still earlier myth is undeniable, but the myth is not of China; it is Asiatic in the widest sense, and belongs to the same body of ancient myth as underlies the stories of Aryan India, of the ancient land of Iran, and of far off Hellas itself.

But the rejection of these fragments as veritable history by no means implies that we are to condemn them as forgeries, or reject them as useless towards our object of restoring history. In this respect myth has frequently a part to play more important than pretended history itself, as not being subject to falsification to the same extent; and in this case we find that the myths of the *Shi King*, and in lesser degree even those of the more corrupt *Shu King* prove to fit in wonderfully with the still more badly manipulated tales of the Indian Mâhâbhârata and Ramâyana, especially the former. As there is no possibility of the one having been founded on the other, and each describes the position of affairs in the lands north of the Himalayas at the same epoch, we are justified in drawing conclusions where

both are in harmony, and we are thus enabled to carry back the main facts of the history of the Aryan races in both the north of India and in the plains of Eastern Turkestan for some hundreds of years. More, the juxtaposition of the two throws a flood of light on the connection of both with the early Iranians, and so exemplifies some of the more debated points in the early history of Zoroastrianism.

We have learnt a good deal since the publication of the *Chinese Classics* of the late Dr. Legge. That work will long remain as a monument of stupendous energy, and the student of Chinese will long have to be thankful for the excellent text and the indexes attached to the work, as well as for the careful résumé of the Chinese Commentators from the second century downwards. Having said so much, we have said nearly everything that is possible in favour of the work. Legge was not a scholar, nor a critic, and had not the gift of translation; so that, with the partial exception of the *Lüny ü*, the rendering is little better than a travesty of the originals, and may be best described as a trap for the unwary.

To return, however, to the period about the twenty-fourth century B.C. when by popular estimation Chinese "history" is made to begin. The author of the *Chinese Classics* doubtless flattered himself that if he were wrong nobody knew better, and that therefore he was venturing on reasonably firm ground. But it so happens that within the last ten or twelve years we have been digging up the contemporary records of Babylonia at this precise epoch. The twenty-fourth century B.C. was, we find, really a remarkable period in human history; for, within a short space one way or other, in the year 2285 B.C. commenced to reign in Babylon the Law-giving king Khammurabi—one of the greatest of monarchs who ever sat on a throne. He, too, was intimately connected with the Deluge,—not as a spectator but as a narrator. The story of the Deluge was as old and mythical, and as far removed from human knowledge twenty-four centuries before our era as it is at the present day. These are not matters of story or mere hearsay, they are taken from the daily notices of King Khammurabi himself, committed to the safe keeping of his library during his lifetime.

But Khammurabi was not content with merely writing down for future ages the Deluge tales then current—he actually placed them in the sky! R. A. Proctor, an astronomer that deserved a better fate than met him in his lifetime, shows how the story of the Deluge is figured in the constellations which passed along the southern horizon in the latitude of Babylon: the ship Argo (the Ark), the Kentaur (Noah himself), the Altar for his sacrifice, and even the Raven hovering in the firmament aloft, as well as the bow set in the constellation Sagittarius. Proctor was not aware of the story of the Flood as told in Khammurabi's books, which had

not yet been discovered, but he showed how these constellations must have been marked out in the sky at this very period; for only then, during the precessional period of twenty-six thousand years, did the great ship Argo hold her mast upright, and sail across the horizon on an even keel. We can thus understand, how it was—and that without doing any hurt to our finest religious sensibilities—that the twenty-fourth century B.C. should have been a period which left its mark on the popular imagination of Asia. As a matter of fact, the influence of the great King lived long after his death, and we find his laws not only reflected in those of Moses some 900 years later but surviving in Syria and Babylonia up to the Mohammedan conquest.

With Archbishop Ussher's chronology, then, falls the only possible pretext there may be for upholding the historical scheme of the Chinese history-mongers. No good to civilisation generally, or the interests of the Christian religion in particular, can come from seeking to bolster up the inanities, and in many cases bare-faced forgeries, which our missionaries have been spreading broadcast; and the Society is to be congratulated on having been the first to undertake the, doubtless at the moment thankless, task of checking these erroneous teachings, which at the best do no credit to the mental calibre of the missionary body generally. It is not to be supposed that in thus endorsing the attitude of the Society for the Propagation of Christian Knowledge we are to be taken as at all coinciding with Mr. Herbert Allen's professed views as to the deliberate forgery of the entire mass of the Ancient Chinese Classics Far from this being the case, there are actually remaining very large and important relics of genuine antiquity to be unearthed in the rubbish of the books as handed down: the task of discovery is, however, above the ability of the Chinese dominie to whom is entrusted the task of initiating into the secrets of a difficult language the would-be student; and such is the dependence that the student is encouraged to place in his "teacher" that it is not too much to say that there are not a dozen translators in China who will sit down to translate even an ordinary document without the sempiternal "teacher" at their elbow. All knowledge of the cadence of the printed text, and almost all understanding of the grammatical structure, becomes practically an impossibility even with modern Chinese; but when the student desirous of looking into older Chinese endeavours to get the assistance of his "teacher," he finds himself in even worse straits.

The teacher in fact has no apprehension of the text: he probably learnt it by rote when a boy; but his tutor in turn was in like case; and under any circumstances it is not in China considered at all necessary, nor indeed advisable, that the student should have any conception of the purport of what he is learning to repeat parrot like. All he knows about it is the

stereotyped commentary in colloquial handed down traditionally from Chu Hi. And as the old language was in his days already a sealed book, and Chu Hi had no philological knowledge whatever, and not over much ordinary common sense; the result has been that the texts have got overlaid with ignorant comments and modern legend, and in many cases have been deliberately forged. Neither by disposition nor education is the Chinese savant in a position to make a critical study of his text, and the European student learning his task in the same manner, and accustomed to place implicit confidence in the running colloquial patter in which his teacher hums to him his paraphrase, finds himself gradually drawn into the same mind-deadening frame.

But to return to Mr. Herbert Allen. When in China Mr. Allen once committed himself to a disquisition entitled "Is Confucius a Myth?" As there is as little doubt about the personality of Confucius as, say, that of Julius Cæsar, most people were content to look on Mr. Allen's brochure as a well meant satire on the too trustful student of the day, who, provided a statement were in a Chinese book, or propounded by the mouth of his teacher, was prepared to swallow it in its entirety without asking questions as to its probable authenticity or the reverse. There is a danger, however, in propounding a bizarre theory even in jest, that the idea may by too close contact be finally assimilated into the system,—and this is doubtless Mr. Allen's case.

Mr. Allen translates at some length the opening chapters of the *Shi Ki*, and in his introduction makes some sensible critical remarks on the reported finding in old walls and elsewhere of many of the ancient texts. All these stories we are quite entitled to look upon as mere moonshine; but somehow or other odd fragments have escaped into light which bear on their face the evidence of genuineness. It is perhaps fortunate that the Chinese literates who undertook to arrange the texts they had in hand were never able to distinguish the false from the genuine; had they had the capacity, the forgeries would have been both more numerous and more difficult of detection. Unfortunately Mr. Allen shares with his Chinese compeers this inability. We may give an instance in his very first chapter. This is a translation of the first chapter of the *Shi Ki*, or Historical Record. This can hardly be called a forgery, as it is professedly from the hands of Ssema Cheng, who wrote it about A.D. 720. It is, however, simply an invention, and, as may readily be seen, is founded on stories brought to China by the Buddhist missionaries who swarmed during the fifth and sixth centuries. We have only one objection to offer as to Mr. Allen's translation, but it is a serious one. Every student in Chinese knows that owing to the want of any phonetic system,

the only way of presenting proper names is by adopting characters for the several syllables as near the actual pronunciation as may seem fit to an uncultivated ear. The native in selecting his character never pauses to think of the combinations he may make; for ages the same principle has been adopted. When, *e.g.* we use the term Red Sea, to indicate the gulf between Arabia and Egypt, we accept the word as a whole, without taking the trouble to enquire whether the water is red or any other colour. So when we speak of the discovery of America, it never strikes us that it was accomplished by the "Christ-bearing Dove." This latter is, however, the principle on which Mr. Allen translates.

Thus his first chapter of translation begins:—"P'ao-hsi (Great Brilliant), of the clan-name Wind, replacing Suijen (the man who produced fire by friction) continued Heaven's line and became king. His mother, named Hwa-hsü, trod in the footprint of a giant near Thunder Lake, and gave birth to P'ao-hsi at Ch'eng-chi. He had the body of a serpent, the head of a man, and possessed the virtue of a holy one."

Quitting the modern Pekingese patois, and writing the names according to the older dialect of the writer, we find this reads:—P'aohi (Vayu) belonged to the Wind family. In place of Suijen he succeeded to the Celestial kingdom. His mother was called Hwasu (Vasu); she trod in the footprint of a great man by Lui-tsih, and gave birth to P'aohi at Ch'engki. He had the body of a serpent, the head of a man, and the ability of a Sheng (Asura).—Now this is nothing but a late version of a common Indian myth. Vayu, originally one of the great nature gods, is the Indian Eolus and God of the Winds. Suijen, probably for Dhrita, is but another version of the hero Pramantha, *i.e.* the "stirrer," who produced fire. Vasu, the mother of Vayu, is one of the daughters of Daksha, the Indian patriarch, who in another legend was married to Dharma, the God of Justice. This is a fair specimen of the later style of Chinese history—merely a rehash of late Buddhist stories.

Again [in Chapter II, p. 24] Mr. Allen professes to give a rendering of Ssema's account of the "Five Emperors," which he presents to his readers. We give only an extract:—

"Yellow Emperor lived on the hillock of Hsien-yuan, and married a daughter of Western Range, namely, Lei-tsu, and she was Yellow Emperor's principal wife. She bore two sons, both of whose descendants possessed the empire. One of them was called Hsuan-hsiao; this was Ch'ing-yang (Azure Male) who came down to dwell on the river Chiang. The other, called Ch'ang-yi (Splendid Idea), came down to dwell on the Jo water. Ch'ang-yi married a woman from the hills of Shu (*i.e.* Szechwan province) who was called Ch'ang-pu (Splendid Servant). She bore a

son Kao-yan (High Male) who had the virtue of a holy man. Yellow Emperor died and was buried at Ch'iaoshan (Bridge mountain), and his grandson, Ch'ang-yi's son, High Male, that is, Emperor Chuan-hsu, came to the throne."

Now we may much simplify this, while at the same time translating more faithfully, if we treat the Chinese characters simply as the sounds, for which alone they were intended, without striving to introduce into them an element of meaning never intended. Such is the practice of the Chinese with regard to foreign proper names. With this explanation we may proceed with our story :—

"Hwangti lived at the Hienyuen hills, and married a women of Siling called Leitsu, as his favourite wife. She bore him two sons, the descendants of both of whom subsequently occupied the throne: one of these was called Ch'angyi, and lived by the Yok (Weak, or rather Dead) Water. Ch'angyi took to wife a woman from the Shuk Mountains called Ch'angpuk, who gave birth to a son known as Kaoyang. Kaoyang had the ability of a sage. Hwangti died and was buried at K'iaoshan, and Kaoyang, who was the son of his grandson Ch'angyi, succeeded; he was the Emperor Chwenhu."

It requiries but little acquaintance with the simplest canons of historical criticism to see at once that this is "faked," and cannot be accepted as history in any sense. But the Chinese chroniclers, though they were ready to put forward as genuine the most unblushing forgeries, had not the gift of imagination, and were dependent on older stories. The source of inspiration here is the Mâhâbhârata, the great Indian epic, which tells of the internecine wars of the Kauravas and Pândavas. The outlines of the story were in the hands of every Indian Buddhist priest, and Indian Buddhist priests were as plentiful in China about the beginning of the Christian era as blown leaves in autumn. With this hint we can read the whole tale. Krishna (the Dark) *i.e.* Hwangti, with same meaning, is king of the Pândavas and lives in the hills of Gandhâra: he has many wives, but the best beloved in Radhâo (Leitsu), who bore him two sons. Here the teller of the tale gets confused, but the story proceeds on the lines of the quarrel between the two cousins. Krishna Dwaipayana had two sons, Dhritarashtra (T'singyang), who lived by the river Sarasvati in the heart of the kingdom, and Pându—for whom, however, the Chinese substitute Ch'angyik, *i.e.* Dwaraka (Dwaraka not being a person but the name of Krishna's kingdom)—who lived in the remote district by the Weak water, Lake Lob. Taking advantage, seemingly of his absence, though the story finds another incomprehensible excuse, Dhritarashtsa (T'singyang) assumes the throne, which is acquiesced in for some time;

but eventually Dwaraka's grandson Karna (Kaoyang) succeeds to the throne as the Emperor Swarga (Chwanhuk).

Now it is to be noticed that these stories of the "Five Emperors" and the "Three Sovereigns" and their surroundings appear for the first time in the *Shi Ki*; and the *Shi Ki* was not published till the close of the reign of Wu Ti, which took place in the year 86 B.C. Although in the main the production of Ssema T'sien himself, the work is of an encyclopedic nature and bears evidence of being the outcome of several writers. The remaining works of the Confucian age, even the much recensed *Shu King* itself, know nothing of these stories, and begin with Yao and Shun; and it is only with them that we arrive at anything we can look upon as genuine myth, as distinct from conscious invention.

But the myth is not Chinese, it has been carried with the ancient immigrants whose forerunner was the "Western Prince"; and Mencius, the Chinese of whose remains is far more archaic, by the bye, than the so-called "conversations" of Confucius—so archaic in fact that the modern Chinese literati can make neither head nor tail out of the language—quotes a ballad, ancient in his days, to the effect [I. ii. 15.]:—

King T'ai dwelt in Pin,
The Diks harried him,
He paid them tribute of furs and gems,
But could not satisfy them.
He gave them horses and hounds,
But they were not content,
He offered them pearls and jade,
But still they had not enough.
He collected the elders,
And told them:
What the Diks want is our land;
Your ruler seeks not his pelf to your detriment;
Why grieve over his absence?
I will leave you and Pin.
He crossed the Liang Shan, and
Built a city at the foot Mount K'i.
His folk said:
He is a benevolent man, we must not lose him.
They followed in crowds as folk going to market.

The ballad bears all the marks of genuineness, all the more so that the Chinese forger of a later date was in utter ignorance of its explanation.

With the aid of old Zoroastrian myths, certainly unknown to Mencius himself, the way to its understanding is simple.

Fourteenth of the good lands of the *Vendidad* we find the four-cornered Varena, in which was born Thraêtaona the smiter of the Azhi Dahâka. There is little doubt that the Azhi Dahâka here represents the Diks of the Chinese version; and there is apparently as little that in the land of "the Four-cornered Varena" we find the Pin of the Mencian ballad. Naturally much controversy has arisen amongst modern critics as to the position of the "Four-cornered land," but here we may quote Pliny, an author certainly beyond the reach of Chinese forgers,—who mentions Cartana "oppidum sub Caucaso, quod postea Tetragona (four-cornered) dictum. Hæc regio est ex adverso." The name is still preserved in the plain of Charikar, at the junction of the Panjdir and Kabul rivers in the modern Afghanistan. From this the way of the emigration to China is easily followed: they crossed the Liangshan, the mountains of Dardistan, and finally took up their residence at the present Charkhlik, an oasis at the foot of Prejevalski's Altyn Tagh, at the entrance of the present desert of Gobi. It is from such undesigned coincidences, of which there are several in these old ballads, that the careful critic is led to feel some confidence in their genuineness.

But the greater his confidence in the genuineness of these old songs, which have been thus, almost miraculously, preserved, the more disgust he feels at the process of misreading and misinterpretation to which they have been subjected at the hands of the pretended Chinese historians and their wilfully ignorant translators.

Although, then, we must reject *in toto* the whole of the mass of what is called Chinese history, we must be careful on the other side that we do not permit ourselves to fall into the Charybdis of neglecting those fragments of genuine myth and tradition which are, though often sadly blurred and distorted, to be here and there found amongst the older books of China. Foremost amongst these are the ballads of the *Shi King*. But even these ballads have to be taken in hand with due precaution, owing to the ignorant recensions to which from time to time they have been submitted, not only in their first committal to writing about the end of the second century B.C. but under even worse conditions, when the ignorant and conceited Chu Hi and his equally ignorant pupils essayed to amend them about the eleventh century.

It is essential, however, to remember that these myths never had their origin in China, but can be traced to the Cheo immigrants who entered China some twelve or fifteen centuries before Christ. Regarding this Mr. Allen is wrong in stating in his introduction that there is nothing to show how the "Chinese" people come to inhabit China. There are two errors

here. The Chinese people may be allowed to have been the original inhabitants of the land, but it is certain that some twelve hundred years B.C. an alien tribe, closely connected with the Aryan settlers of about the same period in Northern India, entered China, and brought, as in the former case, their own language and civilisation. The early history of the two countries was in fact in the main similar, and so it is that the myths of the two, when carefully studied, show so close a resemblance. As in the case of India we cannot accept the Vedas and the Mâhâbhârata as having any claims to be called historic, so neither can we look upon the ballads of China as truthful records of the past. Both, however, can throw a very important light on the primitive conditions of Eastern Asia, and both are equally well worthy of study by the oriental scholar.

This is, however, a different thing from the stigma of entire forgery with which Mr. Herbert Allen would brand all the remains of ancient China contained in what are known as the Classics, as well as his unmerited depreciation of Ssema T'sien, to whom in addition to Confucius and Mencius we really owe the comparatively little we know of China before the Hans. Ssema T'sien was an able man, perhaps the ablest who has attempted to touch Chinese history; but even he was not sufficiently acquainted with the early history of China and her neighbours to be able to put together so consistent a body of versicles as appears in the *Shi King*, let alone the vast varieties in thought and expression, as well as in language, which they exhibit.

THOS. W. KINGSMILL.

Early Chinese Writing. By Rev. F. CHALFANT. (Memoirs of the Carnegie Museum, Vol. 4, No. 1.)

It is very unlikely that any person who has once attempted the study of the Chinese character could fail to be struck with the pictorial similarity of certain of these characters with the object which they represent. To the curious student, once in possession of this idea, the language opens up a fascinating field for study and theory. It would be mere impertinence of the average scholar to attempt to criticise the work of many years of an authority such as the Rev. Frank Chalfant, who has had unique opportunities of the study of ancient writings, and has, in the volume under notice, thrown much light on the ideographic origin of the Chinese script.

This memoir commences with a most interesting essay on pictorial language, in which the author discusses the gradual evolution of the picture into the modern Chinese character composed of "radical" and

"phonetic," and this essay affords many a solution to difficulties which must have occurred to every student who has sought to arrive at the why and wherefor of the composition of characters. The author describes the change of shape in the symbols, which change commenced with the substitution of the hair pencil [*circa* B.C. 240], for the ancient metal stylus used for engraving hard substances, which rendered difficult the execution of straight lines and angles. This gives the clue to the system of formation of the present character, the basis of which, as used by scholars of to-day, is still the few thousand symbols of the classical period [B.C. 500-200.]

The volume contains a large number of well reproduced plates, tracing the evolution of some four hundred symbols from the pure picture to the character now found in our dictionaries, which list, as the author remarks, "will suffice to show that etymology when applied to the Chinese language "appeals mainly to the eye, and hence has more of orthography in it than it "has of phonology."

Mr. Chalfant comments on the paucity of the vocabulary yielded by the combined texts of ancient Chinese manuscript, although with some right it can be urged that a literature primitive enough to admit its translation into picture writing at all would require but a limited vocabulary to express its ideas.

It is indeed vexatious to find that no exact date can usually be assigned to any ancient writing. The antiquarian finds on some old relic details of the day and month on which the potter or engraver bent to his task, but the worker did not contemplate that the interest which the vessel, coin or weapon would arouse many a century after would be enhanced by a mention of the year or reign.

Several picturesque touches make Mr. Chalfant's scholarly exposition readable by all. He does not incline to the tradition that the Chinese script had its beginnings in a language of knotted cords, developed through the grotesque tadpole letters. These will prove on careful examination to belong to a highly developed orthography not differing essentially from the well known seal character of the early Han Dynasty.

Pictographs, we learn, are of two kinds, the one based upon the form of the object, such as the character for "nail," and those suggesting some real or imaginary characteristic, *e.g.* the character for father, "the rod in a hand."

The author modestly admits that a good many of his conclusions are come to by mere theorising. Had he not assured us of this, we should have considered that he had always proved his case.

A note upon the *Shuo Wen*, the ancient lexicon, dear to Chinese philologists, follows the author's original disquisition. He says "Combine

the ability of the European textual critic with the accumulated knowledge of the Chinese antiquarian, and some of the knotty questions (aroused by the *Shuo Wen*) might find a solution."

The volume also contains a tentative translation of the "San Edict," which has not hitherto been attempted. This Edict is a legal paper going back to at least 1000 B.C., and the translation, though necessarily to some extent theoretical, is valuable to the archeological student.

Mr. Chalfant concludes his interesting work with a paper upon a collection of antiquities inscribed with early writings, of which a quantity of specimens still remain in the Museum of the Royal Asiatic Society at Shanghai. Did space allow, it would have been a temptation to give a more detailed review of this most interesting memoir. As it is, one can but refer the reader, be he student or sinologue, to the descriptive foreword by Mr. W. J. Holland, Director of the Carnegie Museum; having read that, he will not rest satisfied without study of Mr. Chalfant's memoir for himself.

G. W. Pearson.

A Classified List of the Articles printed in the Journal of the North-China Branch of the Royal Asiatic Society from 1892 to 1907.

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S. W. BUSHELL, C.M.G., B.Sc.—*Chinese Art.* Complete Edition in one volume.

MARGARET MACLEAN.—*Chinese Ladies At Home.*

W. GILBERT WALSHE, M.A.—*Ways that are Dark*; being Chapters on Chinese Etiquette and Social Procedure.

W. BURTON, F.C.S.—*Porcelain.* 50 half-tone plates.

W. E. SOOTHILL.—*A Mission in China.*

EVERARD COTES.—*Signs and Portents in the Far East.* 35 illustrations.

B. L. PUTNAM WEALE.—*The Truce in the Far East and its Aftermath.* Illustrations and maps.

B. L. PUTNAM WEALE.—*Indiscreet Letters from Peking.*

YOSABURO TAKEKOSHI.—*Japanese Rule in Formosa.* 38 illustrations and a map.

MARSHALL BROOMHALL, M.A.—*The Chinese Empire*; a General and Missionary Survey.

W. PETRIE WATSON.—*The Future of Japan.*

Sir CHAS. ELIOT, K.C.M.G.—*Letters from the Far East.*

U.S. GOVERNMENT PUBLICATION.—*Report on Inspection of U.S. Consulates in the Orient.*

Customs Statistical Series Nos. 3 and 4. Returns of Trade and Trade Reports, 1906. Part I.—Abstract of Statistics.

Ditto Part II.—Port Trade Statistics and Reports.
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M. A. STEIN.—*Ancient Khotan* ; Detailed Report of Archæological Explorations in Chinese Turkestan. 1 vol. text, 1 vol. illustrations.

Col. A. M. MURRAY.—*Imperial Outposts from a Strategical and Commercial Aspect.*

Sir FRANCIS PIGGOTT (Chief Justice of Hongkong).—*Exterritoriality ; The Law Relating to Consular Jurisdiction.* New Edition.

JOHN CHALMERS, LL.D.—*English and Cantonese Dictionary.* Seventh Edition. Revised and Enlarged by T. K. DEALY, Queen's College, Hongkong.

Professor A. FORKE.—*Lun-Hêng.* Part I.—Philosophical Essays of Wang Ch'ung. Translated and Annotated.

Murray's Handbook to Japan. Eighth Edition.

J. G. KERSHAW, F.E.S., F.Z.S.—*Butterflies of Hongkong and S.E. China.*

J. DYER BALL.—*Rhythms and Rhymes* ; a Lecture on Chinese Poetry and Poets.

W. J. TUTCHER.—*Gardening for Hongkong.*

Customs Postal Series No. 8.—List of Imperial Post Offices, 1906.

Customs Statistical Series No. 2.—Customs Gazette, January-March 1907.

Ditto ditto April-June 1907.

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ANNUAL GENERAL MEETING.

The Annual Meeting of the Society was held in the Society's Library at 5.30 p.m. on the 4th April. There were present: Sir Pelham L. Warren (Chairman), Dr. J. C. Ferguson (Hon. Secretary), Mr. J. Mencarini (Acting Hon. Librarian), Dr. A. Stanley (Hon. Curator), Mrs. Stanley, Mrs. Ayscough, Messrs. H. B. Morse, T. W. Kingsmill, W. E. Leveson, J. C. E. Douglas, Rev. W. N. Bitton, S. Barton, W. Sheldon Ridge, D. MacGregor, Dr. T. Richard, Rev. E. Morgan, C. M. de Jesus, and H. G. W. Woodhead.

The Chairman, at the outset of the meeting, gave the following résumé of the past year's work of the Society:—Mr. Morse's paper on "Currency in China" attracted much attention in the community. The Society published it in a separate fascicle and all the copies were quickly sold. Mr. E. T. Williams contributed a valuable paper on some phases of Chinese Law, in continuation of Mr. Alabaster's paper of last year. The lecture of Mr. Mencarini, illustrated by lantern views, was largely attended and well spoken of in the Press. The Society has also had a paper from Prof. E. H. Parker, which it is hoped to publish in the Journal of next year. The endeavour of the Council to have the Journal issued regularly in July of each year is much appreciated by the non-resident members. Several new features were added to last year's Journal, such as "Notes and Queries" and "Literary Notes," which make the Journal more and more valuable. No pains have been spared to bring to completion the plans for the

new building. The additions of new members have been frequent and the Society shows a healthy growth. Arrangements have been completed for the celebration of the fiftieth anniversary of the first meeting of the Society on October 16th this year. It is expected that addresses will be delivered by Bishop Moule, Mr. Morse and Mr. Kingsmill.

The Chairman then called upon the Secretary to read the report of the Council, which Dr. Ferguson did as follows :—

Three meetings of the Council have taken place during the year. Negotiations concerning the new building, which it is hoped to erect on the Society's property, have been continued and the Council has asked the help of a gentleman now at home on furlough to lay the matter personally before the proper authorities. It is hoped to have a definite and favourable answer to our proposition before the end of the summer. The present building has been put in repair at a small expense but will need extensive repairs if the new building is not promptly erected. The Library and Museum have been entirely overhauled by the Hon. Curator and Hon. Librarian and will be found to have been greatly improved. The Journal is ready to be issued in July. The sales of the Journal for last year and of the fascicle at the opening of this year were most gratifying, all of the copies of the latter having been sold within a month. The following new members have been elected during the year :—Messrs. H. J. Brett, F. A. Carl, O. R. Coales, H. G. Gardiner, A. E. Lucas, E. O. Reiss, R. Seco, V. Stapleton-Cotton, E. D. H. Frazer, B. Lenox Simpson, H. T. Montague Bell, W. W. Ritchie, Adolf Hildebrandt, Sydney F. Mayers, F. E. Hinckley, H. R. Kinnear, J. D. D. de la Touche, R. F. Johnston, Joseph Hers, W. Winford, Professor V. Alexeieff and the Rev. Evan Morgan.

Mr. J. Mencarini, Acting Hon. Librarian, read the following report:—

In autumn last year, on account of the Hon. Librarian Mr. W. Sheldon Ridge's resignation, I took up the Acting Librarianship of the Society. During these few months I could

not but confirm the fact that our Library is one of the richest in the East in old and valuable books pertaining to our scientific branches. I am sure if this were more generally known our Library would be still more consulted than it is at present. With the view of making this more public the Council have decided to recatalogue the whole of the contents of the Library, on modern principles, and steps are being taken to have the work done as soon as possible. The preparation for recataloguing has been completed, a general overhaul has been made, but it is with regret I have to report that some works are found missing, fortunately few and not valuable. Some nineteen recent works relating to China and its most adjacent countries have been added to the Library last month. Additions will be made, as far as the Society's financial means will allow, so as to modernise this valuable collection. The Library has been very fairly attended by consulting students, and this is certainly very encouraging for the Society. In exchanges we have gained considerably, having now on our hands most valuable publications from the best known Societies all over the world. For the student they form a mine of information. The Library has been enriched by about a dozen volumes presented by their modern authors. To them I reiterate the Society's thanks, and hope that their example may be emulated by writers, especially members of the Society.

Dr. Stanley's (the Hon. Curator) report was as follows :—

I have the honour to present my second annual report as Honorary Curator of the Shanghai Museum. As there is little possibility of any considerable development of the Museum in the present building, the policy pursued has been to preserve, as far as possible in good condition, the many valuable specimens that the Museum already possesses, to group them and label them in English and Chinese, so that they may serve a useful educational and practical purpose, and to gradually make additions and improvements where they are most required. An important cause of the deterioration of specimens has been removed by repairing the roof and making it watertight. The walls and

ceilings have been colourwashed and the internal woodwork repaired. The Museum has had such a cleansing as, I believe, it has not received for many years. The dust of ages and the appearance of oriental dilapidation has been removed.

Preparation Room.—A room has been provided for the proper conservation of duplicates and reception and preparation of new specimens and where the books of the Museum may be written up.

Catalogue.—A new catalogue of the objects in the Museum has been commenced.

Maintenance of Specimens.—A beginning has been made with the cleaning and relabelling of the valuable collection of birds. The snakes, also a valuable collection, have almost all been cleaned and relabelled. The collection of Chinese medicines has been re-arranged. The collection of weapons has been cleaned, repaired and properly grouped, but still requires labelling. Most of the miscellaneous objects have been cleaned, labelled and re-arranged.

Visitors.—There has been no lack of visitors to the Museum ; the Chinese, especially, come in their hundreds daily.

Museum Library.—The books belonging to the Museum Library have been re-arranged and catalogued.

Taxidermy.—The work of skinning, stuffing and preserving birds and other animals for the public has been continued ; but there has been a lack of proper attention to the work by the present taxidermist, who has done the work for many years but who now, in the native race for wealth, has obtained more remunerative employment elsewhere and is unable to devote his whole time to taxidermy. Were it not for the convenience this work is to the sporting community I would recommend that it be discontinued, as it is scarcely a credit to the institution under present conditions.

ARTHUR STANLEY,
Honorary Curator.

April 4th, 1907.

Mr. J. West (Hon. Treasurer) read the following report:—I have now to present a Statement of Accounts for the ten months ended March 31, 1907. In accordance with a resolution passed by the Council of the Society the two accounts have now been made up in one statement instead of, as formerly, making a separate account of receipts and expenditure made on behalf of the Museum.

Subscriptions.—During the period under review the sum of $915 has been received from ordinary members, showing an increase of nearly $400 on the amount paid last year.

Rent.—The receipts on account of rent for the use of the Society's hall amount to $496.80, being an increase of $130 on last year.

Account Sales.—The sum realized by the sale of the Society's publications to members and others during the last ten months is $190 more than last year, and the publishers are of opinion that this increased sale will continue. It will be seen that no separate item is shewn of the work done for the public by the taxidermist, as these amounts have been deducted monthly from his wages and only the balance each month has been debited to wages account.

I very much regret that owing to the very short notice given of the date arranged for the annual meeting it was impossible to get the accounts audited, but Mr. Danforth has again been kind enough to undertake to do this work, and the statement of accounts can therefore only be passed subject to his audit.

NORTH-CHINA BRANCH OF THE ROYAL ASIATIC SOCIETY AND SHANGHAI MUSEUM IN ACCOUNT WITH THE HON. TREASURER.

RECEIPTS.	$	cts.	EXPENDITURE.	$	cts.
To Subscriptions, Ordinary Members	915	00	*By* Exchange loss on member's remittance from U.S.A.	—	38
„ Rent for use of Hall	496	80	„ Municipal Rate	24	11
„ Special Grant from S.M. Council, Tls. 100 ...	133	87	„ Municipal Land Tax to December 31st, 1907 ...	43	50
„ Sale of old stove	4	00	„ Contractor for repairs	160	58
„ Account Sales of the Society's Journals to members and the public	475	04	„ Wages, Cash—Librarian and Coolie	528	00
„ Interest on Current Account to end of 1906 ...	53	01	„ Taxidermist—*Less* Cost of work done for the public	267	30
„ Balances from last year :—			„ Sundries	53	17
N.C.B.R.A.S.	281	39	„ Binding books	108	50
Shanghai Museum	2,817	19	„ Water rate	20	00
			„ Gas	52	87
			„ Gas fittings	6	55
			„ Coal	12	90
			„ Stationery	31	50
			„ Advertising	58	71
			„ Subscriptions to deep boring expenses	25	00
			„ Interest to Recreation Fund	33	87
			„ Commercial Press	36	90
			„ Mustard & Co., stoves	20	70
			„ Insurance, fire	9	26
			„ Postage	10	33
			„ Printing and binding Volume XXXVII	1,099	05
			„ Cost of new books	189	60
			„ Credit Balance	2,383	52
	$ 5,176	30		$ 5,176	30

To Balance in H. & S. B. C. $2,737.04
„ *Less*—Amount due to Hon. Treasurer 353.52

2,383.52

JOHN WEST,
Hon. Treasurer.

Shanghai, April 4th, 1907.

Mr. West also mentioned that the Municipal grant of Tls. 500 would be received in May, so that the balance in hand amounted to about $3,000.

Dr. T. Richard said that it gave him much pleasure to move the adoption of the interesting reports that had been read. He considered that they were most encouraging.

Mr. J. C. E. Douglas seconded their adoption, making a humorous reference to the fact that the Society had been described as a Society of Antiquities, and that there was not much of the antiquarian about himself. He considered the insinuation was dispelled by a perusal of the last issue of the Journal.

The resolution was adopted unanimously.

The Rev. W. N. Bitton proposed the following resolution:—

That the following officers of the Society be elected for 1907-8:—*President*, Sir Pelham L. Warren, K.C.M.G.; *Vice-Presidents*, H. B. Morse, Esq., T. W. Kingsmill, Esq.; *Hon. Secretary*, John C. Ferguson, Ph.D.; *Hon. Treasurer*, J. West, Esq.; *Hon. Librarian*, Mrs. F. Ayscough; *Hon. Curator*, A. Stanley, M.D.; *Councillors*, J. Mencarini, Esq., Dr. S. P. Barchet, Dr. Schirmer, W. E. Leveson, M.A., J. D. la Touche; *Editor of the Journal*, John C. Ferguson, Ph.D.

He considered that the composition of the Council would dispel any suggestion of a Society of Antiquities, and made a reference to the fact that the Hon. Librarian was a lady.

Mr. Montalto de Jesus seconded the resolution, which was carried unanimously.

Mr. Mencarini proposed a vote of thanks to the Hon. Secretary Dr. J. C. Ferguson. As Acting Librarian he could testify to the energy and enthusiasm displayed by Dr. Ferguson in the Society's behalf, and he understood that his visit to America would be utilized still further to extend the influence of the Society. Dr. Ferguson had been entirely responsible for reviving the Society from what was practically a moribund condition.

Mr. T. W. Kingsmill cordially seconded this vote of thanks. He, too, could testify from personal experience to the value of Dr. Ferguson's work for the Society.

The vote of thanks was carried with acclamation.

Dr. Ferguson briefly replied. He said that what he had done had been to a large extent from selfish motives. He hoped while in America to make arrangements which would benefit Mrs. Ayscough's department. In conclusion he laid stress on the valuable work done by Dr. Stanley, which he was afraid was not fully appreciated, as many Europeans did not visit the Museum. He proposed a vote of thanks to Dr. Stanley, and the proposition was received with applause.

This concluded the business of the meeting, and the Chairman expressed a hope that the Jubilee celebrations would be well attended.

LIST OF MEMBERS

(Corrected to June 30th, 1907)

Members are particularly requested to notify the Hon. Secretary of any change of address or other necessary correction to be made in this List.

Name.	Address.	Year of Election.

Honorary Protector.

His Majesty LEOPOLD II, King of the Belgians.

Honorary Members.

Bastian, Dr. Adolph	Ethnological Museum, Berlin ...	1865
Bushell, Dr. S. W., C.M.G. ...	Ravensholt, Harrow-on-the-Hill, England	1868
Chavannes, Prof. Edouard ...	1, Rue des Ecoles, Fontenay aux Roses, Seine, France	1889
Cordier, Prof. Henri	54, Rue Nicolo, Paris	1886
Eitel, E. J., PH.D.	Kent Tower, Adelaide, South Australia	1887
Gaikward, Prince Sampatrao ...	Baroda, India	1898
Giles, Prof. Herbert Allen ...	Selwyn Gardens, Cambridge, England	1880
Hart, Sir, Robert, G.C.M.G. LL.D. ...	Peking	1858
Hirth, Prof. F.	Columbia University, New York	1877
Kingsmill, T. W.	2A, Yuhang Road, Shanghai ...	1864
Lockhart, Hon. J. H. Stewart, C.M.G.	Weihaiwei	1885
Marques-Pereira, J. F.	73, Rue Garrett, Lisbon, Portugal	1900
Martin, Rev. W. A. P., LL.D. ...	Peking	1864

Address.	Names.	Year of Election.
Moule, Rt. Rev. G. E., D.D. ...	Hangchow	1864
Parker, Prof. E. H., M.A. ...	18, Gambier Terrace, Liverpool ...	1877
Rockhill, Hon. W. W.	American Legation, Peking ...	1885
Satow, Sir Ernest, G.C.M.G. ...	Salcombe House, Sidmouth, England	1906

Corresponding Members.

De Groot, Dr. J. J. M.	Leyden, Holland	1887
Forke, Dr. A.	Windscheid Strasse 25, Charlottenburg, Germany	1894
Fryer, Prof. John, LL.D. ...	Univ. of California, Berkeley, Cal.	1868
Gardner, C. T. C.M.G. ...	*c/o* Foreign Office, London ...	1900
Jamieson, George, C.M.G. ...	110, Cannon St., London	1868
Jo[illegible], Rev. Griffith, D.D. ...	Hankow	1864
[illegible]to, M.D. ...	Tokyo, Japan	1875
[illegible], PH.D. ..	Auswartiges, Amt. Berlin ..	1864
[illegible] J. ..	Shanghai	1868
[illegible] J. ..	hanghai	1906
[illegible], F.R.C.S. ...	67, Granville Park, Blackheath, London	1864
Laytair, G. M. H. ...	British Consulate, Ningpo ...	1885
Richard, Rev. Timothy, D.D. ...	Christian Literature Society, S'hai	1894
Rondot, Natalis	20, Rue Saint-Joseph, Lyons, France	1864
Széchényi, Count Béla	Zinkendorf, Hungary	1880
Volpicelli, Z. H.	Italian Consulate, Hongkong ...	1886
Williams, E. T., M.A.	American Legation, Peking ...	1889
Williams, Prof. F. W.	135, Whitney Avenue, New Haven, Conn., U.S.A.	1895

Life Members.

Beauvais, J.	French Consulate, Hoihow, Hainan	1900
Bessell, F. L.	Imperial Customs, Shanghai ...	1905
Box, Rev. Ernest	London Mission, Shanghai ...	1897
Brown, Sir J. McLeavy... ...	Chinese Customs, Storey Gate, London, W.	1865
D'Anty, Pierre Bons	Consulat de France, Chungking ...	1889
Drew, E. B.	Imperial Customs, Foochow ...	1882
Ferguson, John C., PH.D. ...	16, Love Lane, Shanghai	1896
Hall, J. C., M.A.	British Consulate, Kobe	1888
Hippisley, A. E.	Imperial Customs, Shanghai ...	1876
Kranz, Rev. Paul	34, Weihaiwei Road, Shanghai ...	1897
Krebs, E.	German Legation, Peking ...	1895
Laufer, Berthold, PH.D.... ...	American Museum of Natural History, New York	1901

Name.	Address.	Year of Election.
Leavenworth, Chas. S., M.A. ...	*c/o* Brown, Shipley & Co., 123 Pall Mall, London.	1901
Lyall, Leonard	Imperial Customs, Shanghai ...	1892
Morse, C. J.	1825, Asbury Avenue, Evanston, Illinois, U.S.A.	1901
Nielsen, Albert	Amoy	1894
O'Brien-Butler, P. E.	British Consulate, Chefoo... ...	1886
Ohlmer, E.	Imperial Customs, Shanghai ...	1885
Olcott, Col. H. S.	Adyar, Madras, India	1902
Plancey, C. Colin de	15, Avenue de Villars, Paris, France	1877
Rocher, Louis	Imperial Customs, Shanghai ...	1884
Taylor, C. H. Brewitt	Mengtse	1885
Tochterman, Karl	Imperial Customs, Peking ...	1902
Trollope, Rev. M. N., B.A. ...	Chemulpo, Korea	1900
Vouillemont, E. G.	Luzy Haute-Marne, France ..	1888
Waeber, C.	9,Todleben Boulevard, Riga, Russia	1894

Ordinary Members.

Aalst, Jules A. van	Imperial Customs, Canton ...	1888
Acheson, James	Imperial Customs, Hoihow ...	1880
Akehurst, A.	Chaufoong Road, Shanghai ...	1906
Alexéieff, Prof. Vassili	Peking	1907
Allen, H. J.	10, The Norton, Zenley, Wales ...	1872
Anderson, F.	Ilbert & Co., Shanghai .. .	1905
Anderson, G. C.	Jardine, Matheson & Co., Hongkong	1880
Andés, Konrad J.	Imperial Customs, Peking ...	1903
Arnold, Julian A.	American Consulate, Tamsui, Formosa	1904
Ayscough, Mrs.	6, Peking Road, Shanghai ...	1906
Ball, J. Dyer	Supreme Court, Hongkong ...	1883
Barchet, S. P., M.D.	American Consulate, Shanghai ...	1899
Barton, S.	British Consulate, Shanghai ...	1906
Beebe, R. C., M.D.	Nanking	1889
Belavenetz, Peter, Lieut. ...	Box N. 414, St. Petersburg ...	1906
Bell, H. T. Montague	*N.-C. Daily News*, Shanghai	1907
Bergen, Rev. P. D., D.D. ...	Weihsien, Shantung	1903
Betz, H.	German Consulate, Tsinanfu ...	1900
Bevan, Rev. H. W. L.	London Mission, Shanghai ...	1906
Bitton, Rev. W. N.	London Mission, Shanghai ...	1902
Bondfield, Rev. G. H.	B. & F. Bible Society, Shanghai ...	1900
Bosustow, J. C.	Municipal Council, Shanghai ...	1905
Bouinais, A. P.	Imperial Customs, Shasi	1900

Name.	Address.	Year of Election.
Bourne, F. S. A.	H.B.M.'s Supreme Court, Shanghai	1885
Bowra, C. A. V.	Imperial Customs, Seoul, Korea ...	1897
Boyé, Dr.	Auswartiges, Amt, Berlin	1902
Brandt, C.	Imperial Customs, Shanghai ...	1896
Brazier, Henry W.	Imperial Customs, Shanghai ...	1905
Brazier, James R.	Tientsin	1906
Bredon, Sir Robt. E., M.A., K.C.M.G.	Peking	1885
Brenan, Byron, C.M.G.	*c/o* Foreign Office, London ...	1884
Brett, H. J.	H.B.M's Consulate, Shanghai ...	1906
Bright, Wm.	Customs Statistical Department, Shanghai	1885
Bristow, H. H.	British Consulate-Genl., Shanghai	1897
Broad, Wallace	*c/o* John Birch & Co., 3, London Wall Bdgs., London	1903
Brockman, F. S.	Y.M.C.A., Shanghai	1902
Browett, Harold	22, Yuenmingyuen Road, S'hai ...	1891
Brown, Thomas	Norfolk House, Cheam Road, Sutton, Surrey, England	1885
Bruce, Lieut.-Col. C. D.... ...	Weihaiwei	1900
Busse, F. W. K.	German Consulate, Chengtu ...	1904
Campbell, C. W., C.M.G. ...	British Legation, Peking	1890
Carl, Francis A.	Custom House, Nanking	1906
Chalfant, Rev. F. H.	Weihsien, Shantung	1904
Cheshire, F. D.	American Consulate, Shanghai ...	1906
Clark, J. D.	*Shanghai Mercury*, Shanghai ...	1895
Clementi, C.	*c/o* Colonial Secretary, Hongkong	1905
Clennell, W. J.	British Consulate, Kiukiang ...	1900
Coales, O. R.	British Consulate, Newchwang ...	1906
Conger, Hon. E. H.	Occidental Mutual Life Ins. Co., Los Angeles, Cal.	1902
Cornaby, Rev. W. A.	Diffusion Society, Shanghai ...	1903
Couling, Rev. S....	Weihsien	1894
Cunningham, A....	*S. C. Morning Post*, Hongkong ...	1895
Danforth, A. W....	14, Whangpoo Road, Shanghai ...	1887
Darroch, John	210, Kiangse Road, Shanghai ...	1906
Darwent, Rev. C. E., M.A. ...	Union Church, Shanghai	1899
Davidson, J. W.	503, Phœnix Bdg., Minn., U.S.A. ...	1904
Delius, Dr.	German Consulate, Shanghai ...	1902
Dennys, H. L.	Hongkong	1877
Dew, G. C.	Atkinson & Dallas, Shanghai ...	1905
Donovan, J. P.	Ch. Imp. Post Office, Hankow ...	1891
Douglas, J. C. E.	Supreme Court, Shanghai ...	1905
Dowie, R. G.	53, Range Road, Shanghai ...	1906
Drake, Noah F., PH.D.	Tientsin	1904
Duncan, A.	Imperial Customs, Hankow ...	1896

Name.	Address.	Year of Election.
Essex Institute	The Secretary of, Salem, Mass., U.S.A.	1906
Ferguson, T. T. H.	Imperial Customs, Tientsin ...	1900
Ferro, G. Vigna del	Italian Consulate, Shanghai ...	1903
Fink, C.	Ostasiatische Lloyd, Shanghai ...	1899
Fischer, Emil S....	Tientsin	1894
Frazer, E. D. H., C.M.G. ...	British Consulate, Hankow ...	1907
Frazer, M. F. A....	*c/o* Foreign Office, London ...	1888
Frieswyk, G. A.	Soc. Fran. d'Explor. Min. en Chine, Shanghai	1905
Fryer, George B....	Butterfield & Swire, Chefoo ...	1901
Fulford, H. E., C.M.G.	British Consulate, Newchwang ...	1885
Fung Yee...	1753, Park Road, Shanghai ...	1900
Gardner, H. G.	Hongkong and Shanghai Bank, Peking	1906
Ghisi, E.	Società Col. Italiana, Shanghai ...	1893
Giles, Bertram	British Consulate, Foochow ...	1902
Giles, Lancelot	British Consulate, Tientsin ...	1902
Goffe, H.	British Consulate, Chengtu ...	1905
Goodcell, Roscoe A.	Provincial College, Chinanfu ...	1905
Grant, Charles	Kelly & Walsh, Ld., Shanghai ...	1901
Grodtman, Johans	5, Canton Road, Shanghai ...	1898
Guernier, R. C.	Imperial Customs, Hankow ...	1901
Halbritter, R. H.	Carlowitz & Co., Shanghai ...	1901
Hanbury, Sir Thomas	Ward, Probst & Co., Shanghai ...	1868
Handley-Derry, H. F.	British Consulate, Tientsin ...	1903
Harding, H. I.	British Consulate, Shanghai ...	1904
Harris, A. H.	Weston-super-Mare, England ...	1902
Hauchecorne, A....	French Consulate, Chungking ...	1898
Hemeling, K.	Imperial Customs, Tientsin ...	1902
Hers, Joseph, ...	Belgian Consulate, Shanghai ...	1907
Hildebrandt, Adolf	*c/o* Max Nössler & Co., Shanghai	1907
Hinckley, F. E., PH.D.	American Court, Shanghai ...	1907
Hiscock, F. H.	Poole, Lauder & Co., Shanghai ...	1905
Hobson, H. E.	Imperial Customs, Shanghai ...	1868
Holm, F. W.	Vacuum Oil Co., Shanghai ...	1903
Hosie, Alex., M.A.	British Consulate, Chengtu ...	1877
Houstown, J. H. W.	Imperial Customs, Yochow ...	1900
Hussey-Freke, F.	Imperial Customs, Shanghai ...	1899
Jamieson, J. W.	Chinese Protectorate, Capetown ...	1888
Jenks, Prof. J. W.	Cornell University, Ithaca, N.Y....	1903
Jernigan, T. R.	3, Hongkong Road, Shanghai ...	1906
Jesus, C. Montalto de	5, Miller Road, Shanghai	1902
Johnston, R. F.	Chinese Post Office, Weihaiwei ...	1907

Name.	Address.	Year of Election.
Kano, Dr. N.	Prof. Kyoto Univ., Kyoto, Japan	1902
Kanzaki, S.	Mitsui Bussan Kaisha, Shanghai...	1906
Kinnear, H. R.	Gibb, Livingston & Co., Shanghai	1907
King, Paul H.	Imperial Customs, Wuhu	1886
Kingsmill, Gerald	2A, Yuhang Road, Shanghai ...	1905
Kratzsch, Dr. K.	German Consulate, Shanghai ...	1906
Kremer, P. P. M.	Imperial Customs, Shanghai ...	1901
Kuhner, Prof. Nicolas	Oriental Institute, Vladivostock ...	1901
Ku Hung Ming	Conservancy Board, Shanghai ...	1906
Lay, W. G.	Imperial Customs, Canton ...	1902
Leveson, W. E., M.A.	Municipal Council, Shanghai ...	1905
Lewis, R. E., M.A.	Y.M.C.A., Shanghai	1901
Little, Edward S.	12, Kiukiang Road, Shanghai ...	1900
Lowder, E. Gordon	Imperial Customs, Peking ...	1904
Lucas, A. E.	Chartered Bank, Shanghai ...	1906
Lynch, Dr. J.	Chinkiang	1900
Lyon, D. Willard	Y.M.C.A., Shanghai	1904
Mackinnon, J. B.	Municipal Council, Shanghai ...	1905
Macoun, J. H.	Imperial Customs, Shanghai ...	1894
Main, Dr. Duncan	Hangchow	1900
Mayers, Sydney F.	British Legation, Peking	1907
McCallum, C. A....	Imperial Customs, Foochow ...	1901
McIntosh, Gilbert	Presbyterian Mission Press, S'hai	1889
Mencarini, J.	Imperial Customs, Shanghai ...	1884
Merklinghaus, Dr. P.	German Consulate, Tsinanfu ...	1906
Messing, Otto	*c/o* Deutsch-Asiatische Bank, Berlin	1901
Milles, W. J., F.R.C.S.	Hongkong Road, Shanghai ...	1885
Morgan, Rev. Evan	44, Boone Road, Shanghai ...	1907
Moore, Bishop D. H.	Portland, Oregon, U.S.A.	1901
Moorhead, Dr. H. B.	Tongshan	1901
Morrison, G. E., M.D.	Peking	1897
Morse, H. B., B.A.	Imperial Customs, Shanghai ...	1888
Moule, Rev. A. C.	Tai An, Shantung	1902
Nocentini, L.	Via del Proconsolo 21, Firenzi, Italy	1884
Nord, D.	German Consulate, Ichang ...	1901
Nully, R. de	Imperial Customs, Shanghai ...	1884
Ohlinger, Rev. F.	176, N. Szechuen Road, Shanghai	1905
Paulun, Dr.	20, Whangpoo Road, Shanghai ...	1893
Parker, Rev. A. P., D.D. ...	Anglo-Chinese College, Shanghai	1901
Patersson, J. W....	Imperial Customs, Shanghai ...	1883

Name.	Address.	Year of Election.
Pelliot, Paul	Mission Archéologique de l'Indo-Chine, Saigon	1901
Perkins, N. G.	Barlow & Co., Shanghai	1905
Peters, H.	German Consulate, Shanghai ...	1906
Petersen, V.	Imp. Chinese Telegraph Co., S'hai	1906
Pettigrew, Hon. R. F.	Washington, D.C., U.S.A. ...	1900
Pichon, L., M.D.	166, Fauberg St. Honore, Paris ...	1876
Piry, Theophile	Imperial Customs, Peking ...	1885
Post, Nicolas	Austro-Hungarian C'sulate, H'kong	1897
Prentice, John	47, Yangtsepoo Road, Shanghai ...	1885
Ravens, T. H. B. von	Imperial Customs, Shanghai ...	1903
Rayner, Chas.	Carlowitz & Co., Shanghai ...	1886
Reinsdorff, F.	German Consulate, Tamsui, Formosa	1883
Reiss, E. O.	Custom House, Shanghai	1906
Remusat, J. L.	Imperial Customs, Soochow ...	1885
Richardson, J. W.	Imperial Customs, Peking ...	1889
Ridge, W. Sheldon, B.A. ...	*Shanghai Mercury*, Shanghai ...	1904
Rössler, Dr. W.	German Consulate, Shanghai ...	1904
Rosthorn, A. Edler von ...	Austro-Hungarian Legation, Peking	1888
Schab, Dr. von	13, Whangpoo Road, Shanghai ...	1901
Schirmer, Curt, Dr.	German Consulate, Shanghai ...	1903
Schjöth, Fr.	Skovvaien 16, Christiana, Norway	1885
Schmidt, K.	Shantung Eisenbohn Gesellschaft, Tsingtau	1888
Schraimer, Dr.	Tsingtau	1895
Schregardus, N. H.	Imperial Customs, Mengtsz ...	1900
Scott, James	British Consulate, Canton ...	1893
Seco, R.	Spanish Consulate, Shanghai ...	1906
Shengle, J. C.	Kiangsu Acid Works, Shanghai ...	1905
Siebold, L.	Imperial Customs, Peking ...	1903
Simpson, B. Lenox	33, Carter Road, Shanghai ...	1907
Sites, Prof. C. M.L., PH.D. ...	Nanyang College, Shanghai ...	1899
Sly, H. E.	63, Carlton Hill, London, N.W. ...	1900
Southey, T. S.	Imperial Customs, Shanghai ...	1880
Stapleton-Cotton, V.	Hongkong and Shanghai Bank, Lombard St., London	1906
Stanley, Dr.	Municipal Council, Shanghai ...	1905
Starkey, E.	Chinkiang	1906
St. Croix, F. A. de	Alfred Dent & Co., Shanghai ...	1893
Stepanov, Simeon T.	Russo-Chinese Bank, Shanghai ...	1897
Stuart, Geo. A., M.D.	Nanking	1897
Tachibana, M.	Imperial Customs, Shanghai ...	1900
Tanner, Paul von	Imperial Customs, Hangchow ...	1881
Taylor, F. E.	Imperial Customs, Shanghai ...	1885

Name.	Address.	Year of Election.
Thyen, Joh.	Hankow	1894
Touche, J. D. la	Custom House, Shanghai	1907
Ting I-hsien	Customs Statistical Dept., S'hai ...	1890
Twentyman, J. R.	Shanghai Dock Co., Shanghai ...	1894
Valdez, J. M. T.	Portuguese Consulate, Johannesburg, South Africa	1888
Valentin, Jules	Messrs. Cuisenier & Cie., Paris ...	1901
Vitale, G.	Italian Legation, Peking	1894
Voelkel, S.	Pharmacie de l'Union, Shanghai...	1885
Wallace, D.	Foochow	1906
Warren, R. L.	Imperial Customs, Shanghai ...	1906
Warren, Sir Pelham, K.C.M.G. ...	British Consulate, Shanghai ...	1904
Washbrook, W. A.	Chinkiang	1881
Weiss, J.	German Consulate, Shanghai ...	1901
West, John	Kelly & Walsh, Ld., Shanghai ...	1901
Wilson, Rev. J. Wallace ...	London Missionary Socy., Changsha	1901
Wilton, E. C.	British Consulate, Ichang... ...	1900
Winford, W.	*c/o* Kingsmill & Co., 10 Hankow Road	1907
Wingate, Major A. W.	British Legation, Peking	1901
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