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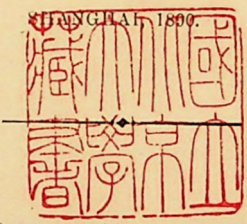
CHINA BRANCH

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FOR THE YEAR 1889-90.

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ESSAY ON MANCHU LITERATURE.

By P. G. VON MÖLLENDORFF.

Since the appearance of the "Elementa linguæ tartario-mantchuricæ" in THÉVENOT'S *Relation de diverses voyages*, Vol. III (1696), a European literature of considerable dimensions has been published on Manchu. The missionaries of the 17th century, who spoke Manchu at Kienlung's court, transmitted original Manchu works and translations to Europe, and everything known of the Manchu language and literature up to the beginning of this century originated either directly or indirectly with them. KLAPROTH, and especially H. C. VON DER GABELENTZ, are alone in having undertaken new and independent researches.

Père AMIOT and his colleagues in their works reported that the language was infinitely easier to acquire than Chinese, that the principal works in Chinese literature were translated into Manchu, and that therefore a knowledge of Manchu opened an easy access to Chinese literature. LANGLÈS,[1] whose knowledge of Manchu was limited, frequently repeated these remarks of the missionaries (*Alphabet mandchou*, 3rd edition, preface p. viii, p. 3, etc.); subsequently, KLAPROTH, in his *Mémoires relatives à l'Asie*, Vol. III, p. 7 *sqq.*, published the *Lettres sur la littérature mandchou, traduites du Russe de* M. A. L. LÉONTIEW, in which he contradicted the missionaries and LANGLÈS, without, however, being able to give anything positive himself.

[1] The editor of Amiot's Dictionary.

Nobody has as yet tried to give a description of the Manchu literature, and while undertaking the task myself, I feel conscious how defective this first essay must be.

The following notes will serve to indicate the sources from which I have drawn my information:—In the introduction to his translation of the *T'sing-wên k'i-mung* (Shanghai, 1855), A. WYLIE has compiled a list of 69 works, unfortunately without any reference whatever.[2] KLAPROTH'S *Verzeichniss der chinesischen und mandschuischen Bücher*, etc. (Paris, 1822), describes the twelve Manchu works in the Berlin Library, to which Prof. SCHOTT, in his *Verzeichniss*, 1840, has added two others. A manuscript catalogue of the Library of the Imperial Russian Legation at Peking shows 62 works. Further, we find 61 Manchu works mentioned in the Catalogue of the Library of the Asiatic Department in St. Petersburg; others are given in the auction catalogues of the libraries of LANGLÈS (1825), KLAPROTH (1839) and THONNELIER (1880). TRÜBNER'S *Am. and Oriental Record* and the catalogues of Messrs. MAISSONNEUVE and LECLERC, in Paris, contain the titles of some Manchu works, with prices. Bibliographical notes are found in G. VON DER GABELENTZ'S "Anzeige," *Zeitschr. der D. Morg. Ges.* XVI, p. 540; in the 滿州名臣傳 (*Man-chou-ming-ch'ên-chuan*), Vol. III, fol. 21 *sqq.*, Vol. VIII, fol. 28 *sqq.*; in the 東華錄 (*Tung-hua-lu*), Vol. I, fol. 22, Vol. III, fol. 3; and in the prefaces of some of the Manchu works. Besides my own library, I have had occasion to consult several private collections in Peking, and during repeated visits to the capital have hunted through the bookstalls and visited the fair at the 隆福寺 (Lung-fu-ssŭ),[3] where I inspected all the Manchu books I could find. In all, I have noted 249 works, which

[2] See also his letter in *Zeitschr. der D. Morg. Ges.*, XIX, p. 303.

[3] See BASTIAN, *Die Voelker des Oestl. Asiens*, Vol. VI, p. 31.

represent the literature in Manchu, classed in the following way :—

	No. of Works.
1.—Aids for learning the language, dialogues, etc.	29
2.—Dictionaries	17
3.—The canonical books	23
4.—Philosophy, ethics, essays, etc.	47
5.—Religion...	25
6.—History, geography	26
7.—Laws, edicts, treaties, regulations	53
8.—Military sciences	6
9.—Mathematics, medicine	6
10.—Novels, poetry, etc.	17
Total ...	249

Of these works—

The Library of the Imperial Russian Legation at Peking possesses	62
The St. Petersburg Library possesses	61
The Berlin Library possesses	14

Nothing is known of Manchu works in the public libraries of Paris and London, excepting occasional remarks in JULIEN'S works, and the price lists in TRÜBNER'S *Record* and the catalogues of MAISONNEUVE FRÈRES and CH. LECLERC in Paris. But few will be added to the above number. Some older work might be found, especially in Palace editions, of which little is known. New works are not to be expected. At present scarcely anyone speaks Manchu at Peking, and the language is learned only by those who intend to enter official service as interpreters. But even these just learn enough to be able to translate documents to be laid before the

emperor. In official phraseology these men are well versed, but rarely one of them takes any interest in other than official work. Within the Imperial family, a merely artificial knowledge of Manchu is kept up by introducing servants, and especially amahs, from Kirin into the palace.

The beginning of Manchu literature dates from 1599. In that year the Manchu chief Nurhacu (drinker), who from 1616–27 called himself emperor, under the title of reign of 天命 (T'ien-ming), M. *Abkai fulingga* (heavenly decree),[4] gave orders to adapt the Mongol letters to the Manchu pronunciation. The officials Erdeni and Hokai carried out this imperial order, and the alphabet proposed by them was improved by Dahai.[5] The latter then received instructions to translate[6] into Manchu the 明會典 (*Ming-hui-tien*), the statutes of the Ming dynasty, the 素書 (*Su-shu*), and the 三略 (*San-lio*). Dahai finished these translations in 1632, under the second emperor, whose title of reign was 天聰 (T'ien-tsung), M. *Sure han* (heavenly intelligence, the intelligent emperor).[7] Dahai died in the year 1633,[8] and left unfinished translations of the 通鑑 (*T'ung-chien*), general history (printed 1665); 六韜 (*Liu-t'ao*), the six military rules; 孟子 (*Mêng-tzŭ*), the philosopher Mencius (printed 1677); the 三國志 (*San-kuo-chih*), the records of the three Kingdoms (printed 1646); and the 大乘經 (*Ta-ch'êng-ching*), the (Buddhist) book of the great development. To his colleagues Erdeni and Hokai we find no translations attributed.

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[4] Canonised as 太祖高皇帝 (*T'ai-tsu-kao huang-ti*), M. *Taidsu dergi hūwangdi* (great ancestor, high emperor).

[5] *Ming-ch'ên-chuan*, Vol. VIII, fol. 28–30.

[6] *Tung-hua-lu*, Vol. I, fol. 22; *Ming-ch'ên-chuan*, Vol. III, fol. 21.

[7] Canonised as 太宗文皇帝 (*T'ai-tsung wên huang-ti*), M. *Taidsung genggingen hūwangdi* (the great founder, the serene emperor).

[8] *Ming-ch'ên-chuan*, Vol. III, fol. 21.

In the year 1634 the emperor decreed the institution of examinations in Manchu.[9] The Manchu dynasty in China begins in 1644 with the emperor Shunchih, and with the settling of the Manchus commences their more intimate contact with the rich literature of China. Up to 1662, the year of Kanghi's accession to the throne, we find, besides the eight translations of Dahai already mentioned, the History of the Liao and the Kin (1644), of the Yuen (1646), the 大清律例 (*Ta-ch'ing lü-li*), or Penal Laws (1644), the Instructions of Hung-wu (1646), the Instructions of T'ien-ming, the 三皇帝聖訓 (*San-huang-ti-shêng-hsün*), the Sage Instructions of the Three Emperors (1739), and several minor works; altogether, 18 publications.

The great Kanghi (1662–1723) took special care of his mother tongue, and ordered translations and dictionaries to be prepared. He himself, however, wrote much Chinese, to emulate the learned of China. In his reign were published the beautiful editions of the 古文淵鑑 (*Ku-wên yüan-chien*), a collection of standard essays; the 通鑑綱目 (*T'ung-chien kang-mu*), the history of China, by Ssŭ-ma Kuang; the 性理精義 (*Hsing-li-ching-i*), an abstract of the metaphysical writings of the Sung scholars; the canonical books, and the Manchu national dictionary, explained in Manchu. In all, 41 works were printed during his reign. But already under his successor, the energetic Yungchêng (1723–36), it was seen that not only was the Manchu language not accepted by any Chinese, but the Manchus themselves were forgetting their language, and were gradually being merged into the Chinese population. The emperor in his edicts made it an obligation for all Bannermen to learn Manchu, in order to preserve the language; but in vain. Only 17 works appeared during his period.

9 *Tung-hua-lu*, Vol. III, fol. 3.

The able Kienlung (1736–96) continued the work of his predecessors, and himself took an active part in the publications called forth by him. The great Mirror of the Manchu language, the polyglot dictionaries, and the enormous Buddhistic polyglot (in Chinese, Manchu, Mongol and Thibetan) are the principal of the 69 works which appeared under this emperor. The remaining 80 works occupy the period from 1796 till now, and comprise all those in three languages (Chinese, Manchu, Mongol, 三合 (*San ho*), M. *Ilan hacin i kamcibuha*).

Under the first three emperors, when Manchu was still spoken, only the Manchu text was published. Such editions cease under Kienlung, and give place to bilingual prints, 合璧 (*Ho pi*), 滿漢 (*Man han*), M. *Manju nikan hergen kamciha* or *Manju nikan hergen i kamcihe suhe.*

All Manchu works are printed at Peking. Nearly all are translations of Chinese originals; the few works originally written in Manchu contain entirely Chinese conceptions.

After each work enumerated below I have added the library or place where, according to my knowledge, a copy exists. Berlin, means the Royal Library in Berlin; Paris, either the house of MAISONNEUVE or one of the great libraries; Peking, the Imperial Russian Legation; St. Petersburg, the library there; v.d.G., Prof. VON DER GABELENTZ, in Leipzig; v.M., my own library.

I.—Aids for Learning the Language, Dialogues, etc.

1.—清文啟蒙 (*Ch'ing-wên ch'i-mêng*), M. *Cing wen ki meng bithe*—Elements of Manchu. 4 vols., 1730, 8vo. Written by 舞格 (Wu-ko), edited by 程明遠 (Ch'êng Ming-yüan). The work (the *only* Manchu grammar, therefore the *best;* see KLAPROTH, *Verzeichn.*, p. 121) contains a Manchu-Chinese preface, and in Vol. I the syllabary, with rules for pronouncing and writing; in Vol. II, Manchu-Chinese dialogues; in Vol. III, all affixes (*de, be, i, ni,*

ger, *go*, *ge*, *ningge*, etc.), altogether 254 articles, with examples—the real grammar; in Vol. IV, a list of words similarly written, like *aga* and *aha*, *menggun* and *munggun*, and a list of synonyms, like *bithe* and *hergen*.

Vide RÉMUSAT, *Recherches sur les langues tartares*, Vol. I, p. 99; G. VON DER GABELENTZ, in *Zeitschr. der d. Morg. Ges.*, XVI, p. 539; A. WYLIE, Translation of the *T'sing Wan K'e Mung*, a Chinese grammar of the Manchu-Tartar language, with introductory notes on Manchu literature (Shanghai, 1855, 8vo; ii, lxxx, 310 pp.) Vol. II has been translated into Russian by A. VLADYKIN. G. HOFFMANN, *Grammatica Mancese Compendiata dall' Opera Cinese Zing wen ki mung*, 1883. 36 pp.

[*Libraries:*—Berlin, Peking, v.d.G., v.M., Paris.]

2.—三合便覽 (*San-ho-pien-lan*), M. *Ilan hacin i gisun kamcibuha tuwara de ja obuha bithe*—Handbook of the three languages, Manchu, Mongol and Chinese. 12 vols., imp. 8vo, 1780. Vol. I contains (*a*) a preface in three languages, (*b*) the Manchu syllabary, (*c*) a Mongol grammar, (*d*) a Manchu grammar; Vol. II–X, a collection of words in three languages; Vol. XI–XII, short sentences in three languages.

H. C. VON DER GABELENTZ, in the *Zeitschr. f. d. Kunde des Morgenl.* I, p. 255–286, III, p. 88–104, has translated into German the articles (*c*) and (*d*) of Vol. I.

[*Libraries:*—Paris, Peking, v.d.G., v.M.]

3.—蒙文晰義 (*Mung-wên-ch'i-i*), M. *Monggu hergen i jurgan be faksalaha bithe*—Compendium of Mongolian. 4 vols., imp. 8vo, 1848. Author, Saishangga (the praiser), with the assistance of others. Manchu words or short phrases in the order of the syllabary, with Chinese and Mongol translation underneath. Below these, and unconnected, Chinese words with Mongol translation.

[*Library:*—v.M.]

4.—清文虛字歌 (*Ch'ing-wên-hsü-tzŭ-ko*)—A Poem on the Manchu Particles. A much-used little book on the use of the affixes in verse. Not printed. 16mo. Without year or author's name.

[*Library:*—v.M.]

5.—*Tongki fuka akū hergen i bithe*—the Book on Letters without diacritical points (like the point to distinguish *t* and *d*, *k* and *g*, and like the ring on *h*). 3 vols.

Langlès, *Alph. mandchou*, 3rd ed., p. 59, calls it, "livre des lettres qui n'ont ni point ni accent." Wylie, Transl., p. xlix.

6.—欽定清漢對音字式 (*Ch'in-ting ch'ing-han tui-yin tzŭ-shih*)—Proposal for Transcribing Manchu and Chinese sounds. 1836. 8vo, 62 leaves.

Published in accordance with an imperial edict of 1772. Contains the Manchu syllabary, with Chinese transcription; transcription of Manchu words of two syllables into single Chinese characters; transcription of Manchu words of two syllables into two Chinese characters; list of geographical names in Manchu and Chinese; thus introducing a uniform system of transcription.

Schott, *Verz.* p. 51, note.

[*Libraries*:—Berlin, v.M.]

7.—原音正考 (*Yüan-yin chêng-k'ao*)—Researches into original initials. 1743, 8vo. New edition, 1830, 16mo. Contains 1,923 Chinese characters, classed under 96 Manchu syllables, commencing with k', k and h, as 圈 *t'uan* surd and t's, ts and s, as 尖 *chien* sonant.

[*Library*:—v.M.]

8.—音韻逢源 (*Yin-yün fêng-yüan*)—On Chinese sounds. With Manchu transcription. 1840. 8vo.

[*Library*:—v.M.]

9.—正字通 (*Chêng-tzŭ-t'ung*)—A Chinese dictionary. First edition, 1670. Contains the Manchu syllabary with Chinese pronunciation.

Vocabularies.

10.—清文典要 (*Ch'ing-wên-tien-yao*)—Important Manchu expressions noted. 4 vols., 1739, 8vo. New edition, 1878. Contains about 6,500 Chinese sentences, consisting of four characters each,

with Manchu translation, arranged, according to the first character of each sentence, under 180 classes.

Vide *Zeitschr. der d. morg. Ges.* XVI, p. 538.

[*Libraries:*—Paris, v.d.G., v.M.]

11.—萬寶全書 (*Wan-pao-ch'uan-shu*)—Complete book of all preciosities. 7 vols., 1739, 8vo.

According to WYLIE, Translation, p. xlviii, the 7th vol. contains a Chinese-Manchu Vocabulary, but SCHOTT, *Verz.*, p. 82, where he mentions this work, says nothing of it, nor was it in a modern edition which I saw.

[*Library:*—Berlin.]

12.—繙譯類篇 (*Fan-i-lei-p'ien*), M. *Fan i lei biyan bithe*—Translated miscellanies. 4 vols., 1749, 8vo. Author, 冠菊窗 (Kuan Ch'ü-ch'uang). Chinese sentences of two and four characters, classed under the headings heaven, seasons, geography, etc., with Manchu translation.

Vide WYLIE, Translation, p. xliii.

[*Library:*—v.M.]

13.—*Yargiyan kooli be tukiyeme fe manju gisun i bithe*—The book of old Manchu speech to keep up good custom.

[*Library:*—Peking.]

14.—滿漢六部成語 (*Man-han liu-pu ch'êng-yü*)—The business expressions in use in the Six Boards (of the Peking Government), in Manchu and Chinese. 4 vols., 1843, 8vo.

[*Libraries:*—Peking, v.M.]

15.—A Chinese-Manchu vocabulary. In manuscript, large 8vo.

[*Library:*—v. M.]

16.—欽定金史語解 (*Ch'in-ting-chin-shih-yü-chieh*) — The native words occurring in the history of the Kin dynasty (1115–1234), explained with the help of Manchu. 4 vols., imp. 8vo ; no year.

[*Library:*—v.M.]

Dialogues.

17.—*Tanggū meyen.* 100 chapters, 4 vols., in 12mo. Only Manchu, manuscript of the latter part of the 17th century. The same printed in 2 vols, large 8vo, no year, but about 1700, with occasional Chinese characters. New edition in 4 vols., 1810, 8vo, in Manchu and Chinese. 清文指要 (*Ch'ing-wên-chih-yao*), M. *Manju gisun i oyonggo jorin i bithe*—Important explanation of Manchu speech.

Vide WYLIE, Translation, p. xl. The Chinese text forms the basis of "The Hundred Lessons" in WADE's Colloquial Series (London, 1867 ; new edition, 1886).

[*Libraries :*—v.d.G., v.M.]

18.—*Dehi meyen*, 清話問答四十條 (*Ch'ing-hua-wên-ta ssŭ-shih-t'iao*). 40 chapters, 57 leaves, 1759, 8vo. Author, Yunggui. Preface, Manchu; the dialogues, Manchu and Chinese. The same in manuscript, older than the printed edition, without Chinese.

[*Libraries :*—Berlin, v.d.G., v.M.]

19.—*Buyarame gisun*—Everyday talk. 2 vols., 12mo, no year ; only Manchu, manuscript.

[*Library :*—v.M.]

20.—滿漢成語對待 (*Man-han ch'êng-yü tui-tai*), M. *Manju nikan fe gisun be jofoho acabuha bithe*—Manchu and Chinese sentences. 4 vols., 8vo, no year; Manchu preface.

[*Library :*—v.M.]

21.—Dialogues in Manchu, manuscript.

[*Library :*—St. Petersburg.]

22.—三合語錄 (*San-ho-yü-lu*)—Dialogues in Manchu, Mongol and Chinese. 1 cover, 1830.

[*Library :*—St. Petersburg.]

23.—滿漢初學清語 (*Man-han ch'u-hsio ch'ing-yü*)—Manchu sentences with Chinese translation. 8vo, manuscript.

[*Library :*—v.M.]

24.—初學啟蒙話條 (*Ch'u-hsio-ch'i-mêng-hua-t'iao*) — Short sentences in Manchu for beginners, with Chinese translation. 8vo, manuscript.

[*Library* :—v.M.]

25–29.—Five manuscripts, 8vo, of one volume each, containing Manchu-Chinese dialogues.

[*Library* :—v.M.]

II.—*Dictionaries.*

30.—大清全書 (*Ta-ch'ing ch'üan-shu*)—A complete work of the Great Ch'ing (language). About 16 vols., 8vo, no year. Author, 沈啟亮 (Ch'ên Ch'i-liang). New edition, *Tai cing gurun i yooni bithe*. 14 vols, large 8vo, 1682. Chinese preface, general disposition of the work (凡例), table of contents; the dictionary arranged according to the Manchu syllabary. With Chinese translation.

[*Library* :—2nd ed. and vols. 4 and 5 of the 1st, v.M.]

31.—清文廣彙全書 (*Ching-wên-kuang-hui ch'üan-shu*)—A comprehensive collection of Manchu, complete; 4 vols, 8vo, 1703. Authors, 劉順 (Liu-shun) and 桑格 (Sang-ko). Chinese preface. Dictionary in four parts, divided into 44 chapters, on heaven, seasons, earth, mountains and rivers, palace, offices, etc. Chinese, with Manchu equivalents underneath.

[*Library* :—v.M.]

32.—欽定清語 (*Ch'in ting ch'ing yü*, M. *hesei toktobuha manju gisun*)—Manchu expressions compiled by Imperial order, 6 vols., 8vo, no year, Manuscript. Chinese with Manchu equivalents underneath. Arranged according to categories.

[*Library* :—v.M.]

33.—滿漢同文分類全書 (*Man han t'ung wên fên lei ch'üan shu*)—A dictionary in Manchu and Chinese, arranged according to categories. 8 vols, 8vo, 1706. Author: Sangge (he who understands). Preface (dated 1701) first Manchu, then Chinese. Manchu with Chinese translation underneath.

[*Library* :—v.M.]

34.—*Manju monggu gisun i buleku bithe*—Mirror of the Manchu and Mongol language, 21 vols, large 8vo, 1708. Manchu with Mongol translation.

[*Libraries:*—Peking, Paris, Trübner.]

35.—御製滿文鑑 (*Yü chih man wên chien*), M. *han i araha manju gisun i buleku bithe*—Mirror of Manchu. Composed by order of Kanghi by a number of lettrés. Manchu words with Chinese translation. 1708.

[*Library:*—Peking.]

36.—御製增訂清文鑑 (*Yü chih tseng ting ch'ing wên chien*), M. *han i araha nonggime toktobuha manju gisun i buleku bithe.* 48 vols., large 8vo, 1771. Improved edition of the preceding work. Each Manchu word with Chinese translation and Chinese transcription, the Chinese translation with transcription in Manchu, then follows an explanation of the meaning of the word in Manchu. Vol. I, preface of the Emperor Kienlung; Vol. II, preface of the Emperor Kanghi; Vol. III, the Manchu syllabary. 1st division, 32 vols., in 36 chapters with 292 subdivisions according to categories (heaven, time, earth, etc.). 2nd division, 8 vols, index of all Manchu words alphabetically with reference to the subdivisions. 3rd division, 5 vols, new-made words with index.

Vide Kienlung's preface in Langlès' Alphabet Mandchou; Klaproth, *Verz.* p. 61. The latter author reprinted (p. 97–105 and p. 107–117) the list of the subdivisions. Descriptive catalogue of the Chinese and Manchu books in the India Office, by Rev. J. Summers, 1872, p. 9. Extracts by C. de Harlez in Zeitschr. d. D.M. Ges. 38 (1884) p. 634–41.

[*Libraries:*—Peking, Paris, Berlin, London, v.d.G., Trübner, v.M.]

37.—*Han i araha manju gisun i buleku bithe*—16 vols, large 8vo, 1709. All in Manchu, without Chinese. Preface and table of contents 1 vol., 20 divisions 10 vols, tables 1 vol., supplement 4 vols.

[*Libraries:*—Paris, Trübner, v.M.]

38.—音漢清文鑑 (*Yin han ch'ing wên chien*), in Berlin also with Manchu title (KLAPROTH, *Verz.* p. 118): *nikan hergen i ubaliyambuha manju gisun i buleku bithe*—A new edition of the dictionary No. 35, with Chinese explanatory remarks added. Compiler, Mingdo.

[*Libraries:*—Berlin, Trübner, v.M.]

39.—清文彙書 (*Ch'ing wên hui shu*), M. *manju isabuha bithe*—A Manchu-Chinese dictionary, alphabetically arranged in 12 chapters according to the syllabary; 12 vols., 8vo, 1751, also with new title-leaf dated 1807 and 1815. This formed the foundation of AMIOT's *Dictionnaire Tartare-Mandchou-Français*; Paris, 1789–90. 3 vols., 4to.

[*Libraries:*—Paris, Peking, v.d.G., Trübner, v.M.]

40.—清文補彙 *Ch'ing wên pu hui*, M. *manju gisun be niyeceme bithe.* Supplement to No. 39, in 8 chapters; 8 vols., 8vo, 1786. New edition: *manju gisun be niyeceme isabuha bithe*, 1802.

[*Libraries:*—Paris, Peking, v.d.G., Trübner, v.M.]

41.—*Manju nikan isabure bithe.*

[*Library:*—v.d.G.]

42.—*Manju gisun i yongkiyame toktobuha bithe.* 1722. *Vide* ZAKHAROFF, Dictionary, p. xvi.

[*Library:*—Peking.]

43.—御製滿珠蒙古漢字三合切音清文鑑 (*Yü chih man-chu meng-ku han tzu san ho ch'ieh yin ch'ing wên chien*, M. *manju monggo nikan hergen i ilan hacin i mudan araha buleku bithe*—Mirror of the Manchu language with Mongol and Chinese translation and pronounciation; 24 vols., large 8vo. Preface in three languages, dated 1772, a Manchu-Chinese preface dated 1780 (taken from the great dictionary No. 36), the general disposition of the work (凡例), list of compilers. Table of contents as in dictionary No. 36. The words of the three languages stand in the same line, each with the pronounciation in the two others.

Vide THONNELIER's catalogue, p. 532, No. 4015, where the commencement of an edition of this work by KLAPROTH is mentioned.

[*Library*:—Paris.]

44.—四體合璧文鑑 (*Sse̊ t'i ho pi wên chien*), M. *duin hacin hergen i kamciha bithe*—Manchu dictionary with Mongol, Tibetan and Chinese translation, the Chinese with Manchu transcription. Arranged in categories.

[*Libraries*:—St. Petersburg, Peking, Paris.]

45.—滿漢西番集要 (*Man han hsi fan chi yao*), about 1760. A dictionary of Buddhist terms in Sanscrit (in Tibetan characters), Tibetan, Mongol, Manchu and Chinese.

Vide AMIOT, *Mémoires*, xl, p. 516; RÉMUSAT, *Mél. As.*, I, pp. 153-84; II, p. 264.

[*Library*:—Paris.]

46.—清漢文海 (*Ch'ing han wên hai*)—Ocean of Manchu and Chinese; 20 vols., 8vo, 1821. Author, Kua-erh-chia-pa-ni-hun (perhaps *guwere gaba ni hun*—he with a clashing armour), native of Kirin; editor, his son 普恭 (P'u-kung). A Chinese dictionary with Manchu translation arranged according to five tones and 106 finals, extracted from the great 佩文韻府 (*P'ei wên yün fu*), (WYLIE, *Notes*, p. 11).

[*Libraries*:—Peking, v.M.]

III.—*The Canonical Books.*

47.—日講四書 (*Jih chiang sse̊ shu*), M. *inenggidari giyangnaha sy s'u i jurgan be suhe bithe.* 12 vols., 8vo, 1677 and 1683. The four books with Chuhi's commentary, Manchu and Chinese.

The transliterated Manchu text of the four books in VON DER GABELENTZ, Sseschu, Schuking und Schiking in Mandsch. Ueber. Leipzig, 1860, p. 1-149.

For translations see *Manual of Chinese Bibliography.*

[*Libraries*:—St. Petersburg, Peking, v.M.]

48.—滿漢四書 (*Man han ssŭ shu*), M. *manju nikan hergen i sy̆ s'u.* 6 vols., 8vo, 1691. The text of the four books in Manchu and Chinese. The same, new edition, 5 vols., 8vo, 1846.

[*Libraries*:—v.d.G., Trübner, v.M.]

49.—御製繙譯四書 (*Yŭ chih fan i ssŭ shu*), M. *han i araha ubaliyambuha duin bithe.* The text of the four books, Manchu and Chinese, a new translation ordered by the emperor Kienlung; 6 vols., 8vo, 1756.

[*Libraries*:—Paris, v.M.]

50.—合璧四書 (*Ho pi ssŭ shu*). 6 vols., 8vo. The text of the four books, Manchu and Chinese.

[*Library*:—v.M.]

51.—滿漢字合璧四書集註 (*Man han tzŭ ho pi ssŭ shu chi chu*). 13 vols., large 8vo, no year. The text of the four books, with commentary, in Manchu and Chinese.

[*Libraries*:—v.d.G., v.M.]

52.—御製清文大學衍義 (*Yŭ chih ch'ing wên ta hsio yen i*), M. *da hio i jurgan be badarambuha bithe.* 32 vols., about 1700. Amplification of the Great Learning (the second of the four books), *vide* Wylie, *Notes*, p. 69.

Vide second preface fol. 2 of 三合吏治輯要, where this work is quoted under the title: *han i araha manju gisun i amba tacin i jurgan be badarambuha bithe*, and said to have been published under Kanghi.

[*Library*:—St. Petersburg.]

53.—日講易經 (*Jih chiang i ching*, M. *inenggidari giyangnaha i jing ni jurgan be suhe bithe.* 1683. The I-king.

[*Libraries*:—St. Petersburg, Peking.]

54.—御製繙譯易經 (*Yŭ chih fan i i ching*), M. *han i araha ubaliyambuha jijungge nomun.* 4 vols., 8vo, 1766. The I-king, Manchu and Chinese.

[*Libraries*:—Peking, Paris, Trübner, v.M.]

55.—滿漢合璧易經 (*Man han ho pi i king*), M. *manju nikan jeo gurun i jijungge nomun*. 4 vols., large 8vo, no year. The I-king, Manchu and Chinese.

[*Library* :—v.M.]

56.—日講書經 (*Jih chiang shu ching*), M. *inenggidari giyangnaha s'u jing ni jurgan be suhe bithe*. 15 vols., 1681. The Shu-king, with commentary, Manchu and Chinese.

[*Libraries* :—St. Petersburg, Peking, v.d.G., v.M.]

57.—御製繙譯書經 (*Yü chih fan i shu ching*), M. *han i araha ubaliyambuha dasan i nomun*. 6 vols., 8vo, 1760. The Shu-king, Manchu and Chinese, without commentary.

The transcribed text in VON DER GABELENTZ, pp. 151–220.

[*Libraries* :—Peking, v.d.G., Trübner.]

58.—清漢合璧書經 (*Ch'ing han ho pi shu ching*). The Shu-king, Manchu and Chinese, 4 vols., 8vo, no year.

[*Library* :—v.M.]

59.—日講詩經 (*Jih chiang shih ching*), M. *inenggidari giyangnaha s'i jing ni bithe*. 2 covers, 1654. The Shi-king, Manchu and Chinese, with commentary.

[*Libraries* :—St. Petersburg, Peking.]

60.—御製繙譯詩經 (*Yü chih fan i shih ching*), M. *han i araha ubaliyambuha irgebun i nomun*. 4 vols., 8vo, 1769. The Shi-king, Manchu and Chinese.

The transcribed text in VON DER GABELENTZ, pp. 221–304.

[*Libraries* :—v.d.G., Trübner, v.M.]

61.—清漢合璧詩經 (*Ch'ing han ho pi shih ching*). 4 vols., 8vo, no year. The Shi-king, Manchu and Chinese.

62.—滿漢經文成語 (*Man han ching wên ch'êng yü*), M. *manju nikan ging bithe toktoho gisun*. 1737. Selections from the Shu-king and Shi-king in Manchu and Chinese.

Vide KLAPROTH, *Verz.*, p. 141.

[*Library* :—Berlin.]

63.—御製繙譯禮記 (*Yü chih fan i li chi*), M. *han i araha ubaliyambuha dorolon i nomun.* 12 vols., 8vo, 1784. The Li-ki in Manchu and Chinese.

[*Libraries*:—v.d.G., v.M.]

64.—*Niengniyeri bolori i bithe.* Manuscript, the Ch'un-ch'iu in Manchu. 48 vols. *Vide* WYLIE's translation, p. xxxviii; printed (?), *vide* TRÜBNER's Record I, p. 391.

65.—御製繙譯春秋 (*Yü chih fan i ch'un ch'iu*), M. *han i araha ubaliyambuha s'ajingga nomun.* 48 vols., 8vo, 1785. The Chun-chiu, Manchu and Chinese.

[*Library*:—v.M.]

66.—孝經 (*Hsiao ching*), M. *siyoo jing ni bithe*—The Book of Filial Piety.

[*Library*:—St. Petersburg.]

67.—欽定孝經 (*Ch'in ting hsiao ching*), M. *han i araha hiyoos'ungga nomun.* 1727. The Book of Filial Piety, Manchu and Chinese.

Vide KLAPROTH, *Verz.*, p. 140.

[*Library*:—Berlin.]

68.—繙譯忠孝二經 (*Fan i chung hsiao êrh ching*), M. *ubaliyambuha tondo hiyoos'ungga juwe nomun i bithe.* 2 vols., 8vo, 1851. The Book of Loyalty (*see below* No. 87) and the Book of Filial Piety, Manchu and Chinese, translated by 孟保 (Mêng Pao).

[*Library*:—v.M.]

69.—Preface to 孝經 (*Hsiao ching*), by Emperor Hsüan-tsung (A.D. 713–56). Manuscript, Manchu. Another translation exists printed in *Ku-wên-yüan-chien*, chap. 29.

[*Library*:—v.M.]

IV.—*Philosophy, Ethics, Essays, etc.*

70.—朱子節要 *(Chu tzŭ chieh yao)*. 5 vols., 8vo, 1676. Extract from the philosophical writings of 周 Chou, 張 Chang and the two 程 Ch'êng with Chuhi's commentary (1130–1200), in Manchu and Chinese. The original is 近思錄 *(Chin-ssŭ-lu)*, which Chuhi together with Lü Tsu-ch'ien wrote in 1175, *vide* Wylie, *Notes*, p. 68; Legge, *Classics*, I, p. 25; Meadows, *The Chinese*, ch. 18; de Harlez, French translation of some extracts in *Journ. As.*, IX, (1887), pp. 39–71; Mayers, *Reader*, pp. 25, 146.

[*Libraries* :—Paris, Berlin, v.M.]

71.—清文古文淵鑑 *(Ch'ing wên ku wên yüan chien)*, M. *han i araha gu wen yuwan giyan bithe*. 48 stout vols., large 8vo, 1686. A standard collection of model writings, in Manchu only. The Chinese original was published at the same time by order of Kanghi in 40 vols., Translator, Ming-kung. Contains extracts from the Ch'un-ch'iu, 戰國策 *(Chan kuo tsê)*, and from the chief writers from the Han to the Sung (1278).

Vide Wylie, *Notes*, p. 194.

[*Libraries* :—Peking, Paris, v.M.]

72.—繙譯古文 *(Fan i ku wên)*, M. *ubaliyambuha julgei s'u fiyelen*. 16 vols., 8vo, 1851. Another collection like the foregoing, chiefly from historical works, in Manchu and Chinese. Translator, Mêng Pao.

[*Library* :—v.M.]

73.—小學 *(Hsiao hsio)*, M. *siyoo hiyo*. 8 vols. Chuhi's "Little Learning." Written in 1176.

Vide Klaproth, *Verz.*, p. 140; Wylie, *Notes*, p. 68.

[*Library* :—v.d.G.]

74.—*Han i araha ajige tacikū bithe*. 4 vols., 8vo, 1727. The same as foregoing, only Manchu.

[*Libraries* :—Berlin, Peking, v.M.]

75.—滿漢合璧小學 *(Man han ho pi hsiao hsio)*, M. *manju nikan hergen kamcime araha ajige tacikū bithe.* 8 vols., 8vo, 1727. The "Little Learning" with commentary, Manchu and Chinese.

[*Library* :—Paris.]

76.—*Tondo unenggi fan gung ni wen ji bithe.* 8vo, 1708. *(*忠貞范公文集 *Chung chên fan kung wên chi).* 8vo, 1708. Manchu translation of 19 memorials to the throne by 范承謨 (Fan Ch'êng-mo), who died 1679.

Vide SCHOTT, *Verz.*, pp. 96, 97; also *China Review*, IX, p. 97.

[*Libraries* :—Berlin, Peking, v.M.]

77.—薛文清公先生要語 *(Hsüeh wên ch'ing kung hsien shêng yao yü)*, M. *siowei wen cing gung siyan s'eng ni oyonggo gisun i bithe.* 4 vols., 8vo, 1714. Manchu and Chinese. First preface by 徐栻 (Hsü Shih), 1561; 2nd preface by 胡松 (Hu Sung), 1564; 3rd preface by 谷中虛 (Ku Chung-hsü), 1564. The work, divided into two books *(*內篇 *Nei pien*, 外篇 *Wai pien)*, contains philosophical extracts from the 讀書錄 *(Tu shu lu)*, of the Ming dynasty. Translator, Fudari, Captain in the Imperial Life Guards.

[*Libraries* :—St. Petersburg, v.M.]

78.—三字經 *(San tzŭ ching).* 2 vols., 8vo, 17th century. The Three Character Classic, with commentary, Manchu and Chinese. Author 王應麟 (伯厚) Wang Ying-lin (Po-hou), 1223–1296.

[*Library* :—v.M., (2nd vol.).]

79.—滿漢合璧三字經 *(Man han ho pi san tzŭ ching)*, M. *manju nikan hergen i kamcime suhe san dsy ging bithe.* 2 vols., 8vo, 1795. The Three Character Classic with commentary, Manchu and Chinese.

Vide KLAPROTH, *Verz.*, p. 146; VON DER GABELENTZ, *Zeitschr. der d. morg Ges.*, XVI, p. 541.

[*Libraries* :—Berlin, Paris, v.d.G., v.M.]

80.—滿蒙合璧三字經註解 (*Man mêng ho pi san tzĭ ching chu chieh*), M. *manju monggo hergen i kamcime suhe san dsy ging ni bithe*. 4 vols., large 8vo, 1833. The Three Character Classic with prefaces and commentary in Manchu, Mongol and Chinese. Translators: Sung-yan, Fugiyūn and Inggiyūn, revised by Urgujab and Fukiyan.

[*Libraries*:—Peking, Paris, v.M.]

81.—*Han i banjibuha sing li jing i bithe*. 8 vols., 8vo, no year. In Manchu alone. Translation of the 性理精義 (*Hsing li ching yi*), which is an extract of the great metaphysical work 性理大全 (*Hsing li ta ch'üan*), published in 70 books in 1415 (*vide* Wylie, *Notes*, p. 69).

Translations of parts by von der Gabelentz and Grube.

82.—欽定性理精義 (*Ch'in ting hsing li ching yi*), M. *han i araha sing li jing i bithe*. 12 vols., large 8vo, 1717. Only in Manchu. A revised translation of the foregoing.

[*Libraries*:—Peking, Paris, v.M.]

83.—滿漢合璧性理 (*Man han ho pi hsing li*), M. *manju nikan hergen kamciha sing li bithe*. 4 vols., 8vo, 1732. Contains, in Manchu and Chinese, the 太極圖說 (*T'ai chi t'u shuo*), 通書 (*t'ung shu*) and 西銘 (*hsi ming*), (*vide* Wylie, *Notes*, p. 69), *i.e.*, only the first three books of the *Hsing li ta ch'üan*.

[*Libraries*:—v.d.G., v.M.]

84.—*Sing li jen jiyan bithe i hes'en*. 3 vols., 1753, 1763. Extract from 性理眞詮 (*Hsing li chên chuan*). The latter is a philosophical work, published in 1753 by Hsün Teh-chao, in favour of Confucianism against other creeds.

Vide Schott, *Verz.*, p. 44–46. Translation of Vol. I, by von der Gabelentz, in *Zeitschr. fuer die Kunde des Morgenl.*, III, (1840), pp. 250–79.

[*Library*:—v.d.G.]

85.—忠經 *(Chung ching)*, M. *tondo nomun*—The Classic of Loyalty. Author 馬融 (Ma Yung), 79-166. First embodied in the 小學 *(Hsiao hsio)*—Little Learning, (*vide* No. 73).

86.—合璧忠經 *(Ho pi chung ching)*. 55 leaves, no year. The Classic of Loyalty, with commentary, Manchu and Chinese.

[*Library* :—v.M.]

87.—忠經 (*Chung ching*). New edition of the Classic of Loyalty in Manchu and Chinese, translated by Mêng Pao, together with 孝經 (Hsiao ching), *vide* No. 68.

88.—*Tondo be temgetulere bithe*—Loyalty as Model.

[*Library* :—v.d.G.]

89.—*Han i araha gucu hoki i leolen.* 8vo, 1724. Discourse on Friendship. Manchu only.

[*Library* :—v.M.]

90.—聖諭廣訓 (*Shêng yü kuang hsün*), M. *enduringge tacihiyan neileme badarambuha bithe*—Large 8vo, 1724. The Sacred Edict, consisting of 16 maxims written by the Emperor Kanghi, of which his son Yung-cheng, 1724, wrote an amplification. Manchu and Chinese.

Vide KLAPROTH, *Verz.*, p. 144. The Manchu translation published by Nocentini, Firenze, 1883; the 13th maxim in MEADOWS' translations, Canton, 1849; WYLIE, *Notes*, p. 70. C. DE HARLEZ in *Mém. de la Soc. des Études Jap., Chin.*, etc., 2e Livr, 1885.

[*Libraries* :—Berlin, Paris.]

91.—三合聖諭廣訓 *(San ho shêng yü kuang hsün)*, M. *ilan hacin i gisun kamcibuha enduringge tacihiyan be neileme badarambuha bithe.* 4 vols., large 8vo, 1873, with preface of 1724. The sacred edict in Manchu, Mongol and Chinese.

[*Libraries* :—v.d.G., v.M.]

92.—*Enduringge tacihiyan be neileme badarambuha bithe.* 2 vols., 1725. The Sacred Edict in Manchu and Mongol.

Vide Rémusat, *Notices et Extraits*, Vol. XIII, where the first three maxims are published in both languages.

[*Library*:—Paris].

93.—*Ci hiyūn?*

[*Library*:—v.d.G., (3rd vol.).]

94.—聯珠集 *(Lien chu chi).* 61 leaves, 1728. "Collection of strung pearls," Ideas on ethics, geography, history, natural history, etc., in Manchu, Mongol and Chinese.

Vide von der Gabelentz, *Zeitschr. der d. morg. Ges.* XVI, p. 540.

[*Library*:—v.d.G.]

95.—*Sheng dsu gūsin hūwangdi i booi tacihiyan i ten i gisun.* 2 vols., large 8vo, 1730. Only Manchu. Domestic Teachings of the Emperor Kanghi.

Translated in *Mémoires*, Vol. IX; *vide* Wylie, Translation, p. xl.

[*Libraries*:—Peking, Paris.]

96.—*Jun jeu ba i erdemungge niyalma i kimcin.* 1 vol., manuscript.

[*Library*:—St. Petersburg.]

97.—一學三貫清文鑑 (*Yi hsio san kuan ch'ing wên chien*), M. *emu be tacifi ilan be hafu kiyara manju gisun i buleku bithe.* 4 vols., 8vo, 1746. By one study to attain three, viz., Chinese language, Manchu translation and instructive contents. Information on astronomy, geography, etc., in Manchu and Chinese.

[*Libraries*:—Peking, v.d.G., v.M.]

28.—四本簡要 (*Ssŭ pên chien yao*), M. *duin fulehe oyonggo s'os'ohon i bithe.* 4 vols., 8vo. First preface by Fu Ming-liang, 1652; second by Fu Ming-an, 1746; third by Fu Hsüen, (three generations). Rules of Wisdom. In four books (the last in verse),

discussing in 53 chapters the subjects of study, of being reverent and cautious, of moderation of purpose, of refinement and liberality, etc. In Manchu and Chinese.

[*Library* :—v.M.]

99.—事箴言繙譯六 (*Fan i liu shih chên yên*), M. *ubaliyambuha ninggun baita targabun gisun bithe*. 4 vols., 8vo, 1816. Preface, Manchu and Chinese. Author 王鼎 (Wang Ting). New edition 1851, translated by Mêng Pao. Rules of Life on Six Subjects: (1) to take care of one's self, (2) to govern one's house, (3) to do one's official duties, (4) to live in the country, (5) to do one's business, (6) to inquire into men's character.

[*Libraries*:—As. Soc. Shanghai, v.M.]

100.—繙譯童諺 (*Fan i t'ung yên*), M. *manju ubaliyambuha buya jusei muwa gisun i bithe*. 32 leaves, 8vo, 1845. Translated by Hiyan. Manchu and Chinese. Author of the Chinese original 秀楚翹 (Hsiu Ch'u-ch'iao). An elementary book for children.

[*Library* :—v.M.]

101.—繙譯論 (*Fan i lun*). Manuscript in Manchu only. Essays.

[*Library* :—v.M.]

102.—辦事總論 (*Pan shih tsung lun*). 1 cover. Discourse on the management of affairs. In Manchu and Chinese.

[*Library* :—St. Petersburg.]

103.—繙譯試策法程 (*Fan i shih t'sê fa ch'êng*), M. *ubaliyambuha simnehe bodon i durun kemun i bithe*. 8 vols., 8vo, 1845. In Manchu and Chinese. Compiler and translator 穆齊賢 (Mucihiyan Joifan). A collection of the best examination essays. Manuscript.

[*Library* :—v.M.]

104.—繙譯考試題 (*Fan i k'ao shih t'i*), M. *simnehe timu bithe*. 2 vols. 8vo, no year; one vol. Chinese, one Manchu. Contains 33 examination essays.

[*Library* :—v.M.]

105.—*Ubaliyambume simnehe timu bithe.* 68 leaves. Examination essay.

Vide *Zeitschr. der d. morg. Ges.* XVI, pp. 542–43.

[*Library* :—v.d.G.]

106.—*Ubaliyambume simnehe timu bithe.* 8vo, 1853. Manchu with Chinese separately. Examination essay.

[*Library* :—v.d.G.]

107.—繙譯課文條 (*Fan i k'o wên t'iao*). Manuscript, only Manchu. Essays, corrected in red ink.

[*Library* :—v.M.]

108.—滿漢名賢集 (*Man han ming hsien chi*), M. *manju nikan hergen kamcime araha ming hiyan ji bithe.* A collection of 174 maxims.

Vide Wylie, Translation, p. xl. The Manchu text in Klaproth's Chrestomathy, pp. 3–23.

109.—三合名賢集 (*San ho ming hsien chi*), M. *ilan hacin gisun i kamcibuha gebungge saisa isabuha bithe.* 4 vols., large 8vo, 1879. The same as the foregoing, in Manchu, Mongol and Chinese.

[*Library* :—v.M.]

110.—百家姓 (*Pai chia hsing*), M. *be giya sing.* The Book of Family Names.

Vide Wylie, Translation, p. xli.

111.—千字文 (*Ch'ien tzŭ wên*). The Thousand Character Classic. In Chinese transcribed in Manchu.

Vide Wylie, Translation, p. xlii.

112.—滿漢合璧幼學須知 (*Man han ho pi yo hsio hsŭ chih*). 2 vols., 8vo, 1822. Preface dated 1771. What young students ought to know. An elementary book in Manchu and Chinese.

[*Library* :—v.M.]

113.—*Jao min wên ch'üan.* 1 cover, manuscript. Essays in prose and verse.

[*Library* :—St. Petersburg.]

114.—臨雍御論 (*Lin yung yü lun*). Manchu and Chinese; Imperial essays written when visiting the College. Appears periodically.

Vide WYLIE, Translation, p. xlii.

115.—*Emu tanggū orin cakda* (*?*) *i gisun sarkiyan.* 1 cover, manuscript. Philosophy. In Manchu and Chinese.

[*Library*:—St. Petersburg.]

116.—繙譯醒世要言 (*Fan i hsing shih yao yên*), M. *ubaliyambuha jalan de ulhibure oyonggo gisun i bithe.* 8vo, 1876. An important Scripture to awaken the world. Translated by Mêng Pao.

[*Library*:—v.M.]

V.—*Religion.*

117.—大乘經 (*Ta ch'êng ching*). A Buddhist sûtra, either the Mahâyânâ sûtra or all the sûtras of the mahâyânâ. Translated by Dahai in 1633, *vide* Ming ch'ên chuan, III, fol. 21.

118.—感應篇 (*Kan ying pien*), M. *acabume karulara bithe.* 1673. The best known book of the Taoists, not, however, by 太上 T'ai shang (Lao-tzŭ), but of the time of the Sung dynasty. Innumerable editions in Chinese (WYLIE, *Notes*, p. 179).

Vide WYLIE, Translation, p. xxxix. The Chinese text in TURRETINI's *Bai zan sao* and in the Chinese Chrestomathy published in Paris. The Manchu in KLAPROTH's Chrestomathy, pp. 25–36.

119.—太上感應篇 (*T'ai shang kan ying pien*), M. *tai s'ang ni acabume karulara bithe.* 1759. The same as No. 118.

Vide WYLIE, Translation, p. xli; SCHOTT, *Verz.*, p. 35.

[*Libraries*:—Paris, Berlin, v.d.G., v.M.]

120.—Same title as foregoing number. The same work, illustrated by 400 short tales. In Manchu and Chinese.

Vide SCHOTT, *Verz.*, p. 47. One tale in KLAPROTH's Chrestomathy, pp. 48–62; the same in French in St. Julien, *Livre des Récompenses et des Peines.* Paris, 1835, pp. 18–27.

[*Library*:—Paris.]

121.—心經 (*Hsin ching*), M. *niyaman i nomun.* In Manchu, Chinese, Tibetan (with Manchu transcription). 8vo.

Vide THONNELIER's Catalogue, p. 517, No. 3946. Is perhaps an abstract of the pradjna pâramitâ hridaya sûtra.

[*Library*:—Paris.]

122.—四十二章經 (*Ssŭ shih êrh chang ching*). The sûtra of 42 sentences.

Vide *Journal As.*, XI, (1848), pp. 535–57 for French translation by GABET and HUC.

123.—*Fucihi i nomulaha (?) dehi juwe fiyelen nomun.* The sûtra of 42 sentences. In Manchu, Mongol and Chinese. 1 cover, manuscript.

[*Library*:—St. Petersburg.]

124.—*Hian kie ch'ien fo hao.* The names of the 1,000 Buddhas, in five languages—Tibetan, Sanscrit, Manchu, Mongol and Chinese. 2 vols., 4to. The Kalpa of the sages (bhadrakalpa).

[*Library*:—Paris.]

125.—*Guwan s'eng di giyūn i iletuleme acabuha bithei urgen be targabure bithe.* 1728. Kuan-shêng's discourse on the giving up of the desire of rewards. A Taoist tract.

Vide WYLIE, Translation, p. xl.

126.—諸聖帝君訓誡世人之經 (*Chu shêng ti chūn hsūn chieh shih jên chih ching*), M. *geren enduringge di giyūn i jalan i niyalma be tacihiyan targabure nomun.* One leaf, 8vo. A Taoist tract: Warning and Injunction to the men of this world.

Vide WYLIE, Translation, p. xxxix.

127.—*Geren enduringge di giyūn i jalan de tutabuha boobai tacihiyan i nomun bithe.* 1 leaf, 8vo. A Taoist tract. Precious Teachings left to the world. In Manchu and Chinese.

[*Library*:—v.M.]

128.—關聖帝君覺世寶訓經 (*Kuan shêng ti chün chiao shih pao hsün ching*), M. *enduringge di giyūn kuwan mafai jalan de ulhibure boobai tacihiyan i nomun bithe.* 5 leaves, 8vo. A Taoist tract. Precious Teachings for the instruction of the world. In Manchu and Chinese.

[*Library*:—v.M.]

129.—文昌帝君陰隲文 (*Wên ch'ang ti chün yin chih wên*), *M. wen cang di giyūn enduri i butui erdemui bithe.* 4 leaves, 8vo. A Taoist tract. On secret virtues. In Manchu and Chinese.

[*Library*:—v.M.]

130.—戒淫文 (*Chieh yin wên*), M. *hayadara be targabure bithe.* 6 leaves, 8vo. A Taoist tract. Warning against debauchery. In Manchu and Chinese.

[*Library*:—v.M.]

131.—梓潼帝君感應陰隲文 (*Tzŭ t'ung ti chün kan ying yin chih wên*), M. *dsy tung di giyūn i butui sain de karulame acabume bithe.* A Taoist tract. On rewards and secret good actions.

Vide Wylie, *Notes*, p. 180; Manchu in Klaproth's Chrestomathy, pp. 37–47.

132.—欽定清文祭祀條例 (*Ch'in ting ch'ing wên chi ssŭ t'iao li*), M. *hesei toktobuha manjusai wecere metere kooli bithe.* 6 vols., large 8vo, 1765. In Manchu only. The Sacrificial Ritual of the Manchus; Vol. I–IV, describing the ceremonies and prayers during the sacrifices; Vol. V enumerates the different sacrificial vessels and utensils, of which Vol. VI gives 118 drawings.

Vide Langlès, *Rituel des Tartars-Mantchoux*, Paris. 1804, 4to, 74 pp. and 10 plates; reprint from *Notices et Extraits*, VII, pp. 241–308. C. de Harlez, *La religion nationale des tartares orientaux, mandchous et mongols; avec le Rituel tartare, traduit.* Bruxelles, 1887. 8vo, 216 pp. and 8 plates.

[*Libraries*:—Peking, Paris, v.M.]

133.—*Wu pan jo king* (*?*). The Manchu version of a Buddhist sûtra. 16 vols., folio, 1820.

[*Library*:—B. Quarritch, London.]

134.—The *Kandjur* and *Tandjur*, *i.e.*, the Buddhist *tripitaka*, the three collections (三藏 *San t'sang*):—sûtra (經 *Ching*), the sacred texts; *vinaya* (律 Lü), works on discipline; *çâstra* (論 Lun), philosophical treatises. The catalogue of the Kandjur (三藏聖教法寶標目錄, *San t'sang shêng chiao fa pao p'iao mu lu*, vide *Shên-i-tien*, chap. xcv, in the collection *Ku-chin t'u shu*), has been edited by SCHIEFNER, *der Index des Gandschur tibetanisch herausgegeben*. St. Petersburg, 1845, 4to, and Oxford, Clarendon Press, 1883. *Vide* JULIEN, *Mélanges de Géographie*, p. 94; also the works of S. BEAL, on Buddhism.

This great collection was printed by order of the Emperor Kien-lung, in four languages—Chinese, Manchu, Tibetan and Mongol, each language in 348 vols. folio (Kandjur 108 vols., Tandjur 240 vols.), together 1,392 vols.

[*Library*:—St. Petersburg.]

135.—萬物眞原 (*Wan wu chên yuan*), M. *tumen jaka unenggi segiyen*. 8vo. The true origin of all things. Written in 1628 by the Missionary J. ALENI. *Vide* WYLIE, *Notes*, p. 140, and Translation, p. xliv.

Catalogue of Sikawei (near Shanghai), p. 26, P. JULIO ALENI, S.J. Probatur imprimis Dei existentia, etc., dein demonstratur absurdam esse philosophorum sinensium sententiam qua asserunt omnium rerum principium esse Li 理 (rationem) et Yuen-ki 元氣 (primam materiam). 1 vol., 28 fol., 8vo, 50 sap. (cash).

[*Library*:—Paris.]

136.—教要序論 (*Chiao yao hsü lun*). Written by P. FERDINAND VERBIEST, S.J. (南懷仁 Nan Huai-jen), 1677. Prohibited by Imperial Edict of 1805, *vide* WYLIE, Translation, p. xliii. Rudimentorum fidei ornata expositio. Explicantur in hoc libro

mysteria fidei, qualia sunt Dei existentia, S.S. Trinitas, immortalitas animæ, symbolum Apostolicum, Decalogum, Oratio dominica, etc. 1 vol., 75 fol., 8vo, 100 sap. (cash), *vide* Catal., p. 67.

137.—Brevis relatio eorum, quæ spectant ad declarationem Sinarum imperatoris Kam-hi circa cœli, Confucii et avorum cultu, datam a. 1700, accedunt primatum, doctissimorumque virorum et antiquissimæ traditionis testimonia opera P.P. soc. J. Pekini pro Evangelii propagatione laborantium. Large 8vo. Printed in the Imperial Palace, 1701. In Manchu, Chinese and Latin. 61 double leaves.

[*Library*:—Paris.]

138.—聖年廣益 (*Shêng nien kuang yi*). By P. J. F. Moyra de Maillac, S.J., 1738. New edition 1815. Prohibited by Imperial Edict 1805. Annus sacer seu vitæ Sanctorum totius anni. Hoc opus vitas continet Sanctorum quorum festa singulis anni diebus, in Martyrologio adnotantur. Post quamlibet vitam habetur brevis meditatio tribus constans punctis et oratio cujusque Sancti propria. 4 vols., 12 libr., 16mo, 2,000 sap. (cash). Cat. p. 11.

139.—天主實義 (*T'ien chu shih yi*), M. *abkai ejen i unenggi jurgan*. Vera de Deo doctrina, by P. Matth. Ricci, S.J. 4 vols., 1758. Auctor multis ac variis argumentis probat Dei existentiam, dein metempsychosin aliosque istiusmodi refutat errores, et tandem diversas de cœlibatu et abstinentia solvit quæstiones. Cat. p. 14.

[*Library*:—St. Petersburg.]

140.—*Musei ejen isus heristos i tutabuha ice hese.* 8 vols., 4to, St. Petersburg, 1835. The New Testament, translated under the direction of Lipowzow.

Vide Schott, *Verz.*, p. iii.

[*Libraries*:—St. Petersburg, London, (Summers' Cat. p. 70), Paris, v.M.]

141.—The Old Testament, translated into Manchu. Manuscript. *Vide* Wylie, Translation, p. xlvii.

[*Libraries*:—St. Petersburg, London.]

On Christian literature in Manchu, *vide* LANGLÈS, *Alphabet Mantchou*, pp. 71, 72; *Lettres édif. et cur.* Nouv. édition, Paris, III, p. 330; MEADOWS, *Essay on the Manchu Language*, p. 11.

VI.—*History.—Geography.*

142.—大遼史 (*Ta liao shih*), M. *dai liyoo gurun i suduri*. 8 vols., 8vo, 1644. In Manchu only. Author of the Chinese original the Mongol 脫脫 (T'o T'o), translation commenced by Dahai and Erdeni, completed under direction of Hife by a number of scholars. History of the Liao dynasty, comprising 307 years up to 1125. Presented to Emperor Shunchih, 1644, who ordered 300 copies of the Liao history, 300 of the Kin, and 600 copies of the Yuen, to be printed.

Toto's histories are not authentic, as the Liao (the Khitans) left no documents.

Translated into German by VON DER GABELENTZ. St. Petersburg, 1878, 8vo, 225 pp. *Vide* KLAPROTH, *Verz.*, p. 90.

[*Libraries*:—Paris, v.d.G.]

143.—金史 (*Chin shih*), M. *aisin gurun i suduri*. 9 vols., 8vo, 1644. In Manchu only. History of the Kin (1115-1234). Author and translators are the same as those of No. 142. The Tungusic tribes, which under the name of 女直 (*Ju chih* or *Nü chih*), lived in Manchuria, founded 1116, under Aguda, an independent kingdom, which they called 金國 (*Chin kuo*), M. *aisin gurun* Golden Kingdom. This (1234) was conquered by the Mongols.

Vide KLAPROTH, *Verz.*, p. 33. The Kin words in the Chinese original are explained in No. 16.

Translated into French by C. DE HARLEZ, Louvain, 1887.

[*Libraries*:—St. Petersburg, Berlin, Paris.]

144.—大元史 *(Ta yuan shih)*, M. *dai yuwan gurun i suduri bithe.* 13 vols., 8vo, 1644. In Manchu only. Translators the same as those of No. 142. History of the Mongol dynasty (1206–1367), by 宋濂 (Sung Lien), (1310–81) and others.

Vide WYLIE, *Notes*, pp. 13 and 19.

[*Library*:—Peking.]

145.—綱鑑輯覽 *(Kang chien chi lan)*, M. *hafu buleku bithe.* 1665. A compendious history of China, up to 1368, in Manchu. Left incompletely translated by Dahai (1633), completed and edited by order of the Emperor Kanghi in 1665. The Chinese original by 袁黃 (Yuan Huang), latter part of 16th century.

Vide KLAPROTH, *Verz.*, p. 41.

[*Library*:—Berlin.]

146.—*Hafu buleku bithe ci oyonggo s'os'oho bithe.* 2 covers. Abridgment of No. 145.

[*Library*:—St. Petersburg.]

147.—通鑑綱目 *(T'ung chien kang mu)*, M. *tung giyan gang mu i bithe.* 48 vols., large 8vo, 1691. In Manchu. A translation of the history of China, written by Ssŭ-ma Kuang and changed and abridged by Chuhi.

Vide WYLIE, *Notes*, p. 20; SCHOTT, *Verz.*, pp. 1–3.

[*Libraries*:—Peking, v.d.G., v.M.]

148.—*Wargi amargi babe necihiyeme toktobuha bodogon i bithe.* 1709. On the pacification of the West and the North.

[*Library*:—Peking.]

149.—*Junggar babe necihiyeme toktobuha bodogon i bithe sirame bithe.* 1761–65. On the Pacification of the Djungars.

[*Library*:—Peking.]

150.—欽定西域同文志 *(Ch'in ting hsi yü t'ung wên chih)*, M. *wargi aiman i hergen be emu obuha ejetun bithe.* 8 vols., large 8vo, 1766. Description of the Western Countries, by order of the Emperor Kienlung. A geographical dictionary in Manchu, Mongol,

Chinese, Tibetan, Olot (Djungar-Kalmuc) and Chagatai. In 24 chapters, enumerating the places, mountains, rivers, lakes and historical persons of Central and Western Asia, in all 3,111 articles.

Vide Preface to the Great Dictionary (No. 36) fol. 2; St. JULIEN, *Journal Asiatique*, X, (1840), p. 380. THONNELIER published part of it (Cat. p. 524, No. 3977).

[*Library*:—Paris.]

151.—異域錄 (*I yū lu*), M. *lakcaha jecen de kalkūraha babe ejehe bithe.* 2 vols., 8vo, 1723, manuscript. Also printed, in Manchu. Notes on the countries on the far frontier, with a chart. Translated from the Chinese.

[*Libraries*:—Peking, v.M.]

152.—清字欽差大臣記在外夷論 (*Ch'ing tzŭ ch'in ch'ai ta ch'ên chi tsai wai i lun.* 2 vols., 8vo. Notes of an Ambassador on the Outer Barbarians. In Manchu. Manuscript.

[In a private collection in Peking.]

153.—西域聞見錄 (*Hsi yū wên chien lu*), M. *wargi jecen i bade bifi donjihi sabuha bithe.* 1777. What I heard and saw in the Western Countries. A description of Eastern Turkestan and part of Central Asia. By the Manchu 七十一 (Ch'i shih i).

Vide WYLIE, *Notes*, p. 52.

[*Library*:—v.d.G.]

154.—*Mukden ging hecen i cergi bai nirugan.* Names of Cities, etc., in the Province of Mukden. *Vide* WYLIE, Translation, p. xxxix.

155.—A description of the Chinese Embassy to the Turguts. *Vide* WYLIE, Translation, p. xxxix.

156.—*Kalkai dulimbi cugun gūsa.* The Banners of the Kalkas Tribe. *Vide* WYLIE, Translation, p. xxxix.

157.—八旗通誌 (*Pa ch'i t'ung chih*), M. *jakūn gūsai tung jy sucungga weilehe bithe.* About 200 vols., large 8vo, 1739, in Manchu only. The History of the Eight Banners.

Vide KLAPROTH, *Verz.*, p. 90; WYLIE. *Notes*, p. 57.

[*Libraries*:—Peking, v.M. (4 vols.).]

158.—欽定八旗姓氏族譜 (*Ch'in ting pa ch'i hsing shih tsu pu*), M. *han i araha jakūn gūsai manjusai mukūn hala be uheri ejeri bithe.* About 45 vols., large 8vo, 1744. Genealogy of the Manchu families of the Eight Banners, in Manchu only. First preface by Kienlung, 1744; second by Yungcheng, 1735. In 80 chapters.

[*Libraries:*—Peking, v.M., chap. 1–18, in 10 vols.]

159.—清字宗室王公表傳 (*Ch'ing tzŭ tsung shih wang kung piao chuan*), M. *uksun i wang gung sai gungge fas's'an be iletulere ulabun.* 6 vols., folio, 1765. In Manchu only. Biographies and Genealogies of Manchu Princes of the Imperial Clan.

For the Chinese original, *vide* Wylie, *Notes*, p. 28.

[*Library:*—v.M.]

160.—欽定滿洲源流考 (*Ch'in ting man chou yuan liu k'ao*). In 20 chapters, 1777. Antiquities and Geography of the Manchus.

For the Chinese original, *vide* Wylie, *Notes*, p. 36.

161.—欽定盛京通志 (*Ch'in ting shêng ching t'ung chih*). Description of the Province of Mukden, 1736. Author 王河 (Wang Ho), *vide* Wylie, *Notes*, p. 36.

162.—繙譯名臣傳 (*Fan i ming ch'ên chuan*). 8vo, manuscript. Biographies of famous men. In Manchu and Chinese.

[*Library:*—v.M.]

163.—*Cin lien s'an alin i ice ji bithe.* Description of the Chin-lien (?) mountains.

[*Library:*—Peking.]

164.—*Janla cucin babe necihiyeme toktobuha bodogon i bithe.* 12 covers, 1784. The pacification of the Kinchuan; *vide* Wylie, *Notes*, p. 23.

[*Libraries:*—St. Petersburg, Peking.]

165.—*Hesei toktobuha tulergi monggo hoise aimani wang kung sai iletun ulabun.* 60 vols. Biographies of Mongol and Turkish Princes. Translated from the Chinese.

[*Library:*—St. Petersburg.]

166.—皇朝開國方畧 (*Huang ch'ao k'ai kuo fang lio*). 6 vols., 1786. History of the conquest of China by the Manchus, in chronological order, from Nurhachu to Shunchih (1584–1644). Preface by Kienlung. Compiled by a number of scholars.

167.—讀史論畧 (*Tu shih lun lio*), M. *hūlaha suduri i s'os'ohon he leolehe bithe*. 2 vols., 8vo, 1849. On the study of History. In Manchu and Chinese. By 興德 (Hingde). Also 三合 (San ho) in Manchu, Mongol and Chinese.

[*Library*:—v.M.]

VII.—*Laws.—Edicts.—Treaties.—Regulations.*

168.—A tablet erected by the King of Corea to the Manchu Emperor Tsungteh, 1639, in Chinese, Manchu and Mongol; *see* W. R. Carles in *J. of C. B. of R. A. S.*, XXIII (1888), pp. 1–8.

169.—*Monggo fafun i bithe*. 4 vols. Translated from the Chinese.

[*Libraries*:—St. Petersburg, Peking.]

170.—明會典 (*Ming hui tien*). Description of the Chinese Government under the Ming dynasty (1368–1644). Published in Chinese in 1509 by 徐溥 (Hsü P'u); in 1632 translated into Manchu by Dahai.

Vide Wylie, *Notes*, p. 56; Ming ch'ên chuan, III, pp. 21–22.

171.—大清律例 (*Ta ch'ing lü li*), M. *dai cing gurun i fafun*. 12 vols., folio, 1646; new edition, 1766. The penal code of China, in Manchu. First translated under Taitsung (1627–44), 1646, published. The Chinese text revised 1670, with additions 1723, revised 1740 and 1829, *vide* Wylie, *Notes*, p. 57.

[*Libraries*:—Peking, v.M.]

172.—*Ming gurun i hung wu i tacihiyan*. 1646. "Homilies on themes relating to the Government." By the Ming Emperor Hung-wu (1368–99).

[*Library*:—Peking.]

173.—Diploma for P. Adam Schall, 1651, in Manchu, *vide* Klaproth, *Verz.*, p. 59.

[*Library*:—Berlin.]

174.—*Han i araha ambasai mujilen be darabure bithe.* 1655. The Emperor's Address to the Officials on Morality; *vide* Wylie, Translation, p. xxxviii.

175.—*Dasan de tuwangga oyonggo bithe.* 1 cover, 1655. On Government.

[*Libraries*:—St. Petersburg, Peking.]

176.—*Dorgi durun i jurgan be badarambuha bithe.* 1656. The ministry of the Imperial Household.

[*Library*:—Peking.]

177.—The treaty between Russia and China concluded in 1675 by Spafari. Manchu text in Wassilyeff's Chrestomathy, pp. 82–120.

178.—*Jalan jalan i hafu buleku.* General mirror for all generations; *vide* Wylie, Translation, p. xxxix. This is perhaps a translation of the 世緯 (Shih Wei), by 袁袠 (Yuan Chih), intended "to rectify abuses which had crept into the Government;" Wylie, *Notes*, p. 70.

[*Library*:—St. Petersburg.]

179.—The treaty between Russia and China concluded in 1689, in Nipchu (Nerchinsk) by Golowin. Manchu text in Wassilyeff's Chrestomathy, p. 166; English in Mayers, Treaties, p. 96.

180.—欽定大清會典 *(Ch'in ting ta ch'ing hui tien)*, M. *dai cing gurun i uheri kooli.* 1694. New edition, 1764. The Statutes of China. Published in Chinese the same year, revised 1727, again 1771; *vide* Wylie, Translation, p. xlii, *Notes*, p. 57.

[*Library*:—Peking.]

181.—The treaty between Russia and China concluded in 1727, in Manchu, Russian and Latin by Sawa Wladislawich. Manchu text in Klaproth's Chrestomathy, pp. 101–120, and in Wassilyeff's Chrestomathy, p. 171. English in Mayers, Treaties, p. 96. *Vide* Wylie, Translation, p. xli.

182.—上諭八旗 (*Shang yü pa ch'i*), M. *dergi hese jakūn gūsade wasimbuhengge.* Manchu text 14 vols. Chinese text 12 vols., large 8vo, 1723–35. The edicts of Emperor Yungcheng addressed to the eight banners. *Vide* KLAPROTH, *Verz.*, p. 58; DE HARLEZ, *Manuel*, p. 4. *Zeitschr. d. d. morg. G.* XLI, (1887), pp. 311–18. *Mém. de la Soc. des Et. Jap.* 2e Livr, 1885.

[*Libraries:*—Berlin (5 vols.), Peking, Paris, v.d.G., v.M.]

183.—諭行旗務奏議 (*Yü hsing ch'i wu tsou i*), M. *hesei yabubuha hacilame wesimbuhe gūsai baita.* Manchu text 13 vols., Chinese text 4 vols., large 8vo. Reports of the Eight Banners to the Emperor Yungcheng, on military and other matters.

[*Libraries:*—Paris, v.M.]

184.—上諭旗務議覆 (*Shang yü ch'i wu i fu*), M. *dergi hesei wasimbuhe gūsai baita be dahume gisureſi wesimbuhengge.* Manchu text 13 vols., Chinese text 11 vols., large 8vo. Rescripts of the Emperor Yungcheng in answer to the reports of the Eight Banners.

[*Libraries:*—St. Petersburg, Paris, v.M.]

185–187.—Three scrolls in Manchu, being patents of nobility given to Manchus. Time of Emperor Kienlung.

[*Library:*—v.M.]

188.—太祖高皇帝聖訓 (*T'ai tsu kao huang ti shêng hsün*), M. *dai dsu dergi hūwangdi i enduringge tacihiyan.* The homilies of Nurhachu (1584–1616), who from 1616–27 reigned under the title of 天命 (T'ien ming).

[*Library:*—Peking.]

189.—三皇帝聖訓 (*San huang ti shêng hsün*). 1739. The homilies of the three Emperors Shunchih, Kanghi and Yungcheng.

[*Library:*—Peking.]

190.—聖祖仁皇帝聖訓 (*Shêng tsu jên huang ti shêng hsün*), M. *s'engdsu gosin hūwangdi i enduringge tacihiyan.* 1741. Homilies of the Emperor Kanghi, (1662–1723).

[*Library:*—Peking.]

191.—*Jakūn gūsai kooli hacin.* 1 cover, 1742. The regulations for the Eight Banners.

[*Library*:—St. Petersburg.]

192.—*Da se i jurgan be badarambuha bithe.* The Board directing the affairs of the Tartars (?) at Peking.

[*Library*:—Peking.]

193.—*Ukanju be kadalame jafara kooli.* 2 vols., 8vo, 1743. Regulations for the capture of deserters. In Manchu only.

[*Libraries*:—Peking, v.M.]

194.—*Uheri kooli i kooli hacin i bithe.* 1747. General regulations.

[*Library*:—Peking.]

195.—*Dai dsu han i yargiyan kooli bithe.* Nurhachu's customs. Quoted by Amiot, *Éloge de la ville de Moukden*, p. 21, Note a.

196.—The treaty between Russia and China concluded in 1768, by Kropotow. Manchu text in Wassilyeff's Chrestomathy, p. 190. English in Mayers, Treaties, p. 96.

197.—清文五朝聖訓 (*Ch'ing wên wu ch'ao shêng hsün*). 10 covers, edited by Kienlung. The homilies of the five Emperors, Nurhachu, Taitsung, Shunchih, Kanghi and Yungcheng.

[*Library*:—St. Petersburg.]

198.—時憲書 (*Shih hsien shu*), M. *dai cing gurun i (abkai wehiyehe i dehi jakūci aniya i) erin forgon ton i bithe.* Folio, 1783. Published every year. Calendar.

[*Libraries*:—Paris, v.d.G., v.M., (1870 and 1871).]

199.—欽定吏部則例 (*Ch'in ting li pu tsê li*), M. *hesei toktobuha hafan i jurgan i weile arara kooli.* The records of the Board of Civil Office.

200.—欽定戶部則例 (*Ch'in ting hu pu tsê li*), M. *hesei toktobuha boigon yamun i weile arara kooli.* The records of the Board of Revenue.

201.—欽定禮部則例 (*Ch'in ting li pu tsê li*), M. *hesei toktobuha dorolon yamun i weile arara kooli.* The records of the Board of Ceremonies.

202.—欽定兵部則例 (*Ch'in ting ping pu tsê li*), M. *hesei toktobuha cooha i jurgan i weile arara kooli.* The records of the Board of War.

203.—欽定刑部則例 (*Ch'in ting hsing pu tsê li*), M. *hesei toktobuha beidere jurgan i weile arara kooli.* The records of the Board of Justice.

204.—欽定工部則例 (*Ch'in ting kung pu tsê li*), M. *hesei toktobuha weilere jurgan i weile arara kooli.* The records of the Board of Works.

205.—欽定理藩院則例 (*Ch'in ting li fan yuan tsê li*), M. *hesei toktobuha dulergi golo be dasara jurgan i weile arara kooli.* 1815. The records of the Board of Dependencies.

206.—欽定續纂中樞政考 (*Ch'in ting hsü tsuan chung ch'u chêng k'ao*), M. *hesei toktobuha coohai jurgan i baitai kooli bithe (simnere bithe).* 18 covers, 1801. The records of the Great Council of State, now called 軍機處 (Chün chi ch'u), (*vide* MAYERS, Government, p. 12). In former times it was called 樞密院 (Ch'u mi yuan).

[*Library*:—Peking.]

207.—大清高宗純皇帝聖訓 (*Ta ch'ing kao tsung ch'un huang ti shêng hsün*), M. *dai cing gurun i goo dsung yongkiyangga hūwangdi i enduringge tacihiyan.* 150 vols., folio, 1807. Homilies of the Emperor Kienlung.

[*Libraries*:—Peking, v.M., (vols. 145-150).]

208.—欽定回回疆 (*Ch'in ting hui hui chiang*), M. *hesei toktobuha hoise jecen i kooli hacin i bithe.* 9 vols, large 8vo, no year; only Manchu. The administration of Chinese Turkestan.

[*Libraries*:—St. Petersburg (1814), v.M.]

209.—大清仁宗睿皇帝聖訓 (*Ta ch'ing jên tsung jui huang ti shêng hsün*), M. *dai cing gurun i jin dsung sungkiyan hūwangdi i enduringge tacihiyan.* 20 covers, 1824. Homilies of the Emperor Kiaking (1796–1821).

[*Libraries:*—St. Petersburg, Peking.]

210.—吏治輯要 (*Li chih chih yao*), M. *hafan i dasan i oyonggo be isabuha bithe.* 40 leaves, 8vo, 1845. Author: 通瑞 (T'ung Jui). On ruling officials. In Manchu and Chinese.

[*Libraries:*—Peking, v.M.]

211.—三合吏治輯要 *(San ho li chih chih yao)*, M. *ilan hacin i gisun kamcibuha hafan i dasan i oyonggo be isabuha bithe.* 2 vols., large 8vo, 1857. The same as No. 210. In Manchu, Chinese and Mongol.

[*Library:*—v.M.]

212.—*Likin regulations.* Manuscript, *vide* DE HARLEZ, *Manuel de la langue Mandchoue*, p. 4, Extracts, pp. 130–33.

[*Library:*—De Harlez.]

213.—The treaty between Russia and China, concluded in Kuldja, 1851, by Kowalewski. Manchu text in WASSILYEFF's Chrestomathy, p. 200. French in MAYERS, Treaties, p. 97.

214.—大清宣宗成皇帝聖訓 (*Ta ch'ing hsüan tsung ch'êng huang ti shêng hsün*), M. *dai cing gurun i siowan dsung ceng hūwangdi i enduringge tacihiyan.* Homilies of the Emperor Tao-kuang (1821–51).

215.—The Homilies of the Emperor Hienfung (1851–62).

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218.—The treaty between Russia and China, concluded in Tientsin, 1858, by Count Putiatin. Manchu in WASSILYEFF's Chrestomathy, p. 213. French in MAYERS, Treaties, p. 101.

219.—Regulations for the Banners. One vol., manuscript, 8vo. In Manchu and Chinese.

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220.—滿漢京城規條 *(Man han ching ch'êng kuei t'iao)*. 1 vol., 8vo, manuscript, first Manchu, then Chinese. Regulations for the Peking Garrison.

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VIII.—*Military Sciences.*

221.—素書 *(Su shu)*. A military code, said to be written by 黃石公 (Huang Shih-kung), third century, B.C., *vide* MAYERS, *Reader*, p. 71, No. 223; but probably the production of 張商英 (Chang Shang-ying), of the third or fourth century, A.D., *vide* WYLIE, *Notes*, p. 73. Translated into Manchu by Dahai (Ming ch'ên chuan, III, p. 21).

222.—三畧 *(San lio)*, M. *ilan yohibun*. The three *résumés* of tactics by Huang Shih-kung, translated by Dahai, *vide* No. 223.

223.—六韜 *(Liu t'ao)*. The six rules (of tactics), said to be written by 呂望 (Lü Wang), minister of Wên Wang, of the Chou dynasty, "but the style of the work and many expressions in it shew it to be posterior to the Han" (WYLIE, *Notes*, p. 72). Translated by Dahai.

224.—*Coohai baita de gisurengge*. 1710. On the art of war. Contains: 1.—孫子 (Sun Tzŭ), by 孫武 (Sun Wu), sixth century, B.C. On tactics. In 16 chapters, *vide* WYLIE, Translation, p. xxxix, *Notes*, p. 72.

2.—吳子 (Wu Tzŭ), by 吳起 (Wu Ch'i), fourth century, B.C. On the art of war. In 6 chapters, *vide* WYLIE, *Notes*, p. 72.

3.—司馬法 (Ssŭ Ma Fa), "a treatise compiled several centuries before the Christian era, by order of the prince of Tsi, from a number of ancient writings, elucidating the principles acted on by 田穰苴 (T'ien Jang-tsu), the military director of that state," (WYLIE, *Notes*, p. 73).

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226.—繙譯孫子兵法 (*Fan i sun tzŭ ping fah*). M. *ubaliyambuha sun dsy i coohai doro bithe.* 4 vols., large 8vo, 1846. A new Manchu translation of Sun Wu's tactics, by Kiying, of the Imperial Clan, (see No. 223).

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[*Library :*—Peking.]

234.—滿漢三國志 (*Man han san kuo chih*). 48 vols., large 8vo, no year. The same as No. 233, in Manchu and Chinese.

[*Library :*—v.M.]

235.—金瓶梅 (*Chin p'ing mei*), M. *gin ping mei bithe.* 48 vols., 8vo, 1709. A novel describing Peking life, in 100 chapters. Author of the Chinese original said to be 王世貞 (Wang Shih-chên), a celebrated historian, (1526–90), *vide* Mayers, *Reader*, p. 246, No. 817. The Manchu translation probably by a brother of the Emperor Kienlung. Wylie, Translation, p. xlii, (but corrected in *Notes*, p. 162) von der Gabelentz, *Zeitschr. der d. morg. Gesellsch.*, XVI, p. 544, erroneously believe this brother to be the author. Only Manchu with occasional Chinese characters. 1753; prohibited as immoral by Kienlung, (Wylie, *Notes*, pp. 21, 162, Translation, p. xliii). French translation of some parts by von der Gabelentz.

This work, the *San kuo chih*, (No. 232), the *Shui hu chuan*, (No. 243), and the *Hsi yo chi* (西遊記) are called 四大奇書 *(Sŭ ta chi shu)*, the four Wonderful Books. See WYLIE, *Notes*, p. 162.

[*Libraries:*—Peking, v.d.G., v.M.]

236.—御製避暑山莊 (*Yü chih pi shu shan chuang*), M. *han i araha alin i tokso de halhūn be jailaha gi bithe.* 2 vols., large 8vo, 1713. Each volume with 36 illustrations. 36 poems on the retreat in the summer palace in the Jehol mountains, by the Emperor Kanghi. Imperial preface 1712; at the end of the work a panegyric by four officials. *Vide* RITTER, *Asien*, I, pp. 139-40.

[*Libraries:*—v.d.G., v.M.]

237.—御製盛京賦 (*Yü chih shêng ching fu*), M. *han i araha mukden i fujurun bithe.* 1 vol., 8vo, 1748. Poem celebrating Mukden, by the Emperor Kienlung.

[*Libraries:*—Peking, Paris, v.d.G., v.M.]

238.—The same as foregoing, printed in 32 different styles of writing, in imitation of 32 styles of Chinese characters. 64 vols., large 8vo.

[*Library:*—Peking.]

French translation by AMIOT, *Éloge de la ville de Moukden.* Paris, 1770, 8vo. Manchu text in KLAPROTH's Chrestomathy, pp. 63-99.

239.—合璧西廂記 (*Ho pi hsi hsiang chi*), M. *manju nikan si siyang gi bithe.* 4 vols., 8vo, 1711. Drama in 16 acts. French by ST. JULIEN, Paris, 1861, and in TURRETINI's *Atsume gusa.*

Prohibited in 1753 as immoral by Emperor Kienlung, (WYLIE, Translation, p. xlii). *Vide* SCHOTT, *Verz.*, p. 92.

[*Libraries:*—Paris, v.d.G., v.M.]

240.—東周列國 (*Tung chou lieh kuo*). An historical novel, embracing the period from the eighth to the third century, B.C. *Vide* KLAPROTH, *Verz.*, p. 151.

241.—玉嬌梨 (*Yü chiao li*), M. *ioi jioo li i bithe.* Manuscript. A novel in 24 chapters. French by St. Julien, 1864.

[*Libraries:*—Paris, St. Petersburg.]

242.—好逑傳 (*Hao chiu chuan*). A novel. English by Sir J. F. Davis, London, 1829.

[*Library:*—Paris.]

243.—*Dergi han gurun i bithe.* Manuscript. A historical novel of the time of the Han dynasty, first century, B.C.

[*Library:*—St. Petersburg.]

244.—水滸傳 (*Shui hu chuan*). A novel by 施耐菴 (Shih Nai-an) of the Yuan dynasty, "the scene is laid in Honan and Shantung," the period chosen is the time of Emperor Hueitsung (1101–1126) of the Sung; *vide* Wylie, *Notes*, p. 162. 1753, Emperor Kienlung prohibited the book as immoral; *vide* Wylie, Translation, p. xliii.

245.—肉蒲團 (*Jou p'u t'uan*). M. *jeo pu tuwan i bithe.* 1 vol., manuscript; Manchu translation of a Chinese novel; *vide* Klaproth, *Verz.*, p. 152.

[*Library:*—Berlin.]

246.—Poem on the conquest of Kinchuan. French by Amiot, *Hymne Tartare-Mandchou chanté à l'occasion de la conquête du Kin-Tchouen.* Paris, 1792, pet. in 4°. *Vide* Wylie, Translation, p. xlii. See No. 164.

247.—*Kitaiskaya mysli* (Chinese thoughts translated from the Manchu), by A. Leontieff. St. Petersburg, 1772, 8vo. In Russian.

248.—平山冷燕 (*P'ing shan lêng yen*). A novel in 20 chapters. French by St. Julien, *Les deux jeunes filles lettrées.* Paris, 1860. 2 vols., 12mo.

[*Library:*—Paris.]

249.—合璧聊齋志異 (*Ho pi liao chai chih i*), M. *manju nikan liyoo jai jy i bithe*. Other title 譯繙 (*Tsê fan*), M. *sonjoſi ubaliyambuha*. Select translation; 24 vols., 8vo, 1849. In Manchu and Chinese. The Chinese original, first printed in 1740, is a collection of 300 stories, by 蒲松齡 (P'u Sung-ling), native of Shantung, seventeenth century; MAYERS, *Reader*, No. 567. The best edition is that of Tan Ming-lun (1842). The Manchu translation is made by 五費居士 (*Wu-fei-chü-shih*) and others, and contains 129 stories. *Vide* MAYERS, in *Notes and Queries*, I, p. 24.

Translated into English by H. A. GILES, *Liao Chai, or Strange Stories from a Chinese Studio*, 1880. C. F. R. ALLEN has translated 19 stories in *China Review*, II, 364; III, 16, 99, 142, 205, 284; IV, 26.

[*Libraries*:—Trübner, v.M.]

ABSTRACT OF INFORMATION

ON

CURRENCY AND MEASURES IN CHINA.

THIS Abstract has been compiled by Mr. H. B. MORSE from the replies received in answer to the Society's Circular issued in January 1889. The Council observe that the information is in some cases partial or defective, and that no replies have been received from many of the recipients of the Circular. It is therefore hoped that this publication may not be definitive, but that those who are able to supplement what is here set forth will communicate with the Honorary Secretary, the Council's desire being to publish at some future date a second edition of this paper.

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INTRODUCTION.

ALL nations have passed through the stage of chaos in their currency and measures. In western countries modern legislation has done much to reduce irregularity to order, though even there the old special units still linger on in common usage. In China some spasmodic efforts have been made from time to time to secure uniformity, but they have never gained much support, and, as will be seen from the following tables, chaos reigns supreme through the whole of the Empire. In many of the following contributions reference is made to the difficulty of finding any standard, even local.

An apology is due to the various contributors to this inquiry for not printing their papers as received; it is hoped, however, that they will recognise the utility of presenting the information in summarised tables, rather than giving detached information under all heads for each place. Where any contributor has given special information, it has been appended in the shape of notes under the proper head.

I have not attempted to prepare any general summaries. The reason for this will be obvious, when, on referring to the tables, it is remarked that many provinces are unrepresented, many others only covered at a few points, and two only (Kansu and Kiangsu, the latter fairly completely) are adequately reported on. The apathy of the mercantile residents in China on this subject, which so closely affects their interests, is remarkable, not one paper having been

received from any member of that influential body; and were it not for the efforts on their behalf made by the missionaries, Catholic and Protestant, this inquiry would have had no result.

An earnest appeal is made to all residents in China, whether members of the Society or not, to contribute further information on this important subject. There are three points to be kept in view:—

1°.—To check and (if wrong) rectify the statements made in the tables now submitted;

2°.—To send full information on the lines of this paper regarding places not now reported on;

3°.—To thus collect the material for an intelligent summary of the Currency and Measures of China by some competent hand.

The paper now presented is only preliminary, and it is hoped that the Society may soon be enabled to publish tables covering every part of China.

H. B. MORSE.

Pakhoi, 11*th January* 1890.

CIRCULAR ON CURRENCY AND MEASURES IN CHINA.

China Branch of the Royal Asiatic Society,
Shanghai, January 1889.

The Council of the China Branch of the Royal Asiatic Society are desirous of collecting information regarding the currency and measures in use in all parts of China, and request the favour of a short paper from you embodying information on the points given below. The papers when received will be summarised; and the summaries, together with the papers on which they are based, will be read at one of the open meetings of the Society, or printed in the Journal, at the discretion of the Council.

The points on which information is sought, are as follow :—

Currency.

1.—What are the kinds of Tael (兩) *of Silver (the Haikwan or* 關平 *Tael excluded) known in your district? Please give names in full, thus* 湘平化寶銀 (Hsiang-p'ing Hua-pao Yin), *together with the colloquial name.*

*2.—What is the actual weight in grains (*437½ *grains equal to one ounce avoirdupois) of the Tael of each* 平?

3.—What is the touch or fineness of each of the several kinds of Silver (pure silver being taken as 1,000 fine)?

4.—In each Tael of currency weighing (so many) grains, how many grains are there of pure silver (1,000 fine)?

5.—How many Taels of each of the currencies mentioned by you, are considered to be the equivalent locally of 100 K'u-p'ing Taels of pure silver (庫平足紋銀)?

6.—What relation do Mexican Dollars bear to the Tael commonly used locally? (100 Taels = ? Dollars).

7.—What kinds of Copper Cash are used in your district? What is a Tiao, *and what its value?*

8.—What relation do Copper Cash bear to the Mexican Dollar and [*or*] *the local Tael?*

9.—To what extent are Cash Notes (paper money) used locally? If used at all, please give some account of them.

10.—Are Bank Notes (or Bankers' cheques) for Silver used in your district otherwise than as cheques?

Weights.

11.—What weights of Catty (斤) *are known in your district? Please give the equivalent in ounces avoirdupois or in grammes. Which is the one generally used?*

12.—What weights of Picul (石 *or* 擔) *are known in your district? Please give the equivalent in pounds avoirdupois or in kilos. Which is the one generally used?*

13.—What variations are known from the table—

16 Taels (兩) = *1 Catty* (斤).
100 Catties (斤) = *1 Picul* (石).

14.—Does the Tael (兩) *of Currency bear any* exact *relation to the Catty* (斤) *of commerce?*

Capacity.

15.—What is the weight in lbs. or kilos of dry rice contained in the Peck (斗) *known in your district? What is its capacity in English cubic inches or in cubic centimètres?*

Length.

16.—What lengths of Foot (尺) *are known in your district? Please give equivalent in English standard inches (and decimals) or in decimals of a mètre. What are their names or use?*

17.—What variations are known from the table—

10 Inches (寸) = *1 Foot* (尺).

10 Feet (尺) = *1 Chang* (丈).

18.—What is the length of a Pace (步)?

19.—What is the length of a Li (里)?

Area.

20.—What is the area of a mow (畝) *known in your district? Please give the equivalent in English square feet or in square mètres.*

21.—How is the area of land under one mow designated? Please give a table.

General.

22.—Please give any other information regarding these measures not covered by the above questions.

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4.—Rev. H. P. Perkins. Notes on Lin-ch'ing-chou (臨青州), Shantung
5.—Rev. Gilbert Reid. Notes on Chi-nan-fu (濟南府), Shantung.
6.—Mgr. Ferd. H. Hamer, Vicar Apost. of Kansu. Notes on Lan-chou-fu (蘭州府), Liang-chou-fu (涼州府), Kan-chou-fu (甘州府), and Su-chou-fu (肅州府), Kansu.
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10.—Anonymous (a priest). Notes on Liu-an-chou (六安州), Huo-shan-hsien (霍山縣), and Huo-ch'iu-hsien (霍邱縣), Anhui.
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14.—J. H. Hunt, Esq. Notes on Fusan, Corea.
15.—Thos. F. Pettus, Esq.
16.—Dr. S. P. Barchet. } Notes on Ningpo (甯波府), Chekiang.
17.—Rev. E. T. Williams. Notes on Nanking (江甯府), Kiangsu.
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20.—Rev. Martin Poell. Notes on Lu-an-fu (潞安府), Shansi.
21.—E. H. Parker, Esq. Notes on Foochow (福州府), Fukien.
22.—Rev. C. F. Hogg. Notes on Shansi, Shensi and Kansu.
23.—Rev. John C. Gibson.
24.—L. Grunauer, Esq. } Notes on Swatow (汕頭), Kwangtung.
25.—A. P. Happer, jr., Esq. Notes on Mêngtzŭ (蒙自縣), Yunnan.
26.—Mak Sze-Che, Esq. Notes on Takow (打狗), Taiwan.
27.—T. E. Hallifax, Esq. Notes on Seoul, Corea.
28.—A. Agassiz, Esq. Notes on Lungchow (龍州廳), Kwangsi.
29.—W. B. Russell, Esq. Notes on Newchwang (牛莊), Shêngking.
30.—Rev. F. P. Gilman. Notes on Overland Trip from Macao to Hainan.

NOTE BY DR. MACGOWAN ON THE METROLOGY OF CHINA.

UNDER 斤, WILLIAMS, in remarking on its variations, ranging from three to twenty-one taels, the highest being the weight by which coal is sold in Honan, and the lowest being the catty of tea in Peking, justly ascribes the discrepancies to "an effort to equalise an apparent price at the expense "of the quantity given."

It cannot be said that the Imperial Government has failed in duty in the important function of providing standard weights and measures. More than two score centuries ago (2255 B.C.) that duty was discharged by the illustrious Shun, who rectified balances and co-ordinated weights and measures; successive dynasties have enacted statutory regulations to prevent metrological anarchy, but, as we see, they have been impotent in attempting their enforcement.

Metrological Policing.—No supervision is exercised by the Mandarinate in respect of weights and measures; statutable measures exist in the yamên, to which those in use by the people more or less correspond, the people in this as in commercial and municipal affairs being guided by rules of their own—consuetudinal law enforced by guilds generally or by extemporized organizations.

In the all-important matter of rice measuring, public vigilance suffices in most cities—as Wênchow, for example—to maintain uniformity. So well do the consumers of this

comestible know how many bowls of rice a given measure should contain, that the least fraud would be detected and the dealer lose custom—a matter that never happens.

In larger cities, however, for example as at Ningpo, rice-guilds exercise strict control over all rice-dealers, each one being obliged to be a member of the Association, among whom attempts at fraud are easily detected and the guilty are severely mulcted. Semi-monthly every dealer is required to send his measures to the guild to be tested. Care is taken to provide against the expansion and shrinkage which is consequent on the hygroscopic condition of the season, chunam being added or removed from the corners of the measure so as to adapt it to atmospheric vicissitudes; measures not taken for the public weal, but that dealers shall be able to obtain advantage over their fellow-tradesmen.

GOLD.

Rev. P. Hoang (1) states:—

Gold ingots are not in common use in trade, but only for hoarding. Hoarded gold is generally in one of two forms. One is in ingots shaped like a small boat, about 0·09 mètre [3·6 inches] long, 0·02 mètre [0·8 inch] wide, and weighing 360 grammes [5,555 grains=11·575 oz. troy]; this is called 金條. The other is in the form of gold-leaf, measuring about 0·2 mètre [8 inches] square, and weighing about 30 grammes [463 grains]; this gold-leaf is called 金葉子. The unit of value of gold is called 換; *e.g.*, if one ounce of gold is worth eighteen ounces of silver, it is quoted 十八銀換. The relative value of gold to silver was in the beginning of the Ming dynasty (1375) four times greater; under the Emperor Wan-li (1574) of the same dynasty, seven to eight times greater; at the end of the Ming dynasty (1635) ten times; under the Emperor Kang-hsi (1662) of the present dynasty, ten and more times; under the Emperor Kien-lung (1737) twenty times and more; in the middle of the reign of Tao-Kwang (1840) eighteen times; at the beginning of the reign of Hien-fung (1850) fourteen times; and at present (1882) generally eighteen times.

Rev. G. Parker (7) states:—

A *liang* of gold is worth [in Kansu] 17½ *liang* of silver. When the late Governor Tan was superseded, he required such a quantity of gold that the price rose to 21½, or 4 *liang* above the normal price.

Dr. S. P. Barchet (16) states:—

Gold is now seldom found in silver, since the natives have learned the wet process of extracting it.

Place.			Authority.	Name of Tael.	Weight of Tael.	
Province.	Prefecture.	Town.			15.4325=1 Grains.	Grammes.
...	...	...	...	Haikwan ... 關平	583.3	37.79
Shêng-king	Fêng-tien	Newchwang	29	Ying-tzŭ ... 營平	578.3	37.47
Chihli	Peking ...	...	...	Ching-p'ing ... 京平	...	...
			...	Erh-liang-p'ing 二兩平	...	...
	Tien-tsin	Fu ...	3	Hang-p'ing ... 行平	560.0	36.29
			3	Hsiang-p'ing ... 湘平	559.0	36.22
Shantung	Chi-nan ...	Fu ...	5	Chi-p'ing ... 濟平	563.75	36.53
			5	K'u-p'ing ... 庫平	573.0	37.13
	Lin-ch'ing	Chou	4	...	...	...
	T'ang-chou	Chefoo ...	3	Ts'ao-p'ing ... 漕平	561.7	36.40
Shansi	Lu-an ...	Fu	20	Lu-p'ing ... 潞平	...	...
	T'ai-yuen	Yang-ch'ü ...	20	Yang-ch'ü ... 陽曲平	...	...
Shensi	Hsi-an ...	King-yang	7	King-pu-p'ing 涇布平	558.15	36.17
			22	,,	574.0	37.19
Kansu	Lan-chou	Fu ...	7	Lan-pu-p'ing ... 蘭布平	552.6	35.81
			6, 7	Lan-p'ing ... 蘭平	551.0	35.70
	Liang-chou	Fu	6	Liang-p'ing ... 涼平	554.3	35.91
	Kan-chou	Fu	6	Kan-p'ing ... 甘平	559.7	36.27
	Su-chou...	Fu	6	Su-p ing ... 肅平	558.7	36.20
Honan	Nan-yang	Fu ...	9	Shih-p'ing ... 市平	557.5	36.12
			9	K'u-p'ing ... 庫平	564.7	36.59
Hupeh	I-chang ...	Fu	3	...	550.0	35.00
	Han-yang	Hankow ...	3	...	554.7	35.94
Kiangsi	Kiu-kiang	Fu ...	3	Ts'ao-p'ing ... 漕平	565.6	36.65
			3	Hang-p'ing ... 行平	555.5	35.82

Silver in Tael.				Equivalent Value		Local Taels 100 equal Silver Dollars	Copper Cash.			Notes.
Name.	Fineness.	Fine Silver in each Tael.		Haikwan Taels 100 equal	Kuping Tls. 100 equal		Denomin.	Actual number in Tiao.	Tiao in one Tael.	
		Grains.	Grammes.							
足紋銀	1,000	583.3	37.79	...	98.384	152.778				
化寶	992	573.7	37.17	108.50	103.550	142.86	1	160	10	
...	...	...	...	...	...	...	10=20	50	10 to 14	
...	...	...	...	...	...	...				
化寶	992	554.4	35.92	105.00 106.05	103.515	142.860	1=2	500	3.150	Note 1.
,,	992	554.5	35.93	105.20	103.500					
...	...	...	...	103.27	101.600	148.000	1=2	490	3.166	
...	...	...	...	...	...	...	1=2	490	3.100	
...	976	548.2	35.52	106.40	104.681	...	...	...	...	Note 2.
...	...	...	...	...	102.600					Tls. 100 equal S'hai Tls. 108.30
...	...	...	...	...	100.529	...	...	...	...	
...	970	...	...	...	101.456	...	...	...	...	Note 3.
...	?	...	...	...	...	...	...	...	...	Note 4.
...	970	...	...	...	102.470	...	1=2	485	3.180	Note 5.
...	? 985	...	...	...	104,500	...				
...	? 995									
...	...	...	...	...	101.317	...	1	980	1.600	
...	? 967	532.0	34.47	109.65	107.879					
...	967	536.4	34.76	108.75	106.993					
...	990	560.0	36.29	104.16	102.484					
...	988	559.0	36.22	104.36	102.674					
...	988	548.8	35.56	106.29	104.573					

Place.			Authority.	Name of Tael.	Weight of Tael.	
Province.	Prefecture.	Town.			15.4325=1	
					Grains.	Grammes.
Anhui	Wuhu	Fu	3	Ts'ao-p'ing 漕平	565.6	36.65
	Liu-an	Chou	10	„	...	...
		Huo-shan	10	„	...	...
	Ying-chou	Huo-ch'iu	10	„	...	...
Kiangsu	Kiang-ning	(Nan-king)	17	K'u-p'ing 庫平	575.0	37.26
			17	Ts'ao-p'ing 漕平	563.7	36.52
			17	Hsiang-p'ing 湘平	552.4	35.79
			17	...	...	...
	Chin-kiang	Fu	3	Ts'ao-p'ing 漕平	565.6	36.65
			3	Hang-p'ing 行平	563.5	36.51
	Soochow	Fu	1	Ts'ao-p'ing 漕平	565.0	36.61
	Hsü-chou	Sui-ning	11	„	...	...
	Sung-kiang	Shanghai	1	„	565.3	36.63
			1	K'u-p'ing 庫平	575.9	37.32
			1	„	577.5	37.42
			3	Kuei-p'ing 規平	560.0	36.29
Chekiang	Ning-po	Fu	3,15,16	Kiang-p'ing 江平	546.9	35.44
			15,16	Ts'ao-p'ing 漕平	558.0	36.16
			16	K'u-p'ing 庫平	569.1	36.88
			15	Kuei-p'ing 規平	...	...
			16	Ssŭ-ma-p'ing 司碼平	574.6	37.23
	Wênchow	Fu	18	Kiang-p'ing 江平	560.0	36.29
			18	Ts'ao-p'ing 漕平	573.1	37.13
			18	K'u-p'ing 庫平	580.8	37.63
			18	Kuei-p'ing 規平	520.0	33.69
			18	Hsiang-p'ing 湘平	564.4	36.57
			18	Hsiang-p'ing 飾平	579.7	37.56

Silver in Tael.				Equivalent Value		Local Taels 100 equal Silver Dollars	Copper Cash.			Notes.
Name.	Fineness.	Fine Silver in each Tael.		Haikwan Taels 100 equal	Kuping Tls. 100 equal		Denom'n.	Actual number in Tiao.	Tiao in one Tael.	
		Grains.	Grammes.							
...	990	560.0	36.29	104.17	102.484					
...	994	562.1	36.42	103.77	102.093					
...	...	...	...	...	102.041	...	1	980	1.250	
...	...	...	...	...	103.093	...	1	980	1.200	
...	...	...	...	103.093	...	...	1	1,000	1.550	
雪花銀										
紋銀	...	...	...	...	...	146.86	1	974	1.550	Note 6.
底潮銀										
杭銀	...	...	...	...	...	...	1	974	0.700	
...	990	560.0	36.29	104.16	102.484					
...	988	556.7	36.07	104.782	103.089					
...	960 *to* 990	...	...	...	105.840	135.32	1	1,000	1.530	Note 7.
...	...	...	...	...	...	...	...	...	...	Note 8.
...	935	523.6	33.92	111.10	109.600	136.00				
...	...	...	...	105.83	104.500 104.120 104.000	144.10	1	990	1.555	
元寶銀	998	...	...	...	102.252 101.970					
顆子銀	997	568.0	36.80	102.70						
圓絲銀	991	...	...	...	105.451	136.15				
條頭銀	988									
...	...	...	...	...	104.400					
...	...	561.7	36.40	103.88	102.200	140.00	1	1,000	1.470	Note 9.
元寶銀	1,000									
土銀	980	...	...	...	110.000					
洋錢銀	930	...	...	...	103.700					
...	...	...	...	...	101.800					

Place.			Authority.	Name of Tael.	Weight of Tael.	
Province	Prefecture.	Town.			15.4325=1 Grains.	Grammes.
Fuhkien	Foochow	Fu	3	Ssŭ-ma-p'ing ... 司碼平	581.7	37.69
			21	Hsin-i-p'ing ... 新議平	...	...
			21	Hsiang-p'ing ... 湘平	...	...
			21	Wên-kwang ... 紋廣	...	...
	Ch'uan-chow	Amoy ...	3	Shih-p'ing ... 市平	573.3	37.15
Taiwan	Tai-pei ...	Tamsui ...	3	...	575.7	37.30
	Tai-nan ...	Takow ...	3	...	576.9	37.38
			26	K'u-p'ing ... 庫平	580.0	37.58
Kwangtung	Ch'ao-chou	Swatow ...	23	Guild ... ...會館平	575.0	37.26
			3	Ssŭ-ma-p'ing ... 司碼平	576.7	37.37
			23	Market ... 市平	580.0	37.58
	Shao-chou	Fu	19	Ssu-ma-p'ing ... 司碼平	...	...
	Kwang-chou	Canton ...	3, 19	„	581.0 576.0 575.0 574.7	37.65 37.32 37.26 37.24
		Hsin-hui ...	19	„	...	...
	Kiung-chow	Hoihow ...	3, 30	...	...	...
	Lien-chow	Pakhoi ...	3	K'u-p'ing ... 庫平	583.3	37.79
			3	Pu-p'ing ... 部平	575.7	37.30
			3	Ssŭ-ma-p'ing ... 司碼平	580.0	37.58
Kwangsi		Yeong-kong	30	...	...	...
		Mui-luk ...	30	...	...	...
		Hai-on ...	30	...	...	...
	Tai-p'ing ...	Lungchow ...	28	Shih-p'ing ... 市平	530.0	34.34
Yunnan	Lin-an ...	Mêng-tzŭ ...	25	... 蒙自平	574.5	37.22

COREA.—See Note 16.

Silver in Tael.				Equivalent Value		Local Taels 100 equal Silver Dollars	Copper Cash.			Notes.
Name.	Fineness.	Fine Silver in each Tael. Grains.	Grammes.	Haikwan Taels 100 equal	Kuping Tls. 100 equal		Denom'n.	Actual number in Tiao	Tiao in one Tael	
Dollar	900	523.5	33.91	110.28	108.498					
...	1,000	...	...	...	102.459	...	1	1,000	1.405	Note 10.
...	1,000	...	...	...	103.413					
...	...	...	...	...	...	...	1	1,000	0.800	
Dollar	900	516.0	33.43	111.75	109.945					
Dollar	900	518.1	33.57	111.32	109.522					
„	900	519.2	33.64	111.114	109.319					
„	900	522.0	33.82	111.37	...	...	1	1,000	1.700	
„	900	517.5	33.53	112.715	...	...	1	1,000	1.500	Note 11.
„	900	519.0	33.63	111.145	109.350					
„	900	522.0	33.82	111.75						
...	...	...	...	...	...	152.00	1	1,000	1.500	Note 12.
Dollar	900	522.9	33.90	110.40	108.616					Rice and Wood Guild
„	900	518.4	33.59	112.526	...	...	...	...	...	
„	900	517.5	33.53	112.715						
„	900	517.2	33.52	112.80						
...	...	...	...	...	...	153.00	1	1,000	1.500	Note 13.
...	...	...	...	113.762	...	...	...	960		
Dollar	900	522.0	33.82	110.572	...	138.89	1	1,000	1.470	
...	...	...	...	...	...	...	...	912		
...	...	...	...	...	...	...	...	922		
...	...	...	...	...	...	...	...	936		
...	980	519.4	33.65	...	102.612	138.89	1	994	1.425	Note 14.
牌房銀	980	563.0	36.48	103.546	...	153.84 selling	1=1¼	780	1.500	Note 15.
母雞顆銀	980	563.0	36.48	103.546	...					
老槽紋銀	990	568.8	36.86	102.500	...	142.85 buying				

CURRENCY TABLE.

10 Hsü 須	= 1 Hsün 巡	10 Hsien	= 1 Wei 微
10 Hsün	= 1 Chün 逡	10 Wei	= 1 Hu 忽
10 Chün	= 1 Ai 埃	10 Hu	= 1 Ssŭ 絲
10 Ai	= 1 Mo 漠	10 Ssŭ	= 1 Hao 毫
10 Mo	= 1 Miao 渺	10 Hao	= 1 Li 厘 (cash).
10 Miao	= 1 Chên 塵	10 Li	= 1 Fên 分 (candarin).
10 Chên	= 1 Sha 沙	10 Fên	= 1 Ch'ien 錢 (mace).
10 Sha	= 1 Hsien 纖	10 Ch'ien	= 1 Liang 兩 (tael).

NOTES.

NOTE 1.—*Note on Tientsin Currency:*

Of the two equivalent values given for the Hang-p'ing Tael at Tientsin, the first (Hk. Tls. 100=T'u Tls. 105.00) is the rate at which foreign merchants pay duties, the second (Hk. Tls. 100=T'u Tls. 106.05) is the rate fixed for Chinese merchants in paying duties.

NOTE 2.—*Note on Chefoo Currency:*

Foreign merchants pay duties at the rate of Hk. Tls. 100=Ts'ao p'ing Tls. 104.40, instead of the rate given here, Ts'ao p'ing Tls. 106.40.

NOTE 3.—Rev. G. PARKER (7) states:—

Our remittances from Hankow are received in King-pu-p'ing, and weigh in the street shops *nearly* three per cent more. The discrepancy of one or two mace is caused by the two slight squeezes at Bank and Cash-shop. The reason for the use of the King-yang scale at Lan-chou is that King-

yang in Shensi (but since the Mahommedan rebellion San-yuen 三原縣) is the chief commercial centre in the north-west. The Lan-chou silver, in the shape of "fowls' kidneys," is melted at the Pu-chêng-ssŭ Yamên and is considered the very worst in use; old lumps and Szechuen silver are better; silver from Honan is the best. In re-casting the silver after former alloy has been removed, three per cent copper is added to ninety-seven per cent purified silver to make one hundred Taels. At Ch'in-chou 秦州, the chief city in the south-east of the Province (Kansu) this quality is difficult to change except at a loss.

NOTE 4.—Rev. C. F. HOGG (22) states:—

涇市平 (called Ching-pu-ping. Pu=布?)

This scale takes its name from 涇陽縣 in 陝西, which was formerly the commercial capital of the province, but after its sack during the Mahommedan rebellion, the business was transferred to 三原縣. The latter city is the great wholesale mart for the north-western provinces. The Ching-yang scale is in ordinary use there and is also used by bankers in Kan-su and Shen-si and perhaps elsewhere. Drafts drawn in Hankow on Si-ngan and Lan-chou banks are written in this scale, though the currency of both these cities differs considerably from it.

NOTE 5.—Mgr. HAMER (6) states:—

La balance de Lan-tcheou a une différence avec le Scen-con-fa 申公砝 de 24 par mille; 1,000 Tls. Scen-con-fa est 1,024 à Lan-tcheou.

NOTE 6.—Rev. E. T. WILLIAMS (17) states:—

1.—*The Tael.*

There are three kinds of Tael commonly used in Nankin: the "K'u-p'ing," known also as "Süeh-hwa Yin" (雪花銀),

the "Ts'ao-p'ing" (糟平), called "Wăn Yin" (紋銀) and the "Siang-p'ing" (湘平) or "Ti-ch'ao Yin" (底潮銀).

As a matter of fact, however, these are three methods of reckoning rather than three kinds of Tael. The "Ts'ao-p'ing" is the standard and the Tael commonly used in Nanking. In "Ts'ao-ping" 100 Taels are 100 Taels, but if a transaction is conducted in "K'u-p'ing," to every 100 Taels 2 Taels must be added; that is, 100 "K'u-ping" Taels are equal to 102 "Ts'ao-ping." 100 "Siang-ping" are but 98 "Ts'ao-ping." The "Ts'ao-ping" Tael contains 563.72 grains. The "Siang-ping" is used in paying the army and the prizes awarded students at the semi-monthly examinations, although the latter are supposed to be paid in "K'u-p'ing" Taels. My Chinese teacher says, it is a common saying among students that the prizes are awarded in "K'u-p'ing," the examining official pays them in "Ts'ao-p'ing," the minor officials distribute them in "Siang-p'ing," and by the time it reaches the student the Tael has become a Mexican dollar, which, on being exchanged, is found to be bad.

I have not been able to discover the fineness of the various kinds of silver or the number of grains of pure silver in each Tael. To every such question the bankers I have asked answer that they do not know. They determine the relative value by touch and colour, but say there is no established ratio. No doubt they are wrong, but I have not been able to push my inquiries farther.

A Mexican Dollar by weight is said to be .74 Tael, but it does not of course exchange at this rate. At present it is worth but .68 Tael. A hundred Taels are equal to 146.86 Dollars.

2.—*Cash.*

All the Cash used in this region are of one denomination—about $\frac{1}{1500}$ of a Tael; but there is a large quantity of bad Cash and small Cash in circulation.

A Tiao consists of 10 strings or 974 good Cash reckoned as 1,000. Each string contains nominally 100, but in reality only 98 or 95. The 95 Cash string is called a "Ti-tsz," (底子) and is indicated by a knot on the end of the string. In every Tiao there are two "Ti-tsz." In three strings or more one may be a "Ti-tsz;" in seven or more two "Ti-tsz" are allowed.

On every string of good Cash there may be two or three small Cash or counterfeit Cash,—as a matter of fact, there are many more.

These spurious Cash are called by various names: "Ts'ing-pau" (青板), "Hiao-p'ien-p'ien (囂片片), "Shui-shang-p'iao" (水上飄), a light, thin variety, said to float on water, the "Sha-tsz-tsz" (沙子子) which contains a great deal of sand, and the "Ngo-yen" (我眼) in which the hole is very large and the coin very small. This is not to be confounded with an ancient coin of the same name. Other names are: "Sui-ts'ien" (碎錢) and "Lü-cheu-kw'an" (盧洲寬), so-called because much of this counterfeit Cash was formerly made at a place of this name in Anhuei.

There is still another variety of small Cash, known as "Hung-ts'ien" (紅錢), because made of red copper. It is of ancient manufacture, and, although spurious, passes as good coin, on account of the quality of the copper. As many as five of this variety may be found on each string.

A Mexican Dollar exchanges for 1,030 good Cash in summer and 1,080 in winter. A Tael exchanges for from 1,500 to 1,600.

There are strings, however, known as "Yih-kiu-tih" (一九的), "'Rh-pah-tih" (二八的) and "San-ts'ih-tih" (三七的), containing 10, 20 or 30 small to 90, 80 or 70 large Cash. One can, of course, exchange at a much higher rate for this sort of Cash.

At the pawn-shops a Tiao is 1,000 in reality as well as nominally. No shortage is allowed. This is true, too, in the payment of taxes and of bank discount.

I presume it was not your purpose to inquire as to the dates of the coins or the inscriptions they bear. There is great variety in this respect, though most of the Cash belongs to the present dynasty, by far the larger part bearing the style of Kien-lung (乾隆). It is quite common, however, to find coins of the Sung dynasty, and there are many varieties issued by old-time rebel kings. It seems strange to a foreigner to find coins two hundred years old in general circulation, but to be able to handle coins of the tenth century in this matter-of-fact way is simply marvellous. To the Chinese collector, of course, with his coins of two thousand years ago, these seem quite modern. Most of the light, thin cash mentioned above as the "Shui-shang-p'iao (水上飄) bear the style "Kwang Chung T'ung Pao," are of unknown date, and are said to be of foreign coinage.[a]

In using large quantities of these small Cash, 1,000 "Hung Ts'ien" best quality will pass for 900 Cash; of medium grade 1,000 are equal to 800, and of poorest quality 1,000 are reckoned but 700 good Cash. Of the "Ts'ing-pau" there are three grades, rated respectively at 600, 700 and 800 Cash per 1,000. There are three grades of the "Hiao-p'ien-p'ien" also which pass for 450, 500 and 550 per 1,000, and two grades of the "Sha-tsz'-tsz'" which command 400 and 500 cash per 1,000.

[a] These are Annamite.—H. B. M.

4.—*Spanish Dollar.*

In addition to the varieties of currency just mentioned, the Spanish Dollar is also very commonly used, its value compared with that of the Mexican Dollar being as 10 to 8, that is, 8 Spanish Dollars are equal to 10 Mexicans. The Spanish Dollar exchanges here for from 1,200 to 1,300 Cash. Going north from Nanking into the interior it is difficult to use the Mexican. Its exchange value falls as low as 900 Cash, but the Spanish Dollar is in demand in these districts.

5.—*Hang Yin.*

A variety of silver used here, though for certain special purposes only, is the "Hang Yin" (杭銀).

This too, however, is simply a method of reckoning. A Tael of the "Hang Yin" is but 700 Cash. Its use seems confined to the payment of marriage and funeral directors and yamên runners.

NOTE 7.—Rev. P. GAIN (11) states:—

Voici la valeur réelle du Tiao dans la préfecture (Sui-ning):—

au Tong-shan-hien	1	tiao	vaut	988 sapèques
Soei-ning-hien	,,	,,	994	,,
Sou-tsien-hien	,,	,,	992	,,
Pei-tcheou	,,	,,	992	,,
Fang-hien	,,	,,	988	,,
Pei-hien	,,	,,	988	,,
Tang-shan-hien	,,	,,	992	,,

NOTE 8.—Rev. P. HOANG (1) states:—

The Provincial Treasurer's paying weight for the K'u-p'ing Tael is 37.32 grammes, and his receiving weight 37.42 grammes.

One Ts'ao-p'ing Tael of silver in 1736 was worth 700 copper cash, in 1780 was worth 900 cash, in 1796 was worth

1,400 cash, in 1853 was worth 2,000 cash, and is now worth from 1,500 to 1,700 cash.

Traders travelling to other regions on business usually take with them a balance 天平 of their own district, or a small steel-yard 戥子, or a hundred cash previously weighed by the scales of their own district, for the purpose of comparison with the weights in vogue elsewhere.

NOTE 9.—Dr. D. J. MACGOWAN (18) states:—

Ts'ao-p'ing Tael is used in markets and all ordinary transactions.

K'u-p'ing Tael „ „ „ paying taxes.

Hsiang-p'ing 湘平 Tael „ „ „ volunteers — called *hsiang*, because Hupeh furnishes the greater portion of China's extemporised forces.

Chiang-p'ing Tael is used in dealings with Ningpo merchants.

Kuei-p'ing Tael (*Kuei*=usage) used in the Shanghai trade; the "usage" consists in discounting 98 taels=100.

Hsiang-p'ing 餉平 Tael (*Hsiang*=rations) is used to pay regular troops.

NOTE 10.—Mr. E. H. PARKER (21) states, respecting Foochow:—

The Hsin-i-p'ing Tael is worth 2.4 per cent and the Hsiang-p'ing Tael 3.3 per cent less than the K'u-p'ing Tael. The K'u-p'ing Tael being a definite weight in avoirdupois, any one can calculate for himself the weight of the others. The Hsiang-p'ing was introduced during the Rebellion and is only used for paying the soldiers. For sales of land only, an imaginary tael, called Wên-kwang, is used, and is always worth 800 large cash; this is to guard against variations in the silver market, and has no other practical exchange significance.

NOTE 11.—Rev. J. C. GIBSON (23) states, respecting Swatow :—

No distinction is made among the various foreign dollars in circulation as to the fineness of the silver. The Japanese Yen is now the popular favourite, on account of its uniformity in weight. In small transactions it is sometimes accepted as equal to Taels 0.72 without weighing. But the Japanese Yen, Mexican, Carolus, and American trade dollars, and the French Piastre de Commerce are all taken alike by weight without distinction as to purity.

It is impossible to answer this question (No. 6) because all dollars here are chopped, and no two are alike in weight. The standard $1 Mexican=Taels 0.723 or upwards is only in use with foreigners. In native transactions the Swatow standard is $1=Taels 0.70 according to the 會館直秤, but there is also another standard in use, called the 市秤, according to which Taels 0.694 is taken as one dollar. In the country, Taels 0.68 is a common standard weight for the dollar.

NOTE 12.—Rev. C. BONE (19) states, respecting Shao-chou :—

At present the Tael is 994 ; an old scale was 992 ; but now those who sell pork, wood, paper and tobacco use a Tael worth only 991. If 1,000 equal pure silver, the silver in general use equals 900, and 100 must be added if it were to be melted *fine*, and given to the mandarins. But there is a silver said to be in use which, if 1,000 equal perfect, can be reckoned at 960, so that it will be perfect if 40 only is added. If K'u-p'ing is worth 100, and that is perfect, the general currency must add from 6 to 10 Taels according to its pureness.

NOTE 13.—Rev. C. BONE (19) states, respecting Hsin-hui :—

I have not been able to ascertain that there are any special names for the different Taels, except the perfect Tael, which is called 足司碼. This is the ancient Tael and the ideal. In business, Mexican dollars are used or broken dollars, and the

"touch" of the silver will of course depend on the touch of the original dollars. There are however three kinds of Tael in general use, and called after the business-people among whom they obtain :—

a. In banks, warehouses, and retail shops in which corn, oil and rice are sold, the Tael is reckoned at 997 instead of 1,000.

b. The tobacconist's Tael is 998 instead of 1,000.

c. In purchase of land or houses the perfect Tael 足司碼 is used, which is 1,000 or even slightly over.

About 10 Taels (sometimes a little more, sometimes a little less) must be added to local Taels 100 to make them equal to the Government or ideal Tael.

NOTE 14.—Mr. A. AGASSIZ (28) states :—

French dollars, which occasionally find their way to Lungchow from Tonkin, are worth from five to eight cash each more than the other dollars. [*N.B.*—The weight given for the Lungchow Tael seems doubtful, but I have no means of checking it.—H.B.M.]

NOTE 15.—Mr. A. P. HAPPER (25) states, respecting Mêngtzŭ :—

(1) The sycee most current in Mêngtzŭ 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 certain brass pieces inserted in wood to protect key-holes in foreign articles of furniture. The thickness of the ingot, at the two ends, is considerably reduced by the impression of the smelter's *chop* stamped on the face of it, so in that aspect of it, the ingot might be likened to Faber's double-ended erasers with the corners of the rubber worn round. The same stamp is lightly impressed on the middle section too. In weight the pieces vary from two taels up to five taels.

(2) *The Hsi ssŭ hsiao k'o ting* (細絲小錁錠), called colloquially the *Mu chi k'o* (母雞錁), is a small ingot weighing from a few mace up to nearly two taels. In shape it is like a narrow oblong cup with spiral lines on the top, not unlike the lines in the skin of the fleshy part of the human thumb.

(3) In shape like No. 2, but purer in the quality of the silver, and cast in ingots of five taels and fifty taels weight, is the *Hsi ssŭ hsiao pao yin* (細絲小寶銀), called also the *Lao ts'ao wên yin* (老槽紋銀). These two kinds of sycee have a limited circulation in Mêngtzŭ, but they are known throughout the province. The latter is much sought after by the aborigines because of its purity.

(4 *to* 6) The *Ch'uan* (川) *Kuang* (廣) and *Mo* (墨) ingots are seen here occasionally. The *Mo* ingot is Tonkinese sycee, and is so called because it resembles, in shape, a stick of India ink.

As each province has its own *K'u-p'ing* tael of pure silver, I give as the standard of comparison the *Kwan-ping* (關秤). On our *Kwan-ping* scales, brought from Canton, Hk. taels 100=Mtz. taels 101.4775. The equivalent in *value* depends upon the touch of the silver. The figures, as given, are only approximate, because the scales in the city differ.

Mtz. Tls. 100=$153.84 when selling dollars, but only $142.85 when buying them. In other words, $100.00 will only exchange for Mtz. Tls. 65.00 of *Pai-fang* silver when parting with them, but it will take Mtz. Tls. 70.00 to repurchase them.

The same rates are quoted for the French Tonkinese dollars, but neither they nor the Mexican are current here.

NOTE 16.—Mr. T. E. HALLIFAX (27) states of Seoul, Corea:—

The only coin in currency amongst the natives is the bronze cash, and the value of this in Mexican or Japanese

dollars varies every day, from 1,200 to 2,000 cash per dollar. Amongst the higher class of traders, the Japanese silver dollar is a favourite, while owing to having been largely taken in with spurious Mexicans by Chinese adventurers, the Mexican dollar is looked upon with great suspicion and disfavour, and is consequently most difficult to pass. Chinese sycee is also current in Corea, but the precise value in exchange is difficult to state, owing to the variation in the value of cash. Very recently Japanese Bank notes and Government notes have come into favour among the higher class of Corean merchants in Seoul and the ports *only*. Some time ago the Corean Mint succeeded in coining a few Corean silver dollars, but these first specimens (a few thousand) went into the Palace, probably for ornaments for the King's wives, and then the coining was stopped. So that at present we have in Corea as native coins only the common cash, and as a foreign medium, Japanese silver dollars and paper money. Mexican dollars are now rarely seen. Eight or ten years ago the Corean Government coined a limited quantity of pure silver coins of three denominations, the intrinsic value of the set of three coins being about $1.10. These, however, in 1883 and 1884, were mostly bought up by the Japanese Bank, sent to Osaka, and recoined. The few remaining were bought by private individuals as curiosities.

NOTE 17.—Rev. F. P. GILMAN, having recently made an overland trip from Macao to Hainan, through Yan-ping, Yeong-kong, Tin-pak, Mui-luk, Liu-chow, crossing the straits opposite Hoihow, writes (November 1889) :—

"At Yeong-kong a dollar sold for only 912 cash. At Mui-luk a dollar brought 922 cash. The dollar increased in value as we neared Hainan. At Hai-on, opposite Hoihow,

it was 936 cash, and at Hoihow about 960 cash. Everywhere they said the dollar had fallen in value, from 100 to 200 cash during the previous eight months."

NOTE 18.—Regarding SHENSI and KANSU, Rev. C. F. HOGG (22) states :—

Only the ordinary 銅錢 in Shensi and Kansu. Sometimes 當十 cash are found, but they are used simply as common cash. In Lanchou 蘭州 a *tiao* is=1,000 cash. 九六錢 (*i.e.*, 96 per 100), each thousand cash being short 6, (六個底子) extra. The number of *ti tsz* varies with the hsiens.

In Si-ngan (西安府) 對板兒錢 is used, *i.e.*, one *tiao*= 500 cash. In 西甯府 (Kansu) the *tiao* has this value.

In 岐山縣 (Shensi) 二八錢 is used, *i.e.*, one *tiao*= 800 cash. In 漢中府 (Shensi) and 秦州 (Kansu) the *tiao* =1,000 cash. The 1,000 cash *tiao* is known as 老, 大, or 銅錢. The 500 cash *tiao* as 毛, 小, or 對板. 毛 and 小 are sometimes used of the poorer, small cash, but they are used in this case with reference to quantity. In some other districts in Shensi (寶雞縣, for instance) the *tiao*= 700 cash. The 吊 of whatever kind, is also called 串. From experience in several provinces, I should say that the local tael averages 1,500 cash in value all the year round. In Han Chung it has sunk to 1,100 odd, and risen to close on 1,900. The demand for cash at the New Year increases its value. In Han Chung and Si-ngan the price of silver is usually between 1,500 and 1,600 cash. In Lanchou from 1,450 to 1,550. Rain, examinations, and the opium season increase the demand for cash and so raise its price.

The following note by Mr. W. S. EMENS, of the U.S. Consulate-General, Shanghai, was received after the tables on pp. 58–63 were printed :—

The name of the tael current in SHANGHAI is 規銀 or 灶. Each tael contains .98 pure silver. Shanghai Tael 1.1114 is equivalent locally to one K'u-p'ing or Hai-kwan tael.

The relation of the Mexican Dollar to the local tael is a fluctuating one, the rate of exchange being fixed at the 錢業公所 daily.

The average value of a Mexican Dollar may be put at Taels .73. The "cash" current at Shanghai are from the various provinces with a percentage, probably, 10 per cent, of Japanese cash.

The term *tiao* is not usually employed, but the word for *thousand* is used in its stead. In ordinary business transactions 99 cash are counted as 100. Only in a 當舖 is a full string of one hundred cash given. One Mexican Dollar buys from 1,020 to 1,200 *cash*, according to the market demand for one or the other.

PAPER MONEY.

Cash notes are common in many parts of the Empire, and are extensively used from their convenience. See especially the memorials of the Governor of Kirin given in the *North-China Herald*, Vol. XLII, page 175, and Vol. XLIII, page 50. Silver notes, except those of the foreign banks, are not used at all. The remarks of the various contributors on this subject are abstracted as follows:—

SHÊNG-KING:—Newchwang. Mr. W. B. RUSSELL (29) states:—

Cash notes are in circulation to the amount of about 3,000,000 tiaos or 300,000 taels. The reason why they are

so cheerfully accepted in the market, is because they are convenient to be carried and no exchange of debased cash is to be made.

No Bank notes or cheques are used locally.

CHIHLI:—Peking and Tientsin:—

Cash notes are in common use.

SHANTUNG:—Chi-nan-fu. Rev. G. REID (5) states:—

Cash notes may be used within a distance of 100 li, being accepted by salt-dealers and some of the shop-keepers. In the city they are accepted, if from reliable shops.

Supposing that by "Bank Notes" is meant something other than "Cash Notes," I would say that such are used as cheques only. In this city there are large exchange-shops, where cheques from Shanghai, Peking, and other parts of the country may be exchanged for silver, or where such cheques may be purchased for other places.

SHANSI:—Lu-an-fu. Rev. M. POELL (20) states:—

Cash notes are used of denominations from 500 to 5,000 cash; they are the same as those I have seen in other provinces. Silver notes are not used.

SHENSI }
KANSU } Rev. C. P. HOGG (22) states:—

In Si-ngan, paper notes, value 1,000 (*i.e.* 500) and 2,000 (*i.e.* 1,000) cash, are issued and largely used. Spurious notes are afloat in quantities, so that neighbouring money-shops are usually appealed to before the notes change hands. In Lanchou, paper notes equivalent to 1,000 cash (actual value) are largely used also.

In Han Chung, oil-cloth notes are used,—value 1,000 cash. Different hsiens and large towns in this and other fus also issue

notes. The Han Chung fu notes present quite a creditable appearance, are stout, of a yellowish brown color, and are oiled after signature or rather after value and cipher have been inserted; these appear to be the equivalent of the "signature" in Chinese bank notes. Banks sometimes shut their doors, but the notes of established houses are readily accepted without reference. Silver drafts may be given in payment for goods. They are always payable to bearer (認票不認人, 照票發銀) notwithstanding that there may be no intimation of the fact in the document itself and that the payee's name may be inserted in full. A special clause has been added at times by some of the Hankow bankers, in drafts made payable to foreigners. 足紋銀 is interpreted relatively, the standard being the 街市銀 of the place on which the draft is drawn.

Rev. G. PARKER (7) states:—

Both oil-cloth and paper cash notes are used. No official control is exercised as to their issue.

Panics sometimes occur at the closing of several money-shops. The first from swindling, others in consequence of the run on their bullion in cashing notes. For the issue of silver drafts, 協同慶, 天成亨, 蔚豐和 are the three Chinese bankers that have agencies in Kansu; Lanchou all three, Kanchou two, Liangchou and Suchou one each. Chinchou formerly had an office, but it has been closed since the Rebellion.

Mgr. F. H. HAMER (6) states, respecting Kansu:—

Pas en usage dans la plus grande partie de la province. (Cash notes).

Negative. (Silver notes).

KIANGSU :—Nanking. Rev. E. T. WILLIAMS (17) states :—

The use of paper money is very common in Nanking, especially of the 300, 400, 500 and 1,000 cash notes, called "P'iao-tsz," (票子). These are very well engraved, and printed on good, strong paper in red and blue inks. A note of ordinary size is 7⅞ inches long and 4⅝ inches wide. The design consists of a border, usually made up (largely) of human figures. One before me, as I write, has a border composed of characters and scenes from some ancient drama. Within this is a second border, consisting of an extract from the classics in very small type. Inclosed by these borders is an oblong space containing the name of the bank, its location, the value of the note, its number and date and the mark or style (號) of the bank. Before being put in circulation the note must also bear the great seal of the bank upon its face. Each person too, as the note passes through his hands, adds his private mark, so that it soon becomes defaced. There are also 2,000, 5,000 and even 100,000 cash "p'iao-tsz," but these are not so common. Notes for 50, 100 and 200 cash, printed upon red paper and called "T'iao-tsz" (條子) are used at New Year, chiefly for presents to children and servants. At other times they are rarely seen. The small foreign silver pieces are slowly taking the place of these. Silver notes are used in trade, but not to any great amount. Their use is almost wholly confined to merchants in their dealings with one another.

SHANGHAI :—Mr. W. S. EMENS writes :—

Cash notes or paper money promising to pay copper cash are not used in Shanghai. Mexican Dollar notes and Tael notes issued by the European Banks are used extensively by natives.

Hsü-chou-fu. Rev. L. Gain (11) states:—

Les billets de banque abondent. Les principaux bourgs en émettent tous des différents qui n'ont cours que dans un rayon assez restreint et perdent de leur valeur en passant dans une autre localité. Ils ont la valeur nominale d'un *tiao* ou *Tchoan*, 串, toujours payable en grandes sapèques.

On ferait une belle collection des ces billets de banque, vrais petits chefs-d'œuvre d'imprimerie. J'en ai plus de 50 espèces entre les mains.

Chekiang: Ningpo. Mr. T. F. Pettus (15) states:—

Cash notes issued by firms whose credit stands high are in general use among the merchants for all amounts, and in many cases preferred to silver. When cashed a premium of $\frac{1}{2}$°/₀ is generally charged, and in some cases 1°/₀ to 2°/₀.

Dr. S. P. Barchet (16) states:—

Paper money, as a universal and unquestioned tender, is unknown in Ningpo, but wholesale dealers (*e.g.* fishmongers) will give notes, 鹹貨票, payable 10 days after issue, which are readily taken instead of money, for they can be cashed by bearer at any time. Shops also issue cash or promissory notes, but these will not be paid till they fall due (usually from 10 to 40 days). Cash notes issued by small firms are risky in proportion to the length of time before they fall due. The greatest risk is incurred where parties borrow the name and credit of other firms, issuing cash notes in their name. It often happens that when such cash notes fall due they are not even then paid in hard cash but in cash notes on somebody else and again on somebody else till the last holder finds himself the loser. It is probably owing to such experience that cash notes are endorsed or verified, and when cash notes change hands reference is made to the original party

issuing them, to have them again verified. This involves a great loss of time and makes most people prefer cash. When it is wished to have the amount paid into a bank or other firm, a small deduction is made (from 5 to 10 cash in the dollar). Bank notes are not used otherwise than as cheques.

WÊNCHOW. Dr. MACGOWAN (18) states :—

Paper money circulates to a very limited extent. Cash notes are issued by a few traders, and cheques by bankers, yet they can hardly be said to perform the function of money as a circulating medium.

FUKIEN: Foochow. Mr. E. H. PARKER (21) states :—

Cash notes or *ch'ien-p'iao*, 錢 票, for 100, 200, 300 cash are called *p'iao-t'iao*, 票 條; for 400, 500, 600 they are called *hsiao-p'iao*, 小 票. There are no others but for thousands, from one to ten, called *ta-p'iao*, 大 票.

A cheque is called *chi-ch'ien*, *tsz-t'iao*, (支 錢, 字 條). Bank notes range from one tael to two thousand taels, and are called *yin-p'iao*, 銀 票.

TAIWAN: Takow. Mr. MAK SZECHE (26) states :—

No cash notes or paper money of any kind used here. Bank notes are not used by natives. They all use dollars in silver.

KWANGTUNG: Swatow. Mr. L. GRUNAUER (24) states :—

There is no paper money in Swatow representing cash. Bank notes are a new invention; their use commenced certainly not before last year. The circulation is not large, and is restricted to the port.

SHAO-CHOW-FU. Rev. C. BONE (19) states :—

Bankers' cheques are used as money orders to and from the Provincial city 省 城 (Canton).

HSIN-HUI. Rev. C. BONE (19) states :—

Paper money not used now, but said to have been used during the Ming dynasty.

Hongkong Bank notes are used, and will pass at par in business transactions, but if changed at a money-changer's or a bank, one fan (100 fan=1 Leung) will be deducted.

PAKHOI.—Paper money, Chinese or foreign, not used.

KWAÑGSI : Lungchow. Mr. A. AGASSIZ (28) states :—

Cash notes and bank notes not used.

YUNNAÑ : Mêngtzŭ. Mr. A. P. HAPPER, jr. (25) states :—

There are no cash notes in Mêngtzŭ. There is no bank in the city.

WEIGHTS.

Catty 斤

Place.			Authority.	Name or Use.		Weight 1= 28.35	
Province.	Prefecture.	Town.				Ounces avoirdupois	Grammes.
...	...	...	...	British Treaty	...	21.33	604.90
...	...	...	...	French „	...	21.32	604.53
Chihli	Peking ...	...	2	Tea	...	4.00	113.41
Shantung	Lin-ch'ing	Chou ...	4	"Thirty-four"	三十四的	19.95	565.60*
			4	"Thirty-five"	三十五的	19.40	550.00*
			4	"Thirty-six"	三十六的	18.85	534.50*
	Chi-nan ...	Fu ...	5	"Three-catty"	三斤秤	22.00	623.75*
			5	"3 catties 4 taels"	三斤四兩秤	20.00	567.10*
			5	"3 catties 6 taels"	三斤六兩秤	18.70	530.20*

* Note 1.

Catty 斤

Place.			Authority.	Name or Use.		Weight	
Province.	Prefecture.	Town.				1= Ounces avoirdupois	28.35 Grammes.
Honan	...	...	2	Coal	...	28.00	793.88
	Nan-yang	Fu ...	9	...	...	20.40	578.40
			7	...	...	20.20	572.75
Kansu	Lan-chou	Fu ...	7,22	Double catty used in wholesale and for bulky goods.	...	40.40	1,145.50
	Liang-chou	Fu ...	6	...	...	21.70	615.33*
	Lan-ch'ing	Chou ...	7	...	...	21.45	608.20
Hupeh	Han-yang	Hankow	22	...	...	20.20	572.75
Kiangsu	...	...	1	Ts'ao-p'ing	漕平 天平秤	20.66	585.79
	...	...	1	T'ang	塘秤	27.25	773.25
	Kiang-ning	(Nanking)	17	Ts'ao-fa ...	漕法	20.60	601.00
			17	Su-fa	蘇法	18.55	525.90†
						19.70	558.50†
			17	Oil, etc. ...	...	23.20	657.72
	Yang-chou	Hai-mên	1	Chêng-sha ...	正紗秤	25.55	724.90
	Tai-tsang	Tsung-ming	1	Chê-chuang ...	折庄秤	24.90	706.60
	Soochow...	Fu ...	1	Chê	折 秤	19.75	560.16
	Sung-kiang	Shanghai	1	Guild	會館秤	18.60	527.21‡
			1	Foreign trade .	來洋秤	20.40	578.47
Chekiang			15,16	Official	官 秤	20.44	579.47
			15,16	Cheh	折 秤	19.10	541.48
				Tiao-ku ...	糶穀秤		
			15,16	Shui-kuo ...	水菓秤	16.00	453.50
	Ningpo ...	Fu ...				16.44	466.07
			16	Tsu	租 秤	19.78	560.76
			16	Medicines ...	藥物秤	21.33	604.90
			15,16	Family	家 秤	21 *to* 42	595 *to* 1,190
			16	Ssŭ-ma	司碼秤	22.00	623.70
	Wênchow	Fu	18	...	...	21.28	603.15

* Note 2. † Note 3. ‡ Note 4.

Catty 斤

Place.			Authority.	Name or Use.		Weight.	
Province.	Prefecture.	Town.				1= 28.35 Ounces avoirdupois.	Grammes.
Fukien	Foochow	Fu	21	General ...	...	16.00	453.60*
				Rice	...	21.33	604.90
Taiwan	Tai-nan ...	Takow...	26	Fish	...	26.67	756.10
				Fruit	...	18.67	529.20
				General ...	...	21.33	604.90
Kwangtung	Ch'ao-chou	Swatow ...	23	General	...	21.33	604.90†
			23,24	Wholesale ...	...	26.67	756.10
			24	Various ‡			
	Shao-chou	Fu	19	General	...	21.33	604.90
	Kwang-chou	Canton	19	General	...	21.33	604.90
			19	Metals & Fruit	...	20.00	567.00
		Hsin-hui	19	General	...	21.33	604.90
			19	Country use ...		34.67	982.80
	Lien-chow	Pakhoi ...	3	Ssŭ-ma	司碼秤	21.22	601.60
			3	Raw Hides ...	...	31.83	902.40
Kwangsi	T'ai-p'ing	Lungchow...	28	Market	市 秤	20.90	593.00
Yunnan	Lin-an ...	Mêng-tzŭ ...	25	Hill products	山貨秤	23.50	666.66
				Po-fu	百福秤	21.90	621.60§

* Note 5. † Note 6. ‡ Note 7. § Note 8.

For information relating to Ning-kuo-fu and Kwang-tê-chou in the province of Anhuei *See Note* 10, *page* 89.

WEIGHT TABLE.

16 Liang 兩 (tael) = 1 Chin 斤 (catty).
100 Chin = 1 Tan 担, 擔 (picul).
For weights in subdivision of Liang, *see* CURRENCY.

NOTES.

NOTE 1.—Rev. H. P. PERKINS (4) states:—

The common one [in Lin-ch'ing-chou] about which everyone knows is the catty of 16 taels, and called the thirty-five (三十五的), because using this catty ten strings of cash weigh 35 catties 斤. The cash has 49 coins for one hundred, which gives 490 coins to the tiao or string. Using my weighing pole (which is as likely to be right as any other, for I can find no standard) I find that this string of cash weighs 54 taels=65.5 U.S. oz., which gives one catty =19.41 U.S. oz. There are also at least two other catties, *i.e.*, the 34 and 36, of which the explanation is as of the 35. I find that in the cotton hong they use the 34 (which they call the 架子) for buying and the 35 for selling.

Rev. GILBERT REID (5) states:—

In Chi-nan-fu there are three kinds of weight for catty in common use, one called the "three catty four tael scale" (三斤四兩秤), one the "three catty scale" (三斤秤), and the third the "three catty six tael scale" (三斤六兩秤). These names are given by weighing one tiao [490] of the Chi-nan-

fu cash, this being taken as a basis or standard of comparison. Of these, one catty of the first, or "three-four" weight, is equal to 20 ounces avoirdupois; the catty of the second, or "three-catty" weight, is equal to 22 ounces; and the catty of the third, or "three-six" weight, is equal to 18.72 ounces. The one generally used is the first named, or "three-four" weight.

[*N.B.*—In connection with these two notes, the fact is notable that according to the Imperial Decree of 1886 ordering new coinage of cash, the weight of the cash is one mace, and this weight was adhered to in Shantung. On this basis 10 cash weigh 1 tael, and 490 cash weigh 49 taels, equal to 3 catties 1 tael. Of what scale this was, I do not know (K'u-p'ing I suppose)—and it is left to the reader to make his deductions.—H.B.M.]

NOTE 2.—Mgr. HAMER (6) states:—

Ici [Kansu] on compte pour un tan 担 la charge d'une mule, 240 livres [catties]. Un char transporte 5 tan.

NOTE 3.—Rev. E. T. WILLIAMS (17) states:—

1. *Kin.*—The ordinary Catty or *Kin* used in Nanking consists of 16 Liang (兩), 1 Liang being equal to 1.2885 ounces avoirdupois. This is known as "Ts'ao Fah" (曹法). We have also the "Su Fah" (蘇法) in which either 14.4 Liang or 15.3 Liang equal 1 kin. The "Su Fah" is used in buying raw cotton, metals, certain kinds of fruit and bread. Another sort of kin contains 18 Liang, and is used in sale of certain oils as the "Ma yiu" (蔴油) and the "Teu yiu" (荳油) and other articles.

3.—*The Liang.*—The Tael or Liang (兩) of commerce is identical with the Tael of currency, and although the Kin varies, the Liang remains the same.

Additionnal weights are :—

5 Sz' (絲) = 1 Sheh (縅).
A double Sheh = 1 Shing (升), not the same as the measure of capacity which is known by this character. This is used in weighing yarns. 80 Threads (縷) also equal 1 Shing or Skein.
24 Scruples (銖) = 1 Liang.
1.5 Liang = 1 Tsieh (搩).
Double Tsieh = 1 Kü (舉).
Double Kü = 1 Ts'iang (鏘).
or 1 Hwan (鍰).
6 Liang also = 1 Chw'en (川).
1 Great Half-ounce (半兩) = 1 Kiün (鈞).
10 Kiün = 1 Hwan (鍰).
2 Hwan 4 Kiün = 1 Kin.
24 Liang = 1 Yih (鎰).

Many of these weights are used only in the yamên.

Note 4.—Rev. P. Hoang (1) states :—

This catty [Hui-kuan, or Guild catty, of 527.21 grammes] is in use in Shanghai, in the Guild House of which place is kept a mass of copper, called 糖砝, the weight of which equals 122 catties of the said scale, and which serves to rectify steelyards of this scale.

Note 5.—Mr. E. H. Parker (21) states with respect to Foochow :—

The scale of commerce is three-fourths that of the standard, for all articles but rice. The standard is the K'u-p'ing ounce of silver. Thus 100 catties of anything but rice are 75 catties weight in silver. This is called the Hung-hua-ch'êng 紅花秤, and is always used unless you ask for the standard and pay prices in proportion.

NOTE 6.—The Rev. J. C. GIBSON, of Swatow (23) states :—

There is a considerable variety of standards. The usual one for small transactions is the 司馬秤 of 16 taels to the catty. For larger dealings the 汕頭篢秤 is used, according to which the catty weighs 20 taels.

Formerly there were at least three standards in use by small dealers in Swatow, making the catty = 12 taels, 14 taels, and 16 taels respectively. The local petty Mandarin, a number of years ago, fixed a uniform scale of 16 taels to the catty, and provided standards for reference. This reform has fallen into abeyance and the old variety has re-appeared with more uncertainty than before as to the scale sanctioned by usage for each kind of transaction. The usage also varies in the different market-towns, and different standards are used for different classes of produce. In some scales two taels or thereby are taken as one. Thus, in the market-town of Mien-fu, 棉湖, 60 miles west of Swatow, I noted the following scale :—

For	Ducks and dried cuttle-fish,	1 Catty	= 40	Taels
,,	Fowls	,, ,,	= 36	,,
,,	Pork and salt fish	,, ,,	= 32	,,
,,	Sweet potatoes	,, ,,	= 28	,,
,,	Tea and tobacco	,, ,,	= 18	,,
,,	Vegetables, charcoal & fruit	,, ,,	= 16	,,
,,	Hemp and flax	,, ,,	= 15	,,

This is a specimen of what holds with endless variation elsewhere.

The Picul (担) weighs 100 catties. Its weight therefore varies with that of the catty, but as the 汕頭篢秤 is the usual standard for large transactions, the standard picul weighs 125 of the normal catty of 16 taels. The 石 is a measure of capacity containing 10 Pecks (斗) and is not used as a standard of weight.

NOTE 7.—Mr. GRUNAUER (24) states:—

There are 4 different kinds of weight used in Swatow; none is used more than the other, as each is used for a different kind of cargo or business; they are the—

汕頭針秤, which is equal to 125 catties Customs weight, *i.e.*, one of these piculs, if weighed on Customs scales, gives $1\frac{1}{4}$ picul.

漳林針秤 on the same bases as above is 4 °/₀ more.
糖針秤 ,, ,, ,, 30 °/₀ —
冰菓秤 ,, ,, ,, 25 °/₀ less.

This last weight is used by petty shop-keepers and is practically a squeeze.

NOTE 8.—Mr. A. P. HAPPER, jr., (25) states:—

Two catties are in use in Mêng-tzŭ: one, the Hill Products (山貨) or Tavern (店) catty, for weighing cotton, fungus and certain kinds of produce, not numerous. It equals 18 *Mêngtzŭ p'ing* taels in weight, and is supposed, consequently, to weigh 666 grammes, but I could not obtain any exact weights.

The other catty is that of the *Po-fu* (百福), or, Canton (廣) steelyard, which is the one in common use. It should weigh 621.6 grammes.

The same steelyard is used for both kinds of catties, as there are two sets of scales marked on it.

NOTE 9.—The Rev. F. P GILMAN states that at Yeong-kong he was informed that a catty was made up of 60 taels. At Mui-luk the catty is 20 taels.

NOTE 10.—The Rev. Père DEBRIX states with regard to Ning-kuo-fu and Kwang-tê-chou, that the usual weight of the catty is 16 ounces, but a 14 oz. catty is employed to weigh iron, and one of 18 ounces for various other things. The Peck of dry rice contains 16 kin at Ho-li-k'i, but in other places $14\frac{1}{2}$ or 15 kin.

Tou 斗

Place.			Authority.	Contents.				Capacity.	
Province.	Prefecture.	Town.		Grain.	Local Catties.	2.2046 = 1 Lbs. av.	2.2046 = 1 Kilo.	61.027 = 1 Cubic inches.	61.027 = 1 Litre.
...	...	...	2	Rice	10.0	...	...	452.0	7.41
...	...	...	2	„	6.5	...	...	309.6	5.07
...	...	...	2	„	13.0	...	...	587.5	9.63
...	...	...	2	„	14.0	...	...	632.7	10.37
Sheng-king	Fêng-t'ien	Newchwang	29	„	38.0	50.67	22.980	2,475.0	40.56
Shansi	Lu-an ...	Fu	20	„	18.0				
Shantung	Lin-ch'ing	Chou	4	„	24.0	28.70	13.018	876.4	14.36
				Millet	22.0	27.00	12.247		
	Chi-nan...	Fu	5	Rice	...	42.50	19.278	1,618.8	26.53
			5	„	...	38.75	17.577	1,485.1	24.34
Kansu	Liang-chou	Fu ...	6	„	40.0				
	Lan-chou	Fu ...	6	„	120.0				
			7	Wheat Flour	70.0				
Honan	Nan-yang	Fu	9	Rice	40.0	...	...	1,049.2	17.19
Anhui	Ying-chou	Huo-ch'iu ...	10	„	35.5				
Kiangsu	...	...	1, 2	...	...	...	...	629.2	10.31*
	Kiang-ning	(Nan-king)	17	Rice	14.0	18.04	8.183	558.3	9.15
			17	Melon-seeds	15.5				
	Hsü-chou	Sui-ning ...	11†	Rice	28.0				
				Wheat... ...	26.0				
				Barley... ...	15.0				
				Rye	12.0				
				Maize	20.0				
				Sorghum ...	22.0				
				Beans	25.0				
				Peas, green	29.0				
				„ yellow	24.0				

* Note 1. † Note 2.

Tou 斗

Place.			Authority.	Contents.				Capacity.	
Province.	Prefecture.	Town.		Grain.	Local Catties.	2.2046=1 Lbs. av.	Kilo.	61.027=1 Cubic inches.	Litre.
Kiangsu	Hsü-chou	Sui-ning	11*	Peas, black	25.0				
				Petits pois	26.0				
				Sesamum	14.0				
				Colza... ...	18.0				
				Melon-seeds	15.0				
	Tai-tsang	Tsung-ming	1	...	...	...	...	767.1	12.57
	Soochow	Fu	1	...	...	...	...	640.8	10.50
			1	...	...	...	...	645.6	10.58
			1	...	...	...	...	649.3	10.64
			1	...	...	...	...	636.5	10.43
		Country	1	...	...	...	...	651.1	10.67
			1	...	...	...	...	673.1	11.03
			1	...	...	...	...	692.0	11.34
		Chên-tso	13	...	...	...	...	622.5	10.20
		Changshou	1	...	...	...	...	662.7	10.86
			1	...	...	...	...	671.3	11.00
	Kia-ting	Fu	1	...	...	...	...	670.1	10.98
	Chang-chou	Wu-hsi	1	...	...	...	...	640.8	10.50
			1	...	...	...	...	644.5	10.56
			1	...	...	...	...	648.1	10.62
	T'ung ...	Chou ...	1	...	...	...	...	751.2	12.31
			1	...	...	...	...	888.5	14.56
	Sung-kiang	Fu	1	...	...	...	...	742.7	12.17
		Hsi-king	1	...	...	...	...	757.3	12.41
		Shanghai	1	Rice... ...	...	...	...	728.6	11.94
			1	Beans ...	...	...	...	655.4	10.74
			13	...	...	...	...	678.0	11.11

* Note 2.

Tou 斗

Place.			Authority.	Contents.				Capacity.	
						2.2046 = 1		61.027 = 1	
Province.	Prefecture.	Town.		Grain.	Local Catties.	Lbs. av.	Kilo.	Cubic inches.	Litre.
Chekiang	Ningpo	Fu ...	15	Rice	14.0	18.30	8.300	591.3	9.69
			16	,,	16.0	...	...	565.0	9.26*
			16	Maize	15.0				
			16	Millet	13.0				
	Wênchow	Fu ...	18	Rice	11.75	15.63	7.090	502.2	8.23
Taiwan	Tai-nan	Takow ...	26	Coarse rice	14.25	19.00	8.620	617.5	10.12†
				Fine ,,	11.25	16.00	7.258	529.3	8.67‡
Kwangtung	Ch'ao-chou	Swatow	23	Rice	14.5	...	...	731.0	11.98
			23,24	,,	...	24.00	10.886	768.8	12.60
			24	,,	...	20.00	9.072		
			24	,,	...	25.33	11.490		
	Shao-chou	Fu ...	19	Rice (soldiers')	12.5	...	...	488.4	8.01
			19	,, (people's)	9 *to* 10				
	Kwang-chou	Canton ...	19	,, ...	6.25§				
		Hsin-hui ...	19	,, ...	6.25				
	Lien-chow	Pakhoi ...	3	Rice ...	22.5	29.75	13.490	952.5	15.61‖
				Paddy ...	18.0	...	...		
Kwangsi	T'ai-p'ing	Lungchow...	28	Rice	6.25	8.17	3.704	264.0	4.33
Yunnan	Lin-an ...	Mêngtzŭ ...	25	,,	60.0	82.10	37.300	2,598.5	42.58
Corea	...	...	14	,,	...	40.00	18.144	1,303.0	21.36

* Note 3. † Square. ‡ Round. § Note 4. ‖ Note 5.

CAPACITY TABLE.

10 Ho	禾	= 1 Hsi	粟	10 Su	= 1 Kuei	圭
10 Hsi		= 1 Pi	秕	10 Kuei	= 1 Tso	撮
10 Pi		= 1 K'ang	糠	10 Tso	= 1 Ch'ao	抄
10 K'ang		= 1 Chi	稷	10 Ch'ao	= 1 Shao	勺
10 Chi		= 1 Shu	黍	10 Shao	= 1 Ko	合
10 Shu		= 1 Li	粒	10 Ko	= 1 Shêng	升
10 Li		= 1 Kuo	稞 粿	10 Sheng	= 1 Tou	斗
10 Kuo		= 1 Su	粟	10 Tou	= 1 Shih	石

NOTES.

Note 1.—Rev. P. Hoang (1) states :—

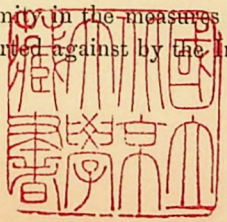
The measures in common use for measuring grain are of three kinds :—

1st.—The Hu, 斛, which is half the Shih, 石, (or 5 Tou, 斗) ;

2nd.—The Tou, 斗, a tenth of the Shih, 石 ;

3rd.—The Shêng, 升, a hundredth of the Shih, 石.

The Chih-hu, 制斛, or Ts'ao-hu, 漕斛, is the legal measure of capacity by which the Tribute Rice, 漕米, is measured. By this measure one Shih, 石, equals about 103.1 litres [6,292 cubic inches]. That this measure may be uniform throughout the Empire, the Board of Revenue, 戶部, keeps a Hu made of iron, and sends a corresponding specimen to each official, 漕督 and 糧道, in charge of the Tribute Rice. The District Magistrates send their wooden Hu to the 糧道, who compare them with their iron Hu, seal them and then return them. In the 28th year of Kien-lung (1763) an attempt was made by a Censor to secure uniformity in the measures of capacity, but the innovation was reported against by the Imperial Council.



NOTE 2.—Rev. P. GAIN (11) gives an interesting note of the price of various cereals in February, 1889, at Hsŭ-chou in Sui-ning-fu, Kiangsu :—

1	shih	of rice	of 280	catties,	value	7,600	cash.
1	,,	wheat	,, 260	,,	,,	4,500	,,
1	,,	barley	,, 150	,,	,,	3,200	,,
1	,,	rye	,, 120	,,	,,	2,600	,,
1	,,	maize	,, 200	,,	,,	4,000	,,
1	,,	sorghum	,, 220	,,	,,	3,800	,,
1	,,	beans	,, 250	,,	,,	3,800	,,
1	,,	petits pois	,, 290	,,	,,	4,000	,,
1	,,	yellow peas	,, 240	,,	,,	4,600	,,
1	,,	green peas	,, 260	,,	,,	4,200	,,
1	,,	black peas	,, 250	,,	,,	4,000	,,
1	,,	sesamum seed	,, 140	,,	,,	5,200	,,
1	,,	colza	,, 180	,,	,,	3,800	,,
1	,,	melon-seeds	,, 150	,,	,,	7,000	,,
1	,,	ground-nuts	,, 100	,,	,,	220	,,
1	,,	taro	,, 100	,,	,,	350	,,

NOTE 3.—Dr. S. P. BARCHET (16) states :—

We find considerable difference in the peck of the city and the peck used up-country. As a rule, the peck increases in size in large shops where business is done for ready cash, and decreases where the credit system prevails.

NOTE 4.—Rev. C. BONE (19) states :—

The Tou, 斗, of rice is 6.25 catties. In some cases, however, grain-selling guilds use a tou of 10 or 13 and even 14 catties.

NOTE 5.—*Note on Pakhoi Tou.*

I have made no attempt to reconcile discrepancies. As to the Pakhoi Tou, I may say that I measured the tou in common use, and weighed on foreign scales its contents in rice.—H. B. M.

Foot 尺

Place.			Authority.	Tailor's Foot		Carpenter's Foot.		Other Feet.		
Province.	Prefecture.	Town.		39.37 = 1 Inches	Mètre	Inches.	Mètre.	Use.	Inches	Mètre
...	...	...	...	...	...	...	...	BritishTreaty	14.10	0.358
...	...	...	...	...	...	...	...	French „	13.98	0.355
Shêng-king	Fêng-tien	Newchwang	29	...	...	...	...	General ...	13.50	0.343
Shantung	Lin-ch'ing	Chou ...	4	...	...	12.55	0.319	Bricks ...	11.15	0.283
								Land ...	12.20	0.311
								Farmer's...	13.95	0.354
								Cloth ...	23.75	0.603
	Chi-nan	Fu	5	13.20	0.335	13.50	0.343	Land ...	14.95	0.380
								Cloth ...	21.40	0.544
		Lo-an ...	5	...	...	...	...	Land ...	14.95	0.380
Shhansi	Lu-an	Fu	20*	...	...	...	...	.....	...	...
Shhensi	Han-chung	Fu	22	13.95	0.354	...	...	.....	...	...
Kansu	Liang-chou	Fu	6	...	...	12.60	0.320	Cloth ... Silk—shorter than Carpenter's.	14.55	0.370
	Lan-chou	Fu	8, 22	14.35	0.365	13.05	0.332	General ...	14.50	0.369
Hhnan	Nan-yang	Fu	9	...	...	13.00	0.330	Official ...	13.75	0.350
								"Native" 土	10.95	0.278
								Silk ...	8.25	0.210
Anhui	Liu-an	Chou ...	10	14.15	0.360	12.75	0.324	Official ...	13.55	0.344
		Huo-shan ...	10	...	...	13.30	0.338	Market ...	13.90	0.353
	Ying-chou	Huo-ch'iu ...	10	13.90	0.353	13.25	0.337	.....	...	...
	Ning-kuo	Fu	12	...	...	13.25	0.337	.....	...	...
	Ssŭ-chou	Wu-ho ...	12	...	...	13.50	0.343	.....	...	...

* Note 1.

Foot 尺

Place.			Authority.	Tailor's Foot		Carpenter's Foot.		Other Feet.		
Province.	Prefecture.	Town.		39.37 = 1 Inches	Mètre	Inches.	Mètre.	Use.	Inches	Mètre
Kiangsu	...	...	1	...	...	...	...	Land* ...	12.10	0.307
	Kiang-ning	(Nanking) ...	1, 12 17	13.75	0.350	12.60 12.50	0.320 0.318	Satin weaver's Timber	14.05 13.82 13.50	0.357 0.351 0.343
	Chin-kiang	Fu	1, 12	13.45	0.342	12.60	0.320	Timber ...	13.45	0.342
		Tan-yang ...	12	14.00 13.75	0.356 0.350	12.40	0.315	.....	...	...
	Soochow	Fu	1	...	...	10.85	0.276	Official ... Timber ...	13.40 13.35	0.340 0.339
		Chang-shou	1	...	...	...	...	Official ...	13.80	0.351
	Tai-tsang	Tsung-ming	1	...	...	...	...	Land ...	13.55	0.344
	Hsü-chou	Sui-ning ...	11	13.75	0.350	13.25	0.337	Land ... Cloth ...	14.00 19.95	0.356 0.507
	Sung-kiang	Fu	1	...	...	...	...	Land ... „ ...	13.80 13.95	0.351 0.354
		Shanghai ...	1, 3 12, 13	...	...	11.10	0.282	„ † ... „ † ... Timber ... Official ...	13.20 12.40 13.25 14.00	0.335 0.315 0.336 0.356
Chekiang	Ningpo	Fu	15, 16	14.10 13.50	0.358 0.343	10.95	0.278	Land ... Family‡ ...	12.25 15.50	0.311 0.394
	Wên-chou	Fu	18	14.00	0.356	11.00	0.279	...	...	...
Fukien	Foochow	Fu	21§	...	...	...	...	...	...	...
Taiwan	Tai-nan	Takow ...	26	14.50	0.368	9.33	0.237	Cloth ...	11.62	0.295

* Official. † See Table of Mow. ‡ Note 2. § Note 3.

Foot 尺

Place.			Authority.	Tailor's Foot		Carpenter's Foot.		Other Feet.		
	Prefecture.	Town.		39.37 Inches = 1 Mètre		Inches.	Mètre.	Use.	Inches	Mètre
Kwangtung	Ch'ao-chou	Swatow ...	23, 24	...	...	11.50 12.00	0.292 0.305	Cloth (Shops) Cloth (Family) General ...	12.69 13.00 14.87 15.00	0.322 0.330 0.378 0.381
	Kwang-chou	Canton ...	2, 19	14.80 14.75	0.376 0.375	14.10 14.00	0.358 0.356	Land ...	14.00	0.356
		Hsin-hui ...	19	14.80	0.376	13.67	0.347	General ...	14.10	0.358
	Lieu-chou	Pakhoi ...	3	14.20	0.361	13.80	0.350	Land ... "Standard"*	10.00 14.70	0.254 0.374
anggsi	T'ai-p'ing	Lungchow ...	28	13.30	0.338	15.50	0.394	Land ...	10.50	0.267
Yunnan	Lin-an	Mêng-tzu ...	25	14.00	0.356	13.75	0.346	Cloth† ... Stone-mason's† Land† ...	14.25 13.60 12.10	0.359 0.342 0.305
a	...	...	14	...	...	12.55	0.317	Cloth ... Land ...	20.75 11.85	0.527 0.301

* Note 4. † Note 5.

LENGTH TABLE.

10 Hsien 纖 = 1 Wei 微 10 Li = 1 Fên 分
10 Wei = 1 Hu 忽 10 Fên = 1 Ts'un 寸 (inch).
10 Hu = 1 Ssŭ 絲 10 Ts'un = 1 Ch'ih 尺 (foot).
10 Ssŭ = 1 Hao 毫 10 Ch'ih = 1 Chang 丈
10 Hao = 1 Li 厘 5 Ch'ih = 1 Pu 步 or Kung 弓
1,800 Ch'ih = 360 Pu = 1 Li 里 (considered $\frac{1}{3}$ mile).

N.B.—The length of 5 *Ch'ih* is called indifferently *Pu* (pace) or *Kung* (bow), but it seems more common to call the length a *Kung*, and the square of 5 *Ch'ih* a *Pu*.

The *Li* is theoretically 1,800 of the *land* foot, the length of which may be seen on reference to the Table of Area of the *Mow*. Practically it is usually one-tenth of an hour's march 塘, which will vary according to the nature of the ground.

NOTES.

NOTE 1.—Rev. P. M. POELL (20) states :—

The carpenter uses a foot of 9 inches, the tailor of 10 inches, and others of 15 inches. [These are proportions only.]

NOTE 2.—Dr. S. P. BARCHET (16) states :—

The "family" foot is used by families for buying cloth, etc., which they sell by the "tailor's" foot, hence the "family" foot varies considerably in length.

NOTE 3.—Mr. E. H. PARKER (21) states of Foochow :—

The tailor's foot 裁尺 is 20 per cent larger than the cloth foot 店尺 or builder's foot 木尺. The official Kung 弓 of land is in length 5.6 of the latter. The other calculations can be made by any one.

NOTE 4.—*Note on Pakhoi foot :*

The "standard" foot appears to be used only in making flooring-tiles, which are exactly a "standard" *Ch'ih* square. The tailor's *Ch'ih* is called "nine-seven" 九七, and the carpenters' *Ch'ih* "nine-five" 九五, being respectively $\frac{97}{100}$ and $\frac{95}{100}$ of the "standard" *Ch'ih*.—H.B.M.

NOTE 5.—Mr. HAPPER (25) states respecting Mêngtzŭ :—

Peddlers in the country are said to carry several foot-rules with them, and when offering cloth for sale, give the prices according to the measurement of each foot.

Mow 畝

Place.			Authority.	Length of Kung or Pu.		Number of Pu. to Mow.	Area of Mow.	
Province.	Prefecture.	Town.		English inches.	Mètres.		English Square Feet.	Square Mètres.
Mng-king	Fêng-tien ...	Newchwang ...	29	67.50	1.715	240	7,594	705.9
Shantung	Lin-ch'ing ...	Chou	4	61.10	1.552	240	6,320	578.1
						360	9,480	867.1
						480	12,640	1,156.2
	Chi-nan ...	Fu ... ... *	5	73.92	1.877	240	9,327	866.4
						360	13,991	1,299.6
						720	27,982	2,599.2
		Lo-an	5	73.92	1.877	840	32,634	3,032.4
suu	Liang-chou ...	Fu ... ... †	6	63.00	1.600	240	6,615	614.4
Honan	Nan-yang ...	Fu	9	68.75	1.746	240	7,877	731.6
	Ju-ning	Fu ... ... ‡	9	99.00	2.515	240	16,320	1,518.0
uiii	Ying-chou ...	Huo-ch'iu §	10	69.50	1.765	240	8,050	745.2
Kiangsu	Kiang-ning ...	(Nanking) ‖	17	62.50	1.587	240	6,510	604.5
	Tai-tsang ...	Tsung-ming **	1	67.70	1.720	240	7,643	710.0
	Hsü-chou ...	Sui-ning ...	11	70.10	1.780	240	8,190	760.4
	Sung-kiang	Fu	1	66.50	1.690	240	7,430	690.3
			1	69.70	1.770	240	8,094	751.9
		**	1, 13	60.50	1.537	240	6,105	567.2
		Shanghai **	1, 2	66.00	1.676	240	7,260	674.5
			2, 3, 13	62.00	1.575	240	6,600	613.1
			13	70.50	1.790	240	8,284	767.0
Chekiang	Ningpo	Fu	15	61.25	1.556	240	6,252	581.0
			16	60.50	1.537	240	6,105	567.2
	Wên-chow ...	Fu	18	55.00	1.397	240	5,042	468.4

* Note 1. † Note 2. ‡ *Kung* of 7.2 *chih*. § Note 3. ‖ Note 4. ** Note 5.

Mow 畝

Place.			Authority.	Length of Kung or Pu.		Number of Pu to Mow.	Area of Mow.	
Province.	Prefecture.	Town.		English inches.	Mètres.		English Square Feet.	Square Mètres.
Fukien	Ch'uan-chou...	Amoy	2	74.00	1.880	240	9,138	849
Kwangtung	Ch'ao-chou ...	Swatow ... *	23	57.50	1.460	240	5,510	512
	Kwang-chou...	Canton ... †	19	70.00	1.780	240	8,167	759
	Lien-chou ...	Pakhoi	3	50.00	1.270	240	4,167	387
Kwangsi	T'ai-p'ing ...	Lungchow ...	28	52.50	1.335	240	4,594	427
Yunnan	Lin-an	Mêngtzŭ ‡	25	60.05	1.525	240	6,000	557
Corea	...	Fusan ... §	14	71.20	1.808	240	8,449	785

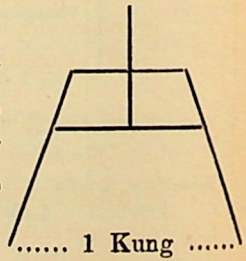
* Note 6. † Note 7. ‡ Note 8. § Note 9.

AREA TABLE.

10 Hsien 纖 = 1 Wei 微
10 Wei = 1 Hu 忽
10 Hu = 1 Ssŭ 絲
10 Ssŭ = { 1 Hao 毫 (0.24 Pu 步) }

10 Hao = 1 Li 厘 (2.4 Pu).
10 Li = 1 Fên 分 (24 Pu).
10 Fên = 1 Mow 畝 (240 Pu).
100 Mow = 1 Ch'ing 頃.

The common instrument for measuring land is of this shape and proportion, measuring 5 local *ch'ih* = 1 *kung* or 1 *pu*; 240 square *pu* legally make 1 *mow*.



NOTES.

NOTE 1.—Rev. GILBERT REID (5) states:—

There are three kinds of *mow*. One consists of 240 square local *pu*, another of 360 square local *pu*, and the third of 720 square local *pu*. The *mow* seems to vary somewhat according to the soil. For example, outside of the South suburb gate of Chi-nan-fu the small *mow* is used, outside the West the next larger, and outside the East the largest. The smallest is the official standard.

[*N.B.*—The Rev. G. REID gives the *pu* at 73.92 inches. It would be worth inquiring if the *pu* at Chi-nan-fu is not more correctly 62.81 inches English.—H.B.M.]

NOTE 2.—Mgr. HAMER (6) states:—

Içi [Lan-chou, Kansu] pour les terres on ne compte pas par *mou* mais par *teou* 斗; personne ne sait dire au juste la mésure d'un *teou*; cela dépend des terres et des endroits. Une telle terre est vendue pour autant, une autre pour autant de *teou*. Il me semble qu'un *teou* équivale à $2\frac{1}{2}$ *mou*.

NOTE 3.—A priest at Liu-an, Anhui (10) states:—

Içi le peuple ne connait pas le nom *mow*, on compte la grandeur des terres par le nombre de *tan* qu'on paye de *tsou* [rent] et on dit, "Je cultive 5, 6, etc., *tan* de terre."

NOTE 4.—Rev. E. T. WILLIAMS (17) states as regards Nanking:—

After sending to the Hien six or eight times I have finally obtained a complete table:—

TABLE OF LINEAR MEASURE.

10 Făn (分)	= 1	Ts'un	(寸) or Inch
10 Ts'un	= 1	Ch'ih	(尺) or Foot
5 Ch'ih	= 1	Pu	(步) or Pace
2 Pu	= 1	Chang	(丈)
180 Chang	= 1	Li	(里)
200 Li	= 1	Tu	(度)
360 Tu	= 1	Cheu-Tein	(周天)

The foot in this table is what is called the Kiu-cheh-ch'ih (九折尺), or Carpenter's Foot, nine-tenths of the ordinary foot. It does not measure exactly this according to my measurement as reported in the paper sent you. I ought to say, however, that I have had no access to any official standard, and have had to measure a number of those in actual use by carpenters and merchants, but as both the carpenter's rules measured by me were a little more than nine-tenths of the longest Ts'ai-ch'ih measured, I considered they could not be far wrong.

According to this, the foot in the above table is twelve and one-half inches in length (English). This will make the Pu, or Pace, equal to 62.5 Inches (English) and the Li equal to 1,875 English Feet.

TABLE OF AREAS.

100 Square Ts'un (寸)	= 1	Square Ch'ih	(尺)
25 ,, Ch'ih	= 1	,, Pu	(步)
4 ,, Pu	= 1	,, Chang	(丈)
6 ,, Chang	= 1	Făn	(分)
10 Făn	= 1	Mow	(畝)
100 Mow	= 1	Ch'ing	(頃)
540 Mow	= 1	Square Li	(里)

It will be seen by this that 240 Square Pu make one Mow. The Ch'ih is of same length as in the table of length, *i.e.*, 12.5 Inches (English), so that a Square Pu will equal 27.126 Square Feet (English) and a Mow 723.36 Square Yards (English).

NOTE 5.—Rev. P. HOANG (1) states:—

The legal measure *kung* 弓 containing 5 營造 *ch'ih* equals 1.537 mètres (60½ English inches). This measure was a few years ago [prior to 1882] legally prescribed for the measurement of land formed thereafter by alluvial deposit; while for old land the use of the measure traditionally employed in each district is permitted. The traditional measure, judicially admitted in the district of Shanghai, equals 1.676 mètres (66 inches). [*N.B.*—This gives 1 acre = 6 *mow* exactly]. This measure was a few years ago sent by the Shanghai Taotai to the British Consul. In the country two other measures are in use, one = 1.690 mètres, one = 1.770 mètres.

In Tsung-ming 崇明, where measurement is frequent on account of continual accretion by alluvial deposit, the traditional *kung* equals 1.720 mètres. During the Ming dynasty a stone of this dimension was erected in front of the Magistrate's Yamên, for standard comparison. There the common instrument of measurement is a thin strip of bamboo, called *Chang-po* 丈帛, measuring 10 *kung* = 17.2 mètres.

NOTE 6.—Rev. J. C. GIBSON (23) states respecting Swatow:—

The "pace" is not in practical use here and its length is not known. Theoretically it should equal about 5 feet, the pace being measured not between right and left foot when stepping, but between successive positions of either foot, which is twice the distance.

The *Li* is often used, but its length is very indefinite. It is used here (also in the Amoy region and Formosa, and in the Hak-ka country) chiefly as a fractional part (one-tenth) of the league (舖), and the length of the latter varies greatly. It represents about an hour's moderate walking on level ground. If the "pace" be taken at 5 feet, then 360 paces

to the *Li* would give 1,800 feet as its length, which would be a fair average here.

No one seems to know the area of the Mow, and it is said to vary not only in different districts, but to be variously reckoned on fields contiguous to each other.

The Mow is divided into tenths (分). Land is commonly described by its average yield reckoned in Piculs (担) of ripe grain unshelled, 5 Piculs to the Mow being a fair yield in good seasons. This is the standard for rice-fields. These give two crops annually, the winter being the heavier (5 Piculs to the Mow) and the summer lighter (4 Piculs to the Mow). For the winter crop, a peck and a half per Mow is allowed for seed, and each Mow is supposed to contain 120 plants. For the summer crop, the allowance of seed is 3 pecks per Mow. For "dry" ground (園), the usual reckoning is in terms of the number of plants reckoned in thousands, of potatoes or sugar-cane which it can carry. [*N.B.*—Mr. GIBSON gives no length for the pace, and I base the area of the Mow on his length for the carpenter's (and land) foot.—H.B.M.]

NOTE 7.—Rev. C. BONE (19) states regarding Canton:—

A pu 步 is 2 Chinese feet, but in some cases it is 2.2 Chinese feet. [*N.B.*—I have disregarded this statement, and in estimating the area of the mow have taken Mr. BONE's further statement that the land foot is 14 English inches.—H.B.M.]

NOTE 8.—Mr. A. P. HAPPER, Jr. (25) states respecting Mêngtzŭ:—

The *Mu* (畝) is not known here. This is stated on good authority. When land is transferred, it is paced off, or delimitated by giving the boundaries. The value is calculated on the rent it will bring, or on the quantity of grain it will

yield per year. The pace is said to be the ordinary step of a man walking at an ordinary gait. The *kung* 弓 lent me measured 1.525 mètres.

NOTE 9.—Mr. J. H. HUNT (14) states:—

The *mow* (*irang* 畝) is the area on which taxes are paid [in Corea]. The people do not buy and sell land by this measure. The price of a field or plot of ground is regulated by the time occupied in ploughing it, or by its average yield of grain per year.

NOTE 10.—Mr. MAK SZE CHE (26) states respecting Takow:—

Natives speak of the *kap* (甲), not the *mow* (畝) of land; the latter measurement is not known.

With regard to Shanghai weights and measures, the following letter from the Chairman of the General Chamber of Commerce to H.B.M. Consul-General, conveys all the information of which the Chamber could dispose:—

SHANGHAI GENERAL CHAMBER OF COMMERCE,

SHANGHAI, *31st July 1885.*

To P. J. HUGHES, ESQ.,

H.B.M. Consul-General, Shanghai.

SIR,

I have the honour to acknowledge the receipt of your letter of 28th July, asking for information as to the denominations and equivalents of the weights and measures in use at this Port, for communication to the Board of Trade, and in reply I have the pleasure to hand you the following particulars:—

The subject is dealt with at length in Dr. S. Wells Williams' *Commercial Guide*, chapter 5, sections 3 to 6, but as only a small number of the weights and measures indicated are in use between foreigners and natives, it is perhaps unnecessary to give details of those which are confined to native use alone.

Weights.—The weights in use for general purposes are

the Tael = $1\frac{1}{3}$ oz. Av.,
the Catty = $1\frac{1}{3}$ lb. ,, = 16 Taels,
the Picul = $133\frac{1}{3}$,, ,, = 100 Catties,

the former being used for precious metals and the two latter for the ordinary purposes of market stuff and produce.

The usual instrument for market use is the Steelyard, which will weigh up to a picul, while larger quantities are usually treated by Beam or Fairbank scales of foreign manufacture.

Measure of Length.—The measure of length is the "Chih," which is equal to 14·1 inches English.

Measure of Distance.—The measure of distance is the "Li," which is equal to 360 paces or 1894·12 feet English.

Land Measure.—Land is generally measured by the "Mau" = 26·73 square Poles English, the subdivisions being decimals: 100 mau = 16·7 acres.

There does not appear to be any reliable standard for either weights or measures, the initial element in both cases being a grain of millet-seed, the equivalent of the English Barleycorn, while there is also a difference in both weights and measures varying with the article to which they are applied. Thus in Shanghai the ordinary Measures of Capacity are the Koh = 6·103 litres
the Shing = 1·031 ,,
the Tau = 10·31 ,,

which are commonly used for retailing market commodities such as rice, peas and grain generally, but the smaller measures are usually made of bamboo joints, and vary in size according to what the retailer considers will give him a fair profit.

The "Tau" is made of wood like an inverted pyramid with the top cut off, and holds generally $6\frac{1}{2}$ catties.

For retailing oil and spirits there are measures which contain 1, 2, 4 and 8 Taels weight respectively, and indeed almost all articles are sold by weight, whether solids or liquids, and there does not appear to be any genuine standard of capacity.

It may further be noted that both weights and measures differ in different provinces, though as far as the open ports are concerned the proper equivalents were arranged by the Treaties, but even in this the French and English do not exactly agree, though they do so nearly enough for practical purposes.

As regards measures of length again the "Chih," or Chinese foot, varies with the different trades, and in Shanghai we have the following:—

		Eng. Inches & Decimals.
Junk-builders'	chih =	15·769 to 15·69
Custom House	,,	14·098
Tailors'	,,	14·05 to 13·85
Board of Revenue	,,	13·181
Artisans'	,,	12·569
Carpenters'	,,	11·14
Masons'	,,	11·08 to 10·9

while they differ again at most of the open Ports.

Trusting that the above information may be of service to you,

I have the honour to be,

etc., etc.,

(Signed) J. J. KESWICK,
Chairman.

APPENDIX.

[EXTRACTS FROM "NORTH-CHINA HERALD" FOR 1889.]

Remittances to Peking from Shantung.

"Chang Yao reports the transmission of the following sums on various accounts to Peking: the sixth instalment of the Peking subsidy, Tls. 50,000, forwarded to the Board of Revenue by the Financial Commissioner: Tls. 6,250 transmitted by the Salt Commissioner to the Board of Revenue as interest on funds lent to the province, together with Tls. 156.2.5 for difference in weight and Tls. 50 for porterage; Tls. 6,250 to the Imperial Household for interest on borrowed capital, with similar allowances for porterage and loss by exchange; Tls. 20,000 sent by the Grain Intendant as the second instalment towards defraying the outlay on frontier defence; and Tls. 20,000 from the four-tenths of the receipts of the foreign Customs' duties at Chefoo as a contribution to the Tientsin Arsenal."—*Vol.* xlii., *p.* 146.

The Currency Question in Kirin: Excessive Issue of Paper Money.

"January 17th.—The Governor of Kirin states that the currency system of the town of Kirin is carried on on a most pernicious system, and as a remedy for the great inconvenience and suffering which it entails upon the people, he suggests that a portion of the subsidy which the province receives yearly from Peking should in future be remitted in copper cash. Cash, he states, is the proper standard for the monetary requirements of the people, and paper money is only to be resorted to when it proves insufficient. If the latter could be made to circulate freely and the price of commodities, whether paid in cash or paper, could be equalised, it would prove a real convenience for the people, to which no objection could be raised, as in the other provinces where paper money is used to supplement the ordinary currency. In Kirin, however, the case is quite different. Here the notes no longer represent a cash value, and, being inconvertible, have given rise to

abuses greater than any ever resulting from the financial expedients of the Sung dynasty. The commercial transactions of the town are all based on a gigantic system of credit, against which prohibitions have been issued from time to time without effect. The notes of the system lay in its convenience for use in the market where money was required to pass rapidly from hand to hand, and in course of time its use was extended until it assumed its present dimensions and afforded facilities to dishonest merchants for fraudulent practices and overtrading. The notes were put on the market without any regard to the capital possessed by the establishment issuing them, and people seeing that they could buy sycee or goods with mere paper, naturally preferred to hide away their cash, and make gain without employing money at all. Merchants who came to the city to trade, observing the high price of silver and articles of commerce, feared that they would lose heavily on any goods purchased there, and took their cash to other places where they could invest it better. The consequence was that there is an unusual scarcity of cash in Kirin, and that prices have gone up to an enormous height. The soldiers and officials suffered more than any other part of the population. By an old regulation a part of their salary was paid out of the local revenue, and to begin with was issued at a discount of twenty per cent. The chief source of revenue is a tax upon distilleries paid in inconvertible paper, of which it took considerably over four *tiao* to make a Tael, but which was issued to the officials and soldiers at the rate of three *tiao* to the Tael. But this did not represent the total loss. The other cities in the province would not accept the inconvertible paper of Kirin, therefore the soldier was obliged, if he wished to return home, to exchange his paper money for silver at the current high market rates. When he reached home he had to convert his silver into cash, and as the price of silver was lower than in Kirin he again sustained a heavy loss. The country people who brought produce into town found themselves unable to sell it unless they took the price in paper money, and as this was utterly useless in the country they were obliged to exchange it at a ruinous loss before returning. Vendors of firewood, and other poor creatures who had carried heavy burdens from a long distance into the city, would often want a few cash to buy food to appease their hunger, and would find themselves unable to obtain it, to such a pitch had the abuses of the currency system attained. After a consultation with the local, civil and military authorities, Memorialist drew up a set of regulations for reducing the price of silver, and placing the copper and paper money on a uniform basis, and took steps to have them enforced among the mercantile community. During a specified period, when outstanding notes were presented for payment, at least 20 per cent. of the

amount was to be given in cash, and after the third moon of next year, the further issue of inconvertible paper was to be entirely discontinued. It is feared, however, that in making such a radical change, a difficulty might at first be experienced in obtaining cash to meet the requirements of trade. The late Governor proposed to open a local mint for the coinage of cash, but the difficulty of procuring copper renders this scheme unsuited to the exigencies of the case. Kirin draws from the Board of Revenue in Peking quarterly subsidies for defence purposes, and half-yearly allowances for the maintenance of a drilled force in the province. It is suggested that of each of these payments, Tls. 10,000 should be issued in copper cash at an exchange of 3,000 cash to the Tael, and be forwarded in carts to Kirin along with the remittances in silver. Or if it is thought better, the Board might direct one of the provinces which coins copper cash and has communication by sea with Manchuria to forward a similar amount of cash by steamer to Newchwang, whence it could be sent overland to Kirin, where it might be used in the payment of salaries instead of a direct remittance from the Board.—Referred to the consideration of the Board of Revenue."—*ibid.*, *p.* 175.

Coinage of Cash in Shensi stopped through want of Foreign Copper.

"February 21st.—About eighteen months ago steps were taken for the erection of a mint to coin copper cash in Shensi. Chên-an is the only district in the province which produces copper, but the quality is so poor that for coinage purposes it can only be used in combination with the foreign metal, and supplies of the latter had to be procured from Shanghai. During the time that the mint has been working, eleven castings have been turned out, representing a total of 19,800 strings of cash. The supply of foreign copper is nearly exhausted, and the officers who were sent to Shanghai to make further purchases report that owing to the stoppage of the Japanese copper works and other causes the price of the article has so gone up as to place it out of their power to procure any more. Under these circumstances, and in view of the fact that the experiment of using the native copper alone has not proved a success, the Governor asks permission to be allowed to postpone further coinage operations until foreign copper can be procured at reasonable rates."—*ibid.*, *p.* 311.

Currency and Public Works in China.

"Our readers will have noticed that some of the correspondents whose reports on the condition of the distressed districts we have published, have at times referred to the losses incurred in the exchange of silver for copper cash. Those who distributed relief after the Yellow River inundations, some two years ago, had similar experiences, and we suppose it would be the same anywhere in the empire where foreign commerce has not increased the working capital of bankers and merchants. The rise in the price of cash caused by the sale of the few thousand taels of sycee that have been sent to Shantung and Manchuria this year, may have partly arisen from the exactions of the money-changers, but we are inclined to think that it has been chiefly brought about by what we may call natural causes. Money-changers are seldom possessed of more than a few thousand taels of capital and very often they have only a few hundred. The influx into a district of a quantity of sycee which would have no effect on the money market of even a second or third rate open port, would very soon exhaust the resources of all the cash bankers in the inland districts. We are aware that in some places the native bankers have behaved very liberally in their dealings with the missionaries who have been distributing the relief funds, but where capital is very limited and business almost at a standstill, from the condition of the country, it could not be expected that the most generous conduct of bankers would have much effect on the market price of copper cash. But the probability is that the bankers were able to do very little to prevent losses in exchange from lack of means. Even if they bought sycee at prices considerably under those ruling in the other provinces, they have not the means of transporting it which would enable them to realise a profit, and it is evident that the supply of cash and the amount of sycee used in the districts we are referring to, are both limited. The writer of *Chinese Characteristics* very graphically described the other day the state of the currency, if we can apply this term to the wretched cash of the country, and the troubles which await all those who have to use it. We were all more or less acquainted with these evils, which we take to be about the most serious which injure China. The condition of the cash in use in all the provinces becomes almost periodically so bad that the *Peking Gazette* is stuffed with Memorials and Edicts on the subject, from which but little good results. The truth is, as we have said before, that there are too many people, of all ranks and degrees, throughout the empire, some of whom are enriched by, and others live upon, the badness of cash and the inequalities of sycee, for any great improvement in either to be attempted by the Govern-

ment. No doubt, some of the higher officials would be glad to see the evils abolished and even a coinage introduced, but reform in this direction, like other western improvements, must come slowly. It is a matter of regret that the mint which the Viceroy of Canton procured from England for the coinage of cash is not to be worked, but if His Excellency's change of plan is owing to the advance in the price of copper which took place last year and in 1887, we hope that the recent decline in the value of the metal may induce him to change his mind again.

"We suggested some time ago that the Viceroys and high officials in the afflicted provinces should employ the people in road-making, the repair of waterways and other public works. If these have been undertaken to any great extent they will be of great service to the country, but we confess that we are not sanguine of anything of consequence being done in these things. Yet nothing would, under the circumstances, be of greater service to the country and the people, for the latter would be provided with some means of subsistence while commerce and the movement of troops would be facilitated. Such improvements could not be objected to by the most conservative Chinese, for they would be in accordance with old ways and the patriotic spirit which is supposed to animate the policy of the Government. No doubt the rulers of China know perfectly well that they must meet the criticism of the outside world, which their predecessors neglected and despised. When, therefore, the country suffers, as unfortunately it has suffered, great distress in recent years, and foreigners are appealed to for aid, the Government should know that the amount of subscriptions from other countries will be greatly affected by the manner in which the officials have discharged their duties or are discharging them. We noticed not long ago that the *Spectator* questioned the wisdom of English people subscribing to the Lord Mayor's fund, and we have no doubt that its remarks on the subject have caused at least some people to withhold their money. Not only Heaven but men help those who help themselves; and if foreigners see that the Government of China does not take effectual steps to mitigate the evils from inundation or drought, much less practical sympathy will be shewn by them on the next recurrence of such disasters. And as a proof of the critical attitude of Englishmen to this country, to which we have referred, and which the Government must meet, we mention the fact that the news of the outbreak at Chinkiang had an immediate and considerable effect in diminishing the subscriptions to the Relief Fund. We commend to those who have the ear of the great officials, if any such foreigner there be, the advocacy of useful public works and currency reform."—*ibid.*, *p.* 399.

"The subject of Chinese currency demands not a brief paragraph, but a comprehensive essay, or rather a volume. Its chaotic eccentricities would drive any Occidental nation to madness in a single generation, or more probably such gigantic evils would speedily work their own cure. In speaking of the disregard of accuracy we have mentioned a few of the more prominent annoyances. A hundred cash are not a hundred, and a thousand cash are not a thousand, but some other and totally uncertain number, to be ascertained only by experience. In wide regions of the empire, one cash counts for two, that is, it does so in numbers above twenty, so that when one hears that he is to be paid five hundred cash he understands that he will receive two hundred and fifty pieces, less the local abatement, which perpetually shifts in different places. There is a constant intermixture of small or spurious cash, leading to inevitable disputes between dealers in any commodity. At irregular intervals, the local magistrates become impressed with the evil of this debasement of the currency, and issue stern proclamations against it. This gives the swarm of underlings in the magistrate's yamên an opportunity to levy squeezes on all the cash shops in the district, and to make the transaction of all business more or less difficult. Prices at once rise, to meet the temporary necessity for pure cash. As soon as the paying ore in this vein is exhausted, and it is not worked to any extent, the bad cash return, but prices do not fall. Thus the irrepressible law by which the worse currency drives out the better, is never for an instant suspended. The condition of the cash becomes worse and worse, until, as in some parts of the province of Honan, everyone goes to market with two entirely distinct sets of cash, one of which is the ordinary mixture of good with bad, and the other is composed exclusively of counterfeit pieces. Certain articles are paid for with the spurious cash only. But in regard to other commodities this is matter of special bargain, and accordingly there is for these articles a double market price. That enormous losses must result from such a state of things, is to any westerner obvious at a glance, although the Chinese are so accustomed to inconveniences of this sort, that they seem almost unconscious of their existence, and the evils are felt only as the pressure of the atmosphere is felt. Chinese cash is emphatically 'filthy lucre.' It cannot be handled without contamination. The strings, of five hundred or a thousand (nominal) pieces, are exceedingly liable to break, which involves great trouble in re-counting and re-tying. There is no uniformity of weight in the current copper cash, but all is both bulky and heavy. Cash to the value of a Mexican dollar weigh not less than eight pounds avoirdupois. A few hundred cash are all that anyone can carry about in the little bags which are suspended for

this purpose from the girdle. If it is desired to use a larger sum than a few strings, the transportation becomes a serious matter. The losses on transactions in ingots of sycee are always great, and the person who uses them is inevitably cheated both in buying and in selling. If he employs the bills of cash-shops, the difficulty is not greatly relieved, since those of one region are either wholly uncurrent in another region not far away, or will be taken only at a heavy discount, while the person who at last takes them to be redeemed, has in prospect a certain battle with the harpies of the shop by which the bills were issued, as to the quality of the cash which is to be paid for them. Under these grave disabilities the wonder is that the Chinese are able to do any business at all; and yet, as we daily perceive, they are so accustomed to these annoyances, that their burden appears scarcely felt, and the only serious complaint on this score comes from foreigners."—*ibid.*, *p.* 411.

Resistance to Change of Currency in Kirin.

26th June.—"A memorial from the high authorities of Kirin states that it has long been the practice in the provincial capital to make use of irredeemable bank notes instead of money. The custom having proved to be injurious to the Government, the army and the people alike, the memorialists obtained permission from the Emperor to put a stop to it altogether. On the promulgation of a notice to this effect unbounded joy was manifested by the public. At the same time six months' warning was given to those concerned, and arrangements were made for carrying out the change gradually. The utmost consideration was thus shown to the merchants, who, notwithstanding, in their greed and covetousness swore an oath not to obey. As a first step they bribed certain unworthy gentlemen, who drew up for them a general petition full of bad arguments and concealed threats; but the memorialists refused to be influenced by this. Finally one house, the Jui-shang Bank, has now suddenly closed its doors for no cause. Unavoidable bankruptcy is a common enough occurrence and would call for no special remark. But in the present instance the pretended insolvents had only four days previously received twelve thousand taels on account of one Government department and ten thousand taels on account of another. Their action can therefore only be regarded as a deliberate swindle conceived with the object of putting pressure on the authorities. The enormity of the offence is moreover aggravated by the fact that they have long been the busiest of traders and have made immense profits at the expense

of other people. The memorialists have ordered the prefect to imprison both the proprietors of the bank and their assistants, and to take measures to recover the moneys owed by them. Even if they discharge all their liabilities in full, they must still be punished severely, in order that others may be warned by their example. It is further requested that one of the officers from whom they received the Government money may also be made a defendant in the case, in order that it may be discovered by a rigorous investigation whether he acted in collusion with them or not.—*Approved.*"—*Vol.* xliii., *p.* 50.

Paper and Silver Currency.

"The use of seals had extended much in China about two centuries after Christ, and this led gradually to stamping silk and skin for various purposes. Just at that time the manufacture of paper was introduced from the West and it was found to be an article capable of many common uses. This led the Taoists, for example, to multiply charms rapidly by stamping them on paper to sell to the superstitious, either to hang on their doors or to carry with them when travelling. Commercial accounts were written on paper for convenience, and merchants and shopkeepers provided themselves with seals for stamping. They came into the habit also of stamping the paper before or after they wrote their figures upon it. This was the state of things when the establishment of the Caliphate on the Euphrates gave an impetus to Eastern trade. The Chinese in the eighth and ninth centuries made much more silk than before for foreign countries. The spread of the silk manufacture in Western regions did not put an end to the demand for the silk goods of China or for the unwoven silk. Neither Europe nor Western Asia could manufacture enough of their own silk to meet the demands of the market. The historian Robertson says of this period that the silk of China was purchased in Shensi, the westernmost province of that empire, and conveyed thence by caravan in a march of eighty or a hundred days to the banks of the Oxus, where it was embarked and carried down the stream of that river to the Caspian. After a dangerous voyage across that sea and ascending the river Cyrus as far as it is navigable, it was conducted by a short land carriage of five days to the river Phasis, which falls into the Black Sea. Thence it was taken by ship to Constantinople. While such was the activity of trade by land there would naturally be a corresponding expansion

of seaborne traffic from the seaports of China to India and farther west. The three centuries of the Tang dynasty at the same time gave opportunity to home commerce to grow in proportion. Trade flourishes when an empire is at peace. It was these circumstances combined which led to the invention of paper money in the Tang dynasty, and it was to the Chinese merchants and statesmen, particularly of the ninth century, that the credit is due in the first instance of employing paper money in the form of drafts payable at certain cities.

"Those who wish to master this subject will find much to interest them in VISSERING's work, which received the Julien prize a few years ago. During the present year the Peking Oriental Society has published a paper (taken chiefly from a work by Wang-liu, published in 1831) by the lamented Japanese Minister to China, Shioda Saburo, on the same subject. This paper is of very great value. It brings out clearly the point that silver was not employed as money before the Tang dynasty, and that it was then introduced. Reference is here made to the work called *Ji Chilu* by Ku Yen-wu,* who died two centuries ago, where it is said that before the Tang dynasty copper cash was the medium of exchange between Government and people, and silver had never come into use. At that time silver was already introduced in South China, meaning by that term Canton and Kuangsi. It is a curious fact that at about A.D. 500, according to Chinese history as examined by Ku Yen-wu, there were in regard to money circulation three belts of country. In the extreme south, gold and silver were in use, Canton being the centre of trade. In middle China, all along the Yangtse into Szechuan, copper cash were used everywhere as the medium of exchange. All this belt of territory, with Canton, Kuangsi and Tongking, was then ruled from Nanking as the centre. In the North, which was under Tartar administration, copper cash and grain were employed as a double medium of exchange. The effect of Tartar control was to favour barter and keep back the onward advance of monetary conveniences. Even now soldiers are paid in grain when they are upon the old *régime*, but the new drilled troops are paid in silver. It is noticeable here that silver began to be a currency in South China first and at a time when China sent her prefects regularly to rule in Cochin-Chinese and Cambodian cities. Gold in ancient China was much used on account of its great abundance. But silver began to enter China because it is produced abundantly in Burma and because it was a circulating medium in India and farther west. The silver which circulated by weight in Canton in A.D. 500 would be partly

* See Wang Ziu's work 鈔幣芻言 *Ch'au-pi-chu-yen.*

Burmese and partly what Arabian merchants and others brought from distant ports. The Arabian trade would certainly have a share in the introduction of silver by weight into the commerce of China in its southern provinces. We find many proofs of the activity of the Arab merchants from the Han dynasty downwards. This is probably another instance of it. The Mei-ling mountains, on the north of Canton province, at that time separated the belt of country which traded by weight from the belt of country which traded with the help only of copper coins, and this was noticed by the celebrated author Han Wên-kung in a memorial he sent to the Emperor about A.D. 800. Yuen Chen, another great statesman, mentioned at about the same time that salt and pieces of silk were used as money in Szechuan. Cinnabar and quicksilver, he added, were used as money in Kuangsi, as also pieces of cloth and silk. At that time any valuable article which had a known price in the market could be bartered like coins elsewhere. It was in this way that silver came into extensive use. It was of a fixed value according to weight, and the silver mines of Burma made it very convenient when the influence of the Chinese Government extended to that region. Another step in the use of silver was taken when in A.D. 1035 it was commanded that the provinces of the empire should not in future be expected to pay taxes in the same form. Most portions of the empire would pay in copper cash. Fukien, Canton, and Kuangsi might send silver, Kiangsu and Chêkiang could contribute silk. This is the first instance of the payment of taxes in silver being recognised in an edict, and it was 854 years ago. Since that time the influence of silver has been increasing to the present day, for during this century the change of grain to silver in the contributions of the people to the expense of the Government has in many localities been made for the first time. A change back again from silver to grain or from silver to copper is never known.

"For eight centuries the use of silver by weighing it, as a circulating medium, has been increasing in China, and it has known no check but the introduction of the dollar. The dollar, however, has only perhaps represented in the amount of its circulation a contemporaneous growth of new trade. The sycee in use as money has certainly not diminished in quantity on account of the large import of Mexican dollars which China now requires, for these dollars, when cheap, are often melted down into sycee. A thousand years ago the people in Central China kept their accounts in copper cash, which at that time would in the market procure a much larger amount of clothing and provisions than now, and the inconvenience of copper, on account of its relative weight, would not be so much felt. They did not then change cash into silver

in totalling up their daily and annual entries, because the change from copper to silver as a standard of value had not yet been made. Arabian trade brought to China the use of silver by weight as European trade at a later period brought the dollar. In both cases the flow of silver has been traceable from south to north in successive zones of country. The convenience of a paper currency made itself felt much sooner in China than in any other country because of the early use of engraved seals, the immense internal trade, and the commercial instinct of the people."—*ibid.*, *p.* 139.

Want of Control over the Circulating Medium.

"About sixty years ago a student of Chinese history in Soochow made some deep researches into the question of the currency. The currency was then becoming more and more out of the reach of Government control. Foreign trade was increasing. The Government had for nearly two centuries left silver to work its own way as money paid by weight, and received it in payment of taxes from each *arrondissement*. Only the copper cash were issued by the Government. For silver there was no mint and never had been but once, and that for a short time, yet this metal had grown to be one of the most important elements in domestic as well as foreign trade. It was the same with paper. Paper notes representing money were issued by private capitalists in all large cities, and the Government had no interest in them. Their success as a circulating representative of silver was entirely at the risk of the native bank. Silver and paper both represented money in all the large transactions of trade. The small market negotiations in copper cash which belong to the daily life of the people, and which, while as transactions they are counted by millions, are always small in bulk, were the only trading operations of which the Government issued the circulating medium. How strikingly different was this state of things from that which exists in the West, where gold, silver, copper, nickel, and stamped paper are all issued by the Governments as money. Our author knew nothing of this, of course, but he was still able to cast his eye over a wide range of financial facts. China had had a long history of financial experiments and a succession of prosperous and disappointing experiences. With the national annals before him, each dynasty having its special chapter on finance, it never struck him that China was, or could be, deficient in financial knowledge or unable to meet the new conditions of the time. He attempted to shew that a change in policy was required in finance, and the

conclusion he arrived at, and which he tried to prove by argument, was that a Government paper currency ought to be again issued and the use of silver prohibited. The people should attend to agriculture rather than to trade. This was their proper occupation, and would lead them to a spirit of contentment. The circulating medium of trade ought to be in the hands of the prince as a source of revenue.

"The reasons, he said, why the monarch cannot easily control the currency or derive revenue from it are fivefold. Coppersmiths melt coin because they wish to use the copper in making wash-basins, tea-kettles, and images of the gods. This is the first interference with the monarch's authority. In addition to this, lead and spelter are employed to make spurious coin in the furnaces of law-breakers aiming at a little profit. This is the second interference; and the third is the extending use of foreign dollars. (It is worthy of remark that through the whole of his book the author, writing in 1831, makes no allusion to opium; yet it is unquestionable that the spread of Spanish dollars first and American dollars afterwards was very much connected with the opium trade. At the same time he makes no allusion to the silk or the tea trade. His point is simply that it is a loss to the Chinese Government not to have the profit arising from the control of the currency. As to commercial questions he seems to have no information, nor did he seek any.) His fourth reason why the Government fails to derive benefit from the circulating medium is that the market price of silver is entirely in the hands of the merchants. He would like the Government to regulate the currency by authority—not knowing that it is disastrous and vain for official authority to attempt to modify prices. China has learned many lessons since the day when this author lived. The fifth cause of the feebleness of the Government in regard to the control of the money market is the fact that bank notes and bills of exchange are issued by private capitalists.

"Our author's advice to the Government was to make a law prohibiting the use of silver in money payments and at the same time restore the issue of Government bank notes which had been so long discontinued. In his opinion this was the only policy by which the five evils from which the Government suffered could be eradicated and the country made prosperous. In support of this view he appeals to the history of money in China. Ancient statesmen saw the propriety of drawing a revenue of cereal products from one locality, of textile fabrics from another, and of coined money from a third. They did not see the need of a large issue of coins, except occasionally, when floods and drought compelled the adoption of this expedient. Nor did finance minis-

ters in very early times limit money to silver or to copper. Pearls and jade, tortoise-shell and cowries, bundles of silk and grass-cloth, served as money in China's ancient markets. About B.C. 800 an old poem says: "A simple-looking lad, you were carrying cloth to exchange it for silk." The official master of the market, says the comment, stamped the cloth for use in barter, and it was two inches in width and 16 inches long. The author adduces this as classical authority for an issue of Government bank notes. But as the poem mentions merely barter, and the explanatory remark is that of an author of A.D. 200, how can we know whether the market officer stamped the cloth or not? It may have been a simple case of barter. Whatever is meant it would scarcely be by stamping, for this mode of giving official validity was hardly in use so early. Why, for example, do we find that the cash of the Ch'in dynasty, B.C. 220, were issued without any inscription upon them? Books tell us that the Han dynasty monarchs were the first to direct characters to be inscribed upon their coins. This practice commenced about B.C. 200 and was never afterwards neglected. He refers to another example—that of painted squares of white deer skin, which in the reign of Han Wu-ti were used as money. They were priced at four hundred thousand cash each, and were presented to the Emperor by the high nobility or by his relatives at the daily audiences or at high festivals, after which they could pass into circulation for the amount mentioned. At that time there was also a silver coinage, the silver being mixed with tin as an alloy, on account of the whiteness of that metal. This alloy of tin was doubtless intended to prevent all attempts at melting the imperial coins. The melter could only lose by the act, and if it was not worth his while he would not place the coins in his melting-pot. This seems to be a clear historical instance of silver coinage lasting for a very short time. Neither the silver coins of Han Wu-ti nor the painted squares of white deer skin remained long in use; and the high value assigned to the deer skin would suggest that it was something like the million pound bank note of Samuel Rogers, which he displayed in the chimney-piece of his breakfast parlour. It was more an object of admiration than of utility, in an age of luxury and gaudy show. As to the origin of paper currency in China, we must look to an age later than the Han dynasty."—*ibid.*, *p.* 171.

Ten Reasons for a Paper Currency.

"In the Ming dynasty, about A.D. 1600, when the Board of Revenue was desirous to return to the use of paper money, the

Governor of one of the provinces stated in a memorial what appeared to him to be the ten advantages of paper money. The first was that it could be manufactured at the capital of each province for use in that province. The second was that it could circulate widely. The third was that it could be carried with ease, being light. The fourth was that it could be readily kept in concealment. The fifth was that it was not liable to division like silver into different grades of purity. The sixth was that it did not need weighing, as was the case with silver, whenever it was used in a commercial transaction. The seventh advantage was that silversmiths could not clip it for their own nefarious profit. The eighth was that it was not exposed to the peering gaze of the thief's rapacity. The ninth was that if paper took the place of copper, and copper ceased to be used for making cash, there would be a saving in the cost of this metal to the Government, or the copper saved could be used in manufacturing arms for the troops. The tenth advantage would be that if paper were used instead of silver, the silver might be stored up by the Government.

"Our author in citing these ten reasons for adopting a paper currency adds that the last two are defective. In adopting paper for the mercantile classes the copper coins would remain in use to meet the necessities of the common people. So also silver should continue to be used in making ornamental articles and head-gear of various kinds. It would be a mistake to shut it up in the Government treasury and prevent its being accessible to silversmiths. There is a fallacy lying hidden in our author's reasoning. He thought that the authority of the Government was all that was essential to the successful establishment of a circulating medium, not reflecting that if paper were so employed there was need of a corresponding store of gold or silver in readiness to pay value for the notes if the people lost confidence in them and wished for their metallic equivalent. It did not strike him that the financial credit of the Government bank can be sustained only by payment in gold or silver to discontented holders of paper. He thought only of supplying the demand for ornaments and not of a run on the treasury. In fact, China is too large a country and the merchants as a body too powerful by their numbers for the Government to attempt successfully the prohibition of silver, nor can it refuse to allow the issue of paper money by private banks. The difficulty in establishing a national bank is found in the fact that the Government cannot take better care of the interests of the mercantile classes than each private capitalist can do for himself, and in the difference which exists in the commercial conditions of the various provinces.

"In the ten reasons for adopting a paper currency, when it is suggested that each treasurer of a province should issue bank notes,

it may well be asked, why not leave native banks in possession of this privilege, which is not only a benefit to themselves but to trade generally? It is certainly a great advantage to travellers that through the wide business connections of the Chinese bankers, bills of exchange may be bought in Shanghai and cashed in any of the provincial capitals of the empire. Both to native and foreigner this is an unquestioned benefit, and renders travelling ten-fold easier than if the silver had to carried in the traveller's trunks. In the fifth and sixth reasons alleged for Government paper currency the Chinese writer touches upon two patent and unanswerable objections to the present system. The silver is weighed at each transaction, and it is circulated in varying states of purity. The scales at which silver is weighed differ in each locality and the traveller feels himself outwitted. His money becomes less at each new point in his journey, and a general feeling of dissatisfaction with the currency grows upon him on his return; however, he would naturally become more reconciled to the tyranny of the scales had he silver left to weigh, for when he arrived again at places of large trade, his sycee weighs as much in proportion to bulk as before. The scale differs to allow the money-changers in towns of small trade to pay their expenses, and when this is understoood the indignation of the traveller sinks somewhat. But there is a worse trouble than the variation in scales. It is the variations in the purity of the silver. It becomes alloyed in many ways and is reduced to purity only by re-melting. Blacksmiths melt the silver, and in all places of large trade there are assaying offices which certify the purity of silver for a small sum. Silver sent to Peking to represent taxes has cut into it by the treasurer of the province, the name of the *arrondissement* from which it comes, and of the blacksmith who melted it. Only silver of first purity is allowed to be sent to Peking. In this way the Government indirectly aids in rendering the silver which is in circulation as money much more pure than it would otherwise be, but the introduction of new silver into the money market is the work of merchants alone. Also the law does in a direct way by statute undertake to protect silver from the incessant efforts of the unprincipled who for private profit in every possible way try to diminish its purity. But it is so hard to discover the evil-doer that statutes are promulgated in vain and the owner of the metal is in fact only protected by the shroff and the assaying office. When it is considered how much impure silver is in circulation there does seem strong reasons for a silver coinage. This would at once improve the standard and raise the average of purity. To reject the precious metals as currency because their purity is tampered with, in favour of paper, would be a mistake. The cure for the evil is to maintain the efficiency of

the statutes which aim at the punishment of crimes against the currency. Mexican dollars are now much more uniform in value than sycee silver, and the convenience of a coin is so great that it is remarkable that the Chinese Government does not follow Japanese example and establish a mint."—*ibid.*, *p.* 203.

The Origin of Paper Currency in Seals.

"The introduction of paper currency in China is very closely connected with the ancient history of printing. Those native authors who have referred to early passages which speak of the employment of seals by officers to give a money value to certain articles as the real commencement of paper currency have done quite right. Grass cloth, silk, and paper all admit of an impression being made on them with ink or with vermilion. In fact, vermilion mixed with oil was perhaps the oldest printer's ink, and the impression of the seal made of jade, copper, silver, gold or wood was, if we allow the word block to include stone and metal, the oldest block printing. The Chinese saw seals from Western Asia and they made them themselves with their own writing cut upon them, to be used in giving validity to official documents, as also to employ them as amulets to protect them from imaginary evils. The seal was not only used to stamp charms, but the handle was a tortoise, a tiger, or some other emblem of longevity or power, in order that it might have a defensive effect against evil. These ideas imported from Western Asia with the seals were as willingly adopted by the Chinese for imitation as the more reasonable idea of employing the seal as a manifest proof of the genuineness of documents. Among the more important of the improvements introduced and additions made to the Chow legislation by the founder of the Ch'in dynasty was the extensive use of seals. The progressive spirit of that dynasty is unquestionable. This is shewn by the fact that many features of the Ch'in legislation were adopted by the Han Emperors. Among them was that of giving a seal to every officer. The silver seals now called Kuan-fang of officers of the 1st and 2nd rank, and the copper seals of Taotais are the continuation of an old rule which has come down from B.C. 221. The system has been found most useful because the seal was the sign of delegated authority, and of the fact that the viceroy instead of being himself a monarch was the representative of the imperial head of the state. The seal was the visible sign of the change from feudalism to centralisation. From that time it gradually became a

fixed idea with the Chinese that they must have a seal impressed on every writing as a proof of property or genuineness. All scholars and firms at the present time have a seal, and seals are placed on books, drawings, and letters, to an extent which is quite remarkable. Since this custom can be traced back to the Han dynasty it becomes easy to understand that the way was open whenever any one chose to extend a seal, by cutting it in relief instead of internally, into any one kind of blank form and into the printing of books. The multiplication of copies by stamping followed readily from the use of a stamp to give validity, and a stamp of four or eight or ten characters might readily be expanded into twenty or fifty. So then we have in the early use of seals the ideas of official validity, of superstitious efficacy and of the possible multiplication of copies, beside the use of the seal, as given to every official appointed by the Emperor.

"Some one may ask what have superstitious observances to do with the origin of printing and of paper currency? To this the reply may be given that superstition makes a custom popular and often helps a good notion to spread rapidly. The Taoists were accustomed to cut seals of the wood of the jujube tree four inches square, or three-and-a-half of our inches, and circulated them among the people to check evil influences. They taught the people to believe that there were evil influences in the air always ready to affect them mischievously, and then they provided them with guardian charms to secure them from the harm which they themselves had taught them to fear. They are not alone in thus acting, for in other countries it has happened that superstition has been ingeniously made a source of pecuniary profit by not a few. The occasions when the use of seals as proof of genuineness were required were of course very numerous. It is mentioned for instance that generals had their orders cut on seals for rapid circulation among the troops under their command. In such a case in the third and fourth centuries the writing in camp orders would be white while the ground was black or red. All the seal cutting and the circulation of charms and of mirrors with lucky sentences and animal shapes engraven on them were in every case so much preparation for the success of paper currency when the time should come. Not only does the credit rich men possess contribute to that success, but also the invention of blank forms rapidly multiplied by printing. The blank form saves time in writing and it also makes the document more uniform, more easily tested and more readily accepted as valid when presented to a third person. The dynasty of Ch'in Shi-huang gave the use of seals to China and from that time forward the possession of an official seal became essential to each office. The Han dynasty simply followed the Ch'in dynasty rule. When this came to be the

case the seal impressed with vermilion was attached by regulation to every document issuing from each officer, metropolitan or rural.

"If then the Chinese in the Han dynasty had the common use of seals large and small, and if paper was introduced about A.D. 200 as we know, how long a time might be expected to elapse before the use of paper money, and the era of the printing of books? In fact, seven centuries passed before books were commonly printed, and eight centuries before paper currency was adopted systematically by the Government. The Chinese, intelligent as they certainly are, and lovers of every practical improvement as they plainly are, were not at all in a hurry to print books to save the expense of copying, or to issue Government paper money to save the expense of copper or silver. What the Chinese highly appreciate when adopted they are usually very slow to adopt. This is true of gunpowder, which they only began to use about the twelfth century, although they had fireworks in the sixth century. A small cause often retards the adoption of remarkable inventions. In this case it seems to have been the habit among workmen of cutting into the material of the seal instead of cutting the inscription in relief. When once the thought occurred to some one that relief cutting would leave a white ground with a red or a black inscription, the path would be open for the invention of blank forms first, and for the printing of books afterwards. What Chinese authors tell us is that seals in the Han dynasty and later left the characters white when impressions were taken from them, and further that in the Tang dynasty the characters in the impressions from seals became red. The meaning of this statement appears to be that the old seals were all or almost all cut in *intaglio* and that about the beginning of the Tang dynasty cameo cutting or cutting in relief became common. This casual remark of a Chinese author throws light on the fact that paper currency began in the Tang dynasty and at the same time the period of printing books was brought so much nearer because the artisans of that age began to engrave in relief. There was in fact Government paper money about A.D. 806 and there were printed books about A.D. 920."—*ibid.*, *p.* 265.

The History of Paper Currency.

"The first attempt at paper currency in China of which any record remains was in A.D. 806, when bills of exchange were called 'flying money.' Merchants in the capital could by an ordinance then first made receive Government bills in return for the merchants' copper money. On arrival at any provincial capital

they could receive from the provincial treasurer the amount stated on the bill. There was a return to this system, which was a sort of banking facility offered to the merchants by the Government, about the year A.D. 960. A bureau was instituted in Kai-feng-fu, then the capital, for the transaction of this business.

"In 1023 Szechuen was suffering from the iron cash coinage which the Government from scarcity of copper was forcing on the people there. The paper notes then put in circulation at Chêng-tu by the Government were meant as a relief. They were to be returned once in three years. The idea sprang up among the rich merchants and was accepted by the Government, and the merchants conducted the business. The limit of capital represented by the notes was 1,255,300 strings, a string being a thousand copper cash. In A.D. 1150 the Golden Tartars had just conquered North-China, and about this time they adopted a currency in paper because they found copper scarce. Copper, silver and gold have always been chiefly found in South China. A North-China kingdom finds it convenient to use paper so far as possible, to prevent its being dependent on a southern neighbour. From this time forward, during a century of the Golden Tartars and another century of the Mongol domination, strenuous efforts were made to maintain a paper currency. Colonel YULE, Dr. BUSHELL and others have printed fac-similes of the notes of these periods. They are found, for example, in YULE's *Marco Polo* and in the *Journal of the Peking Oriental Society* published this year. All the efforts of the Government did not secure the credit of the notes at par. On the contrary, they became depreciated to an extreme degree. This, however, did not prevent the Government of the Ming dynasty, which acquired the sovereignty in A.D. 1368, from continuing for a time paper currency which was finally abandoned as silver flowed into the country through the foreign trade which brought to the southern ports a portion of the products of Mexican and Peruvian mines. It was American silver that gave the death-blow to paper currency in China. The arrival of sufficient silver was the real relief which Chinese trade required. Notes were finally abolished about A.D. 1620. Thus the conquest made by silver over paper occupied about a century or a little more, from the commencement of the trade of the Spaniards and Portuguese with Canton."—*ibid.*, *p.* 292.

Gold in 1889.

"Gold has kept its price well in China during recent years. The constant demand from Europe to meet the needs

of the countries that have lately established a gold coinage has had its effect on the gold market in China. Germany began to absorb eighty million pounds sterling fourteen years ago. It was done in the following manner. There were in 1875 in circulation 640 million marks of small notes, equal in English currency to 32 millions sterling. They were replaced by notes of 100 marks or above 100 marks in value, that is, £5 notes and £10 notes, and by gold and small coins. Between the middle of 1875 and the end of that year notes had been exchanged for coin to the extent of £15,000,000. Paper gave place to coin in Europe just as in the Ming dynasty in China silver increased in quantity and the Government found that it would be better not to issue any more paper notes. The new love for gold in Europe has influenced the most distant money markets. Consequently Peking, Chefoo and Corea are now every year sending gold to Shanghai for transmission to Europe. They are sending all they can and as fast as they can get it ready. Take for instance the export of gold from Tientsin. The following figures appear in the Customs' Reports, and it must be remembered that it is Peking gold chiefly that is here entered :—

EXPORT OF GOLD FROM TIENTSIN.

1882	...	Tls. 574,414
1883	...	„ 610,022
1884	...	„ 112,238
1885	...	„ 1,781,337
1886	...	„ 1,875,976
1887	...	„ 1,706,864
1888	...	„ 1,398,264
1889 (six months)	...	„ 1,044,459

"The rich families in Peking are parting with their hoards of gold because of the good price at Shanghai. Silver is cheap and all the rich property-holders of China count their treasures in taels of silver. They are attracted by the gain which they can acquire by an increase in the number of taels of silver which is paid them at Shanghai for hoarded gold, since the price of silver went down. This table shews how steady on the whole the outflow now is year after year. It went on increasing till 1886. Then it declined a little. Now it is rising again. In Chinese life it is quite common for rich families to become poor. In such cases gold ornaments will be exchanged for silver. The thick needles round which women's hair is bound, their bracelets, rings, and other

ornaments, if of gold, will, when poverty comes in at the door, be exchanged for silver. Gold thus sacrificed may go far to pay a husband's debts. Men who are not poor will give their gold to make profit by exchange. In Peking there are likely to be many rich men who have acquired wealth in the provinces and who have for convenience carried it to Peking in the form of gold. From their hoards much of the present stream is probably supplied. They see a sufficient reason when they read in the Chinese newspapers that they can obtain perhaps Tls. 23.6 of silver for one tael of gold in the Shanghai market.

"The gold sent from Chefoo to Shanghai is gradually increasing in quantity as may be seen in the following table :—

EXPORT OF GOLD FROM CHEFOO.

	Value in Hai-kuan Taels.
1881	58,348
1882	68,448
1883	48,893
1884	47,457
1885	69,520
1886	164,648
1887	140,970
1888	233,000
1889 (six months)	66,260
	897,544

"The export rose until 1882. Then it declined during two years. In 1885 it rose again during three years. Now it is falling. The highest amount it has reached has been about the value of £60,000 sterling a year. Books say little about Shantung gold. In the Book of History, lead is the only metal found there, in the section known as the 'Tribute of Yu.' In those days, four thousand years ago, gold, silver and copper came from Southern China as tribute to the emperors, the last two coming from Southern China alone. The great source for receiving gold was, however, the tribes who inhabited Tartary. War with these tribes in the first and second centuries before Christ brought to China immense amounts of gold. History mentions gifts made to victorious soldiers at one time of more than 200,000 catties. Of course it was a very small catty which was in use then. This was after a battle in which 19,000 of the Hiung-nu were killed. The gold

would be taken from the captured tents and the armour of the slain warriors. All the gold then used as ornaments by Tartar men and women would naturally be brought from Siberia or the mountainous parts of Tartary.

"The gold of Corea partly is forwarded to China, but most of it goes to Japan. In both cases it is probably sooner or later sent to Europe to meet the present demand:—

EXPORT OF GOLD FROM COREA.

		Value in Dollars.
1885	To China	46,100
1886	„	218,743
1887	„	210,294
1888	„	348,564
1889 (six months)	... ...	115,014
		938,715
1885	To Japan	388,269
1886	„	911,745
1887	„	...1,177,975
1888	„	...1,025,401
1889 (six months)	... ...	339,448
		3,836,838

"There seems to be no probability of a rapid increase in the yield of Chefoo gold or that of Corea. The native apathy in regard to the existence of gold in various parts of Shantung promontory is noticed by Dr. WILLIAMSON in his *Journeys in North-China*. Yet there is a sufficient yield of the most precious of metals to warrant the expectation that after a time Shantung may produce gold in greater abundance. The legal prohibition to search for gold has led to the surface only being scratched. To dig beneath the surface is to deprive the land of its prosperity. This belief has influenced both the people and the Government. The consequence is that more is left for the men of coming ages. In Australia the abundance of gold does not diminish as the works become deeper, and it is expected that they may be continued for a depth of two thousand feet, and gold still be found. If this view is correct, China must have a good prospect of obtaining large

quantities of gold in future years, not only in Shantung but in many parts of the southern provinces and on the southern slopes of the Altai mountains in particular. The present drain of gold from Shanghai does not alarm the Chinese much, but it must later produce an effect on them. The following table shews the present condition of the export:—

EXPORT OF GOLD FROM SHANGHAI.

	Value in Haikuan Taels.
1886	... 1,746,248
1887	... 3,449,853
1888	... 2,018,899
1889 (six months)	... 862,875

"The maximum was as appears from these figures about eight hundred and thirty thousand pounds sterling in 1887. The amount of export is now declining. This is not because the demand in the west is less, but more probably because there is a limit to the quantity of gold which the holders are willing to convert into silver at the current price."—*ibid., p.* 437.

*Customs Duties at Newchwang.**

23rd September.—"The Viceroy Li submits a return of the duties received by the Foreign Customs at Newchwang during the quarter ending 30th September 1888. The accounts have been audited by the Commissioner of Customs and a *Wei-yuan* acting under the direction of the Taotai at the port, and the total collection for the period in question is shown to be Tls 110,155.2.2.9.4, of which a sum of Tls. 72,340.9.2.7.8.5 has been appropriated for the payment of troops and miscellaneous expenditure. The balance remaining over from the present and previous quarters is Tls. 74,511.7.0.6.9.3.6."—*ibid., p.* 445.

Silver in China.

"The silver used in China as a circulating medium in her commerce has been increasing, in quantity especially, for four hundred years, and most rapidly of all during the present

* Note the six places of decimals in the totals.

century. Each industrious Chinaman represents so much wealth by his labour, that is, so much silver, for silver has now for several centuries been the standard of money value in this country. The increase of population means an increase of wealth wherever there is scope for industry; and in localities where opportunity is wanting, it leads to emigration. At the beginning of the Ming dynasty, in the latter half of the fourteenth century, the public currency had fallen into a most unsatisfactory state through the Government not being able to maintain the credit of the paper notes then used. Yünnan was conquered, and it contained many silver mines, and these were worked to increase the quantity of silver then rapidly coming into use as a medium of exchange. We are told that in 1578 the Government received from Yünnan 13,764 taels in paper money, 944 piculs of grain and 5,769 strings of shells. Two hundred years later the amount received in hemp, cloth and silver amounted to 14,801 taels of this last metal. The strings of shells used as money had disappeared. The cumbersome grain tribute in heavy bags had become changed for silver. But hemp and cloth were still received by the Government tax-collector because they could be exchanged for silver, and the expense of conveyance of these articles was not very great. Yet after a few more decades this mode of paying taxes will again be exchanged for silver, which in a country like China has proved to be the most economical form of tribute. The Government in these circumstances began to prize silver very highly. It keeps its value as an article in great request for ornamental work. It is cheaper to convey than other kinds of tribute. It is acceptable in trade, and the merchant is far more willing to part with his goods for silver than for paper money. Hence the Government made efforts to obtain more of it. They set criminals to work in the mines of Yünnan. This was in 1460; and they do not seem to have allowed Chinese employers of labour to manage mining operations. They considered it good policy to keep the mines in their own hands, and they ordered the high officers to report fully on any failure in the working or diminution in the yield of metal. Then in 1463 the works were suddenly ordered to be stopped, probably because of earthquakes, for a few years later, in 1511, the Governor of Yünnan sent up a memorial advising that all the mines should be stopped, on account of fresh earthquakes; but they were opened again in 1514, notwithstanding other objections which were pressed at the time, such as the gathering of a rough-spirited population at the mines, and the neglect of agriculture in the province leading to want of food to supply the needs of immigrants. At this very time American silver began to enter the country through foreign trade at Canton and Amoy. More silver was thus introduced and a real need

supplied, for it enabled Government to abandon both the shell currency in the south-west and the paper currency everywhere, and the merchants were very glad to see the last of the Governments, (*sic*) and to have in their place this shining metal. Silver was now wanted by every one, to keep in store or use in buying as he pleased.

"The value of silver in copper cash has gone through great vicissitudes. It has been three thousand and it has been one thousand per tael. In A.D. 1696 a tael of silver was worth 1,750 cash, and it is now, A.D. 1889, worth 1,380 in the Shanghai market. In the reign of Yung Cheng, about A.D. 1730, thirty-six taels of silver were paid for a month's maintenance to twenty-one workmen at cash foundries in Yünnan. That is to say, one ounce and three-fourths of silver would then support an able-bodied workman for a month. In 1555 the casting of cash in Yünnan was commenced, on account of copper being produced there in abundance. The disuse of paper made a new supply, both of silver and of copper cash, a necessity, and from that time forward both metals have been needed; and when the growth of population is remembered they must still continue to be required in increasing quantity. Two centuries ago the workman could live for 100 cash a day. Now more is required, because prices have risen and every one who carries on his shoulder his baskets of market-produce from his little farm to the adjoining local centre of merchandise, expects more money for it than his grandfather did. The old currency needs to be modified to meet the new conditions. Copper cash are not enough for the uses of common life. Silver is required to do what the cash, through gradual sinking in value, cannot do. Two hundred cash are wanted to buy that amount of food and clothing for which in former times one hundred would have been enough. That is to say, the man who goes to market to buy must carry with him twice as much weight in copper as his great-grandfather did. It is more convenient in these circumstances to have small silver coins, and this is our convenience in the west, or small notes issued by native banks and properly stamped and inscribed may be used, as they still are in Peking.

"Yet small silver coins could not now in China take the place of copper cash. Copper must continue to rank in China as the most widely useful of all currencies, because of the disproportion in the expense of living in large cities and in country districts, and the wide differences in climate existing between the north and the south and between mountain and plain in so large a country as China. That coin is most adapted to China which has the most minute divisibility. A dollar which is now worth 3/3*d.* is divisible into a thousand separate coins composed of a mixture of copper and

zinc. It suits the prices of marketable articles and the incomes of the people to retain this sub-division in current coins. Even silver is circulated in very small lumps as well as in large ones, and the small hand steelyard used in weighing it is sub-divided into hundredths of an ounce. Such a steelyard is part of the kit of every traveller, as a check on the weighing of the money-shops."—*ibid.*, *p.* 534.

Copper Cash.

"The older books written by Chinese archæologists on the history of *cash* contain at the beginning examples of money professing to come down from the primitive ages. Some of them belong to Fuhi and others to Shennung. The foreign collector of *cash* ought to know if he has such coins in his cabinet that this immense antiquity is given to them by mediæval mythmakers. The best modern numismatists do not recognise such a claim. Yet they appear in a book of so much authority as *Hsi Ch'ing Ku Chien*, compiled by an imperial commission and published A.D. 1749. Seven hundred years ago, when the capital was at Hangchow, the first complete book on Chinese coins was published. Since that time archæologists have been numerous and a persistent effort has been made to collect newly-found coins. Builders of houses and walls, countrymen at work in the fields, restorers of bridges, and diggers of canals in any part of China, from time to time meet with old cash which are added to the current coins in circulation or are sold or presented to local numismatists. There never has been a law against the use of old cash mixed with the new, nor has there been any official effort made to collect them, and in consequence it is an everyday occurrence to meet with coins made a thousand years ago. The traveller in China does not know, unless he examines carefully, how many relics of distant centuries constantly pass through his hands or through those of his 'faithful Achates.'

"The chief interest attaches to coins of a time anterior to the bookburning—B.C. 211. That was the period when literature and the arts and sciences took a mighty spring upward. It was the time when great books were written, destined to be ever after preserved by a grateful nation as those precious heirlooms which a mad conqueror in his enmity against the sages failed to destroy. The coins of that time are indicators of progress in commerce and the arts in various localities of Northern China. We may consider it as proved that bronze casting and the manufacture of iron implements as well as goldsmith's and silversmith's work were

well advanced long before Confucius. The history known as *Kwo yü* shews that this was the case in regard to work in bronze. But cash were cast before B.C. 524, for it is recorded in that year that larger coins than had been before made were then cast in Honan on the banks of the Yellow River by order of the Chow emperor. From the collections of the numismatists it appears that a square hole in the middle and a legend of two characters were in use as early as this in Chinese coins. *Hwo* was the word for 'money,' meaning that which is changed (*hua*) for something else. *Pao*, 'valuable,' was prefixed to it. But coins must have existed before this, and in the Han dynasty it was fully believed that Kiang Tai-kung, the chief minister of Wên Wang in the 12th century before our era, introduced them in Shensi when in office and afterwards in Shantung when he retired to his principality. His special repute is for advancing commerce, and it was under his fostering care that the salt trade of Northern Shantung came to exercise a decided influence on the development of internal commerce in ancient China. The history of Pankoo ascribes to Kiang Tai-kung the origin of round coins as distinguished from knives and pieces of cloth. We may adopt this view and may connect it with improvements in metallurgy and new acquisitions of foreign knowledge at the beginning of the Chou dynasty. If Kiang Tai-kung is rightly credited with the origination of round cash, the period of that improvement is then fixed to the 12th century before our era. Yet it may be that he is credited with it because he promoted trade and was possessed of political sagacity shewn in other useful measures. If at any time between the eleventh and fifth centuries before our era the coins called *cash* were introduced by any statesman in Northern Shantung, whose name did not shine out with lustre in history, it was very likely that the improvement would be attributed to Kiang Tai-kung. It would be by a suggestion from the strings of sea-shells then used as money that the idea of a hole for stringing the new copper coins would be most probably derived. Further it would be before the time of Kwan Chung, the great administrative statesman of the seventh century, for in the book purporting to be written by Kwan Chung, there are several references to the coining of cash, but the compiler does not attribute the invention to Kwan Chung himself. Perhaps in these circumstances it may be best to assign the first round metal coinage to about the ninth century, the age of Siuen Wang, when the country was prosperous and wars were conducted successfully. But this may be too late, and there is really no very strong reason based in the old literature of China why to Kiang Tai-kung the honour of introducing a copper currency should not be assigned. The remarkable old work *Chowli*, in describing the

administration through all its departments mentions among them a cash office for the manufacture and issue of cash. But this book was probably small at first, and its bulk increased from one period to another, and this particular statement may have been inserted, we know not when, by some unknown official. We must wait for more discoveries from underground. The railway from Peking to Hankow will in Chihli and Honan proceed through a country occupied by a people who for four thousand years at least have ploughed and sown the land, carried the produce to market, exchanged it for something necessary for use or ornament, and returned to their homes with their new possessions. The railway works may anywhere in that region, 'rich with the spoils of time,' yield interesting treasures which will throw light on the past. Should there be a line made from the city of Confucius, or from Taishan to the north of it, to Tientsin, it would bisect the very territory which belonged as a feudal fief to the traditional founder of the copper currency of China. As about many other ancient matters, so on the question of the origin of this currency, our successors will know with certainty what now cannot be determined.—*ibid.*, *p.* 745.

CORRESPONDENCE.

THE PRESERVATION OF THE NESTORIAN TABLET AND OTHER ANCIENT MONUMENTS AT SI-AN-FU.

The following correspondence on this subject has passed between the President of the China Branch of the Royal Asiatic Society and the *doyen* of the Diplomatic Body at Peking :—

China Branch of the Royal Asiatic Society,
Shanghai, 24*th February* 1890.

Sir,

In accordance with a resolution lately passed at a meeting of the Council of the China Branch of the Royal Asiatic Society, I have the honour to bring to Your Excellency's notice the condition of the interesting monument at Si-an-fu known as the Nestorian Tablet. Your Excellency will see from the accompanying photograph that it is now entirely exposed to the weather. When it was seen some years ago by the Rev. A. Williamson, who has handed me this photograph (taken by a recent visitor) for transmission to Your Excellency, it was supported by a brick wall. This wall has now been removed, and the monument, being quite unprotected, is likely to suffer rapid deterioration. There are several other tablets in its vicinity of great historical interest to China, and it is thought that the high officials at Peking might possibly be induced, on Your Excellency's representation, to take steps for the protection of all these monuments. On behalf of the Asiatic Society, I venture, therefore, to beg that Your Excellency will be good enough to mention the matter in the proper quarter, with a view to the

conservation of these monuments, and especially of the Nestorian Tablet, which has so long attracted the attention of all interested in the history of the ancient relations between China and Western countries.

I have, etc.,
(Signed) P. J. HUGHES,
President of the China Branch of the Royal Asiatic Society.

To H.E. Herr M. von Brandt,
Minister of the German Empire,
Doyen of the Diplomatic Body,
Peking.

Gesandtschaft des Deutschen Reichs zu Peking,
Peking, 15*th March*, 1890.

Sir,

I have the honour to acknowledge the receipt of your letter dated 24th February, referring to the Nestorian Tablet at Si-an-fu, and to inform you, in reply, that my colleagues and myself have had great pleasure in forwarding the request of the China Branch of the Royal Asiatic Society for the preservation of this interesting relic of ancient times and Christianity to the Tsungli Yamên, and in recommending it most warmly to the attention of His Highness Prince Ch'ing and their Excellencies the Ministers.

I have, etc.,
(Signed) M. von BRANDT,
Minister of the German Empire.

P. J. Hughes, Esq.,
President of the China Branch of the Royal Asiatic Society,
Shanghai.

GESANDTSCHAFT DES DEUTSCHEN REICHS ZU PEKING,
PEKING, *March 25th*, 1890.

SIR,

Referring to my letter of 15th inst., I have the honour to bring to your knowledge that the Tsung-li Yamên have informed my colleagues and myself that they have written to the provincial authorities of Shensi to see that the local authorities take the necessary steps for the protection and preservation of the Nestorian Tablet at Sianfu.

My colleagues and myself would feel very much obliged if the members of the learned Society whose President you are would let us have from time to time such information as they may be able to get as to the efficacy of the measures adopted by the local authorities.

I have, etc.,
(Signed) M. VON BRANDT.

P. J. HUGHES, Esquire,
President of the China Branch of the
Royal Asiatic Society,
SHANGHAI.

CHINA BRANCH OF THE ROYAL ASIATIC SOCIETY,
SHANGHAI, *2nd April*, 1890.

SIR,

I have the honour to acknowledge the receipt of your Excellency's letters of 15th and 25th March on the subject of the protection and preservation of the Nestorian Tablet.

The members of our Society, to whom I shall take an early opportunity of reading your letters, will be much gratified to learn

that the provincial authorities of Shensi have been instructed by the Tsung-li Yamên to take the necessary steps for the protection of the Tablet.

On behalf of the Society I beg your Excellency and your colleagues to accept my sincere thanks for the interest which you have shown and the trouble you have taken in this matter.

I have, etc.,
(Signed) P. J. HUGHES,
President.

To His Excellency
Herr M. von Brandt,
Minister of the German Empire,
Doyen of the Diplomatic Body,
Peking.

LITERARY NOTE.

We hear that Prof. LEGGE of Oxford is engaged in preparing a new English version of the Chinese philosopher Chuang-tzŭ. In order to be quite independent in his renderings, the learned translator proposes to take no cognizance of Mr. GILES' translation of the same work.

It will be interesting to observe to what extent the two authorities will agree or disagree.

PREHISTORIC CHINA.

By ERNST FABER, Dr. Theol.

INTRODUCTION.

Prehistoric China! Prehistoric means "before history." Not that we should suppose China had ever been without a history. Life, and especially human life, means history. Wherever there is life there are changes of various kinds, and there is development of some kind. We have, therefore, to take the word "history" in a narrower sense, as "Writing on History." Prehistoric China, then, means China as it existed before *reliable* historical records were written about its state and the events of life within its boundaries.

Chinese history begins with the Annals of the feudal state of Lu, 722 B.C., published by Confucius 240 years later. Though even this work has suffered somewhat by the doctrinal tenets of Confucius, still we find in it a statement of facts and a natural order of events. There are also other records of that period preserved by which many statements of the Confucian text can be verified and others rectified. Of the time before the eighth century B.C. we find no such trustworthy historical records in China. Although there are still a number of documents in existence supposed to belong to earlier periods, we have no unquestionable evidence of their authenticity, but strong arguments to the contrary. The safest position that can be taken under such circumstances is to regard all documents of such earlier literature of China as productions of the time of Confucius and succeeding ages. Many of those works, are, we admit, based on earlier traditions and, it may be, even on earlier written memoranda, but facts

and legends, truth and imagination, original statements and later enlargements are deplorably mixed together. We need a trustworthy guide to lead us through such labyrinths. The same is true of other traditions and folk-lore preserved by later writers. There are also ancient monuments and other relics of antiquity found in China, all of which should be examined and compared, but we have no access to them. No Chinese museum is at our disposal where we could find antiquities of all ages, well arranged for comparative study. Thus it seems almost hopeless to arrive at anything reliable in regard to the earliest history of Chinese life.

There is, however, fortunately enough, still a rich mine of solid historical metal unworked at our feet—I mean the Chinese written characters. Much has been written on Chinese Writing, but the written characters have not yet been used as guides into the remotest antiquity of China. This is the purpose of the present paper. Every written character, taken in its isolated value, without reference to the composition and meaning of sentences, is a *historical monument*. But some characters are of an earlier, some of a later, date. By applying a truly scientific method we are enabled to follow the stream of Chinese writing upward to its source, from the myriads of written characters of the present day to its one hundred elementary characters of about 4,000 years ago. These 100 elementary characters, each of which is a sketch of an object out of the scenery of Chinese life 4,000 years ago, will reveal to us Prehistoric China in an astonishing comprehensiveness of detail.

In opening thus a new path of research it can, of course, not be expected that every step should be smooth at once as on well-trodden ground. But the path is leading to a summit, and the view from there over many important questions relating to Chinese antiquity will more than repay

the outlay of time and labour. The results will be decisive in some respects. May qualified scholars improve on the imperfections of this rough-hewn attempt.

For an easier understanding of the paper with all its detailed arguments, a short statement of its method and a brief summary of its results will be welcomed by the student. The attribute of "truly scientific" is claimed for the method. *Facts* and *evidence* are alone the materials it works with. The facts are the myriads of Chinese written characters of the present day. Most of these characters are composite forms. By analysis we reduce them to their component parts of simple characters, *i.e.*, into forms still recognizable as characters and not further reducible. Thus we arrive at about 100 Elementary Characters. I say *about* 100, without giving a definite number, because the ancient forms of some characters are undecipherable. A few examples may suffice for illustration:—蝌 from the classifier 虫 and the primitive 科 a compound of 禾 and 斗. Thus we find the three elementary characters 虫, 禾 and 斗 as component parts of the character 蝌. The meaning of each component part is, beginning at the left side, "worm," "grain," "peck." As, however, the two latter characters form a primitive, and as such only indicate the pronunciation, which is in this case *k'o*, we arrive at the meaning—a worm called *k'o*, or a tadpole.

葆 is composed of 艹 and 保＝亻 or 人, 口 and 木, altogether of four elementary characters.

廐 of 木 and 厩＝广, 日, 月, 犬, five elementary characters.

歡 of 欠 and 雚＝十, 口, 隹, four elementary characters, the last being the figure of a bird in ancient writing.

糜 of 火 and 麋＝广, 木, 米, (the latter probably derived from 木); thus we get either three or four elementary characters.

眞 of 目 and 𠂤 = 匕, 乚, 八, four elementary characters.

衝 of 行 (which is a composite classifier) and 罿 = 目, 隹, three elementary characters.

贏 of 女 and 𧰨 = 亡, 口, 月, 凡, five elementary characters.

夷 of 大 and 弓, two elementary characters.

Examples of characters not decipherable are 也 and 帝.

Analysis of the modern Chinese written characters leads to the following facts :—

(1.)—The whole multitude of Chinese characters can be divided into two natural groups—*phonetic* and *non-phonetic ;*

(2.)—All phonetic characters are composed of a classifier and one other character, simple or compound, called primitive ;

(3.)—The non-phonetic characters are also either simple or compound ;

(4.)—All characters are reducible to about 100 simple characters ;

(5.)—Most of these simple, or elementary, characters are contained in the list of 214 classifiers ;

(6.)—Every elementary character is a rude outline of an object ;

(7.)—The form of the elementary character contains no indication of its pronunciation ;

(8.)—We meet with elementary characters modified by turning or by simple additions which are not characters ;

(9.)—We find two or more elementary characters combined into a new character without indication of pronunciation ;

(10.)—We find simple, or more frequently compound, characters used to indicate pronunciation ;

The facts formulated in these ten paragraphs are beyond dispute. From them we draw two conclusions with mathematical exactness :—

1.—*Elementary characters must have been in existence before compound ones ;*

2.—*Compound characters existed before they were used to indicate sound*, (*i.e.*, as primitives).

By these two conclusions three periods of writing are established in logical order :—

1.—Elementary characters, or Period of Pictorial Writing ;

2.—Their modifications and combinations, or Period of Ideographic Writing ;

3.—Their use to indicate pronunciation, or Period of Phonetic Writing.

History of Chinese Writing.

The facts are taken from Pan Ku's *History of the Han Dynasty* (前漢書) and from the writings of Tuan Yü-ts'ai (段玉裁), a famous writer under the present dynasty (*see* 皇清經解, Books 567–666). The *Imperial Encyclopædia*, (古今圖書) has been compared, but to no advantage. Other works will be mentioned in the course of the essay.

The earliest attempt at making records was by knotted cords. (Notice the striking similarity in the English word record). The invention of these Quipos is attributed to Sui Jen (燧人), by other traditions to Shen Nung (神農). Both of them are legendary Beings. The early use of quipos is, however, a fact, as they can still be seen among the Tu-fan and Si-fan in Tibet and among the Miao Tsz in Kweichow Province. "When making a contract they bind cords on pieces of wood, the number of knots showing the number in the agreement."—(Wuttke, *Geschichte der Schrift*, p. 243.)

Fuh Hi ordered Flying-dragon (飛龍氏) to draw the eight trigrams. In the *I-king* (*see* Dr. Legge's translation, App. III, Chap. ii, 11) it is said:—"Anciently, when Pao-hi (=Fuh Hi) had come to the rule of all under heaven, looking up he contemplated the brilliant forms exhibited in the sky, and looking down he surveyed the patterns shown on the earth. He contemplated the ornamental appearances of birds and beasts and the [different] suitabilities of the soil. Near at hand, in his own person, he found things for consideration, and the same at a distance, in things in general.

On this he devised the eight trigrams, to show fully the attributes of the spirit-like and intelligent [operations working secretly], and to classify the qualities of the myriads of things."

This passage exhibits fine imagery and beautiful style, but goes far beyond any possible meaning of the eight trigrams. If it could be applied to the elementary characters of Chinese writing, which will be treated in the following pages, we should praise this passage as an excellent description of them. As it stands, it is nothing more nor less than an example of first-rate composition from the school of Confucius.

Hwang Ti (2700 B.C.) ordered Ts'ang Hieh (倉頡) to observe the course of stars and note down the traces of dragons and birds. Thus were formed the tadpole characters (蝌蚪). It is also stated that another minister of the same emperor, the court-recorder Tsü Sung (沮誦), (MAYERS, *Chinese Reader's Manual*, 747), assisted Ts'ang Hieh. Certain it is, that the two together are worshipped as the "Gods of Writing" (字神). That Ts'ang is commonly mentioned alone is explained as "brevity of style" (文略也). As Ts'ang is described as having had four eyes, we have to take all tradition about him as myth.

From Hwang Ti we have to pass over at least 1,500 years without finding another notice on writing. After the establishment of the Chow dynasty, (commentators say during the reign of king Ching, 1115–1079 B.C., but the first commentator lived 1,200 years later) some officers, called Pao Shi (保氏), used the *Six Scripts* (六書) to teach their royal pupils. (See *Chow Li* 地官, xiii, 27, of the small Imperial edition). This statement may be true, though we regard the *Chow Li* as a later compilation (about 200 B.C.) of everything known about official duties, to their latest development during the Chow dynasty. The idea that Duke Chow should have written all those details at the very commencement of

the dynasty is too absurd for refutation. The great prominence given to categories, or short formulas, into which all theoretical as well as technical knowledge is reduced, points to repeated teaching by masters of the art. A few such categories may have become formulated in remoter antiquity, but the *Chow Li* shows such a remarkable perfection in this line, that it can only have been the result of those great schools of Taoism and Confucianism which flourished from the sixth century B.C. to the close of the Chow period.

The text of the *Chow Li* says nothing of the contents of the *Six Scripts*. In the commentaries we find Cheng K'ang-sheng's (A.D 127–200) description :—first, figures ; second, ideas; third, inversions; fourth, relations; fifth, of metaphorical meaning ; sixth, phonetic characters. This appears to be a record of ancient tradition. The historian Pan Ku gives the six forms in another order, as : first, 象形 ; second, 象事 ; third, 象意 ; fourth, 象聲 ; fifth, 轉注 ; and sixth, 借假. Though Pan Ku lived earlier than Cheng K'ang-cheng, his statement must be of a later origin. We can easily discover the reason why the order was altered,—merely to put together all the 象, pictures of forms, pictures of affairs, pictures of ideas, pictures of sounds ; these four categories exhausted whatever the author considered expressible by pictures. It is a theoretical arrangement, and even as such not quite adequate, as the fifth group contains figures of the first simply turned around, pictures of changes. We see, however, from these different statements that the forms of the written characters were an object of study in China a few centuries before the beginning of the Christian era. Taking everything into consideration, we have to place the *Six Scripts* AFTER the invention of the Great Seal characters. The Pao-shis of the Chow dynasty were probably the first teachers of Chinese writing. They brought the whole number of characters, for their own and their pupils' convenience sake, into six groups.

This was the first attempt at a systematical arrangement of all known characters, and an improvement on Chow's work on the Great Seal characters. These six groups were well adapted to the characters then in existence, as the greater part were elementary or ideographic, only a few being phonetic. But these phonetic characters multiplied so much during the classical period, about 550–300 B.C., that in the revival of letters during the Han time the old system of six groups, which had already fallen into disuse, was found impracticable, and a new method had to be adopted. No work on the *Six Scripts* was published till some centuries after the *Shwoh Wen*. This *Shwoh Wen* brought the new method of arrangement by Classifiers to light, which gave it the most decisive success. It is an artificial system compared with the natural system of the *Six Scripts*. But the *Six Scripts* were practicable only for a small number of characters. The very existence of its arrangement is a proof that the number of characters was limited to some hundreds in one class, most probably not much exceeding one thousand as sum total.

In Pan Ku's Catalogue of the Han Library, twelve works dealing with the subject of Written Characters (小學) are mentioned, the first of which is that by the historiographer Chow (太史籀). He lived under the Emperor Suen, 827–782 B.C., and was the inventor of the Great Seal characters (大篆). He wrote fifteen slips called "Chow's Book;" six of them were lost in the Kien Wu time, A.D. 25–55, and, consequently, nine were then still in existence. The total number of Chow's Great Seal characters may have been about one thousand. The proof of this calculation will be seen below. During the time of the Contending States, when China was divided into seven quasi-independent kingdoms, every one of them had its own agricultural method, its own width of carriage-wheels, its own criminal law, its own fashion of dress, its *own language* and *its own writing*.

After the Emperor of Ts'in, Shi Hwang, had united the states into one absolute monarchy, his prime minister Li Sze (李斯), (MAYERS, 368), treated with scorn any writing which did not agree with the letters (文) of Ts'in. He published a book on the subject (227 B.C.) Two other scholars, Chao Kao (趙高) and Hu-wu King (胡毋敬) also wrote independently. A village teacher (officer), 閭里書師, of the Han dynasty (probably between 200–150 B.C.) united these three works into one, with the title 蒼頡一篇. He put sixty characters into one chapter and obtained 55 chapters, which gives a total of 3,300 different characters. These are the Small Seal characters (小篆), and are meant whenever *Chuen shu* are quoted by the *Shwoh Wen*. The Great Seal characters were from that time commonly quoted as "Old Style" (古文).

The scholar Ch'eng Miao (程邈), (MAYERS, 110), during ten years' imprisonment, improved on the Great Seal characters in another way, and produced the form called 隸 or 隸書 (Li shu), (200 B.C.) Yü-ts'ai does not mention Ch'eng, but says that this form of characters was invented by officers of prisons who had much writing to do. It became official business style. Yang Hung (楊雄), (MAYERS, 883), republished the village-teacher's work (A.D. 1), and added 34 chapters, *i.e.*, 2,040 new characters. His work, entitled *Huen-tswan* (訓纂), contained altogether 5,340 different characters in 89 chapters. Not one character was repeated (一無重複也).

Kia Fang (賈魴) added to Yang Hung's work 34 chapters, including 13 chapters written by Pan Ku (班固). Thus his work contained in all 7,380 different characters, in 123 chapters. None of the above-mentioned works have been preserved. Hü Shen (許愼), however, digested all works that existed in his time, and finished his great *Shwoh Wen* (說文) in the year 100 A.D. It contains 9,353

different characters and 133,441 characters for explanation. To the original number of different characters the author afterwards added 重, 1,163, including 396 ancient forms, 145 forms from Chow and 622 doubtful forms (*see* 說文管見). As the work had suffered more or less in the course of time, Ta Tsü (大徐), (A.D. 986) revised it. All modern editions follow Tsü's text. It contains 9,431 original characters, *i.e.*, 78 more than Hü's, and 1,279 additional characters, *i.e.*, 116 more than Hü's. The explanatory characters, however, are 10,742 less than Hü's.

Hü in his work explains first the sense (義) of each character; secondly, its form (形); and, lastly, its pronunciation (音). The *Shwoh Wen* has remained a standard work among the Chinese. As it contains not only a repository of the ancient form of so many characters, but also a summary of the current meanings attached to them about 2,000 years ago, its value among Chinese scholars is even on the increase, especially among the Han school of Confucianists.

The Confucianists are, and have been during 600 years, divided into two contending parties—the Sung school, with Chu-fu-tsz as head, which is the dominant party, with Imperial sanction for the State examinations, and the Han school, which attempts a grammatico-historical understanding of the Classics. The controversy is still going on, not without heat and bitterness. Several new editions of the *Shwoh Wen* have appeared during the last few years, and a number of critical essays on its contents have been published separately. The introduction of Classifiers was of the greatest benefit to Chinese students. Though Hü Shen is not mentioned as their inventor, his *Shwoh Wen* is the first work known of that makes use of them. After the invention of paper and of the hair-pencil (about 300 A.D.) the elegant forms of writing, 楷書 and 行書, came into use, and after the invention of cutting blocks and printing from them (about 10th century A.D.), the present form used in printing, called Sung pan (宋板), first made its appearance.

Several kinds of fanciful characters were already known to Pan Ku. In the Han Catalogue he mentions a work (八體六技). The commentary explains the 8 *t'i* as (1) Great Seal, (2) Small Seal, (3) Puzzle (刻符), (4) Animal style (蟲書), (5) for Stamps (摹書), (6) Court style (署書), (7) Spear style (殳書), (8) Business style (隸書). Nothing is said of the *six chi*. The numbers 3, 4, 5 and 7 were fancy-styles, and should serve as a warning against the supposition that inscriptions showing characters of uncommon forms should be considered as very ancient. Many varieties of the Seal characters are brought together in a recent Shanghai publication (孫鳳居先生百體篆書千字文).

The number of written characters had already increased to nearly 25,000 during the Sung dynasty. A further increase is known from K'ang Hi's Dictionary, which contains about 45,000. A list of dates and numbers will be interesting, and cannot but corroborate my conclusions respecting Chinese writing in the beginning of the Chow dynasty :—

Authority.	Period.	Number of different characters.	
—	—	—	
	B.C. 2000?	100?	Beginning of elementary characters.
	„ 1200	500?	Beginning of ideographic characters.
Chow	„ 800	1,000?	Beginning of phonetic characters.
Village Scholar	„ 200	3,300	(Increase of 2,300 characters in 600 years).
Shwoh Wen	A.D. 100	9,353	(Increase of 6,053 characters in 300 years). Beginning of the use of classifiers.
Ching Ts'iao	„ 1150	24,235	(Increase of 14,882 characters in 1,050 years).
K'ang Hi	„ 1720	44,449	(Increase of 20,214 characters in 570 years).

This table shows us an increase of 34,000 characters in the course of 1,600 years, or about 2,000 characters for every century. But from the publication of the *Shwoh Wen* back to the historiographer Chow there are nine centuries, and these include the classical period of Chinese literature, and its revival during the Han dynasty, times of the highest mental activity and productiveness. A period of 900 years is certainly quite sufficient to account for the formation of about 8,000 different characters. [Compare the chapter "The Formation of Chinese Phonetic Characters, a Never-Finished Process," given a few pages farther on].

Conclusions from the Historical Statements.

In looking over this short sketch of the History of Chinese Writing, we notice at once that every item belonging to the time before the beginning of the Chow dynasty is mythical. Attempts may have been made to record important events in one way or another, as by quipos, trigrams, figures, etc. This was, however, not writing in the sense of expressing and fixing thought, but served merely to assist the memory by some incontrovertible marks. As soon as definite reasoning had to be expressed in writing, figures were found insufficient, and speech itself, *i.e.*, the expression of thought in sounds, had to be represented. Sound is to man the medium between his mind and external form. The origin of writing, in the proper sense of the word, is, consequently, the introduction of the phonetic element into some ancient forms of figure-representations.

In combining the evidently reliable statements of ancient Chinese authorities on the invention of the Great Seal characters, about 800 B.C., on the *Six Scripts*, no matter whether we place them before or after the Great Seal characters, though the latter is more probable, and on the small number of written characters at the revival of classical learning during the Han dynasty, 300 years after the revision of the Classics by Confucius, we come to the inevitable conclusion, that the beginning of Phonetic Writing in China must fall within the period of the Chow dynasty, *i.e.*, some time after the year 1200 B.C. It is possible that Chow, the inventor of the Great Seal characters, is the inventor of phonetic writing in Chinese, but it is also possible that he merely brought into general acceptance, through his new form of written characters, what had been of spontaneous growth before his time. There can be little doubt, that it was Chow who commenced Writing, in its proper sense, in China. Chow's fifteen slips are probably the First Book written in Chinese. But this does not exclude the existence of memoranda of various kinds. Even Confucius' edition of the *Annals of Lu* resembles old memoranda. This is a conclusion of very serious import. All monuments of literature, including some very famous portions of the Sacred Books of China, said to be older than the Chow dynasty, are thus pronounced to be later productions. It would have been impossible to compose those documents with characters consisting of figures of objects and ideographic combinations. As all the literary remnants of Chinese antiquity show a predominence of phonetic characters, none can be older than the Chow dynasty; they are, most likely, later than Chow's, (8th century B.C.) A few documents may, however, contain some more ancient matter in a revised form.

There may have been other dynasties before the Chow, such as the Hia and Shang, but their government can have been neither extensive nor powerful. Meagre lists of the names of their kings are perhaps the only genuine records of their times. Any detailed stories such as of Yao, Shun, and Ching Thang, are legends which grew into shape a few centuries before Confucius. Not even the *Book of Odes* contains an allusion to Yao and Shun.

Writing cannot have amounted to much even in the first centuries of the Chow dynasty, till Chow invented the Great Seal characters, about 800 B.C. Of what shape the characters were before that time I have tried in vain to find out from all available Chinese sources. What the Chinese maintain to be the most ancient inscriptions show Seal characters, some of them rather fanciful, others more or less modified, but nevertheless *seal* characters of very uncertain date, it may be a few centuries B.C. or even many centuries A.D. Some other evidence is required to determine their age. Very remarkable is the fact, that the reliable history of China has its beginning with the invention of the Great Seal characters. As the reliability of ancient history is everywhere dependent on the way of its transmission, we are certainly justified in combining these two events. Chinese history became accurate, because Chow's invention enabled the historiographers to give their records a higher finish and to mention also many interesting details which it was before impossible to describe for want of a sufficient number of written characters.

The number of written Chinese characters cannot even then have been more than about 1,000, for the first compilation of written characters at the beginning of the Han dynasty, about 600 years later, contained only 3,300 different characters as the sum of three different works based on Chow's. Chow had, however, started the phonetic principle and had

by it shown the proper method for further development. Thus the different schools of Taoism [compare "The Historical Characteristics of Taoism," in *China Review*, Vol. xiii.] and Confucius with his school had no difficulties in shaping new characters to suit their literary wants. The five ancient Classics, even in their present form, contain not more than 3,235 different characters under 160 classifiers. We have, however, to remember, that the Classics were revised by Confucius and underwent other changes after their destruction in the fire of Ts'in, before they received their present shape. Ancient quotations in the writings of the philosophers of the Chow period differ considerably, and the readings of those in the *Shwoh Wen* are perplexing. All the nine Classics, *i.e.*, the Four Books added to the five above-mentioned older Classics, contain now 4,601 different characters. These facts will convince the most scrupulous scholar, that our estimate of the number of Chow's Great Seal characters, published 300 years before Confucius' revision of the Classics, must be very near the truth. There was in existence only about one fourth of the Classics at the time, and this in a simpler form.

The Formation of Chinese Phonetic Characters a Never-Finished Process.

When phonetic writing was adopted in China, the old figures were not given up, but they became inevitably somewhat modified and adapted to the new method. Though in each character two elements—the classifier and the phonetic—had soon to be distinguished, yet Chinese scholars never showed so much scientific sense as to bring any of the two kinds into a systematic form, and thus achieve the greatest results by the simplest

means. They never made any attempt to reduce the phonetics to an alphabet, in spite of their acquaintance with the alphabetic writings of India. Not even was the pronunciation of words fixed and attached to a definite set of characters,—about 500 would have sufficed,—and simple figures would have best answered the purpose of writing. But the *Shwoh Wen* contains already 883 phonetic elements, or primitives, and K'ang Hi's Dictionary 4,081, many of them being very complicated characters. The classifiers are as bad, if not worse, in their scientific value. Even the 214 of K'ang Hi's might with advantage be reduced to 150 or 100, and some of them better chosen. They should have their place invariably on the left side, or above, according to the nature of the character, and not anywhere according to fancy. We see, that after the Chinese had gained the phonetic principle, they allowed it to grow wild, just as chance might shape it. One who is able to understand the simple and beautiful idea underlying the Chinese mode of writing cannot but feel astonished that the Chinese never should have been able fully to grasp it. Attempts have, however, been made in the *Six Scripts*. Since the first mention of such a digest in the *Chow Li* (see p. 147), between 1100 and 200 B.C., several editions of varying merit followed up to about 2,000 years later. Such dates are instructive in other respects. The best known publication on the *Six Scripts* is the *Luh Shu Kwu* (六書故), 13th century A.D. Its author, Tai T'ung (戴侗) deserves great credit for his valuable researches. He came near to our idea of Elementary Characters in his 188 *Parent Forms*, 45 doubtful and 245 Derivatives (included in our ideographic characters), in all 479 graphic bases. [Comp. *The Six Scripts*, by L. C. Hopkins]. Very handy for finding all known ancient forms of any Chinese character is the work 六書分類, in 12 vols., published during the K'ang Hi period. It is arranged according to the common 214 classifiers. "Six Scripts," as already shown, means

six classes of written characters. Two different arrangements have already been mentioned. In MAYERS' *Reader's Manual*, p. 326, a third may be found, taken from the 讀書記—a work published in 1707. A fourth, though of an earlier date than the latter, is contained in the famous History, or rather Essays on Historical Subjects, 通志, by Cheng Ts'iao (鄭樵), 1108-1162 A.D. The statistics given by Cheng Ts'iao are of some interest, showing the great increase of characters, especially of the phonetic class, from the Han to the Sung period. The sum total of all characters known at his time he gives as 24,235. Of these, nearly 22,000, or nine-tenths, were phonetic, and all five other classes contained together only 2,425, or one-tenth of the whole. All the characters in K'ang Hi's Dictionary, exclusive of duplicate forms, amount to 41,000; the percentage of phonetic and ideographic characters is unknown to me. Dr. MARSHMAN, however, gives the number of phonetic elements, or primitives, as 4,081. As he calculates the average derivatives as less than 10, we get a total sum of about 39,000 to 40,000 phonetic characters. The greatest number of derivatives from one primitive is 74, but many primitives are used in only one combination (*see* Dr. WILLIAMS' Dictionary, p. lvii).

Cheng Ts'iao's first class contains 608 characters, which are figures, though not all of objects, as symbols of numbers etc. are included, and not all of them simple figures, for many are composite forms. The second class contains 107 characters, which are indicative of a relation or action, as 上, above, 下, below. The third class, containing 740 characters, consists of composite forms, which indicate ideas, as sun and moon combined, meaning "brightness," or two trees, indicating "a forest." The fourth class of 372 characters are inverted or otherwise modified forms of the first class. The fifth class contains 21,810 phonetic characters. The sixth class of 598 characters, with borrowed meaning, is outside of the principle

of form, and, therefore, rather out of place in this classification. We have seen that in 1,000 years from the publication of the *Shwoh Wen* to Cheng's History, about 12,000 phonetic characters were produced. In the following 600 years, from Cheng to K'ang Hi, about 18,000 were added, and from K'ang Hi to the present year we may guess at 8,000 to 10,000 more. Now the legions of scientific book translators are exhausting all Chinese and Western resources to swell the number of phonetic characters, if not to a million certainly to beyond a hundred thousand, before the last bell of this century shall have chimed. Then the end will come! if not of the world, certainly of such extravagant industry.

Chinese Phonetic Writing: its Results for Good and Evil.

We have already stated, that with the invention of phonetic writing a new period began in China, not only in writing, but also in history. The Chinese mind loosened somewhat, though it could not altogether shake off, the narrow fetters of pictorial writing, and began to soar on its wings. The great classical period, of which Confucius is the centre, was the immediate result. The ancient memoranda were collected and revised, commentating began, standard works on moral philosophy were written, digests appeared of teachings on political economy, on the military arts, on the theory and practice of medicine, and on other practical subjects. But it seems that the Chinese mind exhausted nearly all its resources in its classical period. Scarcely any productive power is shown thereafter during so many generations to the present day. There is a deal of reproduction, of collecting of old materials, and, alas, of much old rubbish, of commentating, and of antiquarian

research, but the ideal of everything is looked for and found in *sayings* of the classical period. The introduction of Buddhism had little effect, and all efforts to infuse new life into fossilized forms by means of Western science, which have already been going on for three hundred years, have increased confusion and cannot have any other result in the future. New characters and new combinations of characters have to be coined in such numbers that translators find it already more convenient to leave unnoticed what predecessors have done and invent their own terms. Chinese written characters can by the phonetic method certainly be increased to hundreds of thousands, we may even say *ad infinitum*. But of what use is writing when other people are unable to read what is written? Writing can communicate my thoughts to other persons only when they attach the same meaning as I do to the visible signs put in their hands. We cannot here enter into a discussion of the *principles of education* and of the *methods of teaching* which are in close connection with this subject, but may refer to another point. In the *Chow Li*, xxxviii, 26, under the department of the Ta Hing Jen (大行人), who had to receive strangers of the first and second rank paying visits to the Court, a regulation is mentioned, that every seventh year the interpreters were to be summoned to report on the language and fix the form of addresses (諭言語協辭命); and every ninth year the blind [music-masters] and the secretaries were to be summoned to report on the written characters and fix their pronunciation (諭書名聽聲音). If this regulation had been carried out, a standard of writing and of pronunciation would have been the result. It is a painful sight to an intelligent observer to notice the present confusion of Chinese written characters and the toil it causes to millions of people, with immense waste of time and energy to the nation. We are convinced that the present slow progress of China, even the impossibility

of any more rapid movement is to be found in its system of education based on these confused masses of written characters. We are further convinced by the application of established principles of political economy, that this Chinese mode of writing implies a loss to China of hundreds, if not thousands, of millions of dollars a year. We are, moreover, satisfied that Chinese writing and cultivation of Western science cannot possibly go hand-in-hand. Chinese writing in phonetic-pictorial characters should be used exclusively as an excellent means of communication between merchants, and also by officers of government in their proclamations and notices to the people. It might be improved upon and become a *Universal Mode of Writing* in those limited branches, probably better than Volapük. This subject, however, is beyond our present scope.

Period of Pictorial Writing, or Primary Period.

The phonetic principle, as already mentioned, never gained exclusive control of writing in China. It became one element, and soon enough a very important element, but it remained attached to the ancient pictorial writing. This is the peculiarity of Chinese writing. It is not a phonetic system depending on articulate sounds only, but a combination of a new method, indicating pronunciation, with an older method, indicative of figures of things. All the written characters (primitives) used by the phonetic method, to indicate the pronunciation of words, were in existence and in circulation before phonetic writing began in China. These phonetic elements or primitives consequently represent an earlier period of writing. All characters which contain no indication of sound in their

formation belong to this class. As we have found that the phonetic period of writing began during the Chow dynasty, between 1200 and 800 B.C., we get for the earlier period, *i.e.* for Pictorial, or rather Ideographic, Writing, an indefinite time before these dates. Though many characters have changed their forms so much in the course of time that their original shape is no longer recognizable, we can easily convince ourselves that no character once in general use could have been lost. This means, that every character of ancient pictorial writing that was in use more than 3,000, perhaps 4,000, years ago is still preserved in the Chinese written character of the present day.

Leaving alone the phonetic class and directing our attention to the earlier period of writing, we again discover without difficulty two distinct periods of pictorial writing. The first and earliest must have been the formation of certain simple figures, primary characters, which I shall call "Elementary Characters." They form the basis of all Chinese written characters, and are of a limited number, only about a hundred. It is possible that a person called somewhat like *Tsang Hieh* made the first attempt at writing such characters about 4,000 years ago, but other persons must have followed in his line. After the inventors had produced as many elementary characters as they conveniently could, and when the need of expressing more in writing was felt, the period of manipulating them, *i.e.*, of modifications and combinations, began. This is the period of the formation of secondary characters. The elementary characters are analogous to the roots of other languages; all secondary characters are derivations. These secondary characters, which I call ideographic, combine three groups of the Six Scripts into one. We are, however, not sure that all ideographic characters found in K'ang Hi's Dictionary have originated in the time before 1200 B.C., some may be much later. I should accept as ancient primitives only such as entered

the list of phonetics as early as the time of the *Shwoh Wen*. Their use in the *Shwoh Wen* is a proof that such modifications, or such combinations, were already recognized in their meaning and pronunciation some time before the *Shwoh Wen* was written. We have now, as the result of our investigations, three important facts:—(1st). That all the written Chinese characters form three layers—a primary of elementary characters, a secondary of ideographic, and a tertiary of phonetic characters; (2). That the tertiary, or last formation, far outnumbers the other two; (3). That all Chinese literature, without even one exception, belongs to the tertiary period.

Period of Ideographic Characters, or Secondary Period.

Ideographic writing may have been in use for several centuries, perhaps even for ten or fifteen centuries. We are unable to determine the length of its reign as we have no reliable facts to guide our reasoning. We are, however, quite sure that such a period existed, and that there must still be remnants of it in the form of inscriptions in stone and in metal. If excavations were begun and scientifically prosecuted in China as in Egypt and other ancient countries, we might soon get plenty of materials to shed light on the prehistoric period of China. The only accessible mine open to the study of ancient Chinese writing since A.D. 100, is the dictionary *Shwoh Wen*, already referred to. We may suppose that in the *Shwoh Wen* all ideographic characters still in currency at the time became incorporated. It is even most probable that no ideographic character was allowed to be forgotten, because the Chinese phonetic system was not at all inimical to such forms, and ideographic writing is more pleasing to human fancy, and cannot be forgotten as easily as other forms

of writing. Though the *Shwoh Wen* furnishes plenty of materials, yet we have to deplore one serious deficiency. All the ideographic characters are isolated; we do not find a sentence composed of such characters. It may be that a few such sentences are incidentally contained in the *Shwoh Wen* or in other ancient writings, but we have so far not had the good fortune to discover them. A discovery of that kind would be of great interest in several respects. A complete list of all ideographic characters would also be of value, and might be the preliminary step to more important discoveries.

We can give here only a few examples of simple forms. The ninth classifier 人 is meant as a representation of "man." The ancient figure 儿 is not much better, though useful in tracing the different derivations. This figure of man 儿 turned round in this way 匕 is the twenty-first classifier, now written 匕, meaning "a spoon," perhaps originally "fed with a spoon." When put on its back (尸) it becomes classifier 44—a corpse—now written 尸. When put on its head (化)—hands and feet turned up and decomposing—it means "change," now written 化. The same turned round (㐱) means "self-destruction," now written 殄. Then we find a simple line added, as in classifier 34, present form 夂, ancient form 夂—a man's two legs pushed on from behind—slowness. The same reversed (夂)—a man using all the power of his legs—wide steps, overstriding—now written 跨. Further we find 夂—representing a man driven on from behind, therefore, enduring, continuing—now = 久. The classifier 35 夂, old style 夂, represents a man calmly walking, dragging a staff.

There are a still larger number of combinations with other simple figures. For example, 厂儿—a man under shelter, reduced to straits, inclining—now written 仄 or 側. Then the reverse of it 儿, now written 丸—to turn round. 尼, now 究, from "man" and "a burden"—a man carrying a burden,

fatigued. 皃, now 貌—countenance, from "face" and "man." 見=見, classifier 147—to see and already reach it; from "eye" and "man." 艮=艮, classifier 138, is the reverse of the former—to see again and again (probably without being able to reach the object). 兒=兒, from "head with bones not yet closed" and "man"—a new-born child. 頁=頁, classifier 181, from "head" and "man"—a head-man. 臾=臾, from "mortar" and "man"—the momentary rest in working at the mortar; a moment. 向=向—two men making compliments with their hands one to the other—face-to-face. ⊙=旦, from "sun" and "one" (*i.e.*, horizon)—the rising sun. 昜=易, the sun and moon rising and setting—to alternate, exchange. 昜=易, the male principle (the sun), the mate of the female (the moon). 晶, the light of the sun and moon united—splendid, bright. 晴=晴, from the moon and a star, clear sky—because they are seen after rain. 杲=杲, the sun seen above the trees—bright. 東=東, the sun seen in the midst of trees—east. 杳=杳, the sun seen under trees, indicating the evening near sunset—obscure. 晶=晶, three suns—the brilliancy of crystal or gems. 汨=汨, the sun sinking into the ocean and becoming lost to vision; total loss *(Untergang)*.

In order to show the difficulty of analysing some of the complicated characters, one example may suffice. The character 響 *(hiang)* means "a noise." It is composed of the classifier 180—sound—and the phonetic *hiang*, meaning "village." The character itself thus belongs, as a phonetic, to the tertiary period. Its component parts, however, both belong to the secondary or ideographic period. 鄉 is from 阝, classifier 163, also written 邑, and this is repeated back-to-back, as 乡 is nothing but 邑 turned round in ancient writing. 邑 is composed of 囗, classifier 31—an enclosure, and 卩, classifier 26—a seal—referring to the patents given to feudal princes. The middle portion of the character, 皂 is read *p'i* and composed of 白—white, and 匕—a spoon.

K'ang Hi explains it by "fragrant grain," "fragrance," "one grain." Thus we arrive at the original meaning of this ideographic combination of primitives—a space between two towns, filled with the fragrance of meals from both sides. The classifier 音 of the character under examination is composed of 言—words, placed over 含—to hold in the mouth; both these characters are contracted or amalgamated. 言 is composed of 口—mouth, and 辛, old form for 愆—crime. 辛 is composed of 干—a shield and 一—one. 含 is from 口—mouth, and 今—now, above it. 今 is formed of 亼—men, coming into 一—one place (=集—collected together) and 及—up to, contracted. 及 is composed of the classifier 29 (又)—hand or having, and 人—man, which means, to follow a man till he is taken. Thus we are brought into a meeting of rioters where rebellious speeches are delivered till the arm of the police reaches the culprits; the noise is, of course, like that of a yelling Chinese mob, resounding from the hills—that is "sound" in Chinese ideographic writing, and has become the classifier for all noises, and even of softer voices, in the Flowery Kingdom.

This one example may suffice to show that for an analysis of Chinese ideographic characters their present form is useless, and their most ancient form is required. Even ancient forms are not in every case perspicuous, therefore a dangerous field is left to imagination; contractions are supposed to have taken place, which may be referred to a dozen or more different characters.

The Classifiers.

Another difficulty we meet with in analysing Chinese written characters is caused by the classifiers. They only came into use in, and were necessitated by, the tertiary or phonetic period of writing. There was no need of classifiers in the secondary or ideographic period; the picture explained, or at least indicated, its own meaning. As soon, however, as an isolated sound was conveyed to the reader, he had to receive some more help, as the monosyllabic character of the Chinese language and the limited number of syllables available compelled people to use one and the same syllable to convey different meanings. A glance into any syllabic dictionary will suffice to show the necessity of an addition of classifiers to the phonetics. The classifier then helped to arrange all known characters in the dictionary. But as in the formation of tertiary characters no systematic idea guided the adoption of any character to be used as a primitive, so also no scientific method assisted afterwards the dictionary-makers to select the most significant element of each compound character as its classifier. There are difficulties especially in regard to the ideographic characters which also had to be put under classifiers. The *Shwoh Wen* is the first attempt of this kind we know of, and has kept its ground to the present day. Though K'ang Hi's arrangement under 214 classifiers is an improvement on the *Shwoh Wen* with its 540, still there is room for further improvement. The number of classifiers should be no more than about one hundred, which could be managed without serious difficulty. Mr. Wade considers 47 classifiers as obsolete. As we have, however, already called attention to this point (p. 157), two illustrations will suffice for our purpose. Take,

for example, the common character 眞—true; you will naturally first try to find it under the classifier 人 (10), but find yourself disappointed; you then try 匕 (21), with the same result; and will at last discover it with astonishment under 目 (109). Of another kind is the character 靈—intelligence. This is found under the classifier 雨—rain. The remaining part of the character is not a phonetic, but has to be explained ideographically—sorcerer and three mouths, *i.e.*, three sorcerers praying for rain. In the *Shwoh Wen*, 巫 (sorcerer) is classifier, the remaining portion of the character is then phonetic 靈=零 *(ling)*—a gentle rain—and the explanation is, a sorcerer producing rain by offering gems to the gods. As, however, the character 巫 is no longer used as a classifier, the best choice between 雨 (173) and 口 (30) was certainly the first. Rain is regarded as the result of the magical power of sorcery.

The Elementary Characters.

We have already noticed that the secondary period of writing was ideographic, and that each ideographic character was either a transmutation of a simple character previously in existence, or the combination of two or several of such simple characters into one compound character. This compound character had, as a rule, a different pronunciation as well as a different meaning from any of its component parts. Wherever one part has the same pronunciation as the whole, we cannot be sure that such character does not belong to the tertiary or phonetic period.

We have also to take into account that the classifiers, though all of them in existence during the secondary period, are not all simple characters, but that some are compound, even in a

very complicated way. Still, almost all elementary characters, with very few exceptions, such as 丁—nail, 丹—red, etc., are contained in the present list of 214 classifiers. If they contained such elementary characters *only*, the term "radicals" would be very appropriate, as pointing to the root or origin of written characters. But as more than one-half of their number are not roots, but derivatives, we cannot call them radicals. For this reason the term "radicals" is not used at all in this paper. It might be employed to designate such characters as form simple figures not reducible to a simpler form, but it seemed better to call them "elementary" characters, in order to avoid any confusion. The elementary characters are all simple characters, which may form elements of other (compound) characters, but they themselves do not contain any other element; they are figures pure and simple. Most of our readers will be greatly astonished to learn that the number of such elementary characters, out of which the 50,000 Chinese characters of modern times have been developed, is not more than about 100. We cannot give the exact number, as some apparently simple characters remain doubtful. Some meaningless characters, such as classifiers 8, 11, 23, and a few mere strokes, such as classifiers 2 and 4, of which the *Shwoh Wen* has about a dozen, we may leave out of consideration without making any excuse. Somewhat of a difficulty, however, are—

The Signs for Numbers and the Cyclical Characters.

Four characters designating numbers are still among the classifiers (1, 7, 12, 24), *i.e.*, the characters for the numbers one, two, eight and ten. In the *Shwoh Wen*, all the signs of numbers, from one to ten inclusive, are used as classifiers. These figures for numbers seem simple figures, and are certainly very ancient, perhaps more ancient than most of the

ideographic characters, but, as they are not figures of objects, we have to regard them also as ideographic. Numbers are abstractions, not real things, and as abstractions they cannot belong to a primitive period of human history. As most of the signs for numbers, for example 五, 六, 七, 八, 九, 十, 百, remain inexplicable from Chinese sources, we suppose that they were adopted by the ancient Chinese from somewhere else, probably from Western countries. The same opinion we venture to express in regard to the cyclical characters, *i.e.*, the ten stems and the twelve branches. We doubt much that the second stem 子 *(tsz)* and the classifier 39 were originally identical, as they appear now. All Chinese explanations are unsatisfactory and leave the subject in greater obscurity. Why came there in use two parallel lines of numbers from one to ten, as the ten stems and the symbols for the first ten numbers? To what phenomena in nature do the twelve branches refer? to the twelve months of a year, or to the returnings of Ursa major, as a passage in the *Li-ki* indicates? Chinese tradition mentions that Ta Nao (大撓), a minister of the Yellow Emperor, was the inventor of the cyclical characters. Even this statement leaves undecided the question whether he was regarded as the original inventor of the symbols, which are also ascribed to the Heavenly Majesty *(see below)*, or merely as the combiner into sixty of the already existing characters in the ten and twelve lists, so as to give separate marks to each member of a period of sixty.

The Elementary Characters in Natural Groups.

Though we cannot yet construct a complete list of elementary characters, nor can we expect, for obvious reasons, to see such a list finished before the end of this

century, still we venture to proceed with our materials, in the conviction that all future additions will only amount to a very small number, and that none of them will be of such importance as to endanger our conclusions. The numbers refer to K'ang Hi's list of 214 classifiers.

TABLE OF ELEMENTARY CHARACTERS IN NATURAL GROUPS.

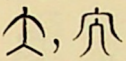
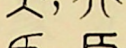
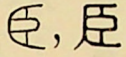
GROUP I.—*Relating to MAN.*

(Total 23 Characters.)

*The characters marked * are not included in the number of 214 classifiers. This list contains 14 such characters, some of them of rare occurrence.*]

Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
(1.)—To the HUMAN BODY:—						
Body	158	身	𠂤 or 𠂤	,shan	shăn	shin
Head	185	首	𦣻	shau	sheu	shut, dut
Eye	109	目	𥁕, 𥁕	muk	muh	mok
Ear	128	耳	𦣻, 𦣻	yi	'rh	nip
Nose ...	...132 (209)	自	𦣻	pi (tsz)	pi (tsz)	zi, bit

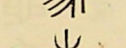
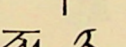
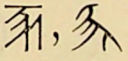
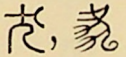
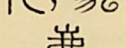
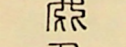
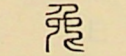
Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins
Mouth	30	口		hau	k'eu	k'u
Whiskers	126	而		yi	'rh	ni
Front teeth ...	211	齒		ch'i	ch'i	t'i
Shoulder	28	厶	 (= 肱)	sz'	sz'	sc
Arm and fist ...	64	手		shau	sheu	shok
Hand	29	又		yau	yiu	ik
Sinews	19	力		lik	lih	lik
Heart	61	心		săm	sin	sim
Belly	49	己		ki	ki	ke
Womb	20	勺		pau	pao	pok
Hip (knee?) ...	60	彳		ch'ik	ch'ih	t'ik
Foot	77	止		chi	chi	tik
(2.)—To Human Society:—						
Male (man) ...	9	人		yan	jăn	nin
Female	38	女		nui	nü	nok
Child (son) ...	39	子		tsz'	tsz'	tsak

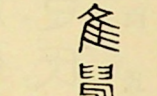
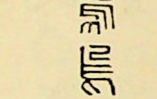
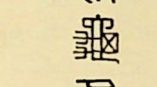
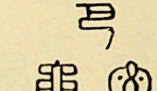
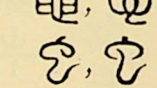
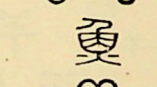
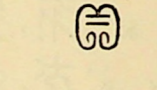
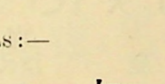
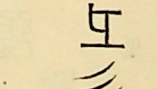
Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
Chief?	37	大		tai	ta	da
Minister?	131	臣		shan	ch'an	din
Family?	83	氏		shi	shi	zhi

Group II.—*Relating to ANIMALS.*

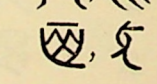
(Total 29 Characters.)

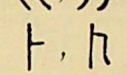
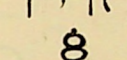
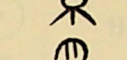
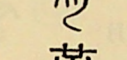
(I.)—To Living Animals:—

Horse	187	馬		ma	ma	mo
Cow, cattle ...	93	牛		ngau	niu	ngu
Sheep	123	羊		yeung	yang	dung
Pig	152	豕		chi	shi	shi
Dog	94	犭, 犬		hün	k'üen	k'on
Deer	198	鹿		luk	luh	lok
Rabbit	*	兎		t'ó	t'u	t'o
Tiger	141	虍		fu	hu	ko
Crawling beast ...	153	豸		chai	chai	dza
Rodentia	208	鼠		shü	shu	sho

Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
Long-tailed bird ...	196	鳥		niu	niao	nio, tok
Short-tailed bird ...	172	隹		chui	chui	tok
Laughing bird ...	*	鵲		ts'euk	ts'ioh	ts'ok
Crow	*	烏		u	wu	a
Tortoise	213	龜		kwai	kwéi	ku
Large snake ...	*	巴		pa	pa	po
Toad (frog) ...	205	黽		man	min	min
Small animal ...	142	虫		ch'ung	ch'ung	dong
Fish	195	魚		yü	yü	ngo
Cowry	154	貝		pui	péi	pi

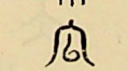
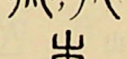
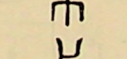
(2.)—To Parts of Animals:—

Pig's-head ...	58	彑		kai	ki	—
Hair	59	彡		shām	san	sham
Claws	87	爪		chāu	chao	tok
Molar tooth ...	92	牙		nga	ya	nge

Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
Wings (plumes) ...	124	羽		yü	yü	yo
Veins of tortoise-shell	25	卜		puk	puh	pok
Silk (floss) ...	120	糸		mik	mih	mik
Flesh	130	月(肉)		yuk	juh	niok
Raw skin	177	革		kak	koh	kak

Group III.—*Relating to PLANTS.*

(Total 4, excluding two doubtful.)

Sprout	45	屮		ch'it	ch'eh	t'et
Ripe grain standing in stakes * ...	210	齊		ts'ai	ts'i	dze
Cucurbitaceæ ...	97	瓜		kwa	kwa	ku
Bamboo	118	竹		chuk	chuh	tok
Tree (wood) ...	75	木		muk	muh	mok
Splinter, tree cut in two * ...	91	片		p'in	p'ien	p'in

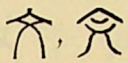
* Ideographic.

Group IV.—*Relating to INANIMATE NATURE.*

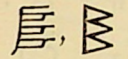
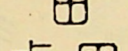
(Total 21 Characters.)

Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
Sun	72	日		yat	jih	at
Moon	74	月		yüt	yueh	nget
Earth, soil ...	32	土		t'ó	t'u	t'o
Air	84	气		hi	k'i	k'ut
Clouds	*	雲		wan	yun	gon
Rain	173	雨		yü	yü	yo
Water †	85	水		shui	shui	shui
Streams†	47	巛, 川		ch'üin	ch'wen	t'on
Ice	15	冫		ping	ping	pang
Fire	86	火		fo	hwo	ha
Mountain... ...	46	山		shan	shan	shan
Cliff, dwelling ...	27, 53	厂, 广		hon, yim	han, yen	gan
Gem	96	玉, 王		yuk	yuh	ngok

† Probably the same.

Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
Veined gem ...	67	文		man	wăn	mun
ded stone ...	*	丹		tān	tan	tan
protuberance of the ground	*	凸		tat	tieh, tuh	tot
ndentation of the ground ...	*	凹		āu	ngae ao	ok

Results of Human Labour are:—

Mound of earth (?) †	170	阜, 阝		fau	feu	pu
ield	102	田		t'in	t'ien	din
llt-land	197	鹵		ló	lu	la
ivided fields ...	*	井		tsing	tsing	tsing

Group V.—*Relating to PRODUCTS OF HUMAN INDUSTRY.*

(Total 28 Characters.)

(1.)—Weapons:—

knife, sword ...	18	刀, 刂		tó	tao	to
ield	51	干		kon	kan	kan
ow	57	弓		kung	kung	kong

† Derivative of classifier 46?

Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
Arrow (with string)	56	弋		yek	yih	ik
Halberd (spear) ...	110	矛		máu	meu	mu
Javelin (arrow) ...	111	矢		ch'i	shi	shi
(2.)—Instruments:—						
Axe or hatchet ...	69	斤		kan	kin	kin
Compass and rule .	48	工		kung	kung	kong
Carving instrument	*	刾		k'ai	k'i	—
Mortar	134	臼		k'au	kiu	gu
Nail	*	丁		ting	ting	tang
Dry measure ...	68	斗		tau	teu	tu
(3.)—Utensils:—						
Tiles, bricks ...	98	瓦		nga	wa	nge
A dish, platter ...	108	皿		ming	ming	min
Wine-jar (earthenware) ...	121	缶		fau	feu	fu
Bench, low table ...	16	几		ki	ki	ke

Meaning.	No.	Modern Form.	Ancient Form.	Canton Pronunciation.	Mandarin Pronunciation according to Dr. Williams	Ancient Pronunciation according to Dr. Edkins.
Wooden trencher (plate) ...	151	豆		tau	teu	du
Tripod	206	鼎		ting	ting	teng
Incense-cauldron...	193	鬲		lik	lih	lik
Bottle for fragrant spirits...	*	卣		yau	yiu	—
Wicker basket † ...	*	笛		tsz	tsz	—
A one-leafed door .	63	戶		wu	hu	gu
A window ...	*	囱		ch'eung	ch'ang	t'song
Inclosure	31	口		wui	hwui	gu
A wheeled carriage	159	車		kü	kü	ko
Boat	137	舟		chau	cheu	tu
(4.)—Clothing :—						
A head-cover ...	14	冖		mik	mih	mik
Embroidery ...	204	黹		chi	chi	te.

† Of bamboo, perhaps originally a bamboo-jungle.

The Original Forms of the Elementary Characters.

That the modern forms of Chinese characters are different from the ancient forms preserved in the *Shwoh Wen*, needs only to be mentioned. The Small Seal characters of the *Shwoh Wen*, again, being about 900 years later than Chow's work on the Great Seal characters, differed so much from these, that scholars well acquainted with the later form could not make out the older. There was an interminable controversy going on in China for several hundred years. It was about two different texts of some of the ancient Classics. The first was written in characters used at the time, the Small Seal, by an old scholar, Fuh-sang. Another scholar, K'ung Gan-kwo, proclaimed afterwards the discovery of another set of books in a wall of Confucius' house. This was in ancient characters, tadpole style, and could only be deciphered by the help of Fuh-sang's books and other resources. (*See* Legge, *Chinese Classics*, III, 1, p. 22). This statement is certainly false. Confucius and his disciples wrote in the Great Seal characters, the ancient tadpole writing being altogether out of the question. But it may be that the handwriting was illegible *(tadpolic)*, being, perhaps, the hasty copy of a scholar who made it for his own use to assist his memory when lecturing to his pupils. Another discovery of ancient tablets was made in a grave in A.D. 279. They had been buried for 595 years (Legge, p. 106). As they are said to have been written in the Small Seal character, which was invented 90 years after the supposed burial of those tablets, we see how unreliable such statements are.

The discovery of the so-called "Tablet of Yu," in the 13th century A.D., about 3,500 years after its supposed origin, Legge (*Chin. Cl.*, III, 1, p. 73 *ff.*) calls "a romance," with which

I agree for brevity's sake [compare, however, the last section of this paper]. In some editions of the *Six Scripts* a great variety of ancient forms of characters is collected, but most of these forms are fanciful, and not original. I think, however, that most elementary characters are simple enough, even in the Small Seal form. The original form was certainly nothing but a crude outline of the figure of its object. Of all editions of the *Six Scripts* one entitled 六書分類, mentioned before, I found most useful. As of many different forms of characters, that of the *Shwoh Wen* is always put first, it seems to indicate that the author considered it the most ancient form of all he could find. There are in circulation a large number of native works on the Antiquities of China, some of them beautifully illustrated. They also contain inscriptions in various forms of ancient characters. Some of them are attributed to periods even before the Chow dynasty, to the Hia and Shang dynasties, 2200-1200 B.C. There is, however, no foundation whatever for such assumption. Chinese authors are too much influenced by their well-known tendency to attach the utmost antiquity to any old relic of uncertain date. Most of the inscriptions in question are written in characters which are apparently but variations of the Small Seal characters. This fact proves that they are not older than the Han dynasty and some of them may be of a still more recent date. We also know of many counterfeits of old things. The trade in relics of antiquity—old cash and porcelain included—is too remunerative not to tempt the ingenuity of artisans. A good museum of articles of Chinese antiquity, where one relic could be compared with a number of other articles of the same period, and one period with other periods, is necessary for satisfactory research. Mere descriptions are insufficient, even when accompanied by drawings.

Thus we have to state, as the result of our examination of the subject, that the Small Seal characters of the *Shwoh Wen* are

the most ancient forms of Chinese written characters accessible with certainty at present, of more ancient forms nothing reliable being known. [Compare the remarks on the "stone drums," on a later page.]

The Original Pronunciation of the Elementary Characters.

Speech was before writing. All the elementary characters are pictures of objects known to the people and named by the people long before an attempt was made at writing. We may even suppose that speech had already had a history, had passed through changes of sounds and of grammar (construction of sentences). As we have to place the formation of the elementary characters before 1200 B.C., we may say with confidence that the pronunciation of those characters, *i.e.*, the spoken language which their pronunciation represents, must belong at least to the time about 2000 B.C. Neither the elementary nor the ideographic characters, however, indicate in the least a pronunciation, and nothing else is known of that remote age. The case seems hopeless. But there are two ways still open for approaching its solution. One is by examining their use as phonetics (primitives), the other by comparing the ancient rhymes. Though by the rhymes we can only get the final, including the vowel, but never the initial, yet we can find the initials by means of the character's use as a phonetic. The phonetics as such, taken separately from the classifiers, have never been made a subject of study by [native] Chinese scholars. A good deal of attention, however, has been paid to rhymes. The phonetics had no practical interest for the Chinese, but the rhymes had, for writing poetry and gaining

honors. The *T'ang yün* (唐韻) is the earliest dictionary arranged according to tones and final sounds still in existence. It was first published in 750 A.D., but is based on an earlier work—*Tsie yün* (切韻), of the Sui dynasty, 589-618 A.D. All characters are arranged under 206 finals. The Kwang yün (廣韻) and the Tsi yün (集韻), published in the Sung period, followed the same arrangement. The finals were reduced to 160, and the initials to 36, which made their first appearance in the 五音集韻 during the Kin dynasty, 1115-1234 A.D. Many other varieties of the same system may be found mentioned in WYLIE'S *Notes*.

One modern work of this kind, however, which is almost universally used among the Chinese, deserves more attention. I refer to the *Wu fang yuen yin* (五方元音) by Fan T'ang-fung (樊騰鳳), first published in 1710, followed by a revised edition in 1810. All finals (韻) are reduced to 12 categories:—*(1)*, 天, *ien*, *īn*, *ān*; *(2)*, 人, *in*, *ăn*, *ăm*; *(3)*, 龍, *ung*, *āng*, *ing*; *(4)*, 羊, *āng*, *ong*, *iang uang*; *(5)*, 牛, *iu*, *au*; *(6)*, 獒, *āu*, *ou*, *iau*; *(7)*, 虎, *u*; *(8)*, 駝, *o*; *(9)*, 蛇 *ie*, *e*; *(10)*, 馬, *a*; *(11)*, 豺, *ai*, *iai*, *āi*; *(12)*, 地, *i*, *ui*, *ū*, *ō*. Of initials (字母) only 20 are used:—*(1)*, 梆, *p*; *(2)*, 匏, *p'*; *(3)*, 木, *m*; *(4)*, 風, *f*; *(5)*, 斗, *t*; *(6)*, 土, *t'*; *(7)*, 鳥, *n*,; *(8)*, 雷, *l*; *(9)*, 竹, *ch*; *(10)*, 虫, *ch'*; *(11)*, 石, *sh*; *(12)*, 日, *y*; *(13)*, 剪, *ts*; *(14)*, 鵲, *ts'*; *(15)*, 糸, *s*; *(16)*, 雲, *j*; *(17)*, 金, *k*; *(18)*, 橋, *k'*; *(19)*, 火, *h*; *(20)*, 蛙, *w*. Of these, Nos. 2, 6, 10, 14 and 18 are merely aspirates.

The ancient rhymes have been particularly examined by prominent modern scholars. Ku Yen wu (顧炎武) (MAYERS, 281) A.D. 1613-1682, reduced all the rhymes of the *Book of Odes*—*i.e.*, of China before Confucius—to ten, without reference to tones. They are *(1)*, *ung*, *iang*; *(2)*, *i*, *iai*, *ui*, *ūh*, *uh*, *ah*, *eh*, *ih*, etc.; *(3)*, *ū*, *au*; *(4)*, *an*, *on*, *un*; *(5)*, *iu*, *eu*; *(6)*, *o*; *(7)*, *ang*; *(8)*, *āng*, *ing*; *(9)*, *ăng* ?; *(10)*, *am*, *om*, *im*.

Kiang Yung (江永), 1680-1762, divided Nos. 4, 5 and 10 into two each, thus distinguishing altogether 13 finals. Twan Mow-t'ang (段茂堂), same as Twan Yü-ts'ai (MAYERS, 694), A.D. 1735-1815, distinguished 17 finals:—*(1)*, *e*; *(2)*, *eao*, *iau*; *(3)*, *iu*; *(4)*, *au*; *(5)*, *u*; *(6)*, *ăng*; *(7)*, *im*, *ip*; *(8)*, *am*, *ap*; *(9)*, *ung*; *(10)*, *ang*; *(11)*, *ing*; *(12)*, *in*, *it*; *(13)*, *un*; *(14)*, *an*; *(15)*, *ei*; *(16)*, *ī*; *(17)*, *o*. He also distinguished three tones observed in rhyming, thus really getting 42 rhymic endings. (LEGGE, Vol. IV, p. 102 *ff.*)

These researches by eminent Chinese scholars, valuable as they are, show that the Chinese do not yet agree among themselves in regard to ancient pronunciation. They also exhibit one weak point, *i.e.*, they all take the *Book of Odes* as a work uniform in all its parts. This is mere fiction. The different odes were composed in different states of ancient feudal China, and the language of those states differed considerably; there are, besides, centuries between the dates of different odes. We know, further, that in rhyming a deal of poetical license is taken. Another work of the Han dynasty is still preserved, with the title *Fang Yin* (方言), by the famous Yang Hiung (揚雄), which enters somewhat into the difference of the then existing Chinese dialects. But we should know the language, and especially the pronunciation of the Han period, spoken by Yang Hiung. We go astray in attaching a modern pronunciation to the Chinese characters used by him and other writers of that period. Some transliterations of Sanskrit terms used in Buddhist translations made at the time may possibly help us out of the difficulty. As, however, I cannot at present give so much time to this subject as would be required to arrive at definite results, I think it wiser to pass it over. I, however, here acknowledge my obligation to Dr. EDKINS for kindly enriching the list of Elementary Characters with their ancient pronunciation. As Dr. EDKINS

has given many years of careful study to Chinese philological questions, his judgment in this line must be of great value to every Chinese student.

The Elementary Characters and Comparative Philology.

The great importance of this list of Elementary Characters for researches into the prehistoric period of mankind may be illustrated by one example. I select from among the animals the *pig*, as the one found in almost every household all over China from the remotest antiquity to the present day. It is the most appreciated and popular of all mammalia among the Chinese. We know that the reverse is the case among Mahomedan nations. The Mahomedan aversion to the pig is, however, derived from the Mosaic prohibition. The law of Moses, though in other respects diametrically opposed to Egyptian usages, shows in its bearing on the pig a perfect agreement with ancient Egyptian practice. We are told by the best Egyptologists that the pig was not domesticated in the first period of Egyptian civilisation. (See *Die Anfänge der Cultur*, von François Lenormant). Egyptian religion regarded the pig as absolutely unclean; even an accidental touch of it subjected the unfortunate person to the strictest purification ceremonies. The pig was domesticated in later periods, especially in Lower Egypt, where foreign tribes had settled.

The ancient Egyptian language has two words for pig, the one—*rer*, Koptic *rir*—is apparently onomatopœic, an imitation of the voice of the pig, the other—*schaau*, Koptic *eschô*—is of foreign origin and is in close connection with the common

expressions for pig in the Arian languages. It is in Greek σύς, ὗς; Latin *sus*, Anglo-Saxon *sûg*, Scandinavian *syr*, German *sau*, English *sow*, Swedish *so*, Gaelic, *suig*, Kymeric, *hweh*; Kornic, *hoch*, (English *hog*), Persic *schûk*, Armenic *chou*, Litthauan *tchûka*, Russian *tchuschka*. The origin of these words may be discovered in the Sanskrit *çûkara*—the animal that makes *çû*, which "grunts." Not without interest is the other fact that the Turanian languages derive their designations for "pig" from the same Arian root. In Finnian it is *ika*, Esthic *sigga*, Tscheremissian *süsna*, Baschkiric *suska*, Telentic *schoschka*, Kirgisian *tchutchka*, Tshumaic *sysna*, Samojedic *soia*. That the Chinese name *chi* or *chu* also belongs to this series needs no demonstration.

If we had a comparative table of the Turanian languages spoken at present, and their ancient pronunciations so far as they can be determined, we might probably discover in the ancient pronunciation of the elementary characters the connecting root of the diverging branches of the Indo-Chinese languages, and perhaps find also a key to the better understanding of the difficult Turanian family in its totality. It is only by methodical study of critically-sifted materials that we can hope to penetrate the darkness of China's remote antiquity. Superficial similarities are always misleading, and mere guesses, though some may be correct enough, cannot dispel doubt and obviate ridicule. There is yet another difficulty too much overlooked. We speak of the Chinese language as if it were the same all over China, and of ancient pronunciation as if there had been only one at any given time. But the fact is, that the differences in language of the various parts of ancient China were greater than at present. There was less mixture of the population, and intercourse was more limited. Further, there are sufficient indications that the people of Hia, of Shang and of Chow were different tribes, if not different nations, that invaded China. Many proper

names in ancient Chinese literature seem of foreign origin, as also some names of places. The language and traditions of the different aboriginal tribes, including Miaotsz, Lolos, Sifan and others, which may be regarded as remnants of the natives of ancient China, are as yet almost unknown. The thought that something could be learned from such sources has never entered the mind of a Chinese scholar, therefore the information obtainable from native literature amounts to nothing.

State of Prehistoric Chinese Civilisation revealed by the Elementary Characters.

From the first group in the list given on p. 171 we learn that human society was already in a settled state. A chief was prominent in the community, and he had officers to support his dignity and carry out his orders. [The character for minister (classifier 83), however, remains somewhat doubtful.] The chief lived in organised family-connexions (clans); these became gradually important factors in Chinese history. All subjects, we may suppose, were considered as mere individuals. Every family- (or better, clan-) name of the Chinese can be traced back to some noble family of ancient China. The characters in the second group contain names for animals of all the great natural orders, and the principal kinds of domesticated animals are specially distinguished. This fact shows that the human mind was already conscious of its power over nature. It was a great step in civilisation to have brute creatures subdued and, by a kind of training, taken into the service of man. It is peculiar that sheep and goats were denoted

by one and the same character. The difference between these two kinds of ruminantia, especially in a wild state, is not so marked in mountainous districts; it may also be an indication that large herds of sheep were not held at the time. Species of wild sheep and goats have been discovered in the north-western provinces of China, as also some of the bovine kind. Wild horses can still be seen on the grassy plains of Tartary, but they may have galloped about the vast uncultivated portions of ancient China. Wild pigs are frequent in all parts of modern China, and the rearing of the domesticated kind is more extensively carried on here than in any other part of the world. Dogs are not only used as faithful guardians of dwelling-houses, but their flesh has been utilized as food from very ancient times. There are, however, indications in ancient Chinese literature that in those days the use of animal flesh [classifier 130] was confined to sacrificial ceremonies. Tigers are still the terror of the southern and middle provinces of China. Other animals of prey are expressed in the general term [classifier 153] "crawling beast." Of fish, the carp is the representative, which proves that the writers lived away from the ocean, else they would certainly have chosen some striking form of sea-fish. Which kind of shell is meant by classifier 154 cannot be determined now; it is probably not the common cowrie. A pig's head, with its snout turned up, is represented by classifier 58. This can be explained only by its use as a sacrifice. To religious usage also points classifier 25, the veins of the tortoise-shell, which were made visible by burning over fire, and served the purpose of divination. The skins of animals were already known to be of particular value. Long hair and feathers were also utilised. The produce of the silkworm was known as "floss-silk." Though the elementary characters give no indication of its use in weaving, still different kinds of silk-manufactures have been known in China from the remotest antiquity.

In the third group, relating to plants, we get only six characters, and even of these, two are better transferred to the ideographic class. Of the four remaining characters, two are of a very general meaning. The "sprout" is most characteristic of the vegetable kingdom; it may be taken as identical with "plant" or may be confined to all plants of the smaller kind, as herbs, grasses, etc. The other character, classifier 75, means "trees with a woody stem, wood," embracing almost all plants of a taller kind. We see that the common botanical distinction between trees and herbs had been noticed and fixed even in prehistoric times. That, however, among the thousands of different kinds of plants growing in China, only bamboo and melon were honoured with special elementary characters, must have been due to some special reason. What species of the cucurbitaceous order is really meant, whether a cucumber, a gourd or a melon, remains undecided, as the flora of the regions along the Yellow River is still insufficiently known. I think *melon* very probable, though the gourd was also known, according to very ancient records, and its hard skull was used as a vessel for drawing water and for similar purposes. The philosopher Chuang mentions one of immense size. We are, however, quite sure on one point, *i.e.*, that the inventors of Chinese writing had no idea that China would ever be called the "Flowery Kingdom!" The bamboo is the real emblem of China. As the greater mass of bamboo is never seen flowering in China, it is impossible to say how many species are growing in different parts of the country. Bamboo appears most luxuriant in the tropical and sub-tropical regions, becoming smaller and scarcer in the northern provinces, and does not reach the northern borders of China (being scarce even on the banks of the Yellow River). It has been used for every imaginable purpose, even from prehistoric times. It is also an article of food, for the bamboo-shoots give a wholesome and agreeable vegetable to myriads of people.

Bamboo-slips were used as perhaps the earliest writing materials in China, till paper was invented. Chinese paper also is made principally of bamboo-fibre. There can be no doubt China is the country of the bamboo!

Remarkable is the meagreness of this group compared with the second—comprising animals. I find in it an unmistakeable proof that agriculture was less developed than the breeding of cattle at that time.

In the fourth group the absence of characters for planets and stars in general is conspicuous. Though some authorities give a character, formed of three dots, as the earliest representation of fixed stars, it soon became supplanted by a phonetic form, if it ever was authorised at all. Icicles seem to have been of no unfrequent occurrence, and point to a regular winter-season, as we find it between the Yangtsze and Hwang ho. The use of fire was known. As shelters against the inclemency of the weather, tents were not used, but overhanging cliffs, [27–53], which points to a mountainous district where rocks abound. This is confirmed by the very character for "mountain" [45]. There was, however, at least some level ground at the foot of the hills and in the valleys, which could be turned into cultivated fields, with channels for irrigation and drainage. The character for "divided fields," not used now as a classifier, but so given in the *Shwoh Wen*, means a division of a piece of ground into nine squares of equal size. I prefer, however, the meaning of "a well" as the original one. It is as such the 48th diagram of the *Book of Changes*. [Only three of the 64 diagrams of the *I-king* are represented by elementary characters—the 48th, the 49th, *i.e.*, classifier 177, "a raw skin," and the 50th, *i.e.*, classifier 206, "a tripod" used for sacrificial purposes]. This digging of wells must have begun as soon as the people settled in fertile alluvial plains where the river was too far off or too muddy for culinary purposes. In

hilly districts in Europe wells are found more serviceable than pure springs and streams of flowing water at an inconvenient distance. The special character for "salt-land" indicates not the sea-shore, but some salt plain away in the interior. The vast ocean would certainly have received a peculiar character for itself, if the inventors had had the grand aspect before their eyes. Their notion of water was expressed by the form of mountain streams, not by the waves of the sea. The characters referring to "gems," 67 and 96, seem to presuppose some human workmanship—cutting, polishing, etc. "Red stone" means probably red sandstone used for building purposes, but it is commonly applied to cinnabar.

The action of the human mind on nature, or, in other words, *nature in the service of mind*, is already visible in Group I, in the characters for chief, minister, and family; and in Group II, in the characters for silk, flesh, skin, veins of tortoise-shell, pig's-head, and perhaps in hair and plumes. In Group III, we meet with a tree cut in two through its whole length. In Group IV there is mentioned the use of fire, of cliffs for dwelling-places, cultivation of fields, arrangement of salt-fields, digging of wells, cutting of sandstone and of gems. The human mind is seen in unceasing activity. Though nature is still prominent, it is made to serve human purposes: though the mind is still bound to nature, it nevertheless regulates the course of nature to a certain extent. The characteristic feature of Group V is not only a partial adaptation of natural objects to human wants, but a more or less complete change of their natural condition into an artificial shape. Nature furnishes only the materials, which by human ingenuity are wrought into such forms as are most suitable to human purposes. Thus the human mind assumes gradually dominion over the realms of nature by expanding the limited powers of the human body through the use of ever-improving instruments. Every instrument is the result of an invention,

and every invention is a victory of Mind over Nature. The weapons, mentioned in Group V, are such as were also in use among other nations in prehistoric times. Of domestic utensils the mortar was used to reduce grain to flour before the easier process of grinding by the millstone was discovered. The artisan's rule with a crosspiece at right angles at one end, the other cross-piece probably moveable to be used as a compass, indicates considerable progress in workmanship. Houses were already made more secure by doors and cheerful by windows. Benches to lean on when sitting on the covered floor added to personal comfort. Enclosures were made for the domesticated animals as a protection against the attacks of beasts of prey.

It having been observed that after the burning of fires a certain kind of mud became as hard as stone, this discovery was utilised to make bricks and tiles for building purposes. Another step was taken by manufacturing different kinds of household utensils of this waterproof material. We find already vessels used in eating, wine-jars (which implies that some sort of wine was prepared at the time), tripods for cooking and to offer sacrificial meat, incense-cauldrons (implying the preparation and use of fragrant materials). Working in wood was already so far developed that not only rough building was executed, but handy utensils for use on the table and in sacrificing were made. There were even vehicles for locomotion on water, and others for use on dry ground. It was no more a primitive state of civilisation when the ancient Chinese could boast of wheeled carriages and of boats as means of conveyance by land and by water. That wicker-work of bamboo, and perhaps also of grass and of other materials, was manufactured at this period is not surprising. We also find the first traces of fine arts in the instrument for carving wood. Carving was the beginning of ornamentation, embroidery (classifier 204)

combined figures and colours, therefore painting cannot have been unknown, as it is the precursor of embroidery. Thus we see even a practical people, as the Chinese are, exhibiting a sense of the beautiful.

That only two articles of clothing are mentioned may be explained by their use as marks of distinction between the different classes or ranks of society. It is also possible that classifier 145 was originally an elementary character, the figure of a suit of clothes, consisting in a lower garment or a pair of covers for the legs, and in an upper garment with a neckpiece and two sleeves. Towards the end of the Chow dynasty this character was used only for upper garments, called *yi*; the lower garments were called *shang* and represented by a phonetic character. As material for their garments the ancient Chinese had at their disposal skins [177], long hair of animals [59], feathers [124], and silk [120], possibly hemp also.

Chinese Religion in Prehistoric Times.

That the Chinese were not without religion, even in those early days, is shown by some of the elementary characters. It may be that the classifier of religious terms [113] belongs to this period, but as it is rather ideographic and could not be otherwise, referring to something invisible, I did not include it in my list. Certain it is that some of the vessels mentioned in Group V were only used for sacrificial purposes. The same must have been the case with the pig's-head [58], as the custom has survived to the present day.

It is not the place here to enter into a discussion of the deeper meaning of sacrificing. The very fact demonstrates

that the human being acknowledges a higher personal power above him. The term *personal* is used deliberately, as it would be mere nonsense to offer a sacrifice to an impersonal force. The act of sacrificing also indicates that man considers the higher Being as capable of being influenced in his favour by such action, and is anxious to avoid divine displeasure.

Another unmistakable proof of Chinese religion at this early period is the character for "divination" [25]. By means of divination historic Chinese, just as their prehistoric ancestors did, inquire into the will of the Divine Being. Men must have felt their deep dependence on divine favour for the prosperity of their doings, so that in order to ensure success they first enquired about the divine will and pleasure regarding every undertaking of any importance, private or public.

Divination and offering of sacrifices have their Christian equivalents in doctrine and worship. They will for ever remain manifestations of genuine religious life. May its forms change ever so much, the two religious motives will remain unshaken: first, to learn the divine will; second, to seek divine favour.

Chinese Accounts of the History of their Earliest Civilization.

As the *I-king*, or *Book of Changes*, is the highest authority for everything relating to human affairs among the Chinese, I shall begin with the few statements contained therein. In the Great Appendix (Part ii, Sect. ii; Dr. Legge, p. 382) we read, (1) that in ancient times Pao Hi (commonly placed in the 29th century, B.C.) invented—

a.—The eight trigrams.

b.—The knitting of strings into nets of various kinds for hunting and fishing.

(2) That Shin Nung (28th century, B.C.) fashioned wood to form the share, and bent wood to make the plough handle. The advantages of ploughing and weeding were then taught to all under heaven.

(3) That he caused markets to be held at mid-day, thus bringing together all the people, and assembling all their wares in one place. They made their exchanges and retired, every one having got what he wanted.

(4) That Hwang Ti, Yao and Shun (27th to the 23rd centuries, B.C.) simply wore their upper and lower garments [as patterns to the people], and good order was secured to all under heaven.

(5) That they hollowed out trees to form canoes; they cut others long and thin to make oars. Thus arose the benefit of canoes and oars for the help of those who had no means of intercourse with others. They could now reach the most distant parts, and all under heaven were benefited.

(6) That they used oxen [for carts] and—

(7) Yoked horses [to chariots], thus providing for the carriage of what was heavy, and for distant journeys, thereby benefiting all under the sky.

(8) That they made the defence of double gates; and—

(9) the warning of the clapper, as a preparation against the approach of marauding visitors.

(10) That they cut wood and fashioned it into pestles; they dug into the ground and formed mortars. Thus the myriads of the people received the benefit arising from the use of the pestle and mortar.

(11) That they bent wood by means of string so as to form bows, and sharpened wood so as to make arrows. This conferred

the benefit of bows and arrows, and served to produce everywhere a feeling of awe.

(12) That in the highest antiquity men made their homes [in winter] in caves, and [in summer] dwelt in the open country. In ages subsequent to these the sages substituted houses with the ridgebeam above and the projecting roof below, as a provision against wind and rain.

(13) That when the ancients buried their dead, they covered the body thickly with pieces of wood, having laid it in the open country. They raised no mound over it, nor planted trees around, nor had they any fixed period of mourning. In subsequent ages the sages substituted for these practices the inner and outer coffins.

(14) That in the highest antiquity, government was carried on successfully by the use of knotted cords [to preserve the memory of things]. In subsequent ages the sages substituted for these written characters and bonds. By means of these [the doings of] all the officers could be regulated, and the affairs of all the people accurately examined.

Contradictory Accounts of Prehistoric Times.

Although the appendix to the *I-king* is not so ancient as the text of the classic itself, and cannot, from internal evidence, even be ascribed to Confucius, still its author must have been a first-class disciple of Confucius. This appendix is a masterpiece of style and as such highly valued among the literati of China. Its contents, however, are more philosophical than historical, showing the Confucian construction of history. To Yao and Shun many inventions

are ascribed which in other accounts are put to the credit of other persons. The fact is, that scarcely any two ancient Chinese traditional records agree one with the other. Ancient Taoist writings are full of traditional matters. A very curious account of prehistoric times is found in the 18th book of the Mountain and Sea Classic (山海經.) Other statements are found in the works of the philosophers Lih, Chuang, Lü, Wei Nan, etc. It would be waste of time to enter into an examination of their differences, as we have not yet even a clue to these ancient mythological names.

Almost all traditions relating to Chinese prehistoric times are collected in the work called 路史, in 16 vols. More fantastic, and different in other respects, is the 神仙通鑑 in 22 vols., with many illustrations. More generally known among men of letters are the statements in modern compilations of Chinese History called 鋼鑑. A well-known compendium of this kind is the *Tung chow kang kien t'siuen pien* (WYLIE, p. 21; *see* VON FRIES, *Geschichte Chinas*). From the latter work I extract a few items bearing on our subject:—

Tien Hwang named the Ten Stems and Twelve Branches.

Ti Hwang, who defined Sun, Moon and the Stars as the three lights (三辰), distinguished day and night and determined a month as thirty days.

Yen Hwang founded cities.

Under Yu Chao the former peace between men and animals ceased. Men killed them, drank their blood and ate their hair. The animals then used their natural weapons against men.

Sui Yen taught how to produce and use fire. He knotted cords to remember things, established markets and commercial exchange.

Fuh Hi taught fishing with nets, the domestication of the six kinds of animals (horse, cattle, sheep, chicken, dog, pig) and their use as food. He received the book of the Loh river on the back of a dragon (or horse), from which originated the

eight Trigrams. The art of writing was invented by his minister Ts'ang Hieh.

His sister Nü Kwa invented the Pan-pipe. Shang ordained matrimony, and presents to be sent to the girl by her lover as the definite form of engagement.

Shen Nung taught agriculture. He made implements of wood, distinguished the five sorts of grain, taught other industries, examined medicinal plants and taught their use.

Hwang Ti introduced the cycle of sixty days, investigated the five elements, the twelve tones of music, the stars and planets. He had an officer to superintend pottery, and another to look after the production of wooden utensils. Two of his ministers made boats of trees which they hollowed out, fixing masts in them. He distinguished the five colours, he received the plan (arithmetical figures) from the Ho (Yellow river). He took the Great Bear (constellation) as his model and made chariots, he sacrificed to God (上帝) and to the spirits, and taught the people to do so. He melted gold (perhaps metal in general) and used it as a precious article. He built an Imperial palace, wrote a treatise on the medical art, and laid down the theory of the pulse. His wife Si Ling (西陵) cultivated the silkworm, and taught how to make clothes from silk. He introduced the agrarian system of the *tsing* (井) and other divisions of the country derived therefrom.

Yao ordered an intercalary month every third year, determined the five punishments (branding, cutting of the nose, of the feet, castration, and death), and chose a successor, passing over his own unqualified son.

Shun organized the administration of government and made the low lands habitable by regulating the water-courses.

Yü, the Great, held the first assembly of feudal princes (諸侯) and made his son his successor, though against his own wish.

Thus hereditary succession commenced in China, which was never afterwards interrupted, except by rebellion and with much bloodshed, about fifty times in 4,000 years, including all the partial successes which lasted only for a few years.

Here we find attributed to Hwang Ti or the Yellow Emperor almost all the most important inventions of Chinese prehistoric times. The principal features of the gradual advancement of Chinese civilization, however, remain the same in the different accounts, and may be taken as representing historical facts. The most striking fact to our readers will be the perfect agreement of these Chinese statements of their earliest civilisation with our deduction of Chinese prehistoric civilisation from the Elementary Characters. This is an incontrovertible evidence of the general correctness of both of them.

Civilization in Ancient China according to the Tribute of Yü.

(*See* Legge III, A, pp. 92 *ff.*).

First province* *K'e*, the present Shansi and parts of Chihli (but the provinces cannot be determined exactly. Chinese commentators disagree among themselves considerably):—Wild people of the island brought dresses of skins.

Second province, *Yen*, South-Western Shantung and a small portion of Chihli:—Varnish, silk, baskets filled with woven ornamental fabrics.

Third province, *Ts'ing*, North Shantung:—Salt, fine grass-cloth, various products of the sea, silk, hemp, lead, pine trees, strange stones, wild silk.

*The term "province" is rather misleading; "circuit" would be better.

Fourth province, *Sü*, one department of Shantung, parts of Kiang-su and Ngan-huei, North of the Yangtsze :—Earth of five different colours, variegated feathers of pheasants, solitary dryandra (*tung*), floating sounding stones, oyster pearls, fish in baskets, deep azure silks, and other silken fabrics, chequered and pure white.

Fifth province, *Yang*, sea-coast, South from the Yangtsze :—Metal of three kinds (gold, silver, copper), *yao* and limestones, bamboo, small and large, ivory, hides, feathers, hair, and timber, garments of grass, woven ornamented silks, oranges and pumeloes.

Sixth province, *King*, Central Hu-kuang :—Feathers, hair, ivory, hides, three kinds of metal, the *ch'un* tree, wood for bows (*kan*), cedars, cypresses, grindstones, whetstones, arrow-head stones, cinnabar, two kinds of bamboo, *U* tree, a kind of rush, deep azure and purple silken fabrics, strings of pearls, great tortoise.

Seventh province, *Yu*, Honan and a small portion of Hupeh :—Varnish, hemp, fine and coarse hempen cloth, fine silken fabrics, fine floss silk, stones for polishing, sounding stones.

Eighth province, *Liang*, Sze-chuan and part of Kan-suh :—Musical gem stones, iron, silver, steel, stones for arrow-heads, sounding stones, skins of bears, great bears, foxes, and jackals, articles woven with their hair.

Ninth province, *Yung*, Shensi, Kan-su and portions of Sze-chuan :—*Ken* and *lin* gem-stones, *lang-kan* precious stones, hair-cloth and skins.

This so-called Tribute of Yü shows such an advanced state of civilization that, on this account, we find it impossible to allow it to pass as a description of the period 2200 B.C. It may be correct for the time at the beginning of the Chow dynasty, a thousand years later, but certainly not earlier. In addition to the articles already mentioned as belonging to

the prehistoric or earliest period of Chinese civilisation, which we have followed from its beginning to the days of Yao and Shun, the immediate predecessors of Yü the Great, and to Yü himself, we find here mentioned :—skins of two kinds of bears, of foxes and jackals, and articles woven with their hair ; varnish from two provinces, Shantung and Honan, fine grass-cloth, garments of grass, wild silk, hemp, fine and coarse hempen cloth ; pine trees, cedars, cypresses, *tung* tree, *U* tree, four kinds of bamboo, rush. Arrows were made in primitive times of wood or of bamboo, but here we find mentioned arrow-head stones from Hu-kuang and Szechuan, besides a large number of other stones. Metal [gold] had been mentioned only for its value in exchange, but here we find metals of three kinds [gold, silver and copper] from the sea-coast province, south of the Yangtsze, and from Hu-kuang, while special names are given to lead from Shantung, and to iron, silver and steel from Sze-chuan. Various productions of the sea are also mentioned, but only from Shantung.

Of colours five belonging to the mineral class are mentioned, of dyes, deep azure [indigo ?] and purple. The manufacture of silk seems to have centred in Shantung ; Hu-kuang, Honan and the islands of Chekiang participating.

During the Chow dynasty the laws and government of the feudal states became developed, ceremonies were multiplied and literature flourished, but the general features of civilisation remained almost the same as the Tribute of Yü describes them, even to the end of that dynasty—225 B.C. Those who wish to go more into details in regard to the period just mentioned may read with advantage the admirable essay, by EDOUARD BIOT, "Researches into the Manners of the Ancient Chinese, according to the She-king," published in LEGGE's *Chinese Classics*, IV. A, pp. 142 *ff*.

The Nine Circuits according to the Chow Li.

The term "circuit" is used here instead of the common translation of 洲 by "province." China had no provinces, in the modern sense, in those early days. The term "circuit" is chosen with reference to the tours of inspection made by some of the ancient rulers of China.

Chinese critics do not regard the *Chow Li* as a genuine work of the Chow dynasty, but as a production of the Early Han period. The famous Sung scholars Cheng and Chu already noticed the discrepancies between the *Chow Li* and Mencius. [See *Canton Miscellany*, 1831, p. 13.] The views of the best authorities of modern times may be seen in the Imperial Catalogue of the K'ien Lung period, the 欽定四庫全書總目, 120 vols.

The *Chow Li*, Book xxxiii, which treats of the duties of the Surveyor-General, 職方氏, as a department of the Summer-officers, contains a description of the "Nine Circuits" similar to that in the Tribute of Yü.

First circuit, *Yang*, [identical with Yü's fifth]. Its source of wealth [利, Biot translates "merchandise"] is gold, tin and bamboo arrows [according to commentaries, two kinds of bamboo.—Biot.] Inhabitants, five males to two females. Birds and animals are reared, and rice is grown.

Second circuit, *King*, [Yü's sixth]. Its resources are cinnabar, silver, ivory, hides. Population, one male to two females. Birds and animals are reared, and rice is grown.

Third circuit, *Yu*, [Yü's seventh]. Its resources are bamboo-timber, varnish, silk, hemp. Population, two males to three females. The six kinds of domesticated animals are reared, and the five kinds of grain are cultivated.

Fourth circuit, *Ts'ing*, [Yü's third and the fourth, *Sü*, united with it]. Its resources, rushes [matting grass?] and fish. Population, two males [two probably for three] to two females. Fowls and dogs are reared, and rice and wheat are grown.

Fifth circuit, *Yen*, [Yü's second]. Its resources, rushes and fish. Population, two males to three females. Six kinds of animals are reared, and four kinds of grain are grown.

Sixth circuit, *Yung*, [Yü's ninth, and the eighth, *Liang*, united with it]. Its resources, jade and stones. Population, three males to two females. Cattle and horses are reared, Shu and tsieh millet grown.

Seventh circuit, *Yeu*, [portion of Yü's first]. Its resources, fish and salt. Population, one male to three females. Four kinds of animals are reared, and three kinds of grain are grown.

Eighth circuit, *K'e*, [Yü's first]. Its resources, pines and cypresses. Population, five males to three females. Cattle and goats [sheep?] are reared, and two kinds of millet are grown.

Ninth circuit, *Ping*, [portion of Yü's first]. Its resources, cloth and silken fabrics. Population, two males to three females. Five kinds of animals are reared, and five kinds of grain are grown.

That silk should be mentioned as a principal article of value in the most northern province is very strange. Native produce is out of the question there, and trade in this article could not have amounted to much with the barbarian inhabitants of Mongolia. The order of the circuits is also unintelligible. Why is *Yung* the first? Then the jump from Kan-suh [vi] to the Gulf of Pechili [vii] and back again to Shensi [viii]. The account in the Tribute of Yü is superior in every respect. The status of civilisation which it represents is certainly higher than what the *Chow Li* exhibits. To maintain that

the tribute of Yü is a record written about 2,000 years before the *Chow Li* appears to me simply impossibile. The few changes in the circuits can be easily understood. The division, for example, of Yü's first, or northern, province into three—*Yen*, *K'e* and *Ping*—as described in the *Chow Li*, is ascribed to the Emperor Shun, [*see* LEGGE, III a, 32]. Why the four western provinces or circuits were united into two, and when, remains to be explained. It is to be noted—and we call special attention to it—that neither iron, steel nor lead, is mentioned in the record of the *Chow Li*, though all three figure in the "Tribute of Yü" as revenue from several provinces. Thus we declare without hesitation the record in the *Chow Li* to be an earlier document than the present text of the Tribute of Yü. Further, the modern text of the Tribute of Yü must have been unknown to the compiler of the *Chow Li* and *vice versâ*. We are justified, by a comparison of both works, to draw the conclusion that they are independent enlargements of a common ancient tradition, consisting almost exclusively of geographical names and statistical notes. But, as the settlement of this question is of little consequence to the subject before us, I leave it for future treatment.

There are only four other complete tables of the productions of China, in detail for each province, as far as I have been able to find out. The next in order of time belongs to the T'ang dynasty, probably of the 8th century A.D. The absurdity of a gap of almost 3,000 years, between the table in the so-called Tribute of Yu and this, needs no further remark. About 1,000 years is all we can allow. Then we find a table from the Sung dynasty, about the 11th century. Another is from the Ming dynasty, 15th century, and the last is given in the 大清一統志, the statistical account of China under the Manchu rulers, published in 1744. A résumé of the latter can be seen in *La Chine Moderne*, by

M. G. PAUTHIER. An intelligent comparison of these different lists would furnish us with a history of both the natural and the industrial productions of China during at least 2,000 years. Another list brought up to date would increase the interest and value of such a comparison.

A LIST OF NINETY-ONE SO-CALLED ANCIENT WORKS WHICH ARE REJECTED BY CHINESE SCHOLARS AS NOT AUTHENTIC.

This list is taken from a work in one vol., 古今僞書考, by Yao Shao-yuen (姚首源), of the K'ang Hi period. His views are largely supported by quotations from other scholars. Many more works could be added by going through the 120 volumes of the Imperial Catalogue (K'ien Lung) 欽定四庫全書總目. There is as much forgery of ancient books going on in China as of coins, bronze, porcelain, etc. The Imperial Catalogue, however, shows that Chinese scholars of some eminence are not so credulous as a few foreign Chinese students appear to be. The Roman numbers refer to the Imperial Catalogue, as far as I succeeded in finding these works mentioned therein. The Arabic numbers follow Yao's book.

A.—*Classical Works*, 經類.

(1).—易傳, the ten appendices to the *Yi-king*, are essays, not by Confucius, but handed down and altered through generations.

(2).—子夏易傳, not mentioned in the Han Catalogue ;—made its first appearance in the Sui Catalogue. [i, 3.]

(3).—關朗易傳. Mentioned neither in the Sui nor in the T'ang Catalogue ;—fabricated during the T'ang dynasty.

(4).—麻衣正易心法. A production of the Sung dynasty.

(5).—焦氏易林. After the Eastern (Later) Han. (From A.D. 25–200). [cix, 13.]

(6).—易乾鑿度. A compilation of the Sung dynasty. [vi, 53.]

(7).—古文尚書. 25 chapters, included in the sacred text of the *Shu King*, manufactured during the time of the Eastern Tsin, (A.D. 317–419). [s. xii, 25 *ff.*]

(8).—尚書漢孔氏傳. The same as No. 7.

(9).—古三墳書. A production of the Sung period. [x, 42.]

(10).—詩序. Not mentioned in the Han Catalogue ;—came to light during the Later Han period from the school of Mou 毛. [xv, 2.]

(11).—子貢詩傳, [xvii, 11.] and

(12).—申培詩說. Produced by an author of the Ming dynasty (A.D. 1368–1643).

(13).—周禮. Appeared at the end of the Western Han (B.C. 206–A.D. 24). [s. xix, 2 *ff.*]

(14).—大戴禮. The present work is not *Tai's* but a later compilation. [xxi, 30.]

(15).—孝經. Not taught by Confucius, and its teaching differs from that of Mencius. [xxxii, 23.]

(16).—忠經. Doubtless not written by Ma Yung, as asserted. [xcv, 4.]

(17).—孔子家語. The present work is not the original, but a compilation by its commentator of the T'ang dynasty. [xci, 3.]

(18).—小爾雅. The present work is not what is mentioned in the Han Catalogue, but a modern compilation. [xliii, 1.]

(19).—家禮儀節. A production of recent times. [xxv, 30.]

B.—*Historical Works*, 史類.

(20).—竹書紀年, [xlvii. 1.]

(21).—汲冢周書, and

(22).—穆天子傳. These three works, and some others, are said to have been found in a grave in A.D. 281, where they had been deposited for 595 years. Their contents, however, show that they were written *after* the Han dynasty, probably not long before their discovery. [cxlii. 3.]

(23).—晉史乘 [lxvi. 33.] and

(24).—楚檮杌 are compilations by a scholar of the Yuen dynasty (A.D. 1206–1367).

(25).—漢武故事. Ascribed to Pan Ku, with whose writings the contents do not agree. It was made by a T'ang scholar. [cxlii. 7.]

(26).—飛燕外傳. Ascribed to a Han scholar, but it is the compilation of one of the Ming period. [cxliii. 2.]

(27).—西京雜記. Mentioned in the Sui Catalogue, without the name of the author. It is a doubtful work.

(28).—天祿閣外史. Ascribed to a Han scholar, but written by one of the Ming period. [cxxiv. 2.]

(29).—元經. Said to be written by a Sui scholar, but referred to one of the Sung dynasty. [xlvii. 9.]

(30).—十六國春秋. The old work is long lost, and the modern is a compilation by two Ming scholars. [lxvi. 9.]

(31).—隆平集 is not by the Sung author to whom it is ascribed.

(32).—致身錄. A doubtful Taoist production of the Ming period.

C.—*Philosophical Works*, 子類.

(33).—鬻子. Mentioned in the Han Catalogue. The modern work, however, does not agree with the two works described there. The contents show that it is not earlier, and it is probably later, than the Han period. [cxvii. 1.]

(34).—關尹子. Though mentioned in the Han Catalogue, it is not in the Sui, T'ang, etc., Catalogues; thus lost long ago. The present work savours of Buddhism. [cxlvi, 16.]

(35).—子華子. This is probably a Sung falsification, feeble and mean. [cxvii 5.]

(36).—亢倉子, not mentioned by the famous Han scholars, contains extracts from a number of Han publications, but nothing original. [cxlxi, 46.]

(37).—晏子春秋. The number of parts does not agree with the work mentioned in the Han Catalogue. It is probably a biography compiled by later writers. [lvii, 5.]

(38).—鬼谷子. First mentioned in the Sui Catalogue. It contains dangerous doctrines, ruinous to Family and State. [cxvii, 12.]

(39).—尹文子. A few historical allusions show that it is false, and a later fabrication. The work mentioned in the Han Catalogue cannot be the same. [cxvii, 6.]

(40).—公孫龍子. Mentioned in the Han, but not in the Sui Catalogue. The modern edition is a later production. [cxvii, 10.]

(41).—商子. Mentioned in the Han Catalogue, but the modern edition is by later hands. [ci, 6.]

(42).—鶡冠子. Mentioned as a Taoist work in the Han Catalogue, but the modern edition is shallow and commonplace. [cxvii, 9.]

(43).—愼子 is described as being of different sizes in the various catalogues, and the present editions differ from them all. [cxvii, 7.]

(44).—於陵子. Produced by a Ming scholar. [cxxiv, 1.]

(45).—孔叢子. Mentioned neither in the Han, Sui nor T'ang Catalogue, but first in the Sung. The work contains historical statements which are wrong. It is probably a compilation by its Sung publisher. [xci, 7.]

(46).—**文中子**. It is doubtful whether such a person ever lived. The work is probably a production of its Sung publisher.

(47).—**六韜**. First mentioned in the Sui Catalogue. The work shows a misunderstanding of the meaning of **陰符**, which is ridiculous. [xcix, 3.]

(48).—**司馬法**. According to the Han Catalogue, it consists of 155 parts, in the Sui Catalogue only three are mentioned, and the modern edition has scarcely five, which proves that the original was lost long ago, and the present is a later compilation. [xcix, 6.]

(49).—**吳子**. The Han Catalogue mentions 48 parts. The modern work in six parts is an imposture. [xcix, 5.]

(50).—**黃石公三略**. First mentioned in the Sui Catalogue, without name of author, except that it was written by a half-god, which is ridiculous. [xcix, 8.]

(51).—**尉繚子**. Two works are mentioned in the Han Catalogue, with which the modern edition does not agree. The contents prove it to be an imposture. It should be destroyed. [xcix, 7.]

(52).—**李衛公問對**. On military art. There was no complete work in existence, but only an outline in the **通典**, from which a Sung author concocted this edition. [xcix, 12.]

(53).—**素書**. Falsely attributed to Hwang Shih-kung (s. 50), but really the work of its publisher and commentator. Sung dynasty. [xcix, 10.]

(54).—**心書**. Falsely ascribed to Koh Liang. [c, 5.]

(55).—**風后握奇經**. A work of modern times.

(56).—**周髀算經**. First mentioned in the Sui Catalogue. The first two characters of its title are not intelligible. It is folly to refer it to Chow Kung. [cvi, 2.]

(57).—**石申星經**. The modern edition is an imposture. [cvii, 34.]

(58).—續葬書. Ascribed to Kwoh Poh. It is a vulgar forgery. [s. cix, 1.]

(59).—撥沙經. A forgery, though said to be a work from the T'ang dynasty.

(60).—黃帝素問. First mentioned in the Sui Catalogue. It is a product from the time after the Han. [ciii, 1.]

(61).—靈樞經. Belongs to the same period as No. 60. [ciii, 3.]

(62).—神農本草. Not mentioned in the Han Catalogue. The name 本草 first occurs in the history of P'ing-ti of the Han. The work is a production of the Eastern Han; later generations added to it. [civ, 36.]

(63).—秦越人難經. First mentioned in the Sui Catalogue, and afterwards in the T'ang Catalogue. Nothing more can be found out. [ciii, 4.]

(64).—胎訣. Ascribed to a writer of the Tsin, but it is a later imposture, probably from the five dynasties. [civ, 18.]

(65).—神異經 [cxlii, 4.] and

(66).—十洲記. Both works, ascribed to a Han scholar, are forgeries. [cxlii, 6.]

(67).—列仙傳. Ascribed to Liu Hiang, but not mentioned in the Han Catalogue, where the works of this author are enumerated; the style also differs. [cxlxi, 32.]

(68).—洞冥記 is an imposture from the time of the six dynasties. [cxlii, 10.]

(69).—博物志. Ascribed to a scholar belonging to the Wei and Tsin dynasties, who is said to have read 30 cart-loads of books, and produced a work in 400 books, which he afterwards reduced to 10. This is incredible. The work is a forgery by the commentator, who lived during the T'ang dynasty. [cxlii, 39.]

(70).—杜律虞註. This is also falsely ascribed to another author.

D.—*Authentic Works wherewith False Portions are intermingled.* *

(71).—三禮考註. Contains many later additions. [By 吳澄 of the Yuen dynasty.] [xxv, 1.]

(72).—文子. A pupil of Lao Tsz, contemporary of Confucius, may be doubted. The book is in the style of Lao Tsz, but contains also much taken from Mencius and other sources. It has, however, a genuine kernel in it. [cxlvi, 28.]

(73).—莊子, especially four chapters, are found objectionable. [cxlvi, 21 *ff.* and cxlvii, 7 *ff.*]

(74).—列子. Said to be forged out of Chuang Tsz with later additions. [cxlvi, 18 *ff.* and cxlvii, 6 *ff.*]

(75).—管子. It is not the work of one man's pen. [ci, 1 and 13 *ff.*]

(76).—賈誼新書. The author's name is famous among the Han scholars. The name of this book appears first in the Sui Catalogue. The [present] work is certainly not the original work of Yi. [xci, 11.]

(77).—傷寒論. A medical work by a Han scholar, but so confused that it is difficult to get a clear idea out of it.

(78).—金匱玉函經. Ascribed to the author of No. 77, but it is an imposture by a later person.

(79).—爾雅. Neither the Han nor the Sui Catalogue mentions its author. In the T'ang dynasty it is first ascribed to Chow Kung, which is wrong. The book was composed after *Li Sou* (離騷), to which elegy it alludes. It may belong to the Han time. It serves to explain the Classics, but cannot be classed among their number. [xl, 5.]

(80).—韻書. The older work is lost, and this is by a Sung scholar.

(81).—山海經. The Han Catalogue does not mention the author. The idea that it is the work of Emperor Yü is

* The *Li-ki* and *Yi Li*, of the Classics, belong to this class.

ridiculous. It was written by somebody between the Ts'in and Han dynasties, *i.e.*, about B.C. 250–200. [cxlii, 1 *ff.*]

(82).—**水經**. The Sui Catalogue mentions two different works without their authors' names, which cannot be determined now. [cxix, 1 *ff.*]

(83).—**陰符經**. Published by a T'ang author. To ascribe it to Hwang-ti, etc., is not worth refutation. [cxlvi, 2 *ff.* and cxlvii, 1 *ff.*]

(84).—**越絕書**. It first occurs in the Sui Catalogue. To ascribe it to **子貢** or to **子胥** is wrong. It is from a person of the Eastern Han. [lxvi, 3.]

(85).—**吳越春秋**. It is ascribed to two different authors, and it is impossible now to decide the question. [lxvi, 1.]

E.—*Authentic Works with False Titles.*

(86).—**春秋繁露**. The Han Catalogue contains two works by the author Tung Chung-shü, one on the Spring-Autumn, the other doctrinal, **儒家**. Of these, some parts were lost, and the remaining portions were collated into one work, of which several chapters, out of the 82, have nothing to do with the Spring-Autumn.

(87).—**東坡志林**. A ridiculous confusion between two different works. [cxx, 21.]

F.—*Works by Unknown Authors.*

(88).—**國語**. The Han Catalogue mentions no author. The *Sz Ki* gives **左丘明**, but this is doubtful. [li, 1.]

(89).—**孫子**. The *Sz Ki* mentions this author and his work, but Tso Chuen is silent. Then there is a difference between the *Sz Ki* and the Han Catalogue. [xcix, 4.]

(90).—**劉子新論**. There is a choice between four Lius.

(91).—**化書**. A Taoist work. [cxvii, 26.]

The Chinese volume from which this list is taken bears no date, but it cannot be less than 200 years old. Since that time antiquarian research has been going on among the Chinese with much ardour. But the results of their critical labours have not yet been collected into one work like Yao's. The Imperial Catalogue, mentioned already, was completed in the year 1782, more than 100 years ago. As it exhibits very fair judgment, we regret that it is not brought up to date. The large collection of works on the Classics, called 皇清經解, in 360 volumes, and a supplement to it of about the same size, embody much of the latest researches on the 13 classical books, including the different readings of the text. Of other ancient works only such are taken into consideration as have a direct bearing on the Classics. A great deal of valuable criticism is still scattered through writings published privately, or in collections of miscellaneous writings, which are commonly expensive and sometimes difficult to obtain. I feel sure that the critical tendency among many highly accomplished native scholars is due to Western influence on the Chinese mind. On the other hand, an unscholarly dependence on the writings of the earlier Jesuits, with a corresponding neglect of recent publications, as also absence of independent research into the modern literature of China, betray an antiquated state of sinology under which only the conservative views of Chinese authors, mostly of ancient times, are brought forward as the Chinese opinion of the question.

APPENDIX (A).

[Quotations from T. WATTERS' *Essays.*]

A few weeks after the manuscript of my paper on "Prehistoric China" had been in the hands of the Council of the C.B.R.A.S. the new work, *Essays on the Chinese Language*, by T. WATTERS, Shanghai, Presbyterian Mission Press, 1889, appeared. This is a most valuable contribution to Chinese Philology. Its masterly treatment of the subject, the richness of information it gives from original sources, and the rays of light it throws on many difficult questions, will repay a careful study of its contents. Though the scope of the work differs from what is aimed at in "Prehistoric China," though our methods vary and our results may appear as not of the same nature, or as belonging to different departments, still there are many points where we touch one another. The student will, therefore, probably welcome a few extracts.

(p. 21) "But it is to be noted that the passages in the 'Shu-ching' just referred to" [on the character for writing, 書] "have been condemned as spurious by some critics, and there is some doubt as to their genuineness. (p. 22) Among the official class, writing seems to have been in common use under the early rulers of the Chou dynasty. (p. 23) In this period colleges existed at all official centres, and schools of various kinds were to be found generally throughout the country. Books were written and libraries formed, though, it must be presumed, only on a small scale. *The written characters were few and insufficient*, much time was wasted in the process of writing, and the materials used were rude and clumsy." [Comp. p. 155 of this essay.]

(p. 25, Note). "Chu Fu-tzu writes to a friend that the 'Urh-ya' was a compilation of the explanations and definitions given by the scholars of former and contemporary times made into a book, but that it has inaccuracies and *cannot be regarded as old*." [See Works rejected No. 79, p. 211.]

(p. 25) "But Chow's invention had the effect of producing a considerable number of new characters, and of restricting to a small extent the applications of those already existing." [Comp. pp. 155 & 149.]

(p. 27) "It is from this period of Ch'in Shi Huang Ti that the use of the term *tzu* (字) or 'character' dates, and the change in name

from *wên* (文) or *shu* (書) is said to have been brought about by the modes of writing invented by Li Ssŭ and Ch'êng Mao. Hitherto, all inscriptions and engravings had been mainly pictorial or symbolic, expressing, as their chief office, only objects or ideas, but now sounds also began to receive attention." This puts the beginning of phonetic writing about 600 years later than my estimate of the period of "Chow's invention." I consider the classical period 600-250 B.C. as inconceivable without phonetic writing. [Comp. p. 153.]

(p. 31) "But the book which has given Yang Hsiung [B.C. 52-A.D. 18] his chief fame in later times is the 'Fang-yen.' [See p. 184 of this.] Native scholars have tried in vain to find out how and why the authorship of this treatise came to be ascribed to him. It is not mentioned in the list of books in the 'Han-shu' nor in the life of Yang Hsiung in that work, nor, so far as is known, does Hsû Shên or any other of Yang's contemporaries refer to the book by name." This should be added to the list of rejected works, under E. p. 212.

(p. 33) "For the making of his 'Shuo-wên' Hsû Shên studied, with the help of Chia K'uei, one of the greatest of the Han scholars, all the accessible literature in the old characters and in those invented in later times. He compared the texts of the recovered tablets, collected inscriptions on ancient vases, and examined the writings of his predecessors, such as Shi Chow, Li Ssŭ, and Yang Hsiung." [Comp. pp. 150, 151 of this.]

(p. 37) "The Buddhist missionaries had come from India and settled down in China . . . They tried to introduce their own alphabet and have it brought into use in China, but in this they completely failed. They succeeded, however, in teaching the Chinese, or at least in giving popularity among them, to an art of spelling, which, though rude and inaccurate, is better than none. This is the procedure known as Fan-ch'ie (反切)." [Comp. pp. 156 *ff.* & 160]

(p. 54) "In the year 744 an Imperial order was given to have the 'Shu-ching' transcribed in the characters in common use at the time. The Emperor, Ming Huang, disliked the *li* characters in which the 'Shu' and other classics continued to be written. Moreover, these characters had become obsolete, hard to learn, and liable to confusion, and only professional scholars could read the canonical books . . . The editions of the classics in the vulgar writing soon superseded the others." [Comp. the final sentence of Appendix B, p. 218.]

(p. 57) "Neither of these two brothers [Hsü, who re-edited the Shwoh-wên in the Sung period to form the basis of the modern editions] gave much study to the phonetics of the language, and later scholars object to them that they overlooked the changes which had passed over the sounds of characters between the Han and T'ang dynasties." [Comp. p. 151.]

(p. 66) "Chêng Ch'iao, 1104-1162, [see p. 158 of this] one of the most erudite and renowned men of letters of the Sung dynasty, distinguished by almost universal knowledge . . . He produced also a book in three *chuan* 'Shi-ku-wên' (石鼓文) in which he argued against the supreme antiquity of the 'Stone Drums.' From the resemblance of the characters on these to characters found on objects of the Ch'in dynasty (B.C. 255 to 206) he concluded that the Drums also belong to that period." [Journal N.C.B.R.A.S. Vol. viii, p. 134.] [Comp. Appendix B.]

(p. 69) "Wu" [吳棫, 12th century] "argued that the political ballads and other poems of early times were at first sung, or chanted, or recited, and that they were not committed to writing but preserved in memory. He held that the minstrels and poets used the sounds current in their several districts at the time, and that words of different tones in the 'Shi' were interchanged and rhymed together." [Comp. p. 184.]

(p. 100) "It must be admitted that the investigation of the language is seldom pursued by native scholars as an independent study. It is always an 'inferior science,' and gains importance only as a help to the understanding of the orthodox canonical literature. From the 'Shuo-wên' down to the latest dictionary, all etymological treatises have been composed with the express design of aiding in the settling of texts, clearing up the meaning, or ascertaining the sounds of characters in the old Confucian writings or in the works composed to teach, illustrate or continue those writings." [Comp. pp. 182-187.]

(p. 120) "Carving in wood seems to have been practised in China from a remote period, and to have been employed for various purposes. In the seventh century B.C. the projecting beams of the roofs of temples and palaces were sometimes elaborately carved and colored. . . . But such rude appliances as knotted cords and carved sticks could not long suffice to meet the requirements of a growing society. The Chinese, accordingly, represent themselves as having at an early period of their history learned to cut, and afterwards paint, in wood

and stone and metal, figures or outlines of objects. These were practically the first beginning of writing for them. All the earliest characters seem to have been either pictorial representations or rough symbols of natural objects and phenomena. That is, they were either drawings which presented an outline of an object, or drawings which by their composition pointed to the meaning intended." [Comp. pp. 192-193.]

(p. 123) "At first only material objects and their relations, dealings of business, and affairs of government, were depicted in outline or symbol. The chief aim which the inventors and first improvers of the graphic art had in view was to make a record which could be appealed to as evidence. It was in matters of government, according to some native writers, that the use of writing began, the design of the inventors being to facilitate intercourse between the ruler and his servants, and between these and the people, and to register transactions of importance. Thus, when in old times the prince of one state invaded the territory of another, slew the inhabitants, and carried off the booty, he caused the event to be recorded. It was written on bamboo or silk, and engraved in metal and stone to be inscribed on sacrificial vessels for the information of posterity. . . . . 'Tadpoles' became the name of a certain whimsical style of written characters." [Comp. p. 162.]

(p. 124) "Dr. EDKINS also has stated that 'the phonetic characters appear to belong to the same era as those that are hieroglyphic. They are found together among the earliest remains of Chinese literature. According to the uniform national tradition, they must, therefore, be dated about B.C. 2700.' But this can scarcely be set down as the prevailing opinion among native students of the language. It may be true, however, of written characters, strictly so-called. The earlier transcript of language, which was called *wên* (文), is defined as the visible representation of objects arranged according to categories (or classes). It is also stated that *wên* is the source of object-picturing or delineation."

(p. 126) "One of the marks whereby a barbarian is known is, that he writes from left to right, another being, that he takes his food without using chop-sticks . . . The Buddhist scholars, whether native or foreign, taught moderation and even modesty in the comparison between Chinese and Sanskrit."

APPENDIX (B).

[THE STONE DRUMS.]

"On the Stone Drums of the Chou Dynasty," an able paper by S. W. BUSHELL, B.Sc., M.D., was read before the Society on November 18th, 1873, and is printed in Vol. VIII. of the Journal. I can here give only a short extract and refer the reader to the article itself.

"The Stone Drums were discovered in the province of Shensi, lying half-buried in the ground. The earliest accounts of them were written during A.D. 627-649. From intrinsic evidence the inscriptions have been referred by the large majority of authorities to the period of Hsuan Wang (B.C. 827-782). They record a hunting expedition in the writing invented by Chou-shih (Ta-ch'uan). There is, however, no mention of the fact in the historical records of this reign.

"Under the Sung, the celebrated writer Ou-yang Hsiu was the first to question their authenticity. He says: '*In my collection of ancient inscriptions, there is not one so old as these.*' Yet there are three doubtful points which suggest themselves to me. First, their good preservation compared with other inscriptions less old. Second, that they are the only remains of that period beside the Shih and Shu. Third, that no mention is made of them in any early record."

The answers by Chinese authors are not satisfactory, nor is Dr. BUSHELL'S summing up: "If we accept the train of reasoning of Ou-yang we must reject all the sculptured monuments of Egypt, Assyria and Persia which have been brought to light in such profusion of late years." As neither the material used in China is the same, nor the climate in the countries referred to, we cannot compare the durability of the monuments here and there. To me the most suspicious feature appears to be that characters of the ancient style should have been so easily decipherable as is the case with all the characters on the Stone Drums.

APPENDIX (C).

[CHINESE ASTRONOMY.]

Dr. LEGGE's view in the *Sacred Books of the East*, Vol. III, Oxford, 1879, differs from the opinion he expressed in the *Chinese Classics*, Vol. III, Hongkong, 1865. The only new argument brought forward is a chart, by Professor C. PRITCHARD, of the stars as they were visible in China in B.C. 2300. In a pamphlet—*Die Schu-King-Finsterniss*, von Dr. G. SCHLEGEL und Dr. FRANZ KÜHNERT, Observator der K. K. Gradmessung in Wien,—which was published at Amsterdam in 1889, a new attempt is made to calculate the date of the Eclipse of the Sun mentioned by LEGGE (*Shoo King*, I, 167). It will be interesting to take a glance at the history of this astro-sinological experiment.

The Jesuit GAUBIL fixed the date at October 11th, 2154 B.C., in accordance with the Chinese T'ang astronomers and the accepted chronology of the Chinese.

According to the Chinese Bamboo-books (see LEGGE's *Chinese Classics*, Vol. III), it would be the 28th of October 1948 B.C.

LARGETEAU found, in the year 1840, that this eclipse occurred during the night, before sunrise, at *Ngan-yih* (安邑), and was, therefore, not visible. Dr. CHALMERS came independently to the same conclusion and adopted the date October 12th, 2127, "without fear of its being hereafter proved invisible." But 15 years later, VON OPPOLZER proved that this eclipse was not visible at that place in China. The same fate happened to FRÉRET and CASSINI's 24th October 2006, and JOH. V. GUMPACH's 22nd October 2155. THEODOR VON OPPOLZER found that of 34 ecliptic conjunctions of sun and moon between 2200 and 1900 B.C., which had occurred in the month of October, only two were visible at that locality in China—those of the 21st October 2136, and 10th October 2135. He decided for the 21st October 2136, provided that the passage in the *Shu King* could be translated in a different way.

SCHLEGEL and KÜHNERT, May 1889, leave the choice between 12th May 1904 B.C. and 7th May 2165, but decide "with great probability" for the latter date.

SCHLEGEL takes the passage in *Tso-chuen*, Duke Ch'ao, xvii year (LEGGE, Vol. v, p. 667) as his basis. This passage is taken as a repetition of the statement in the *Shu* (III, iv. 4), but as the dates do not agree—LEGGE says: "The 4th month of Hea was the 6th of Chow. But the present text of the *Shoo* places the eclipse in the 9th month of the year"—SCHLEGEL declares the date given in the *Shu* AS AN ALTERATION OF THE ORIGINAL TEXT by the Han revisers, or even by Confucius himself, to make it conform to the position of the sun in their time. The ancient Chinese observation, however, is *supposed* to have been made at evening in the 2nd month of spring (akronyktischer Aufgang) and in the morning during the 3rd month of spring (kosmischer Untergang), of which no ancient text says a word. Further, I think the limitation of the period to 1900 B.C., according to the Bamboo-books, [Comp. p. 207, Nos. 20–22,] without scientific foundation.

OBITUARY.

EDWARD COLBORNE BABER.

From time to time our Society has to note in the pages of its Journal the loss of one or other of its members. But seldom has it to deplore the disappearance from its roll of so striking an individuality as his, whose death in the wilds of Burmah the newspapers have recently recorded. Had Edward Colborne Baber been a Frenchman, he would long since have worn a red ribbon, perhaps even a rosette, in his button-hole; but he belonged to a nation which is slow to distinguish, and he has gone to his grave with no other mark of distinction than that accorded by the *vox populi*, viz., that of being spoken of, far and wide, by his simple surname without any addition at beginning or end, which constitutes in itself no doubtful sign of popularity and fame.

It is just 24 years since Baber joined the British Consular service in China, and the first decade of that period was occupied with the usual duties of a Consular officer in this country. He did not fail, however, to give evidence, on occasions, of that energy and force of character, which have since carried him through many a scene of difficulty and danger. Most of us have heard of his exploit at Nan-chang, when he overawed a dangerous mob, by felling to the ground with a single blow of his fist a ruffian, who thrust an impudent head inside the curtains of his official chair. But Baber's reputation was in the main built up outside the narrow limits of an ordinary Consular career, and it is as an explorer in the untrodden ways of China that he is best known. To him belongs the credit of being one of the few to succeed in investing a Blue Book with a

real literary charm: witness that account of his travels in South-western China, published, by arrangement with the Foreign Office, as a special supplement to the Annual Report of the Royal Geographical Society some years ago. In those pages, which, though written for "presentation to both Houses of Parliament," form as fascinating a record of travel as any issued by a Murray or a Macmillan, we can see how his spirit beat against the bars, within which he was confined by the etiquette of the unimaginative official style; and we learn from his own outbursts of regret, how he longed to clothe in a poetical garb worthy of his subject, his descriptions of the glorious mountains of Yünnan. And elsewhere, untrammelled by the requirements of officialism, he was fond of mounting Pegasus and trotting him round for the benefit of his friends. His humorous ballad, "In Yuen-ming-yuen all gaily arrayed," is too well known to be more than referred to.

Baber was attached as interpreter to the Grosvenor Mission, sent into Yünnan in 1876 to investigate the circumstances of the murder of Margary, and to see that justice was done on the guilty parties. He was later stationed for some time at Chungking, which was the starting-point for the explorations he made throughout Ssŭch'uan and Yünnan. In one of these journeys he had for companion Captain Gill, whose book of travels, *The River of Golden Sand*, is well known. In 1879, Baber was appointed Chinese Secretary at Peking, a sedentary post which scarcely suited his restless energies, and which he retained but for a short time. Still nominally attached to the service in China, he was commissioned as Consul successively at Chefoo, Ichang and Swatow, but took up his appointment at none of these places. After a short incumbency of the Consul Generalship in Corea, he quitted China, as we now know, for ever, his services being lent to the Government of India, in connection with the task of delimiting the frontier between Yünnan and Burmah. Though, in earlier days at least, much addicted to all forms of athletic exercise, he was not constitutionally strong, and had a sovereign contempt for the precautions which the average European thinks it necessary to take against the dangers of an Eastern sun. Till further details are to hand, we can only conjecture what the

causes were which led to his last illness, whether lack of stamina to resist a sudden attack, or unavoidable exposure to the treacherous climate of Upper Burmah. Whatever the cause may have been, we know he has died at his post and in the midst of his duties. In Edward Colborne Baber our Society has lost one of its most distinguished members; the Government, a zealous and energetic servant; and those who knew him well, a valued friend.

REVIEW.

AN EXPOUNDER OF DARK SAYINGS.

"CHUANG TZŬ, Mystic, Moralist and Social Reformer;" *Translated from the Chinese by Herbert A. Giles, H. B. M.'s Consul at Tamsui.* London: Bernard Quaritch, 1889.

We live in days of which the most striking characteristics are an advance by leaps and bounds in all departments of science, and an iconoclasm of creeds as thoroughgoing, in its way, as Luther's revolt from Popery, and much more widespread. Some there are who would connect the two phenomena in a chain of cause and effect, and not without plausible grounds. However that may be, it is certain that the old-fashioned hard-and-fast bounds of most creeds, like to the superannuated defences of many a continental town, have been contentedly dismantled by those within, or have fallen flat before the trumpet blasts of modern thinkers from without. Had these trumpeters been none but godless men of science, as the lovers of the old battlements at one time maintained, the symptoms would not have been so serious as they actually are; but when the higher dignitaries of the Church recruit the ranks of the levellers, and demolish, with a hearty good will, here the six days of the creation, and there the bolts and bars of an everlasting hell, it is no wonder that people in general begin to wake up, and take advantage of their enlarged horizon, to speculate whether there be anything worth knowing beyond the ruined boundaries which hem them in no longer.

The vast majority of the respective flocks still remain, doubtless, contented and unquestioning within the sheepfolds of Protestantism and Roman Catholicism, but there are an increasing number of truants, who place the honest doubt which leads to enquiry above the cut and dry tenets of any creed, who decline to admit that "another

man's doxy" is necessarily heresy and schism, and who on the whole gain in Charity where they lose in Faith. And it is consoling to know that a good authority appraised the former at a higher value than the latter.

The spirit of the age is, in brief, a spirit of enquiry into other men's beliefs, with the inevitable result that the enquirer finds there is much commendable, where he would once have been taught to believe all was beyond question condemnable. *Audi alteram partem*, is the motto of the day. Let us hear what the so-called Turk, Jew, Infidel or Heretic has to say before we decide that he is (almost) past praying for. Fetischism may eventually find partisans, or at least apologists, for aught we can tell: at any rate Buddhism, Mahometanism, Confucianism and Taoism have their admirers, and with respect to all creeds, whether religious or philosophical, there is a general feeling growing up that we ought to understand before we condemn.

The works of Chuang-tzŭ, as Mr. GILES is careful to point out, have no title whatever to be classed among the Sacred Books of the East, unless we make a radical change in the ordinary meanings of words. It is also true that Confucianism, which has often been vaguely spoken of as the religion of the educated Chinese, has no claim to rank as a religion. Of Confucius, Mr. GILES writes, (p. IX), "He taught his countrymen that *duty to one's neighbour* comprises the whole duty of man. Charitableness of heart, justice, sincerity and fortitude sum up the ethics of Confucius. He knew nothing of a God, of a soul, of an unseen world. And he declared that the unknowable had better remain untouched."

This is an excellent definition of Confucius' doctrines, and to define Agnosticism scarcely a word would have to be changed. Confucianism had never heard of a Supreme Being; Agnosticism has, but decides that God is a possibility without being a necessity. The wavering Christian has a tendency therefore to become practically a Confucianist, his Confucianism being termed Agnosticism because it retains an ineradicable tinge from a past belief. And in like manner the lukewarm Confucianist of the East, tired of what Mr. GILES calls the "hard and worldly" doctrines of his prophet,

degenerates into the untrammelled *far niente* follower of Chuang-tzŭ and Quietism.

Enough has been said to show that the enquirer into the moral systems of the Far East, who should neglect the study of Chuang-tzŭ, would have unduly narrowed his field of research. But there are few indeed of such seekers after knowledge, even among the remnant possessed of a fair acquaintance with Chinese, who could crack so hard a nut as Chuang-tzŭ in the original. An earlier version, from the pen of Mr. Balfour, was, it is true, in the field, but it must be admitted that Mr. Giles has brought to the task maturer powers, a greater practical knowledge of a translator's requirements and a more thorough command of forcible and idiomatic English. It is a difficult, nay, an impossible, task to divest a translation of this length of all the "parfum de l'antiquité," and the Eastern flavour which is essential to it; and, even if possible, such a deodorizing process would be undesirable. The smell of the oil is pleasant enough to those, who can appreciate what an arduous work the seven years of toil for his uncouth Rachel has been to the author. Whatever gratification Mr. Giles may derive from the completion of his labour of love, I trust he will remember he owes a debt of gratitude to his precursor. In 1882 he wrote, "I personally have no reason to be otherwise than grateful to Mr. Balfour for attempting a translation of the *Divine Classic*. His effort stimulated me to do that which I should in all probability never have done—read the works of Chuang Tsze from beginning to end." There may be some who doubt the lasting character of Mr. Giles' gratitude and who yearn with me to see him take in hand some abstruse but interesting author, who has hitherto escaped translation at the hands of a Legge or a Chalmers, a Balfour or a Beale. It is distinctly a matter for congratulation that, having, shortly after its appearance, satisfactorily demolished Mr. Balfour's version in the *China Review*, Mr. Giles dismisses the offender on this occasion with a Parthian kick at the end of the Introduction, and in a few disdainful lines condescends to

"let the foolish yeoman go."

Writing chiefly for a class to whom the language of Chuang-tzŭ is unknown, Mr. Giles has succeeded in laying before them a translation which, while conveying the purport of the original accurately, as far as a cursory inspection has enabled me to judge, is couched in smooth and lucid English, vastly easier of comprehension to the Western reader than the original is to the Chinese. For such as appreciate caviare, the book will have an undoubted attraction. It cannot be said to be light reading, nor is it a work of such a kind that, when once taken up, you cannot relinquish it till it has been read to the end. On the contrary, even a reader to whom Browning is clear, will often have to lay Chuang-tzŭ down in order to think a passage over. Many a page will have to be read yet once again before the author's drift is grasped, and there are not a few sentences which will have to be treated as enigmas and given up.

For instance, we have on page 19 the following words:—"To take a finger in illustration of a finger not being a finger is not so good as to take something which is not a finger." Perhaps Mr. Giles understands what the above means; I confess, I do not. In any case the fault does not lie in the translator, it is an accurate version, I should say, of the Chinese; but if Mr. Giles does understand it, I think he might have enlightened meaner mortals in a note, for the import is far from self-evident. Possibly this passage belongs to the third class of renderings referred to on page xiii. In wrestling with the obscurities of his author, Mr. Giles adopted three sensible rules,—"Where there is a consensus of opinion [among the native commentators], I have followed such interpretation without demur. But where opinions differ, I have not hesitated to accept that translation which seemed to me to be most in harmony with the general tenor of Chuang-tzŭ's philosophy. And where all commentators fail equally, as they sometimes do, [see for an instance page 329,] to yield anything at all intelligible, I have then ventured to fall back upon what Chuang-tzŭ himself would have called the 'light of nature,' [for which see page 19.]"

It is doubtless by virtue of Rule III that Mr. Giles has been able to present some sort of a version of many a passage which would otherwise have had to be omitted. It would have been useful if such passages had been indicated by an asterisk, placed within

brackets, or otherwise distinguished. In a few instances, however, the fact is mentioned in a note. This bold determination to conquer where so many native commentators have failed, is evidence of considerable moral courage and laudable self-confidence, and those who know Mr. GILES well, will feel sure that, in the absence of authoritative native decisions, the interpretations of "CHAI FU TZŬ" are as good as any procurable from his peers.

I do not propose to enter on a consideration of the contents of the book itself; if any desire to know what Chuang-tzŭ has to say, are there not booksellers? But it will not be out of place to offer some remarks on the way in which the work of translation has been done. Mr. GILES has taken a hint from Mr. IGNATIUS DONNELLY, and in so doing has placed his reviewers somewhat at a disadvantage. The author of the "Great Cryptogram," it may be remembered, did not offer a complete elucidation of his alleged discovery. He contented himself with giving a specimen of the results of his calculations, with some of the main features of the system by which these results were arrived at, and then with the calmness of conscious worth—or, the colossal impudence of brazen imposture—invited the public to take the rest on trust. Similarly Mr. GILES announces that this wholly English reproduction of Chuang-tzŭ is to be followed shortly by a supplement, consisting of such textual and critical notes as involve the use of Chinese characters in elucidation of his translation. It is obvious that to criticise renderings, while still unprovided with these coming explanations, is to work at a disadvantage. I shall, however, make a few observations of this nature, always premising that I am quite prepared to find Mr. GILES has in reserve arguments which may justify, even in my own eyes, renderings to which I now feel impelled to take exception.

At the end of his Introduction Mr. GILES states, that "only one previous attempt has been made to place Chuang-tzŭ in the hands of English readers." Of the works of Chuang-tzŭ, as a whole, this is perfectly true. But portions have found a translator between the appearance of Mr. BALFOUR's book in 1881 and the present version. It will be instructive to place some of these translations side by side, numbering them 1 (Mr. BALFOUR), 2 (the other translator) and 3 (the work under review).

1	2	3
(*a*) "You are as obstinate in your opinion as a man who keeps running round and round in the same circle."	"You might as well try to imprison a man by marking the ground round him."	[p. 55] "Beware, beware, move cautiously on!"
(*b*) "This relief from the anxieties of life and death is as great as that experienced by one who, being strung up by the heels, is suddenly cut down."	"A man suspended in the air may cut down another suspended man, but not himself."	[p. 81] "I am simply * * * * hanging in the air, unable to cut myself down."
(*c*) "When a corner is hacked (with a knife) it requires afterwards to be carved and worked."	"Guard them (men's hearts) from all external injuries."	[p. 123] "But try to cut and polish it."
(*d*) "In the beginning of all things, there was not even nothing. There were no names, these began afterwards."	"At the beginning of all things there was nothing; but this nothing had no name."	[p. 143] "At the beginning of the beginning, even nothing did not exist. Then came the period of the nameless."
(*e*) "Though a loud noise may be unheard by those who are close by."	"A great truth cannot penetrate rustic ears."	[p. 151] "Grand music does not appeal to vulgar ears."
(*f*) The perfect man, though he walks in obscurity, meets with no obstructions."	"The perfect man can walk under water without difficulty."	[p. 231] "The perfect man can walk through solid bodies without obstruction."
(*g*) "I never meet with favourable times in my capacity of ruler."	"I do not serve my prince as the times require."	[p. 243] "Officially, I am not a success."
(*h*) "Things which come together fortuitously—without any special cause or *raison d'être*,—afterwards part company in an equally fortuitous manner."	"The former (the superior man) having had no motive in contracting the intimacy, will have no object in breaking it off."	[p. 254] "The friendship of the mean man begins without due cause, and in like manner comes to an end."

1	2	3
(*i*) He looked southwards [to the abode of Lao Tsze] and was displeased."	"He became king but did not leave off [teaching."]	[p. 294] "On hearing of this, Kêng Sang Ch'u turned his face to the south [towards the abode of Lao Tzŭ] in shame."
(*j*) "Saying, 'O ye, O ye who are alone the first to incur the great troubles that there are upon the earth, are you not robbers, are you not murderers?"	"[To this Lao-tzŭ] replied, "My son, my son, are you then going to be the first to rid us of the great curses of the world with your 'Do not steal,' and 'Do no murder'?"	[p. 344] "'O Sirs, O Sirs, there was trouble upon earth, and you were the first to fall into it.' 'I would say, Perhaps you were robbers, or perhaps murderers?'"

In the case of some of these passages, it is almost incredible that meanings so utterly diverse should be extractable from them. And it is, if possible, still more incredible that any one considering the renderings of, for instance, the sentence marked (*c*) in the 2nd and 3rd columns, should be able to maintain that the Chinese language is never ambiguous. Yet these two renderings are from the same hand, for translator No. 2 is no other than Mr. Giles himself, as may be seen in the *China Review* for July 1882. And who, in the face of Mr. Giles' new rendering of passages (*d*) (*i*) and (*j*) can doubt that Mr. Balfour will be able to gather some crumbs of consolation for the stripes of 1882 from the pages of Mr. Giles' Chuang-tzŭ of 1889 ?

It would be eminently unfair to deduce from the above passages that Mr. Giles seven years ago had only an elementary knowledge of the Chinese language. Not only unfair but grossly illogical, for to draw a universal conclusion from premises of which one at least is particular, is a fallacy such as would make him of Stagira turn in his grave. Yet it is sometimes done. The just conclusion to draw is that in 1882 Mr. Giles had given Chuang-tzŭ only a hasty consideration, and has seen reason to modify his opinions since.

In striving to put Chuang-tzŭ before the English reader in as easily intelligible a form as possible, and perhaps in some instances

from a wish to be graphic or to turn a sentence neatly, Mr. GILES has ended by being at times misleading. What I would chiefly complain of is the rendering by one English word of divers Chinese expressions, which while perhaps reducible to one general category, are still of many distinct shades of meaning. It is a translator's peccadillo which Mr. GILES shares with the authors of the Authorised Version of the Bible, so he errs in good company; but as this very *laches* formed one of the strongest arguments in favour of a revision, it is a pity it was not avoided here. The most glaring instance is of course the word "God," which some sinologues would say does not occur once in Chuang-tzŭ, but which nevertheless will be found liberally sprinkled throughout these pages. Waiving the objection which might be made that the Chinese can hardly be said to have a word for "God" (with a capital letter) at all, it would have been open to Mr. GILES to select any one character which he thought would bear the rendering, and to have restricted the use of the English word to passages where that character occurred. But take the following sentences:—

(1) "I played as a man, drawing inspiration from God." [p. 177.]
(2) "Its name is then *of-God*." [p. 194.]
(3) "Were I to prevail upon God to allow your body to be born again." [p. 225.]
(4) "It is the delegated image of God." [p. 282.]
(5) "God will punish them." [p. 302.]

The unwary reader would take it for granted, and justifiably so, that "God" in each case represents the same idea in Chinese. But so far is this from being the case, that in each of the five the idea is different. In (1) it is *Tʻien*, Heaven; in (2) *Ti*, a ruler or Emperor: in (3) *Ssŭ Ming*, the Controller of Destiny; in (4) *Tʻien Ti*, Heaven and Earth; and in (5) *Kuei*, a devil, or, as translated on p. 236, a bogey. Only in this last instance does Mr. GILES explain in a note this somewhat startling specimen of catachresis.

This wholesale reduction of many terms into one occasionally lands Mr. GILES in a difficulty. For instance on page 41 there is a

passage, "He who is inwardly straight is a servant of *God*. And he who is a servant of *God* knows that the Son of *Heaven* [the Emperor] and himself are equally the children of *God*."

Here each of the words italicized represents the *T'ien* of the original; so that we have the anomaly of the same character translated in two different ways in as many lines. What Mr. GILES' dilemma was is of course obvious enough, but if he had elected to translate *T'ien* in the usual way the dilemma would not have presented itself, and the result would have been rather clearer and more nearly what Chuang-tzŭ meant to express.

Another case of misleading (here, I fancy, with the idea of being more graphic,) occurs on page 40:—"It will be as though you took fire to quell fire, water to quell water, which is popularly known as 'pouring oil on the flames.'" The enthusiastic proverb-hunter might well be excused for thinking he had run to earth in Chuang-tzŭ an excellent equivalent for a Western saying. But on turning to the Chinese he would find nothing about oil, nothing about flames, and not even the word "pouring." The Chinese is simply "making matters worse" or, more literally, "aggravating" [the difficulty or, situation]. Mr. GILES would have been quite justified in inserting in a note that in Europe we should speak of "pouring oil on the flames," but he ought to have kept it out of the text.

On p. 135 we read "Sovereignty begins in virtue and ends in God" (*i.e.*, Heaven). I should say it is doubtful whether the character *ch'êng*, here translated "ends," will bear that interpretation. "Is perfected" appears nearer the mark. But this is a case in which the promised supplement may enlighten us. Supposing, however, that "ends" is tenable, I wonder Mr. GILES resisted the temptation of giving the dictum a prophetic turn. Translated, as it well might be, thus, "Sovereignty originated in pre-eminence and ended in divine right," it would have been startlingly applicable to the history of monarchical institutions.

We must look to the supplement, I presume, to reconcile the translation of a sentence on p. 137 with the original. The former reads, "He will not account a *throne* as his own private gain," but the Chinese, at least in the text I have followed, has no

mention of a throne, but has instead "the profits of a generation."

But with a wholesome fear of this ingeniously minatory supplement, which may reduce me to confusion when it appears before my eyes, I refrain from further textual criticism, and will close this notice with a hearty commendation of Mr. GILES' Chuang-tzŭ to the attention of the reading public, by way of valediction.

G. M. H. PLAYFAIR.

PROCEEDINGS.

MINUTES *of a* GENERAL MEETING *held at the Society's Library on Saturday,* 14*th December* 1889, *at* 9 *p.m.*

The chair was taken by Mr. P. J. HUGHES (the President). About 40 persons were present.

The CHAIRMAN, in opening the proceedings, said that the lecture which Dr. Macgowan had kindly undertaken to give that evening, was one which could not be otherwise than instructive and interesting, as it referred to a subject which had at least the charm of novelty to the general public. It was true that "Gynæcocracy," or "Gynarchy," as he should prefer to call it, was probably known to some of them under a more familar title as applied to a system of Government in the domestic circle. It was understood, however, that the lecturer did not propose to treat the subject as a social question of the present day, but as a political and historical question of the past. It was unnecessary to go through the form of introducing Dr. Macgowan to a Shanghai audience. As the Nestor of sinologues, he was known to most of them and respected by all; and his many valuable contributions to their knowledge of China and the Chinese had made his name familiar as a household word. He was sorry that the unavoidably short notice which had been given and the severity of the weather had prevented the attendance of many who would otherwise have been present; but among the numerous and representative audience there assembled, the lecturer would be glad to recognise some of his old friends and fellow-labourers in the field of Chinese literature; and he (the Chairman) had no doubt that Dr. Macgowan would receive the attentive and appreciative hearing which he well deserved.

Dr. Macgowan, proceeding to read extracts from his paper on "The Gynæcocracies of Eastern Asia," remarked that the unmellifluous word shortened by Sir Walter Scott into gynocracy meant simply what in domestic matters all right-minded men enjoyed—the sway of woman. On the present occasion it referred to political domination, yet it was not to be regarded as bearing on the question of the enfranchisement of women, but as a contribution to anthropological sociology, though perchance something might be found which could be made to fortify the views of advocates and opponents of that momentous question. He added to these prefatory remarks that he eschewed the use of the term "female" as not sufficiently respectful to the dependent sex—to whom the fittest, the reverential, sacred term "woman" or "lady" should be applied. Ethnographical observations commenced the discourse, to show the conditions of aboriginal peoples whom the Chinese found on the Yellow River on their arrival from Akkad. The Chinese then possessed the rudiments of civilisation, of which the aboriginals were destitute. That this irruption of the Chinese was anterior to the invention of cuneiform writing in Akkad was probable, because of their use of quipos or knotted cords in keeping records. Dr. Macgowan added parenthetically that on a future occasion he would explain his views respecting quipos, as they, and not mere tradition, were the base of Chinese archaic annals, and that from those quipos the earliest form of Chinese written characters was evolved. Anterior to these quipos, judging from certain neighbouring tribes, notched sticks were employed, which was an improvement over a plan by which certain Mongol Sachems kept account of the number of their soldiers and cattle. Into a hole in the floor of the tent sheep droppings were deposited, a pellet being dropped in or subtracted on every addition or loss of man or animal; by counting the store of pellets, the strength of the army or number of horses could be known. With regard to the tribes which the Chinese found existing on reaching their future home, Dr. Macgowan remarked that the philosopher of Universal Love—Motzu, proto-altruist and arch-heresiarch—whose sun was rising when the sun of Confucius was setting, enunciated views on the evolution of the State and Family which are in accord

with those of modern anthropologists. Men at first were in the lowest state of savagery: there was no Golden Age as depicted by sages and political philosophers until men felt the necessity of a remedy for the anarchy that prevailed. Practices of self-deformation were, some of them, remarkably curious, such as those of drinking through the nostrils, extracting of front teeth and substituting dogs' teeth, head-flattening, etc.; the most striking was the attempt to raise a polydactylous race, by destroying all children who came into the world with the usual number of fingers and toes, and thus the tribe had a dozen fingers and as many toes. Self-deformation might be taken as a differentiation between man and brute; not even the anthropoid ape disfigured his visage to improve his beauty; he did not tattoo himself, nor did his mate resort to tight-lacing. Man alone was given to such conceits. The first Queendom described was that which was established in Tongking at the beginning of the Christian era, the occasion being an attempt to throw off the Chinese yoke. In relation to the suppression of that rebellion, Dr. Macgowan remarked that the Chinese army would have extended its conquests in the South until the Dragon could lave in the Straits of Malacca, but for malaria, which in a single year destroyed half their number. But for that fell foe Chinese conquests would have annexed the entire Malayan archipelago long ago, and Canton would have become a northern port of China. Jungle-fever alone prevented Burma becoming a Chinese province in the latter half of the last century. The most remarkable gynecocracy was established on the South of the Karakorum Pass in Kashmir by a tribe of Chiang, who in the third century B.C. were driven from Eastern Turkestan. The sufferings of their flight across the Gobi desert and ascent of the Karakorum Pass must have caused them to reach their destination with very few surviving women, and polyandry was the result, and the system of plurality of husbands led to the establishment of hearth rule. Women were few and became dominant. In the course of their history the Karakorum Chiang, wearied by civil wars consequent on contested claims to succession to the sovereignty, resolved to vest the chieftaincy in a line of women, and applied to a dominant clan for two maidens to be their queen and vice-queen, which was

accorded, and when these died without female issue application was again made for a brace of girls as successors, a large amount of gold being sent as a present to the clan which enjoyed the hereditary right of keeping up the line of women sovereigns. Her majesty the queen of the Karakorum Chiang held a *levée* every five days in a nine-storied palace. No male held office except in the army, which was under the command of a generalissimo. Attempts at display were made at this court, the most striking feature being the horns which adorned the head-gear of the ladies, each sporting gold horns indicating the number of husbands possessed. Among a tribe of barbarians in the south tufts of hair indicated the number of husbands which the dames possessed. Comparing this court with the contemporary court of Heraclitus it is probable that while the barbaric display of the former would jar on the æsthetic sense as compared with the magnificence of the court on the Thracian Bosporus, yet the decorum of the simple pagans placed them on a plane higher than that of the licentious Christian court. How long this polity existed it was impossible to discover; probably more than a century, possibly several centuries. It was not likely that of their own accord the Chiangs abolished woman rule; it probably existed until the State was subjugated by more powerful neighbours. Their constitution was the ideal of a commonwealth—rule with the consent of the governed; it did not appear that they became dissatisfied with their peculiar institution, seemingly they were content with the gentle, suave, benign and not unwise sway of mothers, wives and sisters. The whirligig of time had brought the descendants of the founders of this gynecocracy under woman's sway; the Empress of India now ruled in that region and with the free consent of the governed. It was noteworthy that the men of this queendom, where women were excluded from every office except chieftainship, were less advanced in civilisation, less martial, less virile than those who committed the entire administration of the country to their wives. Whether their higher civilisation was due to that cause, or whether their greater progress induced them to adopt the polity, cannot be ascertained. Usurpation by a son of a queen led to the abolition of woman's dominion in the country, which became absorbed by China, when its

polyandry was gradually changed to less discivilising polygamy ; and when their land became denationalised, each cultivator becoming owner of the soil he cultivated, they entered on a march of improvement, as did the Chinese when at the revolution (China's sole revolution, the only interruption in the continuity of her evolution), to which cause, with eligibility of every man to office, is due the progress that she has made. Erstwhile husbandmen enjoyed their land in usufruct only, during which period China was stagnant, or engaged in internecine strife. The lecturer went on to give notices of Malayan, Papuan, Siamese, Japanese and Corean gynecocracies, concluding with those of China, empresses and female regents. It was not until the approach of the revolution that cases occurred—these cases were already known to history, and might here stand over, with the remark that fears of usurpations of empresses dowager acting as regentesses led sometimes (under the Northern Wên in imitation of Hung Wu) to the murder of mothers of heirs apparent, a practice restricted to an alien dynasty and strongly denounced by Chinese writers. It was chiefly among the aboriginal inhabitants that women chieftaincy obtained to this day. There was seldom an age in which one tribe or another did not afford examples—the more primitive the condition of these tribes the slighter was sexual differentiation as regards public governmental affairs, both civil and military. It was rumours respecting tribes of this kind which gave rise to fables and myths in Greece regarding Indo-Scythian Amazons. To the list of women rulers of China, which included empresses of execrable character as well as of character the most exemplary, must be added that of the illustrious lady who has just retired from a regency which must give her a conspicuous niche among the best rulers of her sex. A few remarks were added respecting the court of Rock-tiger, who for a few years held portions of Shensi and Shansi under his sway, shortly before the establishment of the Northern Wei. His Majesty Rock-tiger had a body of maidens numbering ten thousand, duly co-ordinated into seven ranks. To the cleverest was assigned the duty of superintending the astrological observatory —to check the predictions of the male Bureau. More interesting was his cavalry, a thousand strapping girls wearing jaunty, crimson caps, on steeds gaily caparisoned, as a body-guard.

Dr. Edkins said that they had had presented to them a very interesting subject treated in a very interesting manner. It is well for the progress of ethnology to draw on the literatures of Asiatic countries for fresh facts. In the books of ethnologists of the present age, published in Europe and America, attention was devoted too exclusively to the modern savage as he was found in islands scattered about the ocean, but they could only arrive at safe conclusions in ethnology by joining the old facts collected in national literatures with the newly-gathered stories of modern travellers. This contribution of Dr. Macgowan's to their Journal would be welcomed by the ethnological and anthropological societies of the West. Prof. Huxley had divided races into three—the black, the tawny, and the white. He laid down a line from Lapland to the Malayan archipelago, and placed the Turanian or yellow races to the north and east of this line. Perhaps proximity to that line had something to do with the appearance of Amazons in history. In Homer they occupied a prominent place. Gynocracies had played a great part near that line, apparently from the union of race characteristics of opposite kinds, and quite as much from their clashing and rivalry. In regard to the origin of female rule, it was, he thought, the consequence of regency, and the hereditary principle in Governments was the principle on which it rested. In China for a quarter of a century resident foreigners had had the opportunity of judging of the success or failure of rule by a woman. The opinion was unanimous that the country had been wisely ruled. The fact was that woman was naturally possessed of those faculties which, improved by education, have led to its being frequently recognised in times ancient and modern that the government of a State was safe in her hands.

Dr. Bock and Dr. Focke added a few words, and a hearty vote of thanks was accorded to the lecturer.

The meeting terminated with a vote of thanks to the Chairman.

MINUTES *of a* GENERAL MEETING *held at the Society's Library, on Friday, 20th December 1889, at 9 p.m.*

The chair was taken by Mr. P. J. HUGHES (the President). There were about 50 persons present.

In opening the meeting the CHAIRMAN mentioned that as the proceedings of the last meeting of the Society, which was held on the 14th instant, had been reported in the local press, he would, with the permission of the meeting, dispense with the formality of reading the minutes. There were, however, a few matters not mentioned at the last meeting which it was desirable to notice. He was informed by the Honorary Secretary that the replies to the questions circulated by the Society early in the year on "Currency and Measures" had come in neither as readily nor as fully as was expected. Mr. Morse, who had kindly undertaken the duty of editing the replies, reported that the abstract of the papers which he was preparing would "be useful only to circulate for amendment and amplification." When the abstract was complete, it was proposed to print and circulate it, in order that the information might be checked and supplemented. It was hoped that all interested in the subject—and it was one which should be specially interesting to all engaged in commerce—would aid in making the information as full and precise as possible. He might add that at a late meeting of the Council it was suggested that the subject for a similar series of questions to be put in circulation next year should be "The Roads and General Means of Communication and Travel throughout China." With a view of obtaining information on this important subject, a list of questions was in course of preparation. When referring at the last Meeting to the forthcoming papers intended to be read or published, he should have mentioned that they had in the press a valuable paper by Mr. von Möllendorff on "Manchu Literature." It was also his duty to announce that since the Annual General Meeting of the 28th May the following gentlemen had been elected members of the Society:—The Rev. E. T. Williams and Dr. R. C. Beebe, of Nanking; Messrs. A. D. Startseff and G. Martinoff, of Tientsin; Messrs. Chesney Duncan and T. E. Hallifax, of Corea;

Messrs. Claude A. Rees and Otto Messing, of Shanghai. He now begged to invite Dr. Faber to favour them with some account of his paper on "Prehistoric China as revealed by the Chinese Written Character." The paper in its original form had been accepted for publication by the Council and would appear in the Society's Transactions at an early date.

Dr. E. Faber then read extracts from his paper on "Prehistoric China as revealed by the Chinese Written Character," which is printed *in extenso* on pp. 141 *seq.* of this volume.

Dr. J. Edkins said that the exposition by Dr. Faber of the formation of the Chinese characters was most interesting and would prove useful, it was to be hoped, in alluring to the study of the Chinese writings a larger circle of students. In regard to Dr. Faber's chronology he thought it very far in the wrong. By assuming the age of Chinese writing to be no earlier than about 800 years before Christ, Dr. Faber placed himself in opposition to Confucius, to Mencius, to the Han dynasty scholars, to the classical school of the T'ang dynasty, to the Sung dynasty critical school, and to the scholars of the present dynasty, who had carried research much farther than it had been carried before and in a perfectly independent manner. Dr. Faber was prepared to treat the classics as legend, and in doing so he was going against much valuable evidence. For example, there was the astronomical proof of the genuineness of the first parts of the *Shu King*. The Pleiades were now at the winter solstice about 145 degrees distant from the sun. But in the *Shu King* the Pleiades were only 90 degrees from the sun at the winter solstice. The precession of the equinoxes was nearly a minute a year. Taking it at fifty seconds, in 71 years the place of the Pleiades had moved a degree; hence the observation in the *Shu King* must have been made about 2,108 years before Christ. Anyone could make the addition of 50 seconds a year, and he would find it so. In this case we found astronomy in accord with Chinese chronology, and we had better, then, accept the statement of scholars in regard to the books in which this and three other similar observations of stars were found. Not that the book was entire or uninjured. It consisted of fragments, and in it there were many gaps. But

those of an astronomical kind showed that its earlier portions deserved their confidence. With this view the contents of the book agreed. The Emperor Yau gave his three daughters as wives to one husband, the Emperor Shun. Such a thing could not have happened in the China of the Chow dynasty or at any later period. The book that contained it must therefore be much more ancient. So with the geographical chapter, the *Yü Kung*. Dr. Faber said it was written in the Chow dynasty. But against this view was the fact that it had no Chow dynasty names. Its territorial divisions were the Nine provinces, the *Kieu cheu*, names which had given place to others in the times of the Chow. So it might be shown in regard to the *Yi King*, the book of divination, that the names of five-sixths of its 64 sections were older than the Chow period and that they must have been the accepted names of the divining symbols many centuries before B.C. 1120, the time of Wên Wang. The completion of the system of Chinese writing only about three centuries before the age of Confucius was not capable of being harmonised with the fact that Confucius admired antiquity and studied with great reverence the classics which he edited. If they were such new productions, we should have found proof of it in his writings. So with Mencius. Mencius at the end of his work spoke reverentially of the line of ancient kings and sages ending with Confucius, a hundred years before himself. They were, he says, parted at intervals of 500 years or more. Yau and Shun, T'ang and Wên, were his moral and political heroes; and to his knowledge the oldest of these lived more than 1,600 years before his own age. The passage was a splendid ending to a brilliant book and came from one who was a professed expounder of the doctrines of the ancient sages and was personally extremely fond of history. Thus Dr. Faber placed himself in direct opposition not only to Confucius but also to Mencius. Then it should be remembered with what earnestness the scholars of the Han dynasty laboured to restore the ancient classics. Could these able and learned men have been so far mistaken about these books as Dr. Faber's hypothesis implied? It was impossible; and so with the learned classical school of the T'ang dynasty. It was no easy task to overthrow

the results of their careful and laborious vigils. Then came the school of the Sung philosophers, followed at due interval by the critical school of the present dynasty. Truly it was a long array of authorities, distinguished for deep scholarship and critical acumen, to whose views and wide knowledge this theory of the late origin of Chinese writing is opposed. The critical school of the present dynasty, beginning with the seventeenth century and still flourishing, was specially worthy of respect. The "Bell and Vase" school of research began its career in the Sung dynasty. At present there were about fifty vases in the imperial collection marked in books as of the Shang dynasty; and in the inscriptions on these vases there were many characters which were written phonetically, so that the phonetic principle must have been adopted several centuries before B.C. 1120. Lastly, to account for the orderly development of the language since the first poetry was written, they needed the whole of the extent of the Chinese historical chronology, and could not do with less. A single tone took about a thousand or fifteen hundred years to grow up into accepted use. This natural law would find its scope for action much too cramped and confined within the restricting limits of Dr. Faber's new hypothesis. Recognising the utility of Dr. Faber's analysis of the characters and his study of their construction, his chronology of their origin needed to be firmly rejected, although he had supported his views with so much learning, so much Chinese reading, and so much knowledge of the subject.

Dr. Williamson, who said he agreed with Dr. Edkins on the subject of chronology, and who put a number of questions to Dr. Faber on points raised, mentioned that 3,000 years before Christ the Akkads, whose writing had only lately been deciphered, had libraries of two kinds—clay bricks and papyri—and hymns to their gods.

Mr. Kingsmill said that were he to differ from the writer of the paper it would not be, as the last speaker, on the score of his having postdated the introduction of writing into China. Rather, he thought, that he had assigned too early a date for the use of the written character as a means of disseminating literature. There was

evidence, and very strong evidence too, that even so late as the time of Confucius the written characters were not so far developed as to be available for expressing thought and language generally. There was nothing unique in the spectacle of a nation advancing to a high level of civilisation without the possession of a written literature; the case of India, situated nearer to Europe and the West was a case in point. The Rig Veda was on good grounds assigned an antiquity of about fifteen hundred years before Christ, yet it was not till the successors of Alexander opened a path for Western civilisation that writing was introduced into India. The ancient Sanscrit literature was during all that period handed down by oral tradition, and not only the Vedas themselves but, extraordinary to relate, a mass of explanations and comments exceeding in size the original. Again, on the landing of the Spaniards in Central America, they found an advanced civilisation co-existing with an entire absence of writing; quipos did indeed exist and were used for keeping tallies and as remembrancers of the great events of history, but the idea of their representing language had never dawned on the inhabitants of those countries. Mencius, who had been appealed to on the other side and whose authority they would scarcely doubt, was very explicit on the condition of affairs in China. "When the traces of the royal power of Chow were extinguished, the art of ballad-making was forgotten and annals came into vogue," he tells us (IV. 2. XXII). As a matter of fact the period of the destruction of the capital by the Turks (*cir.* B.C. 770) marks the close of the ballad era. It seems difficult for us, brought up amidst the surroundings of a literature some two thousand five hundred years old, to realise the condition of a people well advanced in civilisation without the aid of letters, yet we have only to look back along the current of our own history to find that but for external circumstances we might have been in similar case. The old ballads sung by the bards at the court of the Welsh princes were the exact analogue of the ballads of the *Shi King*, and so late as B.C. 541 we find (*Shi King* XXXI) the King of Wu sending his brother Kicha to the capital of Lu to hear and see their representation, a work of complete supererogation did the ballads, as we are gravely told, exist in writing at the time.

Again, in B.C. 529 we find the assistant recorder of Chow praised for his profound knowledge in understanding the three *fun*, five *tien*, eight *soh* and nine *k'iu*. He, however, fails when he is asked about the *K'i shao*. "If he doesn't know this," is the remark, "how should he know anything more distant?" Even so late as the time of Confucius we find no mention of writing and reading. True, Dr. Legge, by one of those strange instances of mistranslation which are the scandal of sinologues, makes Confucius ask his son, "Have you read the Odes?" but the word rendered "read" is "*hsio*"—*to learn by heart*. The *Sün Yü* bears internal evidence that it was not composed till long after the time of the sage, probably some three generations, for in Mencius and his contemporaries we find unmistakable allusions to writing and reading, while not a single mention is made of either in the works attributed to Confucius. When, therefore, he tells us Confucius was afraid when he had made the *Ch'un-t'siu*, we find him using the same word "make" which is applied to composing a ballad. What Confucius really did make, and the result of which he feared, is hardly to be considered as what we recognise as the text of what is now called the *Ch'un-t'siu*, but then were lectures delivered to his disciples, which afterwards, written down in the time of his grandson, became known as the *Tso-chwan* or "Assisting Narrative" erroneously rendered as Tso's narrative, for whose composition a special sage, Tso King-ming, has been invented by the myth-makers. The *Ch'un-t'siu* itself was doubtless in existence in Confucius' time, but its structure shows that it was at best but a rude description of writing. Even as now printed, with its necessary particles supplied, it contains scarcely one thousand characters: in its original state it must have contained much fewer, and was probably not much advanced beyond the stage of quipos. It was not history, but merely the pegs on which history could be hung, and to enable it to be of any service the court *shis* handed down orally from one to another the tradition of the events. This was the work of Confucius, and as soon as the art of writing was sufficiently advanced to enable language to be portrayed it resulted in the present *Tso-chwan*. He had himself paid much attention to the early literature of China with reference to the subject of Dr. Faber's paper; he had taken up the subject with no foregone conclusion, and

the result was that he had to discard the genuineness of much of the so-called early literature. Allusion had been made to the *Shu King*, and he must express surprise that Chinese students had been unable to recognise the composite character of the work as handed down. The earlier portions of the *Shu* more especially are of this description, and consist of rude rhymes, generally of four characters, embedded in a crust of later verbiage which is frequently little better than a mass of rubbish. The most trustworthy of the ancient works, the so-called Book of Odes, really the ballads of the Chows, was, he was sorry to notice, but little understood by Chinese students, but a careful study could not fail to correct many of the errors into which they had fallen. Of similar construction to the *Shu* was the *Yih King*, a copy of which he had brought with him. If the cabalistic accretions were removed from the text they would find left behind what were probably meant to represent rude versicles, and some of these he had translated and gave a specimen. The so-called early history of China, as the early history of many of the other nations of antiquity, began in myth and ended in legend. Besides this there was a vast amount of pure invention. They had heard quoted the pretended bases of the Shang dynasty, and his hearers would no doubt be surprised to learn that the 28 so-called Kings of that line were simply an old rendering of the twenty-eight mansions of the lunar zodiac. They would find these constellations appearing in ancient Persian in the Bundahesh, in India in the Surya Siddharta, and in old Chinese in the ordinary received twenty-eight Suh. Whence the names preserved in the *Kings* came he was not at the moment prepared to say, but their relations were apparently with the West, and the lists of the sovereigns bore internal evidence of having been evolved in the Han dynasty. It was doubtless comfortable to some minds to receive this mass of verbiage and rubbish as representing an ancient literature, and he envied Drs. Edkins and Williamson the frame of mind which led them to accept it because it was more agreeable to do so than to seek deeper for the truth. Unfortunately, with the writer of the paper, he was unable to bring his mind to this compliant state, and was glad in the interests of scientific truth that Dr. Faber had been bold enough to cast to one side the fetters of an unwholesome tradition.

Dr. Faber warmly thanked all the speakers for their interest in his paper, which had moved them to express their opinions on the subject. He quite agreed with Dr. Edkins that Chinese authors should be treated with respect and that their views should receive careful consideration. Chinese authors, however, were not so unanimous as Dr. Edkins' assertions implied. The principal dates in his lecture were taken from the best Chinese authorities. Neither Confucius nor Mencius, to whose authority appeal had been made, furnished any direct evidence in regard to the age of Chinese writing. Dr. Edkins seemed even to have forgotten the famous saying of Mencius, "Better no *Shu King*, than to place entire confidence in it!" Whether the established Chinese chronology was true or false did not at all affect the line of his argument. Mr. Kingsmill, who had given much careful study to Chinese antiquity, had already satisfactorily answered that point. He might, however, be permitted to remind Dr. Edkins that even on chronology Chinese authors do not agree. There was, for example, a difference of more than 200 years between the respective chronologies of the *Sz Ki* and of the Han books. W. F. Mayers (*Chinese Reader's Manual*, p. 366 Note) says:—"Numerous dissimilar schemes of chronology have been propounded by historical compilers, whose mutually antagonistic views sufficiently attest the unreality of the date for their speculations." There were almost no chronological data in the earlier parts of the *Shu King*. Chronology was still uncertain in the earlier time of the Chow dynasty; not even the chronology of the state of Lu, the native country of Confucius, could be determined beyond the beginning of the "Spring-Autumn" Annals, 722 B.C. Sze-ma Kwang, A.D. 1009-1086, got the credit of fixing the standard chronology; but he would call the attention of students to Choo He's account of the matter. He told them:—"When Kwang first made a chronological scheme, his earliest date was the 1st year of Wei-lee (B.C. 424). Afterwards he extended his dates to the time of Kung and Ho (B.C. 840). After this, again, he made his 'Examination of Antiquity,' beginning with the period of 'highest antiquity,' but he could give no dates of years earlier than the time of Kung and Ho. It was Shaou K'ang-tsie (A.D. 1011-1077) one of the most fantastic

writers of the Sung period, who constructed an arithmetical system and used history to paste it up, and who pushed his calculations up to the 1st year of Yao."—(Dr. Legge, III a, page 83, Note.) Thomas Fergusson, in his *Chinese Researches*, has done a great service to Chinese students by bringing together into one volume the results of all that has been written on Chinese chronology and cycles. After 268 pages of examination of evidence his verdict is: "The chronology of the Chinese can therefore only be considered as an elaborate *fictitious* contrivance, to put in narrative and historical order the traditions that have filtered through the outskirts of ancient civilised Central Asia, towards Chinastan; where at different periods, outcasts and adventurous military chiefs, and even colonies, have found a dwelling-place, and have brought thither with them the traditions of their former homes, which gradually their descendants have imagined were those of ancestors, who had lived all the time of those traditions in China; and thus they appropriated them for their own glorification and that of their adopted country." Mr. Fergusson makes a very important remark on p. 3 of his work:—"It is partly because the annals of those undoubtedly ancient nations (Egypt, Babylonia, Assyria, etc.,) *make no mention* of a coæval empire of China, that a reasonable doubt is suggested as to the reality of the chronology on which the antiquity of that empire is founded: for had China been in those times the seat of science and civilisation, and of the extent and power which are attributed to it, China would have had such a remarkable prominence in the social world that it could not have been unnoticed or unrecorded. It is this absence of any mention of China from the records of known ancient nations that even justifies a refusal to receive any part of its ancient history except with hesitation, and that also necessitates a most careful investigation as to its truth." Dr. Edkins referred to the marriage of Yao's two daughters to Shun as not in accordance with *later* Confucian morals. If not a myth, this story, however, compared favourably with stories related in the *Tso-chuen*, about the time of Confucius, and not at all in accordance with the moral standard of the Confucian classics. That geographical names were commonly older than any books which mention them, should not need mentioning.

Dr. Edkins seemed, moreover, to have forgotten that the division of China into nine provinces was ascribed to Chuen Hü, about 300 years before Yü, the names of which were the same as those of Yü, (Legge, III a 94.) The Emperor Shun, on the other hand, is said to have instituted the division of the empire into 12 provinces, (Legge, p. 38.) As Yü was co-regent with Shun, we find the two divisions of the empire, of which Yü's was regarded as the earlier and Shun's the later, very improbable. [See the chapter on the *Chow Li*, p. 202.] What the speaker had said as to geographical names applied also to the ancient names of the diagrams of the *Yi King*. He had no objection to *names*, only to their writing. Phonetic *writing*, he maintained, was not older than 1200 B.C., probably 800 B.C. He begged a careful consideration of the statistical table of written characters in the paper. Dr. Edkins' apparently strongest argument was taken from astronomy. "In the *Shu King* the Pleiades were only 90 degrees from the sun at the winter solstice." Dr. Edkins did not state that the stars mentioned for the summer solstice and those for the two equinoxes *could not be seen* at the time in China. (Chalmers in Legge III a, Pref. 92.) Dr. Edkins' assertion was in direct opposition to Dr. Chalmers' statement, who says:— "No doubt there was *a tradition* to this effect at the time when the *Shu King* was compiled, for the author, knowing nothing of the precession of the equinoxes, could not have adjusted them to the time of which he was writing. His 'examination of antiquity' (first sentence of Canon of Yao) was so far accurate, although the details of his narrative may and even *must* be mythical. Even Yao himself may be so . . . . The value of the astronomical part of the Canon of Yao, as a confirmation of the received chronology, has been much overrated. According to the obvious interpretation of the text, Yao had *reason* to expect the stars he mentioned to be in the equinoctial and solstitial colures. But what his reason was we are left to conjecture. It might be personal observation; or it might be tradition from his great grandfather, or from Noah himself." Thus, if Dr. Edkins wished his assertion to be of any value, he should first have shown that Dr. Chalmers was wrong. Dr. G. Schlegel published in 1875 a large volume of 927 pages and atlas, *Uranographie*

Chinoise. This learned author found Chinese chronology to be far in the wrong, and calculated, from the astronomical data of the *Shu King*, the year in question at 17,827 B.C., or, according to another calculation by the same author, at 16,916 B.C. The difference of 900 years is, of course, trifling in comparison with that of Dr. Edkins' persistently defended chronology, which amounts to about 15,000 years! They might reasonably expect that Dr. Edkins would first settle accounts with other astronomical sinologues before, on such basis, proposing another "firm rejection" of a view based on firmer ground. The astronomical statements in the *Shu King* were too vague to be of any scientific value. Not a single star was mentioned, but a whole constellation. Dr. Chalmers (Legge, III a, Pref. 95) says:— "The angular value of the 28 mansions varies from 1° to 30°, and modern books differ materially from the older ones as to the dimensions of each." Nothing was said as to whether it stood at the horizon or at the culminating point, nothing whether in the evening, at midnight or at dawn. Dr. Edkins simply presumed that the Chinese, 4,000 years ago, were able to determine, to a minute, the culmination of a constellation by mere eyesight, for no instrument was mentioned. Dr. Edkins further presumed that they could determine the exact time of six o'clock. Yao himself thought it better to verify his star-observations by "the length of the day," "the movements of the people" and "the condition of birds and beasts." Further, Yao sent his four officers in four directions; according to some commentaries, to the four extreme borders of the then known Chinese provinces. Their reports could then not have reached the emperor until after a period of several months. All these details pointed to traditions outside of China, which were never understood by the Chinese. Dr. Edkins picked out only one fact and fitted that to his purpose. They might be sure that on such ground no scholar would agree with Dr. Edkins and "firmly reject" the solid and careful arguments of this paper.

Dr. Jamieson said that he had felt it a great privilege when a few minutes before he had received a note from the Honorary Secretary, asking him to propose a vote of thanks to Dr. Faber for the interesting and valuable paper they had just listened to—a paper, he had no

hesitation in saying, which would prove the most important that had ever appeared in the Transactions of the Society. Those who had once been or were still students of history knew by sad experience that all history voluntarily constructed was liable to be deformed by falsehood: and without any unjustifiable amount of the scepticism which had been denounced by Dr. Edkins, it might be said that no record so formed, no matter how sacred or monumental, was worthy of implicit credence. But here the history, unconsciously inscribed on the language itself, was necessarily and infallibly true. There would needs be differences in the interpretation of it, but whereas, in the case of ordinary history, false interpretations of false records led us into a geometrical progression of error, we had, on the ground which Dr. Faber had broken, only to make sure of our interpretation by careful analysis in order to arrive at certain truth regarding the periods corresponding to the documents. The case was strictly analogous to that of the past history of our globe lithographed on the eternal rocks, where the animals and plants of ages long gone by had left indelible impressions which had only in comparatively recent times found their interpretation. Over these, countless generations of our predecessors had walked all heedless of the treasure beneath their feet. It was a like treasure that Dr. Faber had brought to light, and he (the speaker) was confident that he expressed the feeling of all who had heard Dr. Faber's exposition, when he proposed a hearty and appreciative vote of thanks to the lecturer for doing for Chinese what Max Müller and other eminent scholars had done for the primitive Aryan language.

The vote of thanks was carried by acclamation, and the meeting terminated with the usual compliment to the Chairman.

CHINESE ARCHITECTURE.

By J. EDKINS, D.D.

To understand the architecture of a country it is necessary to have some knowledge of antiquity. All architecture rests upon the past and embodies the ideas of the men of earlier generations. If, for example, we approach a Gothic cathedral, we observe it may have on the outside rows of statues sculptured on the front, representing the prophets and apostles of scripture. They are intended to shew that the Christian religion, for the conduct of the worship of which this splendid church was built, was founded on the teaching of the men whose statues we see. If they are in rows, as in Wells Cathedral, there is an idea borrowed from Greek art, which loved to represent battles, religious processions, gymnastic contests, feasts, marriages and court pageants in this way. Entering we pass the font, which reminds us that baptism admits a man to the Christian assembly. The thought then occurs that the door of the building is the gate of admission to the congregation, and that the building is symbolical in all its principal features. In the nave occupied by the assembly of worshippers, the congregation, which is entered by baptism, is symbolized. The aisles may possibly be separately assigned to men and to women, but are the parts of the one church. The mysteries and highest truths of the Christian faith are symbolized by other chief features of Gothic architecture. The whole has an adaptation to impress both the cultivated and the ignorant. Architecture in such a case has an effect of the most striking kind on minds

endowed with genius. So it was with Milton, whose familiar words I shall be pardoned for using here as a noble introduction to my subject :—

> But let my due feet never fail
> To walk the studious cloysters pale,
> And love the high-embowed roof,
> With antick pillars massy proof,
> And storied windows richly dight,
> Casting a dim religious light :

But the poet wished to describe the effect of music as well as of architecture on the worshipper, and he adds :—

> There let the pealing organ blow,
> To the full-voic'd quire below,
> In service high, and anthems clear,
> As may with sweetness, through mine ear,
> Dissolve me into ecstasies,
> And bring all heaven before mine eyes.

Gothic architecture is a medium for religious impression, and its parts are adapted for the conduct of Christian worship. Provision is made for the reader, the preacher, and the musical features of the service. The high arches of cathedrals are not only intended to symbolize celestial aspiration, but also to allow of deep impression being made on the audience by full and reverberating waves of sound.

I.—Classical Chinese Architecture.

It may be asked, if such be the aim of Gothic architecture and its successful result, what is the aim of Chinese architecture, and is it effective within its own sphere, only having regard to its original ideas?

First, I remark that in classical Chinese architecture *there is no distinction of an essential kind between sacred and secular buildings.* The farther we go back the more clear

does it appear that the palace was a temple and the temple was a palace. This same circumstance in the architecture of the Assyrians struck LAYARD and other students of Assyrian antiquities. The same fact appears in the old Chinese records. We are told in one of the first chapters of Mencius that Ch'i Siuen Wang, King of the Ch'i country, asked him if he should order the Ming tang in his territory to be destroyed, as many persons advised him to do. Mencius said, No; it was the hall for the emperor to announce correct principles of government in the assemblies of the barons. If you wish to act as a king ought, and practise the duties of a wise ruler, do not destroy it. This was his advice. The emperors formerly came, when they visited Tai shan, to hold here a great feudal assembly, to sacrifice to ancestors, to sacrifice to heaven and to reside in it themselves during their stay. This, we partly learn from Panku, who relates that Han wu ti, on visiting Tai shan, found there the foundations only of the Ming tang of the Cheu dynasty. The time would be about B.C. 120. The altar and the hall were gone at that time. Cheu kung, the great sage, sacrificed to his deceased father, Wen wang, in the Ming tang of the Imperial residence, placing his tablet in a subordinate position at the time of sacrificing to Shang ti. This was to confer the greatest possible honour upon his deceased father. In the Ming tang there was worship offered to the sun and moon, also an altar for burnt sacrifice, in which case the victim was laid on wood and burnt. When the covenant was made between sovereign and feudal barons the emperor sat on a throne nine feet high during the Cheu dynasty, three feet high in the Shang dynasty, and one foot high in the Hia. The throne was a dais, and the emperor sat on it cross-legged. The commentator on the *Chow-li*[1], from whom I learn these

[1] *See* 考工記 *Kau kung ki*, the supplement to the *Chow-li*.

particulars, adds that when the covenant had been determined on, the fact was announced to the bright spirits, and therefore the hall was called the "Bright Hall," which is the meaning of the name Ming tang. We gather from this, by the way, the true explanation of the common phrase "Shen ming,"—spirits and bright intelligences. This phrase is much used in modern Chinese for worshipped beings who are believed to come and throng round the spots where sacrifices are offered and prostrations made. They also scrutinize and reward or punish the actions of mankind.

2.—*In the construction of the ancient palaces of the Chinese emperors there were three objects kept in view.* They were for religious purposes, for feudal audiences and consultations, and they included private apartments for the emperor. The feudal compacts needed to be confirmed by religion. The emperor was chief sacrificer, and there never was in China any notion of local sanctity in buildings. All the reverence attached to a palace is on account of the emperor, the brother of the sun and moon, and his ancestors.

It became convenient, when the sovereign was at home in his capital, for the worship to be performed at spots removed from the palace, but down to the present time the ancestral hall is still attached to the palace on the south-east. So also the great halls and courts where the emperor meets the princes and high officers are connected with the palace. The altar of the spirits of the grain and land is also as near to the palace on the south-west as the temple of ancestors on the south-east. The arrangement of buildings in the capital at the present time is therefore in principle like the old classical arrangement, which combines the three ideas of temple, hall of audience and private residence.

In the building of the Imperial capital all favourable circumstances must be combined. There was in ancient times no *feng shui*. This is a recent superstition. But it was

required to have lucky portents and begin laying out a city upon a lucky day. Cheu kung the sage measured north and south with the gnomon's shadow. The gnomon was eight feet long. The time was noon on the day of the commencement of spring B.C. 1109. He used plummet-line and mason's rule, and the latitude was that of Honan fu, or 34° 43′ 15″. The mats he used to lay out the palace were six English feet long, and his measuring-rod four feet and two-thirds long. This also is the English foot, the old Chinese foot being taken at eight inches.

The principal roof of the Ming tang was circular. The building beneath was square at the base. The idea was that of imitating the form of heaven and earth. It had nine rooms and eight windows.

There were two other chief buildings called Pi yung and Ling tai. The Pi yung was on the east, as it is now in Peking. It contains at present the stone classics, cut by order of the Emperor Chien lung, and the Imperial act performed there is the exposition of the classics before the assembled court. The old Pi yung was devoted to music, archery and the like functions. The Ling tai was employed as a cluster of offices for those officers who were engaged on preparing the calendar and calculating eclipses.

We find in the *Kau kung ki* that the dimensions of the Hia dynasty ancestral temple are given. It is there said to have been 14 feet deep and $17\frac{2}{3}$ feet wide. There were five rooms occupying the north-east, south-east, north-west, south-west and centre; each was fifteen feet square; the middle one was three feet wider from east to west than the others. There were nine steps on the ascent. There were windows as well as doors to each of the five principal rooms. The doors were four and the windows eight. Lime made of shells was used in ornamenting the building. At the main door was a separate hall, said by the Erya, a very ancient authority, to have been a school-room.

In this account of a Hia dynasty temple we see that the five elements' philosophy had a voice in the arrangement of rooms. The idea of the architect would be conformity to nature as interpreted by the physical theory of the time. The same occurs in the round hall of the Chow architecture. Roundness means the shape of heaven. The same architecture makes the circle rest upon a square, which is the earth's figure, according to the common idea of the Chinese in ancient and modern times.

In the Imperial temple of the Shang dynasty the idea of a double roof was introduced. The length of the hall was 56 feet. The emperor's platform was raised three feet. The roof was made double on all four sides. The object in this was to lend an air of greater richness and dignity to Imperial buildings.

In the Chow dynasty temple the breadth was 54 English feet and the depth forty-two feet. The height of the Imperial dais was six English feet. There were no chairs in those days. They were first used in China in the Buddhist period.

In the plan of a house the ancients were influenced by filial piety, which caused them to begin with the ancestral hall in the south-east of the plot of land set apart for the building of the palace. This, according to the *Chow-li*, was the idea of the architecture of B.C. 2200. Religion, as people then understood it, was a powerful sentiment in their minds. So in the First Book of Kings it is recorded first that Solomon built the house of the Lord and afterwards the king's house and the house of the forest of Lebanon.

The double roof mentioned as an accession of luxury, when compared with the simplicity of the Hia and ascribed to the Shang dynasty, B.C. 1766, has always continued to be a favourite ornament with the Chinese. It is noticed particularly in gate-towers, pagodas, and towers at the corners of walls. A desire was felt to increase

the appearance of gorgeousness in the imperial dwelling, and magnify the difference between the king's house and that of the common people. This effort became greatly intensified in the Chow dynasty. Then the palace assumed the majesty and beauty of the Ming tang. Many separate buildings began to be erected for each function of the king. The servants of the king or emperor (we may call him by either title) had the most multifarious duties to perform, and the offices were multiplied almost beyond belief; so in Peking at the present time the palace buildings and offices of Government are counted by hundreds.

So far as we have yet gone it will be observed that architecture was at first geometrical. Houses were built to the southward, and they faced north, south, east and west. The circle and the square were both introduced in imperial architecture. The simplest geometrical forms constituted the basis, and ornament was added later. The ancient Chinese built of brick with a wooden framework. The provinces which the nation then occupied are chiefly plains and broad valleys. The chief constituent of the soil is the loess, which is partly a subaerial deposit and has partly become diluvial and alluvial by the action of rivers overflowing every summer. There is also a good deal of yellow clay. Bricks were easily made out of these constituents. The climate was milder than it is now, and the labours of house-building were carried on in the winter. Nothing was found so convenient as brick for house-building, and nothing lends itself more readily to geometrical manipulation.

Chinese architecture then had nothing to do at first with the imitation of tent forms. The suggestion has been made that the concave shape of the eaves of Chinese buildings shews that the people love to remember the nomade life which they once led when they occupied tents of a conical form or shaped

like a house-roof. No such concave curve is seen in any old roofs in sculptures hitherto brought to light. In the Chinese books which contain illustrations to the classics the roofs of temples are indeed turned up at the eaves, but this, I think, must be an error. It would arise partly from an incorrect way of representing in perspective the lines round a corner, and partly from the habit which most people have of carrying the present into the past and making their ancestors responsible for their own peculiarities. The early architecture of the Chinese was plain, geometrical and practically useful. The love of fantastic curves in the lower part of roofs came into vogue later, and must be sought rather in Buddhism.

In the *Book of Odes* we have the grandfather of Wen-wang removing to the south of Chi-shan in Shan-si. This he did for the sake of peace. The tribes of Tartary annoyed him. He left them his old territory and cultivated new lands. He built a new home, and in erecting it used the plumb-line and a wooden wall-frame. Boards are roped together and earth is filled in between them. Such earth hammered down constitutes a wall, and this is still the mode of building used in the north in making earthern walls. When the wall is washed away by rain they build another. This simple style was adapted to an undeveloped state of society, and building by this method allowed houses to be very rapidly erected. Two doors were sufficient—the *kau men*, or "high" gate or outer enclosure gate, and the inner or answering or central gate.

On account of the universal belief in omens it was usual to divine by the tortoise to know if the locality selected was a good one. In ancient China we can judge of the customs of the people in the second millenium before Christ by the three older classics. In the *Book of Odes*, building was not commenced without an omen of a favourable character. This was done when Tai-wang moved south-west from the valley of

the King river, in which lay his old residential city Pin, to the south of Chi-shan, in the valley of the Wei river. He then inscribed on the shell of a tortoise certain lines, and upon scorching it received such an answer that he knew that the site he had arrived at would be suitable. The cardinal points were determined and the simple laws of ancient architecture were followed.

Orientation was made an important point, and there was provision for religious ceremonies. A burnt sacrifice, for instance, was offered even in front of private houses in summer, and on that occasion the altar was on the south-east, the worship being that of the god of fire. This seems to shew that the worship of the five elements was intimately connected with the ancient rules of house-building.

Beside the *kau men* and *ying men*, there was a gate called the "tiger gate," from a picture of a tiger drawn there, as the symbol of bravery. This was to add to the dignity of the master of the house. It was outside the *kau men*. Within was the "pheasant gate," from the representation probably also of that bird drawn there. Outside of it were lofty pillars or flag-posts and standard measures for markets to follow.

The art of house-building was spread among the Tartar tribes by the Cheu family when they took refuge from the tyranny of the Shang dynasty in the Pin country, fifty miles north-west of Si-an-fu, and rather near the western boundary of the province of Shen-si. There the aboriginal tribes had lived in loess caves. This kind of house is there very convenient, warm, well-protected and economical. The loess deposits where they occur are found in the valleys with a vertical front of uncertain height varying from a few feet to several hundred feet. The rude savages who had been living in a single room were taught to make double chambers and upper rooms by their new friends from civilized China. This their friends did by instructing them in the art of making bricks in kilns.

This seems to be the meaning of the passage *t'au jn t'au hiue*—"they taught the aborigines to make double houses and dig caves with the help of the kiln." Yet the commentators explain the passage differently, as if it was meant to say that the people were taught to live in kilns, and LEGGE explains that the houses were shaped like kilns. In RICHTHOVEN'S *China* there is a picture of houses in five stories one above another, all of them having arched windows and doors. There is an outside staircase connecting the houses of each story. On the opposite page is another front of a house hollowed out of a loess bank. It is fenced by a low wall on the outside. This house, hollowed out of a loess bank, communicates with the outside simply by three windows and a door.

On the whole the classical architecture had square and round buildings and double roofs, but it lacked the arch, and the modern *t'ing-tsz* was still undeveloped. Halls were matted. There were no chairs, but there were low tables. Lucky days were selected for building. The emperor's throne was a high dais on which he sat cross-legged and facing the south. His personal suite stood behind him and on his right and left. The ministers of state stood in rows on the east and west. In the open space between them, individuals came forward and prostrated themselves to speak to the emperor and answer questions. There were three audience-halls, that of the daily audience for a few persons, near the private apartments, that of the court generally, more to the front, and that of great festivals, still more to the southward. The arrangement was something like what it is at present in Peking. The ministers held batons in their hands, or writing brush and tablets. In the larger assemblies the greater part of the nobles and officers prostrated themselves in their places in an open-paved court which was unroofed. The emperor and his suite were on a raised platform which was roofed. In ancient times North China had a mild climate in winter, and the grandees,

clad in fox-skins, would not feel cold. The ancestral temple is specially marked out for admiration in the *Four Books*, just at the end, where Confucius is compared to a house whose encompassing wall is much higher than that of all common persons. An observer may see the beauty of a common house by looking over the wall. But the wall of the house of Confucius is several yards high. The disciple, in fervent love for his master, adds that it is with him as with an ancestral temple. It must be entered if its beauty is to be seen. When he said this he was thinking of the double roof, the vermilion pillars of the hall, and within the tablets and the offerings, with the beautiful ornamented vases placed in order before each. Before perspective was ever studied the perspective lines of light and shade caused by these objects would be in his mind, and he would pronounce the effect of the whole to be beautiful. It was the most fitting image he could find to represent the superiority of his master to all other men.

Architecture is introduced with the gnomon and its shadow. A vessel of water is hung up by a string so as to obtain a level. When meeting with this in the *Chow-li*, that valuable repertory of archæological knowledge, no reader will fail to picture to himself the ancient artificer clad in coarse linen in summer, or sheep-skin in winter, determining for himself the level of water for the wall of a house he is building. To have his work strictly according to the cardinal points he marks the shadow of his gnomon. For imperial use there was a gnomon of which the length was eight feet, or $5\frac{1}{3}$ of our English feet. They had the plumb-line, by which they could make the pillars of wood, which supported the roof, perfectly straight. They had also the mason's rule, which they called *kwei* 規, and they used it to secure that the bricks of their walls should be laid evenly, and the walls themselves be both horizontal and and vertical.

According to the *Chow-li* the ancient art of house-building

was controlled by astronomy. It is mentioned that the mason's rule—*kwei*—was placed level with the sun at his rising and at his setting. The builders also looked at stars by night to ensure a perfect level, and to obtain an exactly south façade. In the old architecture of China this was viewed as very important, as it was also in Egypt and Babylon. In these countries the old civilization produced this scientific element in the buildings of the time. Heaven, earth and man are in harmony according to the Chinese idea, and the emperor's palace could not be erected otherwise than facing the south, four square, and with its four walls strictly north, south, east and west. At present it is admitted that the architecture of the pyramid builders was wonderfully accurate in its aspect as regards the heavenly bodies. The great pyramid was not only a tomb for the sovereign, but an observatory from which the stars as they passed the meridian could be observed from its interior with extreme exactness. It is therefore not more than what we might expect to find the art of the builder of palaces in old China also, but in a rougher way, controlled by astronomy and the principles of trigonometry. This part of the modern art of architecture in the West is without doubt traceable to the early Asiatic and African civilization, just as the trigonometry and geometry of the Greeks were suggested to them by the plumb-line, the water-level and the gnomon. It was not Euclid that discovered the properties of the right-angled triangle. They were known to Pythagoras, and before the time of Pythagoras they were familiar to the wise men of Babylon and of Egypt. He travelled in those countries and he was the first to introduce geometry among his countrymen. China also knew, eleven centuries before Christ, the properties of the right-angled triangle.

The capital city must be a square of nine *li*, and there being about six *li* in an English mile, the whole circumference is a mile and a half. It must be square and have three gates in each

wall. It is the city in which the emperor resides. In front of it on the south-east is the ancestral temple, and on the south-west is the altar of the gods of the land. This is just the arrangement followed in Peking in the plan of the palace. In front of it on the east is the Temple of Ancestors, and on the west the Shê tsi t'an. The Emperor Yung lo erected this palace and the Manchus inherited it, occupying the old imperial residence when they conquered the country. But it is otherwise with the gates. According to the ancient plan the emperor's city had twelve gates leading from it. Behind was the market, and in front the emperor met the court every morning. Each of the twelve gates led to a street broad enough to allow of a carriage-way in the middle and a *trottoir* for men on the right and women on the left. The modern arrangement is different.

Imperial editions of the classics, such as the 欽定周官義疏 *Ch'in ting Chou kwan Yi su*, contain illustrations which deserve study, because they are the result of the profound examination not only of old texts but of sculptures rescued from mounds. Attention should be given to the well system of agriculture in this connection. Ancient China was always feudal, and the emperor could command the service of the people of each barony. Agriculture was the basis. The workers of the soil gave a share of their work to the cultivation of common land. In providing for labour in the erection of palaces and imperial temples, the feudal system supplied it, and as that system was based on the justice and benevolence of the sovereign, the people came, says an old classical record, like sons to work for a parent.

II.—Architecture of the post-Confucian Age.

The architecture of the time when the power of the sovereign had declined in China became special by the changed conditions. Feudal chiefs ascended independent thrones and fought with each other for supremacy. A struggle for hegemony became an evil which was chronic. There was a two hundred years' war, and machines were constructed for taking cities, the mode of making which is described in *Mêtsï*.

This state of affairs led to rivalry in palace building. The Imperial revenue was in the hands of the feudal chiefs, and with the people's money they built beautiful palaces and surrounded them with pleasure-gardens. Among them may be particularly mentioned the park and palace of the Wizard Mountain, just beyond I-chang, at the entrance to the beautiful land of Szchwen, where there is now a British Consul and a foreign community of merchants. The fact that the gorges should have been selected as the spot chosen for the site of a feudal palace plainly shews that poetic feeling ruled. In fact, at that time, there sprang up a school of vigorous poetry which has never failed since to influence the literature of this country. The romantic element could not fail, therefore, to appear in architecture, and so we find it. In the architecture of the Han dynasty there is a most remarkable grouping of romantic creations with a reproduction of historic scenes of an exciting and didactic kind, for there are both. Should someone ask, how was the spirit of poetry introduced into palaces and temples in their construction? the answer must be, by painting and sculpture. It is said in the *Shï ki* that "the Emperor is lord of the Four

Seas. All people constitute his family. If his palace were not ornamental he would not possess sufficient dignity. The palace must therefore be richly ornamented." In the palace they recognized the need of depth in the suite of rooms or courts through which the visitor is conducted to the audience-chamber. The architect built with this in view; he had to conceal the sovereign and his family within a succession of courts. He had to provide him with pleasure-gardens. This was imitated by the sovereigns of all the kingdoms of the Chinese heptarchy. Their palaces and parks became all the property of the Chin dynasty in the end of the third century before Christ. By the Chin Emperor's command a palace was built in the Wei valley, near Hien yang, the capital, to represent that of each defunct kingdom, and the peculiar construction employed in erecting the palaces of each with their ornaments would here be reproduced. The Ah fang was the most splendid, being the favourite palace of the Chin Emperors. We can tell the style of the architecture, for it is believed by Chinese critics to be represented in the Chia-siang sculptures. In the scene referred to we find roofs, pillars, low couches, and various architectural details fully represented. There is an audience-chamber in a pleasure-garden; above it is a gallery, and in front of it a large, high tree. The gallery presents a queen sitting on a dais with five female attendants. Below is a king, or noble, seated on a dais, before whom two officers are prostrate and knocking their heads against the ground. The queen wears a five-leaved crown, and the king the court-hat of the time, rising in front by a straight line deflected outwards and having a flat top falling to the crown. The roof of the gallery has men for its supports, that is to say, the pillars of the roof are Caryatides, and like Mount Atlas personified. The roof of the audience-chamber is supported by round pillars having three simple straight mouldings

above, which relieve the angularity. The round wooden pillar rests on a round stone as now in the modern Chinese style. The roof is tiled without the modern concave. At the ends of the upper roof-line large bricks are deflected upward and outward to a point, to remove the angularity there. Peacocks and monkeys are sculptured on the roof-line, as also winged men and various birds walking or resting.

A great peculiarity of the mythological period was the representation of historical scenes. It was before the age of theatrical representation which began in the Tang dynasty, but was only thoroughly inaugurated at the end of the Sung. The historic groups on the sculptured walls of the Chia-siang ancestral chapel are an example of how architecture makes use of history as a teacher. The great men of past times live again before the visitor's eye. As he passes along the ancestral chapel in its three compartments the guide points out to him on the eastern wall of the central hall the sculptured form of Fu hi, founder of the national civilization, who was, as I suppose, an ancient Chinese monarch, who received reverently from Babylon certain instructors in architecture and civilization, and to express this thought vividly he appears with the mason's rule in his hand. What gave him power over the people was scientific and civilizing wisdom. The termination of his body is partly that of a fish. It ends with a fish-tail, denoting that the sculptured idea is foreign. In the classics, Fu hi had not a fish-tail. He was a man like other men, but we are now in the age of mythological architecture. He is closely joined by intertwining of the tail with that of Tsang kie, who also holds a mason's rule right angled. Shen nung follows with the plough, and the Yellow Emperor, who first taught the people in the loess country to dig wells, to divide their fields evenly for irrigation, and to wear dignified robes with broad sleeves and a girdle. The Emperor Yau follows, who taught morality; Shun

succeeds him, who taught astronomy; and Yü, founder of a great dynasty, who, when immense floods checked the labours of agriculture and drove the people to the high grounds to live in tents, undertook the control of the rivers, and restored the land to the cultivators. Then the rise of the Chow dynasty is pointed out with scenes from the history and poetry of the classics. This is followed by groups of an exciting character such as assassinations and battles from the age of Confucius and the two centuries which followed. The rise of the Chin Empire is also sculptured. Here battles on bridges and in rivers and in the air occur, with tiger-hunts, grotesque groups to excite laughter, and many festive scenes.

With such sculptured groups the emperors and princes of the Han dynasty adorned their palaces. The artists of those times were extremely fond of grotesque scenes and monstrous shapes. The sculptured halls of that age are reflected in the poetry, which consisted of long descriptive pieces, like THOMSON's "Castle of Indolence" or the separate books of the *Faerie Queene*. The princes of the house of Lieu gathered round them a choice school of literati and engaged them in discussions on the history of early times and on philosophical and religious dogmas. They talked about Confucius and Lau tsï, and wrote books for the princes and for the emperor. The subjects on which they wrote were politics, history, popular mythology, architecture and astronomy, and they compiled these works in prose or in poetry. A good number of them remain to us, and the discovery of the Chia-siang and other inscriptions and sculptures is a great help to the understanding of China as it was in the Han dynasty.

I learn from Lieutenant D. MILLS, who wrote to me in February 1887, when he had just visited the spot where these sculptures were exhumed, that, "the valley in which they

occur is about five square miles in area, and that the excavation was less than ten feet deep, but it would fill up quickly." The two gate-pillars stand in the excavation, rising about ten feet above the ground. The stone of these pillars has weathered brown. A large number of slabs have been taken out of the soil, and are now set up in an oblong tiled building, fifty feet by twenty, lining its walls without any orderly arrangement. Since the erection of this house other slabs have been dug out, and are piled on the ground in the house, which has no room for them upon its walls. The cutting on the sculptured slabs is about a tenth of an inch deep.

There would be village temples in the Han dynasty, erected to ancestors, as also to the gods of thunder, rain, and wind, and to the Great Bear and the gods of grain and agriculture. All have perished, because they were constructed with a wooden framework. The reason why this ancestral chapel of a prince, consisting of three chambers, has survived the storms and frosts of seventeen centuries, is that it was of stone.

A stone chapel with a stone roof entirely or almost entirely consisting of sculptured slabs and unsculptured slabs, was exposed to winds which blew dust upon it, and floods which dashed silt round it and filled up its interior, till it became buried more than twelve feet deep. The two stone pillars in front of it were twenty-five feet high, and are now buried to about that depth. This is a fact which shews what winds and floods can do in seventeen centuries in raising the soil. It also shews the supreme excellence of stone architecture, which is capable of preserving to us these valuable memorials of the China of the Han dynasty. The chapel dates from A.D. 147. The Pantheon is older by 174 years.

Lieutenant D. Mills, in his visit to the Chia-siang inscriptions *in situ*, observed no traces of wooden beams in any of the stones belonging to the original chapel buildings. The

Pantheon in Rome when it has stood for eighty-three years longer will be two thousand years old. It is a circular building with a stone roof. The ancestral chapels in Shantung were rectangular stone buildings with two gables which fell in part many centuries ago, but the loess, with friendly assistance, buried the sculptured stones under the soil.[2] The buildings would in part be standing till quite recently, or the sculptured stones at least were preserved in good order where they fell. So far was this the case that the native archæologists have been able to tell us to a large extent what part of the buildings was occupied by each particular stone.

The question must here be confronted, how much of the Han dynasty architecture is of foreign origin? In the *Archæological Survey of India*, kindly lent me by Mr. KINGSMILL, we find in the 1st volume, published in 1871, the question discussed how Greek sculpture is found occupying a place in Buddhist architecture. To this question General CUNNINGHAM replies, that Bactrian Greek sculptors would find ready employment for their services among wealthy Buddhists, just as later in the time of the Mogul Empire goldsmiths and artillerymen were employed by the sovereigns. It was a Buddhist custom to make gifts of statues and pillars to the monasteries. This gave continuous employment to many skilled workmen. In the city of Mathura, which lies on the Jumna between Delhi and Agra, there is a colossal image of Buddha the Teacher, measuring one foot across the palm. It would be thirty feet in height. The Chinese have such in their country, where the stone is easily cut and the Buddhist zeal of the community favoured the production of this kind of work. The statue was from 20 to 24 feet in height. Buddha

[2] In the Island of Jersey there is a stone chapel erected A.D. 1111. Its roof is of stone. It has stood more than 700 years—a signal instance of the permanence of stone roofs—but the roof has been replaced recently by a new one.

is represented as the Teacher, explaining the law to his disciples. It should be remembered that the coming and the laughing Buddha are one. In one of the female figures the attitude is peculiar. The left hand is brought across the right breast while the right hand holds up a small portion of drapery. The head is inclined slightly to the right shoulder. The hair is dressed in a new fashion, with long curls on each side of the face, which fall from a large circular ornament on the top of the head. This figure has a plump face with a broad smile, and it is one of the best specimens of unaided Indian art which General CUNNINGHAM had met with. He goes on to notice specimens of Greek sculpture mixed with that of the Hindoos. The costumes of the sculptured figures are Hindoo, Greek and those of some other unknown nation. There is represented in one place a Greek altar such as was dedicated to Bacchus. Adjoining a well-carved elephant in one place are certain inscriptions which contain the names of five Greek kings, including Alexander and Antiochus.

In the fifth volume of the *Archæological Survey of India* the Doric character of architecture in Cashmere is illustrated. In some localities in North-Western India there was Indo-Corinthian and in other localities Indo-Persian. The Ionic style was introduced in Taxila and the Corinthian in Gandhara. All these styles flourished for several centuries. Thus, as far as stone was used in building, the imitation of Greek architecture and sculpture would naturally follow, and would spread into distant countries. But India, like ancient China, was well wooded, and, therefore, wooden pillars and beams continued to be used.

In the case of monasteries, pagodas, tombs and bridges, with certain other structures, stone was held to be better as a material. Civilization, commerce and national intercourse brought more and more wealth to the communities, and these buildings were erected by the gifts of individuals. In such

cases there would be a tendency to imitate Western art. This would gradually lead to the arch in bridge-building. So also the broad verandah, necessary in India to shade a bungalow from the sun, would lead to broad roofs, which were afterwards imitated by the Chinese.

The influence of Greek art would enter as an element in the Han sculptures in the following manner. The country being rich and at peace, many foreign improvements would be adopted. Workmen would be conveyed from a distance to do work for wealthy persons. These workmen would be instructed by skilled masters, who were either Greeks or the pupils of other masters who were taught by Greeks. In this way we may account for sculptured horses represented successfully in attitudes which without a long apprenticeship could not easily be produced.

III.—Buddhist Architecture.

The third period of Chinese Architecture is the Buddhist. When the Hindoo Missionaries came to China to propagate their religion, they were lodged in an official building, called a *sï*, and in consequence of this their monasteries were called *sï* ever after. But the form they took in building was that of the Vihara, the Sanscrit name for a Buddhist monastery. The Buddhist monastery in China may have native Chinese features in some things, as when, for example, we find there the hall for ancestral tablets, in which the deceased priests of the monastery are honoured with worship, wooden tablets being used, just as in Confucian ancestral worship. But the great outline is Indian.

There may be gate lions, one on each side of the gate. The gods of native Hindoo polytheism are placed in the entrance-

hall. This is the locality in which the defenders of the Buddhist faith should be honoured. Here also is found the laughing Buddha, the Buddha of the future. Then come the bell and drum towers. Within is the teaching-hall of Buddha. The normal height of the statue known as the "teaching Buddha" is 16 feet, which probably is represented by ten feet eight inches in English measurement. Much smaller figures are commonly used. The pictures or statues on the east and west or right and left of Buddha are his audience. They consist of the gods of Brahminism, and of renowned Buddhist saints. Behind in another large hall is either the sleeping Buddha, or the ascetic Buddha, or the guiding Buddha, who is called Omit'o Fo, or the Buddha of the future, Maitseya, surpassing all the forms of Buddha in height. The other buildings are numerous. They provide living-apartments for the abbot and the monks under him, refectory, rooms for guests, kitchens, store-rooms, library, halls for the worship of the inferior divinities of Buddhism, and for the complete representation, so far as practicable, of the Buddhist world of worship, of suffering, of joy, of punishment, of salvation. In a Buddhist monastery the object of the architecture, and of the sculptured and pictorial representations, is to exhibit the world as it appears to the Buddhist. Buddha is enthroned on the lotus as teacher and redeemer, and the universe pays him homage.

The lion is not an Indian animal, but is or was Persian and Syrian. The Buddhists borrowed it as an ornament in their mythological conceptions from that part of the world. The whole ideology of Western Asia pressed into India in the age of the Persian dynasty of Cyrus and in part before that time. The lion very soon appears in the Buddhist books, though not in the lifetime of Buddha himself. Why, then, did the disciples of Buddha in North-Western India eagerly adopt this animal as a symbol, the animal being foreign.

It was because they were disputants, and in combating with Persians, Greeks and men of other races who engaged in religious disputation, they found that the lion was considered king of beasts and the symbol of victory. It is found, for example, in the Book of Genesis and other parts of the Bible as a symbol of power, courage and victory. The north-western Buddhists adopted it, as they did images and cosmogony from the nations which lay on that side of India, and used it in the service of their religion.

The pagoda was specially a Hindoo mausoleum for relics of Buddha. It is surprising how little it is used in Japan or in Lamaism. Osaka has but one pagoda and Tokio none. It is very much connected with the *feng shui* superstition, which was never adopted by the Japanese, and with the worship of relics. The number of stories is always odd, because odd numbers are male while even numbers are female. To benefit a locality the pagoda must have the power of *Yang*, the male principle. It is the dark principle *Yin* which does mischief. Pagodas are often built entirely of stone or brick. Quite commonly they have sculptured entablatures representing the life of Buddha, or scenes in the biography of some Buddhist saint.

Many pagodas are very pretty objects, and they have come to be a special characteristic of Chinese architecture. The curling eaves of Chinese buildings are probably an imitation of some early pagodas. They were erected in large numbers from the sixth century onwards, and since China has no explanation to offer of curling eaves, it seems necessary to assign them to a foreign source.

The erection of pagodas was a test of the skill of native architects, many of them being lofty, and built without wood. That they have been fairly successful in erecting strong buildings is evidenced by the fact that there are more old pagodas existing than there are old houses or temples. From the

seventh century onwards, there are still structures of this class. There is an octagonal pagoda in Peking of thirteen stories, and it dates from the year A.D. 600. The sculptured figures are all of moulded brick, and this is the material which has been largely used in erecting this pagoda. It is 275 feet 5 inches in height. This building, so high and so well preserved, is a good specimen of the durability of some Buddhist work in China.

The efforts of Buddhist architects were very much directed to the provision of images of a large size and great variety. Several types grew up which had to be constantly reproduced in new erections. Buddhism teaches contemplation, and does so by images as well as by books. The propagators of this religion aimed to gain the popular ear by appealing impressively to the eye.

The laughing Buddha at the gate indicates that the religion there professed is the pathway of joy. The second form of Buddha is that of teacher. The teaching Buddha is therefore the central object in the principal hall. Around are seen his audience of divinities and human beings. In some other hall is represented the ascetic Buddha, it may be with unshorn head and the attire of a hermit. The sleeping Buddha is quite a favourite subject. Some examples of this type are very ancient, coming down from the Tang dynasty, and made of sandalwood or copper. The guiding Buddha leads the soul to Paradise. The rock-hewn Buddha, of 16, 30 or 60 feet high, is like the laughing Buddha, the Buddha of the future.

Another effort made by Buddhist architects was to represent the Buddhist world in its completeness, or specially some part of it. Five towers on a lofty terrace represent the universe, as north, south, east, west and centre. Such is the Wu t'a sï, or monastery of the five pagodas, in Peking. When ordered to pray for rain, the Buddhist priests arrange the images in a square in some spot in the fields which appears

suitable. The arrangement is made on this principle. Rock-work is much used to represent imaginary worlds. Mud or clay is the material, and paint of many colours is used to deck out in the gayest finery grottos, bridges, winding-ways among mountains, temples and lakes. Some scene may have been drawn by a poet, or the writer of a Buddhist work in prose. A time comes when a decoration is required in a temple under repair. The scene of a book is then realized in mortar and paint.

Other features in Chinese house-building which are a tradition of the Buddhist age are the screen before the gate, and the figures on the roofs. Both these features are connected with *feng shui*, which, being an article of popular belief, it becomes requisite to protect buildings from the mischief likely to be caused by evil beings moving towards a house and capable of doing harm to the inmates.

The screen of brick-work, built like the character *pa* (eight), does not appear in old sculptures and has no ancient equivalent. It is an unpleasing feature which ought to be dismissed from modern architecture, but *feng shui*, unfortunately, insists upon it.

So it is with the little monsters seen on the line of a roof or on the projecting ledges below. They must, like the stories of pagodas, be in odd numbers, in order that the *Yang* principle may prevail over the *Yin*. Though their forms are so sinister looking, they are all friendly, and their ugliness is put on for effect's sake. Their office is to deter evil spirits. The dragon and monkey are the types of these figures. Both are in odd numbers; the larger is the dragon, usually one only, while the smaller is the monkey, which may be three, five or more. I have been at some pains to learn what they mean, and this is the result. It is probably one of those architectural peculiarities which the Chinese may claim as their own. But this is not certain. From Shanghai to Suez, all along

the southern coast of the continent of Asia, the people believe in the active agency of evil spirits constantly in motion and seeking opportunities to inflict evil on mankind. Against them protectors are sought for of every available class, and among them are these creatures which suit alike the Arab, the Persian, the Hindoo and the Chinese.

The result was that in house-building it was felt to be necessary to use protective measures against the forces of evil always threatening danger to men. The gate-screen and the small monster on the roof have the same office as the charm pasted over a door, or the amulet, the small bottle, the bronze mirror, carried on the person. They were supposed to have a magical effect of a defensive nature.

The result was disastrous in an architectural sense. The gate-screen conceals the entrance, and is placed where it is not wanted. It must as such be unpleasing. But popular superstition clings to the gate-screen. It lives still after many centuries of useless encumbrance. Outside the gate there is the *pa* character wall, within the gate is a screen. On each side is a lion. On the roof of the chief building are metamorphosed monkeys and dragons. We can bear the animal shapes for the sake of the grotesque, which human nature loves, but we cannot bear with the same equanimity the hiding of the front view. Our European training has led us to appreciate the excellent effect of an open view in front. To shut off from view the front of a building, is a mistake.

Gilding images was common in India about A.D. 500, and probably earlier. The Buddhists, by introducing the practice of gilding Buddha's image, greatly increased the impressiveness of their temples. This was a new element of beauty added to their architecture, which did not fail to affect the people powerfully in many ways. Let this point be well considered. In Europe, cut stone assumes a dark hue, especially in England. We enter a Chinese Buddhist temple as we see it in Hangchow

or in Peking. The beautiful colour of the gold image, untarnished after many years, is felt to be in itself pleasing. We then become conscious that to gild Prince Albert's Monument in Hyde Park and the statue of Victory in Berlin, was a useful preservative against weathering. The Chinese learned the effective use of gold in ornamentation from the Buddhists.

IV.—Architecture of the Modern Period.

Printing commenced in the tenth century and, the Sung dynasty attaining power at that time, was accompanied by a Tauist revival. Of this there are several indications. The first Emperor, Chau t'ai tsu, had a Tauist friend, Chen twan, who, with the emperor's powerful aid, forwarded his own religious views. The predilections of the founder were shared by his descendants. Among them, Hwei tsung was a great lover of Tauism. The Fukien goddess Ma tsu, the sailor's favourite, belongs to this period. So also does the worship of Kwan ti, the god of loyalty, the favourite divinity of soldiers. Lü tsu, or Lü chun yang, the famous Tauist of the latter part of the eighth and the first half of the ninth century made Tauism popular near Lu shan, on the north-west shore of the Poyang Lake. Temples began to be erected to him in the twelfth century. The early Sung dynasty was then a time of rapid progress in popular Tauism. Nothing marks modern China more than the spread of Tauist worship in imitation of Buddhist worship, and this took place specially in the tenth, eleventh and twelfth centuries.

This fact implies a rapid spread of temple-building; that is to say, Buddhist architecture was imitated most extensively at this time. It was a foreign art in several respects, and

through its being very full of idealism, it won its way to the heart of the Chinese. As to the form of the monastery and the arrangement of the halls, this imitation doubtless began in the Tang dynasty. But there was then no extensive national imitation embracing all parts of the empire. This appears to have taken place in the Sung dynasty, as the examples just given combine to show.

In a large Tauist temple, such as the Tung yo miau, in Peking, in the first small halls at the door in the neighbourhood of the Bell and Drum towers, are certain military images. They indicate protection to the religion of which this is a temple. In this they simply repeat the idea of the hall of the four kings who, at the entrance to a Buddhist Monastery, take the part of the defenders of Buddhism. Beyond is the hall in which the god of the east mountain is worshipped. He takes the place of the teaching Buddha of Buddhism. In the temple of the god of medicine in Peking, in front are distinguished physicians of antiquity. Behind them is the central idol, that of Yü hwang. Farther still behind is the hall consecrated to the worship of the Three Pure Ones. Such a disposition of the halls and statues is mostly taken from the Buddhists.

We see, then, that the Confucianists had in the Sung dynasty ceased to be enemies to Buddhism. They saw that the foreign idolatry was popular, and they decided to leave it to work out its own future. They made deities of native origin, like Lü chun yang, Ma tsu and Kwan yü, and everywhere temples were erected in their honour. Temples had been Confucian and Buddhist. They now became Confucian, Buddhist, and Tauist. An extraordinary number of new temples must have been erected in the Sung dynasty by the Tauists. The emperors favoured them, and this led the people to favour them also. The Ch'eng hwang miau in each district city and prefectural city seems now to be an

essential part of Chinese intitutions. But it is not in fact older than the Sung dynasty in most cities. I have noticed one which was erected in A.D. 917, in the Wu tai period, so that probably this type of temple was first introduced in the Tang dynasty, but it was the partiality of the Sung imperial family for Tauism, and the tolerant political tone of the Sung literati, which spread this sort of temple and other types of Tauist sacred buildings throughout the empire.

In the Sung dynasty, the first part of the modern age of Chinese architecture, we have the results of the devotion of the nation to Buddhism during seven centuries. Two great forces have animated the nation since that time. The one was the Confucian and Tauist revival of the Sung dynasty, the other was the school of critical research of the present dynasty. The Confucian revival led to political toleration, and so foreign architecture, for example, might be imitated without offence. The principles of the Chinese Government from the tenth century forward have allowed men of different religions to reside together, and the magistrate is expected to keep the peace between them if they offend. The consequence is, that Hindoo, Moslem and new European architecture, in the erection of the sacred buildings of each religion, are seen together in China. Toleration of foreign religious tenets has favoured the mixing of styles in buildings and in art generally. This freedom of choice has been encouraged by the critical attitude of the literati in the present dynasty. China is now more eclectic than it ever was.

The school of critical research which has flourished during the last two centuries has paid special attention to the classics, and among them to the *Chow-li*, whence facts on ancient architecture are gathered. It is singular that there should be important differences of opinion on the manner in which the Temple of Heaven ought to be built, and whether Confucius ought to have a statue in his temple or not. The result of

researches in the Ming dynasty led to the abandonment of the statue of Confucius and the restoration of the old Confucian tablet. This was an instance of recoil from Buddhist views of art. Yet in some cities the statue remains, the decree of the emperor on the subject not having been very peremptory. But the spirit of modern China is against the use of statues in Confucian worship. The Buddhist love of statues in temples does not in any way influence the true Confucianist, who glories in his freedom from popular Buddhism. So also during last century it was decided not to have dual worship at the Temple of Heaven, but to worship there only the Supreme Ruler.

The Sung dynasty architecture is not specially known by examples, because it has been outshone by the works of the Yuen and the Ming dynasties, but it may be studied, because books printed with engravings exist, and there are much fuller details and materials for research in that age than previously. For the ancestral temple, for example, it is interesting to find that Chu fu tsï made inquiry into it, and determined its essential features. The Chinese art of the Golden dynasty in North China remains in a few octagonal pillars inscribed with Buddhist charms. Sanscrit and Chinese characters are here seen cut in limestone.

Art rose higher in the Yuen dynasty, and the Chü yung kwan arch and inscription, which have stood for six hundred years, shew that China at that time undertook to develope new types of architectural work. But the Yuen dynasty architecture was surpassed by that of the Ming dynasty. It was then that Chinese art rose to its greatest height. The Emperor Ch'eng tsu, of the Yung lo period, was the greatest of the Ming line. It was he that made Peking what it is. The plan of the city, the tombs, the great bell, the fortified passes in the Great Wall are his. These and the grandeur of the city gates and wall belong to the Ming dynasty and to him in particular. In

the time of Shun chï and Kang hi, an effort was made to improve the astronomical observatory. This was done by removing the observing instruments from the tower and replacing them by machines cast by VERBIEST and some presented by the French king. Underneath the tower is the chamber for observing the length of the shadow at the winter solstice and on other occasions. Peking is the only capital in the world on whose wall is seen a collection of large bronze instruments intended for astronomical observation. They lend a character of refinement to the city to which they belong.

The influence of the Emperor Chien lung was directed to the production of substantial architecture in various styles. His Buddhist, Confucian, Moslem and Italian erections were well done in their day. Yet now the relentless changes wrought by time have reduced many of them to a ruinous state. His Italian structures at Yuen ming yuen were burnt in the war of 1861. High civilization and refinement led this Emperor to look kindly on fashions of all nations and to take pleasure in introducing them into his country. It will never cease to be a subject of regret that the buildings in the parks outside of Peking were burnt. There must be something wrong when it is found necessary to burn works of art.

In the changes made by the Emperor Chien lung in the temple of Confucius there is a distinct aim to restore the ancient classical structure—the Pi yung kung. The brevity of classic texts renders exact restoration to a large extent conjectural. In this case there is a circular marble tank. In the centre is a hall in which is a throne for the Emperor when he expounds the classics. The south face of this hall consists entirely of lofty doors admitting light through thin bamboo paper.

In the architectural works of the present dynasty, as of the Ming, the *feng shui* ideas have never been abandoned. China has ceased to build new pagodas for the sake of riches

and prosperity to a locality, but she puts the old ones in repair when money can be obtained for the purpose. The roofs of temples are still ornamented with a view to *feng shui* opposite to the openings of lanes in Peking. Lions are set up, or stones with the powerful name of the Tai shan god, to frighten away demons who might be intending to come that way. The superstition of *feng shui* is retained in house architecture even in this age of growing knowledge. In judging of Chinese architecture there are two chief divisions of work to be looked at. The one is its general excellence, the effect of dignity, solemnity, richness and grandeur on the whole. The other is the special excellence of the parts. In both there is room for the greatest genius. In regard to the former, it may be noticed that the greatest triumph of Chinese architecture is in the effect on the whole. In the Ming tombs we have the perfection of Chinese power of arrangement. It is a ride of seven miles from the entrance of the valley to the tomb of Yung lo. The valley is occupied by the thirteen tombs. At the entrance the marble gateway attracts special attention. Ninety feet long by fifty high, composed of marble, and seeming to be roofed with tiles, it is seen from a great distance, and it has stood for three centuries and a half. On nearer inspection it is found that the roof is cut marble, and when this fact is observed, the whole structure is seen to be a remarkable triumph of architecture. The P'ai leu of China takes the place of the triumphal arch of Europe, and this one at the Ming tombs is the best in the country. It was erected at a time when the Chinese building and bell-casting art reached their culminating point. The original red and green colours have long since weathered down to a sober grey. Passing this we proceed through several avenues of trees and several gateways till the avenue of animals is reached—a truly striking feature. Lions, unicorns, camels and elephants stand and kneel in pairs. The four elephants are each cut

from one stone. They are 13 feet high and 14 feet long. Thus it is seen that the Chinese are capable of Egyptian effects in working in stone if only their country did not consist of alluvial plains, which necessitate a brick architecture. Then the hall for sacrifice is the third great feature. It is 70 yards long by 30 deep. The teak pillars, 12 feet round and 32 feet high, are 32 in number. The building is 64 feet high. It is reached by a marble ascent of 18 steps, and is surrounded by beautifully-carved balustrades. The roof juts out 10 feet beyond the walls on which it rests. The fourth great feature of the Ming tombs is the tomb itself, above this passage. In front of it is a mass of solid stone-work which supports the monumental stone on which is inscribed in characters of enormous size the posthumous name of the Emperor Yung lo, who died A.D. 1425. Beneath is the coffin-passage, 39 yards long, conducting to the tomb-door, and the visitor arriving there ascends to the platform above by a long staircase. Here the stone, three feet thick, two yards wide, and high in proportion, with the Emperor's name on it, may be observed. It was originally painted with vermilion. Then there is the mound, half a mile in circuit, containing a hemispherical chamber, in which is the coffin. The chamber is large enough to hold probably 400 persons.

In this work of construction we see Chinese architectural skill at its acme of power. So many remarkable features combine in the Ming tombs that we must in this instance award to Chinese architecture the praise of success in imparting to the imperial tombs an air of great dignity and solemnity.

Chinese art is to be praised for the lightness and grace of the curve of a heavy roof. The Greek loved to see lines of beauty at the head of a column, and a succession of columns seen in vanishing perspective has a very lovely effect. The

effort of Chinese art is rather to lighten the appearance of heavy masses of timber in a roof by curves and the use of coloured tiles.

In the modern style we find the shaft of a column carved with dragons, and this mode of ornamentation has lately become commoner than it was. It is observable in the guild-houses of Ningpo and Hankow. If in Shanghai commercial guilds should build new houses suitable for theatrical performances, this kind of ornament would be adopted.

We also find in modern style a special development of the *t'ing tsï*. This first occurs in the sculptured halls of the Han dynasty. An ornamented roof rests on pillars. The pillars enclose a space which is open all round. We see it in the baldacchino of Romish cathedrals, in the kiosk of Constantinople, in the summer-house or arbour or bower of a pleasure-garden, and in the building over the stage of a Chinese theatre. The roof of a *t'ing tsï* may be very simple, as when made square with four slopes, or very complicated, as when gables and slopes alternate. Examples of rich variety in the roofing are seen in many theatres and in the corner towers of the Peking Palace wall.

In the Temple of Heaven the altar is carried to its highest point. Its circularity, its marble pavement and its numerical arrangement deserve attention. It is 90 feet wide at the top where the emperor kneels on the circular stone in the middle. He faces the north while kneeling, and in front of him is the tablet of Shang ti, the Supreme Ruler. Round the circular stone are eight concentric circles of marble stones. Nine stones make the first of these circles. Double that number form the next. Twenty-seven, thirty-six, forty-five, fifty-four stones form the next four circles. The three outer circles have sixty-three, seventy-two and eighty-one stones. These circles represent the universe, which consists of nine concentric spheres. This symbolism also occurred

in Western Asia, and the city of Ecbatana, for example, was built on a plan which exhibits the same principle as its foundation. The marble stones on the middle and lower terrace of the altar are also placed in circles. Outside of them are the boundary-walls of the altar, which are also circular. The lower terrace is 210 feet wide and the middle one 150 feet. There are four flights of steps connecting the upper, middle and lower terraces. The altar is 16·95 feet high. When the emperor worships here, which he does twice a year, he acknowledges Shang ti as his superior, he himself representing the universe symbolized in the mystic numbers of this unique and beautifully-proportioned structure.

We also find bridges greatly improved in the modern style by adopting the arch. This came in with Buddhism, for we find it in the pagodas. At present it is used when it is desired to span rivers by bridges. Made with an arch for foot-passengers, such structures look well to the eye, but they are inconveniently steep, being often 30 feet in height. Such bridges are made with steps so that they are crossed easily by burden-bearing coolies. Beasts, however, cannot easily use them, which is a great defect. The appearance of these bridges is agreeable to the eye, and they last long, because the superincumbent weight is efficiently sustained in the most economical manner by the arch. Many bridges in modern style would be better for being not so steep as they are, and for not being made with steps. They ought to be built not only for longevity and elegant appearance, but for the convenience of traffic. The custom in China is for the rich to erect bridges and dams from charitable motives, and in order to obtain benefits in return from the unseen powers. The money is forthcoming, however much may be required, because of the charitable disposition of the donor. It might be, however, better used than it often is, and much greater convenience for the public

secured. There is often a want of economy in the expenditure. The Chinese are ready to give, and many of them are very rich, but they might give more wisely than they do.

Ultimately, in regard to railway construction in this country, the rich natives will bear a chief part of the burden. There is a large quantity of wealth in their hands. For this purpose, at present, they will not give as they would for a costly bridge. No one would praise them for it. They do not think that the unseen powers, that make men rich and give men many children and grandchildren, will favour the opening of railways as they do the construction in convenient spots of bridges and embankments. When they learn to feel this, and are convinced that the Buddhist doctrine of moral fate which influences their actions approves of railways, the money will come and come in abundance.

*** For illustrations of Chinese Architecture the reader is referred to works containing plans, engravings and photographs. Among these may be mentioned THOMSON'S *Views of China*, the plates to *Macartney's Embassy*, Père ZOTTOLI'S *Cursus Litteraturæ Sinicæ*, *Mémoires concernant les Chinois*, and various recent books of travel in China.

The number of photographs taken by natives is now so great that there is scarcely a remarkable building in any part of China of which a good photograph may not be obtained at Shanghai or elsewhere.

NOTES ON THE NESTORIANS IN CHINA.

By E. H. PARKER.

The following notes may perhaps assist a little in elucidating several obscure points in connection with the Nestorians, Persians and Arabs living in China during the period A.D. 600 to A.D. 1200. It appears to me not unlikely that the Nestorian missionaries never reached the coast of China at all, and that their "heresy" was always tinged with the native superstitions of the Ugro-Tartars, through whose territory it filtered into China; also that it, and possibly other forms of early Christianity, were somewhat coloured by one or the other of the two leading forms of Buddhism: and that the lines of demarcation now drawn by dogma were not so rigid in those days as they are now; in short, that men were more tolerant.

1.—Were there ever Nestorians at Canton?

The late Mr. Bowra, in a paper upon the *Christian Missions in Kwang Tung* [*China Review*, Vol. II, Page 246] says that he could not satisfy himself that the Nestorians ever went to Canton.

Mr. Geo. Phillips quotes an extract from the *Annals of the Canton Customs* [*China Review*, Vol. VIII, Page 31] which makes mention of Persian Priests at Canton, in order to justify the identification of these priests with Nestorians. He confirms this supposition by citing a statement, found in

RENAUDOT's translation of the *Ancient Accounts of India and China*, that there were many Christians residing at *Canfu*, which place Mr. PHILLIPS inclines to think is Canton [I suppose "*Kwang-fu*"] because we can find no mention of Arab or Persian ships frequenting Hangchow at that time.

There are several extracts from a book called *Ch'êng Shï* [程史, I suppose of the *Sung* dynasty] which shew that there were other foreign priests at Canton during the middle ages besides Persians. "One of the most influential of the sea-"foreigners [海獠] was one named *P'u* [蒲], known as the "'white barbarian,' who was originally a prominent man in "*Ciampa* [占城]. Having had rough weather on his "voyage, he was afraid to go back, and begged his ruler for "permission to remain in China so as to facilitate his trade." An extract from the *Sung Shï* says that most of the people at *Ciampa* are surnamed *P'u*; and another extract says that the Caliph Empire sent an envoy named *P'u-sz-no* [蒲思那]; all which looks as though Arab traders were meant in each case. Again: "At Canton [番舶] there are sea-foreigners [海獠]; "for praying happiness they have a hall; in the hall is a "stone slab, which is the object of their symbolic worship "[像主], and those doing obeisance all turn towards it. "They meet to eat at dawn, but do not provide spoons or "chopsticks; they use gold and silver to make a great trough, "and mix porpoise flesh, [鮭] vegetables, grain, and rice all "together, sprinkling rose-water, and scattering camphor."

The word 獠 is, as a rule, specially applied to the frontier tribes of Yün Nan and Burmah, but that Arabs may have been included is evident, because the *Sung Shï* says of *Ciampa*, and also of *Ta-li* State [Yün Nan]: "Their customs "and clothes are like those of the Caliph Empire," which last name is often grouped with those of other Indo-Chinese and Archipelago states, doubtless because the Arabs traded there.

The Chinese occasionally confuse the Persians with the Arabs. For instance, the *T'ang Shu*, on the subject of the Caliph Empire, says :—"Between the years A.D. 605-617 "there was a Persian man tending herds at Medina [摩地那] "Mountains in *Kü-fên* [俱紛]. A beast in the mountains "said :—'East of the mountain, in the third cave, there is a "'sharp weapon, and a black stone with white writing on it : "'whoever gets it will rule.' He went, and found it so. The "writing said he ought to rebel. He wheedled the people, "and got together a multitude of desperate characters at the "River *Hêng-hoh* [恒曷水] ; robbed caravans, occupied the "west part of the region, set himself up as king, removed the "black stone, and treasured it. The people of the state went "to chastise him, but were repulsed with great loss."

This, of course, is Mahomed, who was a tender of camels ; who did spend time in a cave near Mecca ; who framed his Koran with the aid of a Persian Jew and two Nestorians ; who did hoax the people ; took refuge in Medina, and set up there (in the western part) ; whilst the black stone "brought by the angel Gabriel" is still in the Caaba. The account of *Mêhtêhmo* State [默德那] given by Dr. BRETSCHNEIDER on Page 177 of the *China Review*, Vol. V, confirms this strongly.

2.—WERE THE *Ta-têh Sêng* ALL NESTORIANS?

It is a question how far the expression *Ta-têh Sêng* [大德僧] can be taken to refer to Nestorian missionaries. Mr. G. PHILLIPS, criticising Dr. BRETSCHNEIDER, has shewn [*China Review*, Vol. VII, Page 412] that, in or about the year A.D. 719, the ruler of *Fuh-lim* [拂菻] sent two of these ecclesiastical dignitaries to the Chinese court with tribute ; and he justly inclines to the view that these were Nestorian missionaries, inasmuch as *Olopên*, the introducer [A.D. 636] of Nestorian Christianity into China, is also described on the celebrated Si-an Fu monument as being a *Ta-têh*.

Dr. HIRTH, in his work *China and the Roman Orient*, quotes the same passage, and also quotes a passage from the monument itself, which latter seems to mean that, in *Ta Ts'in* or *Fuh-lim* Christianity is the only religion, and that Christians only can be rulers [法非景不行；主非德不立]; adding that Colonel YULE had already conjectured that the *Fuh-lim* missions were connected with the Nestorian arrivals recorded on the monument, [Page 284 of the *Identifications*]. On the other hand, the old *T'ang Shu* tells us that, during the reign of *Ming Hwang* [713–762], the King of Central India *Ishavuma* [伊沙伏摩] sent his *Ta-têh* priest to court with tribute; and that, about that time [750], at one *Chang Yih's* suggestion, ten *Ta-têh* priests were banished to *Ting-chou* [south of Peking].

An extract from a work of *Peh Kü-i* [白居易, lived 772-846], on "A Pagoda Slab of the *Ta-têh* Priests [大德和尙塔碑]" says:—"Abstinence begets calm, calm begets "wisdom, and wisdom has begotten 84,000 *Fah-mên* [法門, "sectarians]." It is evident that the *Fah-mên* must have been different from the ordinary Buddhists, for the old *T'ang Shu* says:—"The Emperor *Wu* of *Liang* was a devout "Buddhist, whilst [his successor, A.D. 550] the Emperor "*Kien Wên* was an ardent *Fah-mên*."

The *Wên-kien Heu-lüh* [聞見後錄, apparently the same as, or a continuation of WYLIE's *Wên-kien Kin-lüh*, 11th century,] says that in *K'i-yang* town of *Fêng-siang Fu*, a piece of Buddha's bone lay buried under the pagoda of the *Fah-mên* monastery, and that the Emperor *Hien* [806–823] had it brought with great ceremony into the palace, in spite of *Han Yü's* remonstrances, [as to which remonstrance see *China Review*, Page 341 of Volume 1].

The *Tu-yang Tsah-pien* [杜陽雜編, 9th century] says that "in the spring of the year A.D. 873 an imperial order "commanded the *Ta-têh* priests to go and welcome Buddha's

"bone. On the 8th day of the 4th moon, it was brought into "*Ch'ang-an* [Si-an Fu]: the Emperor sat in the *An-fuh* "Monastery [安福] and personally *kowtowed* to it." Another passage says that "several hundred *Ta-têh* priests were "ordered to welcome the Buddha's bone of the *Fah-mên* "monastery of *Fêng-siang Fu*."

3.—Were all *Fah-mên* Buddhists?

A work called the *Wu Têng Hwei-yüan* [五燈會元] says that the first Buddhist apostle in China [東土] was the Worshipful *Dharma* [達摩尊者] who was also the last of the line of 28 in India [西天]. He was the son of *Hiang-yüh* [香玉], king of Southern India; and in the year A.D. 520 he came to China by the southern sea route, and stayed at a temple called the *Shao-lin Sz* [少林寺]. This man must not be confused with another *Dharma*, a painter, who came by land to Sz Ch'uan in 580-605. His name was 達摩揔又. The *Kao Sêng Chuan* [高僧傳, a 6th century work], says that his successor was one *Hwei K'o* [慧可], who stood in the snow and cut off his arm whilst begging inspiration from *Dharma*. *Dharma* said:—"My religion is in the heart, and "ignores written script: apostles must be bound by the heart. "Hence the saying 'stamp in the heart.'" The old *T'ang Shu* gives the same account of *Dharma* as that above; and the *Sung Shï* says that *Hwei-k'o* brought out a work on the human pulse by *Dharma*. A work called the *(Ch'uan-fah) Chêng-tsung Kï* [(傳法)正宗記] says that the third apostle [三祖] was the priest *Ts'an* [僧璨大師], but that nothing is known of his origin, except that he came from the Northern *Ts'i* [Tungusic Empire 550-580], and lived in seclusion at the *Kuh-shan* Temple [谷山寺] of *Kung Shan* [公山] in modern An Hwei Province. The fourth apostle was *Tao-sin* [道信大師], whose real surname was *Sz-ma* [司馬]. He was reëmbodied in the person of *Hung-jen* [弘忍大師], a

native of *Hwang-mei* [黃梅] in modern Hu Peh Province. Both of them were together at a temple on *P'o-t'ou Shan* [頗頭山] in A.D. 624. The *Wu-têng Hwei-yüan* says that the bonze *Shên Siu* [神秀] associated with Confucian scholars in his youth, and picked up a great deal of knowledge: suddenly he became a priest and entered the *Tung-shan* [東山寺] temple, where he met the fifth apostle *Hung-jên*, and acknowledged with joy, that he had at last found a real master. Finally, the "History of the Priest *Shên-siu*" says that *Tao-sin* and *Hung-jên* went together to the *Tung-shan* monastery, and that their religion was called the *Tung-shan Fah-mên*; *Shên-siu* looked up to *Hung-jên*, who therefore thought very highly of him.

A literary effort [聖教序] of the *T'ang* Emperor *T'ai Tsung* [627–650] describes the celebrated traveller *Hüen Chwang* as a Leader of the *Fah-mên* [法門之領袖].

4.—Does the Word *T'ien* belong to Nestorianism alone?

The *Sui Shu* [7th century] says, in connection with the state of *K'ang* [康], (which has been abundantly proved to be identical with Samarcand):—"They have a body of Turkish "law [胡律], which is placed in the Nestorian temple "[祆祠]; and, when any punishment is to be awarded, they "take and decide it by this." In translating the remarks of the *Ming Shï*, written nearly a thousand years later, upon Samarcand [撒馬兒罕], Dr. Bretschneider [*China Review*, Vol. V, Page 127] shows that, in the fourteenth century, there was still a hall there, in which the sacred book (then, of course, Moslem), was explained. And that this Nestorian body of law had found its way into China previous to the year A.D. 800 is evident from the remark made by the poet *P'i Jih-hiu* [皮日休, *T'ang* dynasty] that there was a 胡律 in the *Wu-k'iu* Temple [武丘寺], somewhere in China.

That the Turkish races had Nestorian temples among them, previous to their conversion to Moslem, seems plain from the following extract from the *Yu-yang Tsah-tsu*, [酉陽雜俎] a work of the eighth century: The Turks [突厥], in worshipping God [祆神], have no temples or shrines [祠廟]. They carve sandal into figures, which they put in skin bags, and, wherever they go, they smear them over with an unguent [脂蘇], sometimes lashing them on to a stake; and they sacrifice to them [祀之] at the four seasons.

The *Si K'i Ts'ung Yü* says:—"In the fifth year of *Chêng-*
"*kwan* [A.D. 631] imperial orders were given for the
"construction of a Nestorian temple [祆寺] in the *Ch'ung-*
"*hwa* division [崇化坊] of *Ch'ang-an*; and it was called the
"Syrian [大秦] or Persian [波斯] temple [寺]." Again:
"The Emperor *Wu Tsung* [841–6] destroyed the Buddhist
"temples, and made the priests commoners. In A.D. 845 he
"ordered the Syrian Archimandrite and sixty others [大秦
"穆護大祆等] to revert to the lay status." *

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* The last two extracts are taken from the *Si-k'i Ts'ung-Yü* [西谿叢語] a work which, according to WYLIE'S *Notes on Chinese Literature*, was written by *Yao K'wan* [姚寬] in the 12th century, and partly or wholly republished during the *Ming* dynasty, in an encyclopædic collection known as the *Pai Hai* [稗海].

An extract from the *Hwei-chu Lüh* [揮麈錄], however, states that the *Si-k'i Ts'an-yü* [西谿殘語] was compiled at *Yao K'wan's* direction by [some one whose personal name was] *Wei* 威, and that it was a very complete collection of notes on ancient and modern things.

This leaves us pretty much where we were, as WYLIE does not seem to mention the *Hwei-chu Lüh* at all. But an extract from the *T'ung K'ao* [通考] informs us that the latter work was compiled by one *Wang Ming-ts'ing* [王明清], son of *Wang Chih* [王銍] who, according to WYLIE, wrote in the 12th century.

It is clear therefore that the two authorities or the one, if both be identical, date from the twelfth century A.D.

5.—Were all *Po-ss*: Priests Nestorians?

An extract from the old *T'ang Shu* says that, during the reign A.D. 806-821, the Uigurs successfully applied for leave to establish *Moni* [摩尼] temples in *Ho-nan Fu* and *T'ai-yüan Fu*; and the *Kang Kien* gives the year A.D. 806 as the date of the first introduction of *Moni* sectarians, who are described as being Uigur subjects, but Buddhists and Taoists by religion [浮屠道人之稱]. Another extract from the *Sung Shī* says that, in the state of *Kao Ch'ang* [高昌, during the period 960-1127 the Uigur metropolis], there was a *Moni* temple where the Persian priests [波斯僧] held their separate rites; they were the so-called "heretics" [外道] of the Buddhist *Sûtras*.

A work called the *T'ien-kwan Shu-chu* [天官書注, the date of which I cannot find], says that "the Great Unity "[泰一] is the most worshipful God of Heaven," to which a commentator adds, [長水疏]: "the custom of all Western "nations is to worship the Eternal God of Heaven [長命 "天神]."

The *Fah-yüan Chu-lin* [法苑珠林] says that there was a very learned polemical Brahman in the Lion state [Ceylon], champion of the *Wai-tau* [外道], who, hearing that *Kumârajîva* was preaching Buddhism in North-west China, [關中, and at the *Toba* court, 397–415], got on a camel with his books, and came to *Ch'ang-an*. The *Tsin Shu* says that *Kumârajîva's* mother had been with the King of *Kuche* [龜茲], and that she went with her son to India, and tried to dissuade him from preaching in China. Also that "his "father was a clever and virtuous man, and had declined the "hereditary premiership, crossed the Orion Range, and come "east." From these extracts it would seem that *Kumârajîva* was not a Hindoo, but a *Kuche* Turk.

6.—What other Religions, besides Nestorianism and probably Zoroasterism, flourished in the Uigur and North-west China Region?

The Turkish races, and the Uigurs especially, seem to have been religiously inclined, and tolerant to all religion, for the *Sung Moh Ki-wén* [松漠紀聞, a 12th century history of the *Nuchêns*], says:—The Uigurs are very devout Buddhists: when they worship, they wear the *Kachâya*, and use the Sanskrit or Hindoo tongue, [作西竺語]. The *Sung Shĭ* says of *Kao Ch'ang:* There are over 50 Buddhist monasteries, all with door-slabs presented by the *T'ang* dynasty: in their monasteries they have several Chinese dictionaries and other works [唐韻, 玉篇經音, etc.].

The *Si-hu Chĭ-yū* [西湖志餘, possibly the same as the *Si-hu Chĭ-tsuan* 纂 of Wylie, 18th century] says that "wax-"fasting is a custom under which barbarian priests of the "Western regions, during fast time, weigh their bodies and "make a wax figure of like weight: when the fast is over, "they again weigh themselves, and, if their bodies are heavier "than the wax, they have been good; if lighter, then their "efforts have failed."

The *Fah-yüan Chu-lin* [法苑珠林, 7th century] says:—"The *Sûtras* [經] in the West are all written in characters "derived from Sanskrit [祖梵], but some of the 36 states "use forms of it very different from others." The word for Sanskrit is loosely used, for we find *Pashpa*, the Tibetan preceptor of Kublai described in the *Yüan Shĭ* as a 梵僧, whilst the *Liao Shĭ*, or *Kĭtan* History, says that in A.D. 1001 a "Sanskrit priest" and distinguished physician was introduced to court by the Uigurs.

The *Mêng-k'i Pih-t'an*, [夢溪筆談, a very good authority of the 11th century], says that in the *Yen-chou* [延州] hills

there is a Buddhist temple of the *Ts'in* state [秦國佛寺, probably referring to the Tibetan *Ts'in* dynasty of *Yao* 姚 (384–417), which succeeded the Tibetan *Ts'in* dynasty of *P'u* or *Fu*, 蒲 or 符 (351–395), both in North-west China, and also in relation with the Cashmir Buddhists], in the court of which is King *S'ri's* [尸毗] grave.

7.—Is there any Evidence that any Foreign Priests ever went to Canton? Were not the "Sea-foreigners" probably mere Traders, going through their Daily Religious Observances?

The *Yih T'ung Chi* [一統志, I suppose the *Yüan* dynasty edition,] says that south-east of *Shao Chou* [that is, somewhere on the Canton coast] there is a port called *Ts'ao K'i* [曹溪], to which, during the *Liang* dynasty [A.D. 502–555], a Hindoo priest came in a merchant ship. This statement is confirmed by an extract from a stone tablet of the 8th century in praise of one *Ma Tsung's* [馬總] administration at *Ts'ao K'i*, saying:—"The great barbarian "ships from Annam, and the Western sea-going craft from "India [身篤] all shared in his kindness." Another panegyric of the same date, on the same man, speaks of the valuable freights [寶舶] he induced. The *T'ang Shu* speaks of *Pulo Condor* ships [崑崙舶] at Canton in the Empress *Wu's* time [684–704], and of an affray with the captain of one of them, in connection with some extortion, and says that, during the tenure of office of the 38th descendant of Confucius there, [A.D. 808], the mooring-dues exacted from barbarian ships were abolished. There had been great corruption after the reign 714–742. An undated inscription speaks of a sort of *Hoppo* at Canton called the 押番舶使. The poet *Tu Fu* [杜甫 812–870] sings of "thousands of Sea-Turk ships" [海胡舶], which probably refers to the

Arab traders. The *T'ang Shu* says that *Wei Chêng-kwan* [韋正貫], nephew of [the famous Tibetan frontier administrator] *Wei Kao* [韋皐, 9th century], "was appointed "Imperial Commissioner at Canton [嶺南節度使]. The "maritime traders had hitherto been obliged to give the first "pick of their ivory, pearls, etc., to the great officers [大帥] "at nominal prices; but after his arrival there was no "such demand made, and his understrappers grumbled at "his integrity." Again:—"During the Emperor *King's* "reign [about A.D. 825] the maritime traders offered *garu* "wood and timber for building pavilions [亭材]." The *Wu Tai Shī* says that *Liu Ch'ang* [劉鋹, Emperor of the Southern *Han* dynasty reigning at Canton, about A.D. 970], "was dallying with his palace girls and Persian [波斯] "women in the inner apartments, and left the government of "his state to the ministers." The *T'ang-kwoh Shī-pu* [唐國史補, doubtless of the *T'ang* dynasty] says that the Lion state's [Ceylon] ships were the largest that came to Canton [南海], and that, on their arrival filled with precious goods, the Governor at once reported the fact to the Emperor.

8.—Is there not Evidence of Early Foreign Sea-Trade with Fuh Kien and Chêh Kiang Ports as well?

A. The *Peh Shī* [7th century] says that Loochoo is five days' sail from *Kien-an* [建安 modern Foochow]. The *Chung-hing Hwei-yao* [中興會要, Southern *Sung*,] says that, during the reign 1131–1163, the Emperor was alive to the importance of encouraging barbarian ships by having an honest officer at Foochow.

B. The *Wu-kwoh Ku-shī* [五國故事, 10th century] says that one *Wang Yen-pin* was appointed to *Ts'üan-chou*, and used to successfully freight a barbarian ship every good year. The *Yüan Shī* [Mongol] mentions the appointment of

one *K'wei-k'wei* to watch the ships at *Ts'üan-chou* [泉舶. See the late Mr. MAYERS' remarks on page 185 of Vol. IV. of the *China Review*]. The same work says that junks from *Tsüan-nan* [泉南] pass *Ciampa* on their way to Java. The *Wên-hien T'ung-k'ao* says the largest ships that came to China were of one thousand *boran* [婆蘭] capacity, with only one mast: each *boran* was 300 pounds [400 lbs. *av.*] *Boran* is evidently a foreign word, but it does not appear to what port these large ships came.

C. The I-yüan [異苑, *quære* date,] says: During the reign 826-837, during the building of a granary at *Shan-yin* [opposite Hangchow] two large boats were dug up, and in them were found coins with characters on the rim. *Ou-yang Sin* [歐陽 修 11th century] says: "Hangchow, [錢塘] ever since "the Five Dynasties [10th century], has had the good sense to "obey China [proper], to respectfully ask commands, and to "cease warring. The people are now rich and happy, and the "town is splendidly built, having a population of over 100,000 "families, and being shut in between the lake and the mountains. "*Fuh Kien* traders and all sorts of sea-going ships crowd the "harbour." The *Wu-tai Shī* says that "*Ts'ien Liu* of *Wu-Yüeh*, [吳越錢鏐, independently ruling at Hangchow A.D. 900], "frequently sent envoys across the sea, and all the sea-ports "did a large trade with his people," The "good sense" evidently alludes to the period subsequent to his reign.

D. The *Ming Yih-t'ung Chī* [明一統志] says that *Chap'u* [乍浦 near Hangchow] is in the *P'ing-hu* district [平湖], and that, during the *Yüan* [Mongol] time, foreign ships congregated there. The same work says that "*Canfu* [澉浦] "was in the *Hai-yen* district of *Ka-hing Fu*; and that, during "the reign of Kublai Khan, it was a great resort for traders, "for which reason the *Ming* dynasty built a wall round the "harbour, and gave to the place the name of *Kan-p'u* Mart." The city of *Hai-yen* was near the old Salt Town [鹽官鎮]

which had been two centuries earlier submerged by the inroads of the sea. The *Shên Pao* reported that valuable porcelains were dug up here in 1887 when part of the old town was exposed to view.

The result of the above quotations, all of which are taken from the *P'ei-wén Yin-fu*, seems to me to be as follows :—

1. There is no evidence that any Nestorians ever were at Canton, or that any Persian Christians ever were there.

2. Nor that Canton was *Canfu*, or that *Canfu* was any other place than *Kan-p'u*.

3. There is plenty of evidence that both Persians and Arabs went to Canton ; and it seems likely that they were also among the foreigners who plainly went in ships to Fuh Kien and Chêh Kiang ports.

4. The term *Ta-têh Sêng* was undoubtedly applied to Nestorians, and to their religion the *king kiao* [景教] : but the term *Ta-têh Sêng* was also applied to the *Fah-mên* priests, and to priests from India.

5. If all the *Fah-mên* were not Buddhists, at least some of them were. It is certain that some *Fah-mên* were Buddhist sectaries of some sort, and there is nothing to shew that all were not.

6. The *Wai-tao* were not orthodox Buddhists, and there is nothing to shew that any of them were Buddhists at all. Some of them were *Po-sz* and *Moni* priests.

7. *Ta Ts'in* is not only identical with *Fah-lim* in the sense of "Syria," but, in connection with ecclesiastical matters only, it is interchanged also with *Po-sz*. It seems not unlikely that *Po-sz* and *Persian* both mean "Parsee" in many cases, both in China and in the West.

8. The word *t'ien* [祆, or Heaven as a spiritual abstraction] cannot be shewn to have been applied exclusively to Nestorians.

9. *Po-sz* priests were in some cases identical with *Moni* priests; in others with Syrian Nestorians.

10. The Arabs traded all along the China coast as far as they found ports.

THE "TENT THEORY" OF CHINESE ARCHITECTURE.

By S. RITTER von FRIES.

When reading the proceedings of the meeting of the Royal Asiatic Society on the 21st February, as published in the *North-China Herald*, I noticed that Mr. CARLES, one of the members present, in commenting on Dr. EDKINS' paper on "Chinese Architecture," expressed his surprise that the learned author had made slight reference to the Tent Theory, and even doubted whether it was a tenable hypothesis that the curved roofs of Chinese buildings had developed out of and were a remnant of ancient tent-habitations.

In regard to the theory, I venture—though a layman in matters of architecture—to express my view, hoping to elicit in this way information from some of the learned members of our Society who have entered into this question, and arrived perhaps already at a definite result, either supporting or upsetting my argument.

My conviction is, and I hope to be able to prove it, that Dr. EDKINS was perfectly correct in abandoning a hypothesis which cannot be upheld substantially. The few "proofs" which Mr. CARLES brings forward, I find, are as little an obstacle to discarding the tent theory as they are a support of the same.

If we are to assume that the shape of the tent was so familiar to the Chinese that they continued to preserve the same even in their structures of masonry, we must in the first place be able to show that the dwellings of the natives ever consisted of tents. In which period of the history of

this people, wonderfully complete as it is, do we find a hint of their having lived in tents? If we go so far back as to the mythical sovereigns Yu Ch'ao (有巢) and Huang Ti (黃帝), we read that they taught the people to build houses and cities. Of course this is myth; but would even myth abstain from mentioning the existence of tents altogether, if they had been the first and usual form of their quarters at any time? The Chinese fully realise the fact that a nation in its childhood is uncivilised, and they are not ashamed to relate that their ancestors "ate hairs and drank blood," before some one of the Sui-jên family (燧人氏) discovered fire. Why, then, should they ignore the tents, which they would doubtless have kept longer than that strange food and beverage, especially if we find it reasonably assumable that this form of dwelling had any influence on their architecture. I have nowhere come across a passage yet which would show that the Chinese were formerly in the habit of making use of these portable structures as constant habitations. In the absence of such a passage, I must also put the question: were the Chinese ever a nomadic tribe, so as to require tents, or so as to be in circumstances to find them useful? As far as I am aware, the Chinese neither consider themselves, nor are they by Western historians described, as nomads. We have every reason to believe that they were as early as possible a settled people, and essentially agriculturists, (note Shên-nung, the divine husbandman) a mode of life which in itself excludes migration. In the face of these facts, we should, I should say, require very strong proofs to believe that the Chinese were, instead of cave and hut dwellers, at any time dwellers in tents. That tents have been employed by them on their numerous warlike expeditions, even in remote antiquity, I am quite willing to concede, as they could have learned their usefulness in such cases from their northern nomadic neighbours.

The next point in favour of my argument is etymological. Do any of the characters, or part of them, which bear the signification of house, dwelling, home, etc., have the slightest reference to a tent-like structure? Do not the radicals 宀 (*mien*) and 戶 (*hu*) unmistakably point to both a cave and a dwelling with doors, indicating surely that a tent cannot be meant? Finally, the expression *chang-fang*, meaning a tent, is a *compositum*, and therefore naturally also of more recent invention.

If it is not possible to adduce proofs in either history or language in support of the tent theory, by what circumstances then, I may be allowed to ask, are we forced to assume, in spite of this significant silence, that the shape of the tent is the cause of the characteristic form and arrangement of Chinese buildings? The singularly curved roof, I am told, is such a *primâ facie* proof. I venture not only to disbelieve that the usual Chinese roof has derived its shape from the tent, but to go farther, maintaining that such a curve has scarcely anything in it parallel to a tent at all. The outlines of the latter are necessarily straight, and it is the space between the framework, covered with cloth, skins, and the like material, which would bend and show a curve, and this again principally with tents having a triangular profile, which are the sort least likely to have been used. The *yurt* which the Tartars, Kirghese, and Kalmuks construct is round and often hemispherical, and bears no resemblance whatever to the Chinese house. The surface of the roof of native houses is not bent, but the masonry or beams at both its ends, also sometimes the ridge of the house, show the typical curve. The roof surface, on the contrary, is perfectly even and bears, especially in the South, obvious traces of split bamboo roofing alternately showing the concave and convex, the convex parts swelling upwards like ribs, which form it has been found useful to follow even in tile roofs. It is therefore

evident to me that the Chinese house of the present age originated from caves and huts, and the apparently puzzling flourish of corners and ridge of the roof of buildings can, if it must be derived, just as well have been caused by the uneven forms of the rude material used to build the primæval hut. I am, however, more of the opinion that this peculiarly shaped line was no inheritance of days of yore, but is an artistic embellishment given to the gradually more improved houses and temples. That wooden buildings apparently induce the constructor to add projections to the roof and increase its ornamentation I find illustrated in the primitive houses of peasants in some parts of the Austrian Alps, where the wide outstretched rafters at the corners are very often decorated with fantastic carvings, and those on the long side of the roof are bent upwards, and are utilised at the same time to support the eaves. Most of the Chinese ornamentation, which Dr. EDKINS rightly asserts ought to be considered Buddhist, is incongruent with that indigenous fondness for the rectangle which is exhibited in their architecture, furniture and dress, and I can therefore not suppress my doubt whether the characteristically curved roof is originally Chinese. There is, I am perfectly aware, neither in India nor anywhere else an exact parallel to it to be found, which we might consider the original of that form, and I consequently express my doubts with reservation. The archæological remains of Egypt, the country which seemingly had the same propensity for a geometrical arrangement as China, show uniformity in every branch of the plastic arts, because they are all equally Egyptian.

In concluding, I solicit a renewed attention on the part of the learned members of the Society to this interesting question.

NOTE ON THE COMPARATIVE LONGEVITY OF MALES AND FEMALES IN JAPAN.

By T. E. HALLIFAX.

The appended list, taken from the census report published in March 1890, may be of some little interest, as showing the greater longevity of females over that of males in Japan, and the impunity with which the Japanese inhale both tobacco and charcoal fumes. It is the universal custom in Japanese houses during autumn, winter and spring to warm the rooms with charcoal fires. These of themselves would not prove very harmful, as the houses are so badly constructed as to admit draughts from all sides, and thereby render the fumes comparatively innocuous; but the people, both men and women, have a habit of sitting close to the fire with their heads leaning over, so as to inhale fumes to such an extent as would speedily knock over a European. Again, both sexes are inveterate smokers, and inhale all the tobacco smoke. Of course many people of Europe inhale tobacco smoke, but they do not inhale charcoal fumes also; and it is rather matter for surprise that any Japanese reach a hundred, seeing that a great part of their lives they are inhaling poisonous matter, thereby diminishing in the same proportion the necessary supply of oxygen. Among my own acquaintance are several old women, nearer eighty than seventy, who are inveterate smokers, and who, during three-fourths

of the year, crouch over the charcoal fire, yet who are still remarkably healthy and active.

Age.			
70	...	male and female,	983,856
80	...	do. do.	199,074
90	...	do. do.	7,507
101	...	males 9, females	21
102	...	„ *nil* „	9
103	...	„ 1 „	2
104	...	„ 4 „	18
105	...	„ 3 „	6
106	...	„ 1 „	1
107	...	„ *nil* „	1

PROCEEDINGS.

MINUTES *of a* GENERAL MEETING *held in the Society's Library, Museum Road, Shanghai, on Friday, 21st February* 1890, *at* 9 *p.m.*

Mr. P. J. HUGHES (President) occupied the chair. There were about 30 persons present.

The HON. SECRETARY (Mr. W. Bright), in opening the proceedings, said that as the business of the last meeting of the Society, held on the 20th December, had been fully reported in the daily newspapers, he thought that, with the permission of those present, the minutes might be taken as read. At the last meeting the President had mentioned that the abstract of the replies to the Weights, Measures, and Currency circular was in course of preparation by Mr. Morse. It was now his duty to report to the meeting that the abstract had been received, and would form a valuable addition to the current fascicule of the Society's Journal, which was shortly to be published. The thanks of the Society were due to their correspondents for their replies, and especially to Mr. Morse for the great pains he had bestowed on the preparation of the summary. The Circular for 1890 on "Inland Communications" had just been issued, and would, he hoped, elicit even more numerous and exhaustive replies than resulted from the issue of the last Circular. The information sought on the present occasion to be obtained from all parts of China and Corea had reference to the main roads, the condition of the ancient and modern roads, particulars of noteworthy bridges, viaducts and tunnels, of modes of conveyance, rate and cost of travelling, cost of carriage of goods, and accommodation for travellers. He might add, in conclusion, that, owing to the difficulty experienced in some cases of obtaining subscriptions from members, the Council had decided to remove from the list the names of those

who had failed to pay their subscriptions for the past three years, and to print in the next fascicule of the Journal a notice to the effect that members whose subscriptions were a year in arrear would receive no further publications of the Society.

The PRESIDENT said that he had much pleasure in announcing the election, since the last meeting of the Society, of the following gentlemen: Messrs. MAX GOEBEL (Consul-General for Belgium), F. M. GRATTON and FERD. RINKEL. In the name of the Society, he desired to thank M. Janet for his kindness in arranging and classifying the specimens of butterflies in the Museum. He had been requested to intimate to members that they would greatly assist their indefatigable Hon. Librarian (Dr. Faber), in his arduous labour of re-arranging the books in the Library, if they would kindly return without delay any works which might happen to be in their possession. There were at present some forty books missing; the absence of such was, to say the least, exceedingly inconvenient. The lecture on "Chinese Architecture," which they were to have the pleasure of hearing from Dr. Edkins that evening, would, he was informed, treat the subject from the historical point of view. The well-known learning and ability of the lecturer entitled them to expect a lecture of more than ordinary interest, and he was glad to see many present, though doubtless there would have been a much larger audience had not the weather been so severe. Among those present he noticed some who had travelled extensively in the interior, and who had doubtless come across remains of ancient edifices and seen the cave and rock dwellings described by Dr. Williamson in his interesting work, *Journeys in North China*. There were other gentlemen—and perhaps ladies, too—who, although they had not gone so far afield, had closely observed the facts within their reach, and who might possibly favour the meeting with the results of their observations. Last, and perhaps not least, there were present professional gentlemen able, as he hoped they would be willing, to tell them something about Chinese architecture regarded from the standpoint of Western science. He had no doubt that thus many novel and interesting facts would be elicited, and a flood of light thrown upon a subject which, as far as he knew, had not hitherto been discussed at a meeting of the Society.

Dr. J. Edkins then read extracts from his paper on "Chinese Architecture," which is printed *in extenso* pp. 253 *seq.* of this volume.

In the discussion which followed,

General Mesny thought that the different interpretations of scholars in regard to the caves and kilns arose from the use of the same character to express both, as was the case in Shansi and Kansu, though in Szechuan the caves were known by a distinct name. The loess referred to by the lecturer resembled chalk, was easily worked, and was used for making cabins, beds, stoves, etc. The ornaments which he had noticed round the graves of Emperors were usually in pairs; there were two torches, two goats, two horses, two men, and so on. The graves had large tablets, with inscriptions similar to those on tombstones in Western countries. The cap (or *mao-tzu*) at the top of the tablets had designs of dragons holding balls—presumably of fire. There were caves of the Tang dynasty ten or so miles west of Honan-fu executed out of solid rock, and many of them very large. Excepting the porcelain pagoda at Nanking, the pagodas he had seen were mostly of brick.

Dr. Faber said that he had followed with much interest the valuable paper of Dr. Edkins, and only regretted that he found it impossible to remember the great number of minor details. He wished to ask the lecturer a question, namely, "What was the characteristic feature of Chinese architecture?"—in the sense that we speak of parallel lines forming the characteristic of Greek architecture, of the vertical line with pointed arch of Gothic, and of the round arch of the Roman style.

Dr. Edkins replied that he considered the roof the characteristic feature of Chinese architecture.

Dr. Faber, continuing, said that the roof was certainly very characteristic of Chinese architecture. Architecture, however, was not merely workmanship, but a science and an art. The roof could not be considered as an object in itself, but only in connexion with the building to which it belonged, and of which, as an organic whole, it must be a part. Herein Chinese architecture was deficient. The ground plan was sometimes well proportioned, but the leading from it to the superficial roof was seldom perfect, except, perhaps, in small

open garden-houses, in which the Chinese excel. Though the roof was not exclusively supported by walls, but by pillars also, the pillars in themselves showed no artistic perfection. They had commonly a pedestal, of which there were various forms in China, but no capital. Only very rarely was a rough beginning of such to be seen in China. The upper portion of the pillar was pierced by cross-pieces, commonly of wood. This piercing pointed to wood-construction as another feature of Chinese architecture. For this reason no vaults were to be met with, the very few exceptions, on the Omei Mountain and in graves, pointing to foreign workmanship. Dr. Edkins had mentioned a building entirely of stone; it would be interesting to get more particulars about such. Then with regard to the Ming-t'ang, they had been told that it was a square building with a round roof. To accomplish that in an artistic way, to the satisfaction of cultivated, æsthetic ideas, meant the highest perfection in architecture. It would mean an anticipation of Michael Angelo and Wren, 3,000 years ago. But we might as well believe in the squaring of the circle by the Chinese. Probably a round roof was simply put on a square one. That the Ming-t'ang, at the T'ai Mountain, was more magnificent than other buildings of the kind was due to the near relationship of the Duke of Lu, commonly called Chow Kung, to the Imperial house of the Chow, and to his great merits in establishing that dynasty in China. He was invested with the feudal State of Lu, and special privileges were granted to him. Some of these referred to the Ming-t'ang. This was a large building for ancestral worship, for audiences, and for the reception of the Emperor on his tours of inspection. There were four other buildings of the kind in China at the time, the principal one being at the Imperial residence. In the *Li-ki* they were told that the Emperors of the Shang and Hsia dynasties had similar buildings under other names. Though that kind of building served for religious as well as for political purposes, it did not follow that all ancient Chinese buildings were devoted to religious observances. There were very early notices in Chinese literature of markets, of walled cities, of granaries and other store-houses, of stables, towers, etc. All such buildings were doubtless very prosaic in outline, only serving for the immediate necessities of life. The designs of all

larger buildings in China exhibit an immense waste of space ; the principal impression was received from the vast dimensions, which, according to Burke, are always the sign of a common and low imagination. Of more or less beauty, however, were the gates and gateways, and, as a branch of them, the memorial arches. Their ornamentation was often beautiful. But even in their ornamentation the Chinese rarely, if ever, exhibited congruity of detail. The details were often perfect, but they were seldom in such full harmony with other details as to present to the spectator the pleasing aspect of a harmonious work of art. The distinction of a classical and post-classical period in Chinese architecture was scarcely tenable, and certainly of but little importance. Very marked, however, was the Buddhistic period. No mention had been made of the influence of Mohammedan architecture in China. There was undoubtedly such from Arabia (for example, in Canton), from Persia, and from Turkestan. It was possible that the superiority of the architecture of the Ming dynasty could be traced to that source.

Dr. Williamson said there were comparatively few allusions to the buildings of the Chinese in ancient books, and it would be easier to describe their dresses than their dwellings. The few which existed had been utilised by Dr. Edkins. There was no doubt that the lecturer was right in saying that the first end was geometrical, and this was also true of contemporaneous architecture. The early Babylonian and Assyrian architecture was emphatically geometrical — usually rectagonal — crowned often with a dome or an octagon ; so also with the earliest Egyptian. The Great Pyramid was a geometrical problem from base to apex. And in regard to these the lecturer was also right in saying that science preceded superstition. Those two styles of architecture seemed to have had no beginning, but to have sprung up in their richest glory like Minerva full grown and armed from the brain of Jupiter. This was true likewise of the most ancient Egyptian statues, alike as regards size, expression, and finish. In regard to the second stage, the speaker thought it was very likely that Ts'in Shi Huang had obtained his ideas of parks and gardens and other of his public works from the royal palaces of Babylonia, which appeared so unexpectedly

in China, as with the touch of a magician's wand. Ts'in Shi Huang lived in the distant north-west, and there could be no doubt that there was far more intercourse in those times between Central Asia and Asia Minor than was once supposed.

Mr. Hughes (the President) suggested that the resemblance between the Chinese house and the Mongol tent might account for the style of Chinese buildings. He had not heard that subject referred to in the course of the discussion, and perhaps there were some present who could enlighten them with regard to it.

Dr. Edkins stated that he knew that that was a favourite theory, but he had not much faith in it.

General Mesny having made a brief reference to the resemblance between the portable canopy used at military reviews, to shelter the inspecting officer, and the concave roofs met with in China,

Mr. Carles said that he was rather surprised to hear the learned lecturer call in question the origin of Chinese architecture. It was not only the outer slope of the roof in a Chinese house which bore a resemblance to a tent; there were many other features in common. In building it, the wooden framework was first placed in position, after which the brickwork was filled in, the sequence of work being the same as that with a tent's pole and its covering. Further, the rafters overlapped the pillars to a degree which, though natural in a tent, was certainly not necessary in a more stable structure. There was also a complete absence of any arch; but perhaps the most striking resemblance between a Chinese house and a tent lay in the divisions corresponding to the spaces between the poles or pillars, which necessarily, with the exception of the central space, were equidistant from each other. Nor, again, was it only in the interior of the house that the resemblance existed. The main building was slightly raised above the others, and was approached by a pathway flanked by the buildings of secondary importance. The women's quarters were at the back of the main building and thus screened from sight. No communication existed between the different buildings, and if it was desired to pass from one courtyard to another, the passage lay outside the intervening buildings, and not through them. All these conditions were such as would exist in a camp, the chief's

tent being on a slightly higher ground than the rest, the approach to it being guarded by his officers' tents, and the communications from one to another being not under cover, but in the open air. There was another curious feature to which it was perhaps worth while to call attention in passing. The stone socket (*sang-tun*) in which the main pillars stand is cut away on its lower side to such an extent that only a comparatively small portion of it rests on the stone slab beneath it. This, of course, is a weak point in the structure, but may be due to the fact that formerly the socket rested in the earth and not on a stone slab, when, of course, it would be advisable to reduce the size of the lower portion in order to admit of its easier reception into the earth. This, too, might point to the time when a substitute was sought for tent-pegs in the erection of solid buildings. There were other buildings than those of the type which had been referred to. For instance, at Soochow the Wu-liang Tien or Beamless Hall, and at Peking the Drum Tower, were specimens of structures in brick and stone, the like of which were found on a smaller scale at the cemeteries of persons connected with the Imperial family. In view, however, of the resemblances which existed, in appearance, interior arrangements, and general plan, he held that the original idea of a Chinese house was drawn from tents and tent life.

Dr. Faber said that in regard to the design of Chinese Yamêns and similar buildings, he thought that Mr. Carles' arguments were quite conclusive. He also agreed with General Mesny that the concave roof was an imitation of the lines of a tent or portable pavilion. Curved roofs were, according to all Chinese authorities, as ancient as Chinese architecture. They might believe that, as it marked a peculiarity of Chinese artistic feeling, which showed unmistakably a horror of straight lines, especially horizontal ones. The forms on the wall-pictures exhibited before them that evening were no valid argument against it, for they knew that Ts'in Shi Huang showed a great interest in going against every custom prevailing during the Chow dynasty, which was then crushed, and a new era in social and political life, not merely a new dynasty, was inaugurated with irresistible power and relentless cruelty. A few ancient relics at one place in China could never be conclusive in

regard to the state of things at other places, and, still less at other periods.

Mr. G. J. Morrison stated the usual points in architecture were construction, outline, and ornamentation, and as regards construction in Chinese buildings his experience led him to the conclusion that its principal feature was its utter badness. There was hardly a building erected so as to last. In pagodas bricks were used, and such structures lasted longer than most others. Wood formed the chief part of the majority of the buildings. The outline was the point to which Western architects liked to pay most attention. In Chinese buildings, except perhaps as regards the roof, and except in the case of pagodas, there was very little outline. The outline of the semi-circular bridges was pleasing to the eye, and had greater attention been paid to the foundations, they would probably have remained to the present day. The pleasantest feature of most Chinese buildings, and on which the greatest care was evidently bestowed, was the ornamentation. In this real merit could be discerned, and the work was well worthy of the study of those interested in such subjects.

Dr. Faber proposed a vote of thinks to the lecturer for his very interesting lecture, and a similar compliment having been paid to the Chairman, the meeting adjourned.

Minutes *of the* Annual General Meeting *held at the Society's Library on Monday*, 19*th May* 1890, *at* 9 *p.m.*

Mr. P. J. Hughes (President) in the chair. Between 30 and 40 persons were present, including ladies.

The Secretary read the Reports and Accounts for the year 1889-90.

The Chairman observed that the accounts showed a balance of Tls. 530, and Tls. 70 had since been collected. The Reports showed that satisfactory progress had been made during the past session. The Museum had not been so much favoured as usual, and it was hoped that sportsmen would bear this institution in mind. After

expressing a hope that the incoming Council would accelerate the work of printing the papers accepted by the Society, the Chairman said he hoped members would enable them to still further increase the attractiveness of their Journal by reviving the "Notes and Queries" which used to form an interesting item in the Transactions. Accounts of journeys in the interior would be acceptable, especially if read by the traveller himself. In this connexion he would remark that gentlemen who might happen to visit Si-an-fu in Shensi would confer a favour by reporting, as suggested by his Excellency Mr. von Brandt, on the efficiency of the measures taken for the protection and preservation of the Nestorian Tablet. It would be remembered that, at the instance of some missionary friends, the Council had a letter written to Mr. von Brandt on the subject, and that His Excellency and his colleagues had induced the members of the Tsung-li Yamên to interest themselves in the matter and to instruct the local authorities to take the necessary steps for the preservation of this monument of the early relations between China and the West. The meeting would be glad to learn that Dr. Bretschneider had promised a paper on the "Botany of the Chinese Classics," being the second part of his *Botanicon Sinicum*, published by the Society ten years ago.

On the motion of Mr. P. G. von Möllendorff, seconded by Dr. Jamieson, the Report and Accounts were adopted.

On the motion of Mr. M. F. A. Fraser, seconded by Mr. Mencarini, the following gentlemen were elected to constitute the Council for the ensuing year:—Mr. P. J. Hughes, *President;* Dr. Edkins and Mr. von Möllendorff, *Vice-Presidents;* Mr. W. Bright, *Hon. Secretary;* Mr. Thos. Brown, *Hon. Treasurer;* Dr. Faber, *Hon. Librarian;* Mr. Carl Bock, *Hon. Curator of the Museum;* Dr. Jamieson, Rev. A. Williamson, Ll.D., and Messrs. von Haas, Playfair and D. C. Jansen, *Councillors.*

The Chairman observed that several of the retiring Council had deserved particularly well of the Society during the past year, among them being Dr. Faber, Dr. Jamieson, Mr. Bright and Mr. Bock.

Dr. Jamieson then proceeded to read a paper by Mr. E. H. Parker styled "Notes on the Nestorians in China." (*This paper is printed at pp.* 289 *sqq. of this volume.*)

Dr. Edkins said he disagreed with the author of the paper in the conclusion he arrived at. There was a regular trade carried on by the Arabs between Bussorah and Canton, and the Nestorian Christians, having to come to China and coming from the same part of Asia as the Arabs, would naturally come by the same route. The author had been unwise in confining his attention to one book, which was a very unsafe thing to do in reading Chinese history.

Mr. W. Bright then read a paper by S. Ritter von Fries, on "The 'Tent Theory' of Chinese Architecture." (*This paper is printed at pp.* 303 *sqq. of this volume.*)

Dr. Faber thought the writer of the paper rather missed the point of Mr. Carles' argument. Mr. Carles did not mean to express the idea that the curved roof was derived from tents like those of the Mongols, or that the ancient Chinese must have lived in such tents. On the contrary, Mr. Carles pointed to several yamêns and other existing buildings as having derived their shape from structures in an encampment. Dr. Edkins, on the other hand, based his argument on some tablets which had been discovered in a certain place in China as indicating that in ancient China the curved roof was not known. They had learned, from Mr. Parker's paper just read, that it was not wise to confine oneself to one book; and it would not be wise to confine oneself, as he considered Dr. Edkins had done in his lecture on "Chinese Architecture," to one monument, especially one belonging to a dynasty in which all the ancient customs of China were set upside down. The shape of the roof was shown in a line fastened above and below but not stretched tight.

Dr. Edkins thought the imitation of a tent was probably imported into China from other nations.

General Mesny thought some reason for the use of the curve in Chinese buildings might be found in the former use of bamboos with projecting ends.

Dr. Whitney said that from ideas gathered from the natives themselves it was probable that the whole thing arose from superstition. The Chinese never make a road straight for any considerable distance. Every here and there a crook is made, the idea being that any evil influence travelling along the road will be

dissipated at the bend. The same idea had probably been applied to the roofs of houses.

The proceedings terminated with a vote of thanks to the Chairman.

COUNCIL'S REPORT FOR THE YEAR 1889-90.

The Council of the China Branch of the Royal Asiatic Society beg to present their Report on the operations of the Society during the year ended 30th April 1890.

1. *Council.*—The office-bearers and members of Council elected at the Annual General Meeting held, under the presidency of Dr. R. A. JAMIESON, on the 28th May 1889, were as follows:—

P. J. HUGHES, M.A.,	*President.*
W. R. CARLES, Esq.,	*Vice-Presidents.*
P. G. VON MÖLLENDORFF, Esq.,	*Vice-Presidents.*
WILLIAM BRIGHT, Esq.,	*Hon. Secretary.*
Rev. ERNST FABER, DR. THEOL.,	*Hon. Librarian.*
CARL BOCK, Esq.,	*Hon. Curator of Museum.*
R. M. CAMPBELL, Esq.,	*Hon. Treasurer*
JOSEPH EDKINS, D.D.,	*Councillors.*
W. S. EMENS, Esq.,	*Councillors.*
J. H. FOCKE, DR. JUR.,	*Councillors.*
R. A. JAMIESON, M.A.,	*Councillors.*
Ven. Archdeacon MOULE, B.D.,	*Councillors.*

Of these, Messrs. W. R. CARLES and R. M. CAMPBELL, Dr. J. H. FOCKE, and the Ven. Archdeacon MOULE resigned towards the end of their tenure of office, the first-named owing to his transfer to another port, and the others owing to their departure for Europe.

2. *Members.*—The number of members on the roll at the end of the period now reported on comprised 8 Honorary, 24 Corresponding, and 218 Ordinary Members (including in the last-mentioned category 7 Life Members). The total number of members has decreased somewhat, owing to a recent decision of the Council regarding the erasure from the list of members of the names of those whose subscriptions were much in arrear: the decrease, however, is to a certain extent more apparent than real, as many persons who on leaving China wished to resign their membership neglected to inform the Society of their intention. It is with much regret that the Council have to report the decease during 1889 of two prominent and learned Orientalists, Prof. W. Schott and Colonel Henry Yule, C.B., both of whom were Honorary Members of the Society.

3. *Meetings.*—At the meetings held since the date of the last Council's Report papers on the following subjects were read:—

"Government by Women in Eastern Asia," by D. J. Macgowan, Esq., M.D.

"Prehistoric China revealed by the Chinese Written Characters," by Dr. Ernst Faber.

"Chinese Architecture," by Dr. J. Edkins.

The reading of these papers was followed by interesting discussions, notes of which will be found in the minutes of the meetings. In addition, the following papers have been accepted, and will be read at the Annual General Meeting:—

"Notes on the Nestorians in China," by E. H. Parker, Esq.

"The 'Tent Theory' of Chinese Architecture," by S. Ritter von Fries.

4. *Journal.*—Such of the papers mentioned above as have been accepted for publication will appear in the current volume, as also a valuable "Essay on Manchu Literature," by Mr. P. G. von Möllendorff, and an abstract, prepared by Mr. H. B. Morse, of the replies to the Society's Circular on the "Weights, Measures, and Currency of China." Incomplete as the information contained in this abstract may be, it has been thought well to publish it, and at the same time to solicit further particulars from those in a position to furnish them, so as to allow of the information being amplified at an early date.

In the current volume will also be found the correspondence between the President of the Society and the Doyen of the Diplomatic Body at Peking concerning the preservation of the Nestorian Tablet and other ancient monuments at Si-an-fu; and the Council would here beg to tender their thanks to the members of the Diplomatic Corps for the interest they have evinced in the subject, and to the Chinese High Authorities for their ready willingness to undertake the necessary measures for the protection of these historical treasures.

5. *Officers' Reports.*—Appended are the Treasurer's, Curator's and Librarian's Reports. From the Treasurer's Report it will be seen that the Society's financial position is exceptionally satisfactory. The balance standing to credit in the Society's Account is Tls. 532.81, being an increase over that of 1888 of Tls. 379.23; while the Museum Account shows a credit balance of Tls. 120.64. An increase has to be noted in the sale of the Society's Journals, thus affording satisfactory evidence of the growing appreciation in which the early as well as the more recent publications of the Society are held both in China and abroad. The Treasurer reports that repeated applications to many members have failed to secure the payment of their annual subscriptions. Some of the $615 stated in his Report as outstanding under this head has since been paid in, but a considerable sum still remains to be collected. Judging that members who have not responded to the Treasurer's applications do not desire to have their names borne on the Society's roll of members, the Council, in January last, decided to remove from the list the names of those who have failed to pay their subscriptions for the past three years, and henceforth members whose subscriptions are one year in arrear will receive no further publications of the Society, while, as a reminder, the names of such members as have not been heard from for two years will in the published list be printed in italics.

The Curator's Report gives a list of the specimens presented during the year. While thanking those who in their up-country trips, in whatever province they may be, think of the needs of the Museum, the Council cannot but regret that the collection is still below the standard, as regards variety, that they and all students of

natural history desire to see it reach. The Council have to thank M. Janet for his valuable services in arranging and classifying the collection of butterflies in the Museum.

The Librarian reports favourably of the work in connexion with the Library, and the thanks of the Council are due to Dr. E. Faber for his untiring zeal and devotion to its interests. Much solid work has been done, and a great advance has been made towards arranging in convenient order, binding, numbering, and cataloguing the works in the Library, and in utilising to the utmost extent the limited accommodation the room affords.

WM. BRIGHT,
Hon. Secretary.

30th April 1890.

Appendix I.—Hon. Treasurer's Report.

The balance at credit of the Society on 31st December 1888 was Tls. 153.58; the balance at credit on 31st December 1889 was Tls. 532.81. As may be seen from the accounts, the increase is owing to a large number of subscriptions that were in arrear having been collected during the past twelve months. It is greatly to be regretted that subscriptions, part due, are still outstanding to the extent of $615, viz.:—

For the year	1883—	$ 5
,, ,,	1884—	$ 5
,, ,,	1885—	$ 5
,, ,,	1886—	$ 15
,, ,,	1887—	$ 55
,, ,,	1888—	$255
,, ,,	1889—	$275
		$615

All members whose subscriptions are in arrear have been written to and notified of the fact. No doubt some of the letters have not reached their destination, but in many cases this cannot be supposed to be the case. There is a considerable increase in the amount received by sale of the Society's publications, over the amount shown in last year's accounts. Some of the receipts shown in this year's accounts, however, should have been included in the 1888 accounts, but, as stated in the Treasurer's report last year, as the amount was not considerable it was allowed to stand over.

Museum.—The usual grants have been received from the English and French Municipal Councils. The balance in hand on 31st December 1889 was only Tls. 120.64, against Tls. 178.41 at the end of the previous year; against which, however, it may be noted that the interest due on the loan from the Recreation Fund (Tls. 75) was not paid in 1888, whereas this year has borne the charge for that as well as the current year.

R. M. CAMPBELL,
Hon. Treasurer.

Shanghai, 1st January 1890.

THE HON. TREASURER IN ACCOUNT WITH THE SHANGHAI MUSEUM FOR THE YEAR ENDED 31ST DECEMBER 1889.

INCOME.	*Tls.*	*cts.*	EXPENDITURE.	*Tls.*	*cts.*
To Balance from 1888	178	41	By Wages of Taxidermist and Coolie	324	38
„ Grant by Municipal Council	500	00	„ Municipal Council Taxes	12	67
„ „ French Municipal Council	100	00	„ Fire Insurance	10	63
„ Interest on Bank Account	3	26	„ Repairs to premises	13	35
			„ Rent of Rooms paid to Shanghai Library ...	150	00
			„ Two years' interest on Loan from Recreation Fund	150	00
			„ Balance at credit	120	64
Tls. ...	781	67	Tls. ...	781	67

E. & O. E.

SHANGHAI, 1890.

Compared with vouchers and found correct,

THOMAS BROWN,
A. L. ROBERTSON.

R. M. CAMPBELL,
Hon. Treasurer.

THE HON. TREASURER IN ACCOUNT WITH THE CHINA BRANCH OF THE ROYAL ASIATIC SOCIETY FOR THE YEAR ENDED 31ST DECEMBER 1889.

INCOME.			EXPENDITURE.		
	Tls.	*cts.*		*Tls.*	*cts.*
To Balance from 1888	153	58	By Printing and binding Journals...	733	32
„ Subscriptions from Members	1,268	83	„ Postages	77	17
„ Sale of Society's Publications	145	54	„ Stationery...	11	36
„ Rent from Shanghai Library	100	00	„ Advertising	29	44
„ Interest allowed by Bank	6	52	„ Municipal and Government Land taxes ...	14	19
			„ Repairs and Furniture	55	03
			„ Fire Insurance	6	55
			„ Wages	24	95
			„ Chinese Copying and Translating	8	75
			„ Coals and Gas	5	24
			„ Return of Subscription overpaid	3	64
			„ Taxidermist	22	27
			„ Mrs. Gale, honorarium for 1888 and 1889 ...	120	00
			„ Commission to Shroff on collections	29	75
			„ Balance	532	81
Tls. ...	1,674	47	Tls. ...	1,674	47

E. & O. E.

SHANGHAI, 1890.

Compared with vouchers and found correct,

THOMAS BROWN,

A. L. ROBERTSON.

R. M. CAMPBELL,

Hon. Treasurer.

Appendix II.—Curator's Report.

I have the honour to submit herewith my annual report. During the year ended 29th March 1890 the Museum has received the following donations :—

Donations.

July 17th, 1889.—*Xylotrupes dichotomus* (wood-borer beetle), presented by Mr. E. H. Parker.

August 2nd.—Fœtus of *Nyctereutes procyonoides*, presented by Mr. W. Lay.

September 13th.—*Caprimulgus jotaka* (night jar), presented by Capt. Buchanan ; *Ardeola prasinosceles* (red-necked heron), presented by Mr. E. Hember ; small species of bat, presented by Mr. Deighton-Braysher.

November 19th.—*Platalea minor* (lesser spoonbill), rare, presented by Mr. J. Roberts ; *Clangula glaucion* (golden-eye duck), presented by Mr. J. M. Young.

November 25th.—Skull of *Babyrussa*, from Celebes, presented by Mr. Chas. McCaslin ; Specimen of Kauri Gum (New Zealand), presented by Capt. Watts ; *Lepus sinensis* (Chinese hare), presented by Mr. F. A. de St. Croix.

December 16th.—*Chettusia cinerea* (grey peewit), presented by Mr. F. A. de St. Croix ; *Rudicilla aurorea* (grey-headed redstart) presented by Mr. F. A. de St. Croix.

Cisticola cisticola (fantail warbler), presented by Mr. J. M. Young.

December 16th.—*Cocothrastes personata*, (marked hawfinch), presented by Mr. W. S. Emens.

January 2nd, 1890.—*Sciurus castanioventrio* (chestnut-bellied squirrel), presented by Mr. F. Ferris.

January 6th—*Urocissa sinensis* (Chinese blue magpie), presented by Mr. F. Ferris, *Anser erythropus* (lesser white-fronted goose),

presented by Mr. DUNCAN GLASS; *Anser* sp? presented by Mr. DUNCAN GLASS; *Janthia cyanura* (blue tail), presented by Mr. T. H. WANG; *Ardea cinerea* (common heron), presented by Mr. C. JANTZEN.

February 10th—*Merula sinensis* (Chinese blackbird), presented by Mr. C. L. CAMERA; *Canis procyoncides* (racoon dog), presented by Mr. O. G. READY; *Felis sinensis* (wild cat), presented by Mr. O. G. READY.

February 27th.—*Rallus indicus* (Indian water rail), presented by Mr. F. A. DE ST. CROIX.

Monsieur JANET, a French engineer and an authority on butterflies, has kindly undertaken, at much cost of time, to arrange the collection of butterflies in families and repair many of the broken specimens. From want of books, many of the species could not be determined; the collection, however, contains many rare examples.

Attendance of visitors during the year has been 3,040.

CARL BOCK,
Hon. Curator.

Shanghai, 29th March 1890.

Appendix III.—Librarian's Report.

The Library has given an unusual amount of work during the year, but is now getting into a more satisfactory condition. It was found necessary to hand over the sale and despatch of the Society's publications to the publishers, Kelly & Walsh, Limited, of Shanghai, thus relieving the Librarian of a deal of work. By this transfer of stock of publications from the Library, the room has gained sufficient space for a suitable arrangement of the many valuable books contained in it. Some of the old book-cases have been removed and two large new ones acquired, which fill all available space of two walls of the room. As between seven and eight thousand pamphlets, fascicules of periodicals, papers and books were lying about useless, because unbound and uncatalogued, it was found necessary to begin binding at once. This is still going on. The task is a tedious one, taking much time, as many portions of different books were mingled together. Over 400 volumes have been bound during the year by a Chinese binder, who needs every volume put in his hands in proper order, but manages nevertheless to make a mistake now and then. It was unfortunate that the well-trained coolie became ill and died during the summer. His substitute has, so far, been of little help. Mr. T'ang was engaged, on the 1st January 1890, to assist in preparing a new catalogue. Of the Society's Journal, Fascicule 3 of Vol. XXIII, for the year 1888-89, has been published and distributed during the year. A list of all the publications received by the Library since the date of last report will be found appended.

E. Faber,
Hon. Librarian.

Shanghai, 3rd April, 1890.

List of Works added to the Society's Library from 1st April 1889 to 31st March 1890.

ASIA.

CHINA.

Shanghai:

China Branch of the Royal Asiatic Society:

Journal:

Vol. xxiii complete.

Municipal Council: Report for 1889.

Imperial Maritime Customs, Statistical Department:

Customs Gazette, No. lxxxiii, July-September 1889.

,, lxxxiv, October-December 1889.

Medical Reports for the Half-year ended 30th September 1887. 34th Issue. Shanghai, 1890.

List of Chinese Lighthouses, Light-vessels, etc., for 1890. 18th Issue.

Tariff Returns, 1885. Vols. I. & II. 1889.

Catalogue of the Chinese Imperial Maritime Customs' Collection at Philadelphia, 1876.

Service List, 1889.

Bulletin Mensuel de l'Observatoire Magnétique et Météorologique de Zi-ka-wei, Tome xiv, Année 1888. Zi-ka-wei, 1889, and Nos. 173-182, 1889.

The Chinese Recorder and Missionary Journal, Vol. xx, Nos. 1-12, 1889.

Peking:

Transactions of the Peking Oriental Society, Vol. ii, Nos. 4 & 5.

Hongkong:

Observations made at the Hongkong Observatory in the year 1888. Hongkong, 1889.

JAPAN.

Tokio :

Mittheilungen der deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens :

Vol. v, 1889, and Supplement.

Rōmazi Zasshi (a Japanese Romanised Paper). Files, 1889.

Yokohama :

The Japan Weekly Mail. Files, 1889.

The Japan Herald Mail Summary. Files, 1889.

INDIA.

Bombay :

Journal of the Bombay Branch of the R. A. S.

Vol. xvii, part ii, 1889.

Calcutta:

Proceedings of the Asiatic Society of Bengal :

Nos. 1-6, 1889.

Journal of the Asiatic Society of Bengal :

New Series, Vol. lvii, part i, No. 2, 1888.

„ „ „ „ ii, Nos. 1-4, 1888.

Memoirs of the Geological Survey of India.

Palæontologia Indica. Series xiii, Vol. iv, part i, 1889.

ANNAM.

Saigon :

Bulletin de la Société des Études Indo-Chinoises de Saigon.

Année 1888, 3e fasc.

„ 1889, 1er Sem.

Excursions et Reconnaissances, xiv, 1889.

JAVA.

Batavia :

Notulen van de Bataviaasch Genootschap van Kunsten en Wetenschappen :

Vol. xxvii, fasc. 1-3, 1889.

Table of Contents of the Notulen, 1879-1888.

Tijdschrift voor de Indische Taal-, Land- en Volkenkunde. Vol. xxxiii, fasc. 1-4, 1889.

Nederlandsch-Indisch Plakaatbock, 1602-1811, Part vi. By J. A. van der Chijs, 1889.

Dagh-Register, Anno 1661. By the same.

De derde Javaan. Successie-Oorlog, 1746-1755. Door P. J. F. Loun, 1889.

AFRICA.

EGYPT.

Cairo :

Bulletin de la Société Khédiviale de Géographie, 3e Série, No. 2.

AUSTRALIA.

Brisbane (Queensland) :

Proceedings and Transactions of the Queensland Branch of the Geographical Society of Australasia : Vol. iv, 1889, and Vol. v, part i.

Melbourne :

Proceedings of the Royal Society of Victoria : New Series, Vol. i, 1889.

AMERICA.

CANADA.

Toronto :

Proceedings of the Canadian Institute : Third Series, Vols. vi, vii, 1889.

Montreal :

Geological and Natural History Survey of Canada. Micro-Palæontology, by E. O. Ulrich, Part ii.

Contributions to Canadian Palæontology. Vol. i, Part ii, 1889.

MEXICO.

Mexico:

Memorias de la Sociedad Cientifica "Antonio Alzate:"
Vol. i, Fasc. 8-12. Vol. ii, 12. Vol. iii, 1-2, 1889.

Anales del Ministerio de Fomento:
Vol. viii, Memoria—Atlas, 1887.

Resumen de 11 Años de Observ. Meteorologicos, 1889.

Anuario del Observatorio Astrónómico Nacional, 1889.

Puebla:

Boletin de Estadistica del Estado de Puebla:
Tomo iii, 1889.

ARGENTINE REPUBLIC.

Buenos Ayres:

Boletin del Instituto Geográfico:
Vol. x, 6-9, 1889.

UNITED STATES.

Boston, Mass.:

Proceedings of the American Oriental Society at Boston, 1889.

Cambridge, Mass.:

Bulletin of the Museum of Comparative Zoology at Harvard College:
Vols. xvi, 4, 5, 6, xvii, 3, 4, 5, 6, xviii complete.

Annual Report of the Curator of the Museum of Comparative Zoology at Harvard College, for 1888-1889.

New York:

Bulletin of the American Geographical Society:
Vol. xxi, Nos. 1-4.

The Coöperative Index to Periodicals.
Vol. v, Nos. 2-4, 1889.

Journal of Comparative Medicine and Surgery:
Vol. x, Nos. 1, 3, 4.

Philadelphia, Penn.:

Transactions of the Wagner Free Institute of Science:
Vol. ii, Dec. 1889.

Proceedings of the American Philosophical Society:
Vol. xxvi, No. 129, 1889.

Salem, Mass.:

Bulletin of the Essex Institute at Salem:
Vol. xx, 1-12, 1888.
,, xxi, No. 1-6, 1889.

San Francisco, Cal.:

Proceedings of the California Academy of Sciences:
Vol. i, Parts 1 and 2.

Trenton, N.J.:

Journal of the Trenton Natural History Society:
Vol. ii, No. 11, 1889.

Washington, D.C.:

Annual Report of the Board of Regents of the Smithsonian Institution, June 1886, Part 1, 1889.

Bulletin of the United States Geological Survey:
Nos. 9-12, 1889.

U. S. Geological Survey: Mineral Resources of the United States, 1887. Washington, 1888.

Report of the Superintendent of the U. S. Coast and Geodetic Survey, showing the progress of the work during the fiscal year ending with June 1887:
Part 1, Text. Washington, 1889.

EUROPE.

AUSTRIA-HUNGARY.

Vienna:

Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften:
Vols. cxvi, cxvii, cxviii.

Mittheilungen der K. K. Geographischen Gesellschaft:
Vol. xxxi, 1888.

Jahrbuch der K. K. Geologischen Reichsanstalt :
Vol. xxxviii, Fasc. 4, 1889.
„ xxxix, „ 1-2, 1889.
Verhandlungen der K. K. Geologischen Reichsanstalt :
Nos. 1-17, 1889.
Verhandlungen der K. K. Zoologisch-Botanischen Gesellschaft:
Vol. xxxix, Fasc. 1-2, 1889.
Oesterreichische Monatsschrift für den Orient :
Vol. xv, 1-12, 1889.
Annalen des K. K. Naturhistorischen Hofmuseums :
Vol. iv, Nos. 2-4, 1889.
Mittheilungen der Anthropologischen Gesellschaft :
Vol. xix, 1-4, 1889.

Budapest :

Bulletin de la Société Hongroise de Géographie :
Tome xvii, 1-6, 9, 10.

Trieste :

Bollettino della Società Adriatica di Scienze Naturali :
Vol. xi, 1889.

BELGIUM.

Brussels :

Bulletin de la Société Royale Belge de Géographie :
13e Année, Fasc. 1-6, 1889.

FRANCE.

Havre :

Bulletin de la Société de Géographie Commerciale :
1889, 5 fasc.

Paris :

Compte-Rendu des Séances de la Société de Géographie :
Nos. 1-17, 1889, except Nos. 8 & 9.
Société d'Ethnographie : Journal Mensuel, 2e Série, Nos. 26-36.
Bulletin de la Société de Géographie :
7me Série, Tome x, 1-3, 1889.
Bulletin de la Société de Géographie Commerciale :
Tome xi, 2-4.

Tours :

Revue de la Société de Géographie de Tours, 6me Année, Nos. 1-9 (except No. 4), 1889.

GERMANY.

Berlin :

Sitzungsberichte der Kgl. Preussischen Akademie der Wissenschaften zu Berlin : 1889. No. 1, xxxviii.

Phil. und Hist. Abhandlungen der Kgl. Ak. der Wissenschaften zu Berlin, 1889.

Verhandlungen der Gesellschaft für Erdkunde zu Berlin : Vol. xvi, Fasc. 1-10 (except 3), 1889.

Zeitschrift der Gesellschaft für Erdkunde zu Berlin : Vol. xxiv, 1-5.

Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte : 1889, Heft 1-7.

Orientalische Bibliographie : Vol. ii, 4, 5, 1889, Vol. iii, 3, 4, 1889.

Bremen :

Deutsche Geographische Blätter : Vol. xii, 1-4, 1889.

Frankfurt a/ Oder :

Monatliche Mittheilungen aus dem Gesammtgebiete der Naturwissenschaften : Vol. vi, Nos. 1-6, 12, Vol. vii, 2-5.

Societatum Litterae, von Dr. Ernst Huth, Vol. iii, 2-6.

Gotha :

Dr. A. Petermann's Mittheilungen : Vol. 35, 1-12, 1889,

Ergänzungshefte : Nos. 95-96.

Halle a/ Saale :

Mittheilungen des Vereins für Erdkunde, 1889.

Hamburg :

Mittheilungen der Geographischen Gesellschaft in Hamburg, für 1888, Fasc. ii, iii. Hamburg, 1889.

Jena :

Mittheilungen der Geographischen Gesellschaft zu Jena : Vol. vii, Fasc. 3, 4, 1889.

Koenigsberg i/ Pr. :

Schriften der Physikalisch-oekonomischen Gesellschaft : Vol. xxix.

Leipzig :

Zeitschrift der Deutschen Morgenländischen Gesellschaft : Vol. xliii, 1-4, 1889.

Mittheilungen des Vereins für Erdkunde, 1889.

Metz :

Jahresbericht des Vereins für Erdkunde zu Metz : Vol. xi.

Munich :

Sitzungsberichte der Mathematisch-physikalischen Classe der K. Akademie der Wissenschaften : 1888, 1889.

Sitzungsberichte der Philosophisch-philologischen und Historischen Classe : 1888, 1889.

Stuttgart :

Handelsgeographie, vii, viii.

Jahresbericht, 1888, 1889.

GREAT BRITAIN AND IRELAND.

Dublin :

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Edinburgh :

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ITALY.

Florence :

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Naples :

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NETHERLANDS.

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Moscow :

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Vols. xxiv, xxv, 1889.

SWEDEN.

Stockholm :

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Miscellaneous Works.

1.—The North-Western Provinces and Oudh Provincial Museum, Lucknow : Minutes of the Managing Committee, 1883-1888. Allahabad, 1889.

2.—Les Débuts de la Compagnie Royale de Suède. Par H. Cordier. Paris, 1889.

3.—The Modern Vernacular Literature of Hindustan. By G. A. Grierson. Calcutta, 1889.

4.—Die Schu-king-Finsterniss. Von Dr. G. Schlegel und Dr. F. Kühnert. Amsterdam.

5.—Jubiläumsschrift. Von Paul E. Richter. Dresden, 1889.

6.—Estudio de la Filosofia y Riqueza de la Lengua Mexicana. Guadalajara, 1889.

7.—Liste des Ouvrages offerts à l'Auguste Protecteur du VIII^{e} Congrès à Stockholm.

8.—An Account of the Congo Independent State. By H. Phillips, jr. 1889.

9.—A Grammar of the Kwagintl Language. By the Rev. A. T. Hall. Montreal, 1889.

10.—China's Place in Philology. By the Rev. J. Edkins, D.D. London, 1871.

11.—Rev. Dr. E. Faber's Works: Digest of Confucius, Mencius, Licius, Micius, Introduction to the Science of Chinese Religion, Famous Men of China, The Status of Women in China.

12.—Discours d'Ouverture à Stockholm. Par le Comte C. de Landberg.

OBITUARY.

Rev. ALEXANDER WILLIAMSON, Ll.D.

The death of Dr. Alexander Williamson, on August 28th of this year, at Chefoo, deprives our Society of one of its oldest members and of a contributor to our Journal of many years' standing.

His *Journeys in North China, Manchuria and Mongolia*, in two volumes, contain many valuable observations on the regions he visited as a missionary traveller. He was among the first to make known the mineral treasures of North China, taking his place in this respect with Pumpelly and von Richthoven. The latter in his large work on China fully recognizes Dr. Williamson's contributions to our knowledge. It was this book which led to his receiving the honorary degree of Ll.D. from the University of Glasgow, where he had received his collegiate education. His little book *The World: Whence cometh it?* by "Tu Quoque" shews much familiarity with modern science. He took a very decided pleasure in reading books of science by contemporary authors, and the knowledge thus acquired has enriched his works in Chinese. In this language he published a work on Botany, a Natural Theology out of McCosh, a Life of Christ and a History of Religions. He also wrote much on political science, sociology, education and kindred subjects. Perhaps McCosh's *Method of the Divine Government* was the chief influence on him as a translator, and it was this which led to that happy combination of modern science with religious teaching which characterizes his works in Chinese. He secured writers having facility in style, and as a translator he thought out the ideas himself, mastered them, clothed them in his own language,

turned them into Chinese colloquial and then left the control of the style in the Chinese writer's hands. He wrote much in monthly periodicals in Chinese and was an occasional contributor to the *Shên-pao* daily newspaper. In the literature of the Protestant Missions his works take a high place. He had a faculty for exposition and a keen avidity for acquiring knowledge which stood him in good stead in making books. By their tincture of philosophy and science an elevated tone was imparted to them. Several of his books have been reprinted in Japan. All are in a high degree readable and valuable.

Illness led to Dr. WILLIAMSON's retirement from China in 1858 and prevented his return for five years. He gave in all thirty years to China, and not only worked usefully himself as a translator, but was very active and successful in founding societies and obtaining funds to print works translated by others. This is shewn in the history of the School and Text Book Series and of the Society for the Diffusion of Christian and General Knowledge among the Chinese.

J. EDKINS.

LIST OF OFFICERS OF THE SOCIETY FOR 1890-91.

President : P. J. Hughes, M.A.

Vice-Presidents : P. G. von Möllendorff.
Rev. Joseph Edkins, D.D.

Hon. Secretary : Wm. Bright.

Hon. Treasurer : Thomas Brown.

Hon. Librarian : Rev. Ernst Faber, Dr. Theol.

Hon. Curator of Museum : Carl Bock.

Councillors : J. Ritter von Haas.
R. A. Jamieson, M.A.
D. C. Jansen.
G. M. H. Playfair.

LIST OF MEMBERS.

(Corrected to 20th October 1890.)

Members are particularly requested to notify the Hon. Secretary of any change of address or other necessary correction to be made in this List.

† Indicates a Member who has contributed to the Society's Journal.
§ „ Life Member of the Society.

Name.	Address.	Year of Election

Honorary Protector.

His Majesty Leopold II, King of the Belgians.

Honorary Members.

Alcock, Sir Rutherford, K.C.B., D.C.L.	Athenæum Club, Pall Mall, London, S.W.	1864
Hart, Sir Robert, G.C.M.G., LL.D.	Inspectorate-General of Customs, Peking.	1864
Legge, Prof. James, D.D. ...	University of Oxford	1864
Richthofen, Freiherr F. von ...	Berlin	1880
Wade, Sir Thomas F., G.C.B., M.A.	5, Salisbury Villas, Cambridge ...	1864
Zottoli, l'ère Angelo	Jesuit Mission, Sicawei, Shanghai ...	1886

Name.	Address.	Year of Election

Corresponding Members.

†Bastian, Dr. Adolph	Ethnological Museum, Berlin ...	1865
†Bretschneider, E., M.D. ...	Moïka, 64, St. Petersburg	1880
Cordier, Henri	3, Place Vintimille, Paris	1886
†Edkins, Rev. Joseph, D.D. ...	Custom House, Shanghai	1864
†Fritsche, H., PH.D.	C/o Russian Legation, Peking ...	1877
†Fryer, John	Kiangnan Arsenal, Shanghai ...	1868
†Gabelentz, Prof. Georg von der	Berlin	1884
†Giles, Herbert A.	British Consulate, Ningpo	1880
Happer, Rev. A. P., D.D. ...	Canton	1864
Hepburn, J. C., LL.D. ...	245, Bluff, Yokohama, Japan ...	1864
†John, Rev. Griffith, D.D. ...	Hankow	1864
Keischke, Ito, M.D.	Tokio, Japan	1875
Kreitner, G. Ritter von ...	Yokohama, Japan	1880
†Lindau, Rudolph, PH.D. ...	C/o Auswärtiges Amt, Berlin ...	1864
Lockhart, Wm., F.R.C.S. ...	67, Granville Park, Blackheath, London, S.E.	1864
†Macgowan, D. J., M.D. ...	Custom House, Wênchow	1864
†Martin, Rev. W. A. P., D.D. ...	C/o T'ung-wên Kuan, Peking ...	1864
†McCartee, D. B., M.D. ...	C/o Dr. Ellinwood, 23, Centre Street, New York, U.S.A.	1865
†Moule, Right Rev. Bishop, D.D.	Hangchow	1864
†Muirhead, Rev. W.	London Mission, Shanghai ...	1864
Rondot, Natalis	C/o Chambre de Commerce, Lyons.	1864
Schereschewsky, Right Rev. Bishop, D.D.	23, Bible House, New York, U.S.A..	1864
Széchényi, Count Béla ...	Zinkendorff, Hungary	1880

Name.	Address.	Year of Election
Ordinary Members.		
Aalst, Jules A. van	C/o Custom House, Shanghai ...	1888
§Abbott, R. J.	Custom House, Hankow	1888
Acheson, James	C/o Custom House, Canton	1880
Adams, Rev. J. S.	Am. Bap. Miss. Union, Kin-hwa-fu, *viâ* Ningpo	1889
Addis, Charles Stuart	Hongkong and Shanghai Bank, Shanghai	1885
Adler, Max	Messrs. Reiss & Co., Shanghai ...	1885
†Allen, H. J.	54, Cambridge Road, Brighton, Sussex	1872
Andersen, N. P.	C/o Custom House, Shanghai ...	1883
†Anderson, G. C.	C/o Messrs. Jardine, Matheson & Co., Hongkong	1880
Anding, W.	C/o Mr. W. Rosenthal, Unterstrasse, 85, Eisenach, Germany	1887
Arnoux, Comte G. d'	Custom House, Ichang	1883
§Ball, J. Dyer	Supreme Court, Hongkong ...	1883
Baux, G.	20, Place Denfert-Rochereau, Paris .	1885
†Becher, H. M.	C/o Kelly and Walsh, Limited, Singapore	1885
Beck, H.	23, Szechuen Road, Shanghai ...	1885
Beebe, R. C., M.D.	Nanking	1889
Bethge, C.	Casa Valentino Molo, Bellinzona, Switzerland	1887
Bock, Carl	Consulate-General for Sweden and Norway, Shanghai	1888
Bottu, Prof. A.	Kiangnan Arsenal, Shanghai ...	1889
Bourne, F. S. A.	Southboro', Tunbridge Wells, Kent .	1885
Bradlee, Rev. Caleb D., D.D....	57, West Brookline Street, Boston, Mass., U.S.A.	1890
Brand, W.	C/o Robt. Brand & Co., 7, Union St., Old Broad St., London, E.C.	1887
§Bredon, M. Boyd, B.A. ...	C/o Custom House, Shanghai ...	1883
Bredon, Robt. E., B.A. ...	Custom House, Shanghai	1885
Bright, Wm.	Inspectorate-General of Customs, Shanghai	1885
Bristow, H. B.	British Consulate, Chefoo	1877
Brosche, H.	C/o Custom House, Shanghai ...	1881
§Brown, J. McLeavy, LL.D. ...	Custom House, Kowloon	1865
Brown, Thos.	Kelly & Walsh, Limited, Shanghai...	1885
Brown, W. P.	Inspectorate-General of Customs, Shanghai	1890
Buchanan, J.	Messrs. J. P. Bisset & Co., Shanghai.	1887
Burrows, T. D....	C/o Custom House, Canton	1886
†Bushell, S. W., M.D.	British Legation, Peking	1868
Butler, Count A. von	Tamsui, Formosa	1886
Butler, P. E. O'B.	C/o British Consulate-General, Shanghai	1886

Name.	Address.	Year of Election
Calder, J.	Port Arthur, North China	1890
Campbell, C. W.	British Consulate-General, Seoul, Corea	1890
Campbell, R. M.	C/o Agra Bank, Limited, Shanghai.	1889
†Carles, W. R.	British Consulate, Chinkiang ...	1887
Carrall, James W.	Custom House, Chefoo	1885
Chalmers, James L.	C/o Custom House, Canton ...	1885
§Chavannes, Ed.	French Legation, Peking	1889
Cocker, T.	Custom House, Canton	1885
Cordes, Aug. C.	Messrs. A. Cordes & Co., Tientsin ...	1877
Coughtrie, J. B.	45, Queen's Road, Hongkong ...	1879
Creagh, E. Fitzgerald ...	C/o Custom House, Yuensan, Corea.	1886
Danforth, A. W.	Cotton Mill Co., Shanghai	1887
De Groot, Dr. J. J. M. ...	C/o Netherlands Consulate, Amoy...	1887
Deighton-Braysher, C. ...	Custom House, Shanghai	1870
Dennys, H. L.	Secretary's Office, City Hall, Hongkong	1877
Dmitrevsky, P. A.	Russian Consulate, Hankow ...	1882
Dodd, John	C/o Messrs. Dodd & Co., Tamsui ...	1872
Dowdall, Chas.	21, Foochow Road, Shanghai ...	1881
§†Drew, E. B.	Inspectorate-General of Customs, Peking	1882
Dülberg, F. W. E.	Inspectorate-General of Customs, Shanghai	1890
Duncan, Chesney	C/o *Hongkong Telegraph* Office, Hongkong	1889
Ebbs, W.	C/o Messrs. R. Telge & Co., Shanghai	1886
Elwin, Rev. Arthur	Church Missionary Society, Hangchow	1890
†Faber, Rev. Ernst, DR. THEOL.	Saunders' Compound, Shanghai ...	1886
Faragó, Edm.	Poste Restante, Budapest, Hungary.	1877
Fergusson, T. T.	C/o Messrs. Fergusson & Co., Chefoo	1872
Fisher, H. J.	C/o Messrs. W. M. Deacon & Co., 80, Bishopsgate Street Within, London	1877
Flothow, Carl	Messrs. Siemssen & Co., Shanghai...	1886
Flothow, Hugo	Messrs. W. Meyerink & Co., Shanghai	1886
Francis, R.	10, Peking Road, Shanghai	1888
Franke, Otto, PH.D.	German Consulate-General, Shanghai	1890
Fraser, M. F. A.	British Consulate-General, Shanghai	1888
Frater, Alex.	British Consulate, Swatow	1877
†Fries, S. Ritter von	Custom House, Foochow	1885
Fulford, H. E.	C/o British Consulate-General, Shanghai	1885
Gabriel, Hermann, DR. JUR. .	C/o German Consulate, Amoy ...	1884
†Gardner, C. T.	British Consulate, Hankow ...	1877
Gatti, Carlo	C/o Messrs. Jardine, Matheson & Co., Shanghai	1886
Goebel, Max.	Belgian Consulate-General, Shanghai	1890

Name.	Address.	Year of Election
Gowing, Lionel F.	6, Upper Park Road, Haverstock Hill, London, N.W.	1885
Grant, P. V.	Messrs. Boyd & Co., Shanghai ...	1871
Gratton, F. M., A.R.I.B.A. ...	The Bund, Shanghai	1889
Gulick, Rev. L. H., M.D. ...	C/o 3, Soochow Road, Shanghai ...	1885
†Haas, J. Ritter von	Austro-Hungarian Consulate, S'hai .	1869
Hall, J. C., M.A.	C/o H. P. Wilkinson, Esq., 3, Brick Court, Temple, London, E.C.	1888
†Hallifax, T. E.	Tokio, Japan	1889
Hanbury, T.	C/o Messrs. Iveson & Co., Shanghai.	1868
†Happer, Andrew P., Jr. ...	Custom House, Mêngtzŭ, Yünnan, *viâ* Haiphong, Tungking	1885
Harding, J. R.	C/o Custom House, Amoy	1885
Hart, J. H.	C/o Custom House, Shanghai ...	1885
Hart, Rev. V. C., M.A. ...	314, Parkdal, Ontario, U.S.A. ...	1887
Henderson, D. M., M.I.C.E. ...	Custom House, Shanghai	1885
Henderson E., M.D.	Szechuen Road, Shanghai	1876
†Henry, A., M.A.	C/o Inspectorate-General of Customs, Storey's Gate, London	1881
Hey, E.	8, Foochow Road, Shanghai ...	1886
Hippisley, A. E.	Custom House, Lappa	1876
†Hirth, F., PH.D.	Custom House, Tamsui	1877
Hjoubery, E.	C/o Messrs. Mustard & Co., Shanghai	1880
†Hobson, H. E.	Custom House, Chungking	1868
Hodges, Rev. H. C., M.A. ...	The Deanery, Shanghai	1887
Hoetink, B.	Swatow	1882
†Hosie, Alex., M.A.	British Consulate, Wênchow ...	1877
How, A. J.	1, Hongkong Road, Shanghai ...	1876
†Hughes, P. J., M.A.	British Consulate-General, Shanghai	1868
Hughes, T. F.	Custom House, Amoy	1885
†Imbault-Huart, C.	C/o French Consulate, Canton ...	1880
Ivy, R. S., D.D.S.	1, Kiukiang Road, Shanghai ...	1889
Jack, J. B.	Custom House, Shanghai	1890
†Jamieson, G.	C/o H.B.M.'s Supreme Court, Shanghai	1868
Jamieson, J. W.	British Consulate, Canton	1888
†Jamieson, R. A., M.A. ...	40, Szechuen Road, Shanghai ...	1864
Jansen, D. C.	Astor House, Shanghai	1877
Kenmure, Alexander	Canton	1887
Keswick, J. J.	C/o Messrs. Jardine, Matheson & Co., Shanghai	1885
King, Paul H.	C/o Custom House, Shanghai ...	1886
†Kingsmill, Thos. W.	28, Kiangse Road, Shanghai ..	1864
Kleinwächter, F.	Netsche bei Bohrau, Kreis Oels, Schlesien, Germany	1868
Kliene, R.	United States Consulate, Ningpo ...	1890
†Kopsch, H.	Custom House, Chinkiang	1877

Name.	Address.	Year of Election
Lemke, F.	Messrs. Meyer, Lemke & Co., S'hai.	1890
Lenz, Ph., PH.D.	German Consulate-General, Shanghai	1885
Lépissier, E.	Custom House, Shanghai	1885
Lieder, Ph.	Messrs. Mandl & Co., Shanghai ...	1886
†Little, Archibald J.	C/o R. W. Little, Esq., *North China Herald* Office	1868
Little, L. S., B.A.	Kiukiang Road, Shanghai	1879
Little, Robt. W.	*North China Herald* Office ...	1886
Lockhart, J. H. Stewart ...	Hongkong	1885
Macgregor, John	Messrs. Jardine, Matheson & Co., Shanghai	1888
Macintyre, Rev. John ...	Newchwang	1880
Mackey, Jas.	38, Yama, Kobe, Japan	1886
Maclellan, J. W.	C/o *North-China Herald*, Shanghai.	1888
Major, E.	14, Hankow Road, Shanghai ...	1887
Martinoff, G.	Tientsin	1889
McDougal, H., M.B.	Amoy	1885
McIntosh, G.	C/o Amer. Presb. Mission Press, S'hai.	1889
†Medhurst, Rev. C. Spurgeon...	C/o Messrs. Sietas & Co., Chefoo ...	1888
Mencarini, J.	Custom House, Shanghai	1887
Merz, C., PH.D.	C/o German Consulate, Takow, Formosa	1883
Mesny, Gen. W.	Shanghai	1890
Messing, O.	Deutsch-Asiatische Bank, Shanghai.	1890
Metzger, E.	Kriegsbergstrasse, 29, Stuttgart, Germany	1887
Milles, W. J., F.R.C.S. ...	Szechuen Road, Shanghai	1885
Mills, Lieut. D A., R E. ...	Bude, Cornwall	1888
Mittag, M.	Messrs. Gipperich & Burchardi, S'hai.	1887
†Möllendorff, O. F. von, PH.D.	C/o Mr. P. G. von Möllendorff, Inspectorate-General of Customs, Shanghai	1877
†Möllendorff, P. G. von ...	Inspectorate-General of Customs, Shanghai	1877
†Morrison, G. J., M.I.C.E. ...	Messrs. Morrison & Gratton, S'hai.	1880
Morse, H. B.	C/o J. W. Welsford, Esq., West Hill, Harrow, Middlesex, England	1888
Mörsel, F. H. ...	Custom House, Jenchuan	1889
Mortimore, R. H. ...	British Legation, Peking	1885
Moule, Ven. Archdeacon A. E., B.D.	C/o Church Missionary Society, Shanghai	1888
Mowat, R. A.	H.B.M.'s Supreme Court, Shanghai .	1838
Müller-Beeck, Geo.	C/o German Consulate - General, Yokohama, Japan	1886
Murray, D. S.	British and Foreign Bible Society, Shanghai	1887
†Nocentini, L.	Via del Proconsolo, 21; Firenze, Italy	1884
Novion, A.	C/o Mons. Quentin, 7, Rue J. J. Bell, Bordeaux, France	1885
Nully, R. de	Custom House, Shanghai	1884

Name.	Address.	Year of Election
Ohlmer, E.	Custom House, Foochow	1885
Ottomeier, P. A. W.	Messrs. Hopkins, Dunn & Co., S'hai	1886
Oxenham, E. L.	C/o Messrs. Maynard, Harris & Co., 126 Leadenhall Street, London, E.C.	1887
Palamountain, B.	Inspectorate-General of Customs, Shanghai	1886
†Parker, E. H.	British Consulate, Pagoda Anchorage, Foochow	1877
Parkinson, F. B., A.R.S.M. ...	Hankow	1890
Patersson, J. W.	Custom House, Canton	1883
Perkins, H. M., D.D.S. ...	1, Kiukiang Road, Shanghai ...	1885
Peterson, Denton E., D.D.S. ...	The Club, Shanghai	1887
Pichon, L., M.D.	Rue Guénégaud, 17, Paris ...	1876
Piry, Théophile	Inspectorate-Gen. of Customs, Peking	1885
†Phillips, Geo.	British Consulate, Foochow... ...	1888
Plancy, V. Collin de	Seoul, Corea	1877
†Playfair, G. M. H.	British Consulate-General, Shanghai	1885
Prentice, John	Messrs. Boyd & Co., Shanghai ...	1885
Price, G. U.	Messrs. Tait & Co., Amoy	1886
Pym, E. T.	Custom House, Wuhu	1885
Rathsam, Th.	German Consulate, Canton ...	1887
Rayner, Charles	C/o Messrs. Carlowitz & Co., Tientsin	1886
Rees, Claude A.	Messrs. Gilmour & Co., Shanghai ...	1889
Reinsdorff, F.	German Consulate, Seoul, Corea ...	1883
Rémusat, J. L....	Custom House, Canton	1885
Rennie, Sir Richard T. ..	H.B.M.'s Supreme Court, Shanghai.	1885
†Rhein, J.	Netherlands Consulate, Amoy ...	1877
Rinkel, Ferd.	Deutsch-Asiatische Bank, Shanghai	1890
Riva, Achille	C/o Messrs Russell & Co., Shanghai.	1885
Robinson, Prof. Henry H., B.A.	Wuchang	1890
Rocher, Emile	French Consulate, Mêngtzŭ, Yünnan	1877
§Rocher, Louis	Custom House, Ningpo	1884
Rockhill, W. W.	No. 1620, 19th St., Washington, D.C.	1885
Rosthorn, A. Edler von ...	C/o Custom House, Ichang	1888
Ruhstrat, Ernst	C/o Dr. C. Zedelius, Kiangse Road, Shanghai	1886
Russell, Sir Jas., C.M.G. ...	Hongkong	1870
Sampson, Theo.	12, Madeira Road, Streatham, London, S.W.	1868
Samson, J.	C/o Messrs. Reid, Evans & Co., Shanghai	1877
Samwer, Ernst...	Cöln a/R, Germany	1886
Schiötz, H.	Great Northern Telegraph Co., S'hai	1890
Schjöth, Fr.	Custom House, Pakhoi	1885
Schmacker, B.	Messrs. Carlowitz & Co., Shanghai...	1887
Schmidt, K.	Messrs. Carlowitz & Co., Shanghai...	1888
Schulze, F. W.	Jenchuan, Corea	1879
Seckendorff, Baron Edm. von.	German Consulate, Tientsin ...	1880

Name.	Address.	Year of Election
Snethlage, H.	Shanghai	1885
Southey, T. S.	Custom House, Amoy	1880
Spinney, W. F.	Custom House, Wuhu	1885
Startseff, A. D.	Messrs. Tokmakoff, Molotkoff & Co., Tientsin	1889
Streich, K. I.	German Consulate, Swatow ...	1880
Stripling, A. B.	C/o British Consulate, Jenchuan, Corea	1877
Styan, F. W.	C/o Messrs. Robt. Anderson & Co., Shanghai	1884
Sutherland, H.	C/o Messrs. Fairhurst, Sutherland & Co., Foochow	1876
Syburg, F. von	German Consulate, Bombay ...	1886
Tanner, Paul von	C/o Custom House, Canton... ...	1881
Tata, D. B.	Messrs. D. Tata & Co., Hongkong ...	1874
†Taylor, C. H. B., F.R.A.S. ...	Foochow Arsenal	1885
Taylor, F. E.	C/o Custom House, Kowloon ...	1885
Thwing, Prof. E. P., M.D. ...	156, St. Mark's Avenue, Brooklyn, New York, U.S.A.	1890
Underwood, G. R., M.B. ...	Kiukiang	1888
Valdez, J. M. T.	Portuguese Consulate, Shanghai ...	1888
Vissière, A.	86, Avenue de l'Est, Parc St. Maur (Seine)	1880
Voelkel, S.	Pharmacie de l'Union, Shanghai ...	1885
†Volpicelli, Z. H.	Mergellina, 98, Naples	1886
§Vouillemont, E. G.	C/o Comptoir National d'Escompte de Paris, Shanghai	1888
Wade, H. T.	Shanghai Club	1886
Wallberg, R.	Messrs. Kirchner & Böger, Shanghai	1887
Washbrook, W. A.	Custom House, Chinkiang	1881
Watters, T., M.A.	British Consulate, Newchwang ...	1865
Wilcox, R. C.	*Daily Press* Office, Hongkong ...	1877
†Williams, Rev. E. T.	Nanking	1889
Wood, A. G.	Messrs. Gibb, Livingston & Co., Shanghai	1879
Zedelius, C., M.D.	18, Kiangse Road, Shanghai ...	1885

