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JOURNAL

OF THE

NORTH-CHINA BRANCH

OF THE

ROYAL ASIATIC SOCIETY.

NEW SERIES No. V.
DECEMBER 1868.

YENCHING UNIVERSITY
燕京大學
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SHANGHAI:
A. H. DE CARVALHO, PRINTER & STATIONER,
KIANGSE ROAD, No. 37.
1869.



ROYAL ASIATIC SOCIETY CHINA
SHANGHAI
上海

REPORT

OF THE

COUNCIL

OF THE

NORTH-CHINA BRANCH

OF THE

ROYAL ASIATIC SOCIETY,

FOR THE YEAR 1868.

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REPORT

OF THE

COUNCIL OF THE NORTH-CHINA BRANCH

OF THE

Royal Asiatic Society

For the Year 1868.

THE following gentlemen were elected office-bearers at the first meeting of the year:—

G. F. SEWARD, Esq., President.
Rev. C. H. BUTCHER, C. W. GOODWIN, Esq., } Vice-Presidents.
T. W. KINGSMILL, Esq., Corresponding Secretary.
J. B. ROBERTSON, Esq., Secretary.
W. B. PRYER, Esq., Treasurer.
A. MICHIE, Esq.,
G. H. FITZ ROY, Esq.,
A. C. DULCKEN, Esq.,
G. THIN, Esq., M.D., } Members of Council.
F. C. SIBBALD, Esq., M.D.,
F. B. FORBES, Esq.,
R. J. FORREST, Esq.,

Vcte. Brenier de Montmorand was elected as Member of Council in addition to the above, but declined to serve; and as there were more than the requisite number according to the rules already on the list, it was not deemed advisable to nominate any one in his stead. During the year the Society had to deplore the unexpected death of Mr. Fitz Roy at Nagasaki, and this led the Council to invite Mr. W. H. Medhurst, who had recently removed from Hankow to Shanghai, to join their number.

A list of the present Members of the Society is appended.

The following papers have been read during the year:—

Notes of an Overland Journey from Tientsin to Chinkiang, between 24th January and 14th February,
by —— Parker, Esq.

Notes on the Yellow River,
by —— Weber, Esq.

Notes on the celebrated ancient Chinese Inscription on the Hang Mountain,
by W. H. Medhurst, Esq.

Notes on Abyssinia,
by E. Hepple Hall, Esq.

Notes on the Takosima Coal Mines and the Geology of the Neighbourhood of Nagasaki,
by T. W. Kingsmill, Esq.

Notes on Co-operative Societies in China,
by G. Eug. Simon, Esq.

Selected Passages from the Journal of Mr. T. T. Cooper's Travels in Western China.

A few Notes on Solar Spots observed at Woosung by Mr. C. D. Braysher on 15th April,
by D. J. Macgowan, Esq., M.D.

Notions of the Ancient Chinese respecting Music, a Translation from Chinese,
by Dr. Jenkins.

On the Fogs of the Yangtse and how to neutralize them,
by D. J. Macgowan, Esq., M.D.

Notes on Yü Tablet,
by Chas. Gardner, Esq.

Account of the Earthquake in Northern Formosa on the 18th December 1867,
by W. Sibbald, Esq.

Note on the Discovery of Miautsze in the Province of Chehkiang,
by D. J. Macgowan, Esq., M.D.

Notes on the Coal Fields of Northern Formosa,
by W. Sibbald, Esq.

Notices of Lok Ping Cheung, late Governor General of Szechuen,
by Rev. C. F. Preston.

A few Notes descriptive of the Principal Highways and of the Trade between Thibet, Burmah, Western China, and the Eastern Seaboard,
by T. T. Cooper, Esq.

During the year the Meetings of the Society have been held in the new Masonic Buildings.

The Council have, with the approval of the Society, had several important questions under consideration during the year, in some of which they have taken action. Amongst them may be mentioned, the expedition to explore and report on the Yellow River which was undertaken by Messrs. Elias and Hollingworth; a proposal to secure permanent quarters of its own for the Society,

for which purpose ultimately the British Government courteously offered a plot of land for building upon at a merely nominal rent; the purchase of Mr. Alex. Wylie's valuable library of works pertaining to China and the East; the publication in whole or in part of the Chinese Repository. Annexed to this Report will be found special Reports on all these subjects exhibiting what has been done by the Council regarding them.

The Council desire to recommend that Missionaries who are elected Members of the Society should be exempt from any subscription, but that in such case they will not be entitled to receive the Society's Journal without payment. In other respects it is proposed that they should participate in all the benefits of the Society, and the Council feel confident that the Members of the Society will approve of the alterations in the Rules, which will be necessary to give effect to this suggestion. In view also of the wider scope which the Society's efforts are now assuming, it is further proposed to add to the officers of the Society a Librarian and Curator of the Museum, so that our Library and Museum may have the special supervision which will be necessary.

The following books have been received:—

From Trübner & Co.

Geological Society.
List of Members 1867.
Journal February, May, August, November, December, 1867, February, May, 1868.

Royal Asiatic Society.
Transaction for 1867, Vol. III, Part I.

Royal Geographical Society.
Vol. XXXVI 1866, also Parts 1-6 proceedings 1867.

Royal Society of Edinburgh.
December 1866 to April 1867.

Royal Society.
Vols. XV and XVI, Parts 87 to 100.

Zoological Society of London.
Report 1867, proceedings for 1866 Parts II and III; for 1867, I, II, III.

Statistical Society.
Vol. XXX, Parts 1, 2, 3, 4; XXXI, Parts 1, 2.

Oriental Translation Fund of Great Britain and Ireland.
Chronique de Abon-Djafer-Mahammed-ben-Djarir-ben-Yezid Tabasi, Traduite par M. H. Zotenberg, Tome premier.

Kaiserlich-Könichlichen Geologischen Reisanstalt.
Jahrbuch 1866, Parts October, November, December.
Die Fossilen Mollusken des Tertiær-beckens von Wien 2. Vols., pp. 215 to 430.

Also received by Mail steamer addressed to "China Branch R. A. S."

ROYAL SOCIETY OF EDINBURGH
Vols. V and VI 1865-66 and 1866-67.

AMERICAN PHILOSOPHICAL SOCIETY, PHILADELPHIA.
Vol. X, Nos. 73-77 January 1865 to March 1867.

Also through Mr. Pryer the following books addressed to the "China Branch R. A. S."

Report of Superintendent, U. S. Court Survey 1863, 1864, 1865.

BOSTON SOCIETY OF NATURAL HISTORY.
Annual 1868-69 and proceedings.
Boston Journal of Natural History, Vol. I, Part III.

SMITHSONIAN INSTITUTE.
Contributions to Knowledge, Vol. XV, 1867.
Report 1866.

DEPARTMENT OF AGRICULTURE U. S. GOVERNMENT.
Report 1866.
Monthly Reports 1866 & 1867.

Account of the "Public Ledger" Building, Instructions in case of Accidents.—By Dr. Packard.

I.

Special Report of Council on the feasibility of establishing a Public Library.

The Council has had in consideration the matters referred to it at the October meeting, viz:—the building project, and the purchase of Mr. Wylie's Library.

The sense of the meeting referred to appeared to be that the opportunity to purchase the books should not be lost, but that the building project could stand over.

The Council believing that this view is just, appointed a Committee consisting of Messrs. Forbes, Thin and Butcher to report what arrangements should be made for the purchase of the Library, and whether rooms for the present accommodation of the Society could be procured in the Masonic Hall, as there seemed reason to believe.

The Committee has reported to the Council as shown in the attached papers, and the Council now reports accordingly to the Society, and asks it to accept the action taken, and to instruct the Council to complete the proposed arrangements.

Report of Committee appointed by Council.

The Committee appointed by the Council to ascertain what arrangements can be made for the purchase of Mr. Wylie's library and for obtaining temporarily suitable rooms for the Society at the Masonic Hall, report as follows:—

They are inclined to believe that the Shanghai community will respond readily to an appeal for funds to found a Public Library, the nucleus of which shall be the Wylie collection, and they append the draft of a circular which they recommend the Council to issue as soon as possible.

They further recommend that a printed catalogue of the Wylie collection be annexed to the circular, and that a Committee be appointed to solicit subscriptions in the manner indicated.

Your Committee understand that the large room on the first floor of the Masonic Hall intended originally to be used as a Library, may be leased on favourable terms, viz:—for Taels Two Hundred a year, subject however, to the proviso that in case the Shanghai Library Association shall hereafter be disposed to take rooms in the Masonic Building, our Society shall accommodate matters with them.

They recommend that these arrangements be effected.

(Signed) F. B. FORBES, G. THIN, C. H. BUTCHER, } *Committee of the Council.*

Circular issued in accordance with suggestion of Committee.

THE SHANGHAI PUBLIC LIBRARY.

The want of a public library of reference has long been felt in Shanghai, but the difficulties attendant on the collection of suitable books have so far discouraged any serious attempt to meet the requirements of the community.

These difficulties however, seem about to disappear. The approaching departure of Mr. A. Wylie from Shanghai places within our reach the valuable library which he has accumulated during his many years of scholarly research, and which comprises nearly every important work on the language, geography, history and religion of China. This collection is offered to us for an amount which competent judges consider below the cost of the volumes, if purchased separately, besides which there are many

rare books among the number which we might be otherwise unable to buy at any price.

The undersigned would strongly urge the importance of securing this collection for Shanghai, not only for its special and intrinsic value, but as the nucleus for a public library, so favorable an opportunity to create which may be long in recurring.

The amount of money needed for the purpose, though not large, is beyond the limited means of the Asiatic Society, but they confidently appeal to the public for cooperation and assistance. For their own part they offer to charge themselves with the care and management of the books and to give the public the use of their own valuable collection. This is annually increased by the publications of the various literary and scientific bodies with whom the Society exchanges journals, and it would so far supplement the Wylie library as to need only a small sum to complete the acquisition of all printed books on China.

The special aim of this scheme is the creation of a public repository for every book or paper illustrative of the study of China and the Chinese. So far, however, as funds admit, it is proposed to collect useful books regarding the neighbouring countries of ultra-gangetic Asia, and to add such scientific, philosophical and historical works as will make the library valuable to the more general reader or student. It is believed that the library, once fairly started, will never fail to obtain active support from our own community, while it may also rely to some extent on the known liberality of governments to similar undertakings.

The basis on which subscriptions are solicited is briefly as follows:—

All the money so obtained is to be applied to the purchase of books to form a public library, the property in which will be vested in Trustees under a deed specifying the general conditions of the foundation.

It is proposed to make the Council for the time being of the Asiatic Society the Trustees under the deed—the Society on their part undertaking to provide suitable rooms and a librarian.

Should the Asiatic Society lapse, or be unable or unwilling to continue the management of the Library, the trust to pass from their Council to the Consuls of Great Britain, France, Prussia, and the United States, and the Commissioner of Customs, a

majority of whom will nominate new Trustees with power to make the necessary arrangements in the interest of the Shanghai community.

The entire management of the library will be in the hands of the Trustees. It will however be obligatory on them, save in exceptional cases, to open the library for at least four hours every week, and to allow books to be borrowed by respectable residents or visitors under such restrictions as may be needed to prevent property from being damaged or lost.

Should sufficient subscriptions be obtained it will be possible to open the library to the public early in May of this year.

F. B. FORBES,
W. H. MEDHURST,
A. MICHIE,
F. B. JOHNSON,
Committee of the Council of the North-China Branch of the Royal Asiatic Society.

II.

Report of Committee appointed for the consideration of the expediency of publishing a re-print of the Chinese Repository.

The Committee have met with serious hindrances in the way of preparing a conclusive report upon the expediency and practicability of publishing a re-print of selected portions of the Chinese Repository. The chief of these has arisen out of the difficulty experienced in so shaping the several engagements of the members of the Committee as to admit of a combined survey of that valuable work. They can consequently present but a partial report of what has been effected.

Mr. Forbes has completed the preliminary work of classifying the contents of the twenty volumes of the Repository under three heads; namely, "re-print," "condense," "omit." His work is now being revised by Mr. Medhurst.

The result so far (and it may be accepted as a fair indication of what may eventually be determined upon by the Committee) goes to prove that a complete selection of the most valuable information comprised in the Repository may be condensed and republished within the compass of say three volumes of from six to seven hundred pages each. Preference is being given to articles above average merit upon geographical, topographical,

historical, classical, and philological subjects. State papers likewise are to receive attention in most cases, and journals, itineraries and notices, literary and general, as well as translations, will have selections made from them, or will be condensed as it may be found expedient. Journals of occurrences and miscellaneous notices will need pruning to a very great extent. Religious papers as well as biographies of a purely religious character, together with missionary intelligence will be almost entirely eliminated.

The above will give a fair idea of what has been effected by the Committee so far, and they must crave the indulgence of the society until they are in a position to put their labours into such a shape as to merit the approving judgment of the Members.

W. H. MEDHURST,
F. B. FORBES,
CHAS. W. GOODWIN, } *Committee.*

III.

Report of the Committee appointed by the Council of the North-China Branch of the Royal Asiatic Society to promote the exploration of the old and new Channels of the Hwang Ho.

Your Committee was appointed at a Council meeting on the 25th August last to aid Mr. Ney Elias in organising his expedition.

Your Committee lost no time in conferring with Mr. Elias on the subject of his journey, and the nature of the exploration to be undertaken, the feasibility of the various parts of the general plan, the means to be employed, and the probable cost, and all other matters of that kind were fully discussed and considered.

The result was the following appeal to the public for the necessary funds, which were estimated by Mr. Elias at $800.

YELLOW RIVER EXPLORATION.

The Council of the North-China Branch of the Royal Asiatic Society deeming it desirable in the interests of Science and Commerce that an exploration of the new channel of the Yellow River should be undertaken, have entrusted the task to Mr. Ney Elias, and have appointed the undersigned a Committee to carry out the preliminary arrangements.

It is proposed to explore and map out the Yellow River from the point where it leaves its old bed to *Tieh-mên-kwan*, about 30 miles from the present mouth of the river, from which point to the sea its navigability has been

ascertained. Also, if time and opportunity permit, to examine the port of Haichow and the Coast in the vicinity of the old mouth of the Yellow River, although this is more properly the duty of Ships of War.

Mr. Elias will take with him a full complement of the requisite instruments for making astronomical observations, and will be accompanied by an efficient Assistant and Interpreter. Mr. Elias will of course not limit himself to the precise duty indicated above, but will endeavour to procure and furnish to the Society and the public as much general information as can be obtained along the route.

The cost of the expedition is estimated at about $800, and as the Society is not in a position to furnish any portion of the funds required, this appeal is made to the liberality of the public for the necessary supplies. The Committee, thinking that the object is one which will commend itself to the community generally, trust that the amount required to give effect to their plans may be readily obtained.

A. MICHIE,
F. B. FORBES,
G. THIN,
} *Committee.*

Of the above estimated amount Tls. 565.81 have been collected as per accompanying subscription list, and the exact amount has been expended leaving no balance either for or against the Committee. The accounts are submitted herewith.

Mr. Medhurst, H. B. M.'s Consul, on the application of the Committee took advantage of his visit to H. E. Vice-Roy Tsêng at Nanking in September last to obtain for Mr. Elias a special pass-port available for 6 months. The Committee desire to express their thanks to Mr. Medhurst for his valuable assistance in this matter.

Mr. Elias in company with Mr. H. G. Hollingworth left Shanghai fully equipped for the journey on the 24th September last, and returned on the 20th December having been completely successful in establishing the course of the Hwang Ho, from the point where it has broken through the old bank near Kai-fung-foo to its embouchure in the gulf of Pechili. Several important points have been fixed by astronomical observations, the river has been carefully sounded, its navigability or otherwise ascertained; and many other matters of great general interest recorded. All this will be laid fully before the Society at an early date. Circumstances did not admit of Mr. Elias's proceeding to the old mouth of the Hwang Ho, nor did it appear from the enquiries made that much information was likely to be got there.

The Committee have much pleasure in saying that so far as they are able to judge from a close inspection of Mr. Elias's

journals and maps he has discharged the task allotted to him in a thoroughly efficient manner, and that he has done as much towards forwarding the Society's objects as the modest means at his command would permit. The thanks of the Society are also due to Mr. Hollingworth who rendered valuable assistance to Mr. Elias, and who has placed his journal at the disposal of the Society.

IV.

Copy of letter from the Secretary of the Treasury to Major Crossman, R.E., *offering site for new building.*

Sir,

The Lords Commissioners of Her Majesty's Treasury have had before them your letter of April 17th enclosing copy of a letter addressed by H.M.'s Consul at Shanghai to Sir Rutherford Alcock on behalf of the North-China Branch of the Royal Asiatic Society, requesting that a strip of ground belonging to Her Majesty's Government adjoining the present Consular Gaol at Shanghai may be granted to the above Society for the purpose of building a Library, Museum and Lecture room.

I am to state that My Lords have communicated with the Secretary of State for Foreign Affairs and that his Lordship has expressed his full concurrence in the proposed grant of land.

My Lords are therefore pleased under the very special circumstances of the case to approve of the grant of the piece of land on the terms and conditions stated in your letter, viz:—that the Society hold the ground at present at a nominal rent, and in the event of the remainder of the property being sold, that their Lordships hand it over in fee-simple to the Society on condition that it never be diverted from the purpose for which it is granted; and should the Society be dissolved, or circumstances occur which might prevent the erection of any building within three years, that it should then revert to Her Majesty's Government.

I am, &c.,

(Signed,) G. SCLATER BOOTH.

To

Major CROSSMAN.

True Copy.

(Signed,) J. P. MUNRO FRASER,

1st Assistant.

Treasurer's Report.

I am sorry to have to call attention to a balance to the Society's Debit in the accompanying financial statement. I have collected during the year $80 arrears, $610 subscriptions for 1868, and $10 for the present year, leaving about $200 more to come in, principally from non-resident members.

The expenditure contrasts favourably with the previous year's report, being nearly Tls. 200 less, from this however the rent will have to be deducted; still, at the end of this year, I have every reason to hope that with an increased number of members, we shall be in a very flourishing condition.

W. B. PRYER,
Treasurer.

SHANGHAI, 4*th February*, 1869.

BALANCE SHEET OF THE

North-China Branch of the Royal Asiatic Society.

Dr. FOR THE YEAR 1868. *Cr.*

RECEIPTS.	$	cts.	Tls.	cts.	DISBURSEMENTS.	$	cts.	Tls.	cts.
To Balance to credit of last account			30	07	By Amt. paid on Printing account...			496	51
„ Sales of Transactions.....			8	52	„ do. Mr. Bishop			22	80
„ Subscriptions	705	00	534	75	„ do. Sundry Expenses.			96	45
„ Balance due Treasurer.....			42	42					
			615	76				615	76

SHANGHAI, 4*th February*, 1869.

Audited and found correct,

J. P. BISSET.

LIST OF MEMBERS.

HONORARY.

Sir Rutherford Alcock, K.C.B.
D. B. Robertson, C.B.
Captain Shadwell, C.B.
Sir John Davis, K.C.B. Bart. F.R.S.
Professor Stanislaus Julien.
Sir John Bowring, L.L.D. F.R.S.
T. F. Wade, C.B.
W. H. Medhurst.
Rev. J. Legge, D.D.
A. F. Marques Pereira.
J. R. C. do Amaral.
Sir Harry S. Parkes, K.C.B.
S. Wells Williams, L.L.D.
G. F. Seward.

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W. Lockhart, F.R. C.S.E.
D. J. Macgowan, M.D.
Captain Wild.
M. N. Rodert.
Dr. Pompe Van Meerdevort.
R Swinhoe.
Monsgnr. de la Place.
Rev. W. Muirhead.
Rev. A. Williamson.
Rev. Griffith John.
Rev. G. Moule.
Rev. T. McClatchie.
Rev. Josiah Cox.
Rev. W. A. P. Martin, D.D.
Rev. A. P. Happer, D.D.
B. Hobson, M.B.
Rudolph Lindau.
Raphael Pumpelly.
Dr. Bastian.
L'Abbé Mermet de Cachon.
Dr. F. H. Hance.
A. Wylie.
Rev. J. Schereschewski.
D. Hanbury.
J. C. Hepburn, M.D.
Rev. S. R. Brown.
Dr. B. Jenkins.
Lieut. M. C. Sampaio.
D. B. McCartee, A.D. M.D.
Lieut. F. da Silveira.
Lieut. Col. Gordon.
John Fryer.

LIFE MEMBER.

Admiral Sir James Hope.

RESIDENT.

John Major.
J. P. Tate.
R. I. Fearon.
Wm. Gamble.
J. Johnston, M.D.
T. W. Kingsmill.
Wm. Remé
E. Koch.
F. A. Groom.
C. W. Goodwin.
Wm. Tarrant.
C. J. King.
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H. P. Hanssen.
F. B. Forbes.
G. P. Grant.
Rev. C. H. Butcher.
Wm. Saunders.
J. Battison.
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W. A. Hague.
C. de St. Croix.
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T. Kroes.
A. Robinson.
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E. A. Reynolds.
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G. Thin, M.D.
A. da Silveira.
H. Mylne.
A. Michie.
E. Cunningham.
A. J. Little.
H. Beveridge.
F. C. Sibbald, M.D.
F. B. Johnson.
J. B. Robertson.
Ney Elias.
James Jeffreys.
T. B. Rennell.
Yung Wing.
G. R. Corner.

NON-RESIDENT.

T. Hanbury.
A. Heard.
H. Hobson.
R. Hart.
E. C. Bowra.
J. G. Murray.
T. Sampson.
P. J. Hughes.
T. Adkins.
A. W. Corner.

T. Dick.
J. M. Canny.
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G. Whitfield.
P. Giquel.
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Augustine Heard, Jr.
W. Bushell, M.D.
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R. W. Little.
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H. G. Hollingworth.
Capt. Blakiston.
A. Howell.
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T. Watters.
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T. T. Cooper.

JOURNAL

OF THE

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OF THE

ROYAL ASIATIC SOCIETY.

NEW SERIES No. V.
DECEMBER 1868.

SHANGHAI:
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1869.

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JOURNAL
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THE ROYAL ASIATIC SOCIETY.

ARTICLE I.

NOTE SUR LES PETITES SOCIÉTÉS D'ARGENT EN CHINE.

PAR M. G. EUG. SIMON.

Consul de France à Ningpo.

DANS aucun pays du monde assurément, le si fécond principe d'association ne reçoit de plus fréquentes applications qu'en Chine. On s'associe à la ville, on s'associe à la campagne. Les riches capitalistes s'associent pour constituer de puissantes maisons de banques; les petits cultivateurs s'associent pour acheter le bœuf qui doit seconder leurs travaux; les marchands besogneux s'associent pour fonder des maisons de commerce plus importantes; le gamin qui vient d'obtenir de la générosité des passants quelques sapèques (1) court les associer aux aumônes recueillies par d'autres mendiants, et reparait bientôt chargé d'un panier de fruits ou de pâtisseries qu'il revend à ces mêmes passants; le mandarin que travaille le désir d'avancer en grade, associe ses amis ou ses parents à sa destinée, en leur empruntant les sommes dont il aura besoin pour faire le voyage de la capitale et se rapprocher des dispensateurs des grâces, sommes qu'il leur rendra avec des intérêts proportionnés à la faveur qu'il aura obtenue. Les mères de famille s'associent pour vêtir leurs enfants; les domestiques associent leurs économies pour faire un petit commerce et finissent par devenir de gros négociants (2). On s'associe pour un an, on s'associe pour un mois, pour huit jours!

(1) Une sapèque vaut un demi-centime environ.

(2) On peut citer maint négociant Chinois, aujourd'hui 2 et 3 fois millionnaires, qui ont commencé par être simples domestiques.

On s'associe entre parents, on s'associe entre amis, entre voisins, entre inconnus, en sorte que dans une province de 25 à 30 millions d'habitants il n'y en a peut être pas mille, qui n'aient été, ne soient ou ne doivent être un jour associés, et que depuis cinq mille ans, les *Cent familles* (1) ont eu beau multiplier jusqu'au point où elles sont aujourd'hui, il n'en est pas moins vrai que dans cette masse effrayante de plus de 400 millions d'individus, il y a beaucoup moins d'individualités qu'on pourrait le penser. Il n'y a point de doute que ce ne soit une des cent raisons qui expliquent cette si longue et si forte vitalité de la société chinoise, l'ont rendue si florissante et maintiennent les Chinois dans une situation de bien être supérieure à celle des habitants de beaucoup, pour ne pas dire plus, de nos états de l'Europe.

Il y a des associations reconnues par les lois; ce sont celles qui ont pour but des entreprises d'une certaine importance; mais elles n'ont rien dit, et ne pouvaient rien dire de celles qui s'adressent aux infiniment petits, et se forment à chaque instant entre les faibles et les pauvres, sous le titre de *Hoeï-Tsien* ou sociétés d'argent. Il n'y avait qu'à les laisser vivre, et c'est ce qu'elles ont fait; aussi grâce à cette liberté et à cause des nombreux besoins en vue desquels ces associations se forment, on peut dire qu'elles fourmillent en Chine, et sauf quelques conditions communes, les règles d'après lesquelles elles fonctionnent varient au gré de ceux qui les composent.

Elles ont pour but principal d'éviter le fardeau des dettes fixes et portant intérêt, et leur avantage consiste à procurer tout d'un coup à celui qui en a besoin, une somme relativement considérable qu'il ne paie qu'en détail, moyennant un intérêt léger, quelquefois nul.

Ce sont donc suivant les statuts en usage dans ces sociétés, tantôt comme on le verra, des sociétés d'assistance mutuelle, conciliant avec la bienveillance et la gratuité des services, le mobile souvent plus efficace de l'intérêt personnel; tantôt des sociétés d'emprunt, avec le système de l'amortissement rendu accessible aux particuliers et aux plus humbles, tandis qu'en Europe il n'est encore que je sache, appliqué que par les grandes compagnies.

Le grand obstacle qui s'oppose chez nous à ce que ce système

(1) C'est le surnom que les Chinois aiment à donner à leur nation.

entre dans la pratique des individus, est je crois le long-temps nécessaire à l'action incessante des intérêts, à un taux déterminé; les sociétés chinoises l'évitent, et me paraissent même offrir à chacun de leurs membres une séduction assez forte; c'est que chacun recevra à tour de rôle le fonds social, et que ce tour change chaque année ou à chaque réunion. On pourra en juger par l'examen des statuts et des tableaux de quelques unes de ces sociétés qui sont le plus en vogue parmi celles qui existent. Mais avant de l'entreprendre, je dois dire comment elles se forment, et signaler les conditions générales qui sont le plus souvent observées; je n'aurai plus ensuite qu'à indiquer quelques particularités de chacune de ces sociétés.

Lors donc qu'un cultivateur a besoin d'argent, soit pour acheter un champ, soit pour acheter un cheval, soit pour payer le loyer de sa terre ou de sa maison;

Lorsqu'un jeune laboureur veut commencer à cultiver pour son compte et a besoin qu'on lui avance le fermage d'un champ et le prix de ses instruments aratoires;

Lorsqu'un commis marchand veut devenir marchand, ou qu'un marchand veut profiter d'une bonne occasion, pour étendre son petit commerce;

Lorsqu'un enfant ou un jeune homme se trouve arrêté dans ses études par sa pauvreté ou par celle de ses parents;

Lorsqu'une pauvre mère de famille doit, soit marier sa fille, soit pourvoir à quelque dépense extraordinaire;

Lorsqu'un employé subalterne veut, pour avoir un emploi mieux rétribué, gagner les bonnes grâces de son chef, ou bien lorsqu'il passe d'une fonction à une autre qui l'oblige à quelques premiers frais d'établissement couteux;

S'ils ont un parent ou un ami riche, ils lui exposent la nécessité où ils se trouvent, et ceux-ci leur prêtent généralement sans intérêt la somme demandée. Mais si la situation de fortune de ces parents n'est pas telle qu'ils ne puissent s'adresser à eux sans les exposer à se gêner, ou à rougir d'être obligé de refuser, ou si l'on ne connait que des personnes vivant de la même vie que soi-même, soumises aux mêmes vicissitudes, aux mêmes éventualités, on pressent ou l'on fait pressentir leurs dispositions, et après s'être ainsi assuré de leur assistance, on les convoque à un repas, et après leur avoir expliqué le but de la réunion, et les motifs de l'emprunt, s'ils sont approuvés, la société est constituée, et l'emprunt partagé également entre chacun des assistants, qui

s'engage en outre à apporter chaque année ou à chaque réunion à la masse commune une quote-part déterminée.

On fixe aussi dans cette même séance:

1°. La durée de la société qui est ordinairement d'autant d'années qu'il y a de souscripteurs.

2°. Les statuts.

3°. Le titre de l'argent des lingots qu'on doit fournir (1) et la balance qui servira à les peser (2).

4°. On tire au sort l'ordre d'après lequel chacun deviendra dépositaire de la cotisation totale annuelle. Voici comment se fait ce tirage. On inscrit d'abord chaque nom sur un morceau de papier qui est plié et mis dans un sac. On les tire une première fois et chaque nom sortant reçoit un numéro. Ces numéros sont ensuite remis dans le sac et retirés. Ce dernier sort est définitif, et détermine aussi comme on le verra la cotisation annuelle. Il est entendu que pour la première fois, le No. 1 appartient de droit à celui qui a provoqué la formation de la société.

L'année suivante la réunion a lieu chez le No. 2 qui doit recevoir le prêt social et est obligé d'offrir un repas aux autres. Le No. 1 apporte sa cotisation plus l'intérêt fixé par les statuts, qui diminue la cotisation des suivants d'une somme proportionnelle.

La 3e. année le No. 3 prend la place du No. 2 qui paie un intérêt qui s'ajoute à celui que continue à payer le 1re. et diminue d'autant la cotisation des autres, et ainsi de suite jusqu'à ce que le dernier ait eu son tour après quoi la société est prorogée ou dissoute, et dans ce cas les quotes-parts sont rendues à chacun.

J'appellerai l'attention des hommes spéciaux sur les calculs, qu'ils saisiront d'ailleurs sans qu'il soit besoin de les exposer, d'après lesquels on a pu établir ces quotités différentes pour chacun suivant le temps pendant lequel il attend le prêt et fait ses avances, et le temps pendant lequel il en profite. Si compliqués qu'ils soient, ils sont cependant compris de la multitude, et

(1) Il n'y a pas de monnaie d'argent en Chine ; ce sont des lingots, de poids et suivant les localités de titres différents. Il est donc très important quand on fait un marché de spécifier le titre de l'argent avec lequel les paiements s'effectueront. Le même object peut se vendre moins de taëls (Once d'argent) à Pekin qu'à Shanghaï, ce qui ne signifie pas toujours qu'il soit moins cher. Il faut savoir en effet que les lingots de Pekin sont d'argent presque pur.

(2) Les balances diffèrent en Chine selon la nature des objets à peser et selon les provinces.

me paraissent non moins que le jeu même des sociétés dont il est question ici, montrer sous un jour bien digne de remarque l'esprit et le caractère chinois.

Si quelqu'un manque une année à apporter sa quote-part il perd toutes ses avances au profit du bénéficiaire de l'année précédente qui fait alors l'avance pour lui. Mais cela n'arrive presque jamais, parceque ces sociétés étant fondées sur l'honneur et l'amitié celui qui en violerait les conditions serait déshonoré et ne trouverait plus à faire partie d'aucune autre société d'assistance. Quand quelqu'un se trouve pressé d'argent, au lieu de pouvoir en verser, il obtient facilement qu'on lui cède le prêt, et s'il ne peut plus continuer, il cède ses avances et sa place à un autre qui n'est tenu de le rembourser qu'à l'expiration de la société.

L'on connait maintenant tous les avantages de ces sociétés; au point de vue particulier des emprunteurs comme des prêteurs, elles facilitent les emprunts sans les rendre dangereux comme ils le sont par exemple dans certains de nos départements de l'Est de la France; elles provoquent sur les opérations en vue desquelles les emprunts sont faits, une critique amicale qui devient une garantie de succès ou un obstacle à l'emprunt: elles engagent à l'épargne par des moyens extrêmement puissants dans les mœurs chinoises; elles le rendent aussi plus facile.

Au point de vue général de la société elles accusent et font naître un esprit de bienveillance et de conciliation et de mutualité extrêmement heureux.

On ne reconnaîtra cependant pas toujours dans les tableaux qui vont suivre, la même justice et la même égalité, et d'abord dans le tableau No. 1; mais on ne peut empêcher que les meilleures choses ne soient contrefaites et dénaturées. Un dernier mot encore pour rappeler qu'en Chine le taux de l'argent toléré par les lois dans le commerce, est de 30% par an pour les prêts ordinaires (1). A la campagne l'intérêt ne dépasse guère 12 ou 15%. L'argent placé en fonds de terre ou en maisons, rapporte 9, 9½ et 10%.

(1) Cette loi est tombée en désuétude en ce sens qu'on ne s'en souvient et qu'on ne l'applique qu'en temps ordinaire; mais en vertu de ce principe que l'argent est une marchandise, on en voit le taux s'élever jusqu'à 40, 50, et 60 % et même plus.

No. 1.

SOCIÉTÉ DE SOU-TCHEOU.

(Ainsi appelée parcequ'elle a pris naissance à Sou Tcheou-fou, ville industrielle extrêmement importante de Chine, dans la province du Kiang-sou).

D'après les règles de cette société elle doit être formée de 11 associés; les réunions périodiques ont lieu de 10 en 10 mois, ce qui fait une série de cent dix mois et le fonds social entier est de cent taëls à reçevoir successivement.

Ceux qui sont les premiers à profiter du prêt, donnent une quote-part plus forte que les derniers. En garantie de la somme qui lui est prêtée le bénéficiaire remet entre les mains du plus agé des associés un titre de propriété de terre ou de maison sur le dos duquel il reconnaît avoir reçu la somme qui lui est prêtée; si dans la suite il ne peut satisfaire aux conditions de la société c'est à dire rendre par parties selon les statuts la somme qu'il vient de recevoir, la société jouit de cette propriété à ses risques et périls, mais elle ne peut la vendre; elle n'en a que l'usufruit.

Chacun doit assister en personne aux réunions, à moins qu'il n'ait renoncé à la société, et que du consentement commun il ne se soit substitué un remplaçant.

Afin de stimuler les associés et de les engager à être à l'heure dite au lieu indiqué pour la réunion, le bénéficiaire, dès que les 2/3 des associés sont réunis, organise entr'eux une loterie de quatre ou cinq cents sapèques et elle est tirée immédiatement, en excluant les retardataires.

L'associé qui le premier a profité du prêt de 100 taëls, est tenu de rendre dans chacune des réunions suivantes, jusqu'à la dernière, 15 taëls, 5 tsienn (le tsienn = 1/10e de taël) pour capital et intérêts qui font alors parties de la masse nouvelle. Il donnera donc en cent dix mois, cent cinquante cinq taëls pour 100 qu'il aura reçus, mais qu'il n'aura remboursés qu'en dix ans.

Le 2e associé qui ne jouira de cette masse que pendant cent mois donnera dans la première réunion, 15 taëls, 5 tsienn et dans chacune des 9 autres 14 taëls 5 tsienn, et donnera en tout 146 taëls.

Le 3e dans les 2 premières réunions paie 14 taëls 5, et dans les 8 dernières 13 taëls 5, en tout 137 taëls pour 100 taëls qui lui auront été prêtés pendant 9 ans, et ainsi de suite.

TABLE DES SÉRIES DE LA SOCIÉTÉS DE SOU-TCHEOU.

1re. Réunion.		2e. Réunion.		3e. Réunion.		4e. Réunion.		5e. Réunion.		6e. Réunion.		7e. Réunion.		8e. Réunion.		9e. Réunion.		10e. Réunion.		11e. Réunion.	
Sommes versées au 1r. Associé.		Sommes versées au 2e. Associé.		Sommes versées au 3e. Associé.		Sommes versées au 4e. Associé.		Sommes versées au 5e. Associé.		Sommes versées au 6e. Associé.		Sommes versées au 7e. Associé.		Sommes versées au 8e. Associé.		Sommes versées au 9e. Associé.		Sommes versées au 10e. Associé.		Sommes versées au 11e. Associé.	
Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.	Par le	Taëls et 10e. ou tsienn.
2e.	15.5	1r.	15.5	1r.	15.5	1r.	15.5	1r.	15.5	1r.	15.5	1r.	15.5	1r.	15.5	1r.	15.5	1r.	15.5	1r.	15.5
3e.	14.5	3e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5
4e.	13.5	4e.	13.5	4e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5
5e.	12.5	5e.	12.5	5e.	12.5	5e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5
6e.	11.5	6e.	11.5	6e.	11.5	6e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5
7e.	8.5	7e.	8.5	7e.	8.5	7e.	8.5	7e.	8.5	7e.	8.5	6e.	8.5	6e.	8.5	6e.	8.5	6e.	8.5	6e.	8.5
8e.	7.5	8e.	7.5	8e.	7.5	8e.	7.5	8e.	7.5	8e.	7.5	8e.	7.5	7e.	7.5	7e.	7.5	7e.	7.5	7e.	7.5
9e.	6.5	9e.	6.5	9e.	6.5	9e.	6.5	9e.	6.5	9e.	6.5	9e.	6.5	9e.	6.5	8e.	6.5	8e.	6.5	8e.	6.5
10e.	5.5	10e.	5.5	10e.	5.5	10e.	5.5	10e.	5.5	10e.	5.5	10e.	5.5	10e.	5.5	10e.	5.5	9e.	5.5	9e.	5.5
11e.	4.5	11e.	4.5	11e.	4.5	11e.	4.5	11e.	4.5	11e.	4.5	11e.	4.5	11e.	4.5	11e.	4.5	11e.	4.5	10e.	4.5
	100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „

No. 2

SOCIÉTÉ DE TCHÉ-KONG, FONDÉE PAR UN HOMME HONORABLE DE CE NOM.

La somme à percevoir dans chaque réunion jusqu'à la 6e. inclusivement est de 100 taëls. Dans la 1re. réunion, chacun des associés moins le 1re. apporte 10 taëls. Les associés ne reçoivent pas de numéros d'ordre. Se premier bénéficiaire est celui qui forme la société, le 2e. est désigné par le sort avant la fin de la première réunion; le 3e. par le sort avant la fin de la 2e., et ainsi de suite. Le tirage se fait comme pour la société précédente du Kiang-sou, une première fois avec les noms, une seconde et dernière avec les numéros. La présidence de la société appartient au bénéficiaire. On détermine en commun le prix du repas qui sera offert à tour de rôle par chacun des bénéficiaires. Le No. 1 de la première réunion paie le premier et le deuxième repas, le second paie le 3e. &c.

Celui qui arrive le premier aux réunions reçoit quatre cents sapèques du président et les autres 100.

Outre les 11 réunions dans lesquelles chaque associé reçoit successivement le capital social, il y en a une 12e. dans laquelle personne ne reçoit et ne paie que son écot pour le dernier repas qui a lieu.

Le 1re. associé est obligé de rembourser 20 taëls par an capital et intérêts compris. En 6 ans il a payé 120 taëls pour 100 reçus; ensuite il ne paie plus rien.

Le 2e. reçoit donc 20 taëls du 1re. et chacun des autres ne lui donnent que 8 taëls 8 tsienn 8 feun. Puis à la 3e. réunion il donne ainsi que le 1re. 20 taëls au 3e. qui ne reçoit des autres que 7 taëls 5 tsienn. En 6 ans outre sa première mise de 10 taëls, il a payé 120 taëls ce qui fait 130 pour 100 reçus. Le 4e. reçoit 20 taëls des 3 premiers, et des autres 5 taëls 7 tsienn 1 feun 6 lis; en 6 ans il a payé ses premières mises à savoir :

10 taëls	pour la 1re.	année
8.89	pour la 2e.	id
7.5	pour la 3e.	id

en tout 26 taëls 39, plus 120 taëls soit 146 taëls 39, pour 100 reçus.

Et ainsi du 5e. et du 6e. associé.

Mais les 7e., 8e., 9e., 10e. et 11e. cessent leurs quotes-parts à partir de la 6e. année inclusivement et ne paient les intérêts et le capital de 20 taëls que pendant, 5 ans pour le 7e., 4 ans pour le 8e., 3 ans pour le 9e., 2 ans pour le 10e., et un an seulement pour le 11e. C'est ce dernier qui liquide la société.

Un certain nombre d'associés seraient d'après ce qui précède beaucoup plus chargés que les autres, mais on les en dédommage, et voici comment. Dés la 7e. réunion (chacun étant obligé de rembourser 120 taëls en 6 ans), il y a un excédant de 20 taëls sur les 100 à prêter; on divise donc ces 20 taëls entre les associés, même le No. 1.

A la 8e. réunion on exclut le No. 2 de cette division, à la 9e. le No. 3, à la 10e. le No. 4, à la 11e. le No. 5, ainsi qu'on le verra par le tableau A.

TABLEAU A.

Répartition par Année.					Sommes.
7e. année.	8e. année.	9e. année.	10e. année.	11e. année.	
					Taëls.
2	1	1	1	1	0.8
3	3	2	2	2	1.1
4	4	4	3	3	1.2
5	5	5	5	4	1.3
6	6	6	6	6	5.0
7	7	7	7	7	4.0
8	8	8	8	8	3.0
9	3	9	9	9	1.3
10	10	10	10	10	1.2
11	11	11	11	11	1.1
					20.0

A la 12e réunion, la société devant se dissoudre, il reste 120 taëls à partager, partage qui se fait d'après le tableau B. Sur cette dernière somme de 120 taëls, 2 taëls sont retenus pour payer le dernier repas.

TABLEAU B.

Numéros.	Sommes.
1	4.0
2	5.6
3	13.3
4	13.2
5	13.1
6	9.4
7	10.4
8	11.4
9	13.1
10	11.2
11	13.3
	118.0

TABLE DES SÉRIES DE LA SOCIÉTÉ DE TCHÉ-KONG.

1re. Réunion.		2e. Réunion.		3e. Réunion.		4e. Réunion.		5e. Réunion.		6e. Réunion.		7e. Réunion.		8e. Réunion.		9e. Réunion.		10e. Réunion.		11e. Réunion.		12e. Réunion.	
Sommes versées au 1r. Associé.		Sommes versées au 2e. Associé.		Sommes versées au 3e. Associé.		Sommes versées au 4e. Associé.		Sommes versées au 5e. Associé.		Sommes versées au 6e. Associé.		Sommes versées au 7e. Associé.		Sommes versées au 8e. Associé.		Sommes versées au 9e. Associé.		Sommes versées au 10e. Associé.		Sommes versées au 11e. Associé.		Réunion. vide sommes versées.	
Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e & 1000e.	Par le	Taëls 10e. 100e & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.
2e.	10. „	1r.	20. „	1r	20. „	1r.	20. „	1r.	20. „	1r.	20. „	1r	20. „	2e.	20. „	3e.	20 „	4e.	20. „	5e.	20. „	6e.	20.¹ „
3e.	10. „	3e.	8.89	2e.	20. „	2e.	20. „	2e	20. „	2e.	20. „	2e.	20. „	3e	20. „	4e.	20. „	5e.	20. „	6e	20. „	7e.	20. „
4e.	10. „	4e.	8.89	4e.	7.5	3e.	20. „	3e.	20. „	3e.	20. „	3e	20. „	4e.	20. „	5e.	20. „	6e.	20. „	7e	20. „	8e.	20. „
5e	10. „	5e.	8.89	5e.	7.5	5e.	5.716	4e.	20. „	4e.	20. „	4e.	20 „	5e.	20. „	6e.	20. „	7e.	20. „	8e.	20. „	9e.	20. „
6e.	10. „	6e.	8.89	6e	7.5	6e	5.716	6e.	3.334	5e	20. „	5e.	20. „	6e	20. „	7e.	20. „	8e	20. „	9e.	20. „	10e.	20. „
7e.	10. „	7e.	8.89	7e.	7.5	7e.	5.716	7e.	3.334	7e.	„ . „	6e.	20. „	7e.	20. „	8e	20. „	9e.	20. „	10e.	20. „		
8e.	10. „	8e.	8.89	8e	7.5	8e.	5.716	8e.	3.334	8e.	„ . „	8e.	„ . „	9e.	„ . „	10e.	„ . „	11e.	„ . „				
9e.	10. „	9e	8.89	9e.	7.5	9e.	5.716	9e	3.334	9e.	„ . „	9e.	„ . „	10e.	„ . „	11e.	„ . „						
10e.	10. „	10e.	8.89	10e.	7.5	10e.	5 716	10e	3.334	10e.	„ . „	10e.	„ . „	11e.	„ . „								
11e.	10. „	11e	8.89	11e	7.5	11e.	5.716	11e.	3.334	11e.	„ . „	11e.	„ . „										
	100. „		100. „		100. „		100.012		100.004		100. „		120. „		120. „		120. „		120. „		120. „		120. „

No. 3.

SOCIÉTÉ DE TCHAO-KONG, OU DU VÉNÉRABLE TCHAO.

PARTICULIÈRE AUX FEMMES.

Il ne s'agit point ici de fortes sommes. On n'apporte point d'argent mais des sapèques ; et les mises de fonds périodiques sont au plus de cinq ligatures (1). Les réunions ont lieu d'année en année et les numéros d'ordre sont désignés par les dés.

Celui qui a profité du capital social annuel doit le rendre avec l'intérêt prescrit dans les quatre années suivantes après lesquelles il ne donne plus rien. Ceux qui n'en ont pas encore profité ne donnent de quote-part que pendant les quatre premières années.

Le bénéficiaire offre un repas aux autres, et ce repas ne doit pas coûter plus de 50 sapèques c'est à dire 0.25 f. environ par personne; mais il est évident que ce repas se réduit à une ou deux tasses de thé avec quelques gâteaux.

Le 1$^{r.}$ associé reçoit dans la première réunion soit 50 ligatures (cinq de chaque des 10 associés) et en rend 60 en 4 ans, 15 chaque année.

Le 2$^{e.}$ associé en reçoit donc 15 du 1$^{r.}$ et des 9 autres, 3 ligatures 890 sapèques, en tout 50; il les rend seulement en 4 ans.

Le 3$^{e.}$ reçoit 30 ligatures des 2 premiers, et des 8 autres, 20; en tout 50.

Le 4$^{e.}$ reçoit des 3 premiers 45,000 sapèques et de chacun des 7 autres, 713 sapèques; en tout 50 ligatures, qu'il rend comme les précédents en 4 années.

Le 5$^{e.}$ reçoit à la 5$^{e.}$ réunion, des 4 premiers 60 ligatures (15 chacun) mais il n'en garde que 50 pour lui; les 10 autres sont également partagées entre le 7$^{e.}$ et le 8$^{e.}$ associé.

Dans la 6$^{e.}$ réunion le 1$^{r.}$ associé ne paie plus rien et le 6$^{e.}$ reçoit des 4 autres 60 ligatures dont il garde 50 pour lui et divise les 10 excédantes entre le 6$^{e.}$ et 9$^{e.}$ associé.

(1) On appelle ligature mille sapèques enfilées par le trou carré dont elles sont percées et séparées par centaines au moyen de nœuds. Chaque centaine de sapèques est donc la 10$^{e.}$ partie de la ligature, et la ligature vaut un taël ou un once pesant d'argent ; soit 8 francs.

A la 7e. réunion les 10 ligatures excédantes sont divisées entre le 1r. et le 2e.

A la 8e. entre le 4e. et le 5e.
A la 9e. entre le 7e. et le 8e.
A la 10e. entre le 6e. et le 9e.
A la 11e. entre le 10e. et le 11e.

A la 12e. réunion nommée *Hiù Che* ou réunion vide 40 des 60 ligatures provenant du dernier emprunt sont divisées entre les associés selon le tableau C, et des 20 autres on donne 5 au bénéficiaire pour préparer un grand repas, et on donne 1 ligature et 500 sapèques aux autres.

TABLEAU C.

Numéros.	Sommes.
2	5. ,,
3	8 890
4	6.390
5	7.140
6	2.100
7	2 100
8	2.100
9	2.100
10	2.100
11	2.100
	40.020

TABLES DES SÉRIES DE LA SOCIÉTÉ DE TCHAO-KONG.

1re. Réunion.		2e. Réunion.		3e. Réunion.		4e. Réunion.		5e. Réunion.		6e. Réunion.		7e. Réunion.		8e. Réunion.		9e. Réunion.		10e. Réunion.		11e. Réunion.		12e. Réunion.	
Sommes versées au 1r. Associé.		Sommes versées au 2e. Associé.		Sommes versées au 3e. Associé.		Sommes versées au 4e. Associé.		Sommes versées au 5e. Associé.		Sommes versées au 6e. Associé.		Sommes versées au 7e. Associé.		Sommes versées au 8e. Associé.		Sommes versées au 9e. Associé.		Sommes versées au 10e. Associé.		Sommes versées au 11e. Associé.		Réunion. vide sommes versées.	
Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.	Par le	Ligatures et sapèques.
2e.	5. „	1r.	15. „	1r.	15. „	1r.	15. „	1r.	15. „	1r.	„. „	1r.	„. „	1r.	„. „	1r	„. „	1r.	„. „	1r.	„. „	1r.	„. „
3e.	5. „	3e.	3.89	2e.	15. „	2e.	15. „	2e.	15. „	2e.	15. „	2e.	„. „	2e.	„. „	2e.	„. „	2e.	„. „	2e.	„. „	2e.	„. „
4e.	5. „	4e.	3.89	4e.	2.500	3e.	15. „	3e.	15. „	3e.	15. „	3e.	15. „	3e.	„. „	3e.	„. „	3e.	„. „	3e.	„. „	3e.	„. „
5e.	5. „	5e.	3.89	5e.	2.500	5e.	„.713	4e.	15. „	4e.	15. „	4e.	15. „	4e.	15. „	4e.	„. „	4e.	„. „	4e.	„. „	4e.	„. „
6e.	5. „	6e.	3.89	6e.	2.500	6e.	„.713	6e.	„. „	5e.	15. „	5e.	15. „	5e.	15. „	5e.	15. „	5e.	„. „	5e.	„. „	5e.	„. „
7e.	5. „	7e.	3.89	7e.	2.500	7e.	„.713	7e.	„. „	7e.	„. „	6e.	15. „	6e.	15. „	6e	15. „	6e.	15. „	6e.	„. „	6e.	„. „
8e.	5. „	8e.	3.89	8e.	2.500	8e	„.713	8e.	„. „	8e.	„. „	8e.	„. „	7e.	„. „	7e	15. „	7e.	15. „	7e.	15. „	7e.	„. „
9e.	5. „	9e.	3.89	9e.	2.500	9e.	„.713	9e.	„. „	9e.	„. „	9e.	„. „	8e.	„. „	8e.	15. „	8e.	15. „	8e.	15. „	8e.	15. „
10e.	5. „	10e.	3.89	10e.	2.500	10e.	„.713	10e.	„. „	10e.	„. „	10e.	„. „	9e.	„. „	9e.	15. „	9e.	15. „	9e.	15. „	9e.	15. „
11e.	5. „	11e.	3.89	11e.	2.500	11e.	„.713	11e.	„. „	11e.	„. „	11e.	„. „	10e.	„. „	10e.	„. „	10e.	15. „	10e.	15. „	10e.	15. „
	50. „		50.01		50. „		49.991		60. „		60. „		60. „		60. „		60. „		60. „		60. „		60. „

No. 4.

TSI-HIENN-HOUEI (SOCIÉTÉ DES SEPT SAGES). AINSI APPELÉE PARCEQU'ELLE A ÉTÉ FONDÉE PAR SEPT SAGES.

Sa durée est variable mais elle est d'ordinaire de sept années et la mise de fonds annuelle est de 20 taëls répartis entre les sept associés, moins celui qui la provoque et ne donne rien la 1re. année. La quote-part de chacun des six á la 1re. réunion est de 3 taëls, 3 tsienn, 3 feuns, 3 lis, en tout 20 taëls remboursables en 4 ans pour chacun des 4 premiers.

A la 2e. réunion le No. 1 rend six taëls et les autres ne donnent plus que 2 taëls, 8 tsienn.

A la 3e. réunion les Nos. 1 et 2 rendent chacun 6 taëls, et les autres ne donnent plus que 2 taëls.

A la 4e. les Nos. 1, 2, et 3 rendent chacun 6 taëls, et les autres ne donnent plus que 6 tsienn, 6 feuns, 6 lis.

A la 5e. les 4 premiers rendent chacun 6 taëls, en tout 24, dont 20 sont prêtés au No. 5, et les 4 autres divisés entre les Nos. 3, 4, 5, et 6 de façon que le 3e. reçoit 1 taël 666, le 4e. 2 taëls 333, le 5e. 0 taël 666 et le 6e. 333 sapèques. Le 1r., le 2e. et le 7e. ne reçoivent rien. C'est ce qu'on appelle reversement du capital.

Dans cette 5e. réunion les Nos. 6 et 7 ne paient plus rien.

A la 6e. réunion le 1r. a fini ses paiements et les Nos. 2, 3, 4 et 5 versent chacun 6 taëls, en tout 24 dont 20 sont prêtés au No. 6 et les 4 taëls excédants sont partagés entre les Nos. 3, 4, 5 et 6 de la manière suivante:

Le No.	3	reçoit	1	taël	,,
,,	4	,,	1	,,	,,
,,	5	,,	1	,,	214
,,	6	,,	0	,,	636.

A la 7e. réunion les Nos. 1 et 2 ont cessé de payer, les Nos. 3, 4, 5 et 6 rendent chacun 6 taëls, en tout 24 dont 20 sont prêtés au No. 7 et les 4 excédants divisées entre les Nos. 3, 4, 5 et 6, comme suit:

Le No.	3	reçoit	0	taël	866
,,	4	,,	0	,,	535
,,	5	,,	1	,,	660
,,	6	,,	0	,,	933
		Total	3	taëls	994.

TABLES DES SÉRIES DE LA SOCIÉTÉ DE TSI-HIENN-HOUEI.

1re. Réunion.		2e. Réunion.		3e. Réunion.		4e. Réunion.		5e. Réunion.		6e. Réunion.		7e. Réunion.	
Sommes versées au 1r. Associé.		Sommes versées au 2e. Associé.		Sommes versées au 3e. Associé.		Sommes versées au 4e. Associé.		Sommes versées au 5e. Associé.		Sommes versées au 6e. Associé.		Sommes versées au 7e. Associé.	
Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.	Par le	Taëls 10e. 100e. & 1000e.
2e.	3.333	1r.	6. „	1r.	6. „	1r.	6. „	1r.	6. „	2e.	6. „	3e.	6. „
3e.	3.333	3e.	2.8	2e.	6. „	2e.	6. „	2e.	6. „	3e.	6. „	4e.	6. „
4e.	3.333	4e.	2.8	4e.	2. „	3e.	6 „	3e.	6. „	4e.	6. „	5e.	6. „
5e.	3.333	5e.	2.8	5e.	2. „	5e.	„ . 667	4e.	6. „	5e.	6. „	6e.	6. „
6e.	3.333	6e.	2.8	6e.	2. „	6e.	„ . 667	6e.	„ . „	7e.	„ . „		
7e.	3.333	7e.	2.8	7e.	2. „	7e.	„ . 667	7e.	„ . „				
	19.998		20. „		20. „		20.001		24. „		24. „		24. „

No. 5.

SOCIÉTÉ DU KIANG-SOU.

Constituée pour 11 ans entre 11 associés au capital de 100 taëls par année.

L'intérêt est nul et les sommes à rendre par chaque bénéficiaire sont tellement combinées, que si le No. 11 a fourni sa quote-part pendant 10 ans avant de jouir du prêt, il en est dédommagé en ce que cette quote-part a été plus faible que celle des autres et qu'il ne restitue plus rien.

Ainsi du No. 10 et des autres.

TABLE DES SÉRIES DE LA SOCIÉTÉ DU KIANG-SOU.

1re. Réunion.		2e. Réunion.		3e. Réunion.		4e. Réunion.		5e. Réunion.		6e. Réunion.		7e. Réunion.		8e. Réunion.		9e. Réunion.		10e. Réunion.		11e. Réunion.	
Sommes versées au 1r. Associé.		Sommes versées au 2e. Associé.		Sommes versées au 3e. Associé.		Sommes versées au 4e. Associé.		Sommes versées au 5e. Associé.		Sommes versées au 6e. Associé.		Sommes versées au 7e. Associé.		Sommes versées au 8e. Associé.		Sommes versées au 9e. Associé.		Sommes versées au 10e. Associé.		Sommes versées au 11e. Associé.	
Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.	Par le	Taëls et 10e.
2e.	14.5	1r.	14.5	1r.	13.5	1r.	12.5	1r.	11.5	1r.	10.5	1r.	9.5	1r.	8.5	1r.	7.5	1r.	6.5	1r.	5.5
3e.	13.5	3e.	13.5	2e	14.5	2e.	14.5	2e.	14.5	2e.	14,5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5	2e.	14.5
4e.	12.5	4e.	12.5	4e.	12.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5	3e.	13.5
5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12.5	4e.	12 5
6e.	10.5	6e.	10.5	6e.	10.5	6e.	10.5	6e.	10.5	5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5	5e.	11.5
7e.	9.5	7e.	9.5	7e.	9.5	7e.	9.5	7e.	9.5	7e.	9.5	6e.	10.5	6e.	10.5	6e.	10.5	6e.	10.5	6e.	10.5
8e.	8.5	8e.	8.5	8e.	8.5	8e.	8.5	8e.	8.5	8e.	8.5	8e.	8.5	7e.	9.5	7e.	9.5	7e.	9.5	7e.	9.5
9e.	7.5	9e.	7.5	9e.	7.5	9e.	7.5	9e.	7.5	9e.	7.5	9e.	7.5	9e.	7.5	8e.	8.5	8e.	8.5	8e.	8.5
10e.	6.5	10e.	6.5	10e.	6.5	10e.	6.5	10e.	6.5	10e.	6.5	10e.	6.5	10e.	6.5	10e.	6.5	9e.	7.5	9e.	7.5
11e.	5.5	11e.	5.5	11e.	5.5	11e.	5.5	11e.	5.5	11e.	5.5	11e.	5.5	11e.	5.5	11e.	5.5	11e.	5.5	10e.	6.5
	100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „		100. „

No. 6.

SOCIÉTÉ DE TCHE-KONG.—*Bis.*

L'intérêt est trés modique.

Les associés excepté le premier en sont exemptés presqu'en entier.

La somme annuelle est de 60 taëls.

Les réunions sont annuelles.

TABLES DES SÉRIES DE LA SOCIÉTÉ DE TCHÉ-KONG.—*Bis.*

1re. Réunion.		2e. Réunion.		3e. Réunion.		4e. Réunion.		5e. Réunion.		6e. Réunion.		7e. Réunion.		8e. Réunion.		9e. Réunion.		10e. Réunion.		11e. Réunion.	
Sommes versées au 1r. Associé.		Sommes versées au 2e. Associé.		Sommes versées au 3e. Associé.		Sommes versées au 4e. Associé.		Sommes versées au 5e. Associé.		Sommes versées au 6e. Associé.		Sommes versées au 7e. Associé.		Sommes versées au 8e. Associé.		Sommes versées au 9e. Associé.		Sommes versées au 10e. Associé.		Sommes versées au 11e. Associé.	
Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.
2e.	6. „	1r.	15. „	1r	15. „	1r.	15. „	1r.	15. „	1r.	15. „	2e.	13.8	3e.	15. „	4e.	15. „	5e.	12. „	6e	9.6
3e.	6. „	3e.	4.99	2e.	15. „	2e.	15. „	2e	15. „	3e.	13.8	3e	10.2	4e.	9. „	5e.	12. „	6e.	11.4	7e.	11.4
4e.	6. „	4e.	4.99	3e.	3.750	3e.	15. „	3e.	15. „	4e.	10.2	4e.	10.8	5e.	10.2	6e.	10.2	7e.	11.4	8e.	12.6
5e.	6. „	5e.	4.99	5e.	3.750	5e.	2.144	4e.	15. „	5e.	10.2	5e.	12.6	6e.	10.8	7e	10.8	8e.	12.6	9e.	13.8
6e.	6. „	6e.	4.99	6e.	3.750	6e.	2.144	6e.	„ . „	7e.	10.8	6e.	12.6	7e.	15. „	8e.	12. „	9e.	12.6	10e.	13.8
7e.	6. „	7e.	4.99	7e.	3.750	7e.	2.144	7e.	„ . „	8e.	„ . „	8e.	„ . „	9e.	„ . „	10e.	„ . „	11e.	„ . „		
8e.	6. „	8e.	4.99	8e.	3.750	8e.	2.144	8e.	„ . „	9e.	„ . „	9e.	„ . „	10e.	„ . „	11e.	„ . „				
9e.	6. „	9e.	4.99	9e.	3.750	9e.	2.144	9e.	„ . „	10e.	„ . „	10e.	„ . „	11e.	„ . „						
10e.	6. „	10e.	4.99	10e.	3.750	10e.	2.144	10e	„ . „	11e.	„ . „	11e.	„ . „								
11e.	6. „	11e.	4.99	11e.	3.750	11e.	2.144	11e.	„ . „												
	60. „		60. „		60. „		60. „		60. „		60. „		60. „		60. „		60. „		60. „		60. „

No. 7.

SOCIÉTÉ COMMUNE ET SIMPLE.

C'est la plus commune parmi les pauvres et les mendiants. Le capital social est souvent représenté par du riz, ou une autre céréale de consommation habituelle. Le nombre des associés est ordinairement de 11, mais on peut l'augmenter à volonté.

La durée de la société ne peut pas être de plus de 11 ans ni de moins de 11 mois au commencement desquels la société se réunit. On détermine dans la première réunion la quantité, d'argent, de riz, d'orge, de froment, ou autre matière de première nécessité, à fournir par les associés. Le bénéficiaire annuel ou mensuel paie le repas. Quelquefois le 1$^{r.}$ associé fournit les 11 repas, mais alors il est exempté de tout intérêt. Dans les sociétés où les mises sont par trop minimes, le thé remplace le repas. Le numéro de chacun n'est tiré au sort qu'au commencement de chaque réunion. Le tableau suivant suppose une mise annuelle totale de 50 taëls.

Chaque année le capital croît selon une progression arithmétique dont le rapport est 2, au profit du bénéficiaire, mais comme les 5 derniers ne paient que pendant cinq ans, ce sont eux en réalité qui profitent de cet intérêt. Les cinq premiers y perdent au contraire. Le 6$^{e.}$ ne gagne ni ne perd.

TABLES DES SÉRIES DE LA SOCIÉTÉ COMMUNE ET SIMPLE.

1re. Réunion.		2e. Réunion.		3e. Réunion.		4e. Réunion.		5e. Réunion.		6e. Réunion.		7e. Réunion.		8e. Réunion.		9e. Réunion.		10e. Réunion.		11e. Réunion.	
Sommes versées au 1r. Associé.		Sommes versées au 2e. Associé.		Sommes versées au 3e. Associé.		Sommes versées au 4e. Associé.		Sommes versées au 5e. Associé.		Sommes versées au 6e. Associé.		Sommes versées au 7e. Associé.		Sommes versées au 8e. Associé.		Sommes versées au 9e. Associé.		Sommes versées au 10e. Associé.		Sommes versées au 11e. Associé.	
Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.	Par le	Taëls et fractions.
2e.	5. „	1r.	7. „	1r.	7. „	1r.	7. „	1r.	7. „	1r.	7. „	1r.	7. „	1r.	7. „	1r.	7. „	1r.	7. „	1r.	7. „
3e.	5. „	3e.	5. „	2e.	7. „	2e.	7. „	2e.	7. „	2e.	7. „	2e.	7. „	2e.	7. „	2e.	7. „	2e.	7. „	2e.	7. „
4e.	5. „	4e.	5. „	4e.	5. „	3e.	7. „	3e.	7. „	3e.	7. „	3e.	7. „	3e.	7. „	3e.	7. „	3e.	7. „	3e.	7. „
5e.	5. „	5e.	5. „	5e.	5. „	5e.	5. „	4e.	7. „	4e.	7. „	4e.	7. „	4e.	7. „	4e.	7. „	4e.	7. „	4e.	7. „
6e.	5. „	6e.	5. „	6e.	5. „	6e.	5. „	6e.	5. „	5e.	7. „	5e.	7. „	5e.	7. „	5e.	7. „	5e.	7. „	5e.	7. „
7e.	5. „	7e.	5. „	7e.	5. „	7e.	5. „	7e.	5. „	7e.	5. „	6e.	7. „	6e.	7. „	6e.	7. „	6e.	7. „	6e.	7. „
8e.	5. „	8e.	5. „	8e.	5. „	8e.	5. „	8e.	5. „	8e.	5. „	8e.	5. „	7e.	7. „	7e.	7. „	7e.	7. „	7e.	7. „
9e.	5. „	9e.	5. „	9e.	5. „	9e.	5. „	9e.	5. „	9e.	5. „	9e.	5. „	9e.	5. „	8e.	7. „	8e.	7. „	8e.	7. „
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	50. „		52. „		54. „		56. „		58. „		60. „		62. „		64. „		66. „		68. „		70. „

Séries de la Société de Ningpo.

No. 1—14,500 sapèques.
„ 2—13,500 „
„ 3—12,500 „
„ 4—11,500 „
„ 5—10,500 „
„ 6— 9,500 „
„ 7— 8,500 „
„ 8— 7,500 „
„ 9— 6,500 „
„ 10— 5,500 „

Le No. 10 paie pendant 10 ans 5,500 sapèques soit 49,500; il recevra 100,000 sapèques moins 5,500 soit 94,500.

Le No. 9 recevra 100,000— 6,500=93,500
„ 8... ... ... 7,500=92,500
„ 7 ... ... 8,500=91,500
„ 6... ... ... 9,500=90,500
„ 5 ... ...10,500=89,500
„ 4... ... ... 11,500=88,500
„ 3 ... ...12,500=87,500
„ 2... ... ... 13,500=86,500
„ 1... ... ... 14,500=85,500

ARTICLE II.

NOTES ON THE COAL FIELDS AND GENERAL GEOLOGY OF THE NEIGHBOURHOOD OF NAGASAKI.

By THOS. W. KINGSMILL, Esq.,

Corresponding Secretary.

As I believe no attempt has yet been made to throw light on the age of the Coal fields of Japan the following notes may have an interest. The rock at Nagasaki itself may be called a coarse volcanic grit; large blocks of green-stone lying embedded in a mass of debris of every size and shape. Here and there these rocks seem to be penetrated by dykes of more modern igneous rocks, but the main masses though consisting of the ruins of plutonic formations show little sign themselves of volcanic action. The thickness of these grits must be very great: their base may be seen in a valley near the village of Tomats, and from that they seem to stretch as far at least as Tokeets some 13 miles distant. They form hills about 1,800 to 2,000 feet in height and seem to have a nearly constant dip at a very small angle to the W.N.W. To a visitor the most striking feature of these rocks is the peculiar manner in which the denuding forces have acted. Though as above stated the strata are nearly horizontal the rock may be seen jutting up into fantastic needles and castle-like structures. Some times a few feet from the edge of a precipice a gigantic needle will be seen rising far above the neighbouring trees, while again on the top of a rounded mass will appear a pile of jutting rocks almost like the bastions and walls of a mediæval fortress; and one mass on the road to Tokeets bears such a fantastic likeness to the head of an Egyptian Sphinx as to have earned the name of the "Giant's Head."

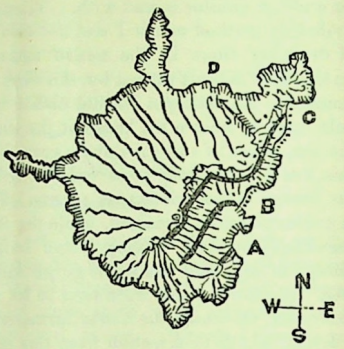
The lowest portion of this series may be seen in a valley to the South of Tomats mentioned above; here at a turn in the road soft shales appear dipping W.N.W. at an angle of about 15 degrees. A few steps further an excavation, driven in on the

slope of the strata and propped with wood, points out the entrance to an old coal mine, now abandoned; about a quarter of a mile on another similar is met with. Whether these mines were ever profitably worked or not I was not able to learn; but the expense of draining them in the native manner by means of flight of small water wheels turned by the feet of boys must have been excessive. At this spot I could obtain no fossils; but about a half mile further, near a tea house at the summit of a path leading to the sea, a bed of soft grey shale cropped up by the way side; in this was a beautifully preserved leaf bed containing in abundance the leaves of dicotyledonous plants. The colouring matter even in some instances remained, while the structure and veining were beautifully marked. Below these beds at the other side of the valley, at the side of a small gorge known as the "Mermaids, Dell" the lower rocks were seen to be mica schists altered and contorted, on which the newer formations rested unconformably.

Lying in a S.E. direction from this spot, at the entrance of the Bay of Nagasaki are the islands at Tako-sima, Koyaki and Iwo-sima; the first of these is about half a mile in diameter and forms an outlier of the coal series of the district; the rocks dip to the N.W. and expose on the S.E. face a fine section of the coal bearing strata. These are for the most part composed of a coarse concretionary sand stone of a sickly yellowish brown colour showing large concentric patches stained with iron. The whole series is more or less fossiliferous; stems, leaves and trunks of trees or stains of carbonaceous matter occuring all through the series. One large boulder lying on the beach disclosed the branching stem of a tree converted into coal, while all round the debris cast out from the mines fragments of trunks of all sizes up to 10 or 11 inches in diameter were lying. The interior of these stems was generally converted into a silicious stone retaining traces of structure, while the bark and the outer wood were for the most part carbonized.

At various depths in the mass, but in more abundant quantities near the coal seams, were leaf-bearing beds of blackish shale containing likewise traces of carbonized branches; at intervals too occurred bands enclosing nodules of impure iron stone, these bands however seeming not to exceed a few inches in thickness.

In the island of Tako-sima three principal beds of coal seemed to occur in a thickness of about 750 feet; of which the upper seemed to produce the best coal, and had been worked to a considerable extent. The island forms a sort of irregular triangle, the east face where the edges of the beds have been exposed by denudation presenting a steep escarpment, while the western portion of the island descends to the sea in a gentle slope corresponding with the dip of the beds. The outcrop of the beds is marked on the rough sketch in the margin, C representing the highest and most worked seam. Towards the extreme north-easterly angle of the island the outcrop of this seam approached the sea level, below which on its dip towards D it inclined; and here the lowest mine of the series had been worked, which served besides as a drainage shaft for the portion of the seam lying above it in level. The mode of working adopted was most peculiar, and in view of the lie of the beds probably the most unsatisfactory possible; long galleries heavily timbered to support the roof and sides were driven in from the outcrop on the slope of the beds, or at a declining angle about 12°, these passages were not even straight but twisted about from one side to the other to avoid obstacles on their passage. As the work went on the coal was simply extracted from the head of the gallery, which in every case was supported and lined with heavy masses of wood; no attempt was made by connecting passages to extract the coal at either side, the miners simply working ahead as long as they could remove the debris and coal from the extremity. Some of these descending adits driven into the hill were at least 400 yards in length, and yet at their extremity they might probably have been reached by a vertical shaft of 50 yards



in depth. The shafts were generally from 5 feet to 5 feet 6 inches high, and about the same width at bottom, tapering towards the top, though their size varied according to the circumstances of the case. The coal seams themselves were irregular in thickness, the coal appearing rather to lie in pockets than in an even seam, in some places I was assured that it was 8 feet in thickness while in others it dwindled down to 2 or 3 feet; thick layers of shale occurred in some places in the middle of the seam dividing it into two or more portions; sometimes the coal appeared altogether to cease, nothing but a wall of rock existing at one side, the result probably of slight shifts.

As stated above, the lowest shaft was used to some extent as a drain for the upper portion of the seam; its mouth opened about 60 feet over the level of the sea, but it seemed to dip some considerable distance under that level. The method of drainage adopted was as primitive as the other operations about the mines. Naked boys or men seated on a cross beam drove with their feet light water wheels about 5 feet in diameter; floats fixed on these lifted the water some two feet over a dam into the next level where the same operation had to be repeated, each lift was thus somewhat under 2 feet; I calculated there were eighty or ninety of these wheels at work in this shaft. To carry off the water from the upper shaft were small adits penetrating the rock but whether natural or artificial I could not say. The workmen said they were in hopes of getting this mine dry after some weeks work, when they would remove the wheels and work it further till the water again stopped them.

At intervals at the side of this shaft chambers for the accommodation of the workmen had been formed; when I passed down they had all retired for a midday rest, and seemed quite happy and comfortable, lying down asleep or chatting to one another. Although this mine was much more crooked than the others and there was no artificial means of ventilation, the air though damp was pure. Throughout the whole of the mines there was no escape of dangerous gases; indeed the little actual depth below the surface at which they were worked naturally left a sufficiency of natural channels for their dissipation. At the south east angle of the island the lowest visible seam A cropped out on the

beach, but had never been worked, probably owing to the expense of drainage, it lying altogether below the sea level; the second seam B was only partially worked, the uppermost C being the favourite.

On examining carefully, some time after my visit, the fossils obtained by me on the spot, I was much surprised to find them agreeing in character with those from the leaf bed at Tomats; the rocks are more compact than those at the base of the Nagasaki grits, but this identity in fossils points them out as portions of the same system, whether upper or lower the time and opportunities at my disposal did not allow me to ascertain. The leaves especially were beautifully preserved, bearing a considerable magnifying power. They seemed to consist entirely of dicotyledons in the specimens in my possession, though many of the trunks seem to belong to the palm tribe; ferns and the more familiar plants of the carboniferous formations in China and Europe were entirely absent, nor did I notice conifers or cycads. The flora seemed to bear a close resemblance to that of the "Brown Coal" of Germany the likeness extending to the families represented.

As dicotyledonous plants made their first appearance, so far as is already known, in the later secondary formations, and as even at this epoch the flora still retained for the most part its archaic physiognomy, being largely composed of the older cycads, ferns, calamites and conifers, we can hardly place the geological age of these rocks earlier than the Chalk of Europe. Indeed from the similarity of its fossils to the recent flora of the neighbourhood, it seems more probable that we must class the formation as belonging to the early Tertiaries.

In the neighbouring island of Koyaki coal mines have also been worked in similar rocks. Iwo-sima seems to consist of similar deposits, while the same formation appears to extend to the Goto Islands where large masses of shale and sand-stone dipping at low angles towards the W. and S. are seen at both sides of the Fukuye channel. The sand-stone used generally for building purposes at Nagasaki is evidently quarried from the same formation; it is of a disagreeable yellow brown colour and of a marked concretionary structure, large reddish spheroidal masses appearing everywhere in the mass, giving the walls built of it a most unpleasant appearance of insecurity.

Should the other coal fields of Japan prove to belong to the same series, we shall have in Japan one of the newest coal fields of any extent in the world; deposits of carbonaceous matter of equally late date occur indeed in many localities in Europe and America but they are generally of extremely limited area, and rarely if ever appear in the form of true coal, being usually in the state of lignite. Compared with the neighbouring country of China a curious contrast appears; in China most of the rocks belong to the palæozoic or early secondary ages; the later deposits in the central and sea board provinces at least being confined to a few sand-stones and clays; while in the island of Kiusiu deposits of solid rock thousands of feet in thickness have been formed and elevated in comparatively recent times.

ARTICLE III.

NOTIONS OF THE ANCIENT CHINESE RESPECTING MUSIC.

A COMPLETE TRANSLATION OF THE YOK-KYI,
OR MEMORIAL OF MUSIC, ACCORDING TO THE IMPERIAL EDITION.*

BY DR. B. JENKINS.

CHAPTER I.

The Source of Music: Sounds proceed from the emotional nature.

As to the source of Music, it is from some emotion of the human mind that every musical air takes its rise, and these emotions are produced by exterior objects. As soon as an object strikes one, an emotion is produced, and the effect is manifested by sounds. As sounds thus respond to sentiments, a great variety is produced, and from this variety, what are called musical airs are formed. These airs being enriched with harmonious sounds, and accompanied with battle-axes, and standards formed of feathers and long hair,—the insignia of military power, and implements of military manœuvre,—that is called music.

It is from airs that music is composed: but the source of music lies in the mind of man, as it is affected by outward objects. Therefore, when the mind is affected by sentiments of sorrow, the sounds elicited are pungent and hasty: when pleasure is experienced, the sounds drawn forth are mild and slow: when joy is experienced, the sounds enlarge and expand: when anger is felt, the sounds become coarse and wild: when the mind is subdued by respect, the sounds become direct and clear: when the mind is influenced by love, the sounds become harmonious and tender. These six sorts of emotion are not naturally inherent in the mind of man, but they are excited by exterior objects. Therefore it is that the ancient emperors watched over with so much care whatever might influence the mind of man.

* Read before the Society on 9th June, 1868.

It was on this account that the ancient emperors imposed ceremonial-rites, for instructing and directing the will of man,—that they established music, for the purpose of harmonizing sounds,—instituted laws for the purpose of effecting unity in human action,—and attached penalties, in order to obviate disorder. In the rites and in music, in penalties and in statutory regulations, there was but one object, and that was to produce a uniformity in the sentiments of the people, and to educe the doctrine of law and order in government.

It is in man's mind that every musical air finds its source. The passions being moved within, are consequently manifested without in sounds. When these sounds form a composition, that is called an air. When good order prevails, the airs breathe calm and joy,—the government then is well-tempered. When disorder prevails, the airs are filled with murmuring hate and impatient anger,—then government is perverse. When a nation is about to fall, its airs breathe sorrow and reflection,—the people are in straits: all which goes to prove that there is an intimate relation between the nature of the musical airs and the condition of the government.

The note *kúng* appertains to the sovereign; the note *shâng* relates to the magistrates; the note *kyóh* relates to the people; the note *chz* to work, and the note *yü* to things. If there be no disorder in these five classes, then the airs meet with no defect or obstacle. If the note *kúng* be not in order, the sound will be wild,—like the sovereign who is proud and conceited. If the note *shâng* be confused, then the sound is not correct,—like the minister who is not regular in his duties. If the note *kyóh* be irregular, then its sound will be mournful,—like the murmurings of the people under oppressive government. If the note *chz* be confused, then its sound will be piteous,—like the cries of unceasing involuntary servitude. If the note *yü* be out of order, then the sound will be weak,—like the weakness of the people overladen by the burden of excessive taxation. If the whole of the five notes be not in order, then there will be a confusing and overstepping of the proper bounds, which may be called carelessness. Thus the bounds between the respective spheres of the governing and the governed being mutually overstepped, the country is sure to fall, without any prospect of a restoration.

Every air finds its source in the mind of man. Music is intimately connected with the essential relations of beings. Thus,

only necessary for the object to be presented, and the man is influenced. Now, man being thus moved by outward objects, and the heavenly principle natural to him being destroyed, he becomes a constant victim to his fleshly desires; hence arises that rebellious and deceitful heart which is manifested, with its carnal and rebellious workings in act. Wherefore it is that the strong cheat the weak; the many oppress the few, the crafty take advantage of the simple; the bold affright the timid; the sick are not cared for and nourished; the infirm aged and tender youth, the solitary widower and the lonely orphan, do not obtain what their condition properly claims: courses which belong only to a state of the greatest disorder.

Therefore the ancient kings, in instituting rites and music, have fixed a mean to the inevitable tendencies of man. The coarse hempen garments, sobbing and tears, establish a rule in the different sorts of mourning. The bell, the drum, the shield and battle-axe, serve to regulate joy and pleasure. The rites of marriage, of assuming the cap of manhood, and taking the hair-pin, regulate the relations and the distinctions between man and woman. The ceremonial feasts between princes, and those between agriculturists, fix the relations of intercourse in their coming together.

The rites mark the classes and their reciprocal duties in the minds of the people: music harmonizes the different sounds among the people: laws require the observance of ceremonial rites and musical regulations, and punishments restrain their infraction: rites, music, punishments and government extend everywhere, and no one is permitted to oppose their requirements. Thus magisterial rule is complete.

Chapter II.

Music Discussed: In what it agrees with, and differs from, the Rites.

It is by music that unity of sentiment is obtained. It is by the rites that the requisite distinctions in society are established. Unity produces reciprocal affection, and distinctions produce appropriate respect. When music is in excess, the affections are not kept within due bounds; and when ceremonial rites are

in excess, it tends to estrangement. The legitimate tendency of music and the rites is, to produce harmony of sentiment and elegance of manners.

In establishing a ritual etiquette, the noble and the ignoble receive their appropriate rank; but in uniting all by means of music, concord between the higher and lower classes is produced. It is by the manifestation of liking for what is good, and aversion toward what is evil, that a distinction is put between the wise and those devoid of wisdom: it is by chastisement that a restraint is put upon the oppressor; and it is by raising the meritorious to dignities, that an equitable administration is indicated. It is by benevolence that the ruler produces reciprocal affection, and by justice that he corrects all impropriety. Thus it is that good order is to be carried out among the people of the nation.

Music comes from within, and the rites find their accomplishment without. As music comes from within, it is peace-inspiring: as the rites arise from without, they are cultivating and adorning. Music is by nature easy; and the rites generally present no difficulties.

When music prevails, then all reproaches cease. When the rites flourish, then there are no contentions. When the empire is governed by condescension, it may be said that it is by music and the rites that such a result is attained. When oppressors of the people do not arise; when the feudal lords assist, and submit to, the emperor; when the implements of warfare are laid aside; when the five kinds of punishment fall into disuse; when there are no grievances on the part of the people, and the emperor is not irritated,—in such a state of things, it is because music generally pervades the nation. When the sovereign fulfils the duties of filial piety, and makes clear the distinction between the aged and the young, so as to incite by his example a respectful disposition in all who live within the four seas,—when the sovereign acts thus, then it may truly be said that the rites are widely disseminated.

The harmony of music is like that between heaven and earth. The gradation in the rites is similar to that which exists between the different beings in heaven and on earth. It is because of harmony that beings do not perish: and it is because of the gradation, that certain sacrifices are offered to Heaven, and different ones to Earth. In the visible world there are the rites and music, and in the unseen world there are the spirits of the

dead, and the spirits deified. Such being the case, if music and the rites prevail in the empire, every body is respectful and affectionate.

In the rites there are many details to be attended to, but the object of all is to promote respectfulness: in music there are a variety of compositions, but their object is to promote mutual affection. The business of the rites and of music is, then, similar. Therefore the enlightened sovereign carries on what his predecessors commenced; yet matters in detail take the impress of the times, and the names of musical compositions change to suit the exigency created by the merits of those in whose honor they are performed.

The bell, the flageolet, the drum, the sonorous stone, the plumed-standard, the flute, the shield and the battle-axe, are the implements used in musical performances. The crookedness and uprightness of the person, the inclination and elevation of the head; the relative position of the ranks of persons; the measure of the forward or retrograde steps; the slowness or celerity of the movements,—these are the exterior appliances of music. The sacrificial vases called *fú*, *kwei*, *tsú*, and *teu*—according to the established regulations—are the vessels of the ritual ceremonies. To ascend and descend, to take one's place above or to wait below; the assuming a reverential demeanor, and showing the beauties of one's habiliments,—these are the elegancies of the rites.

He who knows the essential nature of music and of the rites, can execute. He who knows their external elegancies can imitate. He who by his own personal knowledge can execute, may be accounted to be possessed of the noblest faculties: and he who can imitate the productions of others may be called intelligent:—so, those who are intelligent, and those who are possessed of the noblest faculties, may be called imitators and inventors.

The harmony of music is like that which exists between heaven and earth. The order in the rites resembles that which exists between the different beings in heaven and on earth. By reason of that harmony all beings are produced. By reason of that order and gradation all beings have their separate functions. Music is an imitation of what the heavens originate. The rites are an imitation of the laws existing on the earth. If the laws be faulty, the result is disorder; if the executive be faulty, the result is oppression. Understand thoroughly the heavens and the earth, and then you will be able to practise successfully the rites and music.

to know sounds, without knowing airs, is to be like birds and beasts. To know airs, without knowing music, is the province of the vulgar herd of mankind. It is the province of the superior man alone to understand the principles of music.

Therefore sounds are studied, in order to know airs; airs are studied, in order to understand music; and music is studied, in order to know how to govern. In this manner political science is complete. Thus, we cannot discuss the nature of airs with a man who does not understand sounds; and we cannot discuss music with one who does not understand airs. But a knowledge of music is closely akin to that of the ceremonial-rites. When the ceremonial-rites and music are obtained, it may be said that virtue is possessed,—for the word virtue may be defined—a possession.

But the magnificence of music does not demand that we should execute airs perfectly; as the rite of offerings does not demand that an exquisite flavor should be given to the viands offered. Even the lute which is played in the temple of ancestors has only cords of red silk and a few perforations in the sounding-board. There one person gives the keynote of the tune, and only three others respond thereto,—thus leaving out other parts of the harmony. In the ceremony of offering viands, water is preferred to wine; the sacred vases contain only raw fish, and the soup has no seasoning,—so leaving out many of the flavors.

Thus it is that in instituting the rites and music, the ancient emperors did not seek to satisfy entirely the appetites of the mouth and stomach, of the ears and eyes, but they sought to teach the people to hold the mean in the love of what was good and aversion toward what was evil, in order to lead men into correct principles.

Man is naturally peaceable. This is his heaven-conferred nature. Influenced by external things, carnal desires are excited. It is by the approach of external things that the mind acquires knowledge, and that liking and aversion are manifested. If sentiments of liking and aversion have no proper rules of constraint within, man will be led into error by the influence of outward things, and cannot return to personal virtue, and then the original virtuous nature implanted in him by Heaven will be destroyed.

When men are ceaselessly moved by external things, and their likings and aversions have no proper rule of restraint, then it is

The spirit of music consists in discussing the requirements of the component parts, without injury to the exigencies of any one of them. Joy and affection are its outward affairs. The maintenance of the mean, and undeviating rectitude, are the substance of the rites: seriousness, veneration, respect, and deference, are its laws. So the rites and music have a broad significance, and are not confined to the metals and stones of which their instruments and utensils are composed, and that produce only sounds and airs,—these being only things used in the ancestral temple, and in the sacrifices to the tutelary gods of the land and of grain, and in the services offered to the mountains and rivers, and to the spirits of the dead and of those who have been deified—things altogether within the province of the mass of the people.

Chapter III.

The Principles of Music: How the Rites and Music were settled and regulated.

When the sovereign has accomplished a work, he has a musical composition made to perpetuate the remembrance thereof. When his government is firmly established he regulates the ceremonial rites. If the work be great, the music is perfect. Should the government extend everywhere, the rites are complete. The manœuvring of shields and battle-axes does not constitute perfect music. The offering of boiled flesh in sacrifice does not constitute an all-pervading sacrifice.

Under the Five Emperors, * as the epochs differed in nature, so the music was not uniform. Under the Three Kings, as the ages differed, so the same rites were not followed. Music when carried to excess produces sorrow: and coarseness in the rites induces a perfunctory execution of them. But to give profound attention to music without inducing sorrow, and to give full attention to the rites without inducing carelessness,—it is only he who is possessed of the highest mental and moral endowments that can do thus.

*Those styled the Five Emperors, were *Fúh-hyi*, whose date is put at B. C. 2852: *Shun-nung* 2737 : *Hwang-ti* 2697: *Yau* 2357 ; and *Shun*, 2255.

Those styled the Three Kings are : *Yü*, whose reign is placed at B. C. 2205: *Táng*, 1766; and *Wun* and *Wú* as one reign, B. C. 1134 to 1115.

The heavens are high above, the earth is far below, and the multitude of creatures which occupy the interval between them have the corresponding gradation in their modes of existence; hence the institution of the rites fixes the distinction between the honorable and the mean among men. Heaven, earth and all things unceasingly revolve, and their combined action gives rise to all creations and transformations. So, music attunes and harmonizes the emotional nature of man,—it combines the virtues and nourishes them,—and thus it flourishes. In spring everything puts forth; in summer everything increases—an emblem of benevolence, which incites to the love of mankind. In autumn we gather in our harvests, and in the winter we store them up—distinguishing their qualities—an emblem of justice, which gives to every one what is proper to his relation. Benevolence is akin to music, for it unites and harmonizes; and justice is akin to the rites, for it decides and apportions what is befitting.

Music is intimately connected with the harmony of the sentiments. It follows the superior principle in nature (the *yáng*) and is directed toward heaven. The rites distinguish what things are proper; they depend upon the inferior principle in nature (the *yin*), and are directed toward earth. Therefore the ancient sages created music, to respond to heaven; and instituted the rites to respond to earth. When the rites and music are executed with perfection, heaven and earth equally accomplish their respective duties.

The heavens are high above, and the earth is below. The distinction of sovereign above and subject below is in imitation thereof. So mountains and valleys are spread over the earth, and it is in imitation of them that we have the distinctions of noble and plebeian among men: and the principle of movement and the principle of repose constantly succeed each other appropriately, as the lesser and greater rites make the requisite distinctions. The five social relations (of king and minister, father and son, husband and wife, elder and younger brother, friend and companion) collect together the individuals in relative order: the rites separate things according to their species—and this is because the decreed destiny is not alike for all. There are various figures in the heavens, and various forms on earth, and these serve as models *for ornamenting costumes and constructing buildings*—so the distinctions established by the rites are like those which exist between heaven and earth.

The subtle fluid *(ky'i)* of earth mounts upward, and the subtle fluid *(ky'i)* of heaven descends: the two principles *(yin* and *yáng)* come mutually into contact: the heavens and the earth act reciprocally on each other. To move beings there is the thunder: to make them spring there are the wind and rain: to keep them in motion, there are the four seasons: to warm them up, there are the sun and moon. By means of these, all beings have their birth and development: so, then, the music of the sage is like the harmony existing between heaven and earth.

When the transformations of heaven and earth are untimely, then there is no birth. When the requisite distinctions between male and female are lost sight of, then confusion is complete. So, when music is untimely, harmony is violated; and when the rites fail to make the relative distinctions of duty, disorder results.

The influence of the rites and music reaches to heaven, and pervades the earth; it runs through the *yin* and *yáng*—the inferior and the superior principles of nature,—and even pervades the invisible world of souls and spirits; it reaches to the highest elevation and most extreme distance, and sounds the most impenetrable depths.

Music holds the place of the great original principle—Heaven: the rites hold the place of created beings—Earth. In showing itself without repose music is like heaven, which is in perpetual motion: in showing themselves immovable, the rites resemble earth—which is without motion. On the one part unceasing movement, on the other constant repose—all phenomena being embraced in the interval between the two,—therefore it is that the men of the most exalted virtue speak only of the rites and music—for the doctrines of music and the rites are like the doctrines of heaven and earth.

Chapter IV.

The uses of Music to the Nation: Music a recompense of Virtue.

In ancient times the emperor *Shun* made a lute with five silken strings, in order to chant the Ode "*Nán fáng*" or "South wind." *Kwéi*, his minister, began to regulate the sort of music which, as a reward, was allowed to the feudal barons. Therefore it is that the emperors, in determining the music that might be used as a

reward by the feudal lords, recompensed the virtues of which they were possessed. If their virtue was great,—if they taught the people to esteem highly agriculture, so that the harvests were ripe at the proper time, then a musical recompense was granted to them. So, when a feudal baron laboured assiduously in the good government of the people, the successive files of performers allowed in the evolutions accompanying his music, extended to a great distance; while he who was remiss in the government of the people had but a very limited allowance in the files of performers accompanying his music. Hence it was only necessary to glance at the display accompanying a baron's music in order to ascertain the amount of his virtue,—as it was only necessary to hear the posthumous designation of one deceased, in order to know what his actions were during his life.

The music of YAU, called the *Tu-chang*, displayed the virtues of that ancient emperor. The music of HWANG-TI, called *hyien-chz*, shows that all was complete under that emperor. The music of SHUN, called the *Shau*, intimates the continuance of the virtues of his predecessor. The music of *Yü*, called *hya*, indicates the greatness of *Yü*. The music of the YIN and CHEU dynasties exhausts all that appertains to human affairs.

The law of heaven and earth is such, that if the cold and heat do not come at their appropriate season, maladies result: if the wind and rain have not their due limits, famine results. Now, instruction is to the people just like the cold and heat: if it be not given at the proper time, great damage results. Public affairs are to the people just like the wind and rain: if the proper limits be not observed, no good results. So the ancient emperors have given music for instruction, in order to imitate the lessons of heaven in their government of the empire, and the people, likewise, have imitated the virtuous example of the sovereign.

By the use of grain we may nourish hogs, and also produce wine. The proper use of wine is not necessarily productive of evil and misery; but when it is so taken as to be productive of quarrels and lawsuits in abundance, then it becomes the cause of distress. Wherefore, in the times of the ancient kings, wine being used in the ceremony, manifold compliments between host and guest were passed at each cup; but that they could drink for a whole day without intoxication, this was the warning of the ancient kings against the unhappy effects of wine. Wherefore feasts are for the

enjoyment of the guests: music presents the image of virtue: the rites impose obstacles in the way of excess.

Thus, whenever the ancient emperors had any occasion of great mourning, they did not fail to observe the rites, in order to moderate their grief; whenever any occasion of great rejoicing occurred, they did not fail to observe the rites, in order to restrain their joy: thus it is that the rites alone restrain grief and joy within their proper bounds.

Chapter V.

Music described: Its nature and effects.

Music is one of those things in which men of the highest virtue and endowments find pleasure, for it has the power of making the people good, of moving men in their inmost depths, and of changing the entire manners of the age. Therefore the ancient emperors promulgated music as a branch of instruction.

The people possess corporeal organs and intellectual faculties, which constitute their nature; but grief and joy, pleasure and anger, are emotions of the mind which are not constant. If an emotion arise, excited by some exterior object, then the emotion of the mind is immediately manifested without. Therefore it is that when we find the monarch to be a person of small capacity, and the airs composed dry, hasty, abrupt and meagre, we may conclude that the people are thoughtful and sorrowful. When the ruler is liberal, cordial and considerate, and the airs are full, broad, elegant and orderly, we may conclude that the people are prosperous and joyous. When the ruler is rude and fierce, and the airs begin with sounds which are coarse and shrill, conclude with angry and wild sounds, and have loud and full sounds in the centre, it may be determined that the people are firm and courageous. When the ruler is pure and upright, and the airs compassionate, courteous, stately, dignified and solid, it may be inferred that the people are rigid and respectful. When the ruler is high-minded and liberal, and the airs flowing and harmonious, it may be concluded that the people are tenderly affectionate. When the ruler is wild and unsettled in disposition, and crooked and depraved in character, and the airs produced are winding, jerking and hasty, it may be concluded that the people are abandoned to the lowest passions.

Therefore it is that the ancient emperors took the sentiments of human nature as the essential basis of music, and that they examined the rules of different sounds and instruments, in order to determine what was most suitable for the different rites. Music is calculated to assist the harmony of the creative energy (*ky'i*), and to direct human actions in the paths required by the five relations. It prevents a too great development on the part of the superior principle (*yáng*) in nature, and a too great retirement on the part of the inferior (or *yin*) principle: it prevents the too firm in character from running into anger, and the too mild in disposition from running into fear. These four effects extend and unite in their proper mean, in order to manifest themselves immediately without,—all quietly holding their respective places, without at all infringing one upon the other.

Afterward, the ancient emperors established colleges and literary degrees; they gave development to music, the rules of which they had fixed, and the beauties of which they studied, in order to consolidate natural virtue; they united and harmonized the weaker and stronger sounds, they gave the beginning and the end their relative importance, so as to produce in music a representation of human affairs. In short, they so managed that the doctrine which regulates the duties between near and distant relatives, between the noble and the plebeian, between the elder and the younger, between males and females, were plainly displayed upon all these points in music: wherefore it is said that by means of music the profoundest depths may be seen.

When the land is worn out, plants and trees cannot attain their growth; when the waters of the rivers are disturbed, the fishes and turtles cannot attain their proper size; when the creative energy is decayed, then the natural productions cannot attain perfection; when the age is corrupt, then good principles are buried, and music has become depraved.

Therefore it is that when the music is in a disordered state, though there be pleasure, there is no quiet enjoyment; and there is a neglect of the proprieties of life, a floating away with the current of disorder, and a forgetfulness to come back to the fundamental principles of good order. In this state of unbridled license, when difficulties press, then the baser passions rule, moving the lowest propensities, to the destruction of the harmony of virtue; wherefore the sage despises and abandons such music.

Chapter VI.

The forms of Music: Effects of Depraved and of Correct Music.

Every depraved sound moves the mind of man, and immediately the vicious inclinations respond thereto. When the vicious inclinations are incited to action, then depraved music flourishes. When well-regulated sounds move the mind of man, then the good inclinations in man respond When the good inclinations are set in action, harmonious music flourishes. Every beginning has, then, its legitimate response; the disobedient and, the depraved, the crooked and upright, each reverts to its legitimate department, and the natural law of all things is that each, according to the law of its species, acts one upon the other.

Wherefore, the endeavor of the sage is, to return toward those sentiments which nature implanted in him at his birth, so as to rectify his thoughts. He compares the nature of things, in order to perfect his actions. So, he will not permit lewd sounds nor unchaste sights to have access to his ears or eyes; nor will he permit vicious music or depraved rites to have access to his heart; he will not permit the influence of idleness and depravity to affect the demeanor of his person; but he so acts that his ears, eyes, nose, mouth,—his intellectual faculties and his bodily organs,—all follow a course of rectitude, in order to accomplish what is his legitimate duty.

Then he puts forth sounds and airs, to which are added the graces of the lute and the lyre; evolutions are made with the shield and battle-axe; the flourishes with the tall standards ornamented with plumes, and with those having long flowing hair, give additional ornament,—while these are followed up with the sound of pipe and flute. It is thus that the sage strives to throw splendor upon his sublime virtues—of which music is the exponent,—and to assist the harmony of the four seasons, in order to bring into bold relief the intimate relations existing between music and all created things.

Thus, the splendour of music is the image of heaven; its amplitude is the image of earth. The beginning and the end are the image of the four seasons. The circuitous evolutions accompanying the music, are the image of the wind and rain. The five notes, imaged in the five colors, form a harmonious whole, in which there is no confusion. The eight winds follow after the

twelve notes of the gamut, in which there is no disorder. The different degrees of the musical scale attain a certain number, which is without any variation. The weak and the strong sounds combine perfectly. The beginning and the end mutually produce each other. The air and the accompaniment, with their clear or cloudy sounds, succeed each other as conductors.

Therefore it is, that when music is generally taught, the duties of the five relations are thoroughly comprehended; the ears and the eyes are quick and penetrating; the animal spirits and the emotional nature are in perfect calm; public manners and customs are reformed, and the whole empire enjoys profound tranquillity.

Wherefore it is said that music is joy. But for the sage, joy consists in the acquisition of virtue, while the joy of the mean man consists in gratifying his carnal appetites. In regulating the appetites by means of virtue, there is no disorder in them; but in yielding to the appetites, by a complete forgetfulness of virtue, man is thrown into that state of doubtful uncertainty where there is no true joy. Hence it is that the superior man reverts toward those sentiments of good which are his by natural endowment, in order that he may rectify his thoughts, and that he may extend the sphere of music, so as to complete his instruction,—for if the sphere of music be extended, the people are directed toward virtuous methods, and then the happy effect of the sovereign's virtue may be seen.

Virtue is the great principle of human nature. Music is the budding forth of virtue. Metals, stones, silk and bamboo furnish material for musical instruments. Verse serves to express the thoughts: singing modulates the voice: the evolutions set the countenance in movement. These three things take their origin in the mind, and the instruments of music follow the outward expression.

Hence it follows that the internal nature of music is deep, and that its external manifestation is brilliant. It may be compared to that expansive energy which wonderfully produces all things. The harmony however, must be concentrated inwardly, in order to flourish outwardly, for music is a thing which cannot be falsified.

Music is the product of the heart's emotions. Sounds and airs are the body of music. The elegance and the measure are the ornaments of the sounds. In the producing of music, the sage begins by moving his own heart, and then strives to reproduce

this emotion in music; and lastly, he regulates the adornments. For this reason it is, that the evolutions are preceded by sounding the drum, in order to awake to preparation. Three paces are then taken, by way of prelude. The drum is again struck, as the signal for moving forward. When the performers are in disorder, they are recalled to their respective places by the globular bell; and, how rapid soever the evolutions may be, no unfortunate accident occurs, and how profound soever the music may be, there is nothing concealed. When in enjoying music alone, one enjoys it inwardly, and does not grow weary of the pursuit of virtue,—then all the virtues which music nourishes are exalted, and of all that might be coveted, nothing is selfishly appropriated. Thus the sentiments of the sage appear, and propriety is clearly established. Let music be generally disseminated, then virtue is duly honored—the noble man is led thereby more to the love of good, and the mean man thereby hears his errors reproved. Hence it is said—among the doctrines for educating a people, music is of great importance.

Music is an overflowing of the sage's virtue upon the people, while the rites are the recompense of gratitude. Music is the rejoicing in our virtuous origin; the rites make us go back to the fountain of our benefits. Music illustrates virtue; the rites are a return of gratitude—by these we turn back to the source of our benefits. Thus what is called the great, or golden coach, is the emperor's chariot; and the standard of the emperor has a dragon and nine pendants; and the divining-tortoise of the emperor has a blue or black border. The chariot is followed by a herd of oxen, and a flock of sheep, from which ceremonial presents are made to the feudal barons.

Chapter VII.

The Sentiments of Music: The forms may change—the sentiments change not.

Music takes hold of those sentiments of human nature which are not subject to change. The rites are founded in principles not liable to variation. Music unites men by general sympathies—the rites distinguish men by their different claims. So, when we say "The rites and music," we mean accord with the sentiments of mankind.

It is the province of music to make us investigate the radical nature of things, and to cause us to comprehend the various transformations taking place. It is the province of the rites to make manifest sincerity, and to drive away dissimulation. The rites and music are akin to the nature of heaven and earth: they penetrate the virtue of the gods, bringing down the gods which are above, and sending up the spirits from below; and subjecting to our decision those recondite and manifest principles which rule in all things, and govern the respective duties of father and son, of sovereign and subject.

Therefore it is, that when great men seek to elevate appropriately the rites and music, heaven and earth will respond to their efforts. The heavens and the earth then delight in perfect accord; the inferior (*yin*) and superior (*yáng*) principles of nature mutually harmonize; the celestial and terrestrial fluids cover and nourish all things; afterward plants and trees grow in abundance; the flower-buds burst into bloom; the birds throng and flutter about; quadrupeds come forth in abundance; insects awake from death to life; the birds deposit and hatch their eggs; hairy animals bring forth and nourish their young; among the viviparous there are no miscarriages; and among the oviparous there are no cracked eggs which fail to produce their young, and all this is nothing but the harmony of music as it reverts upon the objects of creation.

What is called music does not consist in the sounds *hwang chúng* and *ta lyü*, nor yet in the stringed instruments, the song or the flourishing of standards,—for in music these things stand last in importance; wherefore the evolutions are performed by young lads. The preparations of the sacrificial or festal table, the display of vases and dishes, the arrangement of the vases for rice and for meats, the art of ascending and descending in conformity with the ceremonial rules, all these are matters of secondary importance in the rites, wherefore there are persons employed to take the charge of these things. The music-master understands the nature of sounds and of verse; and for this reason, with his face turned to the north, he attends to the playing of his instrument, without giving his attention to the recondite meaning of the music. The people employed in the ancestral temples understand the ceremonial in use in the temples, but do not fathom the deeper significance of the rites, wherefore they only attend to keeping in the rear of the living representative of the ancestor.

The officers attending to sepulchral ceremonies, are acquainted with the rites appertaining thereto, but their business is confined to keeping behind the person who conducts the mourning.

Hence it is, that the perfecting of virtue occupies a superior rank, while mere talent in the exercise of any art takes an inferior place. He who practises virtue always goes in advance, and the man of business follows. Wherefore it is that the ancient emperors placed the one above and the other below, putting the one before, and the other after; and thus it was that they succeeded in ruling the empire.

Chapter VIII.

Ancient and Modern Music: The Duke of Wéi's conversation with Tsz-hya thereon.

Prince Wun, of the kingdom of Wéi, inquired of Tsz-hya, saying—"Can you tell me how it is that, while attired in ceremonial robe and cap, I am listening to ancient music, I am constantly afraid of going to sleep, while, when listening to the airs of *Ch'in* and *Wéi* I experience not the least weariness?"

Tsz-hya replied—"Now, in ancient music the advance movement is made in an orderly manner, and the retrograde likewise, —there is accord, exactness—hence expansion. The stringed instruments, the gourd instruments, and the metal-tongued instruments, all follow the strokes of the drum. The beginning of each piece is announced by the drum. When the performers return confusedly to their respective places, it is to the sound of the *nau*—or globular bell. Any disorders arising, are corrected by blows on the *siang*—or husk-sack. Movements which are too precipitous are corrected by striking on the *yá*—or barrel-drum. The sage who fully comprehends these things, discourses upon and eulogises ancient music: but this is not all; he makes use of it to renovate his own person, thereby favorably affecting his own family and the whole empire. These are the effects of ancient music.

"Now in the new music of the present age, there is no order either in the advance or retrograde movement; it overflows with lascivious sounds, in which the hearer sinks down, without stopping. The dwarfish and monkey-like performers mix up the sexes, and forget the distinctions of father and son: such

music is entirely unfit for discussion, and cannot be spoken of with ancient music. Such are the effects of modern music.

"Now, O prince, that about which you were inquiring is music, but you are fond of the airs. Now, although music has considerable affinity with airs, yet it is not the same thing."

Prince WUN then said—"I venture to ask how that is?" TSZ-HYA replied—"In antiquity, when heaven and earth followed their laws, and the four seasons came at the appropriate time; when the people were virtuous and the harvests abundant; when pestilence did not scath, and extraordinary calamitous phenomena did not affright,—that was what we call a state of great prosperity. After such a state of things, eminent sages arose, who determined the duties between father and son, between sovereign and subject, and they made use of this as the lever for moving society. Now as the lever was correctly true, the empire was thoroughly settled. When the good order of the empire was thus established, then the six notes were perfected, the five tones were harmonized, instruments were introduced, and songs, odes and eulogies were composed: these may be called virtuous airs; and it is only virtuous airs that can be called music. Hence it is said in the Book of Odes:—

"'Pure and tranquil! how harmonizing was the fame of *Wang-kyi's* virtue,—
A virtue which was widely displayed, and which illuminated the world brilliantly:
With perspicacity to discern, and equity which could rightly award;
How easy to him were the functions of instructor of the age;
How eminently was he fitted to be the sovereign to reward and punish;
And to lead to prosperity this great country:
The hearts of the people he could render docile,
And in harmony unite the governing and the governed.
When we come to *Wun-wang*, still more,
His virtue was not regretted, as extinct with him;
Since, of the happiness imparted by the Supreme Being,
There remained still enough for his descendants to the latest generation.'

"Which is to the same effect as what has been stated.

"Now, the airs of which you are fond, O prince, are they not lascivious airs?" Prince *Wun* said—"May I venture to ask

whence come lascivious airs?" *Tsz-hya* replied—"The airs of *Ch'in* lean toward depraved thoughts. The airs of *Súng* are full of lewd ideas. The airs of *Wéi* are lively, and inflame lustful passions. The airs of *Tsí* excite arrogance and pride. All four kinds tend to drown men in the pleasures of lust, and are an injury to virtue, for which reason they are not used in the sacrifices.

"It is said in the Odes—'Music in which the *súh* and the *yúng* accord, is heard with pleasure by our ancestors.' *Súh* means reverential deference, and *yúng* means harmony. Now, where respect and harmony prevail, what affair may not be accomplished?

"He who governs men should pay great attention to his likings and to his aversions; for so soon as the sovereign gets fond of anything, the magistrates immediately do the same, and so soon as those in high places do anything, the people immediately imitate them. The Ode says—'There is nothing easier than to lead the people into good or evil, by the example set': which is equivalent to what has been said.

"When music had been instituted,—the instruments called the *tau*—or hand-drum; the *kú*—or common drum; the *ky'ang*—or wooden-tapper; the *kyih*—or sonorous lion; the *kyün*—or earthen-egg pipe; and the *chz*—or flute, were constructed. These six sorts of instruments produced sounds in harmony with virtue. The bell, the sonorous stone, the *yü* pipe, and the *seh*—or twenty-five stringed lyre followed, to harmonize with them. Shields, battle-axes, and shafts ornamented with streaming feathers or flowing hair served for the manœuvres. These were the implements made use of at the sacrifices in the ancestral temples of the ancient kings: such also were the implements made use of at those convivial feasts where the host drank in honor of the guests, and the guests returned the compliments of the host. It was these things that served among the magistrates, to distinguish between the more and the less honorable, so that each obtained what was suitable to his rank and merit. These were the things which served to proclaim to after generations the distinctions established between the honorable and the plebeian, and the grades between superiors and inferiors.

"The sound of the bell goes *k'ung—k'ung*. This sound reminds the ruler of the standard of the commanding general—which moves the troops. This standard inspires courage, and leads to

valorous deeds. When the sage ruler hears the sound of the bell, then he thinks of his valorous generals. The sound of the jadestone goes *ching—ching*. This clear sound recalls the necessity of clear discrimination and accurate judgment. The equity of character which is the sequence, enables one to confront death. When the sage ruler hears the sound *ching*, then he thinks of his generals who die in defending the frontiers of his kingdom. Silk cords produce a dolorous sound. Grief causes one to be given up to a single idea. Occupied by one idea, the mind is recalled to virtue. When the sage ruler hears the sound of the lute and the lyre, he then thinks of his magistrates whose minds are set entirely upon the proprieties pertaining to their administration. The sounds of bamboo instruments remind one of the overflowing of waters. Overflowing waters remind one of the vast assemblages driven together thereby. When the ruler hears the sound of the bamboo instruments called the *yü* and *sáng* pipes, and the *siau* and *kwán* flutes, he immediately thinks of his magistrates who know how to bring men together. The sounds of drums and tambourines are clamorous. By clamorous sounds troops are moved. The movement causes them to advance together. When the ruler hears the sound of the drum or tambourine, he immediately thinks of his leading generals. Thus, when the wise ruler listens to music, he does not confine himself simply to the more or less sonorous nature of the sounds, but he thinks also of their relative affinities. He whose mind is employed thus, is not in danger of becoming drowsy."

Chapter IX.

Ancient and Modern Music, continued: Conversation between Ping-meu Kya and Confucius.

Ping-meu Kya being seated by the side of *Confucius*, the latter began to speak of music, saying—"In the musical performance called *Wú*, why is there so much time occupied in preparation," —after the drum has given the signal to begin? *Ping-meu Kya* replied—"It represents the concern lest the general assent of the leaders and people should not be obtained." "And what," continued *Confucius*, "means the long-continued strain, resembling continued desire, which follows the drum's warning sound, and

precedes the evolutions?" *Ping-meu Kya* replied—"It is the fear lest the feudal barons should not arrive in time to assist"—in the grand undertaking of punishing the tyrant *Cheu*. "And why," again inquired *Confucius*, "is there then such a precipitate movement of hands and feet?" "Because," replied *Ping-meu Kya*, "the time for going into action has arrived." "And why," continued *Confucius*, "in the same piece, when the time to kneel comes, do they kneel upon the right knee, and lift the left?" *Ping-meu Kya* replied—"That is not the way of kneeling proper to the *Wú*." "Why those sounds," said *Confucius*, "which seem as if they were hankering after the *Shâng* dynasty?" *Ping-meu Kya* replied—"Those sounds do not belong to the piece *Wú*." "If those sounds," replied *Confucius*, "do not properly belong to the piece *Wú*, whence are they?" "They come," replied *Ping-meu Kya*, "from some director of music who has lost the correct tradition. Were it not so, it would result, then, that *Wú-wang* had barren thoughts"—a conclusion which is inadmissible. "You are right," said *Confucius*, "I have heard several of the great officers of *Cheu* relate the same thing as yourself."

Ping-meu Kya arose, left his place, and respectfully addressing *Confucius* said—"The tardiness which accompanies the prelude, in the performance called *Wú*, thanks to your kindness, I now fully comprehend. But may I venture to inquire of you how it is, that after the first delay there is yet a second delay of longer duration?" *Confucius* replied—"Sit down, and I will tell you. Musical performances represent events which have had their accomplishment. In this piece, there is, at one time, a general raising of spears and shields and standing erect like a mountain immovable. This represents the waiting of *Wú-wang* for the feudal lords to arrive. The rapidity with which the performers move their hands and feet, images forth the spirit which actuated *Tai-kung*. The general confusion represents the battle; the general resumption of places, shows how the duke *Cheu* and the duke *Shaou* governed the people.

"Now, the musical performance named *Wú* represents first, the starting out toward the north—as *Wú-wang* did when he went to inspect the troops for the expedition against the tyrant of the north, *Cheu*. The second part represents the extinction of the *Shâng* dynasty. The third part represents the return toward the south—in imitation of *Wú-wang* after the defeat of the tyrant *Cheu*. The fourth part represents the establishment of

king *Wû's* rule over those princes of the south who were reluctant to submit to his authority. The fifth part represents the division of the administration between the dukes *Cheu* and *Shau*, the former ruling the left hand or east, and the latter the right hand or west. The sixth brings us back to the starting-point—which is to represent the elevation of *Wû-wang* to the imperial throne. The two champions making four attacks, represent the indomitable power of king *Wû*, now spread over the middle-kingdom. The two officers (holding wooden bells) on the flanks of the troops, and urging on the advance, represent the urgency of *Wû-wang's* undertaking in order to release the suffering people from the oppression of the tyrant. The long standing at the commencement, represents the waiting of *Wû-wang* for the arrival of the feudal barons, to begin the attack on the tyrant.

"Moreover, have you alone not heard the story of the battle on the plains of *Moh?*..... *Wû-wang* having vanquished the dynasty of *Yin*, and having arrived at the capital of *Shang*—in the district of *Méi*—ere he had alighted from his chariot, he had already invested the descendants of *Hwang-tî* with the principality of *Kyi*; he had invested the descendants of the emperor *Yau* with the principality of *Châh*, and had invested with the principality of *Chun* the descendants of the emperor *Shun*. Having descended from his chariot, he invested the descendants of *Yü* of the *Hya* dynasty with the principality of *Kyi;* he sent the descendants of *Yin* to the principality of *Sáng*; he invested with a suitable burial-place [or raised a tumulus to] the prince *Pekán;* released *Kyi-tsz*,—or the viscount of *Kyi*,—from his imprisonment [and it is said sent him to Corea], allowing him to follow the usages of the *Shâng* dynasty, and to resume the throne thereof; he freed the people from oppressive laws, and increased the emoluments of all whom he had employed. *Wû-wang* crossed the Yellow-river and went to the west. The horses used in the campaign he let loose upon the south side of the *Hwa Shan*—or Flowery Mountain—and they were mounted no more. The oxen—used for drawing—were let loose in the uncultivated lands of *Tau-ling*, —or the Peach Forest, and were no more subjected to the yoke. The war-chariots and armour were varnished over with blood, and laid up in the arsenals, and were never used again. The arms used were reversed, enveloped in tiger-skins, and were pronounced laid up. The officers who had high commands were appointed governors over provinces, and then all the empire knew that *Wû-wang* did not wish to go to war any more.

"The army being disbanded, archery was taught in the imperial institute; on the left they drew the bow to the air '*li-sheu*' —or '*fox-head:*' on the right to the sounds of the air '*tseu-yü*' —or the '*virtuous horse:*' as to the shooting of arrows, in which the object is to pierce through the leather target, that practice was discontinued with the cessation of the war. The costume and ceremonial hat for magistrates, were revived with the use of the ceremonial tablet held before the visitor; and the body-guard laid aside their swords. The ancestral sacrifice was offered by *Wú-wang* in the great hall of the palace, whereby the people understood what filial piety meant. By their visits at the court, the feudal barons learnt the duties of a vassal. By seeing the sovereign himself work in the holy field,—the productions of which were used for sacrifices,—the feudal lords learnt the duty of reverence. These five affairs were the great instructions of the empire.

"At the feast in honour of old men, which was given in the great college, the emperor tucked up his sleeves and cut the meats: he took the sauces and presented them: he took the wine-cup and presented the wine. Covered with his ceremonial hat, by taking part in the general evolutions, he taught the feudal lords the duties which younger brethren owe to their elders. In this manner the great duties pervaded all quarters, and the rites and music circulated everywhere. Tell me now, whether there was not propriety in the long delay at the opening of the musical performance called *Wú?*"

Chapter X.

The Renovating Influence of Music: How conservative and reformatory it is.

It is said by the sage that propriety and music may not for a moment be separated from our persons. When we thoroughly investigate music, in order to regulate the heart, then the sentiments of uprightness and goodness come forth with facility. When the sentiments of uprightness and goodness spring forth, then one is pleased. When one is pleased, then there is quiet. Where quietness is, there will be long duration. Where long duration is, there is heaven—and where there is heaven, there the gods

are. It is no more necessary that heaven should speak, in order to obtain our credence, than it is that the gods should be angry, in order to overawe us. So it is, when we investigate music thoroughly, in order to regulate inner man.

When we thoroughly investigate the rites, in order to regulate the outer man, then we acquire gravity and a respectful deportment. Possessing these, they give an imposing air. Should the mind be for a moment without the peace and self-satisfaction which virtue brings, then low and deceitful sentiments enter at once. If the exterior for a moment be wanting in gravity and a respectful deportment, then the feelings which easily enter, at once excite contempt.

Now, music having its origin in the interior emotions, and the rites having their accomplishment in exterior movements, when the sage thoroughly studies the harmony proper for music with the view of regulating his mind, and in the same manner studies the proprieties belonging to the rites for the purpose of regulating his exterior, inwardly he is in perfect harmony, and outwardly he conforms to propriety; then the people, by only looking at the appearance of his face, abstain from quarrelling with him; and if the people only take one look at his countenance, no sentiment of disrespect can have birth. So it is, that when the lustre of the sage's virtue shines within him, among the people there is not one who does not imitate and listen to him: and when the proprieties are manifested without, there are none among the people who do not conform to their requirements. Hence comes the saying,—"When the sage ruler thoroughly understands the principles of music and of the rites, whatever errors may arise in the empire, there will be no difficulty in correcting them."

Music has its source from interior emotions, and the rites have their accomplishment in exterior movements. It follows that the tendency of the rites is to bring down in his own estimation the person who observes them, and the use of music is to fill up the mind with sentiments of good will. Yet, while the rites take down self-conceit, they ought not to hinder our advance; for by advance an accomplished character is formed; just as it is, that while it is proper to have the mind filled with the sentiments inspired by music, yet it is by restraint that an accomplished character is formed. If in the rites we bring ourselves down, without advancing, we are reduced to nothing; and if in music

we fill ourselves up, without restraint, we abandon ourselves to dissipation. Therefore it is, that in the rites we advance, and in music we recede. When in the rites we succeed in advancing to the proper point, the result is pleasure; and in music, when we succeed in restraining ourselves within the proper limit, the result is ease. So, advance in the rites, and retreat in music, mean about the same thing—preserving the mean.

Now, it is the nature of music to hold joy within those bounds which keep it in accordance with the sentiments of humanity. Man's joy must be manifested by the sounds of his voice, and rendered visible by the movement or repose of his person. The action and changes of human emotion find their expression either in the sounds of the voice, or the movement or repose of the body. Man must have pleasure, and pleasure must have its manifestation. If it be allowed to manifest itself without order, then it cannot escape running into confusion. It was because the ancient emperors were ashamed of this disorder that they established the *Yá* and the *Tsúng* odes [such as now form part of the poetical Elegant Extracts, said to be compiled by Confucius himself]—in order that joy might be correctly directed. Therein they managed that the voice should have sufficient scope for joy, without allowing it to run into excess and dissipation. In these odes they managed that the composition should furnish matter enough for the discussion of principles, without extinguishing joy. They so managed that there were curved sounds and straight ones; sounds that were full, and lean sounds, abrupt sounds and those that were continued; dividing sounds, and connecting ones, which were quite adequate to move the human mind to good, without causing any irregular emotions to find reception. Such was the method of the ancient emperors when they instituted music.

Therefore, when music was performed in the ancestral temple, the sovereign and magistrates, superiors and inferiors, heard it together, and there was not one among them who was not harmonized into respect. When music was performed in a clan or a neighbourhood, the aged and the young heard it together, and there was not one who was not rendered docile thereby. When music was performed within the private family, father and son, elder and younger brother heard it together, and there was not one among them who was not drawn into closer affection. [Alas for the poor women of China! Where were they?] So, in music, the mind endeavors to establish the accord which exists between

the harmony of sounds and their sentiments. The instruments and implements employed in musical performances give the external embellishment. All the parts unite in forming a complete composition, and this complete composition unites in harmony the father and son, the sovereign and the minister, and conciliates the affection of all the people. Such are the results of the method of the ancient kings in the institution of music.

Thus, in listening to the singing of the *Yá* and *Tsáng* odes (which rectify our obliquities and praise our virtues) the thoughts acquire breadth and expansion. In grasping and using the implements used in the evolutions, in exercising the inclinations and elevations of the head, the crouchings and the extensions of the body, the exterior acquires gravity. In keeping one's self in the proper rank and place, in giving due attention to the strategic rules and evolutions, the different ranks of performers are kept in line, and the marches and counter-marches preserve the requisite precision. Wherefore it may be said of music, that it is like the instructing ordinance of heaven and earth, or the harmonizing binding-cord of the Mean—from whose restraint human passions cannot free themselves.

Now, music may be considered as the outward adornment given by the ancient kings to their joy—just as troops and their banners and arms were the outward manifestation of their anger. So, whether in their expression of joy or anger, the ancient kings had their rule. Thus, in joy the empire was in accord with their sentiments; and in anger, then the oppressor and the disorderly alike were overawed. Hence it was, that under the system of government adopted by these ancient kings, the rites and music were in so flourishing a condition.

Chapter XI.

Tsz-kúng's conversation with the Music-master Yih: The use of Song, and its effects.

Tsz-kúng, at an interview with the music-master *Yih*, put to him this question,—"I have heard it said that for every person there is a song which suits his character and disposition. Now, as to myself, can you tell me which would be suitable to me?" The music-master replied—"I am but an unskilful artist, how could I presume to determine your question as to what would be

befitting? But if you will rehearse those you have heard, you, my master, will be able to lay hold yourself on a reply to your inquiry. I have heard that, to men with varied ideas but calm temperament, and to men who are meek but of upright character, the Odes of Praise [*Tsáng*] would be suitable. To men with broad and liberal ideas but calm in temperament, and to men of thorough penetration but worthy of all confidence, the Odes of the *Tá Yá* suit. To men who are respectful and economical, but who love the rites, the *Siau Yá* suits. To men who are true and upright, but calm and uncorrupted, yet condescending, the *Kwóh-fúng* suits. To men of unbending rectitude, yet compassionately tender, the *Sháng* suits. To men who are mild, and yet know how to decide, the *Tsi* suits. The nature of the odes requires that one should first rectify his own person, and then select the ode calculated to manifest the virtue one has acquired. When one sets the virtue of his character in action, then heaven and earth respond; the four seasons harmonize; the celestial bodies follow their laws, and all beings receive nourishment according to their respective exigencies.

"Now the *Sháng* has been bequeathed to us by the Five Emperors; but it is because the people of the *Sháng* dynasty were well acquainted with it, that it has been called *Sháng*. The *Tsi* was bequeathed to us by the three dynasties—of *Hyá, Shâng* and *Cheu*, but it is because the people of *Tsi* were well acquainted with it that it has been called *Tsi*. When one thoroughly comprehends the meaning of the airs of the *Sháng*, he is fitted to decide all questions presented: and when one understands the sense of the airs of the *Tsi*, he willingly yields to others, even at the sacrifice of his own personal interests. To decide every affair which presents itself may be called bravery; but to yield willingly to others what is just, at the sacrifice of one's own personal interests—that is equity! Were bravery and justice not preserved in song, pray tell me how they could be rendered durable?"

In song, the high notes may be likened to one's raising the hands as high as possible. The low notes may be likened to one's letting something fall. The curved notes may be likened to repressed feeling. Notes when abruptly arrested may be likened to the breaking of dry wood. Angular notes may be compared to the square. Rounded notes may be likened to a crook. Notes that succeed each other uninterruptedly, may be compared to a string of pearls. Wherefore it may be said that song is

nothing but words, yet words prolonged. When one is delighted he feels the necessity of expressing his joy by words; but unadorned words being insufficient, they are prolonged; prolonged words not sufficing, they are modulated and melodized to express the emotions that produce them; modulation and melody being found insufficient, the hands and feet are unwittingly set in motion, to give vent to the emotions of the mind.

ARTICLE IV.

SOME REMARKS ON RECENT ELEVATIONS IN CHINA AND JAPAN.*

By ALBERT S. BICKMORE, Esq.

In the old and accurate description of China, compiled by Du Halde, about the year 1725, from the full diaries and journals kept by the Jesuits, who between 1708 and 1717 travelled over and mapped out all that vast empire, I find these note-worthy and valuable remarks on the changes in the physical geography of China, since the date of her earliest history.

"In the Abridgment of Chorography, entitled *Quang yu ki*, we find the City of *Chau tsyen* [the capital of Corea in 1694], where *Ki pe* [the king of Corea at that time] resided, is in the Territory of *Yong ping fu*, a City of the first Order in the Province of *Pe che li*. Now, supposing this to be true, one may reasonably conclude that the antient *Chau tsyen* and *Korea* were contiguous, and not separated by a Gulph till many Ages after. For it is not to be imagined that a Prince would fix his Residence out of his own Dominions, especially if divided from them by a wide Sea. This Conjecture will appear the more probable, if we carry our Speculations a little higher [i. e. to a more ancient period]. When *Yu* (whose Memory is justly honoured by the *Chinese* with the Title of *Great*) undertook to drain the Waters, which under the Reigns of *Shun* and *Yau* had overflowed the flat Country, he cut a Passage for the River *Whang ho* thro' a Mountain on the Southern Boundaries of *Shan si* and *Shen si*, which Provinces that River separates, and makes a Cataract here not inferior to those of the *Nile*. Thence he conducted it thro' the Province of *Ho nan*, and following its Channel along the Province of *Pe che li*, he drained the Lake *Tu lu* [i e. Lake Peh-lu] into which the *Whang ho* formerly emptied itself. This Lake overflowed all that Country which now includes the Districts of *Shun te fu* (a City of the first Order,) *Chau chew* and *Shing chew* in the same Province. At last to break its Rapidity, he divided it into nine Channels, which

* Read before the Society on 5th November, 1867.

some imagine were again united before it disembogued itself into the Sea. But whether they were joined, or if it was only the main Channel that ran into the Sea at the Foot of the Mountain *Kye she shan*, which then made a Promontory, this is certain, that since *Yu* began that great Work about 3921 Years ago, this River has stray'd far from its antient Course; for instead of discharging itself into the Sea, as it did formerly in Lat. 40°, it now falls into the River *Whay ho*, a little above *Whay ngan*, a City of the first Rank in the Province *Kyang ngan* [i.e. Kiangsu] about Lat. 34°. It is likewise observable, that the Mountain *Kye she shan*, which was formerly united to the Territory of *Yong ping fu* is now 500 Li [about one hundred and sixty miles] distant in the Sea from this City [and is probably one of the islands near the promontory north of the Maintan group]. So that the Sea gaining on the Land by Degrees, hath at last overflowed all this Tract of Ground. It is indeed true, that the *Chinese* History makes no Mention of this extraordinary Change of the Course of the *Whang ho*, nor of this Overflowing of the Sea. But when Alterations on the Surface of the Globe are brought about insensibly, and without alarming Nature, they easily escape the Observation of History, the Difference that happens during the Life of one Man being not at all perceptible."*

In October 1866, after a long journey through the central and southern parts of China, I took passage from Shanghai for Tientsin, through the kindness of Messrs. Trautmann & Co. on their good steamer, the *Nanzing*. From Tientsin I proceeded to Peking, and thence to the mountains on the north, and along their flanks to the Nankow Pass, and on to the coal mines, a day's journey southward. And, in entire accordance with Du Halde's statements and speculations, everywhere over this steppe-like plain of Pechili, evidences appeared of its recent elevation above the sea, and, farther, that its true eastern border is not the present sea shore, but that this plain actually extends out *under* the Gulf of Pechili, and *under* the Yellow sea, on the north of Shantung, to Corea, and on the south, even to the Japanese Islands, the Lew Chews, and Formosa! For the real eastern border of the continent of Asia, as is well known, is not the present coast line, but including Sumatra, Java, Borneo, and the Philippines, it extends along the eastern shores of Formosa, the Lew Chew group, the Japanese Islands, and the Kuriles to Kamtschatka. In other words the

* A description of the empire of China. 2 vols. London, 1741, vol. 2. p. 382.

eastern margin of this great continent has suffered a slight depression and is now partly covered by the waters of the Pacific Ocean.

Between the line indicated above and the present coast of China, the waters are all comparatively shallow, but outside this line the sounding lead runs down to great depths, and at once shows us we have come to the true edge of the great Pacific basin.

If the north of China were to be raised but one hundred and twenty feet the whole Gulf of Pechili would disappear; and if it were elevated as much more, in place of the Yellow Sea we should have a dry plain from Peking to Corea. And such a change is *actually* taking place. At Chefoo, on the northern shore of the promontory of Shantung, there is a long sand spit extending out from the mainland to a high headland and forming the western shore of the harbor. On this spit are seen two old sea beaches, as perfect as the present one. The highest is but a few feet above high water level, yet it shows what kind of a change the surrounding area has recently undergone, and this assumption is further strengthened by the testimony of the Chinese that the harbor is "slowly filling up." It is seldom possible to obtain data that will give us the *rate* of such changes, and the following statements kindly furnished me by the Rev. Mr. Mateer, of Tung-chau, are therefore the more valuable.

"I have learned with some degree of probability, that in the Ming Dynasty—some 250 years ago—the water from the ocean came up the bed of what is now a small creek, past the city, and extending as much as three li (one mile) from the present beach.

"I also learned that at that time the water in the basin of the water city was at least fifteen Chinese feet deep, where it now is not three feet deep. This difference of twelve Chinese feet (equal to fourteen and one-tenth English feet) is the *least* that will account for the water running up to where it is said to have done. At a later date the water came up outside the water city to the bridge, near a *li* (one third of a mile) from the present beach. The decline has been so gradual that there is now no way of telling exactly when the junks quit coming. It is said there was originally no dry land in the water city save the very least close to the wall.

"It was built by a man named Chi, as a depot for the government junks, and was not intended to include any place to build upon, but to be a safe depot where pirates could not come."

This elevation of at least fourteen and one-tenth feet in two hundred and fifty years gives us a mean rate of nearly *six* feet in

a century, but assuming that this elevating power acts uniformly, to ascertain the rapid rate of the changes in the bed of the Gulf of Pechili, we must add to this the quantity of sediment brought down by the Yellow River, the Peiho, and the minor rivers.

About Peking the plain is composed of stratified clays that form a fine light crust from two to five inches deep along all the travelled roads, in dry weather. In many places I noticed quantities of long claystones branching like corals, for which indeed they have sometimes been mistaken. But instead of being of marine origin, they have been formed by water flowing down along grass roots, which in this way receive a series of concentric layers from the surrounding clay. And as the water naturally follows the branches of these roots the claystones necessarily take a branching form. Frequently where the strata have not been disturbed, the roots can still be seen within these concretions.

In the Nankow Pass and piled up for some distance from the place where it opens out to the plain, appeared considerable quantities of transported boulders. These were probably borne near to the places they now occupy by an old glacier that once filled this pass and brought them down from the neighbouring mountains, or from the borders of the high plateau of Mongolia, on which this river of ice probably took its rise. But a short distance from the mouth of the pass in every direction over the plain, these boulders quite disappear.

Many may have been gathered by the farmers for the walls of their houses; but as few are to be seen in the clay banks, the question occurs whether the materials that fill the Peking basin have not been so completely sorted and resorted by the action of the sea that the larger boulders are now mostly at some depth below the surface. The next day as we followed the flanks of the mountains, we came to a remarkable depression in the plain, evidently the bed of a lake that had been recently drained off, not across the plain, but through some rent in the mountains on the west, to the present channel of the 'Yangho,' and through it to the sea. Farther down the Yangho a small stream comes in on the southwest from the anthracite mine at Mun-to-kow. This minor valley is bordered with a well-defined terrace, some forty or fifty feet in height.

Besides these evidences of the former presence of the sea, several shells of living species were given me from a clay bank not far from Peking.

Though these great changes have taken place so slowly, as mostly to have escaped the notice of man, it has been far otherwise with the Yellow River, whose irregular wanderings and destructive floods have well gained for it the title of "China's Sorrow."

All rivers after wearing out their channels to a certain depth, have a tendency to deposit in their own beds a part of the sand and mud they are bearing along, and this tendency is greatly increased by confining them with dams, and preventing them from overflowing, when swollen by rains or melting snows, and therefore more heavily laden with such materials. The Po, in this way, has raised its bed until the surface of its waters is above the houses of the peasants, and it has already once deserted its old channel and formed a new one, and this is, in short, the whole history of the Yellow River. When it had filled up its old channel to the south of Shantung, and succeeded in making a breach in its dams, it followed nearly its previous course north of Shantung to the Gulf of Pechili.

The whole plain through which it flows being of alluvial origin and completely intersected by canals or small streams, its waters would readily find a lower channel, which their momentum in coming down from the higher level of their old bed would enable them to quickly enlarge. The elevation of the land along the sea shore, at the rate of six feet in a century, would have a tendency to keep the river in its old channel if there was an equal or greater elevation along the upper part of its course, but if the interior has subsided or remained at rest while the seaboard has been rising, the strength of the current must have been diminished, a greater quantity of sediment deposited in its bed, and therefore the danger increased of its bursting its artificial banks. Perhaps no data have yet been obtained to show whether or not the interior of this continent has remained at rest during this time or whether it has been raised or depressed, but it should be noted that where it joins the continent of Europe, its latest movement has been one of elevation and that the Aral sea and the salt lakes that lie north and east of it are only remnants of an old arm of the Arctic Ocean that once stretched down along the eastern flanks of the Ural mountains. The last change in the course of the Yellow River occurred when a strong detachment of the Taipings were approaching and threatening Peking, and is supposed to have been caused by a breach, made either by them, or by the Imperialists to arrest their progress.

All accounts agree that this change is complete, and that its old bed is now dry; and this is only another way of stating as a fact what has just been assumed, namely that the river continued in its old channel until its bed had become as high or higher than the surrounding country.

Dr. Martin, of Peking, informs me it now leaves its old channel a short distance below Ifung, and passing northerly near Tsauchau and Poh to Fan (see Dr. Williams' map), it flows in a northeasterly direction to Tungping, and thence to Tsinan for the capital of Shantung, and down the channel of the Tatsing river to the Gulf of Pechili. This course is just about at a right angle with its old one to Hwaingan, and the distance from its present mouth to where it emptied before into the Yellow Sea is over 380 miles in a straight line and nearly twice that along the shore. Perhaps no other river, within historic time, has wandered so frequently and so far away from its old channels, and also, perhaps no other river flows out into a plain of such wide extent at right angles to its course and at the same time of such a perfect and continuous level. From Hangchau Bay on the south, to where the Great Wall comes down to the shores of the Gulf of Pechili on the north, there is one unbroken level for nearly six hundred miles in a straight line. The Imperial or Grand Canal indicates how remarkably low and even the surface of this plain must be. No other country can boast of such an artificial water communication; but what other country has such natural facilities for making one of such length, and, like this, at right angles with its two greatest rivers?

While the Mississippi, the Ganges, and the Nile flow out by many channels through their low deltas, to the ocean, the Yellow River confines itself to one; but a part of its waters may find an exit to the south through the Grand Canal.

That the region about the mouths of the Yangtse has also been lately raised, though it may now be in a state of rest, is shown by the shell bank near Hangchau, described by Dr. Lamprey in his paper on the geology of the Great Plain. The mouths of the Yangtse themselves have also changed, and Tsungming Island (see China Pilot) which now has a population of half a million did not exist in the fourteenth century.

The Tungting and Poyang lakes, which act as reservoirs for this river, receiving a part of its surplus waters during the floods, and pouring it out again when they subside, are now slowly

filling up, mostly with the sediment brought into them by their own streams from the south. It has been noticed that near each of these lakes high mountains appear. This fact probably indicates the origin of their basins, for where the strata have so greatly folded that the crest of the wave is unusually high, the depression of the wave must be correspondingly low.

The basin of the Tungting lake is merely the lowest part in the low area of the province of Hunan. Its waters are very shallow, and during the floods spread out over the low shore on the south. When I reached Siangyin on my way down the Siang, I found we had already reached the margin of the lake, though according to the map it ought to have been dry land for twenty-five miles farther.

The Poyang lake, in like manner, is merely the lowest part of the low lands in the province of Kiang-si. The basins of the lakes in the Great Plain may be places of a slight local subsidence, but are more probably small areas not yet filled up with the alluvial deposit of which the whole plain is composed, and which has been brought down from the mountains, mostly by the Yellow River and the Yangtse.

At Foochow and about the mouth of the Min, I believe we come to an area that has for some time been slowly subsiding. While all the other rivers in China flow out to the ocean through low deltas, that they have formed themselves, the Min at once empties itself into the sea. No delta is seen, yet it has one, as much as the Peiho, the Yellow River, the Yangtse, the Tsientang by Hangchau, and the Sikiang at Canton. Its delta consists of the shallow and dangerous banks about its mouth, and if the deltas of the other rivers were to subside as fast or faster than they are built up by deposits of sediment on their surfaces, each would present a phenomenon strictly analogous to that of the Min.

Noticing this indication of a recent change when I was visiting Foochow, I made inquiries; and Mr. Dunn, of Hedge & Co., kindly gave the following corroborative data. In digging a well in their compound, "at a depth of from twenty-five to thirty feet below the surface of the ground, there were found two boards each about four feet long and one wide, nailed at the ends to a post. At the same depth was found a quantity of broken crockery, of the same kind as that now used by the lower classes of Chinese, and a number of pieces of half-decayed wood. The earth in which these things were found was a rather loose mixture of mud and

sand, bearing a close resemblance to what is now seen along the river banks at low water.

"The impression upon my mind at the time was, that we had struck the remains of a Chinese house, and the workmen were of this opinion. The tide here has a rise of about twelve feet at high springs, which would place the post about *twelve feet below the present low water level.*

"According to the Chinese, what is now the navigable branch of the river—i.e. between the city and the foreign settlement—was, some 900 years ago, too shallow for junks and large boats. The south branch was then in general use. The long bridge at the head of the island, and the remains of dikes and flood gates in that vicinity, add probability to this statement."

In the plain about Foochow, the river Min, as indicated above, frequently changes its bed by washing away one bank and building up the opposite one. At the foreign settlement lines of stakes are placed in edge of the stream to catch this changing sand and gain land on that side. At first it might appear that this post with its boards had simply sank on one side of the river bed, and been covered by sand and mud from the opposite bank, but the fact that it appeared to be part of a house and that it was found with fragments of earthenware shows it had probably not floated to the place were it was found.

The simple fact that twenty-five feet of sand and mud had accumulated over these human relics, speaks in itself of their high antiquity.

In the south of China, along the east river, Dr. Legge informs me he has seen a large bank of shells, which he believes will all prove of living species.

Passing from the continent to Formosa, Mr. Swinhoe informs me that Castel Zelandia, a fort built by the Dutch in 1634, on what was then an island, is now found some distance back from the sea, in the vicinity of the city of Taiwanfu; and also that at Takao recent corals and recent shells are found at a height of 1111 feet above the level of the sea.

When I was in the north of China I enjoyed the privilege of going in the U. S. Ship *Wachusett* over to the mouth of the Tatung river on the western coast of Corea. This river was found to debouch into a large bay, and all along its northern shore there is a continuous and gradually rising plain to the feet of a range of quite high mountains that rise up abruptly from the low land.

A second indication that that area has been elevated at a very recent period is seen in the streams from the little valleys among the mountains having as yet only worn out for themselves narrow and shallow channels. The height of this elevation I estimated at from three hundred to five hundred feet.

Passing over to Nipon we find on the western side of the bay of Yedo, as we approach Yokohama, a plateau of some two hundred feet high, its top as level as if made by art. A short journey back to Kanasawa, across to the bay of Kamakura and thence up the Tocaido to Kanagawa, showed me that this whole area was also of a recent marine origin. The highest place we passed over that had lately been subjected to the action of the sea, I judged to be from five hundred to six hundred feet above the ocean level; but terraces of twice that height will no doubt be found among the mountains. All the hills in this region have been gradually formed by the streams washing out small valleys. These are constantly widening and occasionally two have nearly met, and in such places only long sharp ridges are left of the original plateau.

In the bay of Kamakura lies the island of Enosima, connected to the mainland by a sand spit about half a mile long and from two to five feet above high water level. This seems to have appeared since the year 1691; for Kæmpfer, who passed near by in that year on his way to Yedo, thus minutely describes an island, which in all other respects agrees with Enosima, excepting alone the name which he seems to have given it from that of the bay and a neighbouring city:

"Off the shore—in the outer bay of Yedo—was seen the island Kamokura, with high rugged shores, but of which the surface was flat and wooded. It was not above four miles circumference, and was used like some other islands as a place of confinement for disgraced noblemen. There being *no landing-place*, the boats that bring prisoners or provisions must be hauled up and let down by a crane."

North of Nipon, on Yesso, terraces line the northern shores of Tsugar Strait and Volcano Bay, and what has been described in Corea, is repeated there, but on a far grander scale. The greatest height to which I have been able to trace the recent action of the sea is 1,180 feet above the level of the ocean, four miles north of Hakodadi; and most or all of this considerable height, I believe, has been caused by a general and not a local elevation.

ARTICLE V.

NOTICES OF LOK PING CHEUNG 駱秉章 LATE GOVERNOR GENERAL OF SZE CHUEN 四川.*

By Rev. C. F. PRESTON.

The accompanying Memorial and Imperial Rescript are of such interest, that it is proper to translate them, with the addition of a few particulars gathered chiefly from conversations with a Chinese friend who is well acquainted with the circumstances. It may be premised, that the facts are well known by the people of Canton; and, as is quite natural, no little satisfaction is expressed by them, in having had such a worthy representative in the government.

The late Viceroy is a native of the Flower District 花縣, which lies to the north of Canton about 30 miles, and the family are now residing at Fuhshan 佛山, the large market town, about 12 miles to the east of this city. When he was young he was a child of poverty, and when about 17 years of age was employed as a cook in the family of a gentleman by the name of Cheung Kam 張金, who resided on the island of Honan 河南 opposite the provincial city, whose sons were taught by a tutor at home. While employed in his menial occupation the cook found time to carry on his studies. He would come to the door of the apartment where the classics were explained, and listen to the instructions given. One day an essay was brought for correction, which the teacher, a "Siu t'sai" 秀才, was confident was not composed by the boy who presented it. Upon being charged with imposition, the young culprit confessed that the paper was prepared by the cook. The teacher was surprised, but satisfied himself of the facts of the case by giving the master of the kitchen a trial, to write upon a theme in his presence, which was done in a short time, and without the necessity of making corrections. The matter was reported to the gentleman

* Read before the Society on 13th November, 1868.

in whose family it happened; and he willingly acceded to the request of the teacher, to give the lad the advantages of a good education. He released him from his servile engagement, gave him a place with his own sons, and subsequently presented him a daughter in marriage. He passed successively the several examinations, until he became a member of the Han Lin Academy 翰林院, from which according to the following translations, he was recommended for promotion. The immediate occasion of this recommendation is said to have been the discovery of his stern honesty and strict fidelity, which have been distinguishing traits of his character, during the whole of his official career, and are now the formation of his fame, and the expressed reasons for the high honours which have been accorded to him. It is said that in one of the missions which was entrusted to him it had been customary to receive presents, or what were in fact bribes, to the amount of five or six thousand taels, a portion of which it was usual upon the return to the Capital, to pay over to one of the Members of the Cabinet. In the present instance the payment not being made, an investigation was instituted which resulted in the happy discovery that notwithstanding the poverty of the Commissioner, which was well known, he was proof against the many temptations to official corruption which he encountered, and that he had refused all the presents of the kind referred to, which rare instance of honesty and integrity, was destined to meet an appropriate reward. At the time in question he was remarkable for his simple manners, and want of ostentation. When entitled by his rank to be addressed as "tajen" 大人, great man, he made visits of ceremony, going on foot, carrying his own cards, and being without attendants. A custom most singular, if not almost improper according to the popular code in vogue in China.

It has been remarked repeatedly, that in this respect, as well as in his ideas of what is honest, he was very like a foreigner. Frugality and fidelity are by no means openly ignored as matters of importance in Chinese official life. There is no lack either of profession, of which there is abundance, but the pure article is sufficiently rare to excite particular attention.

Those who have a reputation of this character are always selected as Imperial Commissioners when missions are instituted to inquire into cases of alleged mismanagement, and crimes of high officials, and it is not uncommon to see the character

affected to an extravagant degree, in order to give the greater emphasis to the severity of the examination, an instance of which occurred not long ago, in which it was reported, and believed by the people outside, that the officer of the kind in question, of a very high rank, was content with one servant, and one course at his meals!

The accompanying translations mention that the late Viceroy was, at the time of death so far as his family was concerned, almost alone; the popular reason assigned for this, is want of sympathy on the part of his sons in the strict code of honesty and integrity adopted by their parent—a fact which resulted in the lamentable separation. It is well known that relatives of officials often take advantage of their position to accomplish private ends, generally without the connivance or knowledge of the official themselves, for the penalties of such offences are very severe. Whatever may be the facts in the present instance, it is evident that such improprieties were contemplated in the formation of the code of Chinese law,—which specially provides with reference to the subject under contemplation, that all the principal civil appointments shall be away from the native province; and there are regulations in respect to what relatives are not permitted to dwell, or hold office, within the same local jurisdiction; and perhaps on the same account the term of office is made very short, and matrimonial alliances are in certain cases not allowed, as utterly improper.

The subject of this notice was a great favourite of the people. The distinguishing traits of his character are what would render him such, and his holding office for ten successive years in Hunan 湖南, when the term is three years, is doubtless to be ascribed to this fact, as well as the comparative freedom from the spirit of rebellion during the time of the Nanking 南京 insurgents in the province of Sze Chuen 四川. It is certainly remarkable that this large outlying province has remained to such a little degree affected by the almost universal anarchy which has ruled so much of the empire in late years; doubtless it has been greatly owing to the personal influence of the Viceroy. One of the so-called Kings from Nanking who attempted to gain a foothold there, was captured and executed, as referred to in the translations—for which at the time much credit was awarded in the "Peking Gazette." Another evidence that he was beloved by the people is told with unfeigned pride by the people of Canton as seldom or

never having occurred before, that for seven days after his death, people of all classes, even the poorest in the province where he held office, put on mourning, and refrained from all festivity and expressions of mirth, as though they had been bereaved of a parent, and this spontaneous homage of the people is felt to be a more precious tribute to his memory than even the Imperial favours.

The surgical operation referred to was performed by Kwan A I'o, a Chinese long connected with the hospital of the "Medical Missionary Society in China," at Canton, for which a long journey and protracted absence was required, but it was in a measure successful, and it was suitably rewarded.

It is an interesting fact that the late Governor of Canton, "Tseung Yik Lai" 蔣益澧, of whose energy, fidelity and honesty so much has of late been written in connection with the many reforms inaugurated at Canton by him, was a decided pet of the subject of this notice. The people insist that they were kindred spirits, and therefore a special and mutual attachment was the result. As was the case with many of the most successful military leaders of the past few years, this official was recommended by the late Viceroy. It is reported as a matter of true history, that after a certain reverse, the life of this young officer was demanded by Chinese law and custom, to atone for defeat, and that he was only saved by the energetic protest and security of his venerable friend; and it is moreover the popular belief that the document referred to in the translations, as left to be forwarded to the Emperor, contained an expression of confidence and earnest recommendation of the late Governor, now partially degraded.

The following is the original, with a translation, of a pair of scrolls which were sent according to Chinese custom to the bereaved family after the news of the death of Lok Ping Cheung 駱秉章 by his protegé, Tseung Yik Lai 蔣益澧.

1. 文潞國忠愛常存化布十六年祐我湘江同再造.
2. 武鄉侯經論未竟名揚十八省如公嶺表又何人.

1. In civil life the patriotism and charity of "Lo Kwok" are preserved, his renewing influence extended over a period of sixteen years. He protected me by the "Seung" river, and I was restored to life again.

2. In military life, twisting the threads of the web like "Heung Han" is not over, his fame spread through the eighteen provinces. Who is to be compared to H.E. beyond the mountain range? (Southern China.)

The Chinese gentleman referred to as patron, survived to a good old age to see the fame of his son-in-law, in his high elevation, nor was he forgotten. So long as he lived a sum of money was every year sent for his support; and it was needed, since in China as in other countries it is not uncommon to see changes from wealth to poverty, and especially of late years the waves of elevation and depression have passed quickly through the social life of this empire.

In regard to the posthumous honours, conferred upon the subject of these notices, it was at first a matter of conjecture, and efforts were made at the Capital by the friends of the family to obtain substantial acknowledgment of his services, and as the merits of the case were well known, it was confidently expected that in accordance with a wise policy they would not be suffered to go unrewarded. Whether these expectations were fully met, or what they would amount to by the standard of western ideas, it would be difficult to say. It is evident that in him the present dynasty has lost an able and faithful servant. The honours accorded to him are exceedingly prized and seldom obtained by his countrymen, by whom they are earnestly sought. Hereditary rank in China does not bring so many substantial benefits as in the countries of the west, and as there is no law of primogeniture, it is seldom of long continuance, and unworthy descendants are deprived of the position. Having a place in the "Chapel of the Worthies" at Peking, might be compared with the permission of burial in Westminster Abbey, or having a monument erected at government expense.

It would be interesting to know what were the feelings of the late Viceroy in regard to the relations of China with western countries; but he was not brought into any connection with foreigners during his official life, and he was absorbed in attention to matters at home.

From what is known of him and the name he has acquired for himself, he may be regarded as a bright example of official integrity and honesty, and he was a tower of strength in the time of his country's need, found to be such by those who sought to overturn the present dynasty. In both civil and military affairs his executive ability was manifest.

Memorial of the Tartar General Shung Shih 崇實, *in relation to the death of Lok Ping Cheung.*

Your slave Shung Shih 崇實 kneeling makes a Memorial concerning the relinquishment of office by H.E. the Governor General, and in accordance with custom the memorial is sent by express, looking up and praying for the Imperial attention.

It appears that "Lok Ping Cheung" 駱秉章, Assistant Member of the Cabinet, and Governor General of "Sze Chuen" was more than seventy years of age. During the autumn of T'ung Chi 同治 3rd year, (1864,) in the first instance and subsequently by Imperial favour, he was granted a vacation on account of disease in his eyes. In the 9th month of the 4th year a memorial was sent praying to be permitted to retire, when the Imperial Will caused Your slave to perform in addition the duties of that office, in order to rest and healing, following which a surgical operation was performed with the needle. In the 3rd month of the present year, although his vital energy had not recovered its usual force, he was for a short time able to examine public documents, and he felt that having received distinguished favours from three emperors he did not dare even to rest for a little, or cease attending to the business connected with the office. Just at this time the "Nin" 捻 rebels burst into "Shien" 陝西 and "Nan" 雲南 (Shensi and Yunnan,) plotting with reference to "Sze Chuen" 四川, so that in increasing the army and planning defense he had not a day of rest, and did not fail to exert himself to the limit of his strength. From the commencement of the autumn his eyes at times were clear, and at times blind, his steps began to be slow and heavy, and in walking it was necessary to have assistance. Still he applied himself with energy to the transaction of public business, until the 9th month, when he took a cold which did not yield to remedies.

Your slave was then engaged with the military examinations, but from time to time went in company with the Commissioners, Taotais, &c., to visit him, and repeatedly exhorted him to desist from his labours, but H.E. the Viceroy was all the time employed in the public committee, and bowed himself to sustain the onerous duties of his office, in performing which the patriotism and sincerity of H.E. were manifest in his words and countenance. During the first part of the present month his maladies were aggravated by a difficulty in breathing. Not being able to

sleep at night his vital energy was gradually weakened, and the daily routine of business was more and more deputed for management to the treasurer, Kong Sze Tsün 江司濬, until he requested a vacation of two months for healing, which during the 12th month was forwarded in a mutual memorial by express. Just then Your slave was engaged in the military examinations, but when they were concluded a visit was immediately made, when it was perceived that his disease was very serious. Already a memorial has been sent reporting in the first instance and subsequently, the conclusion of the military examinations, and a postscript was affixed in a special message making mention of this; but most unexpectedly on the 17th instant, the disease greatly increased in violence, and Your slave, in company with the Commissioners and Taotais of the province, went repeatedly to visit and inquire. Whenever he received us he only spake of the spirit of rebellion not yet quelled, of the plotting around the borders, of the exigencies to be provided for on all sides, and of the plans of defense to be devised. He was aware that recovery from his illness could hardly be expected. He had prepared beforehand a document which was committed to Your slave to forward in his behalf, and he took the seals of his office and delivered them to Your slave to manage in addition to those already incumbent upon me, in order to avoid the danger of delay,—and at about 9 P.M. of the same day H.E. passed away.

In a review it is found that Lok Ping Cheung was recommended for promotion from the Han Lin Academy 翰林院, to Hing Tit 卿秩. During the reign of Tao Kwong 道光, in the first instance and subsequently, he received the Imperial appointment to proceed to Shantung 山東, Hunan 湖南, and other provinces, to examine and transact business. Subsequently after being treasurer in Yunnan 雲南, he was promoted to fill the office of Governor of Hunan 湖南, which he held for ten years, training the army and instructing the scholars, distinguishing and promoting those of ability. The several southwestern provinces depended upon him to suppress the great rebellion.

During the 10th year of Hien Fung 咸豐, he received the Imperial commands to take charge of the military affairs of Sze Chuen, after which he received the selection to be Governor General of Sze Chuen, since entering upon which office he has suppressed the several rebellions from Tin 滇 and Üt 粵

(Yunnan, Kwangtung and Kwangsi). Again he passed beyond the borders of his jurisdiction to gain victories in Kwai Chow 桂州, utterly sweeping away the rebellious hordes of Ki'en 黔, (Kwai Chow).

In succession he received by Imperial favour the titles, "Protector of the Heir Apparent" 太子太保, "Rewarded to wear the double eyed peacock's feather" 賞戴雙眼花翎, "Rewarded with 1st class hereditary rank, Hing Ku To Wai" 輕車都尉. During the 6th month of the present year he received the Imperial will, to become "Assistant Member of the Cabinet" 協辦大學士. The length of time he was in Chuk, 蜀 (Sze Chuen,) was seven years. His august fame was far spread, the whole province was at rest on account of him, and his public patriotism was early manifested. He was frugal, upright, and exercised self control, all the civil officers and people of the whole province, and the military leaders and soldiers of the several camps, all without exception, stood in awe of his great virtue. Moreover his illness was brought on by his multiplied labours, continued until he was unable to rise. Even at the hour of death (lit. changing the mat), it was only with him a subject of regret that he was unable to requite the Imperial favours by completely destroying the rebellion in the adjoining regions, and there was not a word in regard to himself. Further, there was not a single near relative in his office. His eldest son, Tin Po 天保, a "Yam Shang" 蔭生 of the 2nd class, his second son Tin I 天貽, a "Yam Shang" of the 1st class, his grandsons Mau Seung, 懋湘, Mau Kan 懋勤, Mau Yan 懋仁 and Mau Fan 懋勳, counting sons and grandsons, in all six persons, are all at their home in Kwangtung 廣東. Only a grand-nephew, Shiu Ts'ün 肇銓, one person, was with him in his office. At present Your slave in connection with the Commissioners, Taotais &c., as is a matter of duty, will attend to the management of the last offices to the deceased, but the affairs of the office of Governor General are various and of great importance, and as there is urgent necessity to guard the borders, it is mutually proper to request that by the Imperial will a high official be soon selected to come to Sze Chuen to take the office and perform its important duties.

Your slave, albeit in the mean time performing the duties in addition to his own, will do so to the best of his poor abilities, guarding the several public roads, watching over the officers and

comforting the people, making provision for the revenue, and coming to the rescue of the neighbouring provinces; in all these things acting in sincerity and good faith, not daring in the least to be inattentive or neglectful.

Besides taking the date of receiving the seals, and reporting the same in a respectful memorial to the throne, it is proper to prepare a respectful memorial, in regard to the matters connected with the relinquishment of office by H.E. the Viceroy, by reason of sickness, with the date, and to forward the same by express; and still further, to enclose the document bequeathed by Lok Ping Cheung, all of which are handed up for the Imperial glance, kneeling, praying the Empress and Emperor to grant the sacred glance upon this careful memorial for the Imperial Will.

It is recorded.

Imperial Rescript. The Assistant Member of the Cabinet, and Governor General of Sze Chuen 四川 was patriotic, sincere, faithful, upright, firm in government, and diligent in wisdom. He was recommended for promotion from the Han Lin Academy 翰林院 to the 3rd rank "Hing" 卿, on account of frugal principles and self control. His merit was discovered by the late Emperor Tao Kwong 道光, by whom first and subsequently he was ordered to proceed to the provinces of Shantung 山東, Hunan 河南, &c., to transact business, from which he was successively selected to act as judge, and appointed to the position of a high official. He was in Hunan 湖南 for ten years, training its soldiers and instructing its scholars, discovering and promoting those who had ability. The great rebellion of the southeast was suppressed by his aid. Again he was indebted to the late Emperor Hien Fung, for recognizing his merit by whom his titles were increased to wear a button of the head rank, to manifest special regard, after which he was commended to take control of the military affairs of Sze Chuen.

When We came to the throne he was immediately selected to take the office of Governor General of Sze Chuen 四川, proceeding to Shuk 蜀, at the head of the army, distributing rewards and punishments with discreet severity; whatever direction he took he was victorious, and the several rebellions from Tin 滇 and Üt 粵, (i.e. Yunnan and Canton,) were entirely suppressed by him, and in addition he passed beyond his own jurisdiction

into the departments and districts of Kansuh and Kweichow 甘肅貴州, to gain victories, and on account of the capture of the rebel "Shek" the territory of Sze Chuen 四川 was pacified. In accordance with his merits he was rewarded with the title of "Protector of the Heir Apparent," and after the capture of Nanking and the entire pacification of the southeast, remembering that in former years while holding office in Hunan 湖南 it was he who promoted the military leaders, that he was able to excite military awe, his patriotism and entire devotion were acknowledged by all, his diligence and toil were ever seasonable, and he was again rewarded to wear the double eyed peacock's feather, and granted the hereditary rank of first class, "Hing Kü To Waé" 輕車都尉, and during the autumn of the present year he was selected to the office of Cabinet Minister. He was long tried and much respected, and it was desired that he might be spared to a good old age, a support upon which to lean. Recently by reason of a return of his old complaint, he was granted a vacation for healing, and now it is reported that he has passed away. Having examined the document bequeathed by him, the consideration of his great goodness excites profound sorrow.

Let Lok Ping Cheung be granted the posthumous title "Instructor of the Heir Apparent," and let the obsequies be conducted according to those for Members of the Cabinet. All the censures which he incurred during his official life are entirely removed. It is proper that he should receive the Imperial bounty.

The Board in question is ordered to make examination of the regulations and report in full, and at the same time there is to be granted a posthumous name, and entrance into the Chapel of Worthies at the Capital, with special chapels to be erected in the provinces of Sze Chuen and Hunan, and the particulars of his official life are to be entrusted to the Imperial Historiographer. His son Lok T'in Po 天保 is granted the rank "Long Chung" 郎中, and after the period of mourning is passed he is to be employed in the service of the Boards. Lok Tin I 駱天貽 is granted the rank of "Kujin" 舉人, and after the period of mourning is past he is to be admitted fully to the examinations. The grandsons, Man Seung 懋湘, Man Kau 懋勤, Man Yan 懋仁, Man Fan 懋勳, are to be presented at court by the Board. His grand-nephew, Lok Chin Ts'un 駱肇銓, now waiting for selection as deputy district magistrate (tso-ting) 左堂, it is or-

dered that he be sent into the provinces to be appointed immediately as district magistrate.

The mortal remains are to be removed to his native place, and the local officials on the way are to give necessary attention, in which they are to manifest sincere and careful intention. Respect this.

ARTICLE VI.

THE TABLET OF YÜ.

By W. H. MEDHURST, Esq.,
H. B. M.'s Consul at Hankow.

Most persons who have given any attention to the subject of the ancient history of China must be familiar with the name of "Yü the Great," the founder of the Hia dynasty, (B.C. 2205,) and must have heard of the curious inscription in the "tadpole" character, said to have been traced by him, or in his time, upon a peak of the Hêng mountain in the province of Hunan, and purporting to be a record (presuming certain interpreters of its eccentric character to be worthy of credit) of the labour which Yü expended in rescuing the country from the waste and submerged condition in which tradition states it then stood.

Chinese archæologists, literati, and critics, ancient and modern, have looked into and discussed the question of the authenticity of this inscription, commonly known as Shenyu pai, or the Tablet of the sainted Yü, with a zeal and research which do them infinite credit, and foreign savans and sinologues have taken up the controversy as energetically in their turn; but to this day it remains a matter of doubt as to how far such an inscription ever had any existence, and at the same time a mystery as to what common origin, if any, may be ascribed the several reputed fac-similes, copies, or tracings, of the inscription which are undoubtedly to be found in various parts of the empire.

One of these copies or reproductions, from which the impression now presented to the Society (*see plate* A.) was printed off under my directions, is engraven upon a stone tablet, which was not long ago erected by Kwan Wên, late Viceroy of Hukuang, upon the prominent eminence of Wuchang overlooking the Yangtsze, called the Huanghoh low, or pavilion of the Yellow Stork, and it may be interesting to institute a comparison between this copy and others accessible to foreigners, in order to ascertain how far the alleged copies at any rate agree one with the other, and therefrom to judge of the value of the claims which they one and all set up to a common origin. I have thus far only been able to get at one

other reputed copy—namely, that in the possession of the Revd. Mr. Chalmers, of Canton, a facsimile of which, reduced in size by photographic miniature, is published in Dr. Legge's Chinese Classics, vol. III, part I, pag. 73, where likewise the curious reader may find an exhaustive dissertation on the history and pretensions of this remarkable monument. It only needs a glance at the two copies, mine and that published in Dr. Legge's work, to satisfy the most sceptical that they are reproductions of some common original, whatever or wherever that may be, although a close inspection reveals dissimilarities more or less startling in individual characters, as for instance in Nos. 6, 11, 12, 14, 15, 16, 17, 22, 24, 25, 27, 28, 30, 31, 35, 36, 39, 42, 44, 48, 51, 52, 53, 57, 58, 60, 61, 65, 66, 67, 69, 73, 74 and 75; that is in no less than 34 characters out of the whole 77. In judging of these discrepancies however, every allowance must be made for the deviations which would very naturally arise in the process of manual reproduction of such eccentric characters by various artists from copy to copy in the course of several centuries.

The notice by T'ang Siünfang, attached to my copy of the inscription (a translation of which I venture to furnish for the benefit of the uninitiated), although containing the usual admixture of sense and nonsense in which Chinese writers are so prone to indulge, presents a very interesting criticism upon the history and nature of the original inscription and the claims to credibility which the usually recognised interpretation of it is entitled to. Having been penned by an individual of both rank and education, who is a native of the locality in which the original inscription is said to be found, the notice is further valuable as throwing light upon the question of its actual existence on which Dr. Legge appears inclined to cast such grave doubts. On this point I may observe that a Chinese official of my acquaintance here informs me that portions of the rock on which the ancient inscription is said to have been placed are still to be seen, and that a tablet with a reproduction of the inscription reduced in size, but faithful and entire, is, as T'ang Siünfang states in his notice, to be found at this moment at the foot of the Hêng mountain. My friend has a brother resident in that vicinity, and he promises to use his influence in procuring me a rubbing of the reproduction at an early date.*

* This pledge was soon after fulfilled. A facsimile of the rubbing is hewn in plate B. It will be observed that this rubbing bears more marks

I have not thought it necessary to give a translation of the inscription itself as interpreted by Yang Shin and others, that duty having been already performed with such success by several foreign sinologues, as may be seen in reference to Dr. Legge's work already quoted, Dr. Williams's Middle Kingdom, and other works. The imprint I now present consists of, first, the copy of the inscription itself; second, the interpretation of it by Yang Shin; third, a poetic effusion in twelve lines by Kwan Wên, late Viceroy of these provinces, apostrophising the tablet; and fourth, the critical notice by T'ang Siünfang. Translations by myself of the last two will be found below. I may add for the information of persons unacquainted with Chinese peculiarities that imprints like the present one are taken with great facility by laying a sheet of thin porous paper upon the face of the stone which bears the inscription, and then rubbing it over with a bunch of tow filled with damp coloring matter. If carefully done the whole body of the paper takes the color, with the exception of those portions which cover hollows or depressions in the stone, and the consequence is that the imprint then comes out an exact facsimile of the original from which it is taken.

W. H. MEDHURST.

HANKOW, 29*th February*, 1868.

(TRANSLATION.)

Lines by Kwan Wên of Liaou Tung.

Tablet of Yü, celestial gem, by earth preserved,
Now darkly hid, now manifest, ablaze with light.
Chiselled by sprites, by gods set up, but sealed to man,
Thy purple stone bears letters bright, a heaven-born theme.
Like pheasant, or like phœnix, flitting to and fro,
Their track a mystery; so who can trace thy path?

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of authenticity than that shewn in plate **A**. In the latter, for appearance, sake no doubt, all the characters have been more or less touched up, and those which happened to lie in the line of crack in the stone have been altogether supplied. It must therefore be pronounced comparatively worthless for the purposes of comparison or identification.

W. H. M.

Poised in mid air 'neath overhanging precipice,
The mountain elves have ever had thee in their care;
Penned in tortuous style, thy lines who can decipher?
Gemmeous casket, tablet of gold, by sage employed,
Thou keepest guard o'er hill of Hêng, and flood of Seang—
Thy influence benign, like tripods nine of Yü,
Sheds forth a light of noonday sun and silver moon.
Thy style miraculous, with book of Lo can vie,
From whence Fu-Hi of old his mystic model took.
Thy characters in number three score ten and seven
Tell how the waters, erst a raging, roaring flood,
Were led by art divine in useful streams to flow.

(Translation.)

Brief notice (of annexed copy of inscription) respectfully penned by T'ang Sänfang (late treasurer of the province of Hu-pih).

The first notice on record of the "Tablet of Yü" on the Hêng mountain is to be found in the history of Siang chung (the modern Hu-nan), which states that researches in the work called Yü-tsze-t'ung prove it to have reference to the art of conducting water communication. The histories of Wu (the modern Kiang-su) and of Yüeh (the modern Chekiang) say the same. In none of these compilations however is any mention made of the existence of an inscribed tablet. T'sui Yung, who flourished in the time of the T'ang dynasty (A.D. 624-908) is the earliest writer who speaks of the characters being set in shell on a wooden frame; and Liu Yüseih and Han Yü (also two statesmen of T'ang) were the first to state that the inscription had been recorded and engraved. It follows that the people of the time of T'ang must have seen this rock, and the inscription which it bore.

The art of taking facsimile impressions was first introduced in the reign of Kia Ting of the Sung dynasty (A.D. 1208-1224), and the copy of the inscription obtained by this process, and subsequently engraven on stone in the monastery of K'wei mên, was of this period. The interpretation of the characters which formed the original inscription was first declared by Yang Shin and Shin Yi of the Ming dynasty (A.D. 1368-1644), and from

this source, sprung the numerous versions which have since been handed down. These two writers appear to have determined the identity of the seventy-seven hieroglyphics in the original inscription from their fancied resemblance to known characters, and thus managed in most cases to frame intelligible sentences out of them. But they must have been ignorant of the six rules of etymology,* and they cannot have known any thing of the intonation in vogue in ancient days. I therefore consider their interpretation to be only worthy of ridicule.

The sainted Yü flourished several hundred years subsequently to the days of Ts'ang Keih (the inventor of Chinese writing) and although at that early period characters must have been eccentric and quaint in appearance, yet they no doubt possessed specific combinations and forms. No one at any rate ever heard of interpretations being needed of the characters in which the canons of Yaou and Shun were written, and it may be presumed therefore that the characters in use in those ages nearly resembled the "bell and tripod" (commonly known as the "seal") characters, or perhaps those to be found in the Shwo-wên-kiai-tsze (a dictionary of definitions and explanations of characters, A.D.121.) It is much to be regretted that Yang and Shin put forth the random interpretation of the inscription which is attributed to them, and thereby gave occasion for the contemptuous suspicions which have been cast upon the authenticity of the inscription itself by subsequent writers.

Recent investigations go to prove that the true rock on the Yun Meih peak (the site of the inscription) hangs half way up a high overhanging precipice, which seems to be on the very verge of falling. I would ask therefore of those who pronounce the inscription to be a counterfeit, whether it is probable that the persons who placed it there, whoever they may have been, would have risked all the danger and difficulty attending such an undertaking, to carry out a purpose which could bring them no possible advantage? Then again how is it to be explained that, instead of adopting the style of writing in use amongst the ancients, they preferred to invent a set of monstrous extraordinary characters such as those in the inscription, which, however likely to secure for their framers the commendation of the ignorant, would

* For these rules see "Curiosities of Chinese Etymology," by J. Edkins. Notes and Queries on China and Japan, Jan. 1868.

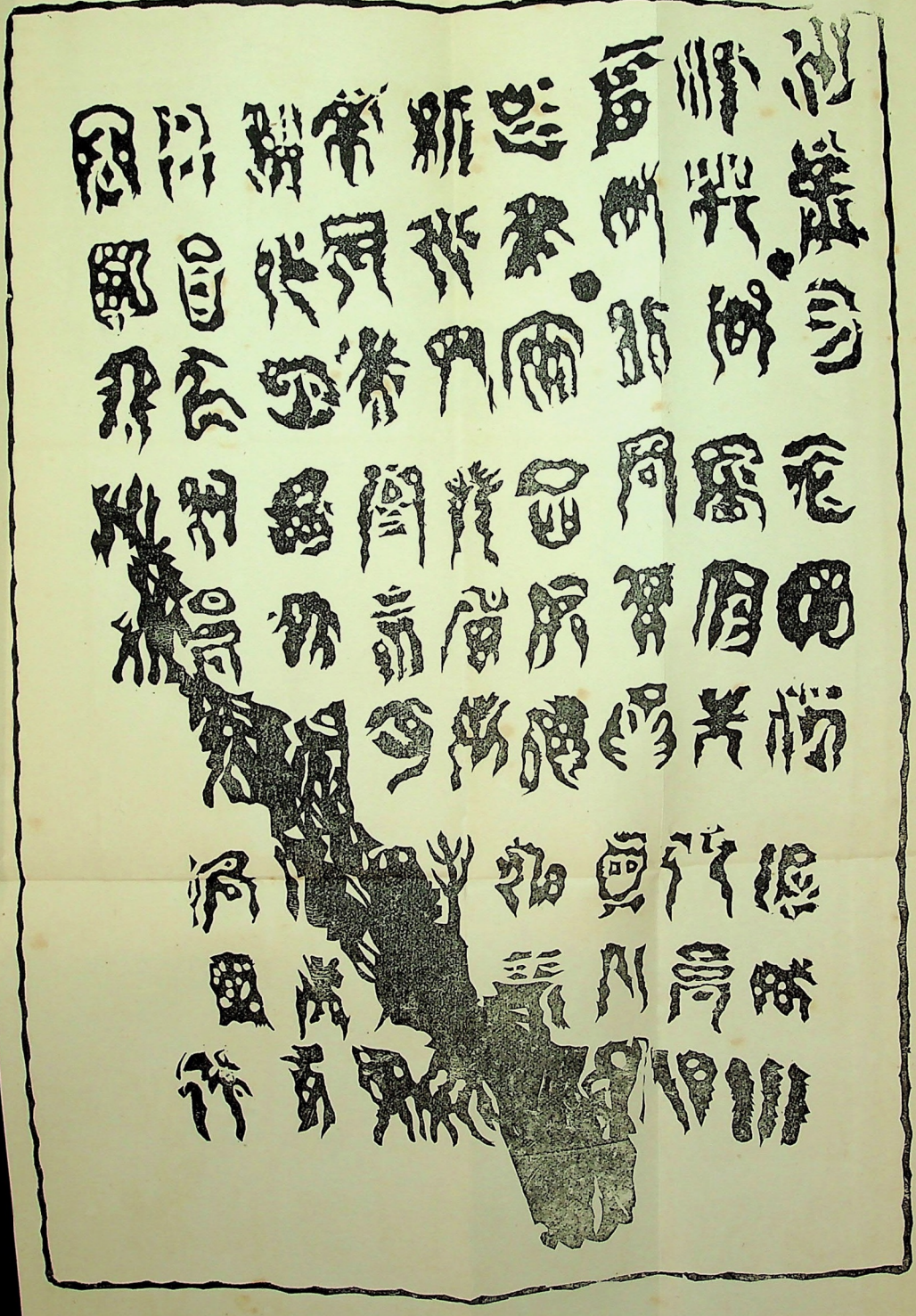
certainly be calculated to earn the profound contempt of the learned?

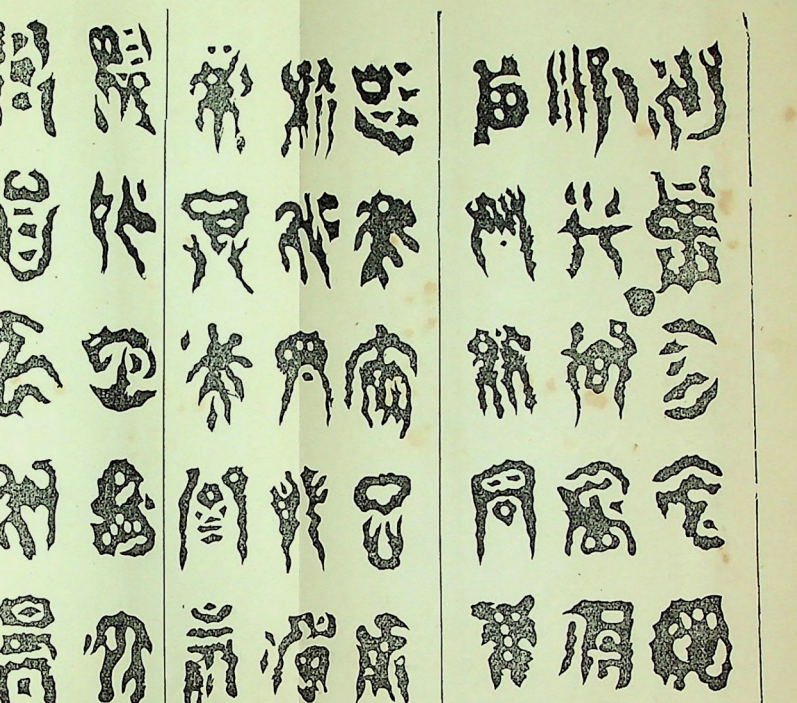
I, Siünfang, had my home close by the Hêng mountain, and whilst yet a child deeply pondered this interesting subject, fondly hoping that I might perchance succeed in deciphering a few at any rate out of the many mysterious characters of which the inscription consisted. Having taken impressions of it, I passed days and nights in studying the shape of the several characters, and in searching in every direction for ancient manuscripts with which I might institute comparisons, and so determine the origin and identity of every one. After a careful examination into the nature and style of the characters, it occurred to me that they closely resembled those depicted in the "veritable illustrations of the five peaks" which one Paou-pu-tsze has handed down to posterity; and I then suddenly remembered how the ancients had said, "the draining of the waters was conducted upon principles laid down in gemmeous tablets and characters, which constituted mysterious talismans of the remoter ages." I thereupon at once concluded not only that the strange forms depicted in the inscription did not partake of the nature of characters, but that the opinion commonly prevalent, to the effect that the tablet had been inscribed by Yü in order to commemorate his miraculous deeds, was entirely groundless. The "Scheme" put forth by the Yellow River (the fabulous origin of the eight diagrams of Fu-Hi), and the "Book" revealed by the River Lo (the legendary derivation of the great plan of Yü), as well as the fairy characters and pearly talismanic signs found from time to time in the hearts of mountains in primeval ages, were imparted to the spiritual and holy men of old, in order to aid them in carrying out their miraculous undertakings; and is it for a moment to be supposed that the paltry attempt at interpretation by a common mortal could succeed in unravelling any of their hidden mysteries?

An analogous instance, corroborative of the fact that such miraculous inscriptions do exist, has occurred within the last few years at Yung-Ning Chow in Kwei-chow, where a peak called Hung Yen Shan, after a shower of rain, at sunrise and sunset, shews lines depicted upon its face, which, although not actually legible as characters, yet suffice to prove that some superhuman agency is being exercised.

Reputed impressions of the accompanying inscription have been reproduced in stone in some ten to twenty different localities in

the Chinese Empire. His Excellency Siu-fung (the late Viceroy Kwan) having shewn me one taken from the original inscription on the Yun Meih peak, and charged me with the duty of tracing in outline the several characters, and restoring any defective portions thereof, I made my tracings from an impression, which I had had for some time past by me, of an engraven copy on stone, which stands at the foot of the peak, merely reducing the characters somewhat in size, but adhering to their form and shape in every respect. When my task was completed I added this critical notice by myself of the ancient history of the inscription; and I appended a copy of Yang Shin's so called interpretation, not that I thought it at all worthy of record, but because of the long notoriety which it has enjoyed, and because I am anxious that those who are capable of forming a judgment may be in a position to test its credibility for themselves.





楊慎釋文
承帝曰咨翼輔佐卿州渚與登鳥獸之門參身洪流而明後爾與久旅忘家宿岳麓庭智營形拆心罔弗辰往求平定華岳泰衡宗疏事衰勞餘伸禹鬱塞昏徙南濱衍亨衣制食備萬國其寧賡舞永奔

禹碑天寶地爲藏隨時隱顯騰光芒鬼斧神工難測量石青字赤蘊天章鸞飄鳳泊渺渺茫茫山靈呵護懸崖旁螭斗文字世莫詳玉函金簡鎮衡湘麻同九鼎日月光體追洛書法羲皇琅玕七十七字香滔滔洪水開八荒　遼陽官文題

衡山禹碑始見稱於湘中記云按省玉字通水理也吳越春秋亦同但未有刻碑之文至唐崔融乃有螺書扁刻之語而劉禹錫韓愈始云有銘有碑則此石唐人蓋有見之者而拓本始於宋嘉定中模刻葵門亦在是時其釋文則始於楊慎沈練從此盛傳凡七十七字大抵依據眞書形象約略成詞未明六書未知古韻適可誦訟而已神禹去倉頡後數百年其時文字雖奇古亦必有偏旁形勢無疑堯典諸篇未聞繙釋知其時文字與商周鐘鼎款識及說文解字所載古籀文相同明矣不幸爲楊沈妄釋使後人盡嗤此碑之僞今觀雲密峰眞石在縣嚴之半倒壓欲落作僞者未能艱險爲無益如此且造字時亦安能不依古文而詭作雄瑋以冀俗賞閒指摘之門乎訓方居衡山之旁少嘗深思頗釋出數字因取拓本日夜觀之搜攷古籍徵其由來諦觀意勢乃是抱朴子所傳五嶽眞形圖然後恍然於古人所云玉滯玉字業以治水者蓋上古符篆之秘果非文字而刻石紀功之誣尤不足辨矣河出圖洛出書山開靈書珍符以佐神聖豈可以陋詞釋之乎近年貴州永甯紅岩山於雨後日夕山石隱起有文示見神奇不成字法卽其證也至此石拓本翻刻者天下有十數處此是雲密峰原石季峰節相師出以相示屬爲鉤補渺處因取舊藏嶽麓刻石拓本鉤出字體差小形象不譌既鉤畢又證以昔間跋於後方其釋文本不足餘以流傳既久亦書於下以備鑒正焉

同治三年八月唐訓方謹記

PRÉFACE.

Après avoir étudié l'Assyrie, l'Egypte, l'Inde et tant d'autres anciens Empires avec un zêle et une puissance d'analyse aux quels nul secret n'a pu résister; après avoir fouillé le monde, hormis la Chine, c'est enfin vers elle que les savants tournent leurs yeux aujourd'hui. De tous côtés, se dressent devant elle, comme des échelles contre les murs d'une place investie, d'innombrables points d'interrogation. Déjà même les assaillants redoublent leurs coups, et l'on sent, à la rapidité avec laquelle ils se succédent, le prix qu'ils attachent à cette dernière conquête et l'impatience qu'ils éprouvent de fixer enfin des solutions qu'ils ont suspendues jusqu'à ce qu'ils aient pu sonder cette immense énigme, si vieille et si longtemps oubliée.

J'ai voulu dans le travail que l'on va lire, montrer, à propos de la Géologie et de la Paléontologie, comment on pourrait répondre à ces attaques, non pas en y résistant comme on résiste à des dangers, mais comme on accueille l'arrivée d'amis mal disposés mais toujours attendus; en leur donnant un plan ou au moins une esquisse de la ville et en leur ouvrant les voies et les avenues qui leur sont préparées depuis tant de siècles.

Cette esquisse même ne m'a pas paru suffisante; et, afin qu'elle pût servir non seulement à eux, mais à leurs amis et à leurs serviteurs, je n'ai pas cru trop faire de chercher, autant que possible, à l'orienter et à y tracer çà et là, quelques points de repère.

Superflus pour ces savants et pour la plupart des membres de la société qui veut bien me permettre de placer ce travail sous ses auspices, ils pourront, toutefois, ne pas être inutiles pour beaucoup de personnes dont l'esprit et l'attention ont été jusqu'ici dirigés d'un autre côté, et qui, douées de la faculté d'observer, peuvent, dans leurs résidences ou dans leurs voyages en Chine, rendre d'importants services, pourvu qu'on leur explique bien ce que l'on désire d'elles.

C'est pour ces personnes, c'est dans l'espoir d'exciter leur intérêt en faveur des recherches qui nous occupent, que j'ai fait précéder les indications que je me suis cru autorisé, par mes lectures ou mes observations personnelles, à donner sur la Chine, d'une sorte d'exposé, aussi complet et en même temps aussi succinct que possible, du sujet, tel que les savants nous le font connaître dans les ouvrages dont j'ai cité les noms en tête de ma notice et aux quels j'ai emprunté sans scrupule et tels quels, les extraits qui m'ont paru nécessaires à mon but, bien sûr du pardon que ce but m'obtiendrait.

D'un autre côté le plan que me traçait cette manière de voir était celui qui pouvait le plus aisément m'aider à présenter aux savants d'une façon claire et logique, des détails dont quelques uns sont produits peut-être pour la première fois, et dont les autres paraissent avoir dormi, oubliés, dans les livres où ils y avaient été publiés en notre langue, il y a cent ou cent cinquante ans.

Ainsi ma notice n'est proprement et à très peu de chose près, qu'un cadre dans lequel j'ai taché de grouper de façon à les éclairer les uns par les autres, en vue des maîtres et en vue des serviteurs de la science, les faits acquis et ceux que l'on peut recueillir en Chine.

Ningpo, 15 janvier 1869.

G. EUG. SIMON.

ARTICLE VII.

NOTE SUR QUELQUES UNES DES RECHERCHES QUE L'ON POURRAÎT FAIRE EN CHINE ET AU JAPON AU POINT DE VUE DE LA GÉOLOGIE ET DE LA PALÉONTOLOGIE.

PAR G. EUG. SIMON,

Consul de France à Ning-Po.

OUVRAGES CONSULTÉS:

La paléontologie appliquée à l'étude des races humaines par Mr. G. de Saporta, 1868.—Les Glaciers et la période Glaciaire par Mr. Ch. Martins, 1867.—Un tour de Naturalistes dans le Nord par Mr. Ch. Martins, 1863.—Les Antiquités Egyptiennes par Mr. E. Renan, 1865.—Cours de Paléontologie par Mr. d'Archiac, 1864.—La Science des Religions par Mr. E. Burnouf, 1867 à 1868.—L'homme primitif par Mr. A. Maury, 1867.—Les Oscillations du sol terrestre par Mr. E. Reclus, 1865.—Le Voyage du Glacier par Mr. E. Rambert, 1861.—Le Dronte et les espèces perdues par Mr. Radeau, 1866.—Les Etudes et les Découvertes archéologiques récentes dans le Nord Scandinave par Mr. A. Geffroy, 1862.—Cours d'Anthropologie par Mr. de Quatrefages, &c., &c.—Mémoires concernant les Chinois par les anciens Missionnaires Jésuites.—Le Chou-king.—Recherches sur les temps antérieurs à ceux dont parle le Chou-king par le Père Prémare.—Notice sur l'Y-king par le Père Visdelou.

> "Toute Doctrine a pour base les merveilles de la Création; pour raisonner sur l'Homme, il faut commencer par la manière dont il a reçu l'être." Début du Tchi-pen-ti-kang. V. les Mémoires des anciens Jésuites: Tome 11, page 385.

NOTRE temps ne s'illustre pas seulement par les découvertes de l'Industrie. Sans vouloir en dire plus de bien que de raison, il n'est que juste de signaler comme un de ses plus grands titres de gloire pour le présent, et comme l'un des mérites dont l'avenir lui tiendra le plus de compte, les études qu'il a entreprises depuis une trentaine d'années sur toutes les questions qui se rapportent à l'homme, à son origine, à sa nature, et à son histoire.

Que sommes nous?—D'où venons nous?—Quels étaient nos ancêtres?—A quelle époque avons nous été placés sur la terre? Comment sont nées les diverses races qui composent l'humanité?

qu'est ce que les différences qui les séparent? les rapports qui les unissent? Tel est, sous quelques unes de ses faces, le problème qui s'impose aujourd'hui aux esprits les plus sérieux avec l'énergie de la pensée qui se sent mal étayée par d'anciennes croyances, déconcertée par de récentes découvertes, avec l'attrait du plus obscur et cependant du moins indifférent des mystères. Tel est le terrain sur lequel les sciences en apparence les plus diverses, l'archéologie, la linguistique, l'anatomie comparée, la géologie, la paléontologie, l'ethnologie et la critique historique se donnent aujourd'hui rendez-vous.

Les réponses de la Bible, trop étroitement interprétée, ne les satisfont plus.

On disait l'homme nouveau sur la terre; on le représentait déchu du haut état physique et moral dans lequel il aurait d'abord été créé; on parlait d'une catastrophe épouvantable engloutissant d'un coup toute sa races; on rejetait comme autant de fables indignes de toute croyance, les légendes de l'antiquité qui nous le montraient au contraire, ignorant et sauvage, acquérant ses idées lentement et comme siècle par siècle; et les vieux mythes de Janus, de Saturne, de Ménès, de Prométhée, de Cérès et de Triptolème étaient relégués parmi les conceptions les plus ridicules du paganisme. "Il y a dix ans à peine, les découvertes relatives aux premiers âges de l'humanité étaient encore frappées d'une sorte de discrédit; on souriait en parlant des objets que certains savants voulaient faire passer pour des instruments primitifs. Maintenant, après avoir vu les parties de la dernière exposition consacrées aux plus vieux spécimens du travail de nos ancêtres et les magnifiques salles du Musée de St. Germain, on est saisi d'étonnement comme devant une révélation inattendue. On est surpris que l'ignorance ou les préjugés aient pu si longs temps dérober la signification de tant de vestiges, armes, ornements, utensiles de toute nature, en silex taillé ou poli, en jade, en serpentine, les uns informes, d'autres d'un fini qui en fait de véritables objets d'art. On ne comprend pas qu'une opinion presque générale ait pu naguère encore circonscrire dans d'étroites limites le passé de notre espéce."

L'Antiquité avait raison: dépouillées de leur caractère symbolique ou allégorique, ses fables sont vraies. L'homme que nous connaissons n'a point été créé; des centaines et peut-être des milliers de siècles l'ont lentement produit; c'est peu à peu que, sous l'influence du choix divin qui le distingua des autres êtres, la religion, la civilisation, les arts se sont révélés à son esprit. Ce

n'est que trait par trait, progressivement, que son corps perdit les caractères de l'animalité qui l'étreignait; que, sous l'effort de son intelligence fécondée de ce même souffle divin, son crâne se développa, son angle facial s'ouvrît et qu'enfin se grava sur son front l'empreinte désormais ineffaçable, mais de plus en plus marquée, de celui qui le tirait ainsi des ténèbres et du chaos. Ce n'est que degré à degré qu'il sortit des cavernes où il habitait, descendit des arbres où il perchait, pour fonder dans les plaines les sociétés puissantes que l'on connait; les six journées de la création ne sont point finies; il n'y a pas eu de déluge universel et les listes généalogiques de la Bible n'indiquent et ne rappellent bien décidément que des races et des époques indéterminées et non de réelles individualités.

Voilà ce que nous enseignent les travaux des d'Archiac, des Grimm, des Burnouf, des Brandt, des Max Müller, des Ewald, des Pictet, des Lyell, des Martins, des Middendorf, des Wilson, des Darwin, des Maury, des Agassiz et de tant d'autres savants éminents.

Voilà ce que prouvent jusqu'à la dernière évidence, les témoignages les plus authentiques, les pièces de conviction les plus diverses, et, en particulier, celles que la Géologie et la Paléontologie ont déjà recueillies dans toutes les contrées du monde qu'elles ont pu explorer et dont les spécimens les plus nombreux et les plus complets sont réunis en France au château de St. Germain.

Voilà ce que démontrent encore tant de races inférieures éparses sur le globe, et qui en disparaissent sous nos yeux sans y avoir été autre chose que les ébauches successives, maintenant inutiles, dont la Création s'est servi pour arriver jusqu'à nous.

Mais quel est l'objet, quel sera le résultat final de toutes ces recherches et de toutes ces découvertes? la vérité d'abord, la vérité pour elle même, la vérité qu'il n'est permis à personne de mettre sous le boisseau et dont, sous aucun prétexte, il n'est permis à personne de retarder l'avénement; la vérité vers laquelle à travers ses erreurs et obéissant à la même loi que celle qui entraîne les corps vers le centre de la terre, l'esprit humain gravite avec une force aussi irrésistible. Ce but se consacre de lui même, et, bien qu'il soit le seul peut-être, pour le moment, qui s'offre clairement à nos désirs, il suffit à les légitimer et à les ennoblir. Cependant il est des conséquences d'un ordre moins abstrait qu'il n'est pas absolument impossible de pressentir dès maintenant. La pensée se trouble bientôt lorsqu'elle envisage les questions que je formulais

si brièvement tout-à-l'heure. On ne songe pas sans anxiété aux solutions dont elles peuvent être suivies, aux profondes modifications qu'elles devront faire subir aux idées dans lesquelles les sociétés modernes ont été élevées. Il est douloureux de renoncer à d'anciennes croyances; mais c'est un insupportable supplice que de ne pas savoir comment elles seront remplacées. Il est urgent d'y mettre fin au plus tôt.

D'un autre côté, si malgré tant d'efforts et de progrès accomplis dans les sciences et dans les arts, l'humanité est encore si peu avancée que ses efforts et ses progrès semblent se tourner contre elle-même; s'il nous faut encore entendre de peuples à peuples, ces mêmes explosions de haines qui ensanglantèrent son enfance et firent chanceler ses premiers pas; si enfin l'aiguille du temps paraît avoir vainement pour la paix des esprits et des cœurs, marché sur le cadran des siècles, ne serait-ce point pour avoir trop longtemps ignoré quelques uns des rayons dont, comme la lumière, la vérité se compose?—Qui voudrait, aujourd'hui surtout que les plus graves événements se chargent de nous les rappeler, nier par exemple et sans aller plus loin, les rapports de la politique avec les sciences éthnographique, sociale, géographique, religieuse, &c.? Et si chaque science et chaque vérité sont à ce point constitutives de cette vérité générale dont il importe de s'éclairer en toutes choses, à quel point la science de l'homme, la science qui lui apprend à se connaître dans le temps et dans l'espace n'est-elle pas essentielle? Peut-être ne lui sera-t-il jamais donné de découvrir le mot de sa destinée; rien toutefois ne saurait lui en faire concevoir une idée plus haute et plus consolante que la connaissance de ses origines. Si elles lui montrent qu'il n'a point, ainsi que je le disais tout-à-l'heure, fait exception à l'unité, maintenant à peu près démontrée, du plan de la création; s'il y reconnaît que son apparition sur la terre n'a pas été subite, mais lentement amenée, suivant une loi de développement que Dieu semble s'être imposée et dont nous n'avons pas à lui demander compte, elles le convaincront de plus en plus, de la nécessité de son incessante et toute puissante intervention. Ce n'est qu'en se reportant à la faiblesse de ses premières années que l'homme a réellement conscience de ce qu'il doit à sa mère. De même il se rapprochera de ses humbles débuts, il s'identifiera avec ses premiers modes d'existence, il contraindra son imagination à se reporter au milieu de ceux avec lesquels il a commencé de vivre, et, sous ses horribles étreintes, dans cette hideuse promiscuité, il sentira, de qui était,

de qui devait être le bras qui pût le dégager de ces étouffantes entraves, et, suivant les expressions de l'Ecriture, le tirer "d'entre ces démons muets" les sinistres "*Velus*" dont il ne différait que par de vagues inquiétudes et le sentiment de son impuissance. Puisant dans un long passé l'irréfutable certitude d'un auxiliaire supérieur et dans la distance qui l'éloigne de son point de départ une confiance inébranlable en l'avenir, see espérances n'auront d'autres limites que les bornes mêmes de ses aspirations actuelles. Je ne sais si je m'abuse, mais ces travaux de l'humanité sur elle-même, ces efforts de l'humanité qui se cherche au travers des siècles, ont quelque chose de touchant et de grave qui me paraît déjà autoriser les perspectives les plus rassurantes. Les haines s'émoussent devant la mort, on se réconcilie sur un tombeau; sur les ossements de nos ancêtres, sur les reliques qu'ils nous ont laissées, nous abjurerons tous au nom de la vérité, nos erreurs, nos rivalités inutiles et nos ambitions sans but. En présence de leurs restes confondus, nous porterons nos vues au delà du présent instable et fugitif, et, nous élançant vers l'avenir, le jugement de la postérité deviendra la raison de nos actes et le salaire de nos services.

Sous les réflexions enfin qu'évoquent ces vestiges des temps passés, j'entrevois le temps où chacun n'aura d'autre émulation que l'émulation des grandes choses, et où, plaçant dans le sépulcre sa plus noble ambition, n'aura d'autre désir que celui d'une belle mort, sereine, chargée de guirlandes et des bénédictions du monde.

Mais c'est assez nous attarder à ces rêveries. Elles se réaliseront de la même façon que je viens, sans y prendre garde, de m'y laisser entraîner. Ce n'est qu'en se reportant aux cieux que le regard se repose des profondeurs. Le charme de l'infini est trop grand, l'œil qui s'y est abandonné ne s'en détache qu'avec peine et en garde long-temps le reflet. Ainsi, placé entre le passé qui se découvre seulement et le futur qui se jalonne, reflétant les souvenirs du premier et les espérances du second, le présent qui n'etait, pour ainsi parler, qu'un battement entre ces deux éternités, s'harmonisera avec l'une et avec l'autre et en formera l'heureuse modulation.

Cependant, de quelqu'attente que puisse nous remplir les récentes conquêtes accomplies dans les différents domaines de la Science de l'homme, quelque fiers que nous puissions en être, il faut reconnaître qu'elles sont encore très incomplètes, et, bien que je n'aie semblé jusqu'à présent que vouloir en faire ressortir l'impor-

tance ou pressentir les résultats, je n'ai précisément pour but que d'indiquer quelques unes des lacunes qu'elles présentent dans le champ spécial de la Géologie et de la Paléontologie.

C'est là d'ailleurs qu'elles sont peut-être le plus regrettables, car c'est de là que sont sorties les découvertes du plus haut intérêt. L'étude des langues et des traditions dont le secours est si nécessaire pour les temps modernes ne peut en effet presque rien apprendre de l'homme au delà des commencements des sociétés actuelles, car l'écriture qui seule pouvait nous en conserver des traces n'existait pas. L'archéologie elle-même, dans ses monuments les plus anciens, ne nous montre l'homme qu'arrivé déjà à un état social relativement civilisé, mais l'histoire de l'homme dans les âges antérieurs, aux époques où la pierre taillée par éclats, puis la pierre polie, étaient les seuls produits de sa rudimentaire industrie, l'étude du sol où on les recueille et avec lequel elle se confond peut seule nous le révéler.

C'est de là qu'elle se dégage, non plus siècles par siècles, mais par longues périodes, par succession de phénomènes; c'est de là que l'humanité, d'abord incertaine, émerge peu à peu du fond obscur où ses germes dormaient ensevelis, de là qu'elle sort enfin de plus en plus visible pour entrer dans la voie du progrès qu'elle n'a plus quittée.

I.

Il existe, disais-je tout-à-l'heure, dans l'ensemble des observations sur lesquelles s'appuient les sciences dont l'histoire de l'homme est l'objet, un certain nombre de lacunes qui la laissent incomplète, et si, malgré cela, les conclusions que l'on peut déjà tirer des faits acquis sont assez assurées pour n'avoir à redouter aucun démenti des observations contingentes, elles n'en présentent pas moins un aspect tronqué d'autant plus fâcheux.

Toutes les contrées de l'Europe, une grande partie de celles de l'Amérique, et quelques unes de l'Afrique elle même ont été explorées et ont fourni à l'étude une masse de documents de toutes sortes.

L'Asie, sauf les Indes, est restée à peu près muette. On ne sait rien ou presque rien du continent le plus étendu, du continent qui fut le berceau de notre espèce et tout au moins celui de la société civilisée, rien ou presque rien des mille peuples, peuplades ou tribus qu'il recèle, de leurs origines, de leurs langages, de

leurs traditions. On ne sait rien surtout de la Chine, de cette doyenne des nations dont l'immense territoire aussi bien que l'histoire "la plus authentique et la plus reculée qui soit au monde," touche par tant de points aux lieux du globe les plus anciennement habités, et dont les légendes si claires et si transparentes pourraient, maintenant que l'on sait lire dans les légendes, livrer de si précieux renseignements. Dans le peu que nous en savons, que de simplicité, de naturel, de vérité! Point ou peu, très peu de ces interventions surnaturelles si fréquentes dans les histoires des autres peuples, si difficiles à admettre et si fécondes en disputes. Dieu reconnu, il suffit; la loi donnée, on y obéit; le mot d'ordre reçu, on le suit; et tout cela sans bruit, sans fracas. Tout s'enchaîne et se succède, lentement mais progressivement, comme partout, comme dans la nature entière. C'est évident, et l'on dirait presque que tous ces silex, ces ossements n'ont été mis au jour que pour servir de pièces justificatives à l'histoire légendaire de la Chine.

À quoi bon d'ailleurs ces brusques révélations, ces prodiges et ces miracles qu'on pourrait appeler arbitraires tant ils sont subits? Toutes ces évolutions que notre ignorance nous forçait à entasser et à comprendre en un pauvre cadre étroit de 6,000 années et qui auraient choqué notre bon sens comme elles se heurtaient elles-mêmes, s'accomplissent ici en des éternités de cent, de deux cent soixante seize mille ans? Dix-huit mille ans pour seulement débrouiller le chaos!! Nous voici bien loin de compte... Plus tant aujourd'hui cependant, puisque les dernières découvertes faites par un prêtre, Mr. l'abbé Bourgeois, indiquent la présence de l'homme jusqu'en plein terrain miocène et que, se fondant sur d'autres vestiges trouvés dans le *drift*, Mr. Lyell le fait remonter à deux cent mille ans *au moins!*

Et l'homme, le premier homme que nous nous représentions, si beau, si brillent des mille facultés dont nous l'avions cru doté tout-à-coup, quelle déception! Est-il possible, est-il raisonnable de penser que Dieu ne l'ait créé si parfait que pour le défigurer immédiatement et ravaler, même ses traits, presque jusqu'à ceux de la brute, jusqu'à ceux dont nous pouvons nous faire une idée d'après les crânes d'Engis (Liège), de Neanderthal (Allemagne, Elberfeld), d'Eguisheim (Colmar Rhin), des Eyzies (Dordogne)?

En Chine, point de ces contradictions embarassantes pour l'esprit, injurieuses pour la providence.—Pan-kou, c'est l'homme idéal, le type qu'il doit réaliser; il n'a *été créé qu'en esprit, son âme*

seule a existé; c'est elle qui se dégage, générations par générations *du chaos où elle est enfermée et qui a la forme d'un œuf,* c'est elle qui les anime peut-être. Mais le premier homme créé, Fou-Hi, avec son énorme tête et son corps de serpent? C'est presque un têtard. On est stupéfait en vérité! Eh quoi, il y a quelques années à peine que nous connaissons cette loi d'après laquelle tous les individus des créations supérieures revêtent dans les différentes phases de leur existence embryonnaire les formes principales des créations inférieures; il nous a fallu, pour cela, le secours de tous les progrès accomplis depuis vingt siècles de civilisation et d'efforts en tous sens, et nous la trouvons aujourd'hui, cette loi, illustrée par les conceptions les plus anciennes! Elles nous montrent l'homme se formant au sein de la nature, sa première mère, comme l'enfant se forme dans le corps de la femme! Et qu'on le remarque bien, ce n'est pas simple hasard. Si toutes les métamorphoses du fœtus ne sont pas indiquées, il y en a une autre qui n'est pas moins frappante que la première, c'est Chen-Nong, qui succède à Fou-Hi, et qui nait avec un corps d'homme et une tête de taureau.

Les transitions de l'œuf à l'homme sont, on le sait, plus nombreuses, néanmoins les principales, les extrêmes sont bien représentées. Homme dès la cellule, Pan-kou en sortant, prend la forme des animaux les plus infimes, des ovipares, avant d'arriver à celle des animaux supérieurs, des mammifères. En Chen-Nong, le plus fort est fait, homme par le corps, les pieds et les mains, n'ayant jamais cessé de l'être par l'essence, par l'âme, qu'importe la face et le crâne de Pan-kou? Peu à peu le diamètre antero-postérieur du crâne, plus grand que le diamètre transversal, comme dans le crâne de Neanderthal, diminuera; peu à peu, la voûte crânienne s'élèvera, la saillie des arcades sourcillières disparaîtra, le front s'élargira, les parois de la boite osseuse deviendront plus minces, comme dans les crânes des Eyzies, &c.

Je ne sais, mais cette étonnante concordance me paraît avoir, plus j'y songe, quelque chose de terrifiant. Est-ce donc en effet que l'homme s'est ainsi développé? ou bien, ne faut-il voir dans cette conception, infiniment supérieure à celle de l'Hanouman de l'Inde, que le sentiment, mais le sentiment admirable, prodigieux, inouï, du plan de la création qui ne semble ordonné que par rapport à l'homme en qui il se résume, s'incarne et trouve son couronnement.

Ce n'est pas tout, mais le peu qui précède me fait trop prévoir les difficultés que je rencontrerais en continuant cette esquisse, si je n'essayais de résumer d'abord en aussi peu de mots que possible,

et en les limitant, ainsi que je l'ai déjà dit, à la Géologie et à la Paléontologie, les données les plus nouvelles et les plus essentielles de nos connaissances.

Deux grands phénomènes dominent toutes ces recherches; l'un est le phénomène de l'oscillation du sol, l'autre celui des Glaciers.

Le sol qu'on est habitué à regarder comme immuable est au contraire dans un état constant d'oscillation. Sans parler des tremblements de terre et des autres mouvements dûs à des causes tout-à-fait locales ou spéciales, comme ceux qu'y déterminent les courants de chaleur, d'electricité, &c., l'enveloppe de la terre, sollicitée d'un côté par les astres, comprimée de l'autre par la vapeur, les gaz et les matières fondues de l'intérieur du globe, ne cesse d'onduler comme le ferait un radeau s'élevant et s'abaissant sur les eaux de la mer. Les changements de niveau du golfe de Bothnie et de la Baltique, qu'on attribuait autrefois au retrait et à la dépression des eaux de la mer, ne sont au contraire que les conséquences des mouvements de la terre. Il ne faut, pour s'en convaincre, que remarquer que la diminution n'est point égale sur le pourtour de la presqu'île Scandinave, comme cela devrait être s'il était vrai que les eaux, toujours horizontales, se retirassent. Et non seulement elles ne se déprimont pas partout également, mais, en certains points, comme à la pointe de la Scanie, elles recouvrent graduellement le sol. Ainsi, plusieurs rues des villes de Malmoë, Trelleborg, Ystad ont déjà disparu; et depuis les observations faites du temps de Linnée seulement, la côte a déjà perdu une zône de trente mètres de largeur. Ces balancements ont lieu, on le sait, en des temps excessivement longs. A l'extrémité septentrionale du golfe de Bothnie, le continent émerge de 1^{m} 60 en cent ans, par le travers des îles d'Oland de 1^{m} seulement, à la pointe terminale du Jutland de 30 centimètres. Dans l'île de Munkholm il n'a pas varié de 6 mètres en 1,000 ans.

Si lents qu'ils soient, ils arrivent cependant à élever jusqu'à 200, 300 et 414 mètres au-dessus du niveau de la mer, ainsi que le montre la récente découverte de Mr. Derbishire, non loin du Snowdon, les polypiers et les coquilles qui ne peuvent vivre que dans ses profondeurs et que nous foulons chaque jour à nos pieds. En même temps, les forêts de pins qui couronnent les hauteurs des montagnes sont aussi exhaussées jusqu'à la région des neiges éternelles où elles ne peuvent végéter, dépérissent peu à peu et de larges lisières de forêts ne se composent plus que d'arbres morts, quoique restant encore debout depuis des siècles. Ainsi s'ex-

pliquent les solutions de continuité entre certains continents et entr'autres la séparation de la France et de l'Angleterre; ainsi s'explique la présence au milieu des continents, des vastes étendues de sable du Sahara, du Cobi, autrefois fonds de mer comme la Scandinavie elle même. Il serait facile de multiplier les preuves et les exemples de l'oscillation du sol. Toutes les contrées du monde nous en offrent aujourd'hui à profusion, mais on ne les demande même plus à titre de preuves et elles ne nous étaient nécessaires qu'à cause des circonstances qui s'y rattachent et qui nous intéressent plus directement. Il suffira donc de les avoir rappelès.

Nous pouvons cependant remarquer en passant, que c'est déjà par centaines de siècles qu'il faut compter l'existence du monde. Mais l'oscillation à laquelle a succédé l'epoque quaternaire qui nous reporte si loin, n'est pas la seule qui ait eu lieu. En 1819, en creusant un canal de communication entre le lac Maëlar, près de Stockholm, et la Baltique, on traversa, près du village de Soedertelje un osar ou banc de sable émergé et couvert de blocs erratiques portant des arbres séculaires. Les déblais de la tranchée mirent à nu dans le sein même du monticule et à 18 mètres au dessous de la surface, la charpente en bois d'une hutte renfermant un foyer formé de pierres disposées en cercles et de bûches carbonisées. En dehors de la hutte on découvrit des branches de pins coupées; quelques débris d'embarcations dont les parties étaient assemblées par des chevilles en bois, gisaient devant la porte. Les conséquences de ces faits sont évidentes. Quand un pêcheur habitait cette cabane, elle était émergée. Ensuite elle s'est enfoncée et a été couverte d'une épaisseur de 8 mètres de graviers; puis la côte où elle se trouvait s'est lentement soulevée et l'a ramenée à son niveau primitif. D'autres faits sont depuis venus s'ajouter à celui-là, tels par exemple que les vestiges d'habitation ramenés du fond des lacs de la Suisse et de la Savoie.

Dans la partie du monde que nous habitons, on pourrait entre autres faits que des observations suivies feraient certainement apercevoir, citer au Japon la grotte située à l'entrée de la baie de Nagasaki et dont l'ouverture récente, au dire des Japonais, grandit et s'élève assez sensiblement; en Chine l'exhaussement et l'agrandissement de l'île de Tsom-Ming, l'émergement de l'Archipel des Chusan qui finira par être rattaché au continent; l'élévation du fond des golfes de Leao-Tong et du Pe-Tcheli, la présence de roches madréporiques signalées par quelques missionnaires, et notamment, si mes souvenirs sont exacts, par l'abbé Huc, jusqu'au

sommet de certaines montagnes de la Chine; la présence de coquillages marins, dont Mr. le Dr. Lamprey et Mr. Kingsmill nous ont, ici même, fait connaître quelques espèces, les cavernes élevées et remplies, si nombreuses dans la plupart des provinces, les espèces marines de poissons et de crustacés qui existent aujourd'hui encore dans les lacs salés des hauts plateaux de la Mongolie, au nord de Lama-Miao; et enfin et surtout le déplacement actuel de l'embouchure du fleuve Jaune qui recule, en causant de si grands ravages, comme le Soane de l'Inde, lequel a reculé de 7 kilomètres depuis 80 ans.

Ainsi la *subsidence* du sol, le va-et-vient de ce majestueux balancier a été complet et nous voici forcés de doubler le premiers temps de l'oscillation, et l'homme existait déjà, et nous n'avons point tenu compte des temps de repos entre chaque mouvement de bascule!

Nous devons maintenant nous occuper des périodes glaciaires dans lesquelles nous retrouverons non seulement aussi la présence de l'homme mais les preuves d'oscillations plus anciennes.

Mais avant d'en parler, un rapprochement m'obsède dont je veux me débarasser en le disant. Tout naturellement, à propos du phénomène auquel je viens de m'arrêter les mots de *changement*, d'*oscillation*, de *bascule*, de *balancier* se sont présentés à mon esprit et sous ma plume; eux seuls pouvaient faire comprendre ce que j'avais à décrire. Il y en a un autre cependant devant l'emploi duquel j'ai reculé et que j'ai rayé vingt fois. C'est le mot de *pendule*. Pourquoi ai je ainsi hésité?

Par la seule raison que *pendule* est la signification du mot *koua*, nom des trigrammes de Fou-Hi, qui ont inspiré le livre canonique des changements, le plus vieux des livres, puisqu'il remonte à 3,000 ans avant J. C., l'Y-king, lequel a été fait pour montrer comment et sans cesse "ce qui est *dessous* vient *dessus* et ce qui est *dessus* passe *dessous*, livre que l'on appelle encore: *Livre des principes, Livre des combinaisons, Livre du passage perpétuel du repos au mouvement et du mouvement au repos, Livre des Générations et Corruptions, &c.*"

Je confesse ma faiblesse.

Qui sait d'ailleurs si ce livre paraîtrait aussi incompréhensible qu'autrefois et aux Chinois eux-mêmes, à ceux qui, possédant les lumières fournies par les sciences modernes, en liraient les commentaires de Ouen-Ouang, de Tchéou-Kong et de Confucius, c'est-à-dire de trois des plus beaux génies que l'antiquité connaisse en philosophie, en politique, en physique et en morale. Je sais que

ce livre des changements est devenu le livre des sorts et que si on a égard à la composition du caractère chinois *koua*, on peut voir qu'il est formé de la lettre *pou* qui peut signifier sort; mais il est certain que ce livre n'est devenu le livre des sorts que lorsqu'on a perdu l'intelligence de son véritable sens, et ce n'est ensuite que pour mettre le nom des hexagrammes en rapport avec leur amplification ainsi faussée, qu'on l'a écrit par le caractère en question qui satisfaisait au but qu'on se proposait, tout en conservant son ancienne prononciation. En tous cas, le bon sens ne se refuse-t-il pas à admettre que des génies tels que Tchéou-Kong, Ouen-Ouang et Confucius s'en fussent occupés, si ce livre n'eût été qu'un livre de sorts.*

Je reviens aux périodes glaciaires.

II.

La connaissance d'une période glaciaire embrassant les deux hémisphères du globe et postérieure à l'apparition de l'homme sur la terre est une des plus belles conquêtes de la Géologie moderne.

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* A l'appui de ces réflexions je citerai le passage suivant des observations de physique de l'Empereur Kang-Hi, traduit dans le Tome IV des Mémoires des anciens Jésuites ; pag. 474.

"Tartarie Orientale.—En s'avançant du rivage de la mer Orientale, vers le Tchélon, on ne trouve ni ruisseaux, ni étangs dans la campagne, quoiqu'elle soit entrecoupée de montagnes et de vallées. Malgré cela on trouve fort loin de la mer dans le sable, des écailles d'huitres et des cuirasses de cancres. La tradition des Mongoults qui habitent ce pays, porte qu'on a dit de tout temps, que, dans la haute antiquité, les eaux du déluge avaient inondé cette plage et qu'après s'être retirées, les endroits, où elles étaient, avaient paru couverts de sable. Je me suis souvenu à cette occasion que la figure *Kien* (fosse) des Hunt-Kouo de l'Y-King est mise dans le Nord ; et c'est pour cela qu'il est dit que les grandes eaux vinrent du Nord et y restèrent plus long temps. Selon *Mong-Tsée*, les eaux du déluge s'étendirent sur la Chine en l'inondant. L'expression (s'étendirent en l'inondant) *Fan-Kien*, indique qu'elle était plus basse et qu'il y avait une source ou un amas d'eau d'où venait l'inondation. Quoiqu'il en soit du comment, à s'en rapporter à la grande géographie Ti-Chi, une partie de ce pays est une grande plaine où l'on trouve plusieurs centaines de lieues que les eaux ont couvertes et puis abandonnées ; voilà pourquoi on appelle ces déserts *Mers de sable*, ce qui indique qu'ils n'étaient pas couverts originairement de sable ni de gravier."

On trouve encore dans les commentateurs de l'Y-king l'expression Kueï-chin qui désigne les propriétés que possède la Nature de s'étendre et de se contracter. "Et par cette extension et cette contraction qu'ils appelent *l'allée et la venue* ou le systole et le diastole de la Nature, ils figurent les vicissitudes de la Nature dans ses générations et corruptions alternatives."— Notice sur l'Y-king.

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On sait depuis peu que les glaciers non plus que la croûte terrestre, ne sont immuables et que ce sont des fleuves qui marchent. On en a les preuves par les empreintes, les stries qu'ils tracent sur les roches entre lesquelles ils sont encaissés, et surtout par les masses de débris et les blocs énormes qu'ils transportent. Or, il existe dans certaines zônes de l'Europe et de l'Amérique, et nous pouvons ajouter de l'Asie, des moraines ou amas considérables de pierres venues de fort loin, puisque dans ce qui les entoure on ne voit rien qui leur ressemble; on remarque sur les flancs des montagnes ou des rochers à l'extrémité desquels ils sont déposés, des marques identiques à celles que laissent les glaciers actuels; et quoique le fleuve de glace n'existe plus, on est bien forcé de reconnaître qu'il a existé.

Il a donc été une époque où les glaciers recouvraient une surface beaucoup plus considérable qu'aujourd'hui et où les calottes des glaces polaires investissaient en Europe: toute la presqu'île Scandinave, la Finlande, la Russie Orientale, l'Ecosse, l'Irlande, le Nord de l'Angleterre; en Amérique: le Labrador, le Canada, et les Etats-Unis jusqu'à la latitude de New-York. C'est à cette époque que l'on a donné le nom de période glaciaire. Les observations que j'ai pu faire me permettront d'en compléter en partie l'aperçu en y ajoutant pour la premiére fois, je crois, tout le désert de Cobi et une partie de la Chine jusqu'à la latitude de Pékin, au nord; et à l'ouest, quelques hautes vallées du Thibet et celles du Kan-sou, du Chen-si et du Se-tchuen, jusque près des bords du Yang-tse-kiang. On rencontre en effet à 60 ou 70 kilomètres au nord de Pékin, à Tcha-tao, nom qui veut dire "Passe des pierres," des moraines ou dépôts de pierres, de cailloux roulés et des blocs d'une grosseur prodigieuse dont on ne pourrait s'expliquer ni la masse énorme, ni la quantité, ni la nature, si l'on ne savait maintenant qu'ils ont été empruntés à certaines montagnes de la Mongolie, et peut-être même aux montagnes de la Sibérie.

Ces moraines qui se prolongent à l'Ouest et à l'Est suivant une ligne de front que je n'ai pu suivre, seraient, si je ne me trompe, une des plus intéressantes preuves de l'ancienne extension des glaciers, en ce qu'elles montreraient une même surface du sol ayant été tour à tour mer et glacier. Les autres traces ordinaires du passage des glaciers, c'est-a-dire les stries, &c., sont aussi très frappantes sur les parois des montagnes que l'on est obligé de traverser pour se rendre par exemple à Tchang-kia-keou, l'une des portes de la Grande Muraille.

Si mes conjectures étaient vraies, si les stries profondes que l'on remarque à différentes hauteurs des rochers qui encaissent le Yang-tse-kiang en différents endroits, tels que les passes d'Y-tchang et de Kouei-tcheou, aussi bien que la quantité étonnante de pierres déposées en ligne sur chacune de ses rives, ou de blocs qui occupent le milieu du fleuve de façon à en gêner et à en rendre même la navigation dangereuse par les obstacles et les chutes qu'ils créent; si, dis-je, tous ces indices dénotaient en effet, comme je le crois, le passage d'un glacier, ce serait encore un des plus remarquables témoignages des périodes glaciaires. On y trouverait peut-être, en outre, l'explication de ces immenses ouvertures créées en plusieurs endroits du fleuve actuel à travers des roches de plusieurs lieues d'étendue, taillées presqu'à pic, sur des hauteurs qui dépassent souvent 120 mètres. On rencontre enfin sur le Yang-tse-kiang, à l'extrémité de quelques vallées de la province de Se-tchuen, de beaux vestiges de moraines terminales.

Une autre sorte de dépôt que l'on ne peut aisément constater en Chine à cause des terres et des cultures qui le recouvre, mais qui existe certainement dans les plaines et notamment dans la plaine de Pékin, c'est ce limon mêlé de graviers et de fragments anguleux auquel on a donné le nom de *drift*, et que les glaces qui le portaient, en se détachant des glaciers pour tomber dans la mer, ont promené et répandu partout où elles finissaient par céder sous son poids. C'est en se basant sur la puissance et la continuité du drift que l'on trouve en Europe et sur les rapports que les glaciers qui l'ont fourni ont avec les soulèvements du sol, que Sir C. Lyell a évalué à deux cent mille ans au moins la durée de la dernière grande oscillation. Il est évident en effet que la puissance et la durée du *drift* sont proportionnelles au temps que sa formation a exigé et qu'elles indiquent ainsi la durée des glaciers qui l'ont charrié; et, pour se rendre compte des motifs que Sir C. Lyell a eu d'en déduire la durée de l'oscillation pendant laquelle ce dépôt s'est effectué, il ne faut que se rappeler comment les glaciers se forment et disparaissent.

Deux choses sont nécessaires pour la formation de la glace: du froid et de l'eau. L'eau fournie à l'atmosphère par l'évaporation des mers et de ses autres réservoirs, se condense sous un abaissement de température; et, si cet abaissement est suffisant, se congèle sous la forme de neige ou de givre. Puis elle retombe et, suivant les couches d'air qu'elle traverse, revient à l'état liquide ou s'accumule sur les sommets et les flancs des montagnes. Mais cela ne

suffit pas pour faire un glacier. Si cette neige ne se modifie pas, le vent la balaiera comme de la poussière. Il faut qu'elle se transforme en nevé, c'est-à-dire en une sorte de mortier qui agglutine et retienne ses molécules; et, pour cela, il faut un certain degré de chaleur qui produise l'eau nécessaire. Avec de la glace très froide et par conséquent très sèche, la soudure n'est pas possible. On aurait donc tort de croire que plus le climat sera rigoureux, plus les glaciers acquèreront de puissance et de développement.

Pourvu que les hivers soient longs et humides, afin que les réservoirs et les hauteurs se remplissent ou se couvrent de neige, peu importe que le froid soit intense ou modéré; il suffit que le thermomètre se tienne en général au-dessous de zéro, et remonte pendant l'été un peu au-dessus, pour que la neige ait le temps de s'accumuler, et ne fonde ni ne soit emportée par le vent au fur et à mesure qu'elle tombe. La Nouvelle Zélande avec ses hivers humides, sans être rigoureux, ses étés modérés où un ciel habituellement couvert, éteint et absorbe les rayons solaires, réalise le climat le plus favorable à la formation des glaciers; aussi sont-ils nombreux et étendus dans les montagnes de la plus méridionale des deux îles. Au contraire la chaleur excessive de l'été en Mongolie, chaleur qu'explique très bien le voisinage des sables du Cobi, ne permet pas, malgré le froid aussi excessif de l'hiver, la formation des glaciers. Si donc il en existait autrefois, ainsi que le prouve les moraines dont je parlais tout-à-l'heure, c'est que les conditions où se trouvaient cette contrée n'étaient pas les mêmes qu'aujourd'hui. Les sables du Cobi qui, maintenant exposés aux rayons du soleil, en gardent la chaleur et contribuent tant à l'élévation de la température de l'été, étaient sous l'eau. Le climat était ainsi beaucoup moins chaud; il était aussi, par là même raison, plus humide, de l'humidité qu'il empruntait au voisinage de cette mer intérieure. Mais l'eau n'a pu descendre que parce que le sol s'élevait.....Tels sont les rapports des glaciers et des époques glaciaires avec les oscillations du sol. Nous pouvons ajouter tout de suite que l'altitude de la Mongolie étant beaucoup moins grande alors, le froid y était aussi moins rigoureux; en sorte que le climat de cette contrée devait être très semblable à celui de la Nouvelle Zélande.

On trouve dans les livres chinois de très nombreux et très intéressants souvenirs de ces époques.

L'ancien missionaire Jésuite français, de Prémare qui vécut en Chine de 1698 à 1735, cite dans ses profondes "*Recherches sur*

les temps antérieurs à ceux dont parle le Chou-king," (1) ouvrage que tous ceux qui s'occupent des origines de l'homme devraient relire aujourd'hui, plusieurs auteurs qui en font mention de la façon la plus expresse.

L'on sait ou l'on verra tout-à-l'heure que les Chinois partagent l'histoire du monde en un certain nombre de *Ki* ou de périodes de plusieurs siècles chacune, dont les premières appartiennent aux temps pré-historiques. Le *Chan-haï-king*, livre si ancien qu'on l'attribue à l'empereur *Yu* ou à *Pe-y* qui vivait à la même époque, est précisément une description du monde pendant ces premières périodes; et, au sujet de l'une des plus anciennes, l'on parle d'une montagne du nom de *Vou-vaï* qui veut dire "renfermant tout et en dehors de laquelle il n'y a rien,"* et indique clairement qu'elle seule était exondée. Elle était, selon un commentateur, *Tchin-huen*, située à 12,000 lis, ou 1,200 lieues environ, au Sud-est du lieu où s'élève maintenant le mont *Kouën-lün* ou Kou-kou-nor. L'auteur du *Chouï-king* (2) qui n'a aucune idée des changements possibles de la configuration du globe veut que ce soit le mont *Kouën-lün* exondé à son tour.

Mais dans le Chan-hai-king, ce n'est que plusieurs Ki ou périodes après que le mont Kouën-lün devient en effet le centre de la terre.† "Alors l'univers n'était pas encore tempéré comme il l'a été depuis."‡ Dans un autre Ki, on parle des eaux qui "n'étaient point encore écoulées et couvraient la terre, de sorte que la misère était extrême,"§ d'où l'on peut conclure qu'elles ne l'avaient pas toujours couverte, puisque les hommes avaient pu se développer et être heureux au point de souffrir d'un changement dans l'état physique du pays qu'ils habitaient. Ce n'est pas le seul du reste dont l'histoire des temps pré-historiques conserve le souvenir. "En ce temps là," est-il dit à propos d'un des Ki suivants, "les vents furent grands, les saisons tout-à-fait déréglées"‖ et, un peu après, comme une conséquence que la science moderne n'aurait aucune peine à expliquer, "les eaux ne s'écoulèrent point,

(1) V. dans le Chou-king trad. par le P. Gaubil, revu et publié par de Guignes en 1760, le Discours préliminaire ou Recherches sur les temps, &c.

* Discours préliminaire ou recherches sur les temps &c. Chou-king, traduction Gaubil et de Guignes, page LXV.

(2) Autre livre très ancien dans lequel on trouve beaucoup de traditions.

† Page LXXIV.

‡ Page LXXIII.

§ Page LXXVIII.

‖ Page XCVII.

les fleuves ne suivaient point leur cours ordinaire, ce qui fit naître quantité de maladies;"* puis "les vents et les pluies redeviennent tempérés et le froid et le chaud arrivent dans leur saison, les hommes se multiplient et parviennent à une extrême vieillesse." Ensuite, après un certain temps, le côté émergé de la bascule disparait sous l'eau, "le Ciel tomba vers le Nord-ouest et la terre eût une brèche au Sud-est,"† c'est-à-dire que le Ciel se rapprocha de la terre ou plutôt que la terre s'éleva en se rapprochant du Ciel au Nord ouest, tandis qu'au Sud-est elle s'affaissa sous l'eau. Puis "les quatre points cardinaux sont rétablis et la paix est rendue au monde."‡

Enfin se produit un dernier affaissement, le premier des temps historiques, que tout le monde connait sous le nom de déluge d'Yao.

D'après ce qui précède, il semblerait que les Chinois admettent plusieurs oscillations et c'est en effet ce que nous enseignent la Géologie et les observations faites en Suisse, en Savoie, dans les îles Britanniques et dans le Nord de l'Amérique, où l'on voit, se répétant à différentes profondeurs et recouverts par des couches de terre contenant les fossiles des végétaux et des animaux qui y existaient alors, les faits que la surface actuelle du sol déroule sous nos yeux. Les observations nous démontrent qu'il y a eu certainement deux grandes périodes glaciaires, mais elles n'impliquent point qu'il n'y ait eu qu'un nombre corrélatif de soulèvements. Les glaces n'ont point toujours accompagné les oscillations; quelques unes de ces dernières ont pu s'accomplir sans laisser des traces assez durables pour avoir persisté jusqu'à présent, surtout aux époques excessivement reculées où la cosmogonie Chinoise les fait remonter, c'est-à-dire, à l'époque des San-hoang, sur l'existence ou la nature desquels leurs auteurs ne sont pas d'accord, mais qui, en tout cas, précédent même les temps de Fou-hi, de Chen-nong, &c. En outre, ces oscillations ont pu être partielles, locales, l'étude des textes eux-mêmes éluciderait peut-être ces questions.

III.

L'accroissement de la température de l'été n'est peut-être pas la seule raison directe qui explique la disparition actuelle des glaciers,

* Page XCXVIII & XCXIX.
† Page CIX.
‡ Page CXII.

mais quelles qu'en soient les autres causes; qu'on les voie, soit dans le changement de direction des vents si violents qui balaient de nos jours la neige des plateaux de la Mongolie, soit dans l'abaissement de la température de l'hiver, aujourd'hui excessif, comme on le sait en Mongolie, et contraire, nous l'avons vu, à la formation des glaciers, (abaissement dont pourrait rendre compte la disparition d'un courant chaud, émis du gulf Stream, maintenant tout-à-fait rejeté du côté oriental de Formose et du Japon,) on est toujours forcé d'en inférer les changements du sol lui-même. Ainsi se prouvent directement et se contrôlent l'un par l'autre, les deux phénomènes de l'oscillation du globe et des grands glaciers d'autrefois.

Dès lors, la supputation de la durée de la dernière oscillation n'est plus qu'une simple question de calcul dont l'observation de ce qui se passe actuellement fournit toutes les bases; et, sans entreprendre la vérification de ceux de Sir Ch. Lyell, lesquels ne sont d'ailleurs jusqu'à présent pas contestés, on voit du moins que rien n'est plus possible ni moins imaginaire que cette supputation dont les résultats, après tout, ne surprendront aucun de ceux qui connaissent les autres données de la Géologie. Une chose plus étonnante, c'est de voir les évaluations, sensiblement les mêmes auxquelles sont arrivés les auteurs chinois qui ont le plus anciennement écrit. Ici encore, comme au sujet du premier homme, que nous n'avons encore fait qu'effleurer, nous les voyons en effet d'accord avec les conclusions les plus modernes de la science.

Nous les considérions autrefois comme de purs effets d'une imagination fantasque, bien qu'en réfléchissant au nombre et à la valeur des auteurs qui les acceptaient, il semble que nous eussions dû nous garder d'un jugement si dédaigneux. Aujourd'hui nous regretterons qu'il nous ait arrêtés dans la voie des recherches et de observations; et, sans nous laisser détourner par des contradicteurs qui, dans leur ignorance de ce que nous avons appris depuis eux, ne pouvaient y voir ce que nous pouvons légitimement espérer d'y trouver, nous voudrons scruter les textes qui nous livreront peut-être les secrets d'une si remarquable concordance. Qui sait même s'ils ne nous aideront pas à découvrir les lois de ces changements, de ces oscillations qui, sur la terre ferme, déplacent nos ports et les lits de nos fleuves; et dans la mer font surgir des écueils inattendus, et, qu'au point de vue, même le plus pratique par conséquent, il nous importerait tant de connaître et de prévoir.

"Les anciens King, dit le père de Prémare, ne raisonnent point sur la physique du monde,"* mais, ainsi que le père Gaubil le fait remarquer dans une note, c'est des grands King, des King classiques qu'il veut parler; et, en effet, les connaissances que l'on pouvait avoir dans les temps reculés où ils furent écrits, ne permettaient pas d'asseoir cette physique sur des bases assez assurées pour qu'on pût la faire entrer dans l'enseignement public que tous les législateurs et les philosophes de la Chine se sont, au contraire, très visiblement efforcés de rendre aussi positif que possible. Mais il y a d'autres livres, d'autres King, aussi anciens, traitant de choses et de temps moins certains, et qui, s'ils ne sont pas eux-mêmes des systèmes, ainsi que le dit le P. de Prémare, ont pu, et avec d'autant plus de raison, puisqu'ils ne sont plus alors que des souvenirs écrits de faits ou de traditions, servir à édifier ceux que les érudits se mirent seulement, d'après le même Jésuite, à bâtir sous la dynastie des Song. On ne doit pas s'étonner,† ajoute le P. de Prémare en parlant de ces systèmes et de leurs auteurs, avec une incrédulité qui ne nous étonnera pas à notre tour, "On ne doit pas s'étonner qu'ils s'égarent, nos anciens Philosophes n'étaient guère plus habiles qu'eux, témoin la Théogonie d'Hésiode, les mondes de Démocrite et les principes de Lucrèce. Ce qu'il y a d'heureux à la Chine, c'est que les mêmes auteurs qui se mêlent de philosopher sur la machine de l'Univers, ont presque tous commenté les King, (les grands Kings,) qu'ils font tous profession de suivre la grande doctrine que ces anciens monuments ont conservée, et qu'ils reconnaissent comme ces King, un souverain Seigneur de toutes choses, auquel ils donnent tous les attributs que nous donnons au Vrai Dieu (1). Je ne m'arrêterai donc pas à expliquer la période de Tchao-kong Tsie, (2) *qui*

* Discours préliminaire de Chou-king, page LI.

† Page LI.

(1) On voit que contrairement à l'opinion émise dans une petite brochure publiée dernièrement à Shang-haï, le P. de Prémare rend hommage à la connaissance que les Chinois ont du Vrai Dieu : il n'est pas le seul de son avis parmi les anciens Jésuites ; on peut dire que tous pensaient comme lui, et, pour penser comme eux, il ne faut que lire les King classiques des Chinois. Mais on pourrait lire en particulier sur cette grave question les travaux spéciaux du Père de Prémare et ceux des PP. Bouvet, Amyot, Trigault, Ricci, Gaubil, Cibot, &a , tous empreints d'une science réelle et de l'esprit le plus profond et le plus indépendant.

(2) "Tchao-kang Tsie vivait sous la Dynastie des Song, entre l'an 954 et l'an 1279 de J. C ; il est fameux pour ses nombres. Ses périodes ont été mises au jour par son fils et on les trouve dans le Recueil nommé Sing-li-ta-tsuen."—Note du P. Gaubil, page LIII.

comprend une grande année qu'il appelle Yuen et qui est composée de douze parties comme d'autant de mois, qu'il nomme Hoeï, de 10,800 *ans chacun; ce qui fait* 129,600, *ans pour le Yuen entier.** Quand on a voulu prouver par l'exposé de ce système que tous les lettrés chinois sont athées, il me semble qu'il fallait démontrer, que, posé ce système, il n'y a plus de Divinité dans le monde; et de plus que tous les lettrés modernes sont entêtés de cette hypothèse; c'est ce que l'on n'a pas fait."

Quoiqu'il en soit de l'opinion du P. de Prémare sur ces systèmes, aussi bien que de celle des lettrés chinois qui n'en sont pas "entêtés" mais qui sont loin de regarder tous comme fabuleux ce qui a précédé les commencements des histoires admises pour l'enseignement,† nous en retiendrons avec respect ce qu'elle peut avoir d'encourageant pour nos études et nous continuerons à extraire des "Recherches sur les temps antérieurs du Chou-king" toutes les indications qu'elles pourront nous donner. Nous l'avons dit, et c'est notre plus intime conviction, que ces études n'impliquent avec l'existence de Dieu aucune contradiction qui les condamnerait par avance à l'absurde et les rendrait inutiles; ce n'est toutefois pas une mince fortune de trouver, signés d'un nom d'une telle autorité, un jugement si conforme à notre pensée et de si précieux renseignements sur des cosmogonies qui, on peut déjà le pressentir, laissent bien loin derrière elles au point de vue, soit de la vraisemblance, soit de l'antiquité à laquelle elles se rapportent, toutes les cosmogonies connues jusqu'à présent.

On peut ranger les historiens chinois en quatre classes: ceux qui se sont bornés à la relation des faits et des dates dont ils pouvaient suivre l'enchaînement authentique; ceux qui ne se sont point laissés arrêter par quelques solutions de continuité dans la chronologie, causées par l'absence de quelques pièces justificatives, et pour qui certains faits solidement établis et certaines dates bien fixées ont été suffisants; ceux qui ont voulu concilier des traditions qui leur paraissaient vraies ou vraisemblables, avec des dates qui parussent plus vraies ou plus vraisemblables que celles où les plaçaient les documents d'après lesquels ils travaillaient, et qui les faisaient remonter à des périodes de cent ou de deux cent mille ans, devant lesquelles leur imagination se cabrait; ceux enfin qui, plus indépendants, plus philosophes, ou comprenant mieux les documents des anciens âges, ont eu en vue moins de

* Page LI.

† Mémoires concernant les chinois, Tome 1, page 86, Tome 2, page 125, &c.

fixer des dates que de proposer des époques et de coordonner les souvenirs des premiers temps du monde. Nous n'avons à nous préoccuper ni des premiers ni des seconds, dont les points de départ ne sont bien certainement que des minimums au delà desquels la société comptait déjà un nombre de siècles considérable, puisqu'entr'autres preuves, il est démontré par le premier chapitre du Chou-king que, déjà du temps de Yao, les Chinois connaissaient l'année Julienne de 365 jours et un quart, et celle de 366 jours revenant périodiquement chaque 4 ans. Les troisièmes, en cherchant à concilier l'inconciliable, sont tombés dans des erreurs et des défauts analogues à ceux que nous reprochons aujourd'hui aux auteurs de nos propres cosmogonies, religieuses ou autres. Pour nous qui savons que la Création ne mesure point le temps, et que, si nous voulons l'exprimer, les siècles sont les unités dont il faut nous servir, les derniers seuls se rapprochent de la réalité; les derniers seuls nous intéressent; les écarts mêmes de leurs calculs nous disposeront à plus de confiance en leurs recherches et nous feront plus vivement désirer de les suivre avec eux et d'en connaître, s'il se peut, les éléments.

L'état de l'astronomie, lorsqu'ils écrivaient, ne pouvait en effet leur être d'un secours sérieux; et, d'ailleurs, on verra par la suite de cette notice qu'ils ont dû s'aider d'autres circonstances qui n'ont aucune relation avec l'astronomie et qui sont précisément ce que nous cherchons.

Si l'on remonte, dit le P. de Prémare, avec le Vai-ki (1) jusqu'à Pan-kou, que nous savons déjà n'être que l'idée ou le plan idéal de l'homme, "les Chinois l'emportent de beaucoup sur les Chaldéens et sur les Egyptiens (2) car, se on en croit le calcul de divers auteurs depuis Pan-kou jusqu'à la mort de Confucius, qui tombe 479 ans avant J. C., il s'est écoulé 2,276,000 ans ou seulement 276,000 ans, ou même 3,276,000 ans, ou enfin, ce qui dit beaucoup plus, 96,961,740 années."*

(1) "Le Vai-ki ou plus exactement le Tong-kien-vaï-ki est une histoire ancienne faite par Lieou-jou, aussi nommé Lieou-tao-yuen, qui vivait sous la dynastie des Song et travailla sur l'histoire avec Se-ma-kouang."—Note du P. Gaubil.

(2) On verra plus tard que cette déduction du P. de Prémare n'est pas juste, car les auteurs chinois qui ont écrit sur ces époques lointaines ne regardent point comme appartenant à une race particulière les personnages de leurs périodes.—G. E. S.

* Discours préliminaire, page LV.

On voit que les auteurs chinois ont du moins appris avant nous que le temps n'était rien en cosmogonie. Cela seul leur mériterait déjà notre estime. Mais nous l'avons déjà dit.

Se-ma-tsien qui, malgré l'opinion du P. de Prémare et de quelques lettrés qui lui reprochent amèrement les éloges exagérés qu'il fut forcé de donner à la dynastie des Han,* peut-être considéré comme le Tite-Live de la Chine,† Se-ma-tsien, qui avait fait, avant d'écrire, de fréquents et longs voyages dans lesquels il s'informait des antiquités de toutes sortes échappées au temps, et avait enfin été nommé Président du Tribunal de l'Histoire Nationale, appuie au moins ces périodes dans son Che-ki‡ ou Histoire Universelle, s'il n'y remonte pas lui même. Tchou-hi (1) qui fit sur l'Y-king des commentaires d'une grande sagacité, exprime nettement son avis: qu'il ne faut pas blâmer ceux qui prétendent aller même jusqu'au delà de Fo-hi et de Chen-nong.§ Tchao-tse, aprés de longues études entreprises par ordre de l'Empereur avec Fou-cheng, sous la dynastie des Han, sur les restes et les vestiges de l'antiquité et notamment sur les caractères Ko-teou ou Kou-ven‖ qui composent la plus ancienne écriture chinoise et qui, sous leur forme de têtards, paraissent avoir de grandes analogies avec les caractères cunéiformes, (2) Tchao-tse dit "que depuis le moment où le ciel et la terre ont été en mouvement, jusqu'à celui où ils finiront, il doit y avoir une révolution entière. Une révolution contient douze périodes et la période 10,800 ans."** "Depuis la troisième période jusqu'à la septième

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* Tome 1, page 131.

† Tome 1, page 82.

‡ Mémoires &c., Tome 8, page 107.

(1) "Tchou-hi est le fameux Tchu-ven-kong, le plus grand des athées chinois si l'on en croit quelques savants: ce que j'en dirai en passant, c'est que j'ai fait voir que ce philosophe n'est pas plus athée que Socrate et Platon et qu'on l'a fait passer pour athée sans aucune preuve."—Note du P. Gaubil.

Tchou-hi a fait sur les Cosmogonies un ouvrage remarquable appelé Kang-mo.

§ Recherches sur les temps &c., page LXIII.

‖ Mémoires &c., Tome 3, page 309.

(2) Cette circonstance est remarquable à plus d'un titre; on n'ignore pas le secours que prête à la Science la linguistique appliquée à l'analyse des éléments primitifs du langage, ni les résultats, conformes à ceux de la paléontologie, auxquels elle conduit. En outre, si cette analogie était établie, ce serait un nouveau fait en faveur de l'Unité de l'espèce humaine.

** Recherches sur les temps &c., page LXIV.

sous laquelle Yao naquit, il s'est écoulé plus de 45,000 ans et plus de 99,000 depuis le commencement du monde." *

Malgré ses obscurités et une confusion d'idées souvent embarrassantes, on distingue cependant dans le Lou-ché † du très érudit Lo-pi, de la Dynastie des Song, des passages où ces périodes sont aussi adoptées; mais parmi les circonstances avec lesquelles elles se lient dans cet ouvrage ainsi que dans ceux qu'il reste à faire connaître, il en est d'un genre qui n'a été qu'à peine touché jusqu'ici et sur lequel il convient de revenir encore avant de continuer.

IV.

Si l'on ne conteste pas les calculs de Sir C. Lyell, les bases mêmes sur lesquelles il les a établis pourraient être discutées; de ce que les dépôts qui constituent l'écorce la plus superficielle du globe se forment avec une excessive lenteur, il ne suit pas nécessairement qu'aux époques pré-historiques, des révolutions plus multipliées ou plus puissantes n'aient pu accélérer ces accumulations. Toutefois, les différents caractères des objects mélangés à ces dépôts ajoutent tant de force à cette hypothèse que, si l'on considère qu'en une telle question les chiffres ne sont et ne peuvent être qu'un moyen dont l'esprit a besoin pour saisir et embrasser le temps, on reste convaincu qu'ils sont, du moins, fort probables, et l'on arrive même à se demander s'ils ne sont point, plutôt, des minimums. Ce qui, dans la plupart des miracles, nous rend si rebelles, ce contre quoi la pensée n'a jamais cessé de protester, c'est, au fond, le faux et timide synchronisme avec lequel on a voulu à toute force, jusqu'ici, qu'ils se soient produits dans toutes leurs circonstances, encore que tout au contraire démontre leur anachronisme. Une fois d'accord sur cette grande question de *temps*, une fois ce point reconnu que le temps n'est rien dans l'œuvre de la création, tout s'explique, car tout devient vrai par rapport à Dieu, normal par rapport à l'homme. Le prodige ne cesse pas, car tout est, dans le monde, et restera éternellement prodige; de l'idée à l'acte, de l'idée à la forme, ou si l'on veut

* Recherches sur les temps &c., page LXV.

Ne serait ce point là l'origine de la légende biblique des sept jours ou sept périodes de la création, avec cette différence que pour les chinois la création n'est point arrêtée et qu'elle doit compter encore cinq journées?

† Mémoires concernant &c., Tome I, page 101.

Le Lou-ché se trouve à la Bibliothèque Impériale de Paris.

de l'idée de Pan-kou à Pan-kou fait homme, il y aura toujours la distance de l'infini, mais ce faux synchronisme écarté, la transition trouve place dans notre intelligence et ne la révolte plus. Nous parler de nos ancêtres ainsi qu'en parle la Bible, comme s'ils étaient entrés de plain-pied dans une condition semblable à celle où se trouvaient les Israélites à leur arrivée en Egypte; passer, comme le livre sacré, sans transition marquée et en quelques pages d'Adam à Noé et de Noé à Abraham; nous dire qu'après avoir fait à Adam et à sa femme des tuniques de peau et les en avoir revêtus, l'Eternel les envoya hors du paradis terrestre cultiver le sol, et nous représenter leurs fils, l'un, comme laboureur, et l'autre, comme pasteur, ce n'est proprement répondre que par des contes naïfs et enfantins aux questions les plus sérieuses et les plus raisonnables. Nous décrire l'état du globe quand nos premiers parents furent placés dans le paradis terrestre; nous montrer les nombreux essais que l'homme dût tenter avant de réussir à cultiver le sol et à élever des bestiaux; nous apprendre quels furent, dans le principe, sa manière de préparer sa nourriture, son mode d'habitation, et joindre à ce tableau les ustensiles, les armes, les engins de chasse ou de pêche dont il se servait, c'est satisfaire dignement à de dignes préoccupations, c'est cesser de traiter l'homme en enfant pour le traiter en homme. La suite de cette notice nous prouvera qu'on le peut à cette heure, et nous montrera que les cosmogonies chinoises, malgré de nombreuses et très excusables incohérences, ont du moins le grand honneur de l'avoir toujours cru possible.

Les premiers examens des divers étages de l'écorce terrestre ne nous avaient rien appris que de fort vague sur les conditions que notre planète avait successivement traversées; les transformations graduelles qu'elles avaient subies nous avaient échappé; les phénomènes se juxtaposaient sans se relier et ce décousu nous faisait croire à autant de bouleversements, de cataclysmes violents. Déjà cependant ces observations, toutes superficielles qu'elles étaient, avaient, suffi à reporter notre imagination bien au delà des temps historiques. Sous l'influence de l'idée assez sommaire qu'ils nous faisaient concevoir du temps que ces révolutions, quelque brusques qu'elles eussent été, avaient dû exiger, nous avions été forcés d'allonger les jours de la Genèse et d'en faire de grandes époques successives. Plus tard, une observation plus attentive des dépôts de fossiles placés dans ces étages, nous amena à distinguer de secondes époques et à reconnaître, pour ainsi dire,

dans les jours de la Genèse, des heures ou plutôt d'autres temps dont nous ne pouvons fixer ni les limites ni la durée, mais parfaitement établis. C'est ainsi, par exemple, qu'après celui des végétaux, le jour de la création des animaux dut être divisé en différents âges que l'on nomma suivant la prédominance des espèces dont on retrouvait les ossements: âge de l'ours des cavernes, âge du tigre, de l'aurochs, de l'élan, du renne, &c. Mais voici maintenant que les heures se fractionnent à leur tour et leurs parties se multiplient et s'allongent dans des proportions inattendues. C'est, ainsi qu'on l'a déjà vu, ce qui a lieu depuis une dizaine d'années surtout, pour l'heure où l'homme fit son apparition sur le globe. Non seulement elle a commencé beaucoup plutôt ou beaucoup plus loin qu'on ne le pensait; mais elle se manifeste par degrés, par progressions, et chacune de ces progressions est elle-même une longue époque. Voilà ce que nous apprend l'étude plus circonstanciée des dernières couches, de celles qui précédent immédiatement les terrains actuels. Nous croyions que l'homme ne s'était montré pour la première fois qu'avec le renne, et nous retrouvons ses traces jusque dans les dépôts de l'âge de l'ours, du tigre, &c., et ces traces sont si évidentes, si caractéristiques, si abondantes et se trouvent si généralement distribuées que ce sont elles qui, par les traits distinctifs qu'elles présentent, selon les étages où elles existent, servent maintenant à classer ces époques (1). Ainsi la contemporanéité de l'homme avec les animaux que l'on croyait déjà disparus du monde au moment où il se montra, résulte d'une manière frappante et aujourd'hui absolument incontestée, des instruments et

(1) Les Chinois semblent avoir eu l'idée d'établir aussi leurs époques sur les caractères tirés du règne animal; mais, est-ce par les mêmes motifs que nous? c'est ce que l'on ne sait pas et ce qu'il serait intéressant de rechercher. Seulement, au lieu d'interrompre, comme nous venons de le faire, leurs séries animales et de les arrêter à l'apparition de l'homme, ils les continuent, ne regardant l'homme que comme une des évolutions de la création et non comme la fin de ces évolutions. Hou-chi et Tchao-tsé disent que "le ciel commença ses opérations à la révolution du Rat, la Terre à la révolution du Bœuf, et que l'homme fût produit á la révolution du Tigre. L'Homme fait aussi ses opérations," Yao c'est-á-dire l'homme achevé, "naquit à la révolution du Cheval: la Septième. À la Onzième le chien fera les siennes, et après avoir passé par tous les dégrés dont elles sont capables, elles cesseront d'être et le Ciel, devenu sans force, ne produira plus rien jusqu'à la Douzième période où la terre et tout ce qui l'environne se détruiront aussi, et tout l'Univers rentrera dans le chaos. Ce chaos sera une période entière à se débrouiller &c."—Recherches sur les temps &c., page LXIV.

des ossements humains que, depuis 1841, où M. Boucher de Perthes eut l'honneur d'inaugurer ces découvertes, l'on ne cesse de trouver, on peut dire, dans toutes les parties du monde, mélangés dans les sables ou incrustés dans les brèches, et autres roches de diverses natures, avec les débris de ces mêmes animaux (1). Ces instruments consistent en haches, maillets, couteaux, flèches et autres outils plus petits en pierres taillées; en bois de cerf, os, dents, lames d'ivoire, cornes et coquillages façonnés dont les plus précieux, et les mieux conservés furent extraits des cavernes, en même temps que des ossements et même des crânes d'hommes. Certains ossements d'animaux portent l'empreinte des instruments qui ont servi à les casser et à en détacher les chairs, d'autres sont encore traversés par ceux à l'aide desquels l'animal a été frappé.

(1) Il ne serait peut-être pas, d'après certains faits qu'on relève dans les livres chinois, aussi sûr qu'on le dit, que ces anciens animaux eussent tout-à-fait disparu. Les descriptions qu'ils donnent de quelques espèces dont ils parlent comme si elles existaient encore, et qui ne s'appliquent guère à celles que nous connaissons sur nos continents, provoquent un rapprochement involontaire avec les espèces réputées éteintes.

Parmi les *Observations de physique de l'Empereur Kang-hi* dont les mémoires des anciens Jésuites donnent quelques traductions, on lit que "l'on trouve sur la côte de la mer du Nord où le froid est intense et presque continuel, un animal nommé Fen-chou, dont la figure ressemble à celle du rat, mais qui est gros comme un éléphant: il habite les cavernes obscures et fuit sans cesse la lumière. On en tire un ivoire qui est aussi blanc que celui de l'éléphant, mais plus aisé à travailler et qui ne se fend pas. L'ancien livre Chiu-y-king parle de cet animal en ces termes: il y a dans le fond du Nord, parmi les neiges et la glace qui couvrent ce pays, *un chou* (rat) qui pèse jusqu'à mille livres; sa chair est très bonne pour ceux qui sont échauffés. Le *Tsée-chou* le nomme Fen-chou, et parle d'une autre espèce qui n'est pas si grande: il n'est grand, dit il, que comme un Bufle, s'enterre comme les taupes, fuit la lumière, et reste toujours dans les souterrains. On dit qu'il mourrait s'il voyait la lumière du soleil ou même celle de la lune."—Mémoires concernant les Chinois, Tome IV, page 481.

"Le Kan-ta-han est une espèce de cerf du pays de Fou-yo-eulh-tsi; sa couleur est d'un noir qui tire sur le bleu foncé; il a au dessus du col une espèce de fanon de chair fort gros et sur l'échine une bosse comme le chameau. Cet animal est très gros et plus pesant qu'un bœuf; ses cornes sont assez grosses, recourbées, et d'une substance qui ressemble à celle des os; elles ont plus de force et de dureté que le meilleur ivoire, &a."—Mêmes observations et même volume, page 459.

"Le Renard volant se trouve dans les épaisses forêts de la Tartarie, au Nord de la Grande Muraille; les ailes ne sont que des peaux légères qui vont d'un pied à l'autre et se terminent à la queue. Cet animal ne vole qu'en s'élançant du haut d'un arbre sur un autre qui est plus bas; mais il ne peut pas voler en montant: les anciens ont connu ce renard singulier, puisqu'ils

Dès à présent donc se dégage une partie de l'histoire primitive de nos ancêtres; pas d'animaux domestiques, pas de métaux, pas d'instruments propres à cultiver le sol; la chasse et la pêche étaient leurs seules ressources; en fait d'habitations, les cavernes dont ils disputaient la possession aux bêtes fauves. Encore les avaient-ils toujours habitées? avaient-ils toujours su s'y réfugier? Faibles au début, peu nombreux, ainsi qu'on peut en juger par le petit nombre et la grossièreté extrême des vestiges qu'on en recueille dans les couches les plus anciennes de l'époque quaternaire, à laquelle tout ceci se rapporte, ils se glissaient silencieusement à travers cette nature que pourtant ils devaient dompter. Mais peut-être étaient-ils déjà bien éloignés de leur première origine. N'a-t-on pas trouvé dans le calcaire de la Beauce, c'est-à-dire en plein miocène, des silex travaillés et une mâchoire de rhinocéros, portant une entaille visible, ce qui le reporterait en effet aux derniers temps de l'époque tertiaire.

A en croire les traditions chinoises, cela ne serait point douteux. Mais avant de continuer à les interroger, voyons d'abord ce que la science européenne doit à ses propres recherches.

Si l'on compare, dit Mr. A. Maury, dans le tableau qu'il fait de l'homme primitif et que je lui emprunte, "si l'on compare les divers objets en pierre et en os taillés, fournis par les couches quaternaires, les cavernes et les plus anciennes sépultures, on est frappé des différents modes de travail qu'ils représentent. Les uns sont façonnés de la manière la plus grossière et ne présentent que les premiers rudiments de la fabrication, d'autres témoignent d'un art moins inhabile, enfin il en est où se révèlent une adresse et une dextérité singulières. Ces progrès palpables de l'industrie primitive permettent de classer ces dépôts selon une échelle de

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lui ont donné un nom qui l'a caractérisé distinctement. L'auteur du Niu-ching-chi, dit qu'il y a un renard qui se nourrit de glands et de pignons, puis s'envole dans les Hiên-gin (Demi-dieux du Tao-sée). Cette fable ridicule a été imaginée pour persuader un fait qu'on trouvait dans les anciens, et qu'on voyait, par ignorance, dans le faux jour d'un merveilleux outré. Il y a à Kiéou-ouai une espèce de rat volant, il est un peu plus gros que les rats ordinaires et a les ailes comme le renard dont nous venons de parler."—Même volume, page 455.

Quels peuvent être ces animaux? Qui sait si on ne les retrouvera pas un jour, retirés, comme en un dernier refuge, dans quelqu'île inconnue de la mer libre du pôle Nord? Ainsi s'expliqueraient les mammouths en chair et en os que nous charrient de temps à autre les glaces du Nord. On sait qu'une espèce de grand tigre, plus grand que celui de l'Inde, à longs poils, existe encore dans les forêts de la Tartarie.—G. E. S.

civilisation relative, car un dépôt ne renferme presque jamais à la fois des armes et des engins appartenant à ces diverses catégories. Ce qu'on pourrait appeler un style déterminé caractérise chaque trouvaille.

"La physionomie de la faune apporte un second élément chronologique. Les animaux dont les ossements sont associés aux traces de l'homme n'ont pas fait tous en même temps leur apparition. L'*Ursus-Spelæus* qui paraît avoir précédé chez nous l'*hyène* et le grand *felis* des cavernes firent graduellement place aux grands mammifères septentrionaux, à l'*elephas primigenius*, au *rhinocéros tichorinus*, au renne alors que la température alla s'abaissant. Le renne survécut à ces énormes pachydermes et laissa après lui l'aurochs, qui s'éteignit à son tour pour ne plus laisser sur notre sol que les espèces que nous y observons encore. Les transformations du règne animal peuvent donc servir de points de repère dans cette nuit profonde de la période antéhistorique. C'est par l'emploi simultané de ces deux éléments chronologiques qu'il est possible de classer suivant la succession des temps les vestiges des premiers humains."

Dans les dépôts les plus profonds de l'époque glaciaire, dans les dépôts lacustres, dans les sables et les graviers fluviatiles du Suffolk et de diverses localités du Bedfordshire, dans les transports sableux et caillouteux de la Somme et de l'Oise, et dans les sablières du Champ de Mars à Paris, on trouve des ossements de l'hippopotame, du grand castor, du renne, du bœuf musqué qui aujourd'hui n'habitent plus que des contrées beaucoup plus septentrionales. Associés à leurs débris, on trouve des silex et des objets en pierre dénotant le travail le plus grossier et l'état social le plus rudimentaire.

Les cavernes des Pyrénées situées à 150 et 250 mètres au dessus du niveau des vallées actuelles, dans lesquelles existent les mêmes débris, se rattachent au même temps.

"Les armes et les ustensiles de cette première époque sont des haches lancéolées, taillées à grands éclats. On reconnaît aisément que ces silex dont la patine blanchâtre dénote l'excessive antiquité, furent destinés à trancher, à fendre et à percer. Quand les pointes sont aiguës, elles ont été obtenues par des cassures à plus petits éclats; quelques unes de ces pierres figurent de véritables grattoirs.

"Le second âge s'annonce par un travail plus intelligent de la pierre; mais les caractères zoologiques ne sont pas assez tranchés pour le distinguer du premier. Les débris appartenant à cette

époque se trouvent surtout dans les cavernes, et entr'autres, dans celles des Pyrénées qui sont creusées au pied des montagnes. Pendant cet âge, les carnassiers paraissent avoir été moins répandus, ce qui explique la multiplication des ruminants. Les grands pachydermes vivent encore; le renne abonde dans le midi de la France, à en juger d'après les ossements qu'on a rencontré non seulement dans les brèches et dépôts des cavernes du Périgord et de l'Angoumois, mais aussi au pied de certains grands escarpements de calcaires crétacés où ils sont mélangés avec de nombreux silex taillés.

"L'homme de cette époque emploie à la fois, les os, les cornes et la pierre qu'il façonne avec plus d'adresse. Les flèches sont barbelées, des silex sont taillés en scies, on rencontre des ornements éxécutés avec des dents, des cailloux; on a extrait de plusieurs cavernes et notamment de celle des Eyzies des sifflets faits avec des phalanges de ruminants creusées et percées d'un trou. Enfin on a trouvé des ivoires et des bois de renne fouillés et ciselés et même des schistes, des ivoires et des cornes sur lesquels sont dessinés avec la pointe d'un silex l'image des animaux d'alors. Le plus surprenant parmi ces dessins ou *graffiti* est celui qui a été découvert en 1865 dans la grotte de la Madeleine près de Sarlat et qui représente, sur une lame d'ivoire, l'image du mammouth avec sa longue crinière. Mais l'homme n'a pas seulement reproduit l'image des animaux, il a aussi essayé de dessiner la sienne propre, ainsi que le prouve un outil cylindrique retiré des cavernes du Périgord et dont les deux faces sont décorées de deux têtes d'aurochs et d'une figure humaine. Cependant les grands carnassiers coexistaient encore avec lui. Non seulement il était déjà sorti de l'état le plus sauvage, mais il semble résulter de l'attitude repliée de quelques squelettes trouvés dans les grottes d'Aurignac, attitude identique à celle qu'on a observée dans les anciennes sépultures de la France, de la Suisse, de la Suède, de l'Algérie et du Pérou, que l'homme avait déjà l'habitude de certains rites funéraires. Des grottes de ce second âge ont été découvertes dans le Liban, à Natchez, dans le comté de Gasconnade (Kentucky), à Big-bone-lick (Missouri) &c., et ont fourni les mêmes débris. On y a même découvert des ossements humains.

"Le troisième âge est marqué par l'apparition de la pierre polie, car jusqu'à présent aucun spécimen ne portait de traces de polissage. Ces instruments en silex, en serpentine, en néphrite,

en obsidienne, ce ne sont plus les anciens dépôts ni les cavernes qui les fournissent, mais on les trouve dans des couches plus récentes et plus superficielles, telles que les tourbières, dans des sépultures d'une excessive antiquité comme celles que recouvrent les dolmens, dans les anciens camps retranchés de César, de Furfooz, d'Hastedon, de Poilvache, &c. Ce sont ces instruments trouvés par milliers auxquels les antiquaires ont donné le nom de *Celts*.

"Une grande quantité est faite en pierres de plusieurs espèces fort différentes de celles qui existent dans les localités voisines, ce qui implique la nécessité d'échange et de trafic. Quelques unes même ont dû être apportées par mer. Les grands animaux pachydermes ou carnassiers n'existent plus, mais on rencontre le cheval, le loup, le chien, le mouton et la chèvre, &c. Le renne ne se montre plus; en revanche on y trouve les animaux domestiques qui font complètement défaut dans les cavernes du Périgord. Evidemment le climat était alors devenu ce qu'il est de nos jours, on était au seuil de la période historique."

Ces observations s'appliquent également aux débris d'animaux qu'on déterre avec ceux de l'homme sous les dolmens et sous les allées couvertes qui existent en France et en Angleterre et qu'on prît pendant si longtemps pour des autels et des édifices druidiques. Les objets déposés sous ces dolmens et allées couvertes sont aussi des silex et, pour la première fois, des poteries grossières.

"De quelques unes de ces sépultures, mais seulement de quelques unes, on a extrait des armes et des outils en bronze et il en existe où la pierre est presque complètement remplacée par ce métal; mais alors on remarque que l'architecture funéraire a, par suite de l'emploi des outils en métal, pris de nouveaux développements; l'intérieur des tombeaux, au lieu de se borner à une simple cavité, se divise en galeries et en chambres souterraines."

La présence simultanée de la pierre et du bronze peut caractériser une époque de transition; la coexistence des deux matières prouve que les dolmens et les allées couvertes s'élevèrent durant une période qui s'est liée immédiatement à celle que distingue la préparation des métaux. Les monuments mégalithiques ne se rencontrent pas seulement dans les contrées qu'ont habitées les Celtes. On en a observé en Syrie, en Afrique, dans l'Hindoustan, et il y a peut-être lieu de penser qu'en Chine où ce genre d'architecture s'est conservé jusqu'à présent pour les tombeaux et les portiques que l'on appelle Pei-li ou Peï-fang, des recherches amèneraient des découvertes intéressantes. A cet âge se rat-

tachent encore les amas de coquilles qui existent sur les côtes du Danemark et auxquels on a donné le nom de Kjockkenmoeddings (ou rebuts de cuisine) et enfin les cités lucustres ou *palaffites* que l'on découvre au fond des lacs de la Savoie, de l'Italie, de l'Irlande et d'où l'on ramène des ossements d'animaux identiques à ceux qui vivent aujourd'hui, des métaux et des poteries semblables à ceux des dolmens.

"On le voit par ce qui précède, il est dès lors possible d'établir d'une manière approximative une chronologie des dépôts qui se rapportent à l'âge de la pierre et de l'époque quaternaire. Mais il ne faut pas oublier les débris, malheureusement trop peu nombreux pour qu'on puisse en suivre l'enchaînement, trouvés dans les dernières couches du terrain miocène, c'est-à-dire dans les derniers temps de l'époque tertiaire et qui force à reporter l'existence de l'homme à une date encore plus reculée.

"Quant aux débris authentiques que l'on retrouve de l'homme à ces différentes époques, aucun de ceux, d'ailleurs très rares, du premier âge de l'époque quaternaire ne nous permet d'avancer rien de sérieux sur cette race. Les hommes des temps qui suivirent sont mieux connus. C'est à celui qui succède aux graviers de la Somme que l'on rapporte les crânes d'Engis et de Néanderthal dont on a déjà vu les principaux caractères. Les crânes de l'âge suivant présentent une capacité plus considérable, les parois en sont plus minces, mais le front est bas et fuyant, les arcades sourcillières en sont avancées, la racine du nez est écrasée, la face est courte, le menton manque de saillie. Les autres ossements indiquent un squelette grand et développé, mais ce n'est que dans les crânes trouvés sous les dolmens et au commencement du quatrième âge de l'époque quaternaire, de l'âge des métaux, qu'on reconnaît dans les caractères qu'ils présentent un progrès vers la beauté telle que nous la concevons.

"Tels sont les éléments qui dès aujourd'hui peuvent nous servir de jalons pour la nouvelle histoire primitive de l'homme qu'il sera peut-être donné à l'avenir de reconstruire. Après avoir traversé une longue série de modifications et de progrès dont nous ne nous rendons pas encore compte, les hommes, du moins ceux de l'Europe, ont d'abord taillé la pierre pour s'armer, puis ils l'ont adaptée à certains usages, ils ont façonné les ossements des animaux, et, s'habillant de leur peau, ils ont longtemps vécu dans des cavernes, chasseurs comme toutes les races primitives; enfin, quelle que soit la véritable cause de ce changement, ils ont quitté les antres

pour les cabanes, ils ont connu l'agriculture, les plantes textiles et alimentaires, possédé des animaux domestiques et fondé des sociétés. Ils ont alors poli la pierre et donné naissance à un peuple puissant dont les dolmens furent les monuments funèbres. Ils ont connu l'or, le bronze et une sorte d'opulence grossière.

"On est donc ainsi amené à constater pour l'homme la loi nécessaire du progrès, la loi de la perfectibilité; elle est inscrite sur chaque échelon que l'humanité gravit dans sa marche; et cependant les faits que nous venons de retracer ne nous font qu'à peine entrevoir les divers degrés qu'elle a du traverser, l'état antérieur et originaire nous échappe entièrement; obscur et faible comme tout ce qui commence, il n'a pour témoins que des acteurs peu nombreux et qui ont entièrement disparu de la scène. A la distance où nous sommes des points de départ, il se trouve que la plupart des jalons intermédiaires ont été enlevés."

Voyons maintenant si les traditions de la Chine et les vestiges qu'elle a pu conserver pourraient nous en faire retrouver quelques uns.

V.

Bien qu'en tout ce qu'elles disent de cette première aube de l'humanité, régne une assez grande confusion, l'on distingue pourtant dans ces traditions, trois grandes époques entre l'incorporel Pan-kou et Chen-nong à la face bestiale. Les deux premières sous les titres de Tien-hoang et de Ti-hoang, comprendraient suivant les uns, pour la première, celle des Tien-hoang, treize rois ou chefs de races, nommés Vang, c'est-à-dire *espérance** ayant vécu chacun 18,000 ans; suivant les autres, un seul chef ayant vécu 18,000 ans; et pour la seconde, celle des Ti-hoang, onze chefs de race ou un seul ayant aussi vécu 18,000 ans chacun. Et ce sont bien de véritables années qu'il s'agit, car pour désigner ce qu'aujourd'hui on appelle un an, on disait *un changement de feuilles*, comme on le dit encore dans les petites îles de Lieou-kieou.†

La troisième période ou époque est celle des Gin-hoang, qui comprend neuf chefs qui ont duré 45,600 ans, et à qui on attribue des faits qui impliquent contradiction avec ceux des époques suivantes, mais au milieu des quels on pourrait deviner que c'est

* Recherches sur les temps, &c., page LXVI.

† Page LXVII, lire d'ailleurs à propos de ces traditions les pages LII à LXVII.

alors que l'homme eût pour la première fois conscience de lui même et le sentiment, non pas encore du bien et du mal, mais seulement de ses actes.

"On lit dans le Yuen-lao-fan que ce fût sous les Gin-hoang que commença le bon gouvernement; alors le Seigneur ne fût plus un vain Roi, le sujet ne fût plus comblé d'honneurs sans raison; il y eût de la distinction entre le souverain et le vassal, on bût et on mangea, et les deux sexes s'unirent."*

C'est alors que Fo-hi est nommé pour la première fois; je dis pour la première fois, parcequ'en effet plusieurs auteurs le font reparaître dans plusieurs des périodes suivantes et qu'on ne le fait régner comme chef de race que sept ou huit périodes plus tard, bien que ces mêmes auteurs prennent soin d'avertir du vague où ils sont eux mêmes, en disant qu'il ne faut point placer telle ou telle période après Fo-hi. La lecture des textes, la connaissance des documents d'après lesquels ils travaillaient et des faits que nous devons à nos propres observations, permettraient peut-être d'établir quelque clarté dans ces traditions où ils sont les premiers embarrassés. Fo-hi ne serait-il, suivant en ceci une idée qui plait tant aux Chinois et qui leur est si habituelle, qu'une allégorie destinée à représenter l'humanité en ses débuts informes, comme le tétard représente l'être à l'état embryonaire? Cela paraît probable, sans détruire aucune des conséquences que je suggérais à ce propos dans les premières pages de ce travail. D'où est venue aux Chinois, à l'époque surtout où ils imaginèrent cette allégorie, la connaissance du fait physiologique, qui nous a été divulgué depuis si peu de temps?

Quoiqu'il en soit, arrivés à cette époque, nous ne sommes point encore, d'après les Chinois, à l'âge des silex et de la chasse. Jusque là comment l'homme a-t-il vécu? de fruits et d'herbes crues seulement? Toutes ces époques ne seraient-elles encore que des allégories? Mais alors après un tel prodige de pressentiment physiologique, quelle merveille de connaissance psychologique!

Continuons toutefois nos explorations dans le domaine des cosmogonies chinoises et tâchons d'y reconnaître nos âges de silex que l'on serait maintenant presque tentés d'appeler modernes.

Après Gin-hoang commencent cinq petites époques ayant eu chacune plusieurs familles ou plusieurs chefs de races, auxquelles toutes ensemble, et y compris même celle des Gin-hoang, on donne

* Page LXX.

90,000 ans selon Lo-pi,* plus d'un million d'années, suivant un autre auteur qui, il est vrai, paraît être seul de son avis et ne pas l'appuyer sur des conjectures de beaucoup de valeur. C'est sous la troisième de ces petites époques, nommée Ho-lo, et qui n'eût que trois familles, "que les hommes apprirent à se retirer dans le creux des rochers."†

La septième période, nommée Sun-feï, comprend vingt deux familles qui durèrent un temps indéterminé. Certains auteurs veulent qu'elle n'ait pas eu plus de 1,800 ans; d'autres, et les plus anciens, disent positivement, au contraire, d'une seule de ces familles, qu'elle dura quinze cents ans; ils attribuent à une autre trois cents quarante ans d'existence, et à une troisième trois cents. Il parait du reste que ces familles n'auraient pas réellement existé et ne seraient que des symboles sous lesquels les plus anciens cosmogonistes auraient rangé une suite de faits. Ils ne parlent jamais de leurs chefs que d'une façon hyperbolique, mais assez transparente pour que l'on puisse en retenir quelques indications intéressantes. Ainsi l'on dit de Kiu-ling, premier roi de la première de ces familles "qu'il agit sans cesse, qu'il précède le repos et le mouvement, qu'il retourne les montagnes et détourne les fleuves et qu'il n'était pas toujours dans le même lieu, mais qu'il y a beaucoup de ses traces dans le royaume de Chou."‡

Le royaume de Chou correspond à la province actuelle du Se-tchuen§ la plus occidentale de la Chine, une des plus rapprochées du Kouën-lün et des autres montagnes du Thibet. Nous avons pu y constater en effet, en 1863, les traces des profondes et nombreuses modifications dont elle a été le théâtre, regrettant de ne pouvoir consacrer à leur étude le temps et l'attention nécessaires.

Ce ne fut que sous la vingt deuxième famille de cette période que l'on cessa d'habiter les cavernes.‖

Après ces petites époques se placent deux périodes comptant la première treize, la seconde quinze ou seize familles. Sous la première famille de la première de ces deux périodes, "*Tchin-sang* apprit aux hommes à préparer les peaux et à en ôter le poil avec des rouleaux de bois pour s'en servir contre les frimats et les vents

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* Page LXXII.
† Page LXXVIII.
‡ Page LXXIII.
§ Page LXXIX.
‖ Page LXXVIII.

qui les incommodaient." * Sous la quatrième famille, "les Rois allaient les cheveux épars sans sceptre et sans couronne; les peuples, sans les reconnaître pour maitres, gardaient au fond du cœur leur vertu; alors le Ciel et la Terre gardaient un ordre charmant et toutes choses croissaient sans relâche; les oiseaux faisaient leurs nids si bas qu'on pouvait les prendre avec la main, et tous les animaux se laissaient conduire à la volonté de l'homme; on tenait le milieu et la concorde régnait partout; on ne comptait point l'année par les jours; il n'y avait ni dedans ni dehors, ni de mien ni de tien. C'est ainsi que gouvernait Houën-tün; mais quand on eût dégénéré de cet heureux état, les oiseaux et les bêtes, les vers et les serpents tous ensemble, comme de concert, firent la guerre à l'homme." †

La onzième famille compte plus de cent générations pendant l'espace de douze ou de dix-huit mille ans. Alors on était déjà "devenu trop éclairé, ce qui fut cause que les animaux se révoltèrent; armés d'ongles, de dents, de cornes et de venin, ils attaquaient les hommes qui ne pouvaient leur résister; alors Yeoutsao régna, et ayant le premier fait des maisons de bois en forme de nids d'oiseaux, il porta le peuple à s'y retirer pour éviter d'être dévoré des bêtes féroces; on ne savait point encore labourer la terre, on vivait d'herbes et de fruits, on buvait le sang des animaux, on dévorait leur chair toute crue et on avalait le poil et les plumes."‡

Sous la douzième famille on découvre le feu et on apprend à cuire les viandes; § on apprit aussi à pêcher. || Souï-gin,** sous le règne duquel cela se passait, reconnait aussi les quatre points cardinaux, impose pour la première fois des noms aux plantes et aux animaux de telle sorte que leurs noms suffisaient à les faire reconnaître. Enfin il trouve les premiers caractères d'écriture, il découvre les poids et les mesures et fixe l'âge du mariage. Mais ces dernières innovations seront attribuées par la suite à d'autres chefs de races. Il serait plus juste et plus clair de dire que c'est sous ce règne que l'on commença à les soupçonner.

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* Page LXXVIII.
† Page LXXX.
‡ Page LXXXII.
§ Page LXXXIII.
|| Page LXXXIII.
** On raconte que pendant le règne de Souï-gin, un sage étant allé se promener au delà des bornes du Soleil et de la Lune, (ou en haut d'une montagne), vit un arbre sur lequel était un oiseau, qui en le becquettant fit sortir du feu. Il en fut frappé, et en prit une branche pour en tirer du feu.

Sous la treizième famille, "ce qui tenait lieu d'écriture, c'était des cordes remplies de nœuds." *

Je disais tout-à-l'heure que Fo-hi reparaissait en différentes périodes. En voici une, la neuvième des petites, composée de quinze Rois dont le Vai-ki et le Tsien-pun font quinze ministres, sous Fo-hi qu'il ne nomme pas autrement, comme s'il n'était qu'un Symbole sous lequel eussent régné ces quinze Rois.

Le premier de ces Rois est Se-hoang ou Tsang-kie. "Ce prince savait former des lettres au moment où il naquit. Une tortue divine, portant sur son dos des lettres bleues, les lui donna; ce fut alors que, pénétrant tous les changements du Ciel et de la Terre, en haut il observa les diverses configurations des étoiles; en bas il examina toutes les traces qu'il avait vues sur la Tortue; il considéra le plumage des oiseaux, il prit garde aux montagnes et aux fleuves qui en sortent; et enfin de tout cela il composa les lettres. Les plus habiles Chinois prétendent que c'est l'ancienne écriture nommée Koteou-chou et disent qu'elle subsista jusqu'au Roi Siuen-vang, c'est-à-dire jusqu'à l'an 827 avant l'ère chrétienne. Mais Kong-ing-ta a très bien remarqué que, quoique la figure des lettres ait plusieurs fois changé, les six règles sur lesquelles Tsang-kie les forma n'ont jamais souffert aucun changement, &c." † (1)

L'on a vu sous les règnes précédents la conscience s'éveiller, le sentiment des actions naître, et le premier sentiment qu'il engendre est, naturellement, celui de la différence entre les rapports du père et du fils qui s'établit sous Tchang-kié. Voici maintenant quelque chose de plus; on ne dit pas encore, et on ne le dira que plus tard d'une façon positive, que l'homme ait conscience de ce qui était bien et de ce qui était mal, mais sous Tsang-kié paraissent

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* Page LXXXIV.

† Page LXXXVII.

(1) Ce sont ces lettres qui forment le vieux texte du Hiao-king. On appelle ce texte Kou-onen. Ce sont proprement des lettres vermiculaires mélangées de signes ayant la forme de têtards. Voir les planches III à VIII dans le Tome I des Mémoires des anciens Jésuites.

"Ces caractères sont déjà modifiés. Il y a en trois sortes de caractères Kou-ouen : le Tchang-kou-ouen dont il ne reste que les King et quelques inscriptions, le Tchong-kou-onen et le Hia-kou-onen. Le premier, le Tchang-kouen-ouen, est du Chinois tout pur suivant les missionnaires, laconique, plein d'images, d'une profondeur, d'un vrai, d'un lumineux, d'un bon sens et d'une probité qui enchantent. Les pensées y sont serrées les unes contre les autres et comme *pilées*, &c."—Mémoires des anciens Jésuites, Tome VIII, page 157

les premières lois,* qui, effectivement, ont très bien pu être fondées sur les besoins et les intérêts d'une société naissante plutôt que dictées par le sentiment moral ; et, ce qui donne quelque valeur à cette interprétation, c'est qu'après avoir dit que les lois parurent, on ajoute tout de suite que les châtiments furent en vigueur. Cependant les Rites et la Musique régnaient aussi.

L'écriture est aussi inventée, mais même sous Tchong-yang, le troisième chef de cette époque, on se servait encore des cordes à nœuds, parceque les lettres n'étaient pas encore parvenues jusqu'à l'usage commun. C'est de ce chef que date le premier souvenir religieux. Jusqu'à présent les rapports de l'homme avec Dieu n'ont été que des rapports de sujétion, consciente ou inconsciente. Maintenant il en fait l'objet d'un culte, et, pour la première fois il lui dresse un autel. Lo-pi, qui comprend toute l'importance de ce fait, en parle fort au long dans son Lou-che.† Toutefois on ne sent pas encore le besoin d'en rendre les démonstrations fréquentes et générales. Une seule à l'avénement de chaque famille régnante suffit. Rien non plus n'indique que ce culte fût fondé sur un sentiment bien parfait de la Divinité. Remarquons d'ailleurs qu'il est postérieur à celui de la famille. Dès cette époque aussi, il semble qu'on ait déjà soupçonné cet aphorisme qui ne devait se formuler que beaucoup plus tard et que beaucoup plus tard encore les Latins ont traduit par "*Mundum regunt numeri.*" On attribue en effet à ce Tchong-yang, entre les nombres et l'homme, un rapprochement remarquable pour lequel je renverrai à Lo-pi qui le rapporte.‡

On ne parle pas encore de l'agriculture. Celui qui doit la personnifier ne naîtra que plus tard, mais il est probable qu'on en connaît au moins les opérations essentielles : en tous cas, on connait le blé.§ C'est du même aussi qu'on fera dater l'usage de la pierre, mais on verra, quand son époque sera venue, que l'agriculture et l'emploi de la pierre constituaient des arts, et même des arts très avancés et rendus vulgaires. Quoiqu'il en soit, dès à présent l'on a plus de motifs qu'il n'est nécessaire, pour être certain que la pierre entrait dans l'outillage de l'homme. Eût-il dû ne s'en servir qu'en la fixant sous forme d'écaille ou de massue au bout d'un bâton, elle lui fut indispensable dans la lutte que

* Page LXXXVII.
† Page LXXXVIII.
‡ Page LXXXVIII.
§ Page LXXXVII.

nous avons vu les animaux lui livrer il y a déjà plusieurs chefs, je veux dire plusieurs périodes.

Après Tchong-yang viennent trois Empereurs ou Chefs de Races dont les règnes offrent quelques particularités assez remarquables. Ainsi l'on dit que "sous le règne du premier de ces Empereurs, le ciel donna la douce rosée, la terre fit sortir de son sein des sources de nectar; que le soleil, la lune et les étoiles augmentèrent leurs clartés et que les planètes ne s'écartèrent point de leur route."* Or il est bien évident que ce nectar n'était que de l'eau pure, ainsi que le fait remarquer le Père Gaubil, qui, en traduisant ainsi le mot chinois Huen-tsiou, rappelle ce vers d'Ovide :

"*Nectar erat manibus hausta duabus aqua.*"

Mais si l'on parlait de l'eau pure en ces termes, c'est qu'évidemment aussi sa rareté la rendait précieuse; c'est que les eaux de la mer ne s'étaient point encore retirées, ou plutôt que la terre ne s'était point encore assez élevée hors de la mer pour que les sources qu'elle renferme ne fussent pas saumâtres. Les faits relatifs au soleil et aux étoiles seraient peut-être plus difficiles à comprendre.

Sous Hien-yuen-chi, septième Empereur de cette période, Lo-pi, que le P. de Prémare suit surtout dans ses recherches, et non seulement Lo-pi, mais la plupart des auteurs, condensent un assez grand nombre de faits intéressants qui impliquent la connaissance plus ancienne, sinon aussi générale, de quelques uns d'entr'eux et nous permettent de nous figurer l'état de l'humanité à cette époque. Le règne de cet Empereur nous fournit en outre un point de repère très précieux relativement aux époques que la Géologie nous permet aujourd'hui d'établir.

Pour les Chinois, l'humanité était encore confinée sur le mont Kouën-lün ou dans ses environs immédiats. Soit qu'il lui ait pris son nom, soit qu'il lui ait donné le sien propre, le nom de Hien-yuen-chi n'est pas autre, d'après le Lou-che, que celui d'une montagne située tout au bas du Kouën-lün, sur laquelle il se retira pour se mettre à l'abri du vent et des pluies.† Parmi les recueils des traditions, recueils fort anciens eux-mêmes, qui se rapportent à ce règne, deux portent le nom de Se-haï et de Chan-haï-king. Or, le premier de ces titres veut dire les *Quatre Mers*, rappelant certainement qu'alors le monde, réduit cependant aux chaînes du Kouën-lün, était entouré de mers; et le second signifie : Livre des Montagnes et des Mers, indiquant ainsi, et ce semble

* Page XC.

† Pages XCI et XCII.

d'une façon assez claire, que les plaines étaient encore submergées. Ce n'est pas la première fois, on peut le remarquer, que des faits analogues sont signalés à des intervalles de plusieurs milliers d'années; aussi ne hasarderons nous aucune conjecture sur la période glaciaire ou l'oscillation auxquelles ils se rapportent. Il nous suffira de noter que dès cette époque l'on connaissait, du moins ici, de ce côté du monde où fut le berceau de la société civilisée, l'on connaissait déjà non seulement l'échange, mais le commerce sorti de l'enfance, avec les plus significatifs de ses auxiliaires, la Monnaie et la Balance. On connaissait l'agriculture et l'industrie, on tissait des étoffes, &c. "Hien-yuen fit battre de la monnaie de cuivre et mit en usage la balance pour juger du poids des choses, par ce moyen l'Univers fût gouverné en paix..... Les marchandises consistaient en métaux, *Kin*, en pierres rares, *Yu*, (1) en ivoire, *Tchi*, en peaux, *pi*, en monnaie battue, *Tsuen*, (2) et en étoffes, *pou*.* D'un autre côté cependant, et c'est là un second point de repère, "les hommes sous cet empereur et jusqu'au douzième, ne sont point nombreux; on ne voyait que de vastes forêts; les bois étaient pleins de bêtes sauvages et l'on coupait les branches des arbres pour les tuer."† Notons aussi que c'est la première fois qu'il est question des métaux; mais, nous verrons tout-à-l'heure qu'on en parlera comme d'une chose déjà ancienne et remontant à Soui-gin, en même temps que la découverte du feu. Tout d'ailleurs en implique dès maintenant tous les usages. Enfin le tableau un peu trop naïf, pour qu'il soit utile de le rapporter en entier, que Lo-pi fait de la civilisation de cette société naissante, montre que ses besoins, intellectuels et moraux, étaient fort bornés; "l'Empereur respectait le peuple et ne négligeait rien. Sous lui les hommes vivaient en paix sans trop savoir ce qu'ils faisaient; ni où ils allaient..... Après avoir donné le jour au travail, ils donnaient la nuit au repos. Quand ils sentaient la soif ils cherchaient à boire, et quand la faim les pressait, ils cherchaient à manger. En un mot, ils ne connaissaient point encore ce que c'était que bien ou mal faire." C'était enfin cet état de satisfaction physique et d'insouciance qui précède

(1) Silicates de diverses sortes.

(2) "La monnaie de Hien-yuen avait un pouce sept lignes et pesait douze tchu. Un tchu est la vingtième partie du Yo, et le Yo pesait douze cents grains de millet, et on gravait des lettres sur ces monnaies."—Page XCIII.

* Page XCII.

† Page XCVI.

dans l'homme l'âge des sensations plus nobles. L'humanité avait vingt ans. Elle avait vingt ans, car la voici, sous Tcho-yong, le onzième Empereur, qui s'enflamme de l'amour du bien et qui, tourmentée de ces aspirations vagues que l'on éprouve à cet âge, demande à ce qui l'entoure de nouvelles jouissances. La musique affecte son entendement et l'harmonie de la nature le pénètre. Sous Tcho-yong "Le peuple s'excitait à la vertu avant qu'il fut menacé de châtiments. La société civile étant si bien réglée, l'Univers jouissait de la paix et toutes les créatures étaient soumises; ce fut alors que Tcho-yong, écoutant à Kan-tcheou le concert des oiseaux, fit une musique d'union dont l'harmonie pénétrait partout, touchait l'esprit intelligent et calmait les passions du cœur de l'homme, de manière que les sens étaient sains; il appela cette musique: *Tsie-ven*, c'est-à-dire: la tempérance et la grâce. Et ce n'est pas seulement une musique de sons dont parlent les antiquités chinoises; quoiqu'on y trouve souvent en effet des concerts de sons, le but principal est l'harmonie de toutes les vertus, de manière que le concert n'est parfait que quand le corps et l'âme étant d'accord, la concupiscence est soumise à la raison.* Au reste cette musique est toujours jointe à l'urbanité extérieure. La politesse, dit le Lou-che, regarde le dehors, mais elle doit venir du dedans...L'urbanité gouverne l'extérieur et la musique nous ramène au dedans de nous mêmes." (1)

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* Page XCIV et Li-ki Chap. Yo-ki.

(1) On me saura peut-être gré de citer ici, en dehors de ce travail, quelques passages des livres chinois qui, à l'occasion de la musique et de la danse, peuvent donner un léger aperçu de leur métaphysique et sont, d'un autre côté, propres à faire soupçonner que leur ancienne musique dont ils regrettent tant la perte, était bien une musique d'harmonie, encore que nous prétendions qu'ils n'ont jamais connu l'harmonie.

"Lo-pi dit que la musique n'est autre chose que l'accord des deux principes, l'un actif, nommé Yang, et l'autre passif, nommé Yn, sur lesquels roule la conservation du monde visible. En effet le bel ordre de l'Univers est une harmonie; et soit que l'on considère le monde physique, c'est-à-dire le Ciel et la Terre, ou le monde moral, c'est-à-dire l'Homme, ou le monde politique, c'est-à-dire le Royaume, on tous les trois enchainés ensemble, on rencontre toujours ces deux principes qui doivent être d'accord, sans quoi, point d'harmonie. Lo-pi ajoute que le sage concerte les faux accords de l'Yn et de l'Yang et qu'il fait des instruments pour déclarer leur union. De tous les instruments qui font l'harmonie dont je parle, les deux principaux sont le *Kin* et le *Se*, (sorte de lyre et de harpe). L'un et l'autre sont essentiels au concert harmonique. Le premier gouverne le principe actif, et l'autre régit le passif, &c."

Cependant, quoique sorti depuis longtemps de la sauvagerie, l'homme n'est encore que dans les limbes de la civilisation; le bien-être ne lui suffit plus et il a déjà la conscience du bonheur, mais ses facultés ne sont encore que des sentiments et il lui manque les deux plus fécondes; l'amour et la haine, que sous le seizième Empereur il n'aura pas encore acquises. En attendant, ses progrès suivent leurs cours; le nombre de ses idées s'accroît, les lettres qui les représentent se perfectionnent;* et, comme elles ne peuvent tout exprimer, il invente sous le quinzième Empereur, Tse-hang, un objet qui l'aide à traduire ses impressions. Le premier instrument de musique est trouvé et c'est la lyre à cinq cordes.† Notons en passant que, par suite d'un enchaînement d'idées, qui parait très naturel aux historiens chinois, et que ce n'est pas ici le lieu d'expliquer, cette invention est signalée à propos de circonstances tout à fait physiques. "En ce temps là, dit Lo-pi, les vents furent grands, les saisons tout-à-fait déréglées, les eaux ne s'écoulaient pas et les fleuves ne suivaient point leur cours," ce que l'on répète encore sous le quinzième Empereur Yu-kang qui enfin "invente la danse."‡

En ce temps le centre de l'empire était au Kan-sou actuel. Le onzième Empereur est enterré au midi du mont Hueng, près de la ville moderne de Hoen-y-tcheou dans le Chen-si. Le quinzième est aussi enterré au Chen-si au nord du mont Féou-poeï.§

"Lo-pi dit que la vie de l'homme dépend de l'union du Ciel et de la Terre et de l'usage de toutes les créatures. La matière subtile circule dans le corps; si donc le corps n'est point en mouvement la matière s'amasse et de là les maladies. Dans un règne paisible, on ne voit point de malades et sous un méchant roi, tout est en désordre, c'est pourquoi le Li-ki dit qu'on peut juger d'un règne par les danses qui y sont en usage. On dit aussi qu'on juge de la vertu d'un homme par la manière dont il touche le Luth ou dont il tire de l'arc. La danse est donc tellement un exercice de corps qu'en même temps elle se rapporte au Gouvernement comme la Musique."

Les personnes que cette question de l'ancienne musique chinoise intéresserait, pourraient lire le savant article renfermé dans le volume VI des Mémoires concernant les Chinois, et le chapitre Yo-ki du Li-ki. Ils y trouveraient des détails vraiment curieux sur les rapports que les Chinois établissent non seulement entre la musique, la physique et la géométrie, mais entre la musique et la philosophie, la politique, &c.

* Page XCVII.
† Page XCVII.
‡ Page XCXVIII.
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Le seizième Empereur est Vou-hoai-chi. "On dit que sous son règne les hommes demeuraient tranquilles chez eux, et faisaient grand cas de tout ce qui les maintenait en santé; ils travaillaient du corps, mais leur cœur n'avait ni amour ni haine. Le monde était si peuplé que partout, d'un lieu à un autre, on entendait le chant des coqs et la voix des chiens; le peuple vivait jusqu'à une extrême vieillesse, sans avoir grand commerce les uns avec les autres, &c."

Mais il est inutile de dire que le monde était renfermé dans des limites beaucoup plus étroites qu'aujourd'hui; l'on verra tout-à-l'heure que l'on était encore loin de l'état où les derniers événements géologiques ont laissé le globe depuis les temps historiques jusqu'à présent. Sauf quelques points émergés dans le Tché-li, le Chan-tong, le Ngan-hoeï, le Hou-pé, les eaux couvraient toute la surface orientale et méridionale de la Chine actuelle. L'Empire ne comprenait donc qu'une petite surface du Chan-si, le Se-tchuen, le Chen-si, le Kan-sou et le versant des monts Kouen-lun contre lequel ces provinces sont adossées. Quant au Kouy-tcheou, au Yun-nan et au Kouang-si, il n'en est pas question. Ces provinces devaient être en partie exondées, il semble même qu'elles aient été habitées dès cette époque par quelques enfants perdus de cette primitive humanité, à en juger par l'état ou les trouvèrent plus tard les conquérants qui les rattachèrent à la Chine de nos jours, et où se trouvent encore quelques tribus réfractaires à toute tentative de civilisation, connues sous le nom de Miao-tse, Man-tse, Lo-sse &c. &c. De même que les anciennes espèces animales que l'on retrouve vivantes dans certains lacs, ces tribus semblent avoir survécu à toutes les révolutions de notre planète. Humanité fossile dont il m'a été donné de voir quelques représentants pendant mon voyage dans les provinces occidentales de la Chine, ses mœurs paraissent offrir les ressemblances les plus frappantes avec les mœurs de la société contemporaine des Empereurs qui viennent de nous occuper, et ne seraient pas un des éléments les moins importants des études ultérieures. Rien donc ne serait plus désirable de voir enfin publier, même telles quelles, les recherches que le savant et regretté Dr. Bridgman poursuivait depuis longtemps sur ces peuplades à demi sauvages, recherches auxquelles il mettait, si je ne me trompe, la dernière main au moment de sa mort.

Monseigneur Chauveau, évêque actuel du Thibet, qui réside aujourd'hui à Ta-tsien-lou, sur la limite thibétaine du Se-tchuen,

et qui, auparavant, avait habité pendant vingt-cinq ans le Yunnan et le Kouy-tcheou, avait réuni sur les Miao-tse et les Man-tse, dont on sait que ces provinces renferment un grand nombre, plus de deux volumes de notes. Malheureusement l'on dit que ces précieux manuscrits ont été détruits par un incendie. Mais il y a tout lieu de penser que l'on obtiendrait aisément que Monsgr. Chauveau communiquât ce qu'il aurait pu sauver des flammes, ou voulut bien recueillir ses souvenirs pour les mettre à la disposition de la Société.

Monseigneur Faurie, évêque actuel du Kouy-tcheou, a, dit-on, fait des études analogues, de même que Monseigneur Pichon, évêque du Se-tchuen occidental.

Ils me pardonneront de trahir ici leur modestie.

Un grand nombre d'auteurs chinois, anciens et modernes, se sont aussi occupés de ces peuplades.

Nous arrivons maintenant à la dernière époque pré-historique, à l'époque de Fo-hi, de Chin-nong et de Hoang-ti, pendant laquelle les facultés de l'homme déjà adolescent vont se compléter, se fortifier et le feront enfin passer à l'âge adulte, en même temps que la Terre accomplira les dernières transformations auxquelles a succédé l'époque actuelle. Mais arrêtons-nous un instant. A voyager ainsi au travers de l'éternité, l'esprit hésite; et, peu habitué à de pareilles courses, doute de son guide; la lumière même, qui grandit à chaque pas, l'éblouit...Eh quoi, tant de chemin? tout seuls?

Tout seuls. Et n'est-ce donc point assez que Dieu nous ait, en nous créant, donné ce qu'il fallait pour marcher; ne nous suffit-il pas de savoir qu'il est là, et faut-il qu'il se manifeste à chaque pas? Et d'ailleurs, regardons autour de nous; n'est-ce pas ainsi que les choses se passent? Rappelons-nous les grandes preuves que nous avons déjà recueillies. Mais d'abord interrogeons notre bon sens et le bon sens de ceux qui ont été élevés autrement que nous.

"Si l'on veut, dit un ancien Jésuite, (1) si l'on veut savoir quelle est sur cette matière la Grande Doctrine des Lettrés, il faut lire le Tchi-pen-ti-kang, imprimé en 1747, qui est comme le système universel de la Doctrine de l'Ecole de Confucius, sur la Religion, la Morale, la Politique, la Physique et toutes les sciences. Ce grand ouvrage en dix volumes, que les missionaires regardent

(1) Mémoires concernant les chinois, Tome 11, pages 384 et 385.

comme très dangereux et très opposé à la prédication de l'Evangile parce qu'il se renferme dans le Deïsme et dans la Religion Naturelle, est partout au niveau de la raison et de la conscience qu'il contente trop pourqu'elles sentent aisément la nécessité de la révélation."

Pour moi, je ne vois rien de plus admirable, ni qui puisse nous inspirer plus de confiance que cette coïncidence de deux histoires dont l'une, reconstruite par nous, et l'autre, suivie d'une façon aussi continue et aussi logique, aussi conforme aux faits récemment acquis. J'ai passé sous silence, afin de ne pas allonger outre mesure cette note déjà si longue, une multitude de traits, naïfs en apparence, mais qui, mieux que tout, décèlent la vérité et en sont les plus forts témoignages; et pour n'en rappeler qu'un, est-il admissible que les historiens de la dynastie des Han et des Song, c'est-à-dire postérieurs de quelques milliers d'années à l'époque qu'ils décrivent, aient imaginé, par exemple, de faire sortir de la terre des sources d'eau douce. On n'invente pas de pareils détails, et si j'en ai omis, l'auteur des Recherches sur les temps préhistoriques et les historiens chinois eux-mêmes en ont, malgré leurs scrupules, négligé bien d'autres qui devaient leur sembler inutiles, mais qui pour nous, encore une fois, seraient de lumineux indices. Malheureusement il est bien à craindre qu'il ne reste plus guère de ces titres précieux. Dieu sait dans quel état est le sous sol écrit qu'ils constituaient! Deux fois la torche a précédé le flambeau. De ce qui avait échappé aux mains sacrilèges de Tsin-chi-hoan-ti dont deux mille ans passés n'ont pu abolir la mémoire exécrée; de ce qui composait, il y a dix ans encore, les archives non seulement de la Chine, mais nos propres et nos plus vieilles archives, les archives du genre humain, Dieu sait ce que l'incendie naguère allumé de nos propres mains a pu laisser subsister!

Cependant tout n'est peut-être pas absolument perdu; peut-être serait-il possible de retrouver quelques uns de ces documents, soit en Chine, soit même en Europe où les anciens Jésuites ont envoyé un grand nombre de livres chinois. Il en est d'ailleurs que leur nature a pu sauver de la flamme aussi bien que du temps, tels que les inscriptions lapidaires, quelques monnaies, certains monuments et les outils de pierre, dont la collection la plus anciennement formée, était, il y a quelques années encore, réunie dans le palais de Yuen-min-yuen.

J'essaierai dans un dernier chapitre de donner une idée de ceux qui offriraient à nos recherches le plus d'intérêt. Mais je dois auparavant terminer l'esquisse historique de l'humanité d'avant Yao.

VI

Le règne de Fou-hi, auquel nous sommes maintenant arrivés, est un des plus remarquables de la haute antiquité, mais il embrasse tant de faits qu'il y a lieu de penser que le souvenir de cet Empereur plane au dessus d'un temps beaucoup plus long que celui où il a régné individuellement, ainsi que, de nos jours encore, le souvenir du chef de famille prolonge en Chine son influence, j'allais dire sa vie, au delà du tombeau. Bien plus, comme tous les génies dont l'apparition a marqué une ère dans l'humanité, Fou-hi marque son empreinte même sur un long passé. Longtemps avant sa naissance, son nom est répété, et ceux qui le précédent semblent n'être que ses précurseurs. C'est ainsi que nous avons vu un grand nombre de notions acquises à une époque antérieure, placées sous son nom, comme elles se trouveront plus tard récapitulées sous son règne. C'est ainsi qu'il absorbe dans sa puissante personnalité plusieurs règnes et entr'autres ceux de Kou-kong et de Niu-va, bien que très postérieurs, et dont cependant on ne fait que les auxiliaires de Fou-hi, l'un comme ministre et Niu-va comme sa femme, sa fille ou sa sœur. Mais, individuellement, Fou-hi ne régne que 115 ou 164 ans et individuellement ne se prouve, ne s'affirme que par deux ou trois circonstances tout-à-fait nouvelles; la domestication des six animaux,* (cheval, bœuf, poule, cochon, chien, mouton,) l'invention du calendrier† et le cérémonial du mariage,‡ qui, s'ils ne sont pas de lui, paraissent être trop rapprochés de son règne pour que l'on puisse les lui contester. Ce ne sont cependant pas ces innovations qui sont les grandes gloires de l'époque de Fou-hi. Arrivée à cette phase de son développement, l'on dirait que l'humanité se recueille et qu'elle est plus préoccupée de perfectionner ses acquisitions que d'en faire de nouvelles. Déjà ces trois innovations de Fou-hi ne sont réellement au fond que des perfectionnements. Mais elle n'arrête point sa marche; et, si ses conquêtes sur le monde extérieur se ralentissent, ce n'est que pour changer de direction. L'homme est à ce moment où ses besoins physiques sont suffisamment satisfaits pour que des besoins d'un autre ordre, les vrais, ceux qui le font homme, se fassent sentir. Il ne lui suffit plus d'avoir conscience de lui même, de la valeur de ses actions; le sentiment même d'un Être supérieur ne lui suffit plus; et, pour la première fois il se sent pris du noble

* Page CIII. † Page CV. ‡ Page CIV.

désir de savoir. Jetant les yeux autour de lui, et les élevant jusqu'au Ciel, il s'inquiète des rapports qui existent entre l'Homme et la Création, entre la Création et le Créateur, entre l'*être* et le *devenir*; et il ne se borne point aux rapports de causes à effets, mais il va les chercher jusque dans la nature intime des choses. Ce sont ces rapports que Fou-hi exprime par les immortels symboles que l'on connait sous le nom de *Trigrammes de Fou-hi.**

Tels sont les grands problèmes qui font de cette époque la date la plus solennelle de l'humanité. Pourtant, au point de vue physique, elle n'est pas très avancée: Fou-hi n'est encore qu'un tétard ou peut s'en faut; il avait, dit Ven-tse, "le corps de serpent et la tête énorme,"† et ce n'est que naturel, s'il est vrai que l'idée préexiste à la forme; mais c'est pour la dernière fois. On dit aussi que les armes de ce temps n'étaient encore que de bois,‡ ou tout au plus de pierre, si l'on suppose qu'il y ait eu de la part des historiens chinois, quelques transpolations dans les pages des traditions qu'ils ont étudiées; ce qui, d'ailleurs, paraît très possible. Mais qu'importe? Les peuples ont ils attendu les progrès modernes de l'industrie et ceux même de la science pour avoir leurs Aristote et leurs Platon?

Les Recherches du Père de Prémare ne mentionnent aucune note qui puisse servir de point de repère un peu précis à la Géologie, et nous aider à rétablir la date du règne de Fou-hi. Il dit seulement que cet Empereur fit circuler les eaux, mais cette circonstance se renouvelle si fréquemment désormais qu'elle jette au contraire un grand vague sur les temps qui séparent Fou-hi de Yao. L'examen des documents primitifs dissiperait peut-être cette incertitude. Mais on trouve dans le Tcheou-pi-souan-king, une indication astronomique qui pourrait peut-être, jusqu'à un certain point, suppléer à cette lacune. On dit dans cet ouvrage fort ancien, mais postérieur à Fou-hi, et comme si le fait était de son temps, que l'étoile polaire s'appelle ainsi parce qu'elle est droit au centre du pôle. "Or, comme le fait remarquer le P. Gaubil, elle en est présentement assez loin; et, par le chemin qu'elle a fait, on pourrait juger de l'antiquité de la tradition qui l'a conservée."§

Fou-hi fut enterré selon les uns à Choui-yang, et selon les autres à Tchin, mais si ces deux localités sont inconnues aujourd'hui, on sait du moins qu'elles étaient en Occident, et aux approches

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*Page CI. †Page CI. ‡Page CVI. §Page CV.

du mont Kouën-lün, si ce n'est sur le mont lui-même, où le Chan-haï-king place tous les tombeaux des anciens rois.

Kong-kong, dont nous avons parlé tout-à-l'heure, est peut-être, de toute l'antiquité chinoise, le personnage sur lequel les opinions sont le plus partagées. Les uns lui attribuent des faits dont la date remonte à plusieurs siècles avant Fou-hi; les autres le font descendre de Chin-nong lequel lui est au contraire bien postérieur. Lo-pi, pour expliquer cette différence, dit qu'il y a eu plusieurs Kong-kong dont les faits ont été confondus, et paraît croire que c'est à ce dernier Kong-kong qu'il faut rapporter ceux qui nous intéressent le plus. Je ne devrais donc en parler que beaucoup plus tard, et peut-être l'exposé qui nous occupe y acquérerait-il plus de clarté; je préfère cependant suivre le désordre scrupuleux du P. de Prémare, ne voulant pas trancher cette question, mais en laisser la solution à l'examen sérieux des documents originaux.

Il semble que Kong-kong ait été un mauvais prince aux actions duquel on ajouta la responsabilité des évènements malheureux qui eurent lieu de son temps, en qui l'on se plut dès lors à personnifier le mal et que l'imagination revêtit en suite de formes propres à représenter pour le mieux le caractère qu'on lui prêtaît. "Enivré, dit le livre Kouei-tsiang, de sa prétendue prudence, il se regardait comme un pur esprit; il chargeait le peuple d'impôts et les exigeait à force de supplices; il employa le fer à faire des coutelas et des haches et le peuple, sans appui, périt misérablement; il se plongea dans toutes sortes de débauches et ses débauches le perdirent."*

C'est à cette époque que se produisit un déluge causé par le soulèvement du globe au nord-ouest, soulèvement qui entraîna un affaissement au sud-est et qu'on ne manqua pas de lui attribuer. "Afin de perdre son rival Kong-sang, Kong-kong fit le déluge; il donna un coup de corne contre le mont Pou-tcheou, tel que les colonnes du Ciel en furent brisées et que la terre eût une brèche au Sud-est;† ce qui la rendit insuffisante au Sud-est."‡ Outre les cornes, Kong-kong avait le visage d'homme, le corps de serpent et le poil roux. Un de ses ministres ou auxiliaires, Feou-yeou, avait le corps rouge comme le feu et ressemblait à un ours.§

Kong-kong fut défait par Kao-sin qui le précipita dans l'abîme.‖

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* Page CIX. † Page CVIII & CIX. ‡ Page CXIII.
§ Page CX. ‖ Page CVIII.

Le déluge de Kong-kong s'arrêta ou du moins paraît avoir eu un temps d'arrêt pendant le règne de Niu-va qui vient ensuite, mais dont les faits sont cachés sous trop d'hyperboles pour que, excepté la circonstance que je viens de citer, je puisse y rien trouver, je l'avoue, qui ait pour nous un intérêt spécial et clair.

Toutefois, au lieu de les réfuter, comme ont fait beaucoup d'historiens chinois, ce qui, dit le P. de Prémare, est un triste parti, il est très possible que, là encore, l'étude des documents originaux aide à les faire comprendre.

Cette observation s'applique également à un grand nombre des faits du règne de Chin-nong ou Chen-nong. On peut dire aussi de cet Empereur, comme on l'a dit de Fou-hi, que tant de faits se trouvent récapitulés sous son règne, qu'il semble être devenu en quelque sorte *l'exposant* d'une longue époque, qui comprend soixante dix Empereurs: soit, suivant quelques historiens, plusieurs milliers d'années: soit même, selon Lo-pi, plus de cent mille ans.* On place sous le règne de Chen-nong l'invention de la poterie et de la fonte, quoiqu'il parait bien que l'on ait eu dès l'Empereur Souï-gin quelques notions de ces industries; on lui attribue l'invention du véritable vin, car "avant lui c'était l'eau pure que l'on appelait le vin, le vin céleste."† La reconnaissance populaire fit aussi de lui l'invention de l'agriculture; le nom même de Chen-nong signifie *le divin laboureur*; et en effet s'il ne l'inventa pas dans le sens strict du mot, il est certain que les foires, les marchés qu'il institua pour la première fois, les routes qu'il établit, durent la porter à un degré de prospérité qu'elle n'avait pas encore connu. "Chen-nong prit du bois fort et dur dont il fit le coûtre de la charrue et choisit du bois plus tendre pour en faire le manche."‡ Il apprit ainsi aux hommes à cultiver la terre avec plus de profit et moins de peine. Il sema les cinq sortes de blés au midi du mont Ki, (district actuel de Fuen-tchou-fou, au Chan-si) et établit des greniers où l'on conserva pendant l'hiver les fruits de la terre. Consacrant le sentiment qui se fait jour pour la première fois de la propriété des biens acquis par le travail, il fit plusieurs lois pour que l'on n'envahît point les travaux d'autrui. Enfin il enseigna tout ce qui regarde le chanvre et le mûrier, afin qu'il y eût des toiles et des étoffes de soie en abondance.§

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* Page CXXIV. † Page CXCI. ‡ Page CXVI.
§ Page CXVI.

"Quoique Fou-hi ait commencé à guérir les maladies par la vertu des plantes, cet art est particulièrement attribué à Chin-nong. Ce fut lui qui distingua toutes les plantes et en détermina les diverses qualités. Un passage tiré du livre San-hoang-ki paraît vouloir dire que Chen-nong battait et remuait les plantes avec une espèce de fouet ou de spatule rouge, ce qui désignerait la Chimie, d'autant plus qu'on parle d'une marmite (Ting) dans laquelle Chen-nong éprouvait les plantes. Le seul mot *Ting* marque assez qu'il se servait du feu. Une tradition de son temps dit que les plantes se divisent en quantité d'espèces différentes, mais que, si on examine bien leur figure et leur couleur, si on les éprouve par l'odorat et par le goût, on pourra distinguer les bonnes des méchantes et s'en servir pour guérir les maladies."* "Chen-nong ordonna à Tsio-ho-ki de mettre par écrit ce qui concerne la couleur des malades et ce qui regarde le pouls; d'apprendre si son mouvement est réglé et bien d'accord, pour cela de le tâter de suite et d'avertir le malade, afin de rendre par là un grand service au monde en donnant aux hommes un si bon moyen de conserver leur vie."†

Dans un autre ordre de choses, Chen-nong institua des fêtes pendant lesquelles on devait s'abstenir de visites, de procès et de promenades.

" L'Y-king, dit Lo-pi, rapporte au symbole *Fou*: que les anciens Rois, le septième jour, qu'il appelle le grand jour, faisaient fermer les portes des maisons, qu'on ne faisait ce jour là aucun commerce et que les magistrats ne jugeaient aucune affaire; c'est ce que l'on appelle l'ancien Calendrier."‡

" Chen-nong sacrifiait au Seigneur Suprême dans le temple de la Lumière, (Ming-tang;) rien n'était plus simple que ce temple, la terre de ses murs n'avait aucun ornement; le bois de sa charpente n'était point ciselé, afin que le peuple fit plus de estime de sa médiocrité."§

On dit que les lois de Chen-nong étaient gravées sur des planches carrées et qu'elles lui avaient été inspirées par le Ciel.‖

"Quelqu'étendu que fût l'Empire de Chen-nong, il était si peuplé et les habitants étaient si peu éloignés que les cris des animaux domestiques se répandaient et s'entendaient d'un village au village voisin. Le peuple n'était composé que de gens vertueux; les

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* Page CXIX. et CXX. † Page CXX. ‡ Page CXVIII.
§ Page CXXII. ‖ Page CXX.

mœurs étaient pures; on n'avait point ensemble de disputes et chacun s'estimait assez riche parce qu'il était content de ce qu'il avait sans se fatiguer."*

On dit que Chen-nong régna à Tchin, et qu'il fut enterré à Tchang-cha après avoir vécu 168 ans; mais, ainsi que je l'ai déjà observé, il ne faut pas oublier que tous les faits qu'on rapporte à son règne doivent être répartis dans une période de plusieurs centaines, ou peut-être même, de plusieurs milliers d'années.

À la fin de cette époque parait un personnage qui offre tant de traits de ressemblance avec Kong-kong que l'on peut penser que les deux ne font qu'un. C'est Tchi-yeou aussi nommé Tchi-ti ou Fan-tsuen, dont l'imagination populaire a fait en Chine un type qui présente beaucoup d'analogies avec certain mythe de nos légendes religieuses.

Tchi-yeou était un vassal du dernier roi de cette longue dynastie de Chen-nong. Irrité du despotisme de ce roi, il se révolta. Malheureusement la victoire qu'il remporta, au lieu de le calmer, exagéra le sentiment qui l'avait poussé à la rebellion, et il se fit à son tour exécrer par son despotisme et ses débauches. Le Chou-king, à l'autorité duquel il n'est pas permis de se refuser, dit, en suivant les traditions anciennes, que Tchi-yeou est le premier de tous les rebelles et que sa rebellion se répandit sur tous les peuples qui apprirent de lui à commettre toutes sortes de crimes. On dit que Tchi-yeou était chef de neuf noirs (Kieou-li) qui se révoltèrent avec lui et qui lui restèrent associés dans la réprobation des siècles.

Le nom de Tchi-yeou signifie: le *Méchant*. Tel que l'imagination populaire se le représente, il a le corps d'un homme, les pieds de bœuf, des jambes et des cuisses de bêtes et des ailes de chauve-souris. Ses compagnons, les Kieou-li ou les neuf noirs, avaient le corps d'animaux et la tête de métal; c'est aux neuf noirs et à leur chef Tchi-yeou, leur aîné et leur chef qu'on attribue l'origine des révoltes, des fraudes et des tromperies.† Tchi-yeou fût défait par un autre prince nommé Hoang-ti, lequel, après l'avoir longtemps poursuivi, finit par le saisir et le tuer, ou bien, suivant une tradition plus imagée, le jeta dans la vallée des maux.‡

A Hoang-ti, commence une nouvelle dynastie sur la durée de laquelle les historiens ne sont pas d'accord, mais à laquelle Se-ma-

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* Page CXXIII.

† Pages CXXVI à CXXIX.

‡ Chou-king, pages 291 à 294.

tsien, dans son Che-ki, attribue quarante six générations. C'est elle qui précède immédiatement l'époque historique, l'époque de Yao. Malheureusement c'est sur celle-là que les Recherches du P. de Prémare fournit le moins d'indices que la géologie puisse utiliser. On y voit seulement que la Chine avait alors pour limites : à l'ouest, la province actuelle du Chen-si; au nord le Kuen-jo ou désert de Tartarie qui ne devait pas être émergé depuis longtemps puisque c'est la première fois qu'il en est question; à l'est, la mer; et au sud, le Yang-tse-kiang dont l'embouchure était beaucoup plus reculée qu'aujourd'hui et ne devait pas être bien éloignée de la ville actuelle d'Y-tchang. Toutefois, autant qu'on en puisse juger par les souvenirs qu'on a conservés de cette période, et par les préoccupations dont chaque règne, pour ainsi dire, porte la trace, il est évident que les eaux en sont le grand fléau et qu'elle doit par conséquent être contemporaine de l'oscillation terrestre qui a précédé les temps actuels.

Il ne serait peut-être même pas impossible, en tenant compte des circonstances que le coup d'œil que nous venons de jeter sur les dernières dynasties nous font deviner, de reconnaître les deux temps de cette oscillation; le premier, commençant au début de l'époque de Fou-hi, par le soulèvement du désert de Tartarie et l'immersion du sud-est du continent, arrivant à son maximum avec Kong-kong et s'arrêtant à la fin du règne de Niu-va et pendant celui de Chen-nong.—Quant au deuxième, afin de le comprendre, sans empiéter sur le règne de Yao et sur les temps historiques auxquels nous sommes arrivés et auxquels j'ai résolu d'arrêter ce travail, il faut cependant savoir que l'excessive abondance des eaux qu'il causa résulte des obstacles qu'elles rencontraient, et, qui quoique l'on fît, se renouvelaient et empêchaient leur écoulement vers la mer, puisque c'est à leur ouvrir des passages que la fin de l'époque de Hoang-ti et tout le règne de Yao sont consacrés. La cause de ce deuxième déluge, ou plutôt de ces inondations, est donc inverse en quelque sorte de la cause du premier. Pendant le premier, il n'est point question de travaux, d'endiguement, de canalisation, &c., et il n'en saurait être question. S'il y a déluge, ce n'est pas que les eaux ne s'écoulent point, et en effet ce n'est point la pente qui peut leur manquer puisque leurs réservoirs s'élèvent, mais c'est parce que les lits des fleuves et leurs bassins mêmes ne suffisent point à leur écoulement. Pendant le deuxième, si l'excès des eaux n'est pas tel qu'on ne puisse chercher à y remédier, c'est qu'il est causé moins par leur affluence que par le

changement et le rétrécissement en profondeur et en largeur de leurs lits, et par la diminution de la pente de ces lits. Or, si l'on cherche à s'expliquer ces obstacles, on voit qu'on ne peut les attribuer qu'à l'exhaussement du fond des fleuves, des rivages, &c., d'où le deuxième temps cherché. Il commencerait donc à la fin de la dynastie de Chen-nong, parviendrait à son maximum à-peu-près avec Tchi-Yeou et s'arrêterait à la fin de la période de Hoang-ti, de telle sorte que Yao et Yu purent, au moyen de travaux immenses dont on peut juger maintenant encore, puisque c'est à Yu que l'on fait remonter le principal réseau de canaux que l'on admire dans ces mêmes provinces du Kiang-nan et du Tche-kiang que nous habitons, de telle sorte, dis-je, que Yao et Yu purent au moyen de ces immenses travaux et de cent ou cent cinquante ans d'efforts, débarasser le sol des eaux qui le couvraient.

Cependant, malgré le fléau, l'humanité continuait ses progrès. C'est dans le cours de la dynastie de Hoang-ti qu'elle découvre la boussole, et invente la navigation, ou du moins construit la première barque, la première pirogue.* Pour la première fois aussi on s'avise de représenter la sphère. Enfin c'est à Louï-tsu, femme de Hoang-ti, que l'on fait remonter la domestication du Ver à soie dont on se contentait jusque là de recueillir les cocons sur les arbres où cette chenille les déposait.

L'époque de Hoang-ti finit par le roi Tchi que l'on chassa à cause de ses désordres et que l'on remplaça par son frère Yao, auquel commencent le Chou-king et l'époque historique.

Il ne me reste plus dès lors qu'à présenter avec l'exposé des documents qu'il serait le plus possible et le plus intéressant de retrouver, les conclusions de ce travail, c'est-à-dire, les moyens que la Société Asiatique de Shang-haï pourrait peut-être employer pour se les procurer et les faire connaître. Mais arrivé à la fin de la tâche que je m'étais imposé, je ne puis m'empêcher de jeter un regard sur le long passé que quelques pages, pourtant, ont du suffire à dérouler. Que sommes nous? disais-je en commencant, d'où venons-nous, quand avons nous été créés, quels étaient nos ancêtres, comment se sont formées nos diverses races, comment ont-elles grandi? Eh bien, les livres que nous venons de consulter n'ont-ils point répondu, autant qu'œuvres humaines puissent répondre à de telles questions? Les lacunes de nos histoires nous étonnaient, notre esprit se cabrait devant les vides qu'elles lais-

* Page CXXXI.

saient, leurs solutions de continuité nous embarassaient; il me semble maintenant qu'en partie ces lacunes ont disparu, ces vides sont comblés, ces solutions de continuité n'existent plus. La chute de notre premier père n'est plus une contradiction: Adam avant sa chute, n'est pas autre que l'idéal Pan-kou; et cette chute n'est pas autre chose que la transition de l'idée à la forme. Je songe aux diverses races éparses sur le globe, les unes déjà écoulées et n'ayant laissé qu'un stérile souvenir, les autres disparues aussi mais après avoir jeté un éclat qui nous éclaire encore: celles-là jouissant d'une puissante vitalité et parvenues, ce semble, à l'apogée de leur développement; celles-ci grandissant et s'élevant encore. Je me rappelle leurs mœurs, leurs traditions, leurs croyances, leurs usages, leurs industries, leurs héros, leurs origines. Je les rapporte aux origines, aux héros, aux croyances, aux industries, aux usages, aux traditions et aux mœurs des races de ces grandes dynasties humaines qui viennent de se succéder sous nos yeux, et je me demande, si le livre que je tiens en ce moment et que j'ai un instant emprunté aux Chinois, n'est pas le livre souche de l'humanité dont chaque race, sans exception, ne serait qu'un feuillet.

VII.

Les témoignages les plus authentiques, ceux dont la connaissance importe le plus par conséquent à nos recherches, sont évidemment ceux que la nature s'est elle-même chargé de produire et de conserver. C'est, au point de vue spécial de la Géologie, tous les indices qui peuvent dénoter l'exhaussement ou l'abaissement du sol, tous ceux qui peuvent nous faire conjecturer l'état d'une contrée dans les âges antérieurs, je veux dire toutes les traces que les Glaciers ont pu y laisser. Ces indices s'observent par la nature du terrain; par la hauteur, l'altitude où il se trouve relativement au niveau de la mer; par la distance horizontale à laquelle il est des rivages; par les débris des espèces animales ou végétales qu'il recèle où dont il a pu garder les empreintes; par les dépôts glaciaires qui peuvent les recouvrir, tels que le drift, les moraines, les blocs erratiques et les cailloux roulés; par la direction des cours d'eau qui l'arrosent, les traces que les grandes crues laissent sur leurs bords; par les bancs, les îles et ilots dont leurs lits ou leurs embouchures peuvent être obstrués; et, sur les rivages, par certains accidents des côtes, des falaises ou des rochers. Je ne parle pas

des indices que renferment les profondeurs de la mer et que nos navigateurs n'ont que trop souvent l'occasion de signaler.

L'on a vu, dans le cours du travail qui précède, quelques exemples des faits qui se rapportent à cette première classe de témoignages. Lorsqu'il s'agit, soit de localités, soit des bancs de sable ou des rochers qui s'élèvent dans le lit des fleuves ou sur les bords de la mer, ou bien encore des dépôts de pierres amenés par les glaciers: moraines, blocs, drift, &c., il est nécessaire d'en décrire d'abord la situation géographique, l'orientation, la topographie, l'étendue ou la puissance; s'il s'agit du sol, il faut faire connaître sa nature, en rapporter, s'il se peut, des échantillons, aussi bien que des roches, cailloux, débris d'animaux que l'on rencontre à sa surface ou dans son épaisseur. On a vu quelles déductions importantes on tirait de l'analogie ou de la différence qui existent entre les roches ramassées sur le même terrain, des dimensions générales des cailloux, des blocs, &c. Un point très intéressant aussi au sujet des traces des anciens glaciers, est l'angle que les stries laissées par eux sur les flancs des montagnes et des rochers, fait avec l'horizon, la profondeur de ces stries.

C'est d'un bloc comme ceux dont il s'agit que le ministre Amita, envoyé par Kang-hi pour explorer le fleuve jaune, parle à l'Empereur en ces termes: "À la source de l'Alotan qui se jette dans le fleuve jaune (Hoang-ho) existe une pierre que l'on nomme en mongole Alotan-katafou-kaolao, ces trois mots disent en chinois: *roche d'or de l'étoile polaire*. Cette roche a été ainsi nommée à cause que par sa hauteur qui est de plus de cent pieds, et de sa couleur qui est d'un jaune d'or mêlé de quelques veines rouges, elle brille au loin et peut servir de visée comme l'étoile polaire. Elle a encore cela de particulier qu'elle est isolée et ne paraît tenir à aucune montagne."

A cette première catégorie d'observations on pourrait rattacher l'étude des lacs salés où vivent encore des poissons et crustacés qui n'ont pu y être déposés que par les eaux de la mer; l'exploration des forêts et des montagnes y ferait peut-être aussi découvrir d'autres espèces animales offrant de curieuses ressemblances avec les espèces disparues. Il y aurait surtout à étudier toutes ces tribus à demi sauvages qui, comme les tsiganes, errent dans presque toutes les provinces de la Chine, et les autres tribus fixées au Setchuen, au Kouy-tchéou, au Kouang-tong, au Kouan-si, au Yunan, dont j'ai parlé sous le nom de Miâo-tze et de Man-tze et que l'on regarde comme les races primitives des contrées qu'elles ha-

bitent. D'après le rapport que vient de me faire un missionnaire, Mr. l'abbé Mihières, Supérieur des missions du Kouang-si, arrivé depuis peu de ces provinces, elles paraissent avoir conservé des souvenirs d'un déluge et certaines notions qui pourraient bien n'être point différentes de celles que la lecture des Recherches du P. de Prémare nous ont fait connaître. Plus facilement que sur leurs mœurs et leurs traditions, l'on pourrait obtenir des renseignements et même des dessins propres à nous instruire sur leurs caractères physiques et en particulier sur ceux du crâne et du visage et sur leur couleur. Quelques unes de ces tribus sont blondes. Il ne serait point extraordinaire que l'on rencontrât parmi elles des individus appartenant aux races des sept couleurs dont les Chinois paraissent avoir eu de tout temps la connaissance, savoir: les races *violette, jaune, couleur de chair, tirant sur le blanc, jaune pâle, blanche* et *noire*. L'on connaît du reste le dicton populaire d'après lequel un homme blond n'est point un cas extraordinaire, s'il vient d'au delà du Hoang-ho. Aux travaux de Messieurs Bridgman et Chauveau que j'ai déjà mentionnés, j'ajouterai ici un petit travail fait par Mr. l'abbé Lyons, Provicaire apostolique de la province de Kouy-tcheou, travail que l'on ne tardera pas à voir publié.

Telles sont les premières observations auxquelles tous les Européens, voyageant dans l'intérieur de la Chine, pourraient être engagés. Elles ne demanderaient de leur part ni beaucoup de temps, ni des recherches spéciales. Un peu plus d'attention peut-être qu'ils n'en apportent généralement à ces sujets suffirait à donner à leurs renseignements une très grande valeur; et pour les obtenir d'eux, une seule chose est nécessaire, leur faire comprendre l'intérêt majeur qu'on y attache. Un trait, un fait, un détail, même infime en apparence, s'ils sont notés avec soin, peuvent devenir, en certaines circonstances, des témoignages de la plus haute gravité.

Une seconde classe de preuves seraient celles que les Européens fixés dans l'intérieur, missionnaires, marchands, ou autres pourraient recueillir dans les fouilles du sol ou des cavernes qui abondent, on peut le dire, dans presque toutes les provinces. C'est là que l'on trouverait des ossements d'animaux, peut-être des ossements d'hommes et des outils fabriqués de main d'homme; il y a quelque temps, les Japonais découvrirent dans une grotte remplie et bouchée, une quantité de crânes et de débris humains de toute sorte qu'ils firent immédiatement inhumer dans un de leurs cimetières ordi-

naires. Il existe dans le commerce de la pharmacie chinoise, certains remèdes fournis par des ossements fossiles qui ne sont pas autre chose que ceux que l'on voudrait trouver. Au Kouy-tcheou où les cavernes sont en grand nombre, c'est dans leur intérieur que les Chinois vont chercher le salpètre; c'est de là aussi qu'ils tirent ces ossements fossiles qu'ils vendent ensuite aux pharmaciens. On en a extrait souvent des ossements d'animaux d'une dimension prodigieuse; des côtes plus large que la main.

Le palais de Yuen-min-yuen renfermait, il y a dix ans, d'immenses collections de toute espèce qui contenaient entr'autres un nombre considérable de fossiles,* animaux et végétaux. C'est là sans doute que se trouvaient aussi ces pierres en forme de haches, de couteaux, de maillets, de couleur noirâtre ou verdâtre† telles que celles que les Mongols des environs du désert de Cobi, trouvaient et trouvent probablement encore dans le sol et dans les cavernes de leur pays et dont ils se servaient en guise de cuivre et d'acier.‡

Quelques débris de ces collections existent peut-être encore; en tous cas comme le gouvernement chinois avait la sage et prévoyante habitude de déposer à Gehol un double, ou au moins un dessin de chaque objet dont les collections s'enrichissaient§ il y aurait encore espoir d'y trouver de précieuses reliques. Exhumer ces richesses de l'oubli où elles sont, serait, je crois, un des plus grands services que la Société Asiatique pût rendre à la science, si elle croyait devoir user de sa légitime influence pour obtenir la communication de ces riches collections, afin d'en prendre des copies qu'elle pourrait ensuite éditer. Nul doute que les ministres étrangers ne secondent cette initiative de tout leur pouvoir.

Je rangerai dans un second ordre de témoignages, soit parce qu'ils se rapportent à des temps moins reculés, soit parce que l'étude en est plus difficile et demande quelque temps de la part de ceux qui s'y livrent, ceux des médailles, monnaies, vases, cloches et miroirs de métal dont il existe aussi dans les cabinets impériaux de magnifiques collections.

Je trouve sur ce sujet dans le Volume IX des mémoires des anciens Jésuites, page 390, une note que je cite en entier. "La persécution de Tsing-chi-hoang, les guerres civiles, les grandes

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* Mémoires concernant les Chinois, Tome II, page 368.

† Tome IV, page 424.

‡ Même volume, même page.

§ Tome II, page 368.

révolutions, les incendies, les tremblements de terre, les inondations subites, &c., ont détruit tous les monuments de la haute antiquité. On ne les connait guère que par ce qu'en ont dit les écrivains contemporains. On n'a sauvé du naufrage général que des vases de cuivre, des miroirs, des cloches, &c., que l'avidité avait fait enfouir ou que leur poids avait sauvé de ses rapines. Ce qu'on a de mieux en ce genre aujourd'hui, a été trouvé dans des tombeaux, dans des ruines de palais et dans le fond des rivières. Quoique les inscriptions qui sont dessus soient en anciens caractères, on les explique et les savants en ont fait usage pour vérifier bien des époques, et pour fixer les poids et les mesures de chaque dynastie. Plusieurs de ces monuments antiques sont restés si longtemps dans la terre, que, quoique de métal, ils ne rendent aucun son et paraissent être une poterie fort mince. Tout le cuivre a été dissout, il ne reste que quelques petites veines éparses çà et là. D'autres, qui ont été conservés dans l'eau, semblent faits de vert de gris. Les antiquaires chinois se vendraient presque pour acheter ces inutilités augustes. Le ton des mœurs et du gouvernement pousse tout peu à peu dans les cabinets de L'Empereur. Les vrais lettrés ne prisent que les monuments où ils trouvent des inscriptions qui leur donnent des lumières. On travaille depuis plusieurs années à recueillir tout ce qui mérite quelque attention en fait de grands monuments anciens, comme tours, arcs de triomphe, tombeaux, pierres sépulcrales, ponts, &c. Il me vient à l'esprit dans ce moment que la différence de grandeur et de régularité que l'on trouve entre les hiéroglyphes égyptiens des grandes pyramides et des petites, semble rendre témoignage au narré des Chinois. Le même embarras aura fait imaginer les mêmes expédients." Outre ces collections impériales, il en existe encore de particulières qui seraient aussi très intéressantes à consulter. On en trouve même entre les mains des européens. Une des plus belles collections de médailles et monnaies chinoises qui existent, dit-on, est celle dont Mr. Fontanier, Consul honoraire, chancelier de la légation de France, vient de faire hommage à son gouvernement, après avoir consacré de longues années à la réunir. On assure qu'elle renferme des échantillons remontant incontestablement à douze cents ans avant J.C. Un grand nombre d'autres débris antiques tels que vases, armes, &c., en pierre et en bronze, ont été envoyés par les anciens Jésuites à Paris et à Rome, il y a plus d'un siècle.*

* Tome I, page 296.

Dans ce même ordre de documents je placerais ensuite les monuments, ou plutôt les débris de monuments tels que les tours, portiques, pierres sépulcrales, tombeaux, dont parle la note ci dessus. Les portiques et les tombeaux surtout auraient un intérêt particulier depuis que l'on sait que les dolmens et allées couvertes de Bretagne avec lesquels les portiques et les tombeaux chinois, dont la construction est presque la même aujourd'hui, offrent tant de ressemblance; depuis, dis-je, que l'on sait que les dolmens de Bretagne, attribués naguère au druidisme, sont en réalité des tombeaux des lointaines époques, immédiatement postérieures à l'âge des cavernes. On sait du reste que ces mêmes monuments mégalithiques ont été retrouvés sur le littoral du Danube, en Afrique, en Syrie et dans l'Hindoustan.

Cependant il ne faut pas oublier que ces monuments, de même que les pierres sépulcrales et en général toutes les inscriptions lapidaires, sont ceux que l'on trouve en moins grand nombre en Chine et ceux sur lesquels on doit faire le moins de fond, les plus anciens ayant été détruits par l'incendiaire Tsing-chi-hoang-ti au troisième siècle (250 ans) avant J. C. A peine en a-t-on pu sauver quelques fragments.* Toutefois il paraît que quelques uns portent des hiéroglyphes dont la comparaison avec les hiéroglyphes égyptiens ont souvent préoccupé les anciens Jésuites. †

Je ne parlerai pas des inscriptions lapidaires qui existent en grand nombre, d'après ce que m'écrivait il y a quelques jours un voyageur français qui se trouvait à Si-ngan-fou (Chen-si), ‡ dans cette ville et à Kaï-fong-fou. Bien qu'en effet les caractères en soient tellement anciens qu'aucun savant de la localité ne peut les déchiffrer, elles ne doivent pas, pour la raison que je viens de dire, remonter plus haut que Tsing-chi-hoang-ti.

Je ne parlerai donc pas non plus du chapitre Kou-tsi, vestiges de l'antiquité, de la géographie Y-tong-tchi, publiée sous Kang-hi, lequel parle assez au long de sept villes dont il ne reste plus que les noms et quelques ruines, puis des palais, des basiliques ou salles à plusieurs rangs de colonnes, des tours, des jardins, dont il ne reste plus que des ruines. § Mais les ouvrages consa-

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* Tome I, pages 58 et 316.

† Tome I, pages 294, 301, 305 et 317, et Tome II.

‡ On n'oublie pas que le Chen-si est une des provinces qui ont été le plus anciennement habitée.

§ Tome II, page 377.

crés à la description des médailles, vases, choches, &c., ouvrages qui existent en grand nombre en Chine seraient sans doute plus intéressants. Un des plus anciens et par conséquent un de ceux qu'il serait le plus désirable de connaître porte le titre de Po-kou-tou.

Ce livre nous conduit enfin à un troisième ordre de documents qui, s'ils ne sont pas des témoignages aussi authentiques que les précédénts en ce qu'ils ne font que relater des faits nécessairement antérieurs, souvent défigurés par les récits, par la faiblesse de l'intelligence ou par l'imagination de ceux à qui on les doit, n'en fournissent pas moins des renseignements d'une haute valeur.

On a pu en juger par quelques citations que je leur ai empruntées dans le cours de ce travail. J'ai nommé les manuscrits sur planchettes, sur écorce, sur lames de métal, d'ivoire, auxquels je joindrai les livres imprimés ou manuscrits, qui, bien que d'une époque relativement ou même tout-à-fait moderne, peuvent en quelque sorte nous donner la clef des premiers.

Ainsi, si l'on voulait d'abord se faire une idée des opinions des Chinois et des données qu'ils peuvent avoir sur les sujets de nos recherches, je rappellerais, par exemple, le Tchi-pen-ti-kang dont les anciens Jésuites nous ont entretenus de façon à nous faire vivement désirer d'en avoir une traduction. L'ouvrage est en dix volumes dans lesquels, à propos de la Création, on a rapproché les enseignements des Kings et on en a présenté le système développé.

Quant aux autres ouvrages qui traitent des mêmes matières, le nombre en est réellement trop grand pour que j'aie la pensée de les énumérer, car il n'y a presqu'aucun historien chinois qui ne commence l'histoire par celle des premiers temps de la Création. Mais, pourvu qu'on ne se laisse pas influencer par les appréciations, plus ou moins fondées aux yeux de la science moderne, dont les anciens Jésuites les ont accompagnées, on pourrait lire avec fruit les dissertations analytiques très remarquables qu'ils ont faites sur les principaux de ces auteurs, et qui se trouvent publiées, notamment, dans le tome Ier des Mémoires concernant les Chinois (1).

(1) Les histoires chinoises paraissent être écrites avec un luxe de critique et de discussion comparable à celui que les Champollion et les Lepsius de nos jours déploient dans leurs recherches sur l'Égypte, Rome, &c. Mais c'est sous la dynastie des Song, pendant le grand mouvement littéraire qui eût lieu alors et qui dura trois siècles, que cet esprit critique eut le plus de puissance.

Toutefois j'ajouterai au Tchi-pen-ti-kang, comme ouvrage auquel la citation que l'on a été obligé d'en faire dans le cours de notre examen des Recherches du P. de Prémare, donne le plus de mérite et peut d'avantage inspirer le désir de le connaître, j'ajouterai, dis-je, le Che-ki de Se-ma-tsien et le Lou-che de Lo-pi qui tous deux sont à la Bibliothèque Impériale de Paris.

Le Che-ki ne se borne pas à un exposé comme le Tchi-pen-ti-kang; il commente certains faits, certaines traditions; il offrirait donc à nos investigations un intérêt de plus.

Il y aurait particulièrement à lire, dans les 130 livres dont il se compose, les trois premiers des douze livres intitulés Pen-ki ou Fondements de l'Histoire. *

Le Lou-che est un ouvrage du même genre, mais renfermant de plus une foule de détails d'une profonde érudition. †

Je ne puis pas non plus passer sous silence le Vaï-ki ou Tong-kien-vaï-ki de Lieou-tao-yuen célèbre savant que Se-ma-kouang s'était associé pour rédiger, dans son "*Tong-kien*" ou Histoire Universelle, la partie antérieure à la dynastie de Tcheou, c'est-à-dire 1,200 ans avant J. C. et qui la rédigea d'après les King.

Enfin je citerai le Tao-te-king dans lequel on verrait probablement aujourd'hui, si l'on peut en juger d'après l'opinion d'un ancien Jésuite, autre chose que des spéculations philosophiques ou métaphysiques. On sait qu'il a été composé par Lao-tsh. ‡

Cette première série des livres nous conduit à une autre composée des documents que l'on peut considérer comme originaux parce que les documents primitifs ayant à peu près tous été détruits, il n'en reste plus guère d'autres; parce que c'est sur ceux là que les écrivains chinois se sont appuyés, et qu'enfin ils ont été formés des récits recueillis avec soin, peu d'années après l'incendie, de la bouche de ceux qui avaient lu les premiers, ou recomposés par eux mêmes à l'aide de leurs souvenirs. Tels sont entr'autres Tso-kieou-ming, Hoang-sou-mi, Liu-pou-ouei, Tchin-yuen &c., cités par Lo-pi et les meilleurs auteurs. Les uns écrivaient du temps même de Tsin-chi-hoang-ti, 240 ans avant J. C., les autres peu de temps après; les plus modernes ne vont pas au delà de 190 ans après J. C.; on peut donc admettre que les souvenirs des uns et les traditions dont les autres s'inspiraient

* Tome 1er, page 89.

† Tome 1er, page 93.

‡ Recherches sur les temps antérieurs au Chou-king, page XLIX, note 4.

ont été assez fidèles, assez rapprochés des documents authentiques pour mériter quelque crédit.

Il faut d'ailleurs remarquer que Sée-ma-tsien, qui vivait lui-même sous les Han, cite aussi, avec d'autres qui ont disparu ou sont devenus fort rares, ces mêmes documents; ce qui établit en leur faveur une grande présomption, puisque vivant à une époque plus rapprochée de la catastrophe, où les souvenirs étaient plus nombreux et pouvaient lui servir à en constater l'exactitude, Sée-ma-tsien ne les dément pas.

J'en citerai quelques uns d'après le P. Gaubil: Hoai-nan-tse qu'on appelle aussi Hoai-nan-vang, parce qu'il était roi de Hoaï-nan au commencement de la dynastie des Han; c'est-à-dire vers l'an 209 avant J. C. Son palais était une académie de savants avec lesquels il creusait dans l'antiquité la plus reculée; c'est pourquoi ses ouvrages sont très curieux.

Kong-gan-koué qui, sous la même dynastie, fit une savante préface historique au Chou-king, dont il avait trouvé un exemplaire dans le creux d'un mur.

Hiu-chin de la même époque, auteur du dictionnaire intitulé Choue-ven, où il donne l'analyse et le sens propre de chaque caractère et auquel on doit une grande multitude de traditions.

Tong-tchang-chu, Tchin-huen dont le nom littéraire est Kong-tching, Tso-chi sont auteurs de divers Tchun-tsieou, ou de commentaires très estimés sur le Tchun-tsieou de Confucius. Celui de Liu-pou-oueï, qui vivait du temps même de Tsin-chi-hoang-ti, est plein d'antiquités très curieuses.

Tai-te et Hoang-fou-mi, de la même époque aussi, ont donné, le premier, un Li-ki commenté, nommé Ta-tai-li, le deuxième, l'ouvrage intitulé Ti-vang-ché-ki ou les dix périodes des dynasties des Ti-ouang.

Yang-yong, Kang-tsang-tse, Han-fei-tse, Yen-tse sont aussi auteurs de commentaires ou d'histoires de la même époque, et beaucoup d'autres dont je ne finirais point de citer les noms et les ouvrages.

Viennent ensuite une foule d'auteurs dont ils n'indiquent pas les ouvrages ou des ouvrages dont on ne connaît pas les auteurs, cités les uns et les autres par les grands historiens tels que Se-ma-tsien, Lo-pi, &c. Ainsi parmi les premiers Lie-tze, Tso-kieou-ming tous deux disciples de Confucius, Kouang-tse qui vivait avec le grand moraliste chinois, Tching-yuen-yong-tchi, Lao-tchen-tse, Yang-ching-ngan, &c., &c.

Et parmi les seconds: le Choui-king, le Tong-chin, le San-hoang-king, qui paraît être un des plus importants, le Che-pen ou dissertation sur les généalogies et dynasties incertaines, le Tan-houki que Lo-pi cite souvent, le San-fen dont on dit que le meilleur exemplaire est caché au mont Ngo-moeï, le Ming-li-fu, le Se-haï ou les 4 mers, le Tcheou-pi-souan-king qui traite aussi d'astronomie, le Kin-tsan, le Han-li-tchi, le Fong-fou-tou ou recueil de traditions, le Po-kou-tou dans lequel on trouve les dessins des anciens vases et le Kang-mo auquel je m'arrêterai avec le P. Gaubil. Une édition de ce dernier ouvrage se trouve à la Bibliothèque Impériale de Paris, mais il paraît qu'elle est incomplète et qu'il en existe, d'après le P. Gaubil, qui renferment les anciennes traditions depuis Pan-kou jusqu'à Fou-hi. Bien que la plupart de ces livres soient fort rares aujourd'hui, il ne serait point impossible de les trouver, soit dans certaines bibliothèques particulières, soit dans celle des nombreux monastères boudhistes qui existent en Chine et qui, comme ceux du Sinaï et de l'Olympe, sont les gardiens de ces trésors, soit dans ce qui reste des bibliothèques impériales de la Chine.

Je citerai ensuite, mais à part, le Chan-hai-king qui est une géographie attribuée à l'Empereur Yu, contemporain de Yao, dans lequel on trouve des descriptions de plantes et d'animaux extraordinaires, le Yu-kong qui paraît être un ouvrage de même nature aussi attribué à Yu, la catégorie des livres appelés Tchou-chou ou livres écrits sur planchettes et un Pen-tsao-kan-mou ou histoire naturelle que plusieurs auteurs font remonter jusqu'à Chen-nong et que l'on dit avoir, ainsi que les deux précédents, échappé à l'incendie de Chi-hoang-ti.

Quoique l'herbier, dit une note que je trouve dans les mémoires des anciens Jésuites, Tome VIII, page 231, "quoique l'herbier attribué à Chin-nong et le Chan-hai-king qu'on dit être du célèbre Yu, soient probablement moins anciens, cependant ils sont d'une antiquité bien supérieure à tout ce qu'on a en Europe en ce genre. Le dernier va presque de pair avec les King pour le style; ses descriptions sont d'un vrai, d'un naturel et d'un pittoresque qui enchantent. Quel dommage qu'elles ne roulent que sur des singularités et sur des monstres faits à plaisir!* Ce qu'on verrait volontiers en Europe, ce serait la suite historique des phénomènes, comètes, tremblements de terre, sécheresses, grandes pluies, cha-

* Nous savons ce qu'il faut penser de cette appréciation.

leurs extrêmes, froids excessifs, grêles, orages, animaux singuliers, monstres, pestes, maladies épidémiques, &c., qu'on trouve dans les grandes annales pour plus de deux mille ans. Au lieu de s'amuser à augmenter la botanique de quelques nouvelles descriptions de plantes, que d'observations curieuses et utiles ne pourrait-on pas faire sur les vertus que la Chine attribue à celles qui lui sont communes avec l'Europe? Le grand herbier en 260 volumes est rempli de détails et d'observations sur les terres différentes, les eaux, pierres, pétrifications, métaux, mineraux, sel, fleurs, légumes, grains, plantes, arbrisseaux, insectes, poissons, oiseaux, animaux, &c., qui mériteraient l'attention des naturalistes et surtout des Physiciens et des Médécins. Ces derniers y apprendraient peut-être à faire usage des remèdes simples et aisés que la main du Créateur a mis autour de nous; et à aider la nature d'une manière plus naturelle et moins dispendieuse."

Enfin je placerai dans une troisième série de livres les Kings qui peuvent fournir de nombreux jalons aux explorateurs, même pour des âges plus reculés que ceux qu'ils décrivent, et surtout l'Y-king, ou plutôt les commentaires que les philosophes, les savants, les hommes d'état et les empereurs de la Chine les plus illustres ont, depuis Fou-hi jusqu'à nos jours, faits sur l'explication donnée par Ouen-ouang des symboliques trigrammes. J'ai eu assez souvent l'occasion d'en parler dans le cours de ce travail pour qu'il soit inutile d'y revenir encore. On a pu se rendre suffisamment compte de l'intérêt qu'offriraient ces commentaires.

Je ne dois cependant pas oublier de prévenir que tous ne nous satisferaient pas également au point de vue auquel nous nous plaçons. Des trois Y-king originaux, c'est-à-dire des explications qu'en ont données Ouen-ouang, Chen-nong et Hoang-ti, le premier seul a été conservé, non cependant dans son intégrité primitive. Des chapitres ont été transposés, quelques uns mêmes ont été perdus. Beaucoup d'auteurs ont essayé de reconstruire cet ouvrage, et, dans le nombre quelques uns ont fait des erreurs d'interprétation qui le rendent souvent incompréhensible; d'autres, tout en le reconnaissant comme l'histoire de la Création, en ont dérivé des aphorismes moraux ou mystiques qui, détachés ensuite du texte, passent pour en être les commentaires, mais qui, quelque bien faits et judicieux qu'ils soient, ne doivent avoir pour nous que peu de valeur. Bien qu'ils soient approuvés par l'Académie Impériale des Han-lin et enseignés à la jeunesse chinoise, ils ne peuvent en effet que nous donner des résumés tronqués et trop abrégés des

matières qui nous intéressent, celles-ci n'ayant été prises que comme point de départ d'un enseignement moral plus développé. C'est aux grands commentaires que nous devons nous adresser, à ceux d'abord que les tribunaux littéraires et l'académie impériale reconnaissent et consultent; et aussi à quelques uns de ceux qu'ils rejettent parce que les interprétations qu'ils trouvent dans leurs ouvrages ne semblent pas assez justifiées ou assez plausibles, mais envers qui, eu égard à nos connaissances modernes, cette sévérité nous paraîtra trop rigoureuse. Toutefois la seule indication des noms de ces grands glossateurs formerait un trop fort volume pour que je l'entreprenne ici, et je me borne à renvoyer pour les principaux d'entr'eux aux volumes I, II et VIII des Mémoires des anciens Jésuites et à ceux que j'ai eu l'occasion de citer dans mon travail.

VIII.

Ainsi, on le voit, les questions qui nous agitent aujourd'hui ne sont pas nouvelles pour la Chine. De tout temps elles ont été sa plus grande et sa plus chère préoccupation; et, de quelque côté qu'on l'interroge elle est prête à répondre. Si les réponses que nous fournissent ses documents écrits et son histoire ont besoin d'être contrôlées, eux mêmes nous en indiquent les moyens. Nous avons ici pour nous instruire mieux que la mer, mieux que les lits des fleuves, mieux que les montagnes elles mêmes et la surface du sol; c'est, ils nous l'apprennent, aux flancs du Kouën-lün, sur les montagnes et dans les gorges et les vallées du Se-tchuen, du Kan-sou, du Chen-si qu'il faut chercher. Là sont les trésors qu'il nous faut découvrir, les témoins qu'il nous faut faire parler et qui, muets ou inintelligibles pour les Chinois d'aujourd'hui, seront pour nous éloquents.

On parle sans cesse d'ouvrir la Chine; on en parle surtout maintenant et nul moyen ne semble trop fort pour arriver à ce but.

Plût au ciel cependant qu'on en eût moins parlé et que, pour la première fois aujourd'hui, on lui demandât, au nom de la science et de l'intérêt commun de l'humanité, d'ouvrir ses portes qu'il y a des siècles elle avait un instant ouvertes, et que nos imprudences de toutes sortes, pour ne pas dire plus, lui ont fait refermer.

Plût au ciel que nous ne lui eussions jamais inspiré les défiances dont nous subissons maintenant les justes conséquences et ses clefs, que ses savants et ses hommes d'État eussent prêtées à nos

savants et à nos hommes d'État, j'en atteste les souvenirs des Marco Polo, des Ricci, des Verbiest, des Schaal et de bien d'autres, et ses clefs, dis-je, seraient depuis long-temps aux mains de nos commerçants et de nos industriels qui, plus instruits des réelles possibilités, des vrais besoins moraux et matériels de la Chine, plus prudents et plus sages par conséquent, eussent obtenu des résultats bien autrement importants que ceux ausquels ils sont arrivés.

Cinq ou six cents millions d'importations (et de quelles importations,) est-ce donc là un chiffre si beau quand on songe que le peuple chez qui elles se font est à lui seul la moitié de la population du globe! Est-ce donc là un chiffre si satisfaisant après plus de deux cents ans de relations et cinquante ans d'efforts, je pourrais dire de lutte et de guerre?

On nous l'avait bien dit cependant: "Cherchez premièrement la justice et la vérité, &c., le reste vous sera donné par surcroît;" et pour l'avoir oublié, tout, à peu près, est à recommencer.

Laissons donc, puisque nous avons eu si peu de succès, laissons donc la parole à la science; et, satisfaits pour le moment du peu que nous avons obtenu, attendons avec patience les effets immanquables de la confiance qu'elle rétablira. Quand ses pionniers parcoureront, en paix et honorés, toutes les provinces où les poussera la recherche de la verité, notre commerce et notre industrie ne seront pas loin de les suivre.

Est-ce donc autrement d'ailleurs que les relations d'amitié et de commerce s'établissent et se maintiennent même entre nous, dans notre Europe? Qui efface les distances, qui abolit les séparations, qui calme les passions religieuses et politiques, qui a délivré le commerce lui même des entraves où il gémissait, il y a cinquante ans encore, chez toutes les nations de l'Europe?

Mais la science ne procède point avec précipitation, surtout ici, où on lui a donné tant à refaire; elle ne procède point non plus par le mépris envers ceux qu'elle veut connaître.

Débarrassons nous de ces préjugés qui nous font regarder les Chinois comme livrés aux préoccupations les plus matérielles, incapables des nobles inspirations de la science. Rien n'est plus faux qu'un tel sentiment et rien en outre n'est plus stérile. S'ils n'attachent pas à toutes les sciences le même intérêt que nous, c'est peut-être que nous ne savons pas les leur présenter sous le jour le moins douteux; en tous cas il en est une, celle que nous avons nommée la science par excellence, qui peut, maintenant que les progrès nous y ont amenés de notre côté, servir de trait

d'union entre eux et nous. Au nom de l'histoire de l'homme, de l'histoire de l'humanité, de l'histoire de la Chine elle même, offrons aux Chinois de mettre en commun ce qu'ils savent et ce que nous savons; et ceux que le pur intérêt scientifique ne déciderait pas, viendront à nous par orgueil national, car nulle science n'est peut-être aussi propre que la géologie et la paléontologie à les satisfaire.

Mais il faut d'abord pour cela notre concours à tous; que les uns déposent entre les mains de la Société Asiatique pendant quelques années, trois ou quatre seulement peut-être, la patience qui engendre le calme nécessaire; les autres, leur zèle ou leur science de la langue chinoise.

Alors, dirigés par la Société Asiatique, ceux-là recueilleront avec soin les documents de toute nature qu'ils pourront rencontrer, ceux-ci traduiront du chinois en langues européennes et de celles-ci en chinois les ouvrages les plus propres à intéresser les deux peuples, à leur faire comprendre ce qu'ils veulent et ce qu'ils attendent l'un de l'autre dans l'ordre d'idées que je viens d'exposer; et peu à peu s'établira entr'eux un courant de confiance et de sympathie sur lequel on pourra enfin fonder les plus immenses et les plus durables relations.

Quant aux moyens matériels ils ne feraient pas défaut à une œuvre aussi générale et important à un aussi haut degré et à tant de points de vue le bien public. Je ne m'en préoccupe donc pas.

Les négociants, puisque ce sont eux qui sont le plus immédiatement intéressés, les chambres de commerce, toutes les sociétés savantes de l'Europe répondraient pour moi et fourniraient les prix dont la Société aurait à récompenser les traductions des ouvrages qu'elle désignerait et les recherches qui rempliraient son but.

ARTICLE VIII.

ITINERARY OF A JOURNEY THROUGH THE PROVINCES OF HOO-PIH, SZE-CHUEN AND SHEN-SE.

By A. WYLIE.

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
沌口 Keuen-kow *v* *Stream*		Keuen-kow		30
小軍山 Seaou-keun-shan *h*		Golden Hill		
大軍山 Ta-keun-shan *h*		Gt. Golden Hill		25
	金口 Kin-kow *t* *Stream*	King-kow		5
	下沙湖 Hea-sha-hoo *v*			
紗帽山 Sha-macu-shan *h*				15
	上沙湖 Shang-sha-hoo *v*			
梅灘洲 Mei-tan-chow *b*		Mei-tan-chui		
大嘴 Ta-tsuy *v*				
東江腦 Tung-keang-naou *v*				25
鄧家口 Tăng-kea-kow *v*				20
	牛角尖 Neu-keo-tseen			
新灘口 Sin-tan-kow *v* *Stream*				15
	綵洲 Pae-chow *t*	Pai-chow		10
	老觀嘴 Laou-kwan-tsuy *v*			
小林灣 Seaou-lin-wan *v*		How-chin kwang		50

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *li*.
北河 *Pih-ho*				
小洲頭 Seaou-chow-t'ow *v*				
	嘉魚縣 Kea-yu *heen*	Kia-yu		30
壠口 Lung-kow *v*				
	六溪口 Luh-ke-kow *v*	Lo-gi-kow		50
	Stream			
	石頭口 Shih-t'ow-kow *v*	Shih-ta-kow		25
	Stream			
茅埠 Maou-poo *v*				30
新提 Sin-te *t*		Sing-ti		15
螺山 Lo-shan *v*				50
Stream				
楊陵磯 Yang-ling-ke *v*				25
白螺司 Pih-lo-sze *v*				15
丁家洲 Ting-kea-chow *ha*				
	臨湘縣 Lin-seang *heen*	Ling-heang *hien*		
	Stream			
荊河口 King-ho-kow *v*		Kin-ho-kow	123	30
	Stream			
觀音洲 Kwan-yin-chow *v*				
		Huc Reach		
Sze-pa-kow		Sze-pa-kow	17	
	瓦子灣 Wa-tsze-wan *b*			90
下車灣 Hea-chay-wan *t*		Hia-chay-wan	23	30
上車灣 Shang-chay-wan *t*		Shang-chay-wan	4	

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
		Chay-wan tongue		
		Brine Bend		
	華容山 Hwa-yung-shan *h*	Nan-tsuin hills		
窰圻腦 Yaou-ke-naou *v*				
	團子山 Twan-tsze-shan *h*	Ming hill		
		Boulder shoal		
	鹿角山 Luh-keo-shan *h*	Ass's ears		
	塔市驛 Ta-she-yih *v*			60
新河口 Sin-ho-kow *v*		Point Adams		
劉家溝 Lew-kea-kow *v*		Farmer Point		
	桃花山 Taou-hwa-shan *h*			
	調絃口 Teaou-heen-kow *v*	Tiau-hien	38	50
	Stream			
	東山 Tung-shan *h*	Tiau-hien range		
		Atalante Bend		
	流發洲 Lew-fa-chow *v*			
候家腦 How-kea-naou *v*				
	石首縣 Shih-show *heen*	Shi-show and Skipper Point	38	40
楊發腦 Yang-fa-naou *v*				
黃家大路 Hwang-kea-ta-loo *v*				
		Sunday Island		
新塲 Sin-chang *t*				
鄔穴 Ho-heue *t*		Ho-hia	23	

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
	突起洲 T'uh-k'e-chow *i*	Storm Island		
觀音寺 Kwan-yin-she *v*		Quan-yin-shih	18	
窯灣 Yaou-wan *v*				
沙市 Sha-she *t*		Sha-sze	9	120
二磯頭灣 Urh-ke-tow-wan *v*				
沮河 *Tseu-ho*				
	太平溝 Tae-ping-kow	Taiping Canal		
		Kin-chow Reach		
	Stream			
	淵市 Yuen-she *v*	Village Sandford Reach		
石套子 Shih-taou-tsze *v*		Small hamlet		
江口 Keang-kow *t*		Kiang-kow	20	
沮河 *Tseu-ho*				
瑪瑙河 *Ma-naou-ho*	百里洲 Pih-le-chow *i*			
董市 Tung-she *t*		Tung-tsze	7	
	垻洲 Pa-chow *i*	Spring Island Hope Island		
		Grand Point	8	
	洋溪 Yang-ke *v*	Yang-chi	1	
枝江渡 Che-keang-too *ha*	枝江縣 Che-keang *heen*	Chi-kiang *hien*	4	
白洋 Pih-yang *t*		Pah-yang	8	210
		Mountains of the seven gates		
	宜都塔 E-too-ta	Bush Pagoda		
	宜都縣 E-too *heen*	I-tu *hien*	3	
	清江 *Tsing-keang*	Chin Kiang		
		Mount Bridgman		
	紅花套 Hung-hwa-taou *v*	Village		

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
虎膊背 Hoo-naou-pei *t*				
	十二背 Shih-urh-pei *b*	Swain Island		
	觀音菴 Kwan-yin-gan			
臨江 *Lin-keang*				
天然塔 Teen-jen-ta		Tien-chow Pagoda	17	
	豚氣山 Mih-ke-shan *h*			
宜昌府 E-chang *foo*		I-chang	2	
	桃花舖水 *Taou-hwa-poo-shwuy*			
		Mussulman Point		
梁村河 *Leang-tsun-ho*				
南津關 Nan-tsin-kwan *v*				
刑官峽 Hing-kwan *hea*		I-chang Gorge	4	
	下平善垻 Hea-ping-shen-pa *ha*			
	上平善垻 Shang-ping-shen-pa *v*			
南沱 Nan-to *v*				
上紅溪 *Shang-hung-ke*				
無義灘 Woo-e *tan*		1st Rapid	12	
	黃陵舖 Hwang-ling-poo *v*			170
羅鈿河 *Lo-teen-ho*				
虎頭灘 Hoo-t'ow *tan*				
鹿角灘 Luh-keo *tan*				
	三斗坪 San-tow-ping *v*	Shan-tow-pien	4	
史君灘 She-keun *tan*				

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *li*.
	白洞子 Pih-tung-tsze *b*	Rapids		
	達洞 Tă-tung	Kwa-dung		
太平溪 Tae-ping-ke *v*				
白水溪 *Pih-shwuy-ke*				
	衢溪 *Keu-ke*			
黑崖子 Hih-yae-tsze *v*				60
杉木溪 *San-muh-ke*				
老官廟 Laou-kwan-meaou *v*				
牛肝馬肺峽 Neu-kan-ma-fei *hea*		Lu-kan Gorge	8	
花橋水 *Hwa-keaou-shwuy*				
	新灘 Sin tan *v*	Tsing-tan	5	
兵書寶劍峽 Ping-shoo-paou-keen *hea*		Mi-tan Gorge		
米倉口 Me-tsang-kow *v*				
香溪 *Heang ke*				
米灘 Me *tan*				
	茅坪溪 *Maou-ping-ke*			
	老歸州 Laou kwei-chow *v*			
	Stream			
歸州 Kwei-*chow*		Kwei-chow	6	90
洩灘 See *tan*				
叱溪 *Chih-ke*		Yeh-tan Rapid		
洩灘 See tan *v*				
	沙鎮溪 *Sha-chin-ke*			
巴斗灘 Pa-tow *tan*				
Stream				
牛口 Neu-kow *v*		Niu-kow tan	7	
	Stream			

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese &c.
	巴東縣 Pa-tung *heen*	Pa-tung	4	80
	青竹標 Tsing-chŭh-peaou *b*			
東嚷口 Tung-Seang-kow *v*				
舊縣 Kew heen *b*				
	望夫渡 Wang-foo-too *v*			
西嚷口 Se-seang-kow *v*				
元渡河 *Yuen-too-ho*				
雄灘 Heung *tan*				
Stream				
毋楮灘 Moo-choo *tan*				
Stream				
關渡口 Kwan-too kow *v*		Kwan-du-kow	6	
百里峽 Pĭh-le *hea*		Wu-shan Gorge		
火焰石灘 Ho-yen-shih *tan*				
	南木園 Nan-muh-yuen	Nan-mo-yuen	4	
馬尾灘 Ma-she *tan*				
富里溪 Foo-le-ke *v*				
	Stream			
金匾擔 Kin-peen-tan *b*				
新崩灘 Sin-păng *tan*				
鐵棺材山 Teĭh-kwan-tsae-shan *b*		Northern Boundary		90
邊魚溪 *Peen-yu-ke*		Southern Boundary		
	板橋溪 *Pan-keaou-ke*			
	培石 Pei-shĭh *v*	Pei-shih	7	
	白古水 *Pĭh-koo-shwuy*			
	神女廟 Shin neu-meaou			

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
香爐灘 Heang-loo *tan*				
巫山十二峰 Woo-shan-shih-urh-fung *h*				
	沙木嚷 Shah-muh-seang *ha*			
	觀渡河 *Kwan-too-ho*			
宮家坊 Kung-kea-fang *b*	眺石 T'caou-shih *v*			
空亡沱 Kung-wang-to *b*				
大寧河 *Ta-ning-ho*				
巫山縣 Woo-shan *heen*		Wu-shan *hien*	13	60
鏡架灘 Kin-kea *tan*				
烏磧 Woo-tseih *b*				
下馬灘 Hea-ma *tan*				
錯開峽 Tso-keae *hea*				
	大溪口 Ta-ke-kow *v*	Tai-chi	12	
	大溪河 *Ta-ke-ho*			
風箱峽 Fung-seang *hea*		Fung-siang Gorge		
	孟良梯 Măng-leang-te *b*			
	粉壁堂 Fun-peih-tang *b*			
懨澦堆 Yen-yu-tuy		An isolated rock		
白帝城 Pih-te-ching				
八陣圖 Pa-chin-t'oo *v*		Quai-chow Bluff		
大瀼河 *Ta-jang-ho*				
夔州府 Kwei-chow *foo*		Quai-chow *Foo*	6	80
馬湖灘 Ma-hoo *tan*				

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
頭塘溪 *Tow-tang-ke*				
	關武鎮 Kwan-woo-chin *ha*			
司畐沱 Sze-yen-to *ha*				
	五龍溪 *Woo-lung-ke*			
	老馬溪 *Laou-ma-ke*			
老馬灘 Laou-ma *tan*		Low-ma Rapid		
	安坪 Gan-ping *v*	An-ping	8	60
青崖磧 Tsing-yae-tseĭh *b*		Nine Pins		
	黃石嘴 Hwang-shĭh-tsuy *ha*			
	古林渡 Koo-lin-too *v*	Ku-lin-tu	5	
廟基灘 Meaou-ke *tan*		Miou-ki Rapid		
下巴子 Hea-pa-tsze *ha*				
東陽 Tung-yang *v*		Tung-yan		
東陽灘 Tung-yang *tan*		Tung-yan Rapid	3	
東瀼河 *Tung-jang-ho*				
	新軍河 *Sin-keun-ho*			
雲陽縣 Yun-yang *heen*		Yung-yan *hien*	6	60
	盤沱 Pwan-to *v*	A pretty village		
下巖 Hea-yen *ha*		Excavations		
小江口 Seaou-keang-kow *t*				
小江 *Seaou-keang*		Siau Kiang	12	60
下巴峽 Hea-pa *hea*				
	錫臘洞 Seĭh-lah-t'ung *b*			

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
大周溪 Ta-chow-ke *v*				
五土地 Woo-too-te *ha*				
長石尾 Chang-shĭh-wei *ha*				
道人灘 Taou-jin *tan*				
萬縣 Wan *heen*		Wan *hien*	17	60
西河 *Se ho*				
千金島 Tseen-kin *taou*				
	渡口溪 *Too-kow-ke*			
小湖灘 Seaou-hoo *tan*				
	白水溪 Pĭh-shwuy-ke *v* *Stream*			
大湖灘 Ta-hoo *tan*		Hu Rapid		
楊河溪 *Yang-ho-ke*				
壤河溪 *Jang-ho-ke*				
	大溪口 Ta-ke-kow *v*	Ta-chi-kow	16	
仰渡驛 Yang-too-yih *v*		Shan-tu		60
麻榴沱 Ma-lew-to *v*				
武陵 Woo-ling *t*		Hu-lin	7	
合溪 *Hŏ-ke*				
	西界沱 Se-keae-to *t*	Si-kiai-tow	6	
石寶砦 Shĭh-paou-chae *v*		Shi-pow-chai	2	60
塗井河 *Too-tsing-ho*				
關溪 Kwan-ke *v*		Shang-quan-chi	9	
	黃華城 Hwang hwa-ching *b*	Soldier Island		
	沿溪 Yuen-ke *t* *Stream*			
倒鬚灘 Taou-seu *tan*		Tow-to-hiu Rapid		
淹溪 *Yen-ke*				
	鐘溪 *Chung-ke*			

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese le.
	神溪 *Shin-ke*			
忠州 Chung *chow*		Chung *chow*	13	90
鳴玉溪 *Ming-yuh-ke*				
臭水溪 *Ch'ow-shwuy-ke*				
	烏洋 Woo-yang *v*	Wu-yang	5	
塘土埧 T'ang-too *pa*		Mandarin Island	3	
	白馬子 Pih-ma-tsze *ha*			
新塲 Sin-ch ang *v*		Sin-chan		
	三條嶺 San-teaou-ling *ha*			
	羊渡溪 Yang-too-ke *t*	Yang-tu-chi	8	
	復興鎮 Fuh-hing chin *v*			70
灘子沱 Tan-tsze-to				
石灘 Shih *tan*		Lan-chu Rapid		
鸞珠埧 Lwan-choo *pa*		Binquei Island		
挫溪 *Tso-ke*				
丁溪 *Ting-ke*				
	高家鎮 Kaou-kea-chin *t*	Pa-ka liang	11	
赤溪 *Chih-ke*				
龍停溪 *Lung-ting-ke*				
	葫蘆溪 *Hoo-loo-ke*	Kow-kia-wan River		
酆都縣 Fung-too *heen*		Fung-tu *hien*	12	60
大佛灘 Ta-fuh *tan*				
觀音灘 Kwan-yin *tan*				
	白水溪 *Pih-shwuy-ke*			
竈門子 Tsaou-mun-tsze		Sou-mun-tsze	9	
薤石鎮 Le-shih-chin *v*				
馬灘河 *Ma-tan-ho*				

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le.*
	馬頸子Ma-king-tsze *v*			
	羅雲溪 *Lo-yun-ke*			
百背 Pih-pei *v*	南沱 Nan-to *v*	Lan-tu	6	
渠溪河 *K'eu-ke-ho*				
深溪 Shin-ke *t*		Sun-chi	5	
坪須坝 Ping-seu *pa*		St. George's Island		
	清集塲 Tsing-tseih-chang *v*	Siu-show	9	60
	黔江 *Keen-keang*	Kung-tan Ho		
	涪州 Foo *chow*	Fu *chow*	6	70
梨河 *Le-ho*				
	李渡 Le-too *v*	Li-tu	6	
沙州 Sha *chow*		Writer Island		
	甯市 Ning-she *v*	Lin-shih Hwang-pin-ma Rapid	9	60
	石家沱 Shih-kea-to *v*	Shi-kia-tu	4	
龍溪河 *Lung-ke-ho*				
桃花溪 *Taou-hwa-ke*				
長壽縣 Chang-show *heen*		Chang-show *hien*	9	70
	扇背沱 Shen-pei-to *v*	Pei-tu	5	
洛磧塲 Lo-tseih-chang *t*		Lo-shih	7	
上坝 Shang *pa*		Fuzzeler Island		
太洪江 *Tae-hung-keang*				
太洪崗 Tae-hung-kang *v*				
	忠江寺 Chung-keang-she *ha*			
	木洞鎮 Muh-tung-chin *t*	Hu-tung	11	60
當山峽 Tang-shan *hea*		Gorge		

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
魚藉沱 Yu-tseay-to *v*				
	石板灘 Shĭh-pan *tan*			50
	銅鑼峽 Tung-lo *hea*	Iron Gorge		
Stream				
唐家沱 Tang-kea-to *v*				
理明府 Le-ming *foo*		Li-min *Foo*		
合州河 *Hŏ-chow-ho*		Ho-tow River		
重慶府 Chung-king *foo*		Chung-king *Foo*	21	50
	文峰塔 Wan-fung *ta*	Pinnacle Pagoda		
	明月峽 Ming-yuĕ *hea*			
佛圖關 Fuh-too-kwan *t*				
九龍灘 Kew-lung tan *v*				
	青岩子 Tsing-yae-tsze *b*			
	毛溪河 *Maou-ke-ho*			
大渡口 Ta-too-kow *v*				
	魚洞鎮 Yu-tung-chin *v*			
	魚洞溪 *Yu-tung-ke*			
大中坦 Ta-chung *pa*		Mahomet Island		60
龜亭子 Kwei-ting-tsze *h*		Kin-tin tsze		
龜亭溪 *Kwei-ting ke*				
	甘蔗溪 *Kan-chay-ke*			
白沙沱 Pih-sha-to *v*	洛黃石 Lo-hwang-shĭh *v*	Lo-whan-chi	27	
金溪 *Kin-ke*				

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
金劍山 Kin-keen shan *h*				
猫兒峽 Maou-urh *hea*		Limestone Pass		
銅灌驛 Tung-kwan-yih *v*		Tung-quan-yeh		
	江口 Keang-kow *v*			
	綦江河 *Ke-keang-ho*	Chi-kiang		
甕壩沱 Ung-pa-to *ha*				
李家河 Le-kea-ho *ha*				
	江津縣 Keang-tsin *heen*	Kiang-tsze *hien*	14	60
中渡 Chung-too *v*				
	魚子沱 Yu-tsze-to *v*			
	龍門灘 Lung-mun tan *v*	Lung-mun	10	
	樂城溪 *Yo-ching-ke*			
洪猪峽 Hung-choo *hea*				
油溪 *Yew-ke*				
油溪塲 Yew-ke-chang *t*		Yo-chi	4	70
金光背 Kin-kwang-pei *b*				
五洞溪 *Woo-tung-ke*				
土墳溪 Too-tun-ke *ha*				
流水崖 Lew-shwuy-yae *ha*				
灘磐 Tan-pwan *ha*	中白沙 Chung-pih-sha *t*	Chung-pa sha	8	
仁和垻 Jin-ho *pa*				
石門塲 Shih-mun-chang *t*		Shi-mun	5	60

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le.*
	對溪 *Tuy-ke*			
	二溪 Urh-ke *v*	Ur-chi	7	
洙溶溪 *Choo-yung-ke*				
棠簷溪 Choo-yang-ke *v*				
松溉鎮 Sun-keae-chin *t*		Sung-chi	3	
	中坦 Chung *pa*	Zuman-sha Island		
	官溪 Kwan-ke *v*			
朱家沱 Choo-kea-to *t*		Chu-kia-tu	2	60
大鹿溪 *Ta-luh-ke*				
	三喜山 San-he-shan *ha*			
	板塲坦 Pan-chang *pa*	Havildar Island		
	羊石磐 Yang-shih-pwan	Yang-shi-pan	6	
順江塲 Shun-keang-chang *v*				
	坪坦河 *Ping-tan-ho*			
	王家塲 Wang-kea-chang *t*			60
董攻渡 Tung-fun-too *ha*				
	高洞河 *Kaou-tung-ho*			
	赤水河 *Chih-shwuy-ho*	Chi-shui		
	合江縣 Hŏ-keang *heen*	Ho-kiang *hien*	11	
上白沙 Shang-pih-sha *t*		Tow-pung-shih	7	
	大橋溪 *Ta-keaou-ke*			
	大橋 Ta-keaou *v*	Mi-tu-nieu		60
	大河溪 *Ta-ho-ke*			

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le.*
中坝 Chung *pa*		Schereschewsky Island		60
小陶朱Seaou-taou-choo *ha*				
	Mei-too-chang *t*	Liang-tiow-nieu	6	60
新路口 Sin-loo-kow *v*		Sin-tu-kow Rapid		
新機子 Sin-ke-tsze *ha*		Bill Island		
手爬崖 Show-pa-yae *ha*				
	泰淦塲 Tae-gan-chang *ha*			60
龍溪 *Lung-ke*				
沱江 *To-keang*		Fu-sung River		
瀘州 Loo-*chow*		Lu *chow*	21	60
	篮田三坝 Lan-teen-san-pa *t*	Lan-tien-pa	2	
石砌關 Shĭh-păng-kwan *t*				
	Stream			
	納溪縣 Na-ke *heen*	Na-chi *hien*	11	70
	納溪 *Na-ke*	Yun-lin River		
小溪 *Seaou-ke*				
野猪崖 Yay-choo-yae *v*				
大角石 Ta-keo-shĭh *v*				
觀音塲 Kwan-yin-chang *v*				
	大渡口 Ta-too-kow *t*	Ta-du-kow		60
	清溪 *Tsing-ke*			
下溪 *Hea-ke*		Gingall Point		
上溪 *Shang-ke*				
井口 Tsing-kow *v*				
	二龍口 Urh-lung-kow *v*			

Left bank of the Keang.	Right bank of the Keang.	Blakiston.	Statute Miles.	Chinese *le*.
白沙渡 Pih-sha-too *ha*				
	怡樂溪 *E-lo-ke*			
	江安縣 Keang-gan *heen*	Kiang-an *hien*	23	60
	安寧河 *Gan-ning-ho*	An-lui-kow River		
		Sarel Island		
大石盤 Ta-shih-pwan *b*				
		Barton Island		
南溪縣 Nan-ke *heen*		Nan-ki *hien*	13	60
桂溪 *Kwei-ke*				
	里庄塲 Le-chwang-chang *t*	Li-chuang-pa	13	60
仙人塲 Seen-jin-chang *ha*				
福溪 *Fuh-ke*				
掛弓山 Kwa-kung-shan *v*		Pa-ko-shan	5	
	來復渡水 *Lae-fuh-too-shwuy*	Hunan River		
	南廣洞 Nan-kwang-tung *v*	Tang-wan	3	
敘州府 Seu-chow *foo*		Su-chow *foo*	3	60
			923	3525

RIVER MIN.

Left bank of the Min.	Right bank of the Min.	Chinese *le*.
弔黃樓 Teaou-hwang-low *v*		
銅鑼灣 Tung-lo-wan *b*	菜垻 Tsae-pa *ha*	
蘇波溪 Soo-po-ke *v*		

Left bank of the Min.	Right bank of the Min.	Chinese *le.*
	牛尿圳 Neu-she-peen *t*	
牛口 Neu-kow *ha*		60
千佛崖 Tseen-fuh-yae *ha*		
江脚磧 Keang-keo-tseĭh *v*		
黃沙溪 Hwang-sha-ke *v*		
石鴨灘 Shĭh-ya *tan*		
鄧頭溪 *Tăng-tow-ke*		
	眞溪口 Chin-ke-kow *v*	60
	眞溪河 *Chin-ke-ho*	
高崖 Kaou-yae *b*		
	黃天埧 Hwang-teen *pa*	
蠻洞溪 *Nan-tung-ke*		
觀音溪 *Kwan-yin-ke*		
觀音峽 Kwan-yin *hea*		
永樂埧 Yung-lo-pa *b*		
	腳溪 Keo-ke *v*	
	龍溪 *Lung-ke*	
杆栢塲 Kan-pĭh-chang *v*		
太公埧 Tae-kung *pa*		
泥溪 Ne-ke *v*		70
月波塲 Yue-po-chang *t*		
蘇柳塲 Ma-lew-chang *t*		
	大沐溪 *Ta-muh-ke*	
么姑塲 Yaou-koo-chang *t*		60
	紫雲山 Tsze-yun-shan *h*	
孝女嵓 Heaou-neu-yen *b*		
	青水溪 *Tsing-shwuy-ke*	
	河口 Ho-kow *v*	
Watercourse		
	犍爲縣 Keen-wei *heen*	60
	蠻洞 Man-tung	
兆溪耗灘 Chaou-ke-haou *tan*		
兆溪耗 *Chaou-ke-haou*		
	煤炭口 Mei-tan-kow *v*	
石家埧 Shĭh-kea-pa *ha*		
	大碼頭 Ta-ma-tow *v*	
	羅葉溪 *Lo-ye-ke*	
	石板 Shĭh-pan *t*	

Left bank of the Min.	Right bank of the Min.	Chinese *le.*
杏埧 Hang-pa *b*		
麼子塲 Mo-tsze-chang *t*		
道士冠 Taou-sze-kwan *ha*		
	西埧塲 Se-pa-chang *t*	
	Small watercourse	70
竹根灘 Chŭh-kan-tan *t*		
四望溪 *Sze-wang-ke*		
牛華溪 New-hwa-ke *t*		
沙板灘 Sha-pan tan *v*		
青衣埧 Tsing-e-pa *v*		
榮合竈 Yung-hŏ-tsaou *ha*		
馬鞍山 Ma-gan-shan *h*		
	陽江 *Yang-keang*	
烏尤山 Woo-yew-shan *h*		
大佛寺 Ta-fuh-she *h*		
	嘉定府 Kea-ting *foo*	60
	竹公溪 *Chuh-kung-ke*	
尼溪 *Ne-ke*		
	Hwan-leang-tsuy *v*	
老觀音廟 Laou-kwan-yin-meaou *v*		30
Pan-seaou-ke *v*		10
	金牛河 *Kin-neu-ho*	
漢陽塲 Han-yang-chang *t*		40
	新磨河 *Sin-mo-ho*	
	瑞峰塲 Suy-fung-chang *v*	100
Watercourse		
象鼻子 Seang-pe-tsze *b*		
	青神縣 Tsing-shin *heen*	
魚蛇水 *Yu-shay-shwuy*		
太平塲 Tae-ping-chang *v*		
	張家坎 Chang-kea-kan *t*	
黃家塲Hwang-kea-chang *t*		
	醴泉江 *Le-tseuen-keang*	
	黃中埧 Hwang-chung-pa *ha*	50
	眉州 Mei *chow*	10
	九眼橋 Kew-yen-keaou *ha*	

Left bank of the Min.	Right bank of the Min.	Chinese *le.*
	彭山縣 Pang-shan *heen*	50
	二郎灘 Urh-lang *tan*	
	Watercourse	
江口 Keang-kow *t*		10
順河塲 Shun-ho-chang *t*		20
	黃龍溪 Hwang-lung-ke *t*	
黃龍溪 *Hwang-lung-ke*		
	古佛洞 Koo-fuh-tung *v*	
	白馬灘塲 Pih-ma-tan-chang *v*	
	傅家垻 Foo-kea-pa *t*	
蘇碼頭 Soo-ma-tow *t*		
洞子塲 Tung-tsze-chang *ha*		
	二江寺橋 Urh-keang-she *keaou*	
	新開河 *Sin-keae-ho*	
中興塲 Chung-hing-chang *t*		
	走馬河 *Tsow-ma-ho*	
	三瓦窰 San-wa-yaou *v*	160
	Stream	
	成都府 Ching-too *foo*	20
		940

司馬橋 Sze-ma-keaou *v*
由子河 *Yew-tsze-ho*
歡喜菴 Hwan-he-gan *v*
天迴鎮 Teen-hwuy-chin *t*
沱江 *To keang*
毗橋河 *Pe-keaou-ho*
錦水河 *Kin-shwuy-ho*
瓦店子 Wa-teen-tsze *ha*
新都縣 Sin-too *heen* 40
督橋河 *Tuh-keaou-ho*
唐家市 Tang-kea-she *t*
滿水 *Tseen-shwuy*
向陽塲 Heang-yang-chang *t*

	Chinese *le.*
清白江 *Tsing-pĭh-keang*	
張華鎭 Chang-hwa-chin *t*	
通道橋 Tung-taou-keaou *v*	
馬水河 *Ma-shwuy-ho*	
西成橋 Se-ching-keaou *t*	
石堤橋 Shĭh-te-keaou *v*	
漢州 Han *chow*	60
鴨子河 *Ya-tsze-ho*	
鳳凰寺 Fung-hwang-she *ha*	12
小漢鎭 Seaou-han-chin *t*	8
平橋河 *Ping-keaou-ho*	
白魚河 *Pĭh-yu-ho*	
石亭江 *Shĭh-ting-keang*	
大漢鎭 Ta-han-chin *v*	
荷照橋 Ho-chaou-keaou *v*	
竹林舖 Chuh-lin-poo *ha*	20
德陽縣 Tĭh-yang *heen*	10
牛耳舖 Neu-urh-poo *v*	10
簡家林 Keen-kea-lin *v*	2
仙人橋 Seen-jin-keaou *v*	3
孟家店 Măng-kea-teen *v*	4
黃許鎭 Hwang-heu-chin *t*	4
綿陽河 *Meen-yang-ho*	
林坎鎭 Lin-kan-chin *v*	
青剛嘴 Tsing-kang-tsuy *ha*	17
白馬關 Pĭh-ma-kwan *ha*	10
羅江縣 Lo-keang *heen*	
冷水河 *Lang-shwuy-ho*	
黑水河 *Hĭh-shwuy-ho*	
二井舖 Urh-tsing-poo *v*	
大井舖 Ta-tsing-poo *v*	15
金山舖 Kin-shan-poo *t*	15
雞鳴磽 Ke-ming-keaou *v*	10
新舖 Sin-poo *v*	10
皂角舖 Tsaou-keŏ-poo *t*	10
石磽舖 Shĭh-keaou-poo *v*	15
茶坪河 *Cha-ping-ho*	
涪江 *Pei-keang*	

	Chinese *le.*
綿州 Meen *chow*	15
涪江 *Pei-keang*	
東河 *Tung-ho*	
鮮魚碕 Seen-yu-keaou *v*	8
濫泥舖 Lan-ne-poo *v*	7
杭香舖 Hang-heang-poo *v*	10
蔡家碕 Tsae-kea-keaou *ha*	10
沈香舖 Yew-heang-poo *t*	10
銅瓦舖 Tung-wa-poo *v*	10
魏城 Wei-ching *t*	10
魏城水 *Wei-ching-shwuy*	
七里垻 Tseĭh-le-pa *ha*	7
萱花舖 Seuen-hwa-poo *t*	10
石牛舖水 *Shĭh-neu-poo-shwuy*	
羅漢碕 Lo-han-keaou *ha*	13
石牛舖 Shĭh-neu-poo *t*	5
板橋舖 Pan-keaou-poo *v*	10
火燒碕 Ho-shaou-keaou *ha*	14
梓潼河 *Tsze-t'ung-ho*	
梓潼縣 Tsze-t'ung *heen*	6
水觀音 Shwuy-kwan-yin *ha*	10
吉香舖 Keĭh-heang-poo *v*	10
上亭舖 Shang-ting-poo *v*	20
酒店垭 Tsew-teen-ya *v*	10
演武舖 Yin-woo-poo *v*	10
瓦子垭 Wa-tsze-ya *v*	10
武連河 *Woo-leen-ho*	
武連驛 Woo-leen-yĭh *t*	10
大灣里 Ta-wan-le *ha*	15
垂泉舖 Chuy-tseuen-poo *v*	5
柳池溝 Lew-ch'e-kow *t*	20
柳溝 *Lew-kow*	
講書臺 Keang-shoo-tae *ha*	10
梁山舖 Leang-shan-poo *v*	10
青林舖 Tsing-lin-poo *ha*	10
周垭子 Chow-ya-tsze *ha*	5
劍州 Keen *chow*	5
劍水 *Keen-shwuy*	

	Chinese *le.*
五里碑 Woo-le-pae *ha*	5
土門寺 Too-mun-she *ha*	10
抄手舖 Chaou-show-poo *v*	5
漢陽塲 Han-yang-chang *v*	20
青樹子 Tsing-shoo-tsze *ha*	
五里坡 Woo-le-po *v*	15
劍門關 Keen-mun-kwan *t*	5
劍門水 *Keen-mun-shwuy*	
誌公寺 Che-kung-she *ha*	
十五里碑 Shĭh-woo-le-pae *ha*	15
七里坡 Tseĭh-le-po *v*	5
高廟舖 Kaou-meaou-poo *ha*	10
大木樹 Ta-muh-shoo *v*	10
劍門水 *Keen-mun-shwuy*	
竹垭子 Chuh-ya-tsze *ha*	8
天雄閘 Teen-heung-kŏ *ha*	22
五里垭 Woo-le-ya *v*	5
昭化縣 Chaou-hwa *heen*	5
嘉陵江 *Kea-ling-keang*	
結牯渡 Keĭh-pĭh-too *v*	
張家渡 Chang-kea-too *ha*	10
張家灣 Chang-kea-wan *ha*	10
皂角舖 Tsaou-keo-poo *v*	10
五里垭 Woo-le-ya *ha*	12
蘇患連故里 Soo-hwuy-leen-koo-le *ha*	4
稻壩河 *Taou-pa-ho*	
廣元縣 Kwang-yuen *heen*	4
千佛崖 Tseen-fuh-yae *v*	10
須家河 Seu-kea-ho *v*	10
大洞子 Ta-tung-tsze *v*	10
葡萄架 Poo-taou-kea *v*	10
飛仙關 Fei-seen-kwan *ha*	10
沙河驛 Sha-ho-yĭh *v*	10
新店子 Seen-teen-tsze *v*	10
魯奉口 Loo-fung-kow *v*	10
朝天關 Chaou-teen-kwan *ha*	10
朝天鎮 Chaou-teen-chin *t*	13
潛水 *Tseen-shwuy*	

	Chinese *le.*
土門寺 Too-mun-she *ha*	14
龍門閘 Lung-mun-kŏ	6
神宣驛 Shin-seuen-yĭh *t*	7
緜房舖 Te-fang-poo *v*	10
中子舖 Chung-tsze-poo *v*	10
小屯子 Seaou-tun-tsze *ha*	7
轉斗舖 Chuen-tow-poo *v*	5
閆家河 *Yen-kea-ho*	
敖塲垻 Keaou-chang-pa *t*	8
七盤關 Tseĭh-pwan-kwan *ha*	5
黃垻驛 Hwang-pa-yĭh *v*	10
牢固關 Laou-poo-kwan *ha*	10
迴水河 Hwuy-shwuy-ho *v*	10
碾盤石 Chen-pwan-shĭh *v*	10
甯羌州 Ning-keang *chow*	5
白巖河 *Pĭh-yen-ho*	
五里坡 Woo-le-po *v*	20
滴水舖 Teĭh-shwuy-poo *v*	10
五丁峽 Woo-ting *hea*	
五丁關 Woo-ting-kwan *v*	10
寬川舖 Kwan-chuen-poo *v*	15
斬龍凹 Chan-lung-yaou *v*	15
漢源溝 *Han-yuen-kow*	
烈金垻 Leĭh-kin-pa *v*	8
大安水 *Ta-gan-shwuy*	
大安鎮 Ta-gan-chin *t*	2
桑樹灣 Sang-shoo-wan *v*	10
金灘舖 Kin-tan-poo *v*	2
青陽驛 Tsing-yang-yĭh *v*	8
Stream	
Stream	
柴垻 Tsae-pa *v*	15
新舖灣 Sin-poo-wan *v* (left bank of Han)	2
沔水 *Meen-shwuy* do.	
沔縣 Meen *heen* do.	43
黃沙驛 Hwang-sha-yĭh *t* do.	
Stream do.	
白巖河 *Pĭh-yen-ho* (right bank of Han)	

	Chinese *le.*
新街子 Sin-keae-tsze *v* (left bank of Han)	50
黑龍江 *Hih-lung-keang* do.	
漢中府 Han-chung *foo* do.	60
高臺鎮水 *Kaou-tae-chin-shwuy* (right bank of Han)	
衡家琪 Hăng-kea-pa *v*	15
漢江 *Han-keang*	
安家渡 Gan-kea-too *ha*	10
南沙河 *Nan-sha-ho*	
王家河 Wang-kea-ho *v*	25
七里店 Tseĭh-le-teen *v*	5
板橙垭 Pan-tăng-ya *ha*	7
大路坪 Ta-loo-ping *v*	18
雙園子 Chwang-yuen-tsze *v*	15
孫家坪 Sun-kea-ping *t*	20
茶條溝 Cha-teaou-kow *v*	22
沙河 *Sha-ho*	
沙河坎 Sha-ho-kan *t*	8
苦竹琪 Koo-chuh-pa *v*	20
馬鬃灘 Ma-tsung-tan *t*	10
木馬河 *Muh-ma-ho*	
西鄉縣 Se-heang *heen*	50
東渡口 Tung-too-kow *v*	
板橋灣 Pan-keaou-wan *v*	10
洋河 *Yang-ho*	
來家梁 Lae-kea-leang *ha*	15
三郎舖 San-lang-poo *v*	15
白沔峽 Pĭh-meen-hea *t*	30

Left bank of the Han.	Right bank of the Han.	
	茶鎮 Cha-chin *t*	40
	洋河 *Yang-ho*	
珍珠河 *Chin-choo-ho*		
石泉縣 Shĭh-tseuen *heen*		60
蓮花石 Leen-hwa-shĭh *v*		30
池河 *Ch'e-ho*		
	油坊坎 Yew-fang-kan *v*	30

Left bank of the Han.	Right bank of the Han.	Chinese *le.*
Stream		
梅湖 Mei-hoo *v*		30
	漢陽坪 Han-yang-ping *v*	50
馬家營 Ma-kea-yung *ha*		40
漢王城 Han-wang-ching *t*		5
小松河 *Seaou-sung-ho*		
	渚河 *Choo-ho*	
紫陽縣 Tsze-yang *heen*		95
米溪仙洞 Me-ke-seen-tung		30
	汝河 Joo-ho *v*	
	汝河 *Joo-ho*	
	大道河 Ta-taou-ho *v*	40
	小道河 Seaou-taou-ho *v*	20
流水店 Lew-shwuy-teen *v*		30
	嵐河 *Lan-ho*	
	嵐河口 Lan-ho-kow *v*	30
	香河 *Heang-ho*	
越河 *Yue-ho*		
	興安府 Hing-gan *foo*	130
	黃羊河 *Hwang-yang-ho*	
	十里舖 Shĭh-le-poo *v*	30
	二郎舖 Urh-lang-poo *v*	
二郎灘 Urh-lang *tan*		
Stream		
	梨家垻 Le-kea-pa *v*	90
	閭河 *Leu-ho*	
	閭河舖 Leu-ho-poo *v*	
洵陽縣 Seuen-yang *heen*		30
洵河 *Seuen-ho*		
高店舖 Kaou-teen-poo *v*		20
構園水 *Kow-yuen-shwuy*		
蜀河關 Shuh-ho-kwan *t*		60
大棕溪 *Ta-tsung-ke*		
	冷水河 *Lang-shwuy-ho*	50
	月兒潭 Yue-urh-tan *v*	30
甲河 *Kea-ho*		
甲河關 Kea-ho-kwan *t*		40
	白河 *Pih-ho*	

Left bank of the Han.	Right bank of the Han.	Chinese *le.*
	白河縣 Pih-ho *heen*	20
	小白石河 *Seaou-pih-shih-ho*	
	San-chung-ho	
	南峰 Nan-fung *h*	90
黃連水 *Hwang-leen-shwuy*		
曲遠河 *Keuh-yuen-ho*		
	陡河 *Tow-ho*	90
鄖陽府 Yun-yang *foo*	*Small watercourse*	60
	小嶺塘水 *Seaou-ling-tang-shwuy*	
安陽口 Gan-yang-kow *t*		60
	遠河保 Yuen-ho-paou *v*	30
	遠河 *Yuen-ho*	
Watercourse		
	白浪塘水 *Pih-lang-tang-shwuy*	
	均州 Keun *chow*	60
	曾河 *Tsang-ho*	5
	浪河口 Lang-ho-kow *ha*	55
	青山港 Tsing-shan-keang *t*	20
滄浪 Tsang-lang *i*		20
蕭江口 Seaou-keang-kow *v*		10
丹河 *Tan-ho*		
	青石舖水 *Tsing-shih-poo-shwuy*	
		10
沙陀營 Sha-to-ying *ha*	尖角底 Tseen-keo-te *v*	50
客洛河 *Kih-lo-ho*		
老河口 Laou-ho-kow *t*		10
客洛河 *Kih-lo-ho*		
	余家河 *Yu-kea-ho*	
仙人渡 Seen-jin-too *t*	南河 *Nan-ho*	40
	古路嘴 Koo-loo-tsuy *v*	30
	廟灘 Meaou-tan *t*	10
柴店崗 Chae-teen-kang *v*		5
Watercourse		
太平店 Tae-ping-teen *t*		10
Watercourse		

Left bank of the Han.	Right bank of the Han.	Chinese *le.*
	茨河 Tsze-ho *t*	20
	白馬洞 Pih-ma-tung *b*	10
竹篆舖 Chuh-teaou-poo *t*		20
樊城 Fan-ching *t*	襄陽府 Seang-yang *foo*	40
張家灣 Chang-kea-wan *v*		10
白河 *Pih-ho*		
吳山頭 Woo-shan-tow *t*		10
東津灣 Tung-tsin-wan *t*		20
	石灰窰 Shih-hwuy-yaou *v*	30
陸家灣 Luh-kea-wan *v*	陸家集 Luh-kea-tseih *v*	5
		10
	小河口 Seaou-ho-kow *v*	20
	羅家河 *Lo-kea-ho*	
	明針店 Ming-tsin-teen *v*	5
	宜城縣 E-ching *heen*	25
官庄 Kwan-chwang *t*		40
	蠻河 *Man-ho*	
流水溝 Lew-shwuy-kow *t*		50
豐樂河 *Fung-lo-ho*		
賀家集 Ho-kea-tseih *v*		30
	樂鄉河 *Lo-heang-ho*	
	利河口 Le-ho-kow *v*	30
二神廟 Urh-shin-meaou *v*		15
直河 Chih-ho *ha*		5
黃庄 Hwang-chwang *v*		5
周家嘴 Chow-kea-tsuy *v*		
	唐港 Tang-keang *t*	
寨子河 *Chae-tsze-ho*		
	Watercourse	
	石牌鎮 Shih-pae-chin *t*	70
	馬良 Ma-leang *t*	
應家集 Yin-kea-tseih *ha*		
	沙洋鎮 Sha-yang-chin *t*	100
多寶灣 To-paou-wan *t*		30
	Stream	
聶家灘 Ye-kea-tan *t*		70
	小林江 Seaou-lin-keang *v*	
巴家塲 Pa-kea-chang *ha*		30
張集港 Chang-tseih-keang *t*		45

Left bank of the Han.	Right bank of the Han.	Chinese *le.*
	Stream	
官吉口 Kwan-keĭh-kow *v*		
黑流渡 Hĭh-lew-too *t*		30
	Stream	
岳口 Yo-kow *t*		30
彭市河 Păng-she-ho *t*		45
麻陽潭 Ma-yang-tan *v*		20
多祥河 To-tseang-ho *t*		20
	仙桃鎮 Seen-taou-chin *t*	12
	Stream	
	烟家灣 Yen-kea-wan *v*	10
副嘴 Foo-tsuy *v*		
厥旺嘴 Ma-wang-tsuy *t*		50
Stream		
	楊林溝 Yang-lin-kow *v*	
分水嘴 Fun-shwuy-tsuy *t*		
三汊潭 San-cha-tan *v*		
蚌湖 Pwan-hoo *v*		
城隍港 Ching-hwang-keang *t*		
	廟頭 Meaou-tow *v*	
楊池口 Yang-che-kow *v*		60
	繫馬口 Yih-ma-kow *t*	30
Stream		
漢川縣 Han-chuen *heen*		
Stream		
滇口塘 *Yuen-kow-tang*		60
新溝 Sin-kow *t*	蔡甸 Tsae-teen *t*	60
	赤野湖水 *Chĭh-yay-hoo-shwuy*	30
拖路口 T'o-loo-kow *v*		
三里河 *San-le-ho*		30
漢口 Han-kow *t*		

Ching-too to Hankow.....	4514
Seu-chow-foo to Ching-too	940
Hankow to Seu-chow-foo	3525
Total *le*	8979

The preceding itinerary requires but a few words of explanation, tracing as it does with considerable minuteness, one of the principal routes through western China,—a route destined, it may be hoped, ere long to be numbered among the highways of commerce, opened up by the civilizing agency of foreign aggression. All honour to Captain Blakiston, who, with his party, was the pioneer in this department, and has furnished an excellent chart of the great river, with a remarkably accurate description of the country. The above table is intended to supplement his labours, by giving the native names of the places on the way. In the portion of the journey performed by water, the names are disposed in two columns, according as they happen to be on either side of the river; those on the right bank being placed in the right hand column, and per contra in the left. The names by which Captain Blakiston has designated them, as far as they go, are put against the native names. The distances given in miles are from the same authority. The distances in Chinese *le* are for the greater part taken from a native itinerary, the 示我周行 *She go chow hing*, published in 1694; but for part of the land journey where this authority fails, they are noted from the statements of the natives at each place. At best they are but a rough approximation to the real distances, and cannot be relied on where accuracy is a desideratum.

The names given altogether in italics, are watercourses.

A name ending with the syllable *foo* is a prefectural city.

The final syllable *chow* indicates a departmental city.

The final *keen* marks a district city.

The letter *t* following a name, implies that it is a town.

The letter *v* marks a village.

ha is a hamlet.

h is a hill or hills.

i is an island.

b indicates a place on the bank where there is no assemblage of houses.

Gorges, rapids and islands are placed between the two columns.

The final word *hea* implies a gorge or a narrow.

Tan signifies a rapid.

Pa is a bank, generally an island, but sometimes connected with the land.

Chow is a low flat island.

NOTES BY THE WAY.

A glance at the map of Hoo-pih province must strike one with the vast amount of water surface in the valley of the Yang-tsze; and more especially in that portion lying between Hankow and King-chow. Apart from the Tung-ting, the central and largest lake in China, there are some tens of others large and small. Geology tells us that in former ages this was the bed of the Tung-ting lake; and, even within a comparatively modern period, we have evidence of considerable changes in the outline of the water channels. The laconic statement in the ancient "Tribute of Yu" lends confirmatory aid to the conjectures of geology, where five Chinese characters * inform us that as the result of the arch-engineer's labours, "The land in the marsh of Yun became visible, and that of Mung was brought under cultivation;" the Yun being supposed to represent the lake district on the north of the great river, and the Mung that on the south. A recent journey up this river, as far as the capital of Sze-chuen, and shorter expeditions on former occasions, have enabled me to verify some of the changes, noticed in the following remarks.

On the 3rd of April, 1868, I left Hankow in a Hoo-nan boat, in company with the Rev. G. John. Our first evening's halt was at Keuen-kow, a small village at the mouth of a tributary river, one of the principal outlets for an extensive network of water-courses in this profusely-watered region; about fifteen lakes, most of them of respectable size, discharging a part of their waters here. The connecting streams pass in their way the prefectural city of 荆州 *King-chow*, the departmental city of 沔陽 *Meen-yang*, and the district city of 潛江 *Tseen-keang*. One of the largest of these reservoirs is the 赤野湖 *Ch'ih-yay-hoo*. Among the lakes mentioned as its contributors is the 白泥湖 *Pih-ne-hoo*, 40 miles in length; and it is noticeable that there is another lake of the same name, on the south side of the river, not far distant. By the ramifications of this stream, two or three weeks may be saved in the journey from Hankow to Sha-she, and such is the course generally adopted.

The following morning our route led us past the Seaou-keun-shan and Ta-keun-shan, two hills on the left bank composed of a kind of sandstone, where coal has been discovered, but not yet

* 雲土夢作乂 *Yun t'oo mung tso e.*

opened up. Opposite the latter stands the busy town of Kin-kow on the right; where another stream discharges the outflowings of the 斧頭 *Foo-tow* lake, a sheet of water some 40 or 50 miles in length, extending from the south-east boundary of the Kea-yu district, in a north-eastern direction, absorbing the waters of 咸寧 *Keen-ning* district, and some minor affluents. A little higher up on the same bank is the large village of Hea-sha-hoo "Lower Sand lake," and a few miles beyond, also on the right bank, is another village named Shang-sha-hoo "Upper Sand lake." Now one of the feeders of the Ch'ih-yay on the north side is named the 沙湖 *Sha-hoo* "Sand lake." Are we to suppose then that these are traditions of the period when the waters had not yet subsided to their present level,—when the Sand lake stretched across the present bed of the river,—when the Pih-ne lakes now lying on opposite sides of the river, were united in one extended sheet,—when the town of Sha-she was actually a market held on a sand flat, and the present provincial city of 長沙 *Chang-sha* really marked the site of an extensive sandbank?

Some few miles above Ta-keun hill is the Sha-maou shan, on the same bank, where a rock is said to have projected from the river, named the 白人磯 *Pih-jin ke*, but has now disappeared. Three or four miles above this, the river makes a sharp turn in a northerly direction, at the commencement of the loop known as Farmer Bend. The sandy point at this turning is named 梅灘洲 *Mei-tan-chow*, implying that though now it forms the left bank, yet at one time it was an island in the stream. This supposition is favoured by the fact that a long village named Tung-keang naou, with an extension of detached houses for a considerable distance, runs in an oblique line, about two or three miles back, cutting off a large corner of the present left bank, and marking as it were the former boundary of the river. This is further confirmed by the outline of the river in native maps. Having spent a day at the village of Ta-tsuy near this point, we had an opportunity of noticing the configuration of the ground in the neighbourhood. A walk of two miles across the narrow neck of land on the opposite side of the river, took us to the upper end of the bend,—nearly thirty miles distance, and a day's journey, by water. This neck was crossed by Captain Blakiston in his boat on the 27th of June, but when we were there on April 5th, the surface of the river was near twenty feet below the general level of the peninsula. A high broad embankment runs across, to prevent the water

extending to the southward at the time of the rise. Notwithstanding this precaution however, I was told at the other end of the bend, that for the last three years the land had been inundated.

At the western side of the bend we come to a very large sand spit running out from the right bank in a kind of curve, and hence named the 牛角尖 *Neu-kĕŏ-tseen* "Cow's horn point," which threatens soon to add a large portion to the cultivable land on that side. Nearly opposite this on the left bank, at the village of Sin-tan-kow, facing the upper end of Ashby Island, is another outlet for the lake waters of the Meen-yang department. A short distance beyond on the right, the town of Pae-chow stands about a mile in from the bank, with a suburb down to the river side. A few miles south-east from this, the village of Seaou-lin-wan, with a custom house and a busy retail trade, stands at the mouth of the Pih-ho, a small stream on the left. Nine miles higher up on the right, the district city of Kea-yu is prettily situated under the shelter of some small hills, a little way back from the bank. It was scarcely visible from the farther side of the river. On a former occasion when I visited this city, on August 12th, 1864, it was partly under water; our boat ran close up to the gate, and it was necessary to enter by a ladder over the city wall. Formerly there was a creek on the west of the city, connected with a small lake to the south-west; but if it now exists, it must have dwindled down to imperceptible dimensions.*

At the village of Luh-ke-kow† on the same bank, is the mouth of the 陸 *Luh* river, a stream of some considerable length which rises to the south, from three sources among the 大湖 *Ta-hoo* hills, in the department of 寧 *Ning*, in the province of Keang-se, traversing a mountainous region, passing in its course the district cities of 通城 *T'ung-ching* 崇陽 *Tsung-yang* and 浦圻 *Poo-ke*, and absorbing a number of tributaries.

Early on the 8th we were abreast of Shih-t'ow-k'ow, a village nestling under the west side of a low hill, which runs out into the river in a bluff. A creek discharging here, is connected with the 黃介湖 *Hwang-kae-hoo*, a lake about 35 miles long, bearing south-west. The principal sources of this lake rise in the 大嶺

* It is not marked on the Admiralty map, but we find two outlets several miles to the east.

† The old name of this village was 陸口 *Luh-kow*.

Ta-ling hills on the south, and 龍魚 *Lung-yu* hills on the south-east. At the south-western extremity it is connected with the Pih-ne, a lake 24 miles in length.

About midday we passed Sin-te, a town on the left bank, of considerable size and much traffic. The general outline is in the form of a Greek P, a canal from the interior running up the centre which does not communicate with the Yang-tsze. A sandy island some miles long lay between us and the town, but I had already been through it on a former occasion. The right bank now assumes a more picturesque aspect; a range of high hills in the background, and some spurs extending down to the river, the greater part covered with verdure. Later in the day we passed the village of *Lo-shan*,* "Spiral hill," on the left, where a great assemblage of boats were collected in a creek. At night we anchored at Yang-ling-ke a village on the left, picturesquely situated in the face of a rocky bank. A solitary rock in the river gives name to the place, "Rock of the Yang tombs," and is being rapidly worn down by the water. A temple stands on the edge of a high cliff here, and is supposed to exercise an important influence over the destinies of the river and its navigators. By the time we had been anchored about an hour, a deputation of three Buddhist priests from this temple waited on us, according to custom, with a subscription book of huge dimensions. As a class there are perhaps no more rigid believers in China in the power of the idols than the boatmen, and none more strict in their devotions. All along the river the shrines to the protecting divinities of the stream are very numerous, but none enjoys a reputation equal to 王邛 Wang-yay. Every city and almost every village of any tolerable size, has its temple to Wang-yay, designated 紫雲宮 *Tsze yun kung* "The palace of the purple cloud." The origin of this Wang-yay is not very clear, nor could I ascertain to what era he belonged. The name of his temple however indicates a Taouist source, and it is doubtless one of the inventions of that sect, but Buddhist priests are found ministering at his shrine more frequently than any other. Mr. John fished up the information among the natives, that Wang-yay was a child or a boy who was sacrificed by his mother, in order to save his grandmother. When the old lady partook unconsciously of some soup made from the body of her grandson, she revived

* The itineraries give the name of this place 白羅山 *Pih lo shan.*

from a mortal sickness;—so goes the tale, and such is a purely Chinese development of the doctrine of filial piety.

The following morning we soon reached the village of Pih-lo-sze,* marked by a rather conspicuous square turret-like structure of two stories, the lower containing a niche for the worship of the local lares, profusely adorned with votive tablets and other offerings. At the other end of the village, a bold rock projects its rugged prominence into the river, and is being rapidly worn down by the weather and force of the current. This forms the end of a hill known as *Sze-tsze shan*, "Lion hill," with a temple on its summit. The long street and chief part of the village is hid behind this hill. A good deal of timber was being landed in the neighbourhood, from the district of Chang-tih, west of the Tung-ting lake. A pagoda now appears on the south bank at some distance from the river, pointing out the site of the district city of Lin-seang; a few miles beyond which a creek communicates with the 松陽 *Sung-yang*, a small lake at no great distance inland.

Early in the afternoon we arrived at the point of confluence of the two streams that unite to form the lower Yang-tsze; the southernmost leading to Yo-chow and the Tung-ting lake; the northernmost forming the main trunk of the river upwards. On the left bank just opposite the junction stands the village of *King-ho-k'ow*, *i. e.* (not the "Mouth of the Golden river" as Captain Blakiston translates it, but the) "Mouth of the King river," King being the name of this tract of country in ancient times. Here I may remark, that although I have used the name Yang-tsze for this river, in accordance with established custom among Europeans, yet this name is scarcely known among the natives so high up even as Nanking, where the common appellation is the 長江 *Chang-keang*, "Long river." The only general name of the river throughout its whole length is the 大江 *Ta keang*, "Great river," or *par excellence* the 江 *Keang*, "River;" but many sections of it receive special names from the natives, according to the regions through which it passes. Thus 揚子 *Yang-tsze* is a tradition of the ancient state of Yang, so written, and has nothing whatever to do with the "Son of the ocean,"† a

* In the itineraries this is named 白鹿磯 *Pih luh ke*.

† The error has arisen from the fact that the natives often incorrectly write 洋子江 *Yang tsze keang*, using one character for another of the same sound, although a very different meaning.

name as incorrect for a translation as it is unphilosophical and in consequence unpoetical. From King-ho-kow to the city of King-chow it is called the King river, and so on. Half a mile or so behind the last named village is a much larger one named 觀音洲 *Kwan-yin-chow*, implying the existence of an island in this neighbourhood at some previous period.

To the mere pleasure seeker who has no ulterior object, we now enter a region perhaps the least attractive on the whole course of the Yang-tsze. For nearly two hundred miles, a mud flat is slightly relieved by the "Camels hump" range and the small isolated cluster of hills at the district city of Shih-show; besides which the general level is unbroken, save by occasional hills at considerable distances on either side of the river. Even here however, the student of nature and the scientific observer will not fail to add some crumbs to his already accumulated store of facts. Few spots probably could afford a clearer and readier illustration of the secular changes that are taking place in large rivers all the world over. Tediously wending our way along the very tortuous bends, we were daily and hourly witnesses of the rapid alteration the banks were undergoing. A succession of huge masses of loosely-knit material were being precipitated from one side, dissolved in the current, and deposited on the shallow slopes at some lower parts of the river. In walking along the higher banks, one constantly comes to recently well-trodden footpaths, with huge intervals, where a portion of the soil has taken its departure for a more eastern meridian; and the premonitory cracks, sometimes reaching far into the fields, warn the pedestrian of the advisability of giving a wide berth to the avaricious stream. I observed some slips of near half an acre extent, the whole of which would doubtless be washed away by the high water during the summer. The ends of old embankments are occasionally met with, dropping inch by inch into the water,—embankments which had probably been built at a considerable distance back from the river, to defend the adjacent country from the dangers of the flood. New embankments are being built for many miles extent, and generally about a quarter of a mile distant from the present channel. These are massive structures of earthwork, in some places from twelve to twenty feet high, and probably thirty yards thick at the base. Necessity has compelled the raising of many of the old embankments higher. It is curious to observe in a number of places, how low

the country lies inside the old embankments, even compared with the land between that and the river, which has been gradually raised by a succession of periodical deposits, to its present level. In many spots where the element has encroached on the sepulchral domains of the natives, the ancestral relics have been carefully removed, and the funebral trees either cut down or uprooted; while in others, where it may be there are no surviving descendants, the coffins are left to protrude from the perpendicular bank; calling to mind the cliff at the old English church of the Reculvers in Kent, to any one who has seen it.

Seventeen miles from the junction of the waters, the considerable town of Sze-pa-kow is apparently of recent growth, as it is not mentioned in the itineraries; which give the name of 唐家洲 *T'ang-hea-chow*, "Island of the Tang family," instead; but there is no island there now. There is mention also of a stream entering on the right bank hereabout, which uniting with the 澧 *Le* river, discharged into the Tung-ting lake.

The next station on the itinerary is Wa-tsze-wan "Tile Bend," but the town of Wa-tsze* now stands more than a mile inland from the right bank. The number of young litters in this neighbourhood reminded us forcibly of Captain Blakiston's adventure in search of a dinner, about the same part, when the gallant officer and his comrades got outwitted by a Chinese pig.

Ten miles above this we reached *Hea chay wan* "Lower chain-pump bend," a busy town marked by a small pagoda on the left bank. This consists of two long streets, one parallel with the river, and another branching out from it backwards. Some three or four miles beyond is *Shang chay wan* "Upper chain-pump bend," of much greater extent than the other. The next station given in the itinerary is the district city of 監利 *Keen le*; but this lies two or three miles from the river, approachable only by land, and we were not within sight of it.

About twenty seven miles higher is Teaou-heen, a small town with a custom house on the right bank. This stands on both sides of a stream leading to the district city of 華容 *Hwa-yung*

* In the 水經 *Shwuy king* "Water classic," a work of the 3rd century A. D., the river is said to pass south of 竹畦 *Chŭh hwuy* the "Bamboo plantation," somewhere about this part. By analogy the second character *hwuy* should have been originally pronounced *wa*. Is it possible that this has become superseded by the character *wa* for a tile? Without further evidence this is too slender to build upon, but it looks very probable.

and the Tung-ting lake. There is a great traffic in reeds, in this part of the river where they grow very profusely, ten feet high and more. They are used largely for fuel; also for fences, roofing houses, and even for the walls and other purposes. Agriculture is the chief employment of the inhabitants, but everything wears a patriarchal character. Buffalo carts of a primitive stamp are common, with very high wheels cut out of solid planks, about an inch and half thick, bound by an iron tire. The principal crops we observed were wheat, beans, the vegetable-oil plant and barley, the latter of which was in the ear. Rice and millet were being exported to markets up the river. From Teaou-heen to the district city of Shīh-show, there appears to be a greater change in the course of the river than in any other part. The extended tortuous windings of Atalante Bend would seem to be a comparatively recent channel, as the 水道提綱 *Shwuy taou te kang*, a work of last century, on the rivers of China, describes the course as being eastward as far as Teaou-heen, remarking on the existence of a sandy island; and the itineraries give the distance as 40 *le*, while the distance by the bend according to actual measurement is about three times that number, or 38 miles. A view of the country from the top of any of the Shīh-show hills goes far to strengthen this opinion. The numerous lagoons give the district the appearance of being still almost under water, and one can easily believe they are but the vestiges of a channel which has been choked up at no very remote period. If indeed the changes we have witnessed from day to day, proceed with such obvious rapidity, one is constrained to imagine that during a course of years, the alteration must be very great. Probably a minute survey of the adjoining districts would confirm such a suspicion. A comparison of the maps executed by the scientific Jesuits nearly two centuries back, shews a great deviation in the present course of the Yang-tsze; and I may remark that the detailed descriptions given in native works, agree very closely with those maps, which were published by imperial authority.

The Shīh-show hills however retain a fixed position in reference to the channel, forming a natural turning point in its course; for we know from the Shwuy-king that for sixteen centuries at least, there has been no variation in this respect, but that at the remotest period of that limit as now, the river received a check and flowed past these hills on the north side. The city lies as it were cradled between three principal hills, the wall running

partially up the side of the northernmost, on the top of which is a Taouist temple to the deity of the 東嶽 *Tung yŏ*, "Eastern mountain." A higher hill on the south side has a more imposing structure in honour of the deity of the 南嶽 *Nan yŏ* or "Southern mountain."* The third hill consisting of three peaks, is called 筆架山 *Peĭh kea shan*, "Pencil stand hill," from its supposed resemblance to that article. The city presents no great commercial activity, and the walls are in a ruinous state; but a busy suburb nearly two miles long, runs along the river side westward. On the opposite side of the river just past Skipper point, is the village of Yang-fa naou. Being detained at anchor there waiting for the weather, while walking along the shore, some people called my attention to a natural curiosity. On going down to the water's edge, opposite the eastern end of the village, an urchin began scraping in the mud, and having almost immediately struck upon the spot, a lighted paper was applied, when a bright flame sprang up and burned briskly, till it was extinguished by throwing mud over the aperture. Just against our boat also we observed a continuous bubbling in the water. Do not these jets of gas betray the presence of coals below?

About midday of the 21st we passed the town of Sin-ch'ang on the left, some 17 miles from Shĭh-show, and anchored for the night at the town of Ho-heue a larger and very busy place. The intense and unwonted excitement among the natives, to see a foreigner, indicated the rarity of such an event. Here and at two other places where there are sharp turns in the river, the bank is lined with a level facing of hewn limestone, at an angle of about 40 to 50 degrees, serving as a kind of breakwater. The work has been in progress for some tens of years, and is not yet completed.

At an early hour on the 23rd we reached the large and important town of Sha-she, and could not fail to be struck with the dense assemblage of junks, and the various indications of a flourishing trade. The explanation of this is found in the fact

* From the remotest antiquity four mountains have been distinguished in China, as of peculiar sanctity. These are approximately disposed towards the four cardinal points. The Taouists have added another marking the centre, and annexed the whole five to their mythology. The "Eastern mountain" spoken of here is Taé-shan in Shantung, and the "Southern mountain" is Hăng-shan in Hoo-nan, the reputed site of the famous Yu tablet.

of Sha-she being a centre of confluence for a number of great lines of traffic; the whole length of the Yang-tsze upwards, bringing down the material wealth of Sze-chuen and Hoo-pih; the T'ae-ping canal, a few miles distant on the right, forming the usual route to the Tung-ting lake; and the products of the various large cities and towns on the Tseu and Chang rivers, unitedly entering the Yang-tsze, only three or four miles to the west. Most of these finding their natural terminus at Sha-she, the merchandise is transhipped and conveyed eastward to Hankow and other places by the inner lakes; while but a comparatively small portion continue the voyage by the channel we had come up. The trade of the place having been described by abler hands, I shall not attempt anything under that head. The most striking object in the outline of the place is of course the pagoda. To reach the entrance, it is necessary to descend a flight of steps to an open area, about eight feet below the general level; and as it is scarcely probable that it would be built so low, the fair inference is that the ground around has been raised to that height. By an inscription on the front, we learn that it is called 萬壽寶塔 *Wan show paou tă* "Myriad years pagoda," and the erection is attributed to 獻 Heen the king of 湘 Seang, a son of the founder of the Ming dynasty. This prince held his court in the adjoining city of King-chow, and having set fire to his palace, he perished in the flames, in 1398. In general features, this resembles most other pagodas in China. Inside the ground story is a gigantic gilt figure, and numerous inscriptions on the wall. The greater part of the inside, which is ascended by a spiral staircase, is faced with large bricks, each bearing a figure of Buddha in bas-relief, with inscriptions recording the generosity of benefactors. Some are stated to have given a hundred bricks to the building, and some probably gave more; while the great majority are under that sum, and the donors of one brick are very numerous. Nearly all these records are in Chinese, but I observed a few also in the Tibetan character. The structure is in good repair, and the view from the top very extensive on a clear day. Immediately beyond the pagoda on a projecting point, stands a cast iron figure, representing some nondescript animal of the bovine tribe, named the 仙牛 *Seen neu* "Fairy ox." A similar figure stands on another jutting point, some mile and half higher up; the inlying curve between the two being named Urh-ke-t'ow wan "Two rocky points bay." We observed several

other iron oxen from the same mould as the preceding, the date being about a century ago; and it appears special importance is attached to their influence as guardians of the river. This is a Taouist device.

On the 24th we started on a visit to King-chow only about three miles distant, and were astonished to find such a fine large city lying down on the low ground out of sight of the river. The walls are in excellent repair, and there is a wide moat of clear water surrounding them. This is the representative of the capital of the ancient region of King, one of the nine parcels into which the Great Yu divided the empire. On entering the south gate, two dirty hands were somewhat unceremoniously laid on our shoulders, and we were told to wait in a miserable lodge till an officer came to question us. When the functionary arrived, his investigations amounted to nothing. During the interview a dense crowd collected round the door, expecting possibly to see us subjected to some ignominy; but it was very amusing to see them disperse, when two petty officials got whips and lashed them right and left. That is the Manchu method of clearing the way. Our inquisitor put a few questions to us, and received some from us in return. He said the city was a camp, and unless we had some business we could not be allowed to enter. As Mr. Medhurst, H.B.M.'s Consul at Hankow, had procured for us a document from the Viceroy, commending us to the protection of all imperial officers, we claimed an entrance to report ourselves to the *Che-heen* or District magistrate, and were admitted on that plea. Contrary to expectation we found handsome busy streets, with the appearance of a prosperous and well-to-do population; but although it is said to be a garrison city, we did not see a single soldier about it. We were told of course that they were at the other end of the town; but we have generally found, where there are troops, a stranger is not left long in doubt as to their presence. Some roughs in the city were disposed to be insulting, but nothing serious came of it. On making our exit from the city, the officer who had examined us, managed to abduct one of our colporteurs in the crowd, and took him inside to question him more closely as to our real character. It appears Mr. John had asked him how many Manchus there were in the city, and he was in a great state of mind to know what could be the object of such a question. There was something droll in taking us for spies. If Chinese spies go about their trade in such a clumsy way, truly they do not shew the

characteristic shrewdness of their countrymen. I mention this little episode, as it was the only instance we met with in all our journey, where the officials shewed any disposition to place an impediment in our way.

Our progress on the 25th was very limited; the wind being so strong that we were obliged to take shelter in the mouth of the Tseu river, alluded to above, a feat which we accomplished at the expense of a disabled rudder. The day became threatening, and in the afternoon a hurricane was apprehended, when it was feared much damage might be done by concussion among the boats. This led to altercation among the boatmen, and in due time words ran so high, that we began to anticipate a general engagement. However, they exhausted themselves in vituperation, and eventually calmed down, as did the weather overhead, without coming to anything serious. The village at the mouth of the river on the east side is named Seaou-ke yaou, where a few gun-boats are stationed. This was formerly a secondary branch of the Tseu river, but is now the more important outlet. The traffic on it is considerable, leading at it does to the busy town of 古麥城 *Koo-mih ching*, at a distance of about fifty or sixty miles; beyond which about 24 miles it passes the district city of 當陽 *Tang-yang*, and about the same distance still higher up, the city of 遠安 *Yuen-gan*, in the northern part of which district it takes its rise at 北風 *Pih-fung* hill. A little below Koo-mih ching it joins the 漳 *Chang* river, a branch of nearly equal extent, with several towns on its banks. Not far from our anchorage, a handsome temple has recently been built, to the guardian spirits of these two rivers.

A few miles beyond this on the right bank is the T'ae-ping canal, one of the chief thoroughfares in this part of the country, opening up a direct communication with the Tung-ting lake. This was formerly named the 虎渡 *Hoo-t'oo* river, a designation which was changed for the present one, I believe by the commander 向榮 Heang-yung, when he passed this way to suppress the recent rebellion. Having traversed the channel in the autumn of 1864, I found abundance of water for vessels. The only city on the banks is 安鄉 *Gan-heang* district, but there are a good many towns and villages, some of which I found in great disorder from recent inundation. The passage occupied about three days. On the present occasion we learned that it had scarcely been a month navigable when we passed.

A short distance higher up is a large indentation on the right bank, where a stream enters connecting with the T'ae-ping canal. About five miles above that, we found a very large sand deposit in the middle of the river,* leaving a narrow channel on each side. The sand-bank was then nearly covered with water.

The same afternoon we reached the town of Keang-kow on the left, where there is a considerable trade in cotton. The original mouth of the Tseu river enters the Yang-tsze at the west end of the town, but this has now dwindled down to less importance than the branch passing King-chow.

A little before reaching Keang-kow in the ascent, the river divides into two branches, forming a large island above thirty miles long, named *Pih-le chow*, "Hundred *le* island." Proceeding by the southern branch, we arrive at the district city of 松滋 *Sung-tsze*,† towards the upper end of the reach. This now lies about a mile in from the river, and is a place of very little life.

On the present occasion however, we passed up the northern, which is the most frequented channel, and in the forenoon of the 29th reached the town of Tung-she, a tolerable-sized place. A prominent red structure stands on the elevated bank just before reaching the town. This is the 水府廟 *Shwuy-foo meaou*, a temple supposed to exercise an influence over the destinies of the river. Just beyond this we were ferried over a creek by some Buddhist priests, who maintain the monopoly of this branch of industry, as a source of their revenue. This stream, the *Ma-naou ho* "Cornelian river," rises from two sources at the 玉泉 *Yuh-tseuen* hill in the south-west part of Tang-yang district, and another more to the south-west, making a course of near fifty miles.‡ On the western bank of this stream stands the 萬壽宮 *Wan-show kung*, or Keang-se guildhouse, the handsomest building in the town.

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*The itineraries give the name 龍洲 *Lung-chow*, "Dragon island," somewhere in this neighbourhood; but I do not know if it refers to this or not.

†Readers of Huc will remember the fascinating picture he gives of a paternal mandarin at this place.

‡There is a good deal of difficulty in adjusting the watercourses as they stand hereabout with the old accounts. The *Shwuy taou te kang* says the Ma-naou river entered the Yang-tsze to the south of Sung-tsze district, but it says nothing about the northern channel by Keang-kow and Tung-she. Has the course of the Ma-naou since altered, or is part of it absorbed in the newly-made channel of the Yang-tsze?

The country now assumes a different aspect; soon after passing Spring island, we get fairly beyond the limits of the alluvial plain. A long range of hills appears on the right bank; and as we advance, more distant and loftier peaks continue to come in view.

On the evening of the 29th we passed the city of Che-keang, a miserable kind of a place, the wall facing the river having been completely destroyed by an extraordinary rise in the water a few years since. What little business there is seems to be chiefly confined to the suburb, the city being almost deserted. There is one long straggling street inside, mostly occupied by small retail shops; but the greater part of the enclosure is fields with some pretty plantations.

Shortly after we stopped for the night, opposite E-too pagoda, or as it is named by Blakiston "Bush pagoda;" but the distinctive bush which grew so picturesquely from the top corner, and by which I had recognized it on former occasions, is now no more; some rude hand, more concerned for the security of the building than its pictorial aspect, having removed this singular appendage. The hills along the banks are all carefully cultivated, except in inaccessible places; and indeed the same remark will apply for the whole extent of our journey. A double range of much higher hills behind, are named by Blakiston, the "Mountains of the seven gates." We could not after all our inquiries learn where he got this name from. He gives as the Chinese equivalent, "Shih-urh pei," but we were utterly unable to trace any connection between the Chinese name and the translation. Some ten miles higher up the river is a spot called the *Shih-urh pei*, "Twelve backs;" "back" * being a name given to a kind of perpendicular convex cliff.

In the forenoon of May 1st, we passed the district city of E-too, just round a headland facing north-west. It is agreeably situated on the declivity of a hill, at the mouth of the *Tsing-keang*, † "Clear river," the water of which is of a bright bluish green colour, and contrasts strangely with the sombre muddy hue of the Yang-tsze where they unite to mingle. The city must derive much of its importance from its connection with this river, bearing as it does the principal traffic of 施南 *She-nan* prefecture. Rising near the north-west boundary of that prefecture, and with a number of

* In old works the name is written 碚 *Pei*.

† The ancient name of this river was the 夷水 *E-shwuy*.

important tributaries, passing within easy distance of the district cities 利川 *Le-chuen*, 恩施 *Gan-she*, 宣恩 *Seuen-gan*, 建始 *Keen-che*, 長樂 *Chang-lo*, and 長陽 *Chang-yang*, it drains the watersheds of these mountain districts, and disembogues after a distance of 200 miles in its greatest length; running underground for some miles in the upper part of its course.

The following morning, we reached a narrow pass in the river, between two bluffs, where the force of the current is so strong, that it is almost impossible to get through without a favourable wind. A series of bold headlands on the right bank, formed of conglomerate, rising perpendicularly from the river, to the height of a hundred feet or more, are known as the "Twelve backs"* referred to above. If the passenger is on the lookout there, he will get a glimpse for two or three minutes of the remarkable natural arch, figured in Blakiston's book, p. 161. This like all similar formations is called by the natives 仙人橋 *Seen-jin keaou* "Fairy bridge," and forms a very striking object in the scene. A flight of narrow steps is cut in the face of one of the cliffs, connected with a horizontal path and descending flight at the other end; but the whole is so much worn down by the water, that it appears difficult now to get a foothold. Holes in the rock are pointed out, to which it is said chains were attached for the passenger to hold on by. This bears the appearance of great antiquity, and local tradition ascribes the work to Choo-ko Leang, the hero of the *San kwŏ* or "Three states," in the 3rd century of our era. On the opposite cliff there are still chains, by which small boats are pulled up; and a little above this, the face of the rocks was covered with a bright yellow flower, a very pretty sight.

A short distance beyond this on the left, at the village of Tsin-kea-teen,† the Lin-keang river makes its exit, after a tortuous course of several tens of miles from its triple source among the hills to the north.

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*陸游 Luh Yew a native scholar who passed up this river in 1170, has the following note in his private journal, under date 10 month, 6 day.—"Passed the 'twelve backs' of King-mun (gate of King), tall and overhanging like so many huge walls, towering precipitous cliffs to the verge of the summit; this may be classed among the wild scenery of the gorges." (入蜀記 *Juh shuh ke*, Book 6).

†This is called 臨江市 *Lin-keang she* in the itineraries.

Early the same afternoon we reached the prefectural city of E-chang,* a place specially distinguished by its great gathering of boats, of various forms and all sizes; and we soon came to an anchor in the densest of the throng. The city within the walls is rather small for its rank, but there are extensive suburbs along the river bank for several miles, with a busy traffic. Opposite the city is an island Se-pa, about three or four miles long, on which has sprung up a large town, forming a very important addition to the settlement. A large conflagration had recently made a great gap among the houses outside the east gate, which they had scarcely yet begun to rebuild. Down by the river side were a vast number of temporary sheds, made of bamboo framing and covered with mats; mostly occupied by dealers in comestibles. These are deposited year by year as the winter approaches, and are removed by degrees as they get invaded by the rising waters in summer. Having now reached the terminus to which our boat was engaged, our first care on arriving was to secure the means of continuing our journey. When at Sha-she, we were told that that was the best place to engage a boat for Sze-chuen; but fortunately did not yield to the advice. Had we done so, we should assuredly have fared worse. E-chang is doubtless the place to hire passenger boats for going up the river. There is a good choice, and no hesitation on the part of the owners to let them to foreigners. The up-river boats may be generally divided into two classes;—cargo boats and passenger boats. The former have broad roomy holds, and are covered with a mat roof. They may be engaged at lower rates, and might be put up with in winter time; but in the heat of summer, they would scarcely be safe for Europeans to take a long voyage in. The passenger boats, termed 跨子 *K'wa-tsze* are much more commodious and airy; but both kinds are of an exceedingly flimsy build, and constant baling out of the water in the hold seems to be the rule. We soon succeeded in engaging a small *k'wa-tsze* to take us to Ching-too, the peculiar form of which may justify a few words of description. The hull was about 40 feet long and 8 feet wide in the middle, drawing about a foot and half of water; fifteen feet of the fore-deck was left uncovered for the rowers, a division being opened in the middle, for a *cuisine*;

* This was formerly a departmental city, with the name 彝陵 *E-ling* dependent on the prefecture of King-chow. The present name of the district is 東湖 *Tung-hoo*.

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and it was only on rare occasions that the cook left this strong-hold. The centre of the boat was covered by a square-built housing, 16 feet in length, divided by movable bulk-heads, into three compartments 5 feet 8 inches high, airy and well-lighted. The after one we removed to form our dormitory, while the smaller chamber served as sitting room and reception hall. A small house on the stern formed the domicile of the skipper and his family; above which a niche contained the domestic shrine. An intervening space of some four or five feet was occupied by the steersman and various domestic arrangements. A large light sail was fastened to a cross yard at the top of the mast, having a stout bamboo fixed to the lower edge, with a crooked handle attached, by means of which the sail can be furled in three or four seconds, and let down in half that time. An extraordinary kind of scull lay over the bows, more like a mast in size and shape; and its duty seemed to be to supplement the power of the helm. The butt end was bound about with a stout rope, in such a manner that several of the crew could get hold of it to guide it. We had agreed for a crew of eighteen men, but found when fairly off, that reckoning the skipper, his wife and a child of 4 years old as three, we could only make up seventeen in all. However with these we managed very well. After a detention of three days at E-chang, during which we thoroughly visited every part of the city, and rambled over the opposite shore, we started again on the evening of the 5th, and crossed over to the western channel, the eastern being too shallow yet for boats of our size.

Our first sensation on moving was one of uneasiness, on account of the unsteady oscillating motion of our new vessel, so different from the steady-going Hoo-nan craft we had just parted with; however, such is custom, we soon got to feel wonderfully secure, notwithstanding the eccentric motions we had to experience. The current runs strong here, and the slip in crossing is very considerable. Facing the city is a village on the right bank, at the mouth of the Taou-hwa-poo shwuy, a small stream running in from the west. This is the spot pointed out by Blakiston, as a suitable site for a European settlement. The first two miles upwards is an abrupt rocky cliff, composed of intermediate horizontal strata of sandstone and conglomerate; along which the boatmen track wherever it is possible to get a foothold, sometimes thirty or forty feet above the water. At other places one of the crew strips, plunges into the water, and carries the

bamboo towing-line to some point of rock round which he can fasten it, and then all hands pull up by this line. Where more effective means of propulsion are not available, eight or ten of the crew ply the oars in concert, the stroke oar singing time in a monotonous unmusical tone, with which the others chime in. Other devices are at hand where these fail, and so by one means and another every obstacle is overcome. A kind of coxswain or chief mate stands at the head of the boat, poling, guiding, encouraging and giving orders in a good-natured kind of way. This is a very important personage in the boat. Another man is stationed on the roof, almost constantly coiling up the lines or paying out. In fact nearly everything is different from the down-river navigation. On halting for the night a cock was sacrificed, and the remarkable bowsweep duly smeared with the blood, to secure a prosperous voyage.*

By about 8 A.M. on the 6th we were round Mussulman Point, opposite which on the left stands the small village of Nan-tsin kwan,† just at the entrance of E-chang gorge.‡ A little to the east is the mouth of the Leang-tsun ho, a river which rises at a considerable distance among the hills to the north, and receives two accessories in its course. The weather was fine, but there was a cold air in the gorge in the early part of the day. After proceeding a mile or two we got a favourable wind, by the aid of which we made good progress. The narrowing of the river at the entrance of the pass is something remarkable; and the width continues to diminish till about the middle, where it is scarcely above a stone's throw. At first the high cliffs are only on the right bank; but the left gradually increases in abruptness till the two sides are equally precipitous, rising in some places to four or five hundred feet, and worn into the most picturesque forms. At times the fancy is fain to trace the remains of some stupendous cathedral in the ever-varying figures, or the turrets

* In the *Shwuy taou te kang*, this part of the river is called the 大石灘 *Tah-shih tan* "Great stone rapid," and E-ling is said to be at the mouth of the gorge, while nothing is said about a second channel. It appears probable that if the inner channel existed then, it was but an insignificant stream; but that subsequent enlargement has drawn off a great portion of the water, thus reducing the flow in the western channel, which is scarcely entitled to the name of a rapid now.

† The *Shwuy taou te kang* calls this entrance the 下牢關 *Hea-laou kwan.*

‡ The name of this gorge in the itineraries is 刑官峽 *Hing-kwan hea.*

of an ancient baronial castle, perched on the summit of an overhanging precipice. Again we find a cave with intricate passages, worn out by the hand of time and the agency of the elements. Terraces and ledges abound, covered with vegetation; and frequent chasms and ravines, down which cascades pour their contents into the insatiable river.* About the middle of the gorge is a custom-house establishment on the right bank, at a level spot, called Ping-shen pa, but we were allowed to proceed without stopping. Towards the upper end of the gorge, a series of gigantic hoary-looking weather-beaten peaks suddenly make their appearance, peering like so many spectres over the line of hills immediately on the river bank,—a most singular view. At the west end of the gorge on the left stands the village of Nan-t'o, against which is a small stream known as the Shang-hung ke. Here we had to cross to the left in order to avoid the force of the current, which is very swift in this place; and as there is a strong eddy near the left bank, should a boat get too low down, the transit is not accomplished without danger.

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*Not only does this spot strike a foreigner with wonder,—some of the natives have shewn their appreciation of its beauties. I quote here a descriptive passage from the journal of Luh Yew: On the 8th day of the 11th month he notes: "We started this morning at the end of the 5th watch, and passed the Hea-laou kwan, where a thousand peaks and ten thousand precipices limit the confines of the mighty Keang. On the one side we see them rising abruptly from the base, on the other they stand out in isolated prominence; here is a block on the descent as if about to crush one, there hangs a perilous mass as it were on the point of dropping; in one direction we see a horizontal split, in another is a vertical rent; in one place a protrusion, in another a recess, in another a cleft; singular, curious and inexhaustible are the forms. In early winter the trees and plants are still unfaded, fresh and flourishing. Looking to the westward, hills rise o'er hills in semblance of a portal, from which proceed the waters of the Keang. Thus we learn to appreciate the force of the expression, "The mountain stream of Hea-laou." (入蜀記 *Jŭh-shuh ke.* Book 6.) Seven years later, 范成大 Fan Ching-ta, another native who has left his mark in the annals of fame, having passed this spot downwards, at a three months earlier date, records his impressions in his private journal, in something like the following terms:—"Passing the spurious Twelve peaks in our downward course, on all sides pointed summits of stranger aspect come in view; numbers fail to reckon the sum; the artist's pencil is inadequate to portray the magic scene, and no description can equal the reality; surpassingly enchanting and exquisitely grand, the fairy tableau rivals in romance the celebrated mountain group of Woo." (吳船錄 *Woo chuen luh.* Book 2.)

Such was our position; getting too near the whirl, the boatmen lost the control. Round went the head, and the boat lurched heavily to one side, looking very much like a capsize. Scarcely however had we time to congratulate ourselves on getting righted, when down it went as much to the other side, while the boat was at the same time rotating on its centre. This process was repeated while she made two complete revolutions, much to the discomfiture of the passengers at least, if not to the crew. Had it not been for our heavy cargo of book boxes, I believe we could not have stood it. At length however by the aid of the huge bow-sweep, we got through the difficulty; and after getting a mile or two further up, halted for the night near the spot termed by Blakiston the "first rapid on the Yang-tsze," named the 無義灘 *Woo-e tan*;* but there was scarcely any rapid at the time we were there.

The character of these currents is continually changing with the rise and fall in the water. Thus where there are strong rapids in the summer, it often happens that in winter there are none, and *vice versa*. A little higher up is the Lo-teen ho, a small stream on the left.

This part of the river is termed the 黃牛峽 *Hwang-new hea* "Yellow ox narrow;" and considerable interest attaches to it in a geological point of view. Here we come suddenly upon a nest of granite boulders, scattered about in most inexplicable order; and the uninitiated is left to wonder at the apparently isolated position of these blocks. The place however, has been visited by R. Pumpelly, Esq., and, thanks to his able report recently published, we see that this is the only spot along the river, where the lower stratum of granite crops out; and that to the same cause we owe the frequency of rapids in this neighbourhood. Native tradition especially recognizes the hand of the Great Yu here, and tells us that by the miraculous aid of the spirit of the Yellow ox,† he was enabled to remove the huge blocks, and so

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* The itineraries give the 大無泥 *Ta-woo-ne* hereabout, which is obviously intended for the same.

† This name carries an allusion to the mountains I have just mentioned, which Blakiston says are about two thousand feet high. The circumstance may be told in a quotation from the journal of Luh Yew, who says:—"They stand like a wind screen towering aloft, tier piled o'er tier abruptly rising till they pierce the heavens. On the fourth tier is the figure of an ox, the colour a reddish yellow; before which stands a man, as it were, with a hat on his head. Yesterday and this morning, the top of the mountain

make a passage for the water. On the right bank is the *Hwang-new meaou*, "Temple of the Yellow ox," which gives name to the village* where it stands.

Our journey on the 7th was all day through a series of rapids; and with the men hard at work from early dawn till dark, we only made about five miles. This was hard upon the boatmen, but it gave us a good deal of time to spend among the people on shore. An unfortunate boat had fared worse than we in coming up the gorge, having run against a rock and sprung a leak, by which the cargo of cotton had got soaked, and the vessel necessitated to go into dock. Beyond the Woo-e tan, we ascended the 虎頭灘 *Hoo-t'ow tan*, 鹿角灘 *Luh-kŏ tan*, and one or two minor rapids, which brought us to the village of San-tow ping. Here also is a temple to the Yellow ox. A stream from the south enters the river on the east side of the village.

Just here the river takes a bend, and nearly opposite the village, an island, named 中坝 *Chung pa*, a mile or more long has been formed; on which a few colonists have fixed their residence, depending for a living, chiefly on the supply of provisions, opium, and gambling accommodation to the boatmen. Here the current runs very strong, and just beyond, we came to the 史君 *She-keun* rapid. Our skipper had already come to an understanding with a fellow-craft, that the two crews should unite their force for mutual aid where necessary, till we got through the thick of the rapids. Here however we needed the combined force of three boats, to the number of near fifty trackers. We passed up quite safely, but the line of one of our fellow-voyagers broke, and it

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was buried in the clouds, and I have only just now seen it for the first time." From Dr. Barton's picture, the range would seem to have been in great part covered with clouds when his party saw it also. We were more fortunate, getting a clear view of the lofty precipices in all their magnificence. Fan Ching-ta says in reference to this:—"On the vertical face of a lofty mountain precipice behind the temple, is a yellow figure resembling an ox, and a black figure like a man leading him. This is said to be the Spirit of the place."

* The itineraries give the name of this place 黃陵驛 *Hwang-ling yih*, and add that the rapid here is dangerous, with the precaution to beware of bad characters. On the proclamations the name of the village is written 黃陵舖 *Hwang-ling poo*. Luh Yew notes a curious circumstance at this place, thus:—"Behind the temple are a number of trees resembling the Ligustrum lucidum, but not the same, and there is no name for them. When the leaves fall, they have black figures on them, resembling the characters of the Taouist charms, no two leaves being alike." Is there a coincidence here with the famous "Tree of Ten thousand images," seen by Father Huc at Koun boum?

took them an incredibly short space of time to make half a mile down stream; but they managed to haul up again without further damage. This finished the labours of the day, and we came to an anchor.

Scarcely had the first streak of next morning's light dawned upon us, when we were already stemming the billows of another considerable rapid; but the grand performance of the day was to take place at a point known as Pih-tung-tsze which we reached in less than two hours from the time of starting. Here a heap of gigantic granite boulders, forming a bold rocky prominence, juts out into the stream, reducing it nearly one third of its average width; while the numerous blocks of the same material scattered about the bed, give the water the force of a torrent in its impetuous rush. Some nine or ten boats were waiting to be pulled through, and we took our station sixth in rank; the whole forming a scene not a little picturesque. About two hundred natives were on the boulder rocks, standing, sitting and squatting on the ledges and points, the greater part half naked and some pure nude. Indeed *sans culottes* is the most distinctive uniform among the Sze-chuen boatmen. Some few of the better clad among the assembly had no doubt come for the sake of the sight, but the greater part were waiting to be employed. The skippers of the boats, one by one, went on shore to make arrangements, and gradually the numbers on the rocks thinned down to a minimum. At some distance beyond, a group was observed standing on the sandy beach. A strong bamboo towing line four or five hundred yards long had been passed ashore from the foremost boat, a large cargo junk, which was made fast to a point of rock by a hawser; some sixty or seventy men were attached to the line; a drum on the deck sounded a tattoo as a signal for the men to pull; the hawser was let go, and off went the boat into the boiling current. For some minutes there was no perceptible motion, and so strong was the counterforce that it appeared to take all their towing power to maintain their position. They were moving however inch by inch, but we could not suppress some feeling of anxiety as to the result. The bow-sweep was put in motion to ward them off the rocks, and continuous pulling at length brought them to the head of the rush. The same force still acting in the smoother water above, carried them through with a motion that raised the waves, like the action of a steamer, till the boat was quietly discharged in a small bend of comparatively still water. The next boat was then

tackled on, and the same process was in operation, when the line got entangled on a sunken rock. Forthwith a swimmer dashed into the stream, swam to the spot, and cleared it; when on they went again without further hindrances. After a delay of some two hours it came to our turn, when we got through with no more difficulty than an occasional bump on the rocks. This experience was something new to us, and the novelty and excitement amply compensated the inconvenience and danger; but after being subjected to the same treatment for a month or more day by day, the novelty wore off, and it began to lose much of the interest which attached to it at the commencement. Another hour or so brought us to the Tă-tung* rapid, called by Blakiston the Kwan-dung, where a small rocky island was still seen in the stream, but there was no rapid worth naming, although at some seasons of the year it is said to be formidable. Here, and for some distance higher up, the Yellow ox precipices still make a conspicuous figure in the landscape; a fact which has given rise to the following double distich:—

朝發黃牛　　暮宿黃牛
三朝三暮　　黃牛如故
Chaou fa hwang new,　　*Moo sŭh hwang new;*
San chaou san moo,　　*Hwang new joo koo.*

At morn the Yellow ox is seen,
And still abides the same at e'en;
When day and night glide three times o'er,
The ox is still seen as before.

This was an old saw in the days of Soo Tung-po, who has embodied it in one of his poems.

Two or three miles beyond the Tă-tung rapid, the village of Tae-ping ke stands on the right side of a stream of the same name, flowing down a ravine on the left bank. The stream is also known as the Pih-shwuy ke. Scarcely a mile higher up the K'eu-ke water enters on the right bank. A mile or two more brought us to Hĭh-yae tsze, a village on the left, standing about fifty feet above the water level. Here the San-muh ke, a stream of clear water issues from a ravine. The weather was fine, and throughout the day we had been travelling through magnificent scenery. The ranges of hills on either side, of moderate height, formed quite a picture, from the varied tints of the soil and crops

* The itineraries give the name of this 塔洞 *Tă-t'ung*, with a note to be careful at the time of high water, and to beware of bad characters.

with which they were covered, being industriously tilled and cultivated to the summits; while much higher and wilder ranges were seen stretching away behind. The beauty of the landscape increased, till we reached the mouth of the *New-kan ma-fei*,* or "Ox liver horse lights" gorge; and then we came upon one of the rarest pieces of mountain scenery I have witnessed. Huge peaks are seen towering aloft to the height of between two and three thousand feet; while the cliffs stand on either side like perpendicular walls, broken in parts by ledges covered with vegetation; and in some places houses and small farms are perched in almost inaccessible spots. In parts the opening cannot be much over two hundred yards wide, the contraction giving additional impetus to the swift-flowing current. On the left, at the entrance, is a lower stratum of limestone, inclined at an angle of about 30 degrees from east to west. This stone is in places curiously sculptured by the water, into a congeries of tapering spires, beautifully finished off with a complicated series of delicate mouldings. On reaching a spot where a foothold could be obtained, our trackers made a somewhat perilous ascent of these limestone turrets, scrambling up like so many cats, till they reached a path on a ledge of rock some fifty feet high. A mile or two of tracking thus brought us to a convenient spot on the left bank about the middle of the gorge, where we anchored for the night, against one of those bold rounded perpendicular cliffs termed *(pei)* "backs." Nearly opposite was a curious cave wrought out in the rock, by the continued beating of the water. It goes in farther than the eye can follow, contracting as it recedes, the front rising into a huge gothic arch, with a number of pendants attached to the roof, and a piece projecting forward, very like one of those figures we frequently see protruding from the battlements in gothic architecture.†

* Such is the ordinary name; but it is also known as the 空舲 *Kung-ling* gorge; Blakiston names it the Lu-kan gorge; but the old name appears to be the 馬坎 *Ma-kan* or "Horse liver" gorge.

† In reference to this gorge, Luh Yew has the following note under date, 12 day of 11 month:—"After passing the 東灘 *Tung-ling* rapid in the morning, we entered the Ma-kan gorge, where the stone walls rise to a height incalculable. A pendent stone in the form of a liver gives name to the gorge. By the side of this is the Lion precipice, in which a small stone crouching in a gap and covered by green grass, exactly resembles a green lion. The water trickles down from a spring in the rock, but our boat passed so rapidly, that I could not get a drop to taste. It should be a spring of superior quality however."

On moving from our anchorage next morning, the river in front of us appeared to divide into two branches; but on reaching the point of junction, we found the southern opening was a tributary of bright green water, making its way out through a strait and lofty chasm. This was the Hwa-keaou water, formed by the junction of three streams to the south. The main stream bears away in a northerly direction; and for some distance up the right bank, we have the canopied rocks overhanging the river, till we gradually emerge among hills of a lower level, but still retaining their abrupt and jagged character, till near the small town of *Sin-tan*, or "New rapid." There is a strong rapid nearly opposite the town, but the worst features of the place are only seen to perfection in the winter season. When the water is low, it is necessary to remove cargo and every heavy article on shore, and pass through with an empty boat. The bad renown of the place is of old standing. During the first three or four centuries of our era, there were two successive mountain slips, when the channel became choked up by the precipitated rocks, and it received its present name at that time. For many centuries the danger and difficulty of the new rapid were borne with, as an unavoidable evil; and year by year the number of boats lost and damaged are said to have been incalculable; but it was not till about the year A.D. 1028 that it was determined to put a stop to such a state of things. A public notification was then issued forbidding the navigation of that part of the river, from the 10th month to the 2nd month of the following year. As a principal source of income was thus cut off from the inhabitants, who had depended mainly on the wrecks in their neighbourhood, self-interest prompted the adoption of some new measures. The throne was memorialized by the incumbent magistrate of Kwei-chow, a batch of quarrymen were set to work at low water in the year A.D. 1050, and at the end of eighty days they had so far succeeded in removing the principal obstructions that from that time the river was again opened to navigation. Luh Yew passing this way 120 years later, complains of the obstacles still to a great extent remaining, and recommends a combined effort during low water in the 12th and 1st months, to clear away the pointed stones, still left in the bed of the channel; but he remarks that so long as the natives have an interest in maintaining the difficulties of the passage, they will of course oppose the thing as impracticable. The only way would be to insist on its being

done. Another cause of accidents he says is through the cupidity of traders in overloading their boats. He suggests that a tablet should be erected in front of the town, engraved in large characters as a warning to passers. Whether the evil has been mitigated since Luh-Yew's time I do not know; but it is still the practice to unload and reload boats passing up and down, during four or five months of the winter season.

Immediately above this town is the entrance to the *Ping-shoo paou-keen*, "Military code and precious sword" gorge.* This name bears with it a tradition that the treasures named,—once the property of the famous Choo-ko Leang of the Three states period,—are now deposited in some unapproachable recess in the cliffs of this sombre gorge. Such is merely one of the many evidences we meet with over this region, of the veneration in which this ancient worthy is held. A very powerful current met us in this gorge, but fortunately we got a good wind to carry us through without much trouble. Immediately on emerging from the upper end we find the village of Me-tsang kow on the left bank, at the mouth of the Heang ke, a green stream emerging from the mountains. This unites the waters of three rivers, one of which passes the district city of 興山 *Hing-shan* and makes in its greatest length a flow of nearly a hundred miles. A very remarkable cave the 玉虛洞 *Yuh-heu t'ung*, is spoken of about two miles up this river. The entrance is only ten feet wide, but the cave is said to be capable of containing several hundred men. One is struck with the spacious and ornamental interior, as if entering some great palace.† Just past the above-named village I observed the piles of sandstone covered with that black coating which Blackiston speaks of as indicating the proximity of coal; the same occurred at many subsequent places. A

* This is what Blakiston calls the Mi-tan gorge. An old name is the 白狗 *Pih-kow*, "White dog" gorge.

† Luh Yew who visited the place, says :—"The natural stone formations represent curtained canopies, streamers, standards, plants, bamboo shoots, immortals, dragons, tigers, birds and beasts; every conceivable form, and the most striking resemblances. But the most singular thing is a stone on the east round like the sun, and another on the west shaped like the half moon. I have been all my life accustomed to see precipices and caverns, but never met with anything to equal this. About the year 1073 謝師厚 Seay Sze-how inscribed his name on the lofty precipice. There is also a little history of this cave by 陳堯咨 Chin Yaou-tsze, in which he says it was first discovered by some hunters about A.D. 750."

rocky channel for some distance succeeds, and the favourable wind did us good service, in getting us past the *Mi-tan* or "Rice rapid," where the water runs strong. A little distance above on the right is the Maou-ping ke, a stream flowing in from the south-west, having received a smaller affluent from the east. On the west side of this, at a height of nearly a hundred feet above the river, stands the village of Laou-kwei-chow, a single street, with some half-dozen shops. As the name implies however, it was once of greater importance than it is now.

In 1234, when there was an irruption of the Mongol invaders, the district city, then named 秭歸 *Tsze-kwei*, was removed across the river, and fixed on this site. It was subsequently removed to Sin-tan, afterwards to Pih-sha, and ultimately to its present site, about two miles higher up on the left bank, where it has been fixed since the Ming, but the name is now changed to 歸州 *Kwei-chow*. While opposite this city, the wind being quite in our favour for proceeding, no persuasion would induce the skipper to cross over. As the enclosure lies up the incline of the hill, we could see that there was little more than official residences and cultivated fields inside the walls, and a suburb running parallel with the river. About two miles beyond this a small stream enters on the right bank, in the neighbourhood of which we come to a cluster of coal mines in the face of a hill, at various elevations, some scarcely twenty feet above the river and others from one to two hundred feet high. They appear as small quadrangular apertures at the surface, about three or four feet square, and the coal is shot down an inclined plane. A few miles further we stopped in the afternoon, against a village on the left bank named Sëe-tan, a formidable rapid of the same name rushing past it, which took the remainder of the day to ascend. This rapid is also called the 叱灘 *Ch'ih-tan*, * and a stream emerging on the east side of the village is named the 叱溪 *Ch'ih-ke*. On the east side of this stream are a number of coal mines in the face of the hill.

Early on the 10th, at a distance of ten miles from the city, we passed the Sha-chin-ke on the right, a stream formed from the junction of two smaller ones flowing in from the south. A few miles beyond this on the same bank, is another stream, which rises from three sources in the south-west of the district of

* In old books the name is given 吒灘 *Ch'a tan.*

Pa-tung, and flows with a general north-easterly course to its embouchure. Not far from this, is a mountain stream on the left bank, which brings down the contents of three small branches, issuing by the straggling village of New-kow, opposite which is a strong rapid of the same name. In the afternoon we passed the district city of Pa-tung; where there is no city wall now, but there probably has been one at some former time. The settlement consists mainly of a street more than a mile long, running parallel with the river. A few miles beyond is the site of the old city on the left bank; but two or three solitary farm-houses in the neighbourhood, is all the sign of human habitation now left. The city was removed to its present site about the beginning of the 13th century.

The 11th opened with a heavy rain, a considerable fall having taken place during the night; but it ceased about two hours after daybreak, and as the clouds gradually lifted themselves off the higher peaks, the scene was exquisitely beautiful, and the hills looked much fresher than before; while streamlets in every direction were draining the uplands into the great river, the variety in the colour of the liquids, indicating the nature of the soil through which they flowed. First we had innumerable little rills of a blood red; further on, they came down a light yellow ochre; and these again were succeeded by others of the common muddy hue. At an early hour we passed the village of Se-seang kow, standing on the east side of a ravine on the left bank. This is the entrance to the Yuen-too ho, a river which rises about the north-west border of Pa-tung district, and absorbs three affluents in its course, before reaching the Keang. Somewhat higher is a small stream on the right bank; and at the village of Kwan-too kow on the left, another small stream issues from the north. Here we entered the Woo-shan gorge, known generally by the name *Pih-le hea*, "Hundred *le* gorge;" and, at no great distance, reached the *Ho-yen-shih tan*, "Flint rapid." This takes its name from a most confused heap of blue limestone interspersed with strata and nodules of black chert, the huge masses lying about in such anomalous positions as would appear to indicate some great natural convulsion. Several places of this kind occur along the right bank; and the limestone we find lying in thick level strata on the face of the hills, covered with a coating of chert, and broken straight off at intervals, in step-like projections, exhibiting the edges, just like the gable ends of some gigantic cathedral, several hundred feet in height.

In many places we find natural caverns, some of which are of curious formation. The action of the water is seen to a height of fifty or sixty feet above the level as we saw it; and by that agency the limestone has been carved out into the most graceful forms and figures. In one place we find an elegantly-shaped alcove, with a miniature cascade issuing from the interior of the mountain; in another, a natural recess has been taken advantage of to deposit some large gilt idol; and the variety of scene as we proceed, is amply sufficient to keep up the interest and rivet the attention.

We had not gone far the following morning, when we halted against a small stream on the right, by the side of which, on a terrace nearly a hundred feet above the river, I saw the first and only bed of green poppies in all our journey. They were still in flower, but the petals were dropping off; so that the season was drawing to a close. In the adjoining prefecture of Kwei-chow, the cultivation was prohibited by the authorities; and by the time we got beyond it, the crop had been all collected. I can only call to mind one bed of the withered plant still in the ground, the juice of which had been already extracted. But there is no doubt of the extensive cultivation of it throughout the province. From all the information we could gather, it commenced in this province within twenty or thirty years past.* I do not remember seeing any foreign opium, but at every market, the farmers bringing in their little lumps of native production, were always to be met with. As far as I could learn the price ranged from 140 to 250 cash the tael weight. If an outsider may venture an opinion, I should say it looked much inferior to the foreign article.

A short distance further we find on a ledge in the cliff on the left, a line of brick wall with a gate, enclosing a number of caverns, probably the entrance to coal mines, though there is no appearance of any person there now. Near this is the *Kin-peen-tan*, "Golden yoke," where a flight of steps is cut in the cliff, and a chain fixed by staples to aid in the ascent. A little beyond this is the *Teih-kwan-tsae*, "Iron coffin" hill, a perpendicular limestone rock, in the face of which may be seen from the opposite side, at a height of some two or three hundred feet, something of an oblong form glittering like glass or metal, and not unlike a chest

* In the native topography of Sze-chuen, published in 1817, which gives a detailed list of the productions of the province, the poppy is not named.

laid in a recess of the rock. This gives name to the hill. Just against this is the *Sin-pāng*, "New dawnfall" rapid, where two successive precipitations from the mountain have taken place, one in A.D. 102, and another in A.D. 377. A gigantic mass of rock lying prostrate there, still bears witness to the fact. It is recorded that on the day of the fall, the river ran upwards for more than a hundred *le*, and splashed up several hundred feet high. A little further on we arrived at Peen-yu-ke, a stream on the left bank, marking the boundary between the two provinces of Hoo-pih and Sze-chuen; and about half a mile more brought us to the boundary on the southern side, formed by the Pan-keaou-ke, a mountain current running down a narrow rocky gorge. On the Sze-chuen side is the village of Pei-shih, where the people had suffered severely from a tempest a few weeks before. Less then two miles beyond is the Pih-koo-shwuy river, a stream rising among the hills at the northern boundary of 建始 *Keen-che* district in Hoo-pih. On a point of rock at the mouth of this stream is a temple to the 神女 *Shin-neu* or "Female genius," but the doors were shut, and I could not see a vestige of a name or inscription of any kind on the building. On the opposite side of the river are some hills of singular forms, called the Twelve peaks of Woo-shan,* but only nine of them are visible from a boat. There is one said to be in form like the character 巫 *Woo*, "Wizard," which gives name to the district.

Traditions are rife regarding these peaks; not a few of them carry their individual legends, and poets and fabulists have found ample material there for the employment of their pencils. To the Female Spirit of the gorge is attributed the greater part of the natural phenomena of the locality. Among her various recorded apparitions, of course there is one to the Great Yu; and a stone altar is pointed out on one of the peaks, where she presented him with a written charm, that enabled him to carry through his labours in this difficult passage. We naturally look upon these fables as

* The names of these are 望霞 *Wang-hea*, "Cloud observing," 翠屏 *Ts'uy-ping*, "Misty screen," 朝雲 *Chaou-yun*, "Morning cloud," 松醬 *Sung-lwan*, "Fir-tree cone," 集仙 *Tsĕih-seen*, "Congregated immortals," 聚鶴 *Tseu-ho*, "Assembled cranes," 淨壇 *Tsing-tan*, "Clean altar." 上昇 *Shang-shing*, "Mounting aloft," 起雲 *K'e-yun*, "Rising cloud," 飛鳳 *Fei-fung*, "Flying phœnix," 登龍 *Tāng-lung*, "Ascending dragon," 聖泉 *Shing-tseuen*, "Sacred spring."

the vestiges of barbarism, and so they are; but who does not know that some of the most civilized nations of Europe can shew their puerilities equally monstrous, that have found millions of credulous devotees, even within the last half century?

Early in the evening we stopped at Sha-muh seang, a miserable hamlet on the right bank. Although the houses were nearly a hundred feet above the river, it is said that the water sometimes rises to their level. One of the wretched hovels is an opium shop, where I found two of our boatmen regaling. A mass of old building materials and pieces of broken furniture lay scattered about, which they told me was drift saved from the river. Thick limestone strata here lie parallel with the face of the hill, at an angle of about sixty.

The 13th still found us in the gorge, the scenery quite equal to what we had passed for romantic grandeur, a sombre gloom pervading the more precipitous parts. We soon reached a ravine on the right bank, with a village on the east side, where the Kwan-too river enters the Keang. This rises in nearly a westerly direction, and skirting the south side of the gorge range, runs for a considerable distance parallel with the Keang. It is also called the 清溪 *Tsing-ke*, and near the mouth is one of the most remarkable natural curiosities in the gorge, which however we had not an opportunity of going to see. The 清水洞 *Tsing-shwuy-tung*, a natural cave, is said to pass completely under the mountain, with an opening at the other side. When the water is in it, it is impenetrable, on account of the midnight darkness; but in times of drought it was customary to go there to pray for rain. There the river makes a sharp turn in a northerly direction, and a number of rapids and powerful currents for a mile or two require all the skill of experienced boatmen to pass them. On turning the next bend, bearing more westerly, we observed a little change in the geological features. There was still the limestone with a plentiful distribution of chert, in contact with which we found interstratified beds of red and green sandstone, the same formation distinctly visible on both banks, the bright colours of the separate strata standing out in bold relief. Towards evening we anchored at the district city of Woo-shan, a poor place, most of the business being in the suburb. The temples and other public buildings are above the general appearance of the place. The Ta-ning, a considerable river, enters the Keang on the east of the city. This rises from two sources in the south-west of 竹山 *Chŭh-shan*

district in Hoo-pih, enters Woo-shan on the north-east, and flows for 160 *le* under the name of the 東溪 *Tung-ke* river. It is then joined by the 西溪 *Se-ke*, a river that rises on the border of Shen-se to the north-west. Farther south it receives the 後溪 *How-ke*, and passing the district city of Ta-ning on the east, after gathering the waters of some half dozen lesser streams from the west, it unites with the 楊溪 *Yang-ke*, a river rising in Hoo-pih, which also receives a tributary from the north, and makes a course of 200 *le* before its junction. The united stream then flows on for more than a hundred *le* to its embouchure. On the north bank of the How-ke is a place named 監井 *Yen-tsing* "Salt wells," from which we may infer the production of salt in the neighbourhood.

Within the first two miles of our course on the 14th, we passed three rocky islets a few feet above water,—the first out towards the middle of the channel; the second much larger, near the left bank; and the third about the size of the first, a little way out in the stream. Rapids as usual occurred at frequent intervals, and at one of these we struck heavily on a rock causing a considerable leak. This did not give the boat people much anxiety, as it seems to be the normal state of things in Sze-chuen; and they soon got the boat sufficiently patched up to go on again; but from that hour, a regular system of baling out commenced. By this means we managed, contrary to my expectation, to get to the end of our journey without any serious inconvenience. Red sandstone hills, principally, bordered the river till we reached the mouth of the Fung-seang gorge. The Ta-ke ho, a tolerably wide river, there disembogues into the Keang, after a flow of more than a hundred *le* from the south-west.* A large village named Ta-ke kow stands

* It may be well here to notice a paragraph which I find in Dr. Legge's commentary on the Shoo-king (The Chinese Classics, vol. 3, pt. 1, p. 114), thus;—"Hoo Wei insists also on another stream called the 'E water' (夷水), which took its rise in the present dis. of Woo-San (巫山) of K'wei-chow dep. in Sze-chuen, and after entering King-chow, joined the Keang in the pres. dis. of E-too (宜都), as also to be accounted one of the 沱, which engaged the labours of Yu." Dr. Legge seems to commend the judgment of this author; and if the inference in the above paragraph be correct, then in ancient times there was a channel to the south, by which most of the present gorges might be avoided. Is it possible that geological changes have since raised part of the intervening land and cut off the connection? Referring to D'Anville's maps, we find the source of this Ta-ke river within a very short distance of one of the sources of the Tsing-keang or E

on the east side of it, marked by several conspicuous temples. We entered the gorge with a favourable wind, and by dint of vigorous rowing, managed to make very fair headway through the swift-flowing current. The entrance is picturesque, and the cliffs increase in abruptness as we advance; till near the middle, when they rise almost perpendicular on both sides, to the height of about five hundred feet. One peculiar cliff on the left gives name to the gorge (i. e. Bellows), having a number of apertures in the face, through which the wind whistles at times. On a terrace at an elevation of more than a hundred feet, are a number of caverns in the rock, in which some poor people have built their huts. Along the narrowest parts of the gorge, a great number of funnel-shaped large baskets are immersed in the water, and fastened to the rocks with strong ropes, to trap the fish in their downward migrations. Our passage was a continual tacking from side to side; not on account of adverse wind, but to avoid the dangerous currents. An intimate knowledge of the channel here especially is of the utmost importance, as this is probably the most perilous passage in the whole length of the navigable river. Geographically considered it is a point of very great interest, if we look at the immense collection of water concentrated here, from the watersheds of Sze-chuen, Kwei-chow, Yun-nan and Tibet, suddenly compressed into a channel of not more than 150 yards wide, and forming as it does almost the only entrance to that vast region from the east. Anciently it was called the Gate of Tsoo, and the appropriateness of the appellation is obvious at sight. As may be imagined many spots about it are famous in history; and the testimony of the rocks here perpetuates the memory of heroes whom the Chinese delight to honour. Just about dusk we reached a place on the right bank named *Măng-leang-te* or "Măng Leang's ladder." This refers to a period in the history of the Sung dynasty; Măng Leang being a kind of theatrical

water already noticed as disemboguing at the city of E-too. If it be, as it no doubt is, a question of supreme importance to avoid the gorges in the upward navigation, surely it is not beyond the skill of modern engineering science, to open up the old path, and thus reduce to an accomplished fact, one of those wonders connected with the name of the Great Yu, which people would then learn to look upon as prophetic myths. One formidable gorge however, the Fung-seang, would still remain; and if it became a question to cut it off also, then the most probable channel to the west of it would appear to be the Laou-ma ke, which according to the map, comes within twenty miles of another of the head waters of the Tsing-keang.

myth,—first a freebooter, and afterwards an officer in the imperial army. Certain marks are pointed out in the face of the rock, as the places where he fixed a wooden framework, in order to scale the cliff. A very little way beyond, we anchored for the night against a lofty cliff, known as the *Fun-peih tang*, "Plastered hall." This merely designates a part of the cliff that has been rubbed smooth, and an inscription engraved on it, in commemoration of the restoration of the Han, in the first century of our era.

One of the first objects that attracted our attention next morning, when about to emerge from the gorge, was the *Yen-yu tuy*, "Flood beacon," a solitary rock standing in the middle of the channel, just at the mouth of the 瞿塘 *K'eu-tang* gorge, as the river is there called. Native accounts agree in stating this to be composed of a mass of small stones. Some future traveller may be able to decide whether it is conglomerate. In winter time it is said to rise several hundred feet above the river; while at the time of highest flood in summer, the water is some hundred feet above the rock, and it is described as the most dangerous spot in the empire. There is a popular saying of great antiquity, which runs thus:—

灩澦大如象　瞿塘不可上
灩澦大如馬　瞿塘不可下
Yen yu ta joo seang　*K'eu tang puh ko shang;*
Yen yu ta joo ma,　*K'eu tang puh ko hea.*

When the Flood beacon's seen of an elephant's size,
The ascent of the river all prudence decries;
When the Flood beacon's seen the size of a horse,
The attempt to descend is fraught with remorse.

Immediately opposite this on the left bank, is a hill somewhat isolated from the rest, famed as the site of the ancient city of 白帝 *Pih-te*, the "White God,"* some vestiges of which are said to be yet remaining, but we could only see indistinct ruins from the river. The 鐵柱 *T'eih-choo*, "Iron pillar" river, from the north, here flows into the Keang. The name of this river

* As the legend runs, when this city was first built by 公孫述 *Kung-sun Shuh* of the Han, seeing a white dragon issue from a well, he took it as an omen that the country would revert to the Han, and consequently named it the city of the White God. The seat of the district government was first fixed there about the beginning of the 3rd century, and continued so till about A.D. 1005. About 1245 it was again occupied, and finally abandoned during the Yuen dynasty.

commemorates two iron pillars that were fixed on opposite sides of the Keang here, from which a couple of iron chains were stretched across the river to guard the pass. A mile or two to the west of this, are some salt-springs by the river side, but they are only workable in winter when the water is low. A little further on, and just west of Quai-chow bluff, are still to be seen some traces of the 八陣圖 *Pa-chin-t'oô*, a military stratagem of the renowned Choo-kŏ Leang.* This was a stone-wall camp representing a particular arrangement of the symbols of the Yih-king, the conception of which has been considered by the natives a paragon of ingenuity. The village there goes by the same name. But time would fail to speak of all the notable objects in this interesting locality.

The city of Kwei-chow stands on the slope of a hill, immediately across a small river, and seems rather poor for a prefecture. A remarkably handsome temple was being erected to Kwan-te the God of War, the retired General 鮑超 Paou Chaou having contributed ten thousand taels towards the structure. This gentleman's name is well known in the history of the recent rebellion. He has been seventeen years in the field against the insurgents, got a wound in his thigh, and has now retired with a princely fortune, to this his native place, where he is building a magnificent mansion, and surrounding himself with the luxuries of the age, which he is delighted to shew to Europeans.

The Ta-jang river rises on the border of Shen-se, and after a south-easterly course of more than three hundred *le*, during which it receives a small tributary on the west, and another from the north, it enters the Keang on the east side of the prefectural city. The name of the district is 奉節 *Fung-tseih*. The distinctive synonymes of the Keang here are 岷江 *Min-keang*, 蜀江 *Shuh-keang*, and 汶江 *Wăn-keang*. Father Huc in his witty narrative calls it the Blue river. It is difficult to conjecture what could have led the worthy Abbé to give it this title. During the whole of our journey we could find no trace of any one knowing it by any such name.

The water of the Keu-tang gorge is very apt to produce goitre; and indeed native testimony attributes the same characteristic to

* Two other specimens of this camp existed in after ages; one in the district of Meen in Shen-se, and another in the prefecture of Ching-too in Sze-chuen; but less trace of these has been left even, than the one here spoken of.

the water of the river, for many miles higher up. Good water is got from a spring in the 臥龍 *Go-lung* hill, about three miles from the city.

We had come through the gorge without the slightest accident; but some of our fellow travellers had struck the rocks and done great damage to their cargo. A cotton junk found it necessary to unship their freight at the city, having got completely drenched. Another with European goods was so damaged, that the supercargo had to abandon it, and hire another at a great expense, to carry the remainder of his cargo, two thirds having been destroyed by the wet as he said.

Our first adventure on the 16th was to break the towing line while pulling up the Ma-hoo rapid, two or three miles from Kwei-chow; but the trackers got hold of it again before any mischief happened; it might have proved worse. Just above this, the T'ow-tang ke, a stream rising in the north-west of Fung-tseih district, flows down through a broad channel on the left bank. The water in it was low and easily fordable when we passed. A little further on I found coal-slate and very inferior coal cropping out on the face of the hills at several places, three or four hundred feet above the river. There were mines at no great distance, and I observed people carrying a very fair description of coal, which cost a cash a catty delivered at the boat. The freight to E-chang was 8 cash the picul. Having met with a strong head wind, we anchored early in the day at Sze-yen to, a small bay on the left bank.

Early on the 18th we again left our halting place, and soon passed the Woo-lung ke, a mountain stream on the right, and a little further on the same side the Laou-ma ke, with the village of Gan-ping at the mouth. A strong rapid here is named the *Laou-ma tan*, "Old horse rapid." In the afternoon we passed the Meaou-ke tan, another strong rapid. In the forenoon our course was skirted on both sides by hills of moderate height, sloping gently down towards the river, but later in the day they became more abrupt. The formation was red sandstone in horizontal strata.

The following morning we passed the Tung-jang river on the left. This rises near the border of Shen-se, receives a small tributary from the east, and enters the Keang on the east of the city of Yun-yang, after a course of more than a hundred miles. At a distance of ten miles from the city, up this river, there are

ten salt wells, producing rock salt. On the south bank, nearly opposite the Tung-jang is the Sin-keun river. This rises from two sources in Hoo-pih, which unite in the southern part of Yun-yang district, and flow on for more than two hundred *le* to the mouth. The city, which stands on the left bank, immediately beyond, is poor, but we observed some imposing temples and public buildings. By far the most conspicuous from the river is the 萬壽宮 *Wan-show kung*, the Keang-se guildhouse. There are also the 粵東公所 *Yu-tung kung-so*, "Canton guildhouse," 帝主宮 *Te-choo kung*, the "Hwang-chow guildhouse," and several others. Our stay here was short, and we moved on again the same day, and anchored a good distance up, opposite the village of Pan-to, and just against an overhanging cliff named Hea-yen, with a singular cavern in the face of it, more than a hundred feet above the river. This has been fitted up as a Buddhist temple, containing two large apartments. On the back wall of the inner chamber, three huge figures of the Buddhist trinity, have been cut in the rock. Along the face of the cliff outside, a series of niches contain the following images cut out of the rock in full relief:—太陽菩薩 *T'ae-yang-poo-sa*, the "Sun God," Joo-lae Buddha, supported on either side by Kasyapa, the first Patriarch and immediate propagator of the esoteric faith, and Ananda, the second Patriarch, and the first who reduced the doctrines to writing. Next come 燃燈 *Jen-tăng*, the preceptor of Joo-lae; 池藏 *T'e-tsang*, a deity of Siamese origin, Mandshusiri and Poo-heen, two Indian devotees much worshipped in Sze-chuen.

May 20th we found the weather getting rather hot for walking. Farmers were busy in all directions hoeing the cotton, which was only a few inches above ground. Wheat and barley were being cut. A great deal of ground was occupied by tobacco, which was still green and not at its full growth; while in some places the rise in the water had swamped the fields, destroying considerable portions of the crop. The rice was transplanted, but still flooded with water. It is all cultivated on terraces. Hereabout we began to observe a custom which is generally prevalent through the province, of erecting stockades and fortified enclosures on the summits of the most unapproachable hills; to which the people flee for refuge in case of invasion. In time of peace scarcely any remain there but the occupants of temples, the dwelling-houses being vacated for more accessible ground.

Military guard-houses occur at regular intervals along the banks, accompanied by models of the smoke telegraph turrets; but as to actual service, the guard are about as much a myth as the telegraph. Early in the day we passed the town of Seaou-keang kow on the left; on the west side of which the Seaou-keang* enters the great river. This has several sources; one rises in the north-east of the district of 開 *Keae*, under the name 板橋溪 *Pan-keaou ke*, receives a small tributary from the south-east, and a larger from the north; after which flowing south by west, it receives two considerable branches from the west, passes to the south-east of the city of Keae, and is joined by the 臨江 *Lin-keang* from the west. It then flows south-east, and receiving the 墊江 *Teen-keang* from the west, flows on to the Keang as a large navigable river. Nearly all day there had been a continuous range of horizontal sandstone rocks on both sides of the river, which were probably covered, when the water was at its highest. The level was going down daily, although it had not nearly reached its highest. The increase is not a gradual and constant change, but is ever fluctuating from day to day or week to week, now rising and then falling, the changes in both directions being sudden and rapid, and I imagine to a great extent local, the permanent rise being the balance of the aggregate fluctuations.

In the forenoon of the following day we were at the district city of Wan, and this was the first place we had seen signs of business activity since leaving E-chang. Here the accumulation of shipping, the large and wealthy stores, and the general aspect of the place and people all bore witness to its commercial importance. There is a very large suburb on both sides of the *Se-ho*, "West river."† This river rises to the north-west, and has a very picturesque appearance as it passes the city, in a channel scooped out of the rock. The clear water falls down a cascade into a deep pool, and then flowing under a natural bridge, formed of a huge block of sandstone, emerges from a fissure by a shorter fall into another basin below; and so by a variety of tortuous bends, finds its way into the Keang. Probably no artificial bridge would withstand the force of this current in flood

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*This river is also named 開江 *Keae-keang*, and 彭溪 *Pang-ke*.

†This is also called 苧溪 *Choo-ke*, "Hemp stream," in consequence of the cultivation of hemp on its banks. The old name is 池溪 *She-ke*.

time; so a pathway is formed across by a series of piers about a foot square, and something like two feet apart; being in fact a line of stepping stones, firmly fixed to the bottom. This kind of path is rather common over these swift currents. On the west of the city and nearly connected with the suburb, stands a singularly abrupt and conspicuous hill, with apparently a large town on the top named 天子城 *Teen-tsze ching*. Nearly all round are precipitous crags, some two or three hundred feet high, the only ascent being a path on the north-west side. Here it is said the famous Lew Pei garrisoned his troops about A.D. 220. We had not time to go up, but were informed that the place is now inhabited. There are three salt wells to the west of the city.

While we were at Wan, a number of barges forming the funeral cortège of Lo the late Governor-general, arrived from Ching-too with his coffin, which they were conveying to his ancestral place in Hoo-nan. The consequent fireworks, music, banners flying and official visits, gave the appearance of some great festivity. The French expedition from Cochin-China passed down at the same time; the unostentatious character of which was a striking contrast to the funeral.

On the 22nd we met with several rock islands in the stream, from twelve to twenty feet high; one large one about a mile from the city named 千金島 *Tseen-kin taou*. Early in the morning we passed the Too-kow ke, a stream from the south-east; and during the forenoon reached the Pih-shwuy ke, also from the south-east, a tolerably wide stream rushing down a rocky bed, in the form of a cascade: There is a village of the same name on the south side of it. At no great distance beyond this is the 湖灘 *Hoo-tan*, "Lake rapid;" so called because in high water season, the river overflows, and spreads out like a lake there. It is considered dangerous. The spot is memorable, as the place where the Mongol troops crossed the river, about 1240, when invading the Sung. A few miles higher, the Yang-ho ke from the west, enters on the left bank; and beyond that again the Seang-ho ke, nearly parallel with the preceding, but somewhat longer. In the forenoon we observed a number of temples curiously built in the caverns and nooks of the perpendicular cliffs, especially remarking the one that Blakiston speaks of, the door of which is reached by a ladder sixty or seventy feet high. As we advanced the hills were not so lofty, and less cultivated than lower down, but more wooded.

The following afternoon we passed the Hŏ ke* on the left bank, a stream flowing in from the west. Near this there were six salt wells. We anchored for the night at the village of Shīh-paou chae.† This takes its name from a stockade on the top of a singular isolated rock. The rock itself is named the 玉印山 *Yuh-yin shan*,‡ "Jade seal hill," as it is supposed to resemble a seal in form. It is a very picturesque object, the general form being that of a wedge lying on its triangular face, probably about 500 feet long, and 150 feet wide; rising vertically to a height of about a hundred feet, with a basement of some fifty feet more. The object of greatest antiquity about the place, is a bell in the temple at the top, dated A.D. 1618. A nine-storied gallery§ is built against the end of the rock, being the only way of access to the top; both that and the temple on the summit were erected in the Kang-he period (A.D. 1662-1722), and have been restored during the present century, everything now being in complete repair. On the ground floor of the gallery, a group of hideous figures, represent the warders of the regions of darkness, charged to usher souls into the presence of the judge. The temple on the top is an elaborate representation of the ten courts of hades, with all their tortures; Yen-lo wang the prince holding his court at the upper end. This is the Yama of Indian mythology. A stone inscription states that the enclosure on the summit of the rock is capable of containing several thousand people in case of need. They would certainly be very close packed. The Too-tsing river‖ rises in the east of 梁山 *Leang-shan* district, and flows south-east, entering the Keang at the foot of this rock. We observed a bed of withered poppies in this neighbourhood, indicating that we had now got beyond the prefecture of Kwei-chow, and also that the season of cultivation was at an end.

Towards midday on the 25th, we came to a village on the left named Kwan-ke, where the river divides, forming an island about seven miles in circumference, with steep cliffs all round.

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* This is also named the 跳蹬河 *Teaou-t'ang ho.*

† It is also written 石寶寨 *Shīh-paou ch'ae.*

‡ It is also sometimes called the 石堡山 *Shīh-paou shan*, "Stone citadel hill."

§ A sketch of this is given in Blakiston's "Five months on the Yang-tsze," p. 182.

‖ This is also called the 涂溪 *T'oo-ke*; but the most common local name is 小溪 *Seaou-ke.*

The common name of the place among the people is Hwang-hwa ching. At the time of 李雄 Le Hung's rebellion in A.D. 370, the seat of government for 巴西 *Pa-se* region was fixed there, since which it has been known by the name of the 石城 *Shih-ching*, "Stone city." The supplementary branch of the river is called the 黃華水 *Hwang-hwa shwuy*, and the island 黃華洲 *Hwang-hwa chow*. In the afternoon we passed the Yuen ke on the right, a stream issuing from two sources to the south-east. A town of the same name stands at the mouth.

Our first movement next morning took us past the Yen ke,* a stream rising in the south of Leang-shan district, which flows in a general south-easterly direction till it enters the Keang on the left bank. In less than two hours we passed the Chung ke on the right, a small stream from the south-west. A mile and half beyond this took us to the departmental city of Chung on the left bank. This place is not large, but has a brisk retail trade, and there seems to be a good many literary men connected with it. The most conspicuous building as seen from the river is the 魁星樓 *Kwei-sing low*, a five-story building, dedicated to the god of the literati. Exactly opposite the city, the Shin ke flows in from the south. The Ming-yuh ke,† a mountain stream flows past the city on the west side, and the valley is spanned by a pretty stone bridge of three gothic arches and horizontal pathway of recent construction. During the afternoon and following day we passed four other small streams on the left, averaging ten to twenty miles in length:—the Ch'ow-shwuy ke, Tan-tsze to, formed by the union of two branches, and issuing opposite the northern end of the *Shih-tan*, "Stone rapid," Tso ke, opposite Binquei island,‡ and Ting-ke. Thirty-five salt wells are noticed in this department. We heard this day of a boat coming through the Woo-shan gorge, that had struck a rock and gone down, four men being drowned.

Early on the 28th we passed the Ch'ih ke and Lung-ting ke, two small streams on the left. A little way beyond is the

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*The correct name is 淹溪 *Yen-ke*, the form 淦 being a local and unauthorized corruption. Another name is 鹽溪 *Yen-ke*, "Salt stream." In the commentary on the Shwuy-king it is called 鹽井溪 *Yen-tsing ke*, "Salt well stream."

†This is also called 漕溪 *Tsaou-ke*.

‡The native name of this is 鸞珠垻 *Lwan-choo pa*.

Hoo-loo ke, a considerable stream on the right. This rises from two sources in Hoo-pih; the northern is called 龍背溪 *Lung-tsuy ke*, consisting of two branches united; the southern, also embracing two branches, is called 冷清溪 *Lang-tsing ke*. These two uniting, form the 後河 *How ho*, which flowing westward, is joined by the 漆蘭溪 *Tseih-lan ke* from the north-east, and afterwards the 江池溪 *Keang-she ke* from the north; continuing in a south-westerly direction till it enters the Keang, after a course of several hundred *le*. An island against the mouth of the river is called by the people 鳳尾磧 *Fung-wei tseih*. Nearly opposite this, the district city of Fung-too stands on a small spot of level ground on the left bank. The lion of this place is undoubtedly 平都山 *Ping-too shan*, a small hill standing immediately behind the city. This is one of the seventy-two celebrated seats of Taouism, and apparently one of the most renowned, the fame of the temples drawing numerous devotees from far and near. A zigzag road up the face of the hill, is lined with temples nearly from the foot to the summit, increasing in importance till the highest point is reached; special prominence being given to the rulers of darkness and their satellites. If the Buddhists have been successful in appropriating most of the attractive spots in the empire as sites for their temples, there at least the Taouists have the advantage of them. The natural beauties of the place, enhanced by numerous touches of art, are no doubt the great attraction, and very successful as a source of revenue. Besides which they have the prestige of several ancient worthies, who have lived, studied and exemplified the doctrine there. 王方平 Wang Fang-ping of the Former Han, and 陰長生 Yin Chang-sang of the After Han, two celebrated recluses, are both said to have attained the state of immortality on this hill. For many subsequent ages, the stove by which the latter wrought to obtain the philosopher's stone was preserved as a precious relic. The cypress trees he planted are still pointed out, a pretty plantation on the hill side, but if any sceptic ventures to doubt their age, he is assured that they are at least the descendants of Yin's cypresses. The establishment is in the keeping of Buddhist priests, and a good many Buddhist shrines are to be found side by side with the Taouist deities.

Before daylight on the 29th we were on the way, and soon got into a part of the river exceedingly contracted by the large sandstone rocks projecting from both sides, and standing insulated

in the middle. It is thus divided into three channels in one part, and obstructions of this kind continue for some distance up, forming a series of narrows and rapids. One of them is known as the 大佛 *Ta-fuh*, "Great Buddha" rapid, and numerous inscriptions in white paint on the rocks thereabout, call upon all boats passing up and down, to make contributions towards the repair of the old temple, which is supposed to exercise much influence on the destinies of travellers. In many places the rocks are perforated almost like honey combs, with the numerous holes made by the boat poles, which have been stuck into them for many bygone generations; and some of these we found thirty or forty feet above the water level, indicating a corresponding rise. In the morning we passed the Pih-shwuy ke, a stream on the right, and later in the day the Lo-yun ke on the same side. Directly opposite the last-named, the Ma-tan river enters on the left bank. A few miles further on the same side is the mouth of the K'eu-ke river, which rises in the north-west of Chung department, and flows in a south-west direction for more than two hundred *le*. A town called Shin-ke stands at the mouth. There were formerly two salt wells in this district, but they are now abandoned.

In the forenoon of the following day we reached the minor departmental city of Foo.* There is an extensive suburb along the river side, but only one street of any importance in the city. The most conspicuous object as seen from the river is the Confucian temple with red walls and green and yellow glazed tile roof. A little to the west of it is seen a temple to Kwan-te with a green roof. Just opposite the city, on the north bank, is the 北巖 *Pih-yen* hill, a place of some fame, as the spot where the Taouist devotee Wang Fang-ping prosecuted his contemplative exercises, before the Christian era. But it has gained a later celebrity from the famous 程頤 Ching E, the annotator of the classics, who held office in the city during the 12th century, and was accustomed to

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* Foo is the somewhat anomalous pronunciation of this name by the natives of the place; but there is reason to believe that the older sound was Pei, if we may rely upon an ancient rhyme that has been handed down, thus:—

益梓利夔	最下忠涪	恭萬尤阜
Yih tsze le kwei,	*Tsuy hea chung pei,*	*Kung wan yew pei.*

"There's Yih, and Tsze, and Le, and Kwei,
And least of all are Chung and Pei,
But Kung and Wan more mean than they."

retire to a small grotto in the cliff, while writing his notes on the 易經 *Yih-king*. The grotto is still called the 點易洞 *Teen-yih tung*, a cell about six feet wide by four feet deep, and eight or ten feet high. An endowed school for students has been established there in honour of Ching's memory since 1217, and has been revived from time to time, but like most institutions of the kind it is in a languishing state. The tutor was absent when I visited it, but his room exhibited all the apparatus of a scholar. I saw three young men, probably about eighteen years of age, who told me they were students, and said there were something over ten in all. The building is large and there are many traces of Ching and other scholars of later date. Adjoining the grotto are several pavilions and ornamental structures, ponds and paths, which together with the natural curiosities render it a picturesque and agreeable spot. It is customary for the mandarins of the city to pay a visit to the place on the 7th day of the year. On the east of the city, the 黔江 *Keen-keang** discharges its waters into the great river directly opposite the 銅柱灘 *Tung-choo tan*, a formidable rapid. This is entitled to rank as one of the second class rivers in China, draining as it does the main part of the watersheds of Kwei-chow province. Rising in the west, and absorbing an extensive system of ramifications, it gathers into one main stream, the waters of the six prefectures of 大定 *Ta-ting*, 貴陽 *Kwei-yang*, 遵義 *Tsun-e*, 平越 *Ping-yu*, 石阡 *Shih-tseen*, and 思南 *Sze-nan*, in Kwei-chow; besides half the prefecture of 施南 *She-nan* in Hoo-pih, and the districts of 酉陽 *Yu-yang*, 黔江 *Keen-keang*, 彭水 *Pang-shwuy* and 南川 *Nan-chuen*, with the department of Foo, in Sze-chuen; flowing in its greatest length nearly eight hundred miles, in a general north-easterly direction, before it joins the Keang. It is said there are brine springs to the south-east of the city; the supply was formerly sufficient to employ more than four hundred boiling pans. Between sixty and seventy miles up the Keen-keang, an intermittent bubbling spring is spoken of, which rises three times a day to a height of more than a foot. Ten miles east of the city iron is found, which is used by the natives for making knives.

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* This river is also called 涪江 *Foo keang*, and 烏江 *Woo keang*.

In the forenoon of June 1st we passed the Le* river on the right, nearly opposite which is the Sha chow, an island more than three miles long.

Next morning we passed the Lung-ke river on the left. This rises in the south east of Leang-shan district, runs past the district city, receives eight tributaries large and small, one of which passes the district city of 墊江 *Teen-keang;* and enters the Keang after a general south-westerly course of more than a hundred miles. About noon we arrived opposite the district city of Chang-show, but as there was a strong rapid between us and it, our skipper objected to pass over. The city itself is on the top of a hill two or three miles from the river, but there is a large suburb by the water side, with a street leading up to the city. On the east side of the settlement is an old stone bridge of four arches with buttresses between, and a line of sheds on each side of the pathway. This crosses the Taou-hwa ke, a stream rising among the hills in the north of the district. Four miles beyond this we stopped for the night, at the village of Shen-pei to on the right, where a small stream flows in from the south.

Early in the forenoon of the following day, we were at the town of Lo-tseih chang† on the left. This is on the site of the ancient district city of 樂城 *Lo-ching*, which was abolished in A.D. 254. In the heat of the afternoon we stopped at the small village of Tae-hung kang, for the boatmen to rest for an hour. The village is perched on the top of a sharp ridge of rock of the same name, on the left bank, round which the Tae-hung‡ river winds. This rises in the west of the district of 大竹 *Ta-chŭh*, and flows southward, receiving one tributary on the east, and three on the west, one of which passes the district city of 隣水 *Lin-shwuy*. About twenty-seven miles lower down it is joined by the 寶石 *Paou-shĭh* river from the north east, above ninety miles long. The united waters then flow south for more than a hundred *le* to the embouchure. Some few miles beyond this a small stream enters on the right; and a fine wooded hill appeared to stand far out into the river. This proved to be an island§ at high water season, but the water communication was

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* This is also called 離鄉 *Le-heang* river.

† The old name of this is 樂積 *Lo-tseĭh*.

‡ This is also called the 梅溪 *Mei-ke*.

§ This island is not noticed by Blakiston.

not complete when we passed. It is about two miles long and some four hundred feet high. A temple stands picturesquely on the slope of the eastern end, called the Chung-keang she, and this seems to be the name by which the island itself is known; but another name given by the natives is 大沙坝 *Ta-sha pa.*

Late in the afternoon of the 6th we passed up the *Tung-lo hea* or "Gong gorge," so named from some fancied resemblance between that musical instrument and the stones in the cliffs; this is named Iron gorge by Blakiston. Compared with the gorges we had already come through, this was tame; the hills were neither so high nor precipitous; but there were some pretty hamlets scattered about here and there. A small village stands on the left bank just beyond the upper end, and a stream from the north enters the river there. Two or three miles beyond, where the river takes a bend, we found them working coal in the face of the hill on the right bank.

We were on the move next morning before daylight, and as soon as we could see anything Chung-king was in sight, and the Pinnacle pagoda or *Wăn-fung ta* in the distance. As we approached the city, the banks of the river were pretty and interesting, from the number of temples and other buildings almost in continuous succession; and the numerous junks anchored along both sides, indicated the proximity of a great mart. There are two cities, one on either side of the tributary river Hŏ-chow ho. That on the north, Le-ming, is a secondary to Chung-king prefecture. It lies up the slope of a hill, and occupies a considerable space of ground, but there are only two business streets in it, one at right angles to the other. The prefectural city of Chung-king is on a very different scale, and has every appearance of a great mercantile emporium. During the four days we spent walking through it, I can scarcely say we visited every street, though we were through the principal thoroughfares. I should think the population is not inferior in number to Hankow. The city stands on a triangular point of rock between the Ho-chow river and the Keang, and is from two to three miles in length. The name of the district is 巴 *Pa*, which was formerly the name of a large region of country there, and is said to have been given on account of the outline of the principal watercourses resembling that character. It requires a good deal of fancy to trace the resemblance. The hill immediately to the west is a vast necropolis, being apparently the general burying-place for the city. It is customary to build

substantial stone family vaults, with several compartments, in anticipation of future need. Many such were occupied by living beggars, and made very comfortable dwelling-houses for them. The Hŏ-chow river, which separates the two cities, was the largest affluent of the Keang we had met with up to that point, since leaving the Han at Hankow. Its principal trunk, the 嘉陵江 *Kea-ling keang* rises in the neigbourhood of the 惟 *Hwae* in Shen-se. Flowing southwards into the province of Kan-suh, it receives the 西漢 *Se-han*, a very considerable river from the north-west with its many tributaries; and entering Sze-chuen traverses the prefectures of 保寧 *Paou-ning*, 順慶 *Shun-king* and Chung-king. In the north of the province it absorbs the 白水江 *Pih-shwuy keang*, a river rising in Tibet; and farther south the 涪江 *Fow-keang* from the west, which traverses the prefectures of 龍安 *Lung-gan* and 潼川 *Tung-chuen*, and the 渠江 *Keu-keang* from the north-east, both large rivers with innumerable branches. The confluence of the two last with the Kea-ling takes place nearly at the same point, on the south-east of the departmental city of 合 *Hŏ;* and hence the river is named the Hŏ-chow from that point, till emerging from the 魚鹿峽 *Yu-luh hea*, "Fish and Deer gorge," it enters the Keang at Chung-king. It thus embraces the waters of nearly the half of Sze-chuen, and a considerable part of Shen-se.

This is a most important river in a commercial point of view. In the autumn and winter months, when the water is falling, native merchants take advantage of the Keang, to carry their goods up through the western provinces; but during the spring and summer season, when the river is flooding, it is customary to ascend the Han, as far as the district city of Meen; there they hire mules for about forty miles over the hills to 陽平關 *Yang-ping kwan* on the Kea-ling river, where boats are obtained, and water communication thus opened up through a very extensive region in the principal part of Sze-chuen, without hazarding the dangers of the gorges.

Parties wishing to go to Ching-too the provincial capital, with the least expenditure of time and money, will under ordinary circumstances find it most economical to proceed overland from this point; whence the journey may be made in ten or eleven days by chairs; while by water, it will probably quadruple that length of time. The shorter route however was not consonant with the object of our journey, so we continued by boat as before.

Ere leaving Chung-king, some important changes had to be made in regard to the boat; the large bowsweep was dispensed with, the sail was disposed of, the crew were discharged, and a new set of men engaged who were familiar with the upper river navigation, the number being reduced to ten or eleven in all.

Our second day brought us to the pretty little wooded rock island *Kwei-ting-tsze*, "Tortoise pavilion," that being the name of an octagon structure on the top, with a temple attached. The rock is supposed to resemble a tortoise in its outline; hence the name Kwei, which the natives pronounce Kew. Within two miles of this we reached the 大茅 *Ta-maou* gorge, commonly called the Maou-urh gorge. In this the rocks on the left bank are very precipitous and overhanging in most places; little sheds and houses being tucked into all sorts of curious spots, with here and there Buddhist shrines. The right bank is less abrupt; but on both sides there are numerous limestone quarries for the whole length of about a mile. There is a cave in the gorge named the 棲眞洞 *Tseĭh-chin-tung*, where tradition says that the Taouist devotee Maou was raised to immortality; and from this event the gorge gets its name. Some three or four miles beyond, is a strong rapid on the right; a little to the south of which is the 麩溪 *Pĭh-ke*, commonly known as the K'e-keang-ho. This is a river of some importance, rising from two sources in the district of 桐梓 *Tung-tsze* in Kwei-chow province; and passing the district city of 綦江 *K'e-keang*, it receives a number of tributaries large and small, during a general northerly course of about a hundred and fifty miles, to its embouchure.

Towards midday on the 12th, we were at the district city of Keang-tsin, a thriving place, with two good business streets. There are large stores of wood, bamboo and coarse crockery. The latter article is said to be manufactured at a place called 大巴崖 *Ta-pa yae*, a few miles distant to the north of the river. At Lung-mun tan, where we stopped for the night, a large rocks juts far out into the river, causing a rapid which is considered dangerous in high water season.

On the 16th we passed Tuman-shah Island, a low bank about a mile and half long, with a few houses on it, and shortly after, the town of Choo-kea-to on the left; beyond which at no great distance we came to a somewhat formidable rapid at a place called Tuy-kea-shih.

Early in the forenoon of the 18th, we were at the district city of Ho-keang. There is one good business street inside, from the North to the South gate. Another and shorter street enters it at right angles, but the shops are of an inferior class. A busy suburb runs along the river side, some two miles in extent. The Chih-shwuy ho, a river of about three hundred and fifty miles length, enters the Keang on the east of the city. Rising in the north-west of the prefecture of 鎮雄土 *Chin-heung-too*, it dips into the province of Kwei-chow for sixty miles or more, passes the district city of 仁懷 *Jin-hwae*, and receives a large number of accessories, forming a very tortuous course in a general north-easterly direction. One of its southernmost tributaries is named the 鹽井河 *Yen-tsing ho* "Salt well river," implying the existence of such wells in the vicinity. From the exceedingly winding character of the Keang, between Keang-tsin and Ho-keang, the distance by water is half as far again as by land.

In the forenoon of the 19th we reached Schereschewsky Island, opposite which, near the left bank is a strong rapid; and towards evening we came to another.

On the evening of the 20th we arrived at the large departmental city of Loo, where we remained till the 25th. An active trade is carried on there, yellow silk being a great article of culture and manufacture in that region. The city is agreeably situated, surrounded by hills of a moderate elevation. Nearly a mile west of the city is a very handsome Taouist temple named 呂祖閣 *Leu-tsoo-kŏh*, erected at the expense of the Taou-tae, and efficiently maintained by a number of wealthy families in the city. Leu-tsoo is reputed one of the 八仙 *Pa-seen*, "Eight immortals." In the front of the principal building he is represented in effigy seated on a stork. A neat little closet with a couch covered with scarlet cloth, on the upper floor, is shewn as his bed chamber. There is a beautiful garden behind, a good specimen of Chinese art, filled with dwarfed trees of strange device, rare and curious plants, fish ponds, rockeries, summer-house, &c. all kept in perfect order, with two or three stipendiary priests attached. For several days previously, we had found the natives practising with the dragon boats, at various places along the river, where clubs are established for the purpose; and happening to be at this city on the 23rd, no persuasion could induce the boatmen to move on the following day, the 5th of the 5th moon, being the anniversary of the death of Keu-

Yuen,* and the day of the Dragon boat festival all over the empire. The day bore every appearance of a holiday; from an early hour, small parties were seen collected together in anticipation of the event. As the hours wore on, boats filled with pleasure parties began to assemble, bent on an afternoon's enjoyment, the majority being females, and not a few children, all decked out neat and clean, while good humour seemed everywhere dominant. The city magnates were present in their barges, and a few gun-boats kept passing up and down as a kind of river police. Both banks of the river were crowded with spectators, and about 4 o'clock a shot was fired as a signal, when eight dragon boats of various colours, blue, yellow, white, black, gold, silver, &c. belonging to so many companies, started together. Each boat carried about twenty-six paddlers sitting two abreast, besides a coxswain, a steersman, and a drummer. Off they shot across the river, contending against a powerful downward current, at a pace that would not disgrace some of our amateur oarsmen. On reaching the right bank, one from each boat landed, plucked a handful of grass, and returned with it to the starting point, when the race was over, the whole occupying but a few minutes. The palm was sharply contested by the two first boats. The T'o-keang, a very considerable river enters the Keang on the north-east of the city. This originates from ten or more sources in the north of Ching-too prefecture; some of its head waters being connected with the upper branches of the Min. Its importance may be judged by the fact, that in a course of three hundred miles it passes fifteen district cities, besides communicating with many more by an extensive system of tributaries. Nor is its written history one of recent date, for this is one of the chief rivers named in the "Tribute roll of Yu," in connection with his first engineering efforts; where it is said—"The T'o and the Ts'een were conducted by their proper channels."†

The forenoon of the 25th brought us to a spot where a large expanse of the river was a very shallow covering of a shingle bed,

* Keu Yuen was a minister of the kingdom of Tsoo, in the 4th century B.C. whose integrity having provoked the jealousy of rivals, underhand means were successfully resorted to, to procure his disgrace. Slighted by his sovereign and weary of life, he ended his days by precipitating himself into the Meih-lo river; and the dragon-boat fête is a traditionary custom, representing the boats that went out to search for his body.

† 汎潛既道 *T'o-ts'een ké taou.*

which we had some difficulty in getting over, rubbing the bottom in many places; but I believe there was a deeper channel near the left bank. A few miles above this on the left bank, we passed the town of Shih-pang-kwan, and a little way past that, came to a formidable rapid on the right, caused by a reef projecting far into the river. Our skipper considered this so dangerous that he requested us to go ashore till we were past it. Here a boat was stationed by the authorities of Na-ke, for the purpose of picking up persons who might get into the water; corresponding to the Humane Society's boats in England. This was the first of these boats we had seen since leaving Hankow. About half a mile past this, another reef runs farther out into the stream, but is considered less hazardous. Having passed this we crossed to the left side; but unfortunately our slip in crossing, brought us just below a jutting point of very difficult passage. A temple to Wang-yay stands on this point of rock, and the priest was careful to tell us, that since that temple had been built, the passage was much less dangerous. After a delay of nearly two hours, and twice breaking the towing line, we got round the point, and anchored for the night two or three miles higher up, opposite the city of Na-ken but the boatmen would not cross over, as they said, on account of the strength of the current. Here the Na-ke river, also called the 雲溪 *Yun-ke*, and more commonly the 清水河 *Tsing-shwuy-ho*, enters the Keang. This springs from two sources near the northern boundary of Kwei-chow, and almost south from the city of Na-ke. About a hundred miles long, 永寧 *Yung-ning* is the only district city it passes; but it receives a considerable tributary from the west, which touches the ward city of 瀘 *Loo*. The city of Na-ke lies on the east of this stream, but it appears to be very thinly inhabited. On the west side is a very considerable suburb, more than a mile long. About thirty miles from the mouth of the river is the 江門峽 *Keang-mun-hea*, a very famous gorge. In early times, the river was all but impassable at this point; and it was not till the commencement of Ming dynasty, that the obstructions were cleared away; while the land passage remained one of the most difficult in the province. In 1392, the founder of the dynasty appointed an imperial commission, who removed the offensive boulders, and the following year the river was first made navigable.

In the forenoon of the 26th we passed a strong rapid a little before reaching the village of Yao-choo-yae on the left and another,

higher up. The Tsing-ke, "Clear stream" issues hereabout on the right; a small watercourse, which is said to retain its clear transparency all through the flood season, when the Keang is so heavily charged with mud; and hence the origin of its name. In the afternoon we passed the village of Tsing-kow, "Well's mouth," in the neighbourhood of which former accounts speak of salt wells, if they do not now exist.

Late on the 27th we arrived at the district city of Keang-gan on the right. Inside the wall are two busy streets, crossing each other in the direction of the cardinal points. There is a narrow line of houses also between the city wall and the river, but no great appearance of trade. The Gan-ning ho, a tolerable-sized river, emerges on the west side of the city. This arises from several sources about seventy miles to the south. One branch passes the district city of 珙 *Kung;* two others, that of 長寧 *Chang-ning;* and another, the city of 興文 *Hing-wun.* The united streams flow northward, passing the town of Gan-ning on the east.

We passed Sarel Island in the forenoon of the 29th, just beyond which is a moderate rapid at a place called Ta-shih-pwan. Beyond the upper end of Burton Island there is said to be a strong rapid sometimes, but there was nothing of consequence when we passed. In the evening we anchored at the district city of Nan-ke, which appears to be a quiet comfortable kind of place. There is one long street from east to west, and several cross streets; but we were overtaken by darkness before we had time to go all over the city.

Early in the forenoon of July 1st we passed the village of Nan-kwang-tung on the right, standing on the west side of a picturesque ravine, through which the Lae-fuh-too river finds its way to the Keang. This originates in six streams, rising about the southern boundary of Seu-chow prefecture, the waters of which all unite on the north of the town of 平寨 *Ping-chae,* under the name of 宋江 *Sung-keang.* Thence winding northwards, it passes the district cities of 高 *Kaou* and 慶符 *King-foo,* near which latter it receives a tributary from the district city of 筠連 *Yun-leen* to the south-west, and flows north-east to its embouchure, altogether more than a hundred miles in its greatest length. A few *le* beyond this village, on turning a bend in the river, we had the large prefectural city of Seu-chow full before us, in the angle formed by the confluence of the rivers Keang and Min. The rock of which Blakiston speaks, south of the city, was covered, and formed a strong rapid; and we hauled up some distance above

that before attempting to cross. We then worked round to the north-east side and anchored in the Min; thus taking leave of the Keang after a three months journey up its muddy waters. I have given several of the local names of the Keang upwards. Here the general name of Keang terminates, and formerly the northern confluent was considered the main trunk, known also under the names of 汶江 *Wan-keang* and 都江 *Too-keang*. Now however the southern stream is generally admitted to be the main, and is named the 金沙江 *Kin-sha-keang;* also sometimes the 馬湖江 *Ma-hoo-keang,* and the 瀘水 *Loo-shwuy*. The colour of the water seems to mark this as the principal channel; and we were immediately struck by the difference of hue, the Min being comparatively clear. The latter is also narrower, being somewhat contracted at the mouth, where it cuts its way through a mountain range running north-east and south-west; and the current is not quite so swift. The 合江樓 *Ho-keang low,* "Gallery of the United Streams," a fine long three-story building, stands conspicuously at the angle, outside the wall. The city is one of the first class, in magnitude, importance, and general appearance. There are many fine streets; the shops are well stocked, and there is every appearance of an active commerce. The literary examinations were proceeding while we were there, which still farther increased the animated aspect of the place.

We now part from the united waters of the Kin-sha keang and Ya-lung keang, still more than a thousand miles from the source of either, and proceed in a north-westerly course, up a stream sensibly diminished in volume. Within about a mile of the city, a cliff on the right bank bears the two inscribed characters 銷江 *So-keang,* "The locked river," a relic of the middle ages, indicating the importance that was attached to this pass in early times. The left bank is here flat, and about two miles beyond, the cliffs on the right come to a terminus in a bold projecting bluff; in which a broad flight of steps is cut up to the summit. Round this point the water recedes into a small bay, and the river becomes much wider. A little beyond was a large sand and shingle flat, connected with the right bank, which would have been an island some two miles long, if the water had been a foot or so higher, and must be entirely covered at the time of high water. Walking along the bank, we observed numerous signs of gold washing, indications of which we had also seen at several places along the Yang-tsze. We were too late in the season to see the operation

in actual progress, as it is only practised during the low water period; the particles of gold sinking towards the lowest parts of the bed. Here however the labours of the washers had been very recent; and one of the machines was still standing on the sand, as if it had been just left by the operatives. A shallow bamboo basket, about eighteen inches across, rests on two feet, by means of which it is rocked to and fro. Fixed on a table-like stand is a long wooden surface, inclined at about fifteen degrees, on which the sand and water are precipitated and run down, while the weight of the gold particles causes them to remain at the upper end of the slope.

The right bank was there nearly twenty feet above the water, but I was informed that in the time of high water, it was submerged for several feet, a statement corroborated by the existence of an embankment a little way inward. A large curve in the river towards the west is known as the *Tung-lo wan*, "Gong bend." This is caused by the position of the hills; two ranges coming to a termination here on the left bank. These are of bright red sandstone in horizontal strata, from five to six hundred feet high, and the greater part cultivated. A narrow valley runs north-east between the two ranges; and the village of Soo-po-ke at the mouth is a memento of the poet Soo Tung-po, who frequented the spot. About dusk on the 3rd, we stopped for the night at a hamlet named Neu-kow, on the left, just beyond a large island.

Next morning soon after sunrise, our passage cut through another cross range, the left bank presenting a most remarkable red sandstone bluff, named the 朝陽崖 *Chaou-yang yae*, also called the 赤崖 *Chih yae*, "Red cliff;" but the popular name is Tseen fuh yae, "Precipice of the thousand Buddhas." On the western side are two or three houses of entertainment. Zig zag flights of steps are cut in the steep face of the cliff, and lead to an embattled wall about half way up, with a block of buildings within. Steps continued to the summit lead to the 天平寨 *Teen-ping chae*, a stockade with a most commanding position, having complete control of the river. A little further on, the cliff forms an abrupt precipice overhanging the river, beautifully ribbed by a series of vertical lines, formed by the water trickling down the surface. Above the towing path is quite a gallery of sculpture, containing a number of tablets of Buddhist mythology; just beyond which are four conspicuous characters 丹山碧水 *Tan-shan peih shwuy*, "The carnation hill and jasper waters." As we round the bluff,

we get in sight of a natural stone pillar, some fifty or sixty feet high, with a large tree in the cliff overshadowing it. This is termed the Keang-keo tseih, "River's foot rock." The right bank is comparatively low, the cliffs scarcely a hundred feet high, but increasing gradually as we advance. Some three or four miles higher up, is a long line of lofty precipitous cliff on the left, where the river goes by the name of 石鴨子 *Shih-ya-tsze*, "The stone ducks," and a strong rapid there is termed the "Stone duck rapid." Towards the upper end, a stone tablet in front of a dilapidated temple, contains some notes regarding the river, which I thought it might be worth while to jot down, thus:—"More than sixty *le* from the prefectural city, the Stone duck rapid is so named on account of its dangerous character; not that there is really any stone duck there, but in the last month of winter the water comes rushing down like a flock of ducks; when boats from above should keep within ten feet of the east bank. Below this is a place called the 魚兒石 *Yu-urh-shih*, "Fish stones," where are several remarkable stones resembling fish, twenty or thirty feet long. Some years they appear above water; in others they are a foot or two below, when boats ought not to pass over them. When the river is narrower, several stones appear also on the bank like crooked horns. A little below is the "Great rock horn," standing upright in the middle of the stream. There are also three curious stones named the "Three spear stake stones," as they stand together resembling spears. Besides these, there are the "Leprosy stones" and the "Beetle-shell stones," forming most dangerous rapids, and though several feet under the water, boats passing over them are severely shaken." Just about the spot where these interesting varieties occur, it was the fortune of our towing line to snap in two, and down we went with accelerated velocity a mile or so, before they could manage to haul up to the shore. No mischief however occurred, beyond the delay. The character of the river in the vicinity may be surmised from the fact of a life boat being stationed there. A mile or two beyond this, a considerable-sized stream, called the 登溪 *Tăng-ke*, and popularly the Tăng-t'ow ke, cuts its way through the rocks on the left. The source of this is said to be more than a hundred *le* distant, but it is only navigable by boats about five miles up. A little higher, on rounding a rocky headland on the right, the hills by the river side become lower and less precipitious, and the Chin-ke river flows in from the north-west, against the village of

Chin-ke-kow. Soon after passing this we arrived at a long narrow shingle spit, stretching directly across the river from the left bank, half a mile or more. After losing a good deal of time in getting round this, we were against the Kaou yae, a perpendicular cliff level like a wall, about 200 feet high, with a flight of steps cut in the face, by which the trackers ascended to the summit. Past that the water runs very strong for a long distance, and there is a powerful rapid at the upper end, where passengers are requested to go ashore, and make an ascent, somewhat perilous for slippery shoes, up a narrow broken pathway in the rock. An island opposite the rapid about three miles long, is named the Hwang-teen pa. A mile or two beyond, a small stream coming down a ravine on the left is known as the Man-tung ke, "Stream of the Man-tsze caves." A fine specimen of these cave dwellings is seen in the cliff on the north side of the ravine, and there are probably others farther up the stream.

Here I ought to say a few words on these remarkable excavations, which we had been in the habit of observing almost daily, since the day we left Chung-king. Our attention was arrested by square apertures in the face of the cliffs, generally at heights inaccessible by ordinary means, and with no visible media of approach. In answer to all inquiries as to what they were, the uniform reply was that they were 蠻子洞 *Man-tsze-tung*, "Caves of the Man-tsze," a wild and early race of people, who inhabited that part of the country so late as the 3rd century of our era. Their descendants having been driven back into the less cultivable mountain regions in the west, have continued a distinct race to the present day, never having amalgamated with the Chinese proper as a nation. Emissaries from them emerge from their seclusion periodically, for the purpose of bringing down their native produce, chiefly woven fabrics, which they barter in the Chinese markets. Such is about the sum of the information that I could gather from the natives regarding them; but an investigation of the early history of the empire, at the native sources, would no doubt disclose many interesting facts, in an ethnological point of view, and well repay the trouble. Men eminent for their gifts and attainments, at times emanated from their community; their contests with the subsequently dominant race were long and severe; and for many centuries after their complete subjugation, or rather expulsion, their name was used to designate the whole of Southern China; albeit generally as a term of contempt cast upon the

inhabitants by rival nations. Even down to the time of the Yuen dynasty, we find Marco Polo, whose lot was cast among the Mongols, using the term *Manzi* for the proper name of the country ruled over by the Sung dynasty; but that appears to have been an invidious epithet applied by the Tartar conquerors to the Chinese in the south. No other traveller in China that I am aware of, gives the country that designation. We were naturally anxious to inspect these antique remains, and entered a good many of the caves. The majority of them are plain hollow cubes, laboriously chiselled out of the solid rock. The entrance is an aperture about four feet square, inside of which is an oblong chamber, some seven feet wide, by eleven feet in depth from back to front, and about six or seven feet high. The rectangular form is very fairly preserved, and the chisel marks are uniformly apparent all over the walls, but there is no attempt at smoothing. Such is the simplest form, but many others we entered were much larger and more elaborate; frequently we found recesses cut in the sides of the chambers, and in some I observed groves, as if intended to receive a shelf. In some were several wards or chambers connected by passages, and occasionally apertures for windows. One I entered, evidently of a superior class, had an outer apartment, as it were a vestibule, about seven feet high, which led into a gallery by an ascent of near a foot. Two large chambers branched off on the right side, and three smaller ones on the left, these being separated from each other by thick walls of rock left standing. In two of the smaller chambers, recesses were cut in the walls on each side, as if intended for cupboards; perhaps wardrobes or something of the kind. On the face of this, and on some others, were specimens of carving; but they appeared to me too fresh to be of such an age, and I rather incline to the belief, that they are subsequent decorations. The subjects are connected with hunting life. These rock dwellings are exceedingly numerous; sometimes we see a solitary one; five is the most common number; but we often observed ten or a dozen together. Along the banks of the Min especially, they may be almost numbered by hundreds; and in some places there is quite a colony rising tier above tier, as it were some Troglodite village. In some places we find them disappearing under the utilitarian hands of the quarrymen, whose excavations in places, having cut into the old caves, reveal the plan of the interior chambers and passages. In one place on the Min, near the village of 古佛洞 *Koo-fuh tung*,

they have left a passage hewn out under the rock, now used as an aquaduct, half a mile or more in length. All that I observed were hewn out of sandstone; no moss or vegetation of any kind had taken refuge on the walls, and they looked as fresh as if they had been newly made. Not a written character was to be found on them, nor did I see the slightest indication of idolatry. Many of them were high up in the perpendicular rock; fifty, sixty, and some a hundred feet and even higher. These will probably remain for generations unmolested, and are in many cases fringed with a crop of rank grass, protruding from the edge. Others that, from accidental circumstances, have become more accessible, have occasionally been turned to account in recent times. Some I saw had been occupied by mendicants or other refugees; on some occasions I found them converted into Buddhist shrines; not a few are stopped up, and have probably been appropriated as rock sepulchres; one I found with a rude flight of steps built up to it, and used as a lumber room; and in one I observed the floor covered with fresh-turned earth, ready to receive the seeds of some vegetable crop. What has been the object of making them in such inaccessible spots? Some of the natives say, for self protection. I am not satisfied on that point; but if such were the case, they certainly had impregnable fortresses in the days of bow and arrow warfare. However that may be, they are no doubt the most ancient architectural remains in China, and would probably be worth further investigation.

The location of the remnants of these people is now chiefly in the provinces of Yun-nan and Kwei-chow. The 皇清職貢圖 *Hwang tsing chih kung t'oo*, "Illustrated notices of the tributaries of the Manchu dynasty," records the existence of the following tribes in Yun-nan:—the 羅婺 *Lo-woo* Man of Woo-ting and the neighbouring prefectures; the 窩泥 *Wo-ne* Man of Yuen-keang and neighbouring prefectures; the 苦葱 *Koo-tsung* Man of Lin-gan and neighbouring prefectures; the 撲喇 *P'o-la* Man of Lin-gan and neighbouring prefectures; the 撒彌 *Sa-me* Man of Yun-nan and neighbouring prefectures; the 獠獟 *Leih-leih* Man of Yaou-gan and neighbouring prefectures; the 摩察 *Mo-ch'a* Man of Woo-ting and neighbouring prefectures; the 扯蘇 *Chay-soo* Man of Tsoo-heung and neighbouring prefectures; the 侮雞 *Hwuy-ke* Man of Lin-gan and neighbouring prefectures; the 麼些 *Mo-seay* Man of Le-keang and neighbouring prefectures; the 麥岔 *Mih-cha* Man of Woo-ting prefecture; the 嫚且 *Man-*

tseay Man of Yaou-gan prefecture; the 利米 *Le-me* Man of Shun-ning prefecture, and the 普岔 *Poo-cha* Man of Keae-hwa prefecture. In Kwei-chow are noted, the Man tribes of Kwei-ting district, Too-yun prefecture and neighbouring places.

A short distance beyond the Man-tung ke, is the Kwan-yin ke, a small stream of no importance, and a few miles further on we came to an anchor after dark, against an isolated bank named Yung-lo pa.

Having spent a day at anchor there, in the forenoon of the 6th we reached a very wide part of the river bed, containing quite a series of islands and shingle flats, dividing the stream into several channels. On the left is the island of Tae-kung pa, cut off from the main land by a considerable stream about three miles long. There are also the islands of Seaou-kea pa, Seaou-shang pa, and numerous lesser banks, which must be ever changing with the varying height of the water. As the channel our boat was to pass up was very shallow, it was deemed advisable for most of us to go ashore, in order to lighten it; and we walked on a few miles to the large village of Ne-ke, where we waited an hour or more till the boat came up. Above this place the river is again contracted within comparatively narrow limits, between the hills on either side, which rise from one to two hundred feet high, and come down to the water's edge. After two or three miles the bed again widens out, with extensive shingle beds alternately on the right and left sides. The river now skirts the hills on the right, while a plain about a mile in width lies between it and those on the left. All day our view on the right was a promiscuous assemblage of hills, rising range above range into the far distance, the general bearing parallel with the river, the nearer, from one to two hundred feet high, and the more distant ranges apparently several thousand feet. Our view on the left was more circumscribed, scarcely any hill tops appearing beyond those in the immediate vicinity of the river. As far as we could see distinctly, they were all bright red sandstone and cultivated in terraces to the top. Such was the character of the banks, till our course cut through a cross range of considerably greater altitude a short distance beyond the town of Yue-po chang. After passing this, the hills recede on both sides, leaving a valley between, several miles in width, the river meandering from side to side. Some few miles beyond, strata of grey sandstone appear in the rocks on the left, interspersed between the purple, and

inclined northward at about 40 degrees. In many places they run out in reefs, forming a series of rapids, in one of which our boat turned round and we were driven back half a mile. A mile or two beyond this the cliffs come to a terminus, and the hills on the left recede abruptly to a great distance. From the town of Ma-lew chang the river had been inclining in a rather easterly direction, but now it took a sharp turn westward almost at a right angle, and at no great distance again resumed its northerly course. Passing some bold red cliffs on the right, a few miles further on, opposite the town of Yaou-koo chang, towards evening we were at the hill Tsze-yun shan, on which is a celebrated temple to Wang-yay, the guardian of the river. Nearly opposite this is a very conspicuous lofty red cliff, bearing on the face the inscription 孝女嵓 *Heaou-koo yen* "The filial maiden's precipice." The current runs very swift and deep here, and as there is no towing path, it was with some difficulty that our men worked up with hooks and poles. Having got round the corner and hauled up for half a mile further under high cliffs, we crossed to the right and were barely able to make the point, where stands the village of Ho-kow. The Tsing-shwuy ke here enters the Min, after a flow of a hundred miles from the west, passing the borough of 馬邊 *Ma-peen* in its upper waters. As it was quite dark when we reached it, we could not see its actual size; but judging from the strength of the current, I should imagine the volume of water to be very considerable.

Four or five miles through a very tortuous part of the channel, brought us to the district city of Keen-wei, in the forenoon of the 8th. A large shingle bed separated the city from the river, and for about half the length of the frontage there was a considerable lake. The appearance of the place indicates a busy retail trade, the business part being entirely within the walls, and scarcely any suburb worth notice. A few miles higher up on the right is a prominent cliff known as the Man-tung. From the opposite side of the river, we could see distinctly nine of these caves in the rock. About half a mile above is a rapid, said to be the most dangerous in the province, and we crossed over to avoid it. The cliffs hereabout are mostly grey sandstone, inclined to the south at about 25 degrees, with large seams of coal on both sides of the river. In the evening we came to a strong rapid on the left, which, with the aid of some auxiliaries, we had a good deal of

difficulty in ascending, and anchored for the night immediately beyond.

Next morning on starting, through some mismanagement, our men lost control of the boat, and we were precipitately borne down the rapids which it had cost so much trouble to ascend the night before, being carried fully a mile before we could get a mooring. A mile or two beyond, the village of Mei-tan kow on the right is a mart for coals, with some workeable mines apparently in the neighbourhood. Higher up, on the same bank, a coal pit in the cliff was being worked at the village of, Ta-ma-tow.

On the evening of the 9th we anchored for the night at the town of Mo-tsze chang, and about two hours after starting on the following morning, passed close under a cliff on the left with some curious Buddhist sculptures, one of the Man-tsze tung having been apparently appropriated to the same purpose. A few miles beyond this we arrived at a very prominent rocky bluff, standing abruptly out into the river. This is called the *Taou-sze-kwan* or "Taouist's cap," from a fancied resemblance in the form. At the south end a flight of steps is cut in the rock, which rising from the water, ascend below a huge overhanging mass. On the face of the cliff, just under the steps is the inscription 履險如夷 *Le heen joo e*, "Walking through dangers like an ordinary path." Low down near the water is a heavy chain, strongly fastened into the rock by iron staples, for boats to pull up by in case of need. One of the strongest rapids on the river runs past this, and men are always in waiting to render assistance to boats. Having reached the upper end of the cliff, it is customary for boats to have a hawser attached, by which they hold on till they get through the strength of the rapid, while crossing over to an island near the middle of the stream. Our skipper however neglected this precaution, and the strength of the men proving insufficient to bring us up to the island, we were swept down towards the right bank. All their efforts were now of no avail, and we were irresistibly sucked down into a boiling eddy. The men all dropped their oars instantaneously, and crouched down on the deck, expecting the next instant to be in the water, and not a word was spoken or a sound uttered. The boat was whirled swiftly round, close under an overhanging cliff, and had we struck, there is little chance that the present narrator would have been left to tell the tale. But we were mercifully preserved, for we just cleared by some two or three inches. Immediately the head

got round, one of the senior trackers rose and assured the skipper that the danger was past. Undoubtedly it was the narrowest escape we had throughout our journey. Having thus been carried to the upper end of the eddy, the men easily pulled over to the island, and tracked up the east side. A mile or two above this, some coal mines were in active operation; and the small town of Se-pa chang a little further on is almost entirely dependent on the coal trade. Not far from this, the 竹根灘 *Chŭh-kan tan*, another dangerous rapid occurs; to avoid which we passed up a narrow channel on the right for a few miles, inside some islands, and crossed to the left just above the rapid; where we learned that a boat passing over the day before had lost their bowsman.

For several hours before reaching this point, we had observed the atmosphere blackened by numerous columns of smoke rising on the left bank, and connected with the same a vast collection of tall wooden framings, resembling military look-out stages, except that something like a chimney was seen to rise from the top, and in many of them a stem like a flag-staff shot out high above the supposed chimney. These marked the spot of the far famed salt wells; an object which cannot fail to arrest the attention of the traveller, and as a matter of course we embraced the opportunity to visit such a curiosity. The neighbouring town of Chŭh-kan-tan is named after the rapid; and a street at right angles to the river, a mile or more in length, brought us to the town of 筌子嘴 *Tseuen-tsze tsuy* on the other side of the island. Opposite this a stream issues from the left bank, on the north side of which is the village of 五通橋 *Woo-tung keaou*, with a number of these wells, and an excise office, where a duty of five or six cash the catty is levied on the article. On the south side is the village of 青龍嘴 *Tsing lung tsuy*, consisting almost exclusively of salt establishments; a number of which we took occasion to enter. As they are all precisely the same in construction, merely differing somewhat in their dimensions, a description of one will suffice to give an idea of the whole. Over the mouth of the well is erected a strong tapering wooden framework, about fifty feet high, consisting of four corner posts and numerous cross pieces. From the centre rises a wooden cylinder, projecting twenty feet above the framing. The mouth of the well is covered by a stone, having an aperture of about five inches diameter. Down this is inserted a bamboo tube, from fifty to sixty feet long,

consisting of four lengths strongly bound together. The smaller tubes hold about a bucketful of brine, but the larger ones contain several buckets. Connected with the lower end of the tube is a strap, also formed of bamboo about an inch and quarter wide, by which it is lowered and raised. A horizontal axis attached to the wooden framing, carries a drum wheel about five feet diameter, nearly above the orifice of the well. Over this the strap passes, and is conveyed to a vertical cylindrical framework about sixteen or eighteen feet in diameter, and rising some fifteen feet from the ground. This cylinder moves on a wooden axis, fixed in a strong wooden framing, and is turned by two or more buffalos; the whole apparatus being under a shed. To each of these cylinders is attached the strap from two wells, one above and the other below, the straps being wound round it in reverse directions; so that by one motion of the cylinder, as the tube of one well is descending, the other is being drawn up; and thus they get a continued alternate motion without loss of power. Connected with the mouth of the well is a shallow stone cistern, into which the lower end of the tube is placed, when it rises above the orifice. A plug is then withdrawn, and the contents are discharged into the cistern. The ascent of the strap averages about a foot a second. One well we examined was from five to six hundred feet deep; another was eight to nine hundred; another was above a thousand; but we were told that some were considerably over two thousand feet. Father Imbert speaks of one more than three thousand feet deep, on which they had been engaged boring for about a dozen years.* The average time consumed in boring a well is about three years, and the cost about ten thousand taels. There are said to be many hundreds in the neighbourhood; some even named thousands, which is not improbable. The topography published in 1717 gives the number in the district as 614, but it has probably been greatly increased since that time. Father Imbert speaks of some tens of thousands within an area of about thirty miles long by about twelve or fifteen miles in breadth.† In some of them we detected a faint smell of gas, but it was scarcely perceptible. Some few of the wells we were told produced a very little petroleum of a green colour, but nothing sufficient to become an article of commerce. From the stone

* Chinese Repository, Vol. 19, p. 399.

† do. do. do. p. 325.

cistern, the brine is conveyed by bamboo pipes to the boiling house. This is sometimes in the immediate neighbourhood; but in other cases it is at a great distance, even as much as five miles or more; the aquaduct consisting simply of these bamboo trunks joined end to end. In some of the boiling houses we found as many as twenty or more furnaces, with so many strong iron boilers, each about five feet diameter and five or six inches deep. After the process of boiling is carried on for a day or more, during which time new brine is added as the evaporation proceeds, the result is a huge cake of salt, about five hundred pounds weight, and as hard as a stone. These cakes are broken into smaller pieces and are then ready for the market. The retail price there, after customs have been paid, is thirty five cash the catty. The following morning as our boat was slowly toiling up the rapids, we walked on a few miles to the town of Neu-hwa-ke, a place of some twenty to thirty thousand inhabitants, where these wells are very numerous, and we have every facility to confirm our experience of the previous day. The hill in which most of these are sunk is called the 紅巖山 *Hung-yen shan*, "Red precipice hill," on the top of which is one of those singular formations called Fairy bridges. As the sun was not very high above the horizon when we passed, and we were on the other side of the hill, the stream of light that shot through the aperture gave an extremely pretty effect. The rock was soft disintegrating sandstone. We could not get an opportunity to see the process of boring, but found one of the instruments they employ in a blacksmith's shop. It was a square iron rimer about ten or twelve inches long besides the shank, and two inches thick at the larger end, the edges jagged with large notches alternately in opposite directions. This was fixed to an iron spindle, and worked up and down in the manner used for husking rice. The famous Fire wells and Oil wells are at 自流井 *Tsze-lew tsing*, a place two or three days distant to the east.

Early in the afternoon of the same day we reached the *Ma-gan-shan* or "Saddle hill," a very conspicuous isolated rock on the left bank, with high bold red cliffs and two depressions on the summit. The fissures in the rock assume some very fantastic forms, and in places the cypress trees are seen growing downwards. The natives trace the forms of a horse's head in the northern end; and with the exception of a little imperfection about the ears, the resemblance is tolerably accurate. Immediately

beyond is 烏尤山 *Woo-yew shan*, another prominent hill densely wooded with large trees. On the northernmost pinnacle a truncated pagoda-like structure is seen through the trees, immediately below which is a precipitous red cliff. The old name of the hill was *Woo-neu shan* or "Black ox hill," as from its jutting position, it was thought to resemble an ox standing in the water. Before reaching this we had the prefectural city of Kea-ting full in view, and were at the confluence of two rivers. The westernmost is one of two outlets to the river Yang-keang, which though scarcely if at all inferior to the eastern, is yet considered the tributary. The main trunk of this river, called the 大渡河 *Ta-too ho*, is a continuation of the 金川 *Kin-chuen* river, which rises far away to the north-west in the Kokonor region. Entering the province of Sze-chuen, it crosses the borough lands of 雜谷 *Tsih-kuh* and 懋功 *Mow-kung*, enters the prefecture of 雅州 *Ya-chow*, where it first takes the name of Ta-too, and receives the united waters of a multitude of small tributaries from the 打箭鑪 *Ta-tseen loo* region. Still flowing southward for several hundred *le*, it then bends abruptly towards the east and receives the united waters of a number of minor affluents some of which pass the district city of 清溪 *Tsing-ke*. In its onward course it passes the borough town of 峨邊 *Go-peen* on the south, and when near the city of Kea-ting, receives the 青衣江 *Tsing e keang*, an affluent, nearly if not quite equal to the original stream in volume. It thus traverses a course of five hundred miles within the boundaries of Sze-chuen province, gathering up the contributions of innumerable feeders throughout the whole length. The Tsing-e, though much inferior to the Ta-too in extent, is probably from its position, the more important river of the two. Its head-waters rise in the neighbourhood of Mow-kung, and entering the prefecture of Ya-chow, two of its channels pass the district city of 蘆山 *Loo-shan*, then uniting, flow southward, and receive a collection of small streams from the neighbourhood of the departmental city of 天全 *Teen-tsenen* in the west, while a few miles further there is a much larger accession from a number of streams, one of which passes the district city of 榮經 *Yung-king*. The stream then flows past the prefectural city, and receiving two or three considerable affluents, one of which passes the district city of 名山 *Ming-shan* on the north, it enters the prefecture of Kea-ting, passes the district cities of 洪雅 *Hung-ya* and 夾江 *Keä-keang*, and receives a

united tributary, the principal branch of which passes the district city of 峨眉 *Go-mei;* a short distance beyond which it joins the Ta-too river, and the junction stream enters the Min under the name of the Yang-keang. A second debouchure of this river skirts the southern wall of the city, thus forming a delta of nearly equilateral dimensions each side about a mile and half in length. The strength of the current from this river is very great, and notwithstanding the precaution and skill employed by our boatmen, they failed in their first attempt to effect a landing against the city, and we were swept over to the east side. There ropes are attached to the bank, for boats to pull up by, and after working up the Min in this manner for nearly half a mile, we crossed to the city without difficulty.

The violence with which the waters of the Yang-keang dash against the opposite cliff, produces a rapid of very formidable character, known as the 佛頭灘 *Fŭh-tow tan.* The adjoining hill is named the 凌雲山 *Ling-yun shan,* and also the 九頂山 *Kew-ting shan,* "Nine summit hill" being indicative of its configuration. In the early part of the 8th century, a Buddhist priest named 海通 Hae-tung conceived the idea of a huge figure of Buddha, to avert the incident dangers, a design which was brought to completion after nineteen years labour; and there the figure now stands in a recess of the rock, an image of 彌勒 *Me-lih* Buddha, the most gigantic piece of sculpture in China, and perhaps in the world. Fan Ching-ta, who visited the place in A.D. 1177, gives the height of the figure as 360 feet, circumference of the head 100 feet, and breadth of the eyes 20 feet. The ears he says were made of wood, and the whole was screened by a thirteen story pavilion. The Topography agrees tolerably with the above numbers. I should have been disposed to estimate it much less; but appearances are very deceptive sometimes. Figures forty and fifty feet in height on the same cliff, look quite pigmies by the side of the brobdignagnian Buddha. No vestige of a building now remains in front, it being entirely open to the weather. Whether it be a freak of nature, or the work of some waggish priest I know not, but suspect the latter; for the vegetation on the crown appears so trimmed as to form a perfect head of hair; while creeping plants are pendent from the upper lip, much resembling a moustache.

Both in this and the adjoining cliffs, the caves of the Man-tsze are very numerous, and some are found also on the right bank.

Two or three days journey up the Ta-too river is the 峨眉 *Go-mei* mountain, the seat of an immense Buddhist establishment, almost without a rival; the celebrity of which is about on a par with that of Tae-shan, the rallying point of Confucianism in Shan-tung, and Woo-tang shan, the head quarters of Taouism in Hoo-pih. The scenery in the neighbourhood of Kea-ting is very picturesque, and indeed all the way up the Min, the views are scarcely excelled, even if equalled on the Yang-tsze. The humpback deformity is very common among the people in Kea-ting, a circumstance of which they find a ready solution, in the maladjustment of the *Fung-shwuy*. An active business is carried on in the city. Silk seems to be the principal production and manufacture, a large proportion of the population being engaged in it. This is the centre of the white silk region, but the yellow is also very common.

From this place to the provincial city, the journey is generally performed by land, and occupies five days; as it is but a small part of the year that the river is navigable so high up. We were fortunate in arriving at a time when there was no difficulty in this matter, either way being open to us; and it suited us far better to proceed by water, although it took double the time. On the morning of the 14th we left the northern suburb of Kea-ting, where a stone bridge crosses the Chŭh-kung ke, a stream rising at 石牛 *Shih-neu* hill on the north-west. A little above this on the left bank is the Ne ke, a larger stream, the upper waters of which pass the district city of 井研 *Tsing-yen* in the department of Tsze. Early in the forenoon we reached a large shingle flat in front of the village of Hwan-leang tsuy, which extended far out, causing a sharp bend and consequently swift current, which cost our men a good deal of time and trouble. From a short distance above the city, the hills on the left bank recede from the river, while the right bank gradually increases in height, till we have a continuous range of hills down to the water's edge. The river is a great width in some places, but for the most part very shallow. Shoals and islands are numerous, which divert the principal channel into a very tortuous course. Just after passing a high, well-wooded and cultivated island, the river opens out very wide, takes a sudden bend eastward and then northward; a short distance beyond which we stopped for the night, above the village of Laou-kwan-yin meaou, only ten miles from the city. During the day we passed some large plantations of the Insect-

wax tree. A good deal of this is cultivated in the immediate vicinity of the city, and Mr. John discovered some several days before reaching Kea-ting. So much has been written on this singular production, that I can scarcely hope to throw any new light on the subject. The tree on which we found it is called by the natives the 白蠟樹 *Pih-là shoo*, "White-wax tree" and resembles so closely the 冬青 *Tung-tsing*,* that only a close inspection can discover the difference. In the *Pun-tsaou* Materia Medica, the first authority quoted calls it the Tung-tsing; but Le She-chin, the author of the work remarks that though it resembles the Tung-tsing, it is a different tree. Such is the testimony of intelligent natives also, though many call it the Tung-tsing. I suppose it is merely a botanical variety. The crop seemed to be just in perfection at the time we were there, and the plantations wore very much the appearance of a snowy day, so completely were the branches enveloped in the substance. The only thing in which I observed a disagreement with the accounts published by foreigners was, that the wax was not the least translucent. It was snow-white and as opaque as tallow. The insects *(Coccus) pe-la* were of a dark brown colour, an indication that the season was approaching its end.

* I am informed by Dr. McCartee of Ningpo that the *Tung-tsing* is the *Ligustrum lucidum* of botanists; but he remarks that although it grows very plentifully in that neighbourhood, he never saw or heard of the Coccus on it. I may add precisely the same testimony for Shanghae. In the last volume of the Chinese Repository, p. 424, is an article on this subject, written by Dr. Macgowan, and marked by the characteristic clearness of all his productions, in which he gathers up the various known facts, collected from native and foreign sources. In this he gives the name of the wax tree as *Ligustrum lucidum*. In an editorial note to the same, Professor Julien is quoted,' as giving the *Tong-tsing* as one of the wax-bearing trees, which he transtates by the *Lagustrum glabra*. Two other trees he names also bearing the wax-insect ;—the *Niu-tching*, which he calls the *Rhus succedanea;* but I find Hoffmann and Schultes (in the "Journal Asiatique" for Oct.—Nov. 1852) calls the *Niu-tching*, the *Ligustrum japonicum* of Thunberg, and "*Oleaceæ*" of Endlicher. Another variety is given as the *Ligustrum obtusifolium* of Siebold and Zuccarini, and *Ligustrum ovalifolium* of Haskarl. The same authority states the *Rhus succedanea* to be the Vegetable-wax tree, which is a very different article from the Insect wax. Sibold, in the "Verhandelingen van het Bataviaasch Genootschap," gives the *Rhus succedanea* as the name of the Varnish tree. A short notice of the Insect wax is given by the Jesuit missionary Magaillans in the 17th century, but his information does not appear to be the result of personal observation. The earliest circumstantial account of the process by any European writer that I have met with, is a short *memoire* by the Jesuit Father Chanseaume, in the Lettres édifiantes et

During the night there was a sudden rise in the water, and the following day it was no longer clear as before, but had changed to a dark muddy colour. We found the right bank for several miles lined with the Wax tree; and during the day passed a great number of the Man-tsze caves on both sides of the river. Two or three miles beyond the village of Pan-seaou ke, the hills close in on both sides, and we enter the 羅漢峽 *Lo-han hea*, "Arhan's gorge." Some of the hills on the right there, are very precipitous and densely woods, occasionally exhibiting a sylvan scene of rare beauty. There we find several varieties of the weeping cypress, many species of fir, the wax tree, tallow tree, mulberry tree, mountain ash, the Tung-nut tree, the fan palm, a few plantains, and many other tress, of which I cannot tell the names, the variety of the foliage giving wondrous effect to the *tout-ensemble*. Immediately on emerging from this gorge, which is about three miles long, the river widens out, and the country has a much more open appearance. A mile or two beyond is the mouth of the Kin-neu ho on the right bank, a river that rises

curieuses," (Paris, 1781.) vol. 23, pp. 146 s. q. written about the middle of the 18th century. He speaks of two kinds of trees which produce the wax, but his description is confined to one, which he calls the *Kan-la-chu*, or "Dry wax-tree," which is evidently the tree we saw. The other kind which he calls the *Chouï-la-chou* or "Aquatic wax-tree," he merely speaks of from hearsay. Grosier, Duhalde and subsequent writers have relied very much on this Father's account; but still it does not seem very clear how many different species, and what are really the trees that produce the wax. What is the 水蠟樹 *Shwuy-lā-shoo* or "Aquatic wax-tree" does not appear to be very well known. Hoffmann and Schultes call it the *Ligustrum Ibota*. Dr. McCartee (who appears to be the unacknowledged source of the principal information on the subject in recent European works,) tells me that when he began to enquire about the wax, the natives informed him that it was produced on the *Shwuy-hieuh-shu* or "Water orange," and says, when after two years search for it, he found the insect on the tree, he recognized it as one of the *Fraxinæ*, and thinks it may possibly be the *Shwuy-la-shoo* of the Chinese. Such is the specimen figured in Fortune's "Residence among the Chinese" p. 147 in the "Gardener's Chronicle" for July, 1853, and in Hanbury's "Materia Medica," p. 41. He adds:—Dr. Bradley searched for the Wax insect at Snowy valley in the summer season, and brought me a branch of a small tree resembling a *Betula* upon which was wax, with the insects flying about it like bees." The same friend gives me an exract from the letter of a native correspondent at Kin-hwa, who states that there are three different trees that bear the insect:—the *Tung-tsing*, the 六角刺 *Luh-keo-tsze* (*Ilex* or Holly) and the 碗芝花 *Yuen-che-hwa*, which last we have failed to identify.

among the 萬松 *Wan-sung* hills, on the northern boundary of Kea-keang district.

On the 16th we passed several Man-tsze caves, some of a large size; also the Sin-mo, a river of considerable magnitude which rises among the hills in the south-west of 丹稜 *Tan-lăng* district, passes the district city, and flows south-east to the Min, receiving on the way a large tributary from the "Red cliff" hills on the north. Some of the 獠 *Leaou* tribes are said to have been settled on its banks at a recent period. A little later we passed a stream on the left coming from the 周家 *Chow-kea* hills, in the north of Tsing-yen district; and a few miles beyond, arrived at the district city of Tsing-shin in the department of Mei. This is enclosed by a red sandstone wall, and looks rather poor inside. The principal business street is from the east to the west gates, and a considerable proportion of the inhabitants are dependent on the silk trade.

In the forenoon of the 17th we passed the Yu-shay shwuy, a stream flowing in from the north-east, which rises among the hills in the north-east of 仁壽 *Jin-show* prefecture, between thirty and forty miles distant. Towards evening we were opposite the mouth of the Le-tseuen keang, a river rising from two sources among the 盤龍 *Pwan-lung* hills on the northern boundary of the department which unite about four miles to the north-west of the city, and receiving a tributary from the 筆架 *Peĭh-kea* hills, the junction stream flows south-east to the Min.

Early in the morning of the 18th we were at the departmental city of Mei, in front of which are two large islands, one of which prevents boats getting close up to the walls. Inside the south gate we found it very poorly inhabited; and the western portion seems to be mostly open ground; but there are several busy streets in the eastern quarter.

Soon after starting on the 19th, on turning a sharp bend in the river, we were in sight of the city of Păng-shan, a poor-looking place standing in about half a *le* from the river, and connected by a little suburb; but we passed it without going ashore. About a mile beyond, a stream from the Pwan-lung hills discharges on the right. Three or four miles above this we reached the town of Keang-kow on the left, where there is a confluence of two rivers. Geographically viewed, the western is probably the more important, and is considered the main trunk of the Min; but the eastern which was our course, is invested

with a higher interest politically and commercially, as being the direct route to the provincial city. From this point we are about entering on the great plain of Ching-too, and an inspection of the plan of the watercourses of the country. From the Min mountain range, bordering on Tibet, the drainage of numerous watersheds all converge towards one central channel, which, confined within its rocky bed, enlarges with every successive accretion, till it reaches the district city of 灌 *Hwan*. There however, as if impatient of its long restraint, it takes advantage of the level country, to branch out into a multitude of divarications, forming a perfect network of minor currents, to the extinction of the main channel. These which are all included within the provincial prefecture, may be divided into three series. The northernmost series from part of the head waters of the T'o river, which has been previously noticed. The western series some of the ramifications of which pass the departmental city of 崇慶 *Tsung-king*, and the district cities of 温江 *Wan-keang*, 雙流 *Chwang-lew* and 新津 *Sin-tsin*, after reuniting the vagrant streams, receives a very large accession of affluents from the west, of which some of the streams pass the departemental city of 邛 *Keung* and the district cities of 大邑 *Ta-yih* and 浦江 *Poo-keang*. The central and less intricate series is the one enclosing the city of Ching-too, the principal stream of which, called the 府河 *Foo-ho* we were ascending. The united waters of all these channels meeting in a point opposite Keang-kow, we observed a very marked difference in the character of the river from that point upwards. Besides the great reduction in the volume of water, the islands were so numerous, that with the consequent expansion of the stream, it was very difficult to trace the banks. During the following days of our upward course, we observed a great many of the undershot water-wheels called 桶車 *Tung-chay*, used for irrigating the fields. A very accurate description of these is given by Sir G. Staunton.* They are no doubt economical and effective when in use, but for the greater part of the year they are turning round to no purpose, the natural result of which was seen in the broken down condition of many of them. But there is a much greater evil connected with them, in the obstruction they cause to the navigation. They are a detestable nuisance to the trackers, whose lines are

*"An authentic account of an embassy from the King of Great Britain to the Emperor of China." 4to. vol. 2 pp. 500 sq.

ever running foul of them, and at times can only be cleared at considerable difficulty and some risk. This is probably one of the things that would only be tolerated in a country like China, where inconveniences are borne with stoical fortitude, rather than make innovations on ancestral customs. During the day we had a range of low hills on the left, and observed a great many of the Man-tsze caves; some of which were rapidly disappearing under the quarryman's hammer.

In the forenoon of the following day we passed the *Kwang-lung ke* or "Yellow dragon stream," on the left; connected with which is a tradition, that in the year A.D. 219, a yellow dragon was observed for nine days in the water. More of the Man-tsze caves appeared in the cliffs on the right bank; and at the village of Koo-fuh-tung is a curious temple, built against the face of the cliff, nearly a hunderd feet high, in which both Buddhist and Taouist shrines find a place; but the principal idol is a figure of Amida Buddha in a cavernous chamber on the south side, from which the temple takes its name. A range of low hills on each side of the river again restore it to something like a manageable outline.

About midday on the 21st, we parted company finally with the hills till reaching our terminus, and only saw them afterwards as distant ranges across the plain. Boating is very tedious at this part on account of the shallows; and in some places the current runs very strong; so much so, that our men twice lost control of the boat during the afternoon, and we were carried some way down.

Within a mile of our starting place on the following morning, we came to the first bridge that had crossed our course. There are seven openings, the two end ones being arches, and the five middle ones have planks thrown across from pier to pier. It is named the Urh-keang-she-keaou, from a temple adjoining, dedicated to the spirit of the 二江 *Urh-keang*, "Two rivers," which designation the river goes by from this point upwards, bearing reference to the two streams that flow past Ching-too on the north and south, uniting in one a short distance below the city. Another name for the river in this part is the 錦江 *Kiu-keang*, "Embroidery river," in allusion to the reputed excellence of its water for washing embroidery, an article which is extensively manufactured in the vicinity. Immediately above the bridge we pass the mouth of she Sin-keae ho, a large affluent on the right, and our course

becomes still more contracted. At the town of Chung-hing-chang, a mile or two beyond, is a handsome stone bridge of seven arches across the river. Along the banks of the Min there is considerable architectural display in the temples and other public buildings; and the miniature pagoda-like turrets erected to the honour of Wan-chang the God of Literature, form a very tasteful relief in the landscape. There is much variety of design and some of them are highly artistic. Late in the afternoon we passed the mouth of the Tsow-ma ho, also called the 內江 *Nuy-keang*, "Inner river," which passes south of the district city of 郫 *Pe* and the provincial city; while the river we were ascending is named the 外江 *Wae-keang*, "Outer river," and flows on the north side, to a point above the city of Pe, where the two diverge from a common centre.

Early in the following forenoon we reached Ching-too, passed under a red stone bridge connecting the eastern suburb, and anchored a little below the east gate. The river was running very strong, apparently deep and muddy; an effect due to a sudden rise. Another bridge crosses the river, facing the east gate. This has a horizontal roadway, and a row of sheds on each side from end to end. Beyond this bridge boats do not proceed; so we had reached the highest navigable point on that branch of the Min. A swift flowing river skirts the southern wall of the city, the ends connecting with the Inner and Outer rivers respectively. Outside the northern wall is a wide city ditch, but nearly choked up with reeds and other vegetable productions.

The city is about thirteen miles in circumference, including the Lesser city, which is attached to the west side. The walls are in excellent repair. There are a number of handsome streets, especially that from the east gate. The shops are well stocked and many of them shew signs of opulence. Native productions of every kind are procurable, and foreign goods are quite common, both articles of utility and objects of taste and luxury. One street is devoted principally to clock dealers and *magazins de bijouterie*. French and English pictures are exposed for sale, and now and again we meet with an aspirant who can speak a little English. On one occasion I was detained by a polite young man to hear him repeat his lesson, and help him over some of his difficulties. Of course to a great part of the city the preceding remarks are inapplicable, but taking it as a whole, I should not hesitate to say that Ching-too is the finest Chinese city I have seen. Readers

of Chinese history, especially those familiar with the turbulent period of the 3rd century, will find objects innumerable to interest them in Sze-chuen. Ching-too is notable in this view, as having been the imperial city of the short-lived dynasty of Shuh or the Posterior Han. There is the burial place of Chaou-leih Te the founder, better known by the name Lew Pei. The 皇城 *Hwang-ching* or "Imperial city," inside the walls of Ching-too, still remains, a traditional memento of his royal residence. The area is now occupied by an Examination Hall, said to accommodate from ten to twenty thousand students. The whole has been restored within the last few years, and although some of the ancient names are retained, scarcely a vestige of the original buildings remain. I was pointed to some rockery and ornamental work in the garden, as relics of the original, but there was only a fragment here and there that bore the marks of great antiquity. Eight wells also called the 八卦井 *Pa-kwa tsing* are said to be of the same antiquity. One I was told had no bottom.

While we were at the capital, a plague was raging in the city, and people were dying at the rate of eighty per day. The epidemic was a kind of cholera called 磨腳病 *Mo-kĕŏ ping*. Consequent on this there was an extraordinary display of idol processions through the city, with a view to avert the calamity; and as it is just at such times that the people become more than ordinarily excited, I take it as a proof of the pacific character of the population, that we mixed freely in the crowd without the slightest molestation. We found them remarkably well disposed towards us, and I cannot recall anything offensive during our intercourse with them.* Indeed the same may be said almost of our journey

* Up to recent times, almost the only European author from whom we have any account of Ching-too, is Marco Polo, once maligned for his want of veracity, but now as generally vindicated. It is interesting to compare the brief notes of this old traveller with the actual state of the country. Of this city he says :—"Having travelled those twenty stages through a mountainous country, you reach a plain on the confines of Manji, where there is a district named Sin-din-fu, by which name also the large and noble city, its capital, formerly the seat of many rich and powerful kings, is called. The circumference of the city is twenty mile."....."The city is watered by many considerable streams, which, descending from the distant mountains, surround and pass through it in a variety of directions. Some of these rivers are half a mile in width, others are two hundred paces, and very deep, over which are built several large and handsome stone bridges, eight paces in breadth, their length being greater or less according to the size of the stream. From one extremity to the other there is a row of marble pillars on each side, which

throughout from the time we entered Sze-chuen. The officials, if they did not exhibit that cordial familiarity that we meet with in some places, were at least respectful in most instances, as it was our custom to announce ourselves formally to them, on our arrival at a city, and they never in any case offered to obstruct us. We went among the people freely and openly as Europeans, and were accepted as such, without any noisy demonstration; and I trust and believe that our visit will have the effect of strengthening any favourable tendency that may have previously existed in reference to foreigners.

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support the roof; for here the bridges have very handsome roofs, constructed of wood, ornamented with paintings of a red colour, and covered with tiles. Throughout the whole length also there are neat apartments and shops, where all sorts of trades are carried on. One of the buildings, larger than the rest, is occupied by the officers who collect the duties on provisions and merchandise, and a toll from persons who pass the bridge. In this way, it is said, his majesty receives daily the sum of a hundred besants of gold. These rivers, uniting their streams below the city, contribute to form the mighty river called the Kian, whose course, before it discharges itself into the ocean, is equal to a hundred days journey; but of its properties occasion will be taken to speak in a subsequent part of this book. On these rivers and in the parts adjacent are many towns and fortified places, and the vessels are numerous in which large quantities of merchandise are transported to and from the city. The people of the province are idolators."..."In the city there are manufactures particularly of very fine cloths and of crapes or gauzes."

My own notes were written before referring to this old authority, but it will be seen there is a general agreement between the two. Indeed making due allowance for the time that has elapsed, Polo's account is not a very incorrect description for the present day. I suppose "Siu-din-fu" is an error of transcript for Siu-du-fu, a sufficient approximation to Ching-too foo. Relics still remain of the "rich and powerful kings." The "mile" in his narrative is an uncertain measure. He speaks of "many considerable streams," —which surround and pass through the city. I have already spoken of those surrounding the city; but inside the walls, there is scarcely anything beyond the magnitude of a ditch; an insignificant stream entering the river on the east side of the city. This stream however, the 金水河 *Kin-shwuy ho* represents a considerable-sized canal running through the city from west to east, that existed and was navigated by boats during the Yuen dynasty. It was first opened up during the Tang, but in the course of time was choked up and ceased to flow. Early in the 11th century, the channel was again cleared, and in less than a century it again became impassable, till about the year 1125, when the channel was once more renewed, widened out, and the embankments restored. Three subsequent restorations took place in the 12th century, and the next historical notice we have of it is in the latter part of the 14th century, when the viceroy's official residence was built on the south side, and it received its present designation; so that in Marco Polo's time it

Among the productions of Sze-chuen I have already mentioned Gold, Coal, Salt, Silk, Insect wax, Vegetable tallow, Opium, Tobacco, Coarse Porcelain and Embroidery. To these I may add a few other prominent articles without any pretension to an exhaustive list:—Silver, Copper, Iron, Lead, Quicksilver, Cinnabar, Cedar, Pine, San-muh (wood), Bamboo, Varnish, Hemp, Grass-cloth, Tea, Sugar, Indigo, Paper, Fans, Horsewhips, Umbrellas, Lamp-wicks, Grass-shoes, Wine, Fruits, Spices, Scents and Medicines in great variety and abundance.

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must have been in an efficient state, and in common use for the intra-mural transport of goods. The last restoration we read of was in the year 1731; but the present state of this old watercourse seems now again to call for renewed efforts, in order to restore it to the efficiency of ancient times. The bridges are sufficient to strike a stranger's notice, and although those that existed in Polo's time must have long since disappeared, yet we may believe that the present erections are very much after the old model; and indeed the existing descriptions give some notion of the stately figure they must have exhibited. A modern editor remarks:—"This peculiarity of the bridges in Sze-chuen is not noticed in the meagre accounts we have of that province, which all resolve themselves into the original information given by P. Martini, in his Atlas Sinensis, (1655)." This peculiarity however does exist to the present day, almost identically as Polo describes it; unless it be the toll on passengers, which I have not met with. "A hundred days" seems a long time for the downward journey. The French version says "eighty or a hundred," and we must remember the slow rate at which junks usually travel except under pressure. Fan Ching-ta in a journey down the river in 1177, occupied rather more than four months from Ching-too to Soo-chow in Keang-soo. "Fine cloth, crape and gauze" are still articles of manufacture in Ching-too.

ARTICLE IX.

REPORT OF AN EXPLORATION OF THE NEW COURSE OF THE YELLOW RIVER.

By N. ELIAS, Jr., F. R. G. S.

I.

The new Yellow River having become a subject of interest to the North-China Branch of the Royal Asiatic Society, it was decided in the early part of last year to send an exploring party to examine and lay down its course; all information upon it received up to that time having been of a vague and unsatisfactory nature.

In accordance with this decision I had the honour of being requested to undertake the task, and my plan for carrying it out being approved by the Society's Council, a small party was formed for the purpose, consisting of Mr. H. G. Hollingworth, two Chinese and myself.

The plan of the journey was to go to Chinkiang by steamer; from there to proceed up the Grand Canal until we reached the Yellow River; to follow the river down to the neighbourhood of its mouth in the Gulf of Petcheli, and up again as far as the point where it diverges from its old course, (which was reported to be near Ifung in Honan) returning by the river and the Grand Canal to Chinkiang. This plan having afterwards been found practicable, it was carried out.

As most of the rivers in China are known to be in flood during the summer months and consequently in an unfavourable state for exploring operations, and as those in the northern districts are generally frozen over by about the middle of December, the autumn was considered the most advantageous season for the undertaking, and accordingly the party started from Shanghai on the 24th September.

The Grand Canal between Chinkiang and Tsin-kiang-pu, or in other words between the Yang-tsze and the old bed of the Yellow River, has been visited and described so frequently of late years by foreigners, that it is almost unnecessary to touch upon it here. Suffice it to say that it is everywhere in good repair, and the adjacent country well irrigated and apparently in a thriving

state both as regards cultivation, and to judge by the aspect of the towns on and near its banks, as regards trade also.

After crossing the old Yellow River however, a part of the canal somewhat less known, is reached; and the flourishing condition of the country is no longer noticeable: on the contrary, for a distance of about one hundred and fifty miles, though the canal itself is in tolerably good working order, the country in its vicinity has an arid, sterile appearance, and is but thinly populated. There are few towns or villages, and what there are seem neither populous nor busy, though they are not in ruins and bear but few traces of rebel devastation, general poverty being the prevailling feature. Although the country bordering on this portion of the canal is a part of the district lately infested by the Nienfei, yet these would appear to be less the cause of this general poverty than one of the effects of it; the source of both evils being more probably the want of irrigation which has existed since the Yellow River has flowed to the north of the Shantung ranges. The canal which at one time was so deep that in many places the level of the water was above that of the adjacent country, is now everywhere considerably below it, rendering irrigation even at a short distance from its banks without mechanical appliances almost an impossibility. Even the dry bed of the Soma lake is scarcely cultivated on account of its elevation above the level of the canal, though it is only separated from it in some parts by a bank of a few yards in width. It is true that this lake appears never to have been more than a shallow flood lagoon; nevertheless it was some feet below the general level of the country and was connected with the canal by means of watercourses and sluice gates, and if this is difficult to irregate how much more so must be the country above and beyond it?

This one hundred and fifty miles being passed over, the Wei-shan (sometimes called Yü-shan) lake is reached at a small village called Han-chuang-cha. This is the most southern of a chain of lakes or rather lagoons which stretch from far to the south of Han-chuang-cha (I believe from near Su-chau-foo on the old Yellow River) to within a few miles of Tsi-ning-chow which constitute the only important feeder of the Grand Canal to the southward. In the summer they merge one into the other and form a continuous sheet of water, though very shallow in parts. In winter, when the water is low, these shallow parts are mere morasses which divide the sheet into three or four separate lagoons.

In former days the canal ran in some places by the side of these lagoons, and in others through portions of them, but being everywhere embanked on both sides it was only dependent upon them for its supply of water, the canal itself forming an unobstructed means of communication throughout the year. Of late years however, this section of the canal has been allowed to go to ruin, and those portions only are used which run through the morasses existing in the dry season, the lagoons themselves forming elsewhere the only channel for navigation.

Near the northern limit of these lagoons stands the city of Tsi-ning-chow, the first place of any importance on the canal north of Tsin-kiang-pu; it is said to be a place of considerable trade in ordinary times, but for the greater part of last year it was made one of the principal camps or Li Futai's soldiery, and is consequently not in a very flourishing condition at present. It has an inner and an outer wall, the former apparently new, and on the plain outside the city are numbers of stockades of different dimensions dotted about in every direction.

Still proceeding northward at a distance from Tsi-ning-chow of about twenty-five miles, the summit level of the canal is reached near a small town called Nan-wang. It is here that the river Wen falls into the canal, a portion of its waters flowing to the south, and the rest to the north, precisely as described by Staunton and other writers. The Wen is a small stream, scarcely twenty yards broad at the confluence, the canal at the same point being even less than that. Its course is from the N.E., and it is said to take its rise amongst some hills which are plainly visible in that direction. The currents of both are very inconsiderable; certainly under one mile an hour.

About thirty miles beyond Nan-wang we come to the new Yellow River, the canal for that distance being extremely narrow and shallow; a mere ditch in fact running between embankments large enough to confine a stream of infinitely greater volume.

The banks along nearly the whole of the Grand Canal between the old and new beds of the Yellow River, excepting those portions bordering on, or traversing the lagoons, are surmounted by earthen walls crenellated after the fashion of city walls, behind which are stockades at intervals of every few miles. All this work has the appearance of being recently constructed, though in many places it is already being broken up by the country people to make room for cultivation, for they can ill afford to lose

the strip of land immediately adjacent to and irrigated by the canal. The villages also show an attempt at fortification, most of them being surrounded by earthen or mud walls and moats, and indeed many solitary farms have some species of defensive work round them, and in most cases a small square brick tower within. These towers are rarely met with to the south of the province of Shantung. They are probably the "Water Castles" mentioned by the historian of the Dutch Embassy.

A journey of nearly four hundred miles on the Grand Canal, such as I have here attempted in a few words to describe, brought our party on the 17th of October to the southern bank or rather "limit" of the new Yellow River, near a small but busy town called Nan-shan.

The river at this point has no defined bed, but flows over a belt of country some ten to twelve miles in width, having merely the appearance of a flat, level district in a state of inundation; patches of ground, trees and even villages cropping up here and there; the Grand Canal traversing it in a general N.W. direction until it reaches the northernmost channel of the river at Pa-li-miau, some fifteen miles from Nan-shan. Along this fifteen miles the canal banks have been carried away in a number of places by the Yellow River breaking across them. The gaps are sometimes half a mile or more wide, and the current rushing through these almost obliterates the course of the canal and renders the navigation upon it difficult. For dreariness and desolation no scene can exceed that which the Yellow River here presents. Everything natural and artificial is at the mercy of the muddy dun-coloured waters, as they sweep on their course towards the sea; a flood not likely to subside, and a doubly mischievous one from the fact of its ever moving onwards with a swift current.

The Grand Canal is now dry from the Yellow River northwards as far as Lin-tsin-chow, or in other words it ends here, that portion N. of the summit level being merely a tributary of the Yellow River. During the two months of the year however, when the river is in flood and at its highest level, enough water it is said flows into the dry bed of the canal, to form a navigable stream as far as Lin-tsin, where it connects with the Wai-ho. Thus for some ten months in the year there is no water communication towards the north beyond the Yellow River.

Near the southern limit of the river is a channel running in a general N.N.E. direction, down which junks of a considerable

size were seen to be sailing. Being informed however that a more important one existed on the northern limit, it was decided to cross at once and commence the exploration by this latter channel, leaving the southern one until a better opportunity should offer. Having crossed accordingly to Pa-li-miau, (a small village eight li from Chang-tseu-chin), that place was made the first station, and the necessary observations for fixing its geographical position being obtained, the journey down the river was commenced from there on the 20th October, a date, by the way, so far advanced in the season as to render the greatest expedition necessary in order to complete the journey before the closing of the river by ice.

After sailing down the northern channel for about nineteen miles, a point is reached where it is joined by the southern one, and consequently also by all the water which higher up floods the country lying between the two. This point is called Yü-shan, and the deep, narrow, clean-cut river bed that receives the converging waters and leads them to the sea is that which fifteen years ago formed the course of the Ta-tsing. Although still narrow, some two hundred and fifty yards hereabouts, there are everywhere many indications of the river having been less than this before the advent of the Yellow Waters, and to judge by the velocity of the current and other circumstances, it has most probably become deeper also during the same period.

Proceeding down stream, we pass through an open well cultivated country with every here and there low dome shaped hills, sometimes detached, sometimes in groups, and backed up by a range some four hundred to six hundred feet high running about E. and W. which abuts on the river at Yü-shan but diverges from it gradually, the course of the stream being in general a N.E. one. The small hills near the river are of a limestone formation; the strata perfectly horizontal. The main range was not visited, but the hills composing it being similar in shape are probably also of the same formation. The stone is quarried but to a very limited extent, and villages within a few hundred yards of a quarry are built almost entirely of mud and chopped up reeds. Fifty-eight miles from Yü-shan by the windings of the river bring us now to the town of Tsi-ho-hien, a small newly walled unbusinesslike looking place, which except from the circumstance of its being the site of a serious obstruction in the river, would hardly call for a word of notice. This obstruction consists of the ruins of a stone bridge of some seven arches which at one time

spanned the Ta-tsing, but which now would reach only about three quarters of the distance across the river. There is a space between one extremity of it and the left bank of about a hundred yards which is used by boats as the only navigable channel. The deepest portion of this hundred yards is close under the left bank where at the time our party passed down (October 21st) there was a depth of five feet, and no stones to be felt with the lead, the outer portion of the hundred yards channel however, would probably not be practicable even at three feet. The bridge evidently stands in deep water, six fathoms having been found immediately above it and five a few hundred feet below it. The right bank is the steep one, and the left, near which is the channel, the shelving one, and naturally the shallow side of the reach. Its being now nothing but a wreck is of course due to the additional force and volume of water in the river for the last fifteen years, which it has been unable to withstand.

It is evident that the ruins of this bridge might be removed, and if no other obstruction existed, the river rendered navigable as far as Yü-shan or within nineteen miles of the Grand Canal. Unfortunately however, about three miles below this one, there occurs another, though a less formidable obstruction, in the shape of a shoal extending right across the river. In this case too the deepest side of the reach is the right, and here on the 21st of October only eleven feet was found, the bottom rising gradually towards the left bank. On the 6th November, when this spot was passed a second time, there was but five feet of water in mid-stream, and allowing for the fall since the 21st October we should have only about six or seven feet in the deep passage near the right bank. The length of the shoal would be about two to three hundred yards, and is the only place above the bar where less than two fathoms was found in the deep channel. The next point of interest we arrive at is Lo-kau, the port of Tsi-nan-foo, a long straggling unwalled town on the right bank. Tsi-nan-foo itself stands twelve li from the river and not far from the foot of the main range of hills which hereabouts average probably from eight hundred to one thousand and two hundred feet, and form a rather picturesque background to the low thickly wooded plain upon which the city is built, and which extends for many miles on both sides of the river, giving to the country its characteristic feature of flat lowland. Although this plain is essentially alluvial, yet there rise from it in this neighbourhood several small wedge-

shaped jagged hills or rather masses of rocks, in some cases heaped up into fantastic shapes, and the fragments near the bases worn into rounded boulders by the action of water. Their height is inconsiderable, but being perfectly isolated, sometimes several miles of plain intervening between two of them or between one and the main range, stamps them at a glance as the direct result of igneous action.

The trade of Tsi-nan-foo is said to be of great importance, but as a large proportion of it is carried on by means of cart roads, a traveller on the river has but little opportunity of forming an opinion of its magnitude. The number of boats seen at Lo-kau was not large, and many of them appeared to be merely passing through towards the Grand Canal. The only article of commerce noticed in any quantity was salt which had come up the river from Tië-mên-quan. Coal is met with as an article of trade both here and at other places on the Yellow River, and is used for cooking and other purposes to, I believe, a considerable extent; it is of a rather bituminous nature, and is sold at the rate of 1,200 cash per picul in Tsi-nan-foo. The principal mines are said to be at Tsau-fan, a place in the hills ninety li to the eastward, where the coal is sold at a very much lower price than at the city.

We pass on now through a thickly wooded well cultivated country for about one hundred and fifty miles; flat but dry, and the soil very light and friable. The river's banks are steep and indicate a rise in summer above the present (October) level of from eight to fourteen feet according to the distance from the sea. The re-entering angles are everywhere much eaten into by the current, and large masses of soil are continually falling away. In many places the grain of this year having been sown up to within a short distance of the water, the portions of the fields supporting the crop already sprouting have been undermined and fallen into the stream below, thus showing that the undermining process is a very rapid one, probably more rapid this year than the experience of the inhabitants who sowed the grain led them to anticipate. The graves near the river, or rather the coffins from them, have generally been removed to some distance back, and often to the opposite shore; the exhuming and removal being sometimes attended with great ceremony.

Near the course of the river are extensive vegetable gardens growing carrots, onions, celery, turnips, Shantung cabbages, brinjalls, capsicums, &c., &c., also regular plantations of fruit

trees such as the pear, the date and others of less importance, and in some places many square miles of land are occupied by the plant, the root of which is the ground nut. The date and the ground nut are two of the staple products of the district. At the time our party passed down, the former had already been gathered and dried, but it was harvesting time for the latter, and the inhabitants of nearly all the villages were at work in the fields, digging them up and sifting them. A third staple product is cotton which though of an inferior description is rather largely cultivated; and lastly we have the Shantung silk. The mulberry near the Yellow River appears principally, if not entirely, to be cultivated on the left bank, and for a distance of scarcely a hundred miles; the trees are standards and have much the appearance of those grown in England, being larger and older looking than those in Kiangsu. They are planted in lines at regular intervals, some of the plantations covering a large area of ground. Some specimens of the silk were obtained at a village in the heart of the district, also some eggs and cocoons. The best silk is yellow and very long reeled, much resembles the Szechuan, and I believe is often sold at the treaty ports as the product of that province. It is produced by worms fed indoors on the mulberry as in Kiangsu, the wild or outdoor fed worm not being educated in this district, but amongst the hills to the southward in the neigbourhoods of Mêng-yin and I-shui, as I am informed, where the food is not the mulberry leaf but that of a species of oak.

The principal towns situated on the river and within this one hundred and fifty miles of gardenlike country are Tsi-yang, Tsi-tung, Pau-tai and Li-tsin, all "hiens." The first is of no importance whatever; the second is a large busy and apparently thriving place, and would probably rank next to the capital in the matter of trade, though it certainly surpasses Lo-kau in every attribute of a "port;" the third is small and apparently but a poor place of trade and were it not the site of the principal custom house on the river, it would be scarcely more noticeable than Tsi-yang. The fourth town Li-tsin appears also to be of no great importance as regards trade though there is a circumstance connected with it which renders it remarkable, viz: the inroad made by the river into the city, which is situated on the concave bank of a sharp bend in the river. The swift current after eating its way through the foreshore has at length reached the S. W. angle of the city which it has carried away, together with some three hun-

dred feet on each side of the angle, and up to the present time is still at work cutting deeper into the breach, no efforts being made by the natives to arrest its progress. Some of the ruins of the wall and outlying buildings are now visible above water near the middle of the river, but they would form no obstruction to navigation, seven and eight fathoms having been found within a few yards of them and towards the right bank.

A few miles below Li-tsin the country begins to change its character; the well wooded and well cultivated district above described giving place to boundless tracts of mud and marsh but poorly cultivated and thinly inhabited, and the whole aspect one of a bleak, swampy, treeless waste, scarcely fit for man to dwell in. Nevertheless, on the river's banks are villages at short intervals of one another down to within about twenty miles of the sea, which causes the traveller on the water to form an exaggerated opinion of the population of the district, though he is easily undeceived by walking a short distance away from the river when it becomes apparent that on the whole the population is sparse.

In fact the only fairly habitable region is that belt of land immediately skirting the river, and from which the water of the annual flood drains itself off naturally, whilst on the tracts lying farther back it is either absorbed by the soil or remains on the surface in the shape of marshes and ponds, rendering habitation without artificial drainage almost an impossibility, except on a most limited scale.

At the limit of the habitable region, viz: about twenty miles above the sea by the windings of the river, stands the village of Tië-mên-quan, the port of the Yellow River, and though only a village composed, like others in the neighbourhood, of mud built houses, it has every appearance of being a most important place. It is not a centre of trade but consists chiefly of hongs to which traders from the different towns in the neighbourhood come to transact their business, and during the winter months, when the river is closed by ice, it is said to be nearly deserted. Now although it is called a port, Tië-mên-quan is only used as such by small Pei-ho and Yellow River junks. Larger vessels such as those from Ningpo, Shanghai, Swatow, &c., never come within twenty or twenty-five miles of it, but remain at an anchorage outside the bar called Tai-ping-wan, where they discharge their cargoes into Yellow River boats, receiving their

homeward freight by the same means. Thus for these junks Tiĕ-mên-quan can scarcely be considered a port. The direct trade which exists between places high up the river and Tien-tsin, Chefoo and other ports on the gulf is carried on by boats of a lighter draft and of a different construction to the seagoing junks of the southern provinces, but well suited of course to the rivers and shallow seas on which they are employed. The voyage to Ta-ku it is said occupies these boats about two days with a fair wind; that to Chefoo about four days. In both cases the journey is performed by coasting round the gulf, and as the water for some distance from the shore is very shallow the sea never rolls heavily, and it is always possible to anchor in the event of a foul wind. The principal trade of Tiĕ-mên-quan appears to be with Tien-tsin, which is the nearest open port, though junks bound to and from all parts of the gulf are to be found there. The exports are generally salt, cotton, dates, &c.; the imports are paper, timber, seaweed, beans, sugar, and a few English cotton goods and lead. More than three parts of the whole trade however would seem to be in salt, which is produced in the neighbourhood, and is not only exported but sent up the river in large quantities.

The salt manufactories, if such they can be called, for they consist generally of nothing but a few ponds and a mud hovel or two, are dotted about here and there over the waste marshy lands before alluded to, and though constituting on the whole a considerable industry yet it appears to be one that supports but a small proportion of the population, and brings but a limited area of land under subjection.

The country having only recently been left dry by the sea the soil still contains a certain quantity of salt, and by digging to a depth of two or three feet the salt water is obtained from which the brine is procured by evaporation. A manufactory or saltern consists of a series of shallow ponds connected one with the other by means of narrow ditches. The water is first collected in the outside pond, and after being allowed to evaporate for a few days is conducted through a ditch into a second, where it remains for a few days more and evaporates still further; this process being continued till in the fourth or fifth pond the salt is seen lying at the bottom, in crystallised layers as white as, and very much of the appearance of snow, when it is scooped out and stacked, and covered with a thatchwork of reeds and mud. The water in the first or outside pond is but slightly salt, but the saltness increases

with the amount of evaporation, until arriving at the last or inner pond, when it becomes so intense as hardly to admit of putting the tongue to it. It also acquires a peculiar bitter taste as the evaporation proceeds and becomes beautifully clear towards the end of the process. In such a concentrated solution of salt as is the fluid in the inner ponds of these salterns, it would be thought hardly possible that any animal could exist, yet in the clear water above the crystallised layers thousands of small transparent shrimps may be seen darting and gliding rapidly about in every direction and resting sometimes on the salt itself. I believe this little animal to be the "Brine Shrimp" or "Cancer Salinus" (Linn:) well known as the inhabitant of salt pans in England, where the workmen believe that it is of use in clearing the brine of impurities and cultivate it accordingly. Whether this belief obtains on the coast of Shantung I was unable to ascertain, but possibly it does, for certainly no attempt is made to expel the little creatures from the ponds.

Tië-mên-quan, as before remarked, is on the lower limit of the habitable and salt producing region; the country between it and the sea is an immense uninhabitable mud flat, stretching away on both sides of the river as far as the eye can reach. In the summer and autumn the greater part is covered with reeds, the more accessible of which are collected for fuel by a race of miserable reed cutters, whilst the rest afford cover for vast numbers of wild fowl, geese of two kinds, swans, pelicans, gulls, &c. In winter when the reeds are gone it must be a desert of mud, and when the river is in flood it is of course totally submerged. About twelve miles below Tië-mên-quan and half a mile from the river's left bank is a little knoll about ten feet above the general level formed of sea shells and debris, evidently at one time an island, and upon which stands a small brick Joss-house, apparently new, and a few mud houses, the dwellings of reed cutters. This place is called Lau-ye-miau, the only habitable spot for many miles in every direction, and is probably the point reached by the naval surveyors in 1860, and called by them Miau-shing-pu. About four miles below this again we come to the bar, an object that has excited a great deal of interest amongst residents in China, it having been thought that the navigability of many hundreds of miles of the Yellow River hinged upon the depth of water to be found there. This view however as will be seen immediately is not a correct one, worse obstructions existing

higher up. At the date I visited it, October 27th, the least depth found was about five feet near the middle of the river, the water at the time, being according to the pilot who accompanied me, about a foot or eighteen inches above low water mark. The deepest channel is near the right bank though there is one almost as deep near the left, the shallowest part being in the middle. In the former I found about nine feet, and in the latter seven feet which at low water (springs) would give little over seven and five feet. Several junks drawing it was said about two and a half feet of water, were seen sailing through the left channel. The range of the tide, would appear on the average to be about two feet, rather more at springs and rather less at neaps. Ordinary neap floods, when the river is not overflowed, are said to be perceptible for about twenty or thirty li above the bar, and springs when favoured by the wind and a low state of the river are sometimes noticeable as high up as Tiĕ-mên-quan, some sixty li above it. It is of course obvious that a sufficiently long stay to make personal observations on the tides was impossible, and my information on this subject is derived from a number of junk skippers, pilots and others, questioned at different times and under different circumstances, and who, strange as it may appear in this country, agreed remarkably in their statements. It is possible therefore that some approximation to the truth has been arrived at.*

From all I can gather, then on the matter of the bar, I am inclined to believe that the draught of water of the southern junks is no obstacle to their ascending the river, but the almost total absence of tides and the narrowness of the channel constitute the principal difficulty; this more especially as the anchorage at Tai-ping-wan is stated to be safe and convenient and the transhipment there of cargo easily performed, whilst to work a large junk up a narrow and nearly tideless river for twenty miles would be a slow and risky process even though the depth of water would admit of it.

In the case of steam-vessels, of course, these objections do not apply; the depth of water being the only matter for consideration.

* [I may here remark that the Asiatic Society required the river to be examined as far down only as the highest point reached by the naval survey in 1860, viz: to about Lau-ye-mian and I wish it therefore to be distinctly understood that I did not go to the *bar* with any intention of surveying it, and do not pretend for a moment to have done so. My only object in visiting it was to carry my work down to a known fixed point, a few lines of soundings being taken across the bar itself merely by way of attempting to verify information previously received on the subject.]

II.

After returning to Tië-mên-quan from the bar on the 28th of October, our party had thus far examined only the section of the river included between the Grand Canal and the sea, and there still remained that portion above the Grand Canal to be explored. It was already late in the season and before us was a journey on the Yellow River of some five hundred and fifty miles, upwards of four hundred of which was to be performed against a strong current, and in a craft scarcely suitable to the navigation. Every effort therefore was made to push on as rapidly as possible, and no special halts were made for any purpose, except a short one for longitude observations, until arriving at Pa-li-miau on the Grand Canal (our first station) on the 10th November.

The river here as before noticed has no defined bed but presents the appearance of a belt of country ten to twelve miles broad in a state of flood, trees, ruined villages and patches of bare mud being all that is left of a once fertile and prosperous district. We have already seen that this is the aspect of the river for the nineteen miles immediately below the Grand Canal, viz: as far as Yü-shan and in proceeding up stream we find another seventy-six miles (more or less according to the season) of a precisely similar character, making in all a section of ninety-five miles scarcely worthy of the name of a river. Bed there is none, and at some periods of the year scarcely a channel for boats of a moderate size. It is true the natives speak of two channels, and indeed use them, a northern one and a southern one, but both were gone over during the month of November, and when I say that our boat drawing only fifteen inches of water had often difficulty in finding a passage, little more need be said concerning the practicability of this portion of the Yellow River. During the highwater season, junks drawing, it is said, as much as three or three and half feet can use the southern channel, but the journey is slow and laborious in the extreme, and whole days are frequently spent in kedging over shoals or through places where the deposit having found a group of trees or some other object to silt against has commenced the formation of a mudbank. That there can be no great depth in this lagoon-like section of the river is at once apparent when we consider that the same volume of water which lower down is contained between the banks of the narrow Ta-tsing is here spread out over a belt of country

ranging from ten to fifteen miles in width. Had this belt at any time been the site of a fairly deep river or even a deep dug canal, the water of the Yellow River, although at first of too great a volume to be contained in the bed of such river or canal, would in time have so enlarged it by means of its scouring power as to have rendered it of the necessary capacity. This indeed is what took place in the case of the Ta-tsing, for, as we have already seen, the bed of that stream has become both deeper and broader since the advent of the Yellow River and now contains the whole of the latter's waters in addition to its own, and only overflows its banks at the height of the flood season. Above the Grand Canal, however, there was no river bed of sufficient size to form the basis of a course for the Yellow River, and hence the wide spread shallow flood instead of a defined stream. There were, it is true, two small canals falling into the Grand Canal within seven miles of one another; the more southerly of these, the Sun-kiang, was a very small one, only ninety li long it is said. A portion of it was examined, and the banks in some places found to be hardly distinguishable, but everywhere the waters of the Yellow River stretched away like an overflow on both sides. To judge by the ruins of bridges, houses and pailows, the region through which it runs must formerly have been a prosperous one. At present a few mud and reed hovels are the only habitations, and a few patches of wheat sown on the mudbanks left temporarily dry by the yearly seccession of the waters the only signs of cultivation. The second or northerly canal was of much more importance than the Sun-kiang, and though shallow and narrow was about four hundred li in length. It was, and still is, called the Chau-wang-ho, and led, I am informed, from the old Yellow River to the Grand Canal near Pa-li-miau, the point of junction with the old Yellow River. I have never been able to ascertain with any certainty but I believe it to have been a short distance to the east of the place now called Lung-mêng-kou, or the breach in the old river's bank through which the yellow waters leave their former bed. It presents on the whole much the same appearance as the Sun-kiang; viz: an embanked watercourse running through an inundated country. Its artificial banks were at one time at some little height above the general level of the country, but they have now in most places been either carried away by the floods or worn through by the current of the Yellow River. The villages and bridges are mostly in a state of ruin and

the latter as they reach now little more than half way from bank to bank are additional evidences of the power of the river to form for itself a bed provided only that it finds a sufficiently durable basis to work upon. Durability in this case however is wanting, and even had the Chau-wang been many times its original breadth it would still have been useless as a channel for the Yellow River, the artificial embankments being naturally unfitted to withstand the scouring process. As it is the canal is only traceable here and there for a few miles at a stretch, and as its course through the belt of country at present occupied by the river was a winding one, the portions now left are, as it is only natural to suppose, those whose direction was identical or nearly so with that taken by the Yellow River.

A distance of seventy six miles then, by the southern channel from the Grand Canal, brings us to the point where we find the yellow waters again flowing in a defined channel which is traceable as far as the old bed, a distance of about fifty-two (stat.) miles. At the low water season this channel contains the whole Yellow River, but as the banks in the highest places are no more than about ten feet above the November level it can contain, during the flood season, only a portion of it, for though broad, (in some places over a mile), it is everywhere exceedingly shallow and its capacity much contracted by shoals and mudbanks. Now although when the banks are at ten feet above the level of the water this channel has the appearance of being the permanent bed of the river, yet so far from thinking it permanent, I should hesitate even to call it a "bed" at all, for the banks and indeed the country for miles on each side, are composed of the river's own deposit which seems rather to have silted to a certain elevation above the river level than that the water had cut a bed for itself in the soil to a corresponding extent—or in other words it appears that the river here flows but little if at all below the general level of the country, a fact which is at once demonstrated by considering, for example, that at a point in the lagoon-like section just below the lower end of the defined channel and where there were no banks apparent, *old* trees were growing on about the level of the water, and ruins of houses were standing on patches of mud only just awash; whilst at a point twenty miles higher up and within the defined channel *old* trees were also growing on mud banks about flush with the waterline, though here the river banks, were ten feet high and little more than the roofs of

houses were to be seen above ground. It is almost superfluous to say that the country thus formed of the river's deposit is a perfect level, and that the soil is very light and mobile, and though the flood of each successive year by adding more deposit increases the stability, yet a powerful stream like the Yellow River can I imagine hardly be thought to have adopted a permanent course, when the nature and height of its banks, the character of the adjoining country, the extent of its annual overflows, &c., are taken into consideration.

Perhaps the most striking proof that the banks and neighbouring country are the creation of the river's deposit rather than that the channel is a natural excavation, is that of the buried or silted up houses, which besides is a circumstance of interest in other respect; as, for instance, that it goes to show not only the power of the Yellow River in changing the configuration of the country with which its waters come in contact, but also the effects produced by it in the economical condition of those portions of the population whose misfortune it is to inhabit regions coming within its influence. Such a region is that through which this section of the river flows, and where we find many entire villages half buried in deposit, and deserted by the greater portion of the inhabitants, those who remain being in a poor and miserable condition. The houses are frequently silted up nearly to the eaves, and have generally been abandoned, though a few have been dug out. As an example of this I may mention a joss house within a few yards of a point in the river where the level of the deposit was some ten feet above that of the water. To enter this joss house it was necessary to crawl under the eaves, and when inside it was evident from alterations that had been made in the doorway &c., that for some time the inhabitants had attempted to accommodate themselves to the constantly diminishing height of the building, though since the last year or two apparently they had been compelled to abandon it. The deposit on the inside was at precisely the same level as that on the outside, and was said by the villagers in the neighbourhood to be twelve Chinese feet in depth (say thirteen feet English) and to have been the work of fifteen years, or fifteen successive floods of the Yellow River. The heads of some of the larger josses still remained visible above the mud level, but judging by them the size of the rest of the figure to which they belonged, I should say that the statement of the villagers was rather exaggerated, and that nine

or ten feet (English) depth of deposit would be nearer the mark; and in this opinion I am borne out by the proportions of the building, the height of the river and other circumstances. The houses, it may be remarked, in western Shantung and southern Chihli, are built of brick and are more solid, and of altogether superior construction to those in Kiangnan and eastern Shantung. Many have two stories, and in every small village are to be found one or more of those square, castellated little towers sometimes called "watercastles."

So little used is the Yellow River above the Grand Canal, and the navigation on it so little understood, that the people living near its banks and even the boatmen themselves seldom know the distance from one place to another by the river, but always speak of distances by the road, and even then rarely agree, showing of what little importance the river is regarded as a means of communication, even though no roads worthy of the name exist in its neighbourhood—nothing in fact but mere tracks over the mud. In the same way information regarding the direction and distances of towns lying back from the river can never be obtained with any certainty, and though the boundary line between Shantung and Chihli was known approximately, that between Chihli and Honan was a subject of the most vague statements by the people living near the spot. The absence of towns along the course of the river may to some extent account for this kind of ignorance—the only one *on* the river is the old or former Fan (hien) of which there is nothing left now but a small village and a ruined pagoda, the present town of Fan being it is said some thirty li to the northwards. Tung-ming-hien is near the river but not visible from it—the nearest point is one from which the town is said to be distant 12 li in a S.E. direction. I believe it to be a place of no importance, and there is certainly no trade carried on there by means of the Yellow River. A somewhat tedious journey of a fortnight from the Grand Canal brought our party on the 24th of November to Lung-mên-kau, the diverging point of the old and new courses of the Yellow River and the upper limit of the exploration. The breach in the embankment of the old river is about a mile in width, and the present channel runs, as it were, diagonally through it. The two banks at this point are about three miles apart. Near the northern one there is a depression about a quarter of a mile broad full of small sandhills, the only part of the old bed having any appearance of a dried up

watercourse. This was the main or low water channel of the old river, the artificial, outer embankments marking only the limit attained during the annual floods. The course of this low-water channel, as indicated by the present river to the west, and the line of sand hills to the east of the breach, was not always parallel to the flood banks, but made a winding, tortuous line between them, apparently like a natural river, and the point where the breach now is was one where the current impinged on the north bank. Those parts of the bed of the old river lying between the low-water channel and either bank are at a considerable elevation above the general level of the neighbouring country, and this is particularly apparent at the breach where the bank is seen in section, the outer slope being some forty feet in vertical height whilst the inner would be about twenty or twenty-five feet—showing an elevation of the bed of fifteen or twenty feet *near* the bank; though as it slopes somewhat towards the low water channel the average for the whole breadth (exclusive of that channel) would probably not be more than about fifteen feet. Thus by a mere cursory inspection of the neighbourhood of the breach, the cause of the Yellow River's change of course is at once apparent. The river had so diminished the capacity of its bed (which by the way was always an artificial one), by depositing the alluvium with which its waters were charged, that the main pressure during the flood season had come to bear on the upper or weaker part of the embankments, and no measures having been taken to strengthen these or deepen the channel, the great catastrophe happened which with its consequences had been predicted by the Abbé Huc* some years before, a catastrophe which has caused not only the devastation by flood of that line of country through which the river now flows but has also impoverished to such an extent the districts through which it formerly flowed, and which were dependent upon it for irrigation, as to render them almost uninhabitable and to throw a great portion of the population out of employment.

* Car le lit actuel du fleuve Jaune, dans les provinces du Honan et du Kiang-sou, sur plus de deux cents lieux de long, est plus elevé que la presque totalité de l'immense plaine qui forme sa vallée. Ce lit continuant toujours à s'exhausser par l'énorme quantité de vase que le fleuve charrie, on peut prévoir pour une époque peu reculée une catastrophe epouvantable, et qui portera la mort et le ravage dans les contrées qui avoisinent ce terrible fleuve. —*Voyage dans la Tartarie, &c.* 1, *p.* 223.

Lung-mên-kau is a small village built along the north bank of the old river east of the breach. About ninety li W.S.W. of it stands Kai-fung-foo (or Pien-liang-ching as it is more generally called) the capital of Honan; and twenty-five or thirty li to the S.E. is Lan-i (or Lan-yang) hien, a place that has gone entirely to ruin during the last few years. It consists now of nothing but a few mud and reed houses and is said to have been abandoned by the mandarins. A road leads down the old bed and through Lan-i towards the south, and boats bringing cargoes down the river sometimes discharge them at Lung-mên-kau for conveyance by waggon to towns in that direction. Some of these boats bring small quantities of good anthracitic coal from the neighbourhood of Hoai-king-foo; others iron ware, such as cast pots and pans, wire, &c., from places not far distant; all of which are sent south or east by road, Lung-mên-kau having no trade whatever of its own.

After leaving Lung-mên-kau, the river was followed down as far as the Grand Canal, which was reached on the 30th November. It had been intended as before remarked to have examined the channel, which leads from Nan-shan (on the Grand Canal) to Yü-shan, and runs near the southern "limit" of the river; but the fall of water had been so great since the first view of this channel was obtained on the 17th October that it had become impracticable for all but the smallest boats, and seeing that the ice had already begun to form on the shallow waters of the river, it was thought advisable rather to leave this channel unexamined than incur the risk of being frozen in, and having to transport the timekeepers overland. However as its length can be scarcely twenty miles, and as it is impracticable for large boats except during the summer, but little could have been gained by visiting it, more especially as the northern parallel channel had already been thoroughly examined. At Nan-shan therefore on the 1st December the exploration came to an end and the party returning by way of the Grand Canal arrived at Chinkiang on the 15th of December.

To sum up shortly the capabilities of the Yellow River for navigation, it would seem that a vessel of sufficiently light draft to cross the bar, would have no difficulty in ascending the river during all but the lowest point of the season as far as Tsi-ho a distance approximately of two hundred and ten statute miles from the bar; and were the ruins of the bridge at that place removed

a further distance of fifty-eight miles would be rendered navigable, making in all two hundred and sixty-six statute miles from the bar to Yü-shan. To such craft the shoal three miles below Tsi-ho would scarcely be an obstacle, though with the river at its lowest and the vessel loaded to cross the bar at high water it would probably prove impassable. In many places the bends in the river's course are very sharp with spits sometimes projecting from the salient angle, but this would certainly be no obstacle to vessels under two hundred feet in length, and considering the navigation on the Pei-ho, where the curves are still sharper and the river narrower, even a greater length might be found practicable.

All beyond Yü-shan, as far as Lung-mên-kau, must be regarded as totally unnavigable, except perhaps the nineteen miles between Yü-shan and the Grand Canal which could be used during the high water season. The difference in the river's level between the highest and lowest points in the year is something very considerable; but until the fluctuations shall have been observed throughout a whole year it will be impossible to obtain accurate information on this subject. The yearly rise or fall is sometimes greater than at others, but taking the November level of last year as a base, and judging of the former by the indications of the banks and other signs, and of the latter from native informations, I should think that a yearly range of twenty to twenty-two feet would not be far from the mark. Both rise and fall take place very irregularly, and it is said that a fall of three feet in one day is a common occurrence especially towards the approach of winter.

The current during the flood season is of course far stronger than when the water is low, but on this subject also little can be said in the absence or a whole year's observations. On the 26th October at Tië-mên-quan it ran from two and a half to three knots an hour, and at Lo-kau on the 5th November rather under four, and near Yü-shan on the 9th about the same, whilst on the lagoon-like section above the canal it was generally under two. Such solitary instances as these however form but a poor guide for making a general estimate, and though I believe that at the lowest point of the season it is not much less than in November, yet during the height of the floods it must be nearly double.

As in the first paragraphs of this paper mention was made of a southern outlet of the Yellow River existing at the present day,

it must be explained here that this was caused directly by a rupture.

Though not a subject coming strictly within the province of this report, it may not be entirely out of place to notice here the rupture of the south bank of the old river near Yang-kiau in Honan, about one hundred and fifty li above Kai-fung-foo, which occurred in the 6th chinese month. Not having visited the spot my information on this subject is of course derived from the natives, who report that the bank is carried away for about three li and that the water of the Yellow River flowing through the breach floods a large tract of country outside the bank, and then finds its way into a small river called the Sha, a tributary of the Whai, which latter flows into the Hung-tsze lake. This breach is called Sin-lung-mên-kau, the one lower down being sometimes known as Lau-lung-mên-kau. It is said that the authorities are trying to repair it in time for next summer's flood, about a third of the work being already finished (in November), and the common belief is that when the upper one has been closed the lower one will be taken in hand and the river made to flow along its old course to the sea. This however would appear to be impossible as long as the old bed remains at its present level and to deepen it or to raise the embankments would be equally impossible in the present disorganised and impoverished state of the country. On the 22nd November, while proceeding up the Yellow River, I had a corroboration of the statements of the natives regarding a communication with the southern waters by meeting five or six Hung-tsze boats whose people said they had come from Ying-chow (or Hing-chow) in Kiangnan by way of the Sha. These boats were said to draw about one feet and a half of water, but as they were dropping down with the current no information could be obtained concerning the Sha or the communication between the Yellow River and the Hung-tsze, a matter of great interest, as should a permanent communication be found to exist the Yellow River will have to be regarded as *in part* nothing more than a tributary of the Yang-tsze. The amount of water parted with through the new breach I believe to be very inconsiderable.

ARTICLE X.

RETROSPECT OF EVENTS IN CHINA AND JAPAN DURING THE YEAR 1868.

The year opened with the interesting intelligence that Great Britain had resolved on an Abyssinian expedition, and that on November 27th, 1867, two millions sterling had been voted for that purpose. The resolve was well received throughout the empire. The first mail of the year also brought news of the execution of the Fenian murderers at Manchester on November 24th. The precautionary measures taken prevented any outbreak among the large Irish population of Manchester.

A meeting of land renters in Shanghai on 10th January fixed the assessment for taxing purposes to the end of the municipal year. Indications of the increased difficulties of municipal government in the cosmopolitan settlement of Shanghai were not wanting in this meeting. On the 5th January a fire destroyed several foreign houses on the French Concession close to the parish church. On the 6th the Nienfei rebels threatened the banks of the Yangtsze, north of Chinkiang, and towards the end of the month actually swept through the important town of Hsien-wen-miao, taking from it much booty. A letter from the Tsung-le yamen pointed out the status of the Chinese members of the mission about to start to Europe.

On the 4th the *Costa Rica* brought intelligence of the successful opening of Hiogo and Osaka to foreign trade. Mr. Burlingame visited Tseng-kuo-fan late in the month to explain the mission to Europe. From Japan the startling and melancholy news reached us that the American Admiral Bell and Lieut. Reid had been drowned on the bar at Osaka on the 11th. Several important bankrupt cases came before the Supreme Court this month, and the agitation concerning the appropriation of the Recreation Fund will long live in the memory of Shanghai.

Mr. McLeavy Brown arrived in February to join the Chinese embassy, and on the 16th information reached us that Mr. T. T. Cooper had reached Shaze in Szechuen, and that Mr. Myburgh, H. B. M.'s Consul at Hiogo, was dead. General Napier landed in Abyssinia on the 4th. On the 14th the Hongkong and Shanghai

Bank declared a dividend of 12 per cent. and a large reserve, and the annual meeting of the Shanghai Steam Navigation Co. took place on the 21st. A most serious fire occurred in Foochow, destroying property to the value of 200,000 taels. At Osaka some hard fighting proved the hopelessness of the Taicoon's cause, his troops were defeated and his palaces burned or plundered. Foreigners had to retreat from Osaka in no very pleasant manner.

Early in March the rebels again threatened Tien-tsin and devastated the country close to the capital. The Taotai of Shanghai notified that government institutions had been established in Shanghai for the gratuitous vaccination of native children. In Japan a boat's crew from a French man-of-war were brutally murdered by some soldiers of the Prince of Fizen. Ample vengeance was however exacted. Land sales effected in Shanghai during the month show an astonishing decrease in the value of estates.

Telegraphic news in April announced the appointment of Ross Browne as Minister to China. On the 11th it was agreed at a meeting of the China Fire Insurance Co. to wind the affair up, a most unwise resolution as subsequent events have proved. The Mixed Court in the Maloo was opened on the 9th instant. News per *Cadiz* on the 15th announced a murderous attack on Sir Harry Parkes while on a visit to his Imperial Majesty the Mikado of Japan. Sir Harry's life was probably saved by a Japanese noble who was riding by his side. Several men of the escort were wounded, none however, fatally.

In May rebellion was still rampant near Tien-tsin, and Taku was abandoned. Great fears were entertained in Tien-tsin that the place would be taken. Mr. T. T. Cooper had reached the western boundary of Szechuen in safety. On the 4th instant a meeting of land renters was held at H. B. M.'s Consulate, when a resolution was passed declaring that non-rate paying German firms should be excluded from the benefit of municipal institutions. A meeting of the Shanghai Club to consult with regard to their indebtedness to the Recreation Fund ended in nothing. On the 24th May the *Ellora* brought the good news that the Abyssinian expedition had ended most successfully and gloriously, that Theodore had been slain, Magdala taken, and all the captives released. The would be assassin of the Duke of Edinburgh in Australia had been sentenced to death. On the 23rd the fine P. &. O. steamer *Benares* stranded on Fisherman's group and soon

became a total wreck. During May the agitation concerning Chefoo gold mines commenced.

In June Shanghai was amused and edified by the celebrated trials for libel at the suit of Mr. Barnard. The two defendants were fined small sums. The celebrated Vice-roy Tseng-kuo-fan visited Shanghai this month. The usual complimentary Consular visits were made to, and returned by him. At Kiukiang a curious dispute arose between the Taotai and Commissioner of Customs. The Taotai seems to have got the best of it, as the Commissioner has been sent elsewhere. Lord Brougham's death was announced. The French exploring expedition which had started from Saigon, arrived at Hankow after two years absence, during which the chief died. The rebels were gradually retreating from near Peking. A new set of rules regarding the settlement of questions connected with Customs' confiscations arrived from Peking, as also a long letter from H. B. M.'s Minister regarding security chops. Great excitement was caused by the action of certain Americans who chartered the steamer *China* to go to the Corea for the apparent purpose of unearthing a dead King and taking possession of the treasure with which he was supposed to be buried.

On the 8th July a Court was held at the United States Consulate to try F. B. Jenkins for his share in the expedition to the Corea, alleged to have been for the purpose of exhuming the body of one of the Kings. The Court acquitted the accused. A Naval Court was held about the same time at the British Consulate on the Commanding and other officers of the Peninsular and Oriental steamer *Benares*. The Commanding officer was acquitted, but two of the others had their Certificates suspended for a period of six months. On the 8th a farewell dinner was given to Mr. Consul Winchester on his return to Europe after a service of twenty-five years in China and Japan. Messrs. Russell & Co.'s proposal to erect a jetty opposite to their premises in the British settlement led to a prolonged discussion as to the claims of private owners to the foreshore of the river opposite that settlement. Messrs. Russell & Co. finally withdrew the proposal. Mr. Fitzroy, for many years Commissioner of Customs at Shanghai, died at Nagasaki on the 8th. On the 17th a severe gale passed over the settlement causing extensive floods and resulting in the loss of many native junks. On the 23rd Mr. W. Medhurst assumed charge of the British Consulate during the absence of Mr. Winchester.

In Hongkong much dissatisfaction was expressed at the action of the Chinese Government in establishing within the limits of the Colony certain stations for levying taxes on their subjects, and also for placing Custom's barriers at the several entrances to the harbour for the purpose of obtaining contributions from passing vessels.

August opened with the news that the Taotai at Chefoo had formally forbidden the working of gold mines in Shantung province, declaring such to be in contravention of the laws of China.

On the 3rd a very able letter concerning Consular jurisdiction over persons on board ships in Chinese waters was issued by Mr. Seward, United States Consul General at Shanghai. A Company to be called the North-China Steam Navigation Co. for the purpose of continuing Messrs. Trautmann & Co.'s line of steamers between Shanghai and the northern ports was instituted. News from the north declared that the rebels had again entered Shantung.

About the middle of the month news was received at Shanghai that a gross outrage had been committed by a Chinese mob on the persons and property of certain Missionaries who had taken up their residence at Yangchowfoo in this province, with the intention of establishing a permanent Mission. Mr. Medhurst proceeded at once to the spot to investigate the facts of the case.

The Municipal Council having revised objections to the expense of keeping prisoners sentenced to hard labour by the Mixed Court, the Taotai took the opportunity of declaring this punishment to be unsupported by Chinese precedent and in consequence abolished it.

An intercepted despatch from Tseng-kuo-fan Viceroy of the Liang Kiang to the central government respecting treaty revision was published about this time. While in some respects more favourably disposed towards foreign improvements than might have been expected from its author, there was throughout a marked indisposition to accept the altered position of affairs now becoming evident even to Chinese statesmen.

Mr. Medhurst having proceeded to Chinkiang and Yangchow found that a spirit of hostility to foreigners had been aroused in these cities, which was fostered if not originally instigated by the ruling classes. Under these circumstances he proceeded to Nanking to obtain a personal interview with the Viceroy and urge on him a settlement of the points at issue, which mainly consisted of the right of residence undisturbed in the interior, and

also compensation for injuries received. While negotiations were proceeding the ill-timed withdrawal of H.M.S. *Rinaldo*, Commander Bush, which had accompanied him so far, broke off these negotiations before their conclusion, and led to the whole matter being referred to Peking for adjustment.

News was received of the arrival of Mr. T. T. Cooper at Bathang in Thibet on his way to the Indian frontier. The opposition of the Thibetan authorities combined with want of funds unfortunately compelled his return after he had assayed to gain the Birman frontier through the territories ruled over by the Panthay King of Yunnan. While trying to make arrangements with an officer of the latter he was betrayed to the Chinese, by whom he was kept in prison for some time and only let go on his promise to return at once to Hankow.

The erection of telegraph posts in the British settlement by a private firm was made a subject of discussion with reference to the recurring question of public and private rights in the settlements.

It was announced that the British government had given a plot of land near the present Consular Jail to this Society on condition that a building should be erected thereon for the purposes of a library and museum.

Early in November a British squadron consisting of the *Rodney* Capt. Heneage, the *Rinaldo* acting Commander Furguharson, and H.M. gunboat *Slaney*, accompanied by Mr. Medhurst went up to Nanking for the purpose of effecting a settlement of the Yangchow difficulties hitherto refused by the provincial government. A threat to seize a new Chinese government gunboat, unless some satisfactory arrangement could be arrived at, led to Tseng-kuo-fan the Viceroy acceding to all Mr. Medhurst's demands. A detachment of Seamen and Mariners afterwards proceeded to Yangchow where they remained for some four weeks having taken up quarters in the Hsing-chiao temple. The expedition was afterwards joined by the *Icarus*, Commander Lord C. Scott. During the stay of the forces at Yangchow the utmost order was preserved in the city.

News arrived on the 24th of the death of Mr. Thomas Taylor Meadows, H.B.M. Consul at Newchwang. Mr. Meadows was a corresponding member of this Society, and was well known not only in China but in Europe for his knowledge of the Chinese people, government and language.

During the year few events of importance occurred. The partial success of the Burlinghame Mission in the United States seemed to raise the hopes of the old obstructive party, and led to a fixed resolution on their part to oppose all changes however needed. Petitions to open mines of coal or metal were persistently refused, and such simple matters as the improvement of the roads leading to the coal mines of Pechili were forbidden on the most trivial grounds. The negotiations for the revision of the Treaties of Tientsin were carried on but slowly, Sir Rutherford Alcock finding it a difficult matter to overcome the prejudices of the authorities so far as to obtain any real concession.

