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CONTENTS

Proceedings of the Sixth Annual Meeting of the Society	I
Constitution of the Geological Society of China.....	II
Preliminary Note on Additional <i>Sinanthropus</i> Material Discovered in Chou Kou Tien during 1928.....by Davidson Black	15
The Mesozoic Orogenic Movement in Eastern Chinaby W. H. Wong	33
Les Pegmatitoides des roches Volcaniques a facies basaltique a propos de celles du Wei Tchang.....by A. Lacroix	45
Observations sur les Laves de la Mandchourie et de la Mongolie Orientales...by A. Lacroix	51
A Microscopical study of some Coals from Szechuan, S. W. China.....by C. Y. Hsieh	59
The Guano Deposit of the Western Islands (Hsisatao) or paracel Reefs...by T. O. Chu	91
Coordonnees Geographiques (Longitude et Latitude) de Pekin	95
.....by G. Bouillard	
Terms for the Shell-elements on the Holochoanites..by A. W. Grabau	115
Notes on the Mammalian Remains from Kwangsi.....by C. C. Young	125
On some Traces of Vertebrate Life in the Jurassic and Triassic Beds of Shansi and Shensi...by P. Teilhard de Chardin and C. C. Young	131
Geological Notes in Szechuan.....by Yatseng T. Chao	137
The Orogenic Movements in China.....By V. K. Ting	151
Proceedings of the Special Meeting on December 28th....by W. H. Wong	171
Preliminary Report on the Chou Kou Tien Fossiliferous Deposit	173
.....by P. Teilhard de Chardin and C. C. Young	
An Account of the Discovery of an Adult <i>Sinanthropus</i> Skull in the Chou Kou Tien Deposit.....by W. C. Pei	203
Preliminary Notice of the Discovery of an Adult <i>Sinanthropus</i> Skull at Chou Kou Tien	207
.....by Davidson Black	
A New Fossil Land Turtle from Honan	231
.....by Chi Ping	
A New Xenoxylon from North China	243
.....by C. Y. Chang	
Memorial of Yatseng T. Chao	257
.....by A. W. Grabau	
Geological and Microscopical Study of Some Copper Deposits of China	263
.....by C. Y. Hsieh	
Gypsum Deposit of P'ing Lu District, South Shansi.....by S. L. Tsao	327
The Volcanic Rocks in Pei Piao Region.....by P. C. Wang	343
Auffindung von Reis in einer Tonscherbe aus einer etwa fünftausend-jährigen chinesischen Siedlung...by G. Edman & E. Söderberg....	363

BULLETIN OF THE GEOLOGICAL SOCIETY OF CHINA.

PROCEEDINGS OF THE SIXTH ANNUAL MEETING OF THE GEOLOGICAL SOCIETY OF CHINA, HELD IN PEKING, FEBRUARY 13 AND 14, 1929.

BY Y. C. SUN, SECRETARY.

MORNING SESSION OF WEDNESDAY, FEBRUARY 13.

President V. K. Ting in Chair.

The first session of the Sixth Annual Meeting was called to order at 9:30 A.M., Wednesday, February 13 in the Library Building of the National Geological Survey of China, Peking, by President V. K. Ting. Fifty four members were present including Prof. Otto Jackel, representative of Sunyatsen University, Canton, Mr. T. O. Chu representative of Kwangtung and Kwangsi Geological Survey, and Prof. E. T. Nyström of Shansi University. After the President Ting's introductory remarks, Mr. T. C. Chow, and Dr. W. H. Wong were asked to give their reports.

REPORT OF THE TREASURER.

To the Council and members of the Geological Society of China, the Treasurer begs to submit the following report of the finances of the Society for the years 1927, 1928 and Jan.-Feb., 1929.

T. C. Chow,
Treasurer.

Receipts

1927	Balance Credit, December 31st, 1926	\$ 437.75
	Membership Dues.....	173.00
	Bulletins sold	182.34
	Contribution from Geological Survey China	550.00
	Refund from Geological Society Library Fund	6.50
	Credit Interest	3.60
		\$1,353.19

1928	Membership Dues	463.12	
	Bulletins sold	358.90	
	Contribution from Geological Survey China	650.00	
	Contribution from V. K. Ting	150.00	
	Credit Interest	7.63	1,629.65
1929	Membership Dues	24.90	
	Bulletins sold	46.00	
	Contribution from Geological Survey China	300.00	
	Contribution from Liang Kwang Geological Survey	400.00	
	Library Fund	380.20	1,151.10
	Grand Total	<u>\$4,133.94</u>	<u>\$4,133.94</u>
Total Expenditure in 1927, 1928 and January-February, 1929			\$3,974.26
Balance Credit up to February 12th, 1929			159.68
Total			<u>\$4,133.94</u>
Deposit in National Commercial Bank		\$	49.82
Cash on hand			54.86
Valueless bonds and bank notes			55.00
Balance		\$	<u>159.68</u>

Expenditures

1927	Printing Bulletins	\$	660.42	
	Administration		84.33	
	Postage		63.00	
	Stipend to Mr. Ting Tao Heng		200.00	
	Miscellany		79.60	\$1,087.35
1928	Printing Bulletins		1,296.44	
	Administration		23.65	
	Postage		62.00	
	Stipend to Mr. Ting Tao Heng		240.00	1,622.09
1929	Printing Bulletins		1,211.76	
	Administration		22.00	
	Postage		31.06	1,264.82
Total Expenditure		<u>\$3,974.26</u>	<u>\$3,974.26</u>	

REPORT ON THE LIBRARY FUND AND THE FUND FOR
THE GRABAU MEDAL FOR THE YEARS 1927 AND 1928.

Income

Balance end of December 1926.

Library fund	\$4,677.15
Grabau Medal Fund	412.80
Interest (1)	981.63
Contribution from Ta-hsin (大新) Mining Company (through Mr. 小林胖生) (2)	300.00
Total	<u>\$6,371.58</u>

Expenditure

Purchase of the Transaction of South American Geological Society	\$ 110.00
Contribution to the Printing fund for the Society Bulletin (3)	380.20
	490.20
Balance (4) end December 1928	5,881.28
Total	<u>\$6,371.58</u>

(1) The fixed deposit was originally at 10% interest. It is later changed to 7.5%, current account at 4%.

(2) Donation without definite condition. It was thought desirable to accept it to increase the library fund, but use the interest for printing.

(3) Owing to the fact that the Geological Library has enough fund for book purchasing and the Society's income is not enough to pay the printing of the Bulletin, it has considered desirable to contribute part of the interest of these funds to pay the printing.

(4) No expenditure for the Medal with 1927 and 1928.

Respectfully submitted by
W. H. Wong
on behalf of the Special Committee.

REPORT ON THE AWARD OF THE GRABAU MEDAL.

It was proposed by Messrs. A. W. Grabau and W. H. Wong that the Second Medal be awarded to Prof. J. S. Lee for his excellent work on Fusulinidae published as Volume IV Fascicle 1 in the Palaeontologia Sinica Ser. B. The proposal was heartily seconded by Messrs. V. K. Ting and C. Y. Wang and H. T. Chang. Therefore the award of the second Grabau Medal was decided by the committee

unanimously. Some difficulty has arisen for the making of the gold medal. It is expected that the new medal in making now in Shanghai will be soon available for presentation to Prof. Lee.

Submitted by

W. H. Wong

Secretary of the Committee for the award.

REPORT OF THE BOARD OF EDITORS.

Notwithstanding the disturbed conditions which have prevailed in Peiping during the last two years, it has been possible to publish uninterruptedly our bulletin thanks to the valuable contributions from members and friends of the Society. The volume VI for the year 1927 is already complete. No. 1 of the volume VII for the year 1928 is already issued. No. 2 of the same volume is just ready for distribution at the present meeting. During the last two years various members have helped the editorial work Messrs. C. C. Liu and T. C. Chow have been especially active in such work. At present almost the whole editorial work falls upon Mr. T. C. Chow who does it with particular competence. Hearty thanks are due these gentlemen who have so much contributed to the Society's success. The last No. for the year 1928 remains to be printed, while papers communicated in this annual meeting will go to the No. 1 of Vol. VIII for 1929 which shall be simultaneously printed so that there will be no delay in the publication.

In average the printing of our Bulletin costs about \$1,200 a year. These expenses are largely defrayed by the donations of the National Geological Survey in Peiping and the Kwangtung and Kwangsi Geological Survey in Canton. A large part of the formerly accumulated debt has been paid this year so that we have now practically no debt, but further fund is much in need for the new printing. As the available fund is scarcely enough, it is hoped that members will all help by punctually paying their membership dues so that the Surveys' contributions may be as far as possible used for printing.

As can be seen from the Treasurer's report, the income from the selling of the bulletin has now increased to over \$300 a year. The distribution and the selling of our bulletin are all handled by the Survey Librarians Messrs. Chead and Chu whose service is hereby acknowledged.

The following statistics may be interesting :

Bulletin	Number of paper	Number of pages
Vol. I (1922)	5	99
Vol. II (1923)	12	240
Vol. III (1924)	23	407
Vol. IV (1925)	25	276
Vol. V (1926)	25	290
Vol. VI (1927)	21	346
Vol. VII No. 1-2 (1928)	10	208
(incomplete)	121	1866

A detailed index for the volumes I-V has been appended at the end of Vol. V.

The contributions of scientific papers came from almost all the geological or related institutions in China among which the following are especially to be mentioned: Geological Survey of China, University of Peking, Yenching University, Chungchow University, Central University, Union Medical College, Hoangho-Peiho Museum, Shansi University, Siccawei Observatory, Geological Institute of the National Research Institute etc. and many scientific institutions abroad. The Bulletin of the Geological Society of China is therefore become a most representative publication of all activities on Chinese geology.

Respectfully submitted by
W. H. Wong
on behalf of the Board.

ELECTION OF OFFICERS FOR THE YEAR 1929.

The election of the officers for this year was conducted by correspondence. The result was announced as follows :

President : Mr. J. S. Lee 李四光 Director of the Geological Department of National Research Institute, Shanghai.

Vice-President : Mr. L. F. Yih 葉良輔 Member of the Geological Department of National Research Institute, Shanghai.

Mr. L. Wang 王烈 Dean of Peking National University.

Secretary : Dr. Y. C. Sun 孫雲鑄 Prof. of Geology and Palæontology in Peking National University.

Treasurer : Mr. K. H. Hsu 徐光曜 Geologist to the Geological Survey, Peking.

New Councillors : The following were elected as new members of the council :

Prof. A. W. Grabau, Messrs. H. C. Tan 譚錫嘯 H. T. Lee 李學清 Y. T. Chao 趙亞曾 were elected as new members of the Council. The other members of the Council are the following:

Suhsu G. King	金叔初	(term expires 1930)
Teilhard de Chardin	德日進	(term expires 1930)
H. T. Chang	章鴻釗	President (1922)
W. H. Wong	翁文灝	President (1924, 1926)
V. K. Ting	丁文江	President (1923, 1927, 1928)
C. Y. Wang	王寵佑	President (1925)
C. H. Chu	朱家驊	Vice-President (1927-1928).

After the announcement of new officers for 1929, President Ting delivered the Presidential address. His subject was: Orogenic periods in China. A Photograph of the member was taken before the library of the Geological Survey. The Meeting was adjourned at 12:30 P.M.

AFTERNOON SESSION OF WEDNESDAY, FEBRUARY 13.

The meeting was reconvened at 2 o'clock. The President V. K. Ting opened the discussion for the Presidential address on Orogenic periods in China which was presented at the morning session. Discussed by Prof. A. W. Grabau and Director W. H. Wong.

A. W. GRABAU.

Quartzite formation along Yangtze Region is variable in thickness and represents probably not the same horizon, and I think that Yolushan quartzite would not be applicable for all those quartzite is different provinces along Yangtze region.

W. H. WONG.

In general the name of the mountain is usually adapted for orogenic periods such as Tsinglingian, Hercynian, Armorican etc. The province name is not suitable for naming the orogenic periods, for two mountain ranges of different age are often found in the same province.

V. K. TING.

I propose Yolushan quartzite because of the convenience and also because I am convinced that all these quartzite represent a single formation.

The name for orogenic periods is not always derived from the name of the mountain. Caledonian is a good example. Any better name suggested by Dr. Wong will be appreciatedly adopted by me.

After discussion the following papers were read.

Y. C. SUN: NOTE ON MIDDLE DEVONIAN FAUNA FROM KWANGSI.

Remarks made by Prof. A. W. Grabau.

A. W. GRABAU.

The material studied by Dr. Sun is entirely distinct from that of Human and represented by several new species of *Spirifer* which are quite distinct from any one so far known in China. This collection was made by Director Ting and supposed in the field to be of Silurian age. I agree also with Dr. Sun's identification and I think it is of Middle Devonian probably early Middle Devonian.

OTTO JACKEL: PERMIAN AMMONITES FROM KWANGSI.

Discussed by Prof. A. W. Grabau.

A. W. GRABAU.

Some form of Ammonite in this collection are of Ceratite type which is a most unusual feature of Permian Ammonite from China.

OTTO JACKEL: COLOCATION OF GEOLOGICAL MAPS.

President Ting appointed six members to form a Committee for discussing the coloration of geological maps and Dr. W. H. Wong, Prof. A. W. Grabau, Mr. H. C. Tan, Prof. Otto Jackel, Mr. T. O. Chu and Prof. Y. C. Sun were members of that committee.

A. W. GRABAU: PROBLEMS OF THE DISTRIBUTIONS, ORIGIN AND PRESERVATION OF THE GRAPTOLITES.

(The paper will appear in full in the Bulletin of the National Research Institute).

Discussed by Profs. Otto Jackel and Y. C. Sun.

E. LICENT: PLEISTOCENE DEPOSIT IN MANCHURIA.

The meeting was adjourned at 5 o'clock.

ANNUAL DINNER.

The annual dinner was held at 8 P.M. Wednesday February 13 in *Returned students Club*. Thirty-two members and guests were present. Among the guests of the Society were Mr. C. L. Lu, President of Tsing Hua College, Mr. S. Y. Jen, Mr. M. H. Tao. Dr. V. K. Ting acted as toast master.

Speeches were made by Dr. W. H. Wong, Prof. Otto Jackel, President C. L. Lu, Dr. Yamei Kin, Prof. D. Black, Dr. Walter Granger, Prof. E. T. Nyström and Prof. A. W. Grabau of the Geological Survey.

MORNING SESSION OF THURSDAY, FEBRUARY 14.

President V. K. Ting in the Chair.

The Meeting was reconvened at 10 o'clock. The following papers were read in Chinese.

W. H. WONG : GOLD MINES IN KHINGAN REGION.

T. O. CHU : VOLCANOES OF HAI-NAN ISLAND.

President V. K. Ting discussed the geological age of volcanic rock, granite, sandstone, shale and marl with lignite. Mr. Y. T. Chao asked also about the character of the volcanic rocks found in that region.

C. C. WANG : GEOLOGY OF W. KIANGSI.

Discussed by Director W. H. Wong.

W. H. WONG.

What is the age of Kaolin?

C. C. WANG.

Probably of Pre-Cambrian granite.

H. C. TAN AND H. S. WANG : THE PHYSIOGRAPHY ALONG THE NENGIANG RIVER, HEILUNGKIANG PROVINCE.

S. L. TSAO : GYPSUM DEPOSITS IN PING LU, SHANSI.

Discussed by Mr. C. C. Wang.

C. C. WANG.

According to my observation in Shansi the gypsum deposits should be Permo-triassic, not Eocene.

S. L. TSAO.

Gypsum deposits of Ping Lu is quite similar to Yuanchu beds and the gypsum also occurs in Yuan Chu series.

T. F. HOU AND C. Y. LEE : GEOLOGICAL STRUCTURE OF KAIPING BASIN.

The meeting was adjourned at 12 o'clock.

AFTERNOON SESSION OF THURSDAY, FEBRUARY 14.

President V. K. Ting in the Chair.

The Meeting was reconvened at 2 o'clock. The following business was transacted. Adoption of revised constitution: Copies of which had been distributed on the Preceding day. The revised constitution as adopted will be printed after the Proceedings. This following papers then read.

H. S. WANG : MESOZOIC VOLCANIC OF THE NENGIANG VALLEY, HEILUNG-KIANG PROVINCE.

E. LICENT: PHYSICAL CONDITION IN NEOLITHIC TIME IN MONGOLIA.

Y. T. CHAO: PALÆOGEOGRAPHY OF THE UPPER PALÆOZOIC PERIODS IN CHINA.

Discussed by Director V. K. Ting. Prof. Otto Jackel, Prof. Grabau and Mr. H. S. Wang.

A. W. GRABAU.

The Lyttonia bed represents middle Productus limestone and belongs to Lower Part of Lower Permian, consequently the Tetrapora bed must be lower than Lower Permian or belong to the Carboniferous.

It seems to me that Schwagerina fauna originated in Pacific ocean and then migrated into Russia from China.

DAVIDSON BLACK: PRELIMINARY NOTE ON ADDITIONAL SINANTHROPUS MATERIAL DISCOVERED IN CHOU KOU TIEN DURING 1928.

Discussed by Prof. Otto Jackel, Dr. B. Bohlin, Prof. C. Li.

The following papers were read only by title.

J. S. LEE: GEO-TECTONIC OF ASIA.

L. F. YIH: 1. SUCCESSION OF VOLCANIC ERUPTIVES IN CHEKIANG.
2. THE SHORE-LINE OF EAST CHEKIANG.

GEORGE B. CRESSEY: 1. NATURAL REGIONS OF CHINA.
2. MY TRAVELS IN MONGOLIA.

TZUCHANG LI: PRE-CAMBRIAN STRATIGRAPHY AS SEEN IN SOUTH ANHUI.

Y. C. SUN: REMARKS ON THE TRILOBITE FAUNA OF SHIHTZUPU SHALE, KUEICHOW PROVINCE.

K. L. FONG: PRELIMINARY NOTES ON THE GEOLOGY OF KWANGTUNG AND KWANGSI.

C. C. YOUNG: A PRELIMINARY REPORT ON THE FAUNA NEAR CHOU KOU TIEN.

Unless otherwise arranged all the above papers will be printed in full in the Bulletin.

The chairman announced that our corresponding member Dr. C. D. Walcott and honorary member Prof. Kayser, died in 1927 and Dr. C. C. Young was the representative of the Society to the Burial of Prof. Kayser at Munchen, the chairman further announced that six corresponding members were already elected during the last two years and three new corresponding members were proposed this year by the council, they are: Drs. Cowper Reed, Coygin Brown and David White. The election of these was ratified by a rising vote, the new corresponding members of the Society not previously announced in the Bulletin are the following:

Prof. Johannes Walter, Germany. (hon. m.) Prof. H. A. Brouwer, Holland.

Prof. A. Lacroix, France. (hon. m.) Dr. F. A. Bather, England.

Prof. Dr. Musketov, Russia. Dr. Cowper Reed, England.

Prof. W. M. Dr. Davis, U. S. A. Dr. Coggin Brown, India.

Dr. David White, U. S. A.

The chairman thanked the members for their important contributions and the meeting was closed at 5 P. M.

CONSTITUTION OF THE GEOLOGICAL SOCIETY OF CHINA.

Revised and passed by Sixth Annual Meeting February 14, 1929.

Art. 1. This Society shall be known as the Geological Society of China.

Art. 2. The object of this Society shall be the advancement of geology and its allied sciences.

Art. 3. The membership of the Society shall consist of fellows, members, associates, corresponding members and honorary members.

The following persons shall be eligible for membership in the Society.

A. As members, persons interested in geology and allied sciences.

B. As fellows, geologists and other scientists actively engaged in scientific work.

C. As associates, college students of good standing in the studies of geology and its allied sciences.

D. As corresponding members, geologists and paleontologists of note residing abroad who have been associated with or contributed to geological investigation in China.

E. As honorary members, geologists and paleontologists of exceptional eminence who have conspicuously contributed to the advancement of the science in China.

Art. 4. Any candidate desiring to be admitted as a member or as an associate must be nominated by two fellows and elected by the vote of the councils. This election may be conducted by correspondence.

The fellows are to be elected by the council from the members.

The corresponding members and the honorary members are to be elected by the general meeting on the recommendation of the council.

Art. 5. The officers of the Society shall consist of one president, two vice-presidents, one secretary and one treasurer. All the officers, are at the same time councillors ex-officio. Each officer shall be elected by the annual general meeting from the three candidates proposed by the passing council.

Art. 6. The council shall consist of the officers as ex-officio members and six members to be elected by the general meeting.

All past presidents and vice-presidents of the Society shall also become ex-officio members of the council for a term of six years.

- Art. 7. Officers shall be elected one year and not be eligible for re-election for more than three successive terms. Elected members of the council shall hold office for three years; one third of the number is to be elected each year.
- Art. 8. Fellows, members and associates are entitled to vote; only fellows are entitled to hold office.
- Art. 9. The election both for the officers and members of the council can be conducted by correspondence before the annual general meeting, if this is decided by the passing council.
- Art. 10. Any important business of the Society must receive the approval of the council before it can be transacted by the officers.

The quorum of the council meeting shall be half of the total number including ex-officio members.

In case it is impossible to have a council meeting, important business may be submitted to the members of the council by correspondence. But any urgent business can be transacted by the president or the secretary subject to the later approval of the council.

In case of the resignation of any officer or his inability of continuing his duty, an acting officer may be appointed by the council to act in his capacity until the new election.

- Art. 11. The Society shall hold one general meeting each year which shall be for the elections of officers and members of the councils, the presentation of annual reports, the transaction of business and the reading and discussion of scientific papers.

Special meetings may be held for the reading and discussion of scientific papers.

- Art. 12. In any place in China where there are more than five residing fellows, local section may be formed and local meetings may be held for the transaction of local business and the reading and discussion of scientific papers.

- Art. 13. A publication shall be issued under the name *Bulletin of the Geological Society of China*

The bulletin should contain (1) the proceedings of all the general (annual or special) meetings, (2) news or reports of local sections and (3) scientific papers (or abstracts) read in the general and local meetings.

A committee of publication shall be formed with members recommended by the editor who is to be elected by the council. This committee has the power of accepting or rejecting any papers submitted for publication.

Art. 14. Membership dues for members and fellows shall be five dollars each year and for associates two dollars.

Membership dues to fifty dollars paid up at one time shall entitle a fellow to life-membership.

Art. 15. Financial support in addition to membership fees may be obtained from special contributions.

Special permanent funds shall be administered by special committees to be elected by the council and under special regulations approved by the general meeting.

Art. 16. The Society may found and award medals or research funds for the encouragement of geological works.

Art. 17. There shall be bye-laws for the matter not included in this constitution.

Art. 18. This constitution may be amended by two third vote at the annual meeting after the amendment is submitted by more than five members.

PRELIMINARY NOTE ON ADDITIONAL *SINANTHROPUS*
MATERIAL DISCOVERED IN CHOU KOU
TIEN DURING 1928. *

BY DAVIDSON BLACK,

WITH SIX PLATES AND TWO TEXT FIGURES.

In the course of the excavations continued by the Cenozoic Laboratory of the Geological Survey of China at Chou Kou Tien during the season of 1928 a new aggregation of *Sinanthropus* material has been discovered at the north eastern corner of the main deposit and at a level some ten meters above the stratum in which occurred the type lower molar tooth described last year. (Pal. Sin., Ser. D, Vol. VII, Fasc. 1, 1927). For convenience in reference the region in which this new material occurred may here be designated *Locus B*, the original *Sinanthropus* level being then termed *Locus A*. There can be no doubt as to the contemporaneity of these sub-localities within the main deposit nor of their geological age, the rich associated mammalian fossil fauna being identical in the two and typical of the Lower Quaternary (Plyocene) Age. (cf. Zdansky: Die Säugetiere der Quartärfauna von Chou Kou Tien. Pal. Sin., Ser. C, Vol. V, Fasc. 4, 1928).

The Chou Kou Tien field work, which this year has been ably carried on by Dr. Birger Bohlin, Dr. C. C. Yang and Mr. W. C. Pei, has resulted in the discovery and complete excavation of *Locus B*, and in the further extensive though not complete excavation of *Locus A*. A brief report on the 1928 field work has already been made before this Society at its Meeting of December 14, 1928.

Up to the present the following additional specimens undoubtedly referable to the genus *Sinanthropus* have been recovered from *Locus A*, either in the field itself or during laboratory preparation of material from this sub-locality:- the greater part of the right horizontal ramus of an adult lower jaw with three molar teeth in situ and having the premolar, canine and distal half of the lateral incisor sockets preserved; a somewhat worn right upper molar tooth (M 1 or M 2) showing definite evidences of injury during life; the labial side of the crown and portion of the root of a permanent upper median incisor; and immature lower (?) permanent incisor; and lastly the labial half of the crown and root of a worn lower median

* From the Cenozoic Laboratory of the Geological Survey of China and the Department of Anatomy, Peking Union Medical College. Communicated at the Annual Meeting of the Geological Society of China on Feb. 14, 1929. Received for publication March 19, 1929.