MARKHAM HOUSE PRESS, LTD. THE MAIL ORDER BOOK SERVICE.

ART AND LIFE IN ANCIENT MEXICO

by

COTTIE A. BURLAND.

With 47 half-tone illustrations and many line drawings from the ancient MSS.

Crown 4to. 112 pages. Post free 16/6d. or \$2.50. Published by Bruno Cassirer.

ANCIENT MEXICO has always had a great fascination not only for the historian and anthropologist but for everybody interested in the history of mankind on its way from barbarism to civilisation. The grandiose ruins of Mexico are among the most impressive monuments of this struggle. Some of their mysteries have been solved by long years of research, many are still eluding us. But the work is progressing all the time and hardly a month passes without new and important discoveries being made.

THE AUTHOR:

C. A. Burland, to-day one of our leading young Americanists, has already made important contributions to the interpretation of the documents and manuscripts in our possession. He has the rare gift of relating scientific results in a vivid language, with a keen sense of the drama behind the facts and the excitement behind their discovery.

THE BOOK AND THE READER:

While thus opening a new field to the reader, the book will at the same time be invaluable to the student through notes and appendixes on Mexican writing and on the complicated Calendrical system of which the author gives for the first time a comprehensible and lucid interpretation. The book is illustrated by many line drawings of Mexican Glyphs taken from the ancient documents. There is also a glossary, an extensive bibliography and a comprehensive list of all well known Mexican MSS sources.

The illustrations, some of which have not been reproduced before, reveal the astonishing richness of public and private collections in this country and will come as a surprise to many in their close affinity to modern art. It is perhaps significant that one of the most important pieces comes from the collection of Henry Moore.

MARKHAM HOUSE PRESS, LTD., 31, King's Road, London, S.W.3.

ATLANTEAN RESEARCH

Official Organ of

THE RESEARCH CENTRE GROUP

Vol. 2, No. 6.

February/ March, 1950.

CON	TENTS	
ATLANTIS:		Page
European Literature since	1914.	
	By Egerton Sykes	81
Orichaleum.		
	By Egerton Sykes.	85
The Orichalcum of the Atl	antians.	
	By Ivan Tournier.	8 6
HOERBIGER:		
The Birth of the Moon.		
	By Michael Kamienski.	88
Tiahuanacao—The Next S	tage.	
	By Edmund Kiss.	92
AVALON:	0.00	
Earth Lodge and Eternal	House.	
	By C. A. Burland.	93
Thanet Archaeological Soc	iety.	95
Letter from Edmund Kiss.		96

Editor: EGERTON SYKES,

Annual Subscription 12/6, or U.S.A. \$1.75. Post Free. Single Number, 2/- or 30 Cents.

Registered with Stationers Hall.

RESEARCH CENTRE GROUP.

The Atlantis Research Centre.

The Hoerbiger Institute.

The Avalon Society.

Founder and Chairman: EGERTON SYKES. .

Vice-Chairmen: G. A. TAWSE, H. S. BELLAMY, L. EDWARDS, J. E. G. BYRNE.

Hon. Secretary. K. E. SYKES. Hon. Treasurer: J. BARNES.

All communications should be addressed to the Secretary at 9, Markham Square, S.W.3. Tel. Ken. 5381.

LECTURES AND EXCURSIONS.

- On Wednesday, March 22nd, at 4.30 p.m., at the Caledonian Hotel, Edinburgh:—Mr. EGERTON SYKES will speak on ATLANTIS, A PROBLEM OF TO-DAY.
- On Friday, March 31st, at 7.30 p.m., at the Caxton Hall, Westminster:—Mr. F. R. WATTS will speak on SOME EXTRACTS FROM THE TOPOGRAPHICAL SURVEY OF 3.000 B.C.
- On Friday, April 21st, at 7.30 p.m., at the Caxton Hall, Westminster:—Lt.-Col. FENWICK will speak on ARCHAEOLOGY & DOWSING.

Mr. EGERTON SYKES has been invited to lecture in Paris, on May 20th. If this can be arranged, further details will be announced later.

Excursions to the prehistoric sites in Oxfordshire mentioned by Mr. Watts in his lecture and to the Margate Grotto, will be announced at the lecture on March 31st.

ATLANTIS THE ANTEDILUVIAN WORLD.

By Ignatius Donnelly, revised and edited by Egerton Sykes. Published by Harper & Brs., New York, November, 1949: \$4.50.

An English edition of this important work will be published in September, 1950, by Sidgwick and Jackson. As the supply will be limited, copies should be reserved now from Markham House, who will deliver on publication. Please do NOT send any money until you are advised that your copy is awaiting despatch. Price (tentative), 19/- post free.

Markham House Press Ltd., 31, King's Road, London, S.W.3.

EUROPEAN LITERATURE ON ATLANTIS SINCE 1914, REVIEWED.

By EGERTON SYKES.

Subsequent articles will deal with the Latin American complex and the English Speaking World, respectively.

In Europe. The revival of interest in matters Atlantean, after the dull and uninteresting first years of this Century, may be said to date from the end of World War I, when Germany was undergoing the agonies of defeat and France those of victory, and the minds of many writers turned to the study of that portion of our cultural past where finality had seemingly been reached.

In France, although not the first in order of date, Pierre Benoit really set the ball rolling with his Atlantide (1919), a work of fiction which not only turned attention to the past, but also satisfied France's colonial aspirations by placing the Lost Continent in French North Africa. This work, the only one on Atlantis to have been filmed, has been the subject of

three inferior productions in Europe and the U.S.A.

Meanwhile, a timid beginning had already been made by Paul Gaffarel, whose Atlantide, published in 1913, was followed in 1914 by a series of papers presented over the next ten years to the Paris Academy of Sciences by Emile Belot, who had been working on a lunar theory similar to that of Hoerbiger. Louis Germain had also presented a paper to the Academy in 1911, but did not amplify his conclusions until his Atlantide appeared in 1924. R. M. Gattefosse with Adam L'Homme Tertiare (1919), La Verite Sur L'Atlantide (1923), Les Portes de Bronze (1941) and Les Sages Ecritures (1945), and his brother, Jean Gattefosse with L'Hypothese de la Derive des Continents (1925) and L'Hyperboree et les Migrations Neolithiques (1940) were two of the three producers of the Bibliographie de L'Atlantide in 1926, the third being C. Roux, also the author of much Atlantean material.

In 1925, Paul Le Cour was appointed Secretary General of the newly-formed French Atlantis Society, which shortly afterwards split into two groups, the break-away being headed by R. Devigne, himself the author of Atlantide (1923). The journal of the Society Atlantis of which Paul Le Cour is editor, is still in existence, although in the interim it has turned somewhat towards Celtic Mysticism. He has written numerous books and articles of which perhaps the most important is

A La Recherche D'Un Monde Perdu (1926).

In 1928, Paul Coussin launched a bitter attack on the Atlantis hypothesis in his book L'Atlantide de Platon, but, as has so frequently happened, his evidence is more in favour than against. Shortly before that, the French translation of Bessmertny from the German had been completed by A. Gidon, who had also published Les Submersions Atlantiques in 1914, and was later to translate Imbelloni from the Spanish. In 1924 the Abbe Moreux published a popular account of the

Lost Continent: L'Atlantide A-T-Elle Existé; in that year also M. Manzi's Atlantide appeared, giving the latest occult

ideas on the subject.

Another predecessor of Benoit was O. Reclus, whose Atlantide Pays de L'Atlas had appeared in 1913, in which year he had also contributed a preface to the Geographie Mythique of A. Paniagua, who was a follower of the same trend as the American, Fessenden, and also the author of Atlantide in 1927. One of the Belgian writers of this period was A. Rutot whose Atlantide appeared in 1920.

F. Butavand Atlantide of 1925, placed the Lost Continent in Tunisia. J. Carrere Le Grand Soir, an Atlantean novel of 1925 is chiefly valuable for the detailed appendix given in

the first edition.

Pierre Termier's Atlantide of 1913 (Smithsonian Rep 1915) and La Derive des Continents in 1924 (Smithsonian Rep 1925) were, perhaps, the most important scientific works on the subject during this half century, as it is on the basis of their findings that most scientific investigations have since been

pursued.

D. Duville's Aethiopie Orientale ou Atlantie (1936) and Paul Ronciere's La Conquete des Mers (1938) were both milestones in the advance of knowledge, as was Poisson's Atlantide Devant La Science of 1945. R. Godel's Cite et Univers de Platon, a brilliant film scenario based on Plato's life and ideas, was published in Cairo during 1944. Mention should also be made of A. Glotz, the historian who expressed himself favourably towards the Atlantean idea in his Histoire Grecque in 1930.

In Germany, G. Lohmer with Kommende Weltkatastrophen in 1921 started what was to become a small flood of books spread over the next twenty years. Wieland's Atlantis Edda Und Bibel (1922), and K. G. Zschaetzsch's Atlantis der Urheimat der Arier were both of considerable importance for

future developments.

The well known African explorer A. Frobenius, who spent nearly thirty years seeking for Atlantean traces in Africa, mainly in the Ife Country, wrote some dozens of books, of which the most important are: Atlantische Gottelehre (1926), Erlebte Erdteilen (1929 et seq) and Kulturgeschichte Afrikas (1933). The Frobenius Institute which he founded is still functioning in Frankfurt am Main.

Among other seekers for traces in North Africa and Spain were A. Schultern: Tartassos (1922); A. Hermann: Die Erdekarte der Urbibel (1931); H. Jensen: Tartassos—Alantis (1925); Fr. Netolizky: Wiederentdeckung der Atlantis Platon's (1924); and P. Borchardt: Platon's Insel Atlantis (1931).

The first writing to be linked with the Hoerbiger Theory, after the publication of Hoerbiger and Fauth's Glazialkosmogonie in 1913 was H. Voigt's Eis Ein Weltbaustoffe in 1918, followed by E. Quisser's Eline Einfuehrung in die Glazialkos-

mogonie and H. Fisher's Wunder des Welteises, both of which appeared in 1922; M. Valier's Weltuntergang in 1923 and O. Ebelt's Welteislehre in 1925-26. The German translation of Bessmertny's Atlantis, which gave a chapter to the Hoerbiger theory, had been published in 1922.

By 1925, the Hoerbiger Theory had its own journal Schlussel Zum Weltgeschehen, edited by H. Fischer, which continued under varying titles until 1940. H. W. Behm's Planetentod Und Lebenswende (1926), E. Georg's Verschollene Kulturen (1930) (later published in U.S.A. as the Adventure of Mankind), and E. Dacque's Urwelt Sage Und Menscheit

(1927), were a trio of serious studies which should on no account be overlooked. G. Hinzpeter, who was to be the last editor up to 1940 of the Schlussel, by then known as the Neue Welteislehre, wrote several works on the subject from 1928 onwards of which perhaps the best known is Mondniederbruche in Anlitz der Erde (1935). J. Emerson's Die Welt Raetsel Geloest in 1931 was followed by E. Kiss' Welteislehre in 1933.

Kiss also wrote an important work on the Titicaca Calendar **Das Sonnentor Von Tihuanaku** in 1937. With Hinzpeter, he is one of the few from this group of writers to survive the war.

In Austria, in spite of changing political conditions, the Journal of the Vienna Society: Mitteilungen des Hoerbiger Instituts, was published from 1933 until 1944 under the editorship of Dr. Manfred Reiffenstein, who has also written extensively on the subject. One of the Austrian writers was R. V. Elmayer Vestenbrugg whose Welteislehre appeared in 1938. (In 1948 a Bibliography of the Hoerbiger Theory was published

in London, and copies can still be obtained).

Other German writers during this period were Hennig: Von Raetselhaften Laendern (1925); Wencker Wildberg: Atlantis (1925); Herman Wirth: Der Aufgang der Menschheit (1929) and Die Heilige Urschrift der Menschheit (1931), (both works detailing the results of years of investigations into the petroglyphic representations of sun boats and their relation to the Atlantean and the Hypoborean Cultures); S. Kadner: Urheimat der Kulturmenschen (1931); J. Karst: Atlantis (an interesting theory of duality of cultures) (1931); E. Lang: Welt Mensch Und Gott (1935 or 1936).

Finally, mention should be made of A. Wegner, whose continental drift theory was first enunciated in **Die Entstehung**

der Kontinente in 1920.

In Greece, Phocin Negris, the distinguished Greek authority, wrote a series of papers between 1901 and 1922 when his Atlantide was published, and his Glaciers et Atlantes appeared in 1924.

In Hungary, both N. Varkoyni's Sziriat Oszlopai (1939) and Hatvany's Azsia Vilagossaga should be consulted. The first contains a full description of the Hoerbiger Theory.

In Italy, it was perhaps inevitable that Italian interest in Atlantis should be focussed on the Tyrrhenian Sea and North

Africa, rather than on the distant Atlantic, and that, accordingly, the majority of the contributions of members of the Italian Atlantis Society of Bari should be oriented in this direction. Dr. Nicola Russo, Chairman of the Society and editor of its journal Atlantide in Italia which appeared from 1930 to 1932, wrote several papers on the subject, including La Question Atlantidea E La Tirrenia and Atlantide, Tirrenia Et Tirreni both about 1930, at which period G. d'Amato wrote Il Processo Dell'Atlantide Di Platone; G. Perronne: L'Atlantide and U. Rua: Piccolo Breviario Dell'Atlantide. Unfortunately, in the immediate pre-war years, the pressure of domestic politics stopped any further speculative thought, and since then it has not been possible to restart the Society for finanical reasons.

In Scandanavia, Professor Rene Malaise has Atlantis en Geologisk Verkzighet on the stocks and it should be published in Stockholm in the early Summer of 1950, while Professor Hans Pettersson's Atlantis Och Atlanten was published in 1945 and a German translation issued in Vienna in 1948. Professor Hans Alfven has for some time been working out an astronomical theory of moon capture, elaborated in The Cosmogony of the Solar System (1942-1946).

In Denmark, the interest has been more metaphysical, and M. Frandsen has written half-a-dozen works on Atlantis, including Atlantis a Reality or an Utopia, while Karl Stodel has

published The Divine Week-day.

In Slav Countries, although Dmitri Merezhkovsky wrote Les Mysteres de L'Orient and the Secret of the West during the first World War, it was not until 1927 and 1933 respectively that translation made these important works of mystical philosophy available to Western Europe. Another Russian, A. Braghine, wrote L'Atlantide in 1934 and it was published in England as The Shadow of Atlantis in 1938. A Czech, A. Bessmertny, wrote a critical survey of the Atlantis position in German in 1923 and it was translated into French by A. Gidon in 1925. In collaboration with Miss Helen Heney, the Australian author, the writer of the present review had completed an English translation of this work before World War II, but it fell into enemy hands.

Since 1945, Professor A. Kamienski of the University of Krakow has published two most important works on astronomical researches into Atlantis and the past. They are A Cyclic Method of Finding Positions of Planets for Very Remote Times (1948), and Tables of the Sun for the Period from 10000 B.C. to 4000 B.C. (1947). Several of his papers have appeared in

Atlantean Research.

Professor N. Boneff of Sofia University has issued La Theorie des Marees et L'Origine des Formations Lunaires et des Regions Seismiques Terrestres (1948-9) and Une Application de la Theorie des Marees au Probleme de L'Atlantide (1948-9), both of which are important mathematical contributions.

By EGERTON SYKES.

This article, which was written in December, 1949, is complemented by that of M. Tournier, which follows.

One of the mysteries which has perplexed generations of research workers is the metal Orichalcum, which is mentioned by Plato in his story of Atlantis, and also by one or two other classical authors. This strange metal, which the Atlanteans regarded as a very useful building material, has been variously reported as dark red or almost white in colour, but owing to the eomplete lack of any samples for testing purposes, its constitution has baffled investigators for some 2,500 years.

Paul Schliemann reported in his statement of 1912 that he had found several medalions of a whitish metal which he presumed to be Orichalcum, but these are not at the moment avail-

able for investigation.

The late George Isaac Bryant, who spent many years investigating the problem of Atlantis, suggested that Orichalcum might perhaps be an alloy of platinum, copper and aluminium; and recently, thanks to the courtesy of two of our members, this matter was taken up with the leading authority in this country on aluminium, and the largest firm of dealers in platinum. Both these authorities were firm in their conviction that, since aluminium, which does not exist in a raw state, was only discovered in 1809, its earlier discovery in Atlantean times would have involved a degree of metalurgical skill far greater than that which we have any right to presume. They also observed that, owing to the difference in the melting points, an alloy composed of platinum, copper and aluminium could not be produced by heat treatment, but only as a chemical product, which would again put it outside the field of any earlier standard of knowledge.

A point, however, arises from this correspondence that platinum is present as an impurity in nickel, from which metal it is usually obtained by a refining process. It is permissible, therefore, to assume that if the Atlanteans had a source of supply of nickel in which platinum was present as an impurity, the natural admixture of the two metals might perhaps have been used to produce medalions or other specimens of a whitish metal having great durability and resistance to exposure. Whether this could have been used for building purposes or not is still an open question.

On the subject of copper, the name Orichalcum has been translated by several authorities as Pinchbeck, Mountain Brass, or even just Brass; and it would appear that it might have been an impure copper which, when heat-treated, showed differences in durability and structure from ordinary copper, particularly

in resistance to the elements.

Those who visited the Paris Exhibition in 1937 will recollect that one of the bridges over the Seine was coated with sheets of what appeared to be burnished copper. On seeing this, one felt that this must have been the appearance of the Atlantean temples of which Plato speaks.

THE ORICHALCUM OF THE ATLANTEANS

By IVAN TOURNIER.

M. Tournier has been a distinguished contributor to the French journal Atlantis for many years. He has kindly permitted the translation of his recent article in Destins to be published in conjunction with that of Mr. Sykes, to form a picture of the Orichalcum situation as it is today.

Following on recent announcements in the press on the transmutation of mercury into gold in an American laboratory, a writer has observed that it is purely by accident that this discovery agrees with the dreams of the alchemists, and that modern science has nothing to learn from their grimoires. This is a casual judgment, since everyone at all familiar with traditional knowledge believes, on the contrary, that this constitutes a proof of the deep knowledge possessed by the initiates of yore on the constitution of matter and its possible modifications.

This isotope of mercury which is transformed into gold is evidently the mercury of the wise men, already observed as being different to the usual quicksilver. But, by a technique now unknown, the specialists of the past managed to prepare this without atomic piles and all the costly apparatus of to-day. This fact should incite us to take seriously other indications handed down by tradition on the metals known to the ancients, especially in so far as concerns the enigmatic Orichalcum of the Atlanteans.

The ancients, as we know, had knowledge of seven metals which they made to correspond with the seven astrological planets: Gold—the Sun; Silver—Luna; Iron—Mars; Copper—Venus; Tin—Jupiter; Lead—Saturn; and Quicksilver—Mercury. Thanks to modern research, nature has shown herself incomparably wealthier, both in planets (including asteroids), and in metals (some seventy not counting artificial elements such as neptunium, plutonium, americum, curium, etc., and a couple of dozen metalloids).

But already in the times of antiquity an eighth metal seems to have been known, the orikhalkos mentioned by Plato. Although abundant in Atlantis, it has been lost since the submersion of the island. In the Critias it is said: "Orichalcum was dug out of the earth in many parts of the island and, with the exception of gold, was esteemed the most precious of metals—the entire circuit of the wall which encompassed the citadel, flashed with the red light of orichalcum... In the interior of the temple the roof was... adorned with orichalcum, all the other parts of the walls and pillars and floor they lined with orichalcum

... The injunctions of Poseidon ... were inscribed on a column of orichalcum."

What visions have been awakened by this mysterious and magic metal! In Benoit's "ATLANTIDE," Antinea gave a ring of oriehalcum to Saint-Avit. It was Georges Fourest who wrote:

This coffer of orichalcum sealed with sardonyx, And lined with velvet, that Gengis Khan long ago, Gave to my ancestor.

Many commentators have considered Orichalcum to be a myth or an esoteric symbol. Others have thought it to be brass, which is still known as archal in Greek. Plato, however, seems to have spoken of a noble — as opposed to base — and specific metal, and not of an alloy. Now-a-days it could be one of the newly discovered precious metals such as platinum, nickel, irridium, ruthenium, cobalt, etc.

On the other hand, Pliny gives an interesting clue when he observes that the ancients attributed to the Atlanteans the knowledge, since lost, of hardening copper or bronze. That this was not a legend is shown by the discovery, or rediscovery, of a bronze which can be hardened, in the form of an alloy of copper and breyllium—a light metal, also known as glucinium, discovered in 1798, and classified under No. 4 in Mendeleef's atomic table.

It is conceivable that the famous "mountain copper" may well have been copper alloyed with beryllium. One is led to this supposition by the fact that in 1936, bistouris made of this metal dating back to the 14th Dynasty (17th Century B.C.) were found at Assiut (Paris Soir, November 1, 1936). As this metal cannot be oxydised when cold, it may have been employed as a decorative covering, which would explain its high value.

If orichalcum alias beryllium/copper, at last rediscovered, has had an interesting past, the beryllium side of the combination is likely to have an even more remarkable future, for it is stated that it can easily be used to replace heavy water or graphite in atomic piles. Since beryllium is easily extracted from beryl (silicate of aluminium) of which there are large deposits in France, the interest which this news has aroused in that country will readily be understood.

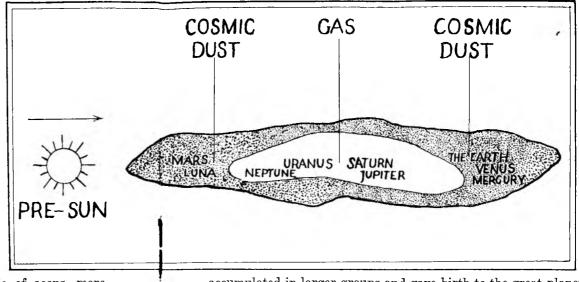
Let us hope that the exploitation of these deposits will only be made in the interests of peace, and that orichalcum does not vanish for a second time in a new cataclysm provoked by celestial anger . . . or human stupidity.

NOTE BY THE EDITOR.—If Orichalcum really is beryllium, which in its turn comes from aluminium silicate, then Mr. G. I. Bryant may not have been so far wrong after all.

THE BIRTH OF THE MOON

By Professor

MICHAEL KAMIENSKI.



1. It happened long, long ago; millennia of aeons, more than two thousand million years ago. Our Pre-Sun, much bigger than that of to-day, young and ardent, radiating with splendour and white light, swam majestically in interstellar space, circling round—as it still continues to do—the invisible centre of our Galaxy, its Great Mystic LOGOS, and since those times, it has circled round this Centrum more than ten times. Thus, ten Galactic Years—if we may use this new term—have elapsed since the life of our Pre-Sun underwent a great change.

Thus far, it had lived solitary, alone, sending its radiating energy to far-distant sister-suns. When lo! at the due time decreed by Higher Powers, it met a certain cloud in its way. This cloud was composed of various gases and cosmic dust, like those which are strewn abundantly in our Galaxy, whereupon the particles of this cloud began to undergo the gravitational forces of the Pre-Sun. They began to fall on to it, but when they entered its electromagnetic field, which partly ionised and partly repelled them by the pressure of light, a certain number of particles of the cloud were arrested. The result must have been that gases were accumulated at about the distance r from the Sun, which depends on the atomic weight r0 of the gas and on its ionization potential r1.

 $r = 13.5 \cdot 10 \cdot m/V$

Now, the gas particles with an atomic weight of about 7 were stopped at the distance of Jupiter, and those with a weight of about 13 at the distance of Saturn. In consequence of their mutual collisions and motions along the lines of the electromagnetic forces of the Sun, the particles which had been stopped

accumulated in larger groups and gave birth to the great planets of the solar system. Most of the material was accumulated at the distance of Jupiter, and a somewhat smaller part at that of Saturn. Out of the central part of this cloud, containing various gases, the giant planets were formed in turn: Neptune, Uranous, Saturn, Jupiter (vide Fig.). They formed the First Planetary Family. The fore part of this cloud, composed of cosmic dust, which the Pre-Sun met first, was responsible for the formation of the oldest planets, Mars and Luna. They belong to the Second Family. Finally, out of the last part of the cloud through which the Pre-Sun passed, were formed the inner planets, Earth, Venus and Mercury, also belonging to the Second Family.

2. The above is a short summary of the theory put forward by the astronomer H. Alfvén, of Stockholm, and published in 1942-1945 (1). It contains the results of his exhaustive researches on the origin of the planets, planetoids and satellites of planets. In his researches, H. Alfvén has used, and applied, several formulas of celestial mechanics as well as the newest conquests of physics and chemistry. Thus his theory enables us to explain and even to foresee many details in the structure and mechanism of the solar system, which could not hitherto be properly explained.

Let us note that the normal satellites of the planets were formed with the remainder of the cloud-material in a manner analogous to the formation of the planets under the influence of the Pre-Sun. The cloud of gas and dust particles, approaching the planets in process of formation, were partially stopped at certain distances and, accumulating, formed their satellites.

Thus, the above-mentioned First Family of planets, formed cut of gas, has many common properties and thus differs from the Second Family, which was formed out of cosmic dust, and thus, the average density of the Second Family planets is over 3.0, whereas that of the First Family is far below 3.0.

3. As stated above, the oldest planets, Mars and Luna, were formed at the very beginning. Luna circled round the Sun probably between Venus and Mars. It is genetically connected with the latter, having many properties in common. These,

however, may be discussed another time.

Now, at a certain time, for some reasons not hitherto sufficiently explained, Luna approached the Earth so close that the latter was able to capture it (2), forming a sort of double planet. Henceforth, it became the satellite of the Earth, though retaining certain of its peculiar traits: its orbit is never convex in relation to the Sun, as it would have been if the Moon were a common satellite of the Earth.

H. Alfvén considers that the numerous craters and other formations of the Moon's surface may be a reminiscence of the

times when it witnessed the birth of the Earth (3).

Curiously enough, the Hellenic myths, which are probably echoes of the memory of pre-diluvian, pre-Hellenic civilisation which existed in the area of the present Mediterranean, tell us that Uranos (Heaven) first rose out of Chaos, and of him was born Chronos, i.e., Saturn. This latter in turn gave birth to Zeus-Jupiter. Thus, their sequence corresponds to that in the birth of the First Family planets from gas, i.e., out of Chaos.

4. It is not easy to answer the question, how long ago the Earth was able to capture Luna, if we take the stand-point of modern astronomical science. We cannot, however, dismiss tacitly the many legends and myths of various peoples, nor the testimonies of ancient writers, which relate that the appearance of the Moon in our Heaven was connected with a terrible catastrophe which once, but, speaking geologically, not so long ago, afflicted our globe. The writer is of the opinion that legends and myths are not the outcome of phantasy; they are narrations of real facts and events which, having been refracted in the prism of many centuries and generations, assume a colour or light seemingly unrealistic.

It is the aim of the science of to-morrow to recreate the true face of that terrible disaster, probably the Universal Deluge, to fix its chronology, and to explain the problem of Pre-Selenites, i.e., of the peoples who lived before the appearance of the Moon in our sky. They are mentioned by Plutarch and other Greek authors in their writings. One of the Arcadian kings was said to have been named Proselenos (4). St. Augustine speaks of them in his "De Civitate Dei." Even now, there are still peoples on the earth who have retained legends about the coming of

the Moon in the sky (5).

5. The readers of "Atlantean Research" are familiar with

the Cosmic Ice Theory, set forth so clearly by Mr. Egerton Sykes in his article "The Theory of Hoerbiger" (6), and supported by Dr. René Malaise (7). According to this theory, Luna, being primarily an independent planet, once approached the Earth so close that the latter captured it. This happened about 13,000 years ago, and this capture was the cause of the Wurm glaciation, of the climatic breakdown, of great seismic disturbances, and finally of the submersion of Poseidonia. It was the second greatest disaster in the whole history of the human race, i.e., the Universal Deluge, the first having been the disintegration of the Tertiary Satellite of the Earth (8).

Mr. H. S. Bellamy, in a series of books and articles, reveals in a convincing manner the causes and the mechanism of these terrible cataclysms. He develops before the mental eyes of his readers the horrible image of the Great Deluge, of which the

Biblical story (9) is but a feeble shadow.

On the other hand, according to the secret traditions of Hermeticism, the Moon is older than the Earth, and is not connected genetically with our globe. These traditions relate further, that the heliocentric orbit of Luna, after many transformations, approached the Earth so close that it was finally captured. They even say that this marriage between the Earth and the Moon was contracted not so long ago, namely about 9500 B.C., consequently at the time of the submersion of Poseidonia . . .

6. Thus we see that the mathematical theory of H. Alfvén entirely confirms the final conclusions both of H. Hoerbiger's theory and of the esoteric traditions, according to which our Moon was captured by the Earth. Thus, it was not born of the Earth (C. Darwin), but was its "adopted child." H. Alfvén does not, however, define the actual time when this capture took place. He is rather of the opinion that it happened a very, very long

time ago.

There is no doubt that our globe undergoes from time to time, at irregular intervals, great shocks and cataclysms. These are provoked either by certain orogenic processes, or by collisions with celestial vagrants. A great many meteoric craters both superficial and even submarine, give evidence of this. In consequence of such collisions with fragments of celestial bodies, great geological changes may take place. One of the greatest cataclysms took place about 12,000 - 13,000 years ago (10). It might have been provoked as a consequence of the fall upon the Earth of a small asteroid or fragment of a comet with its heavy nucleus. One of such minor collisions took place on June 30, 1908, in Siberia, when the Tungusian meteorite, as it is called, destroyed forests over a great area, forming dozens of funnelshaped depressions in the ground and creating the great Southern Marsh with a surface of about five square miles. It was probably related to the Pons-Winnecke comet.

Further scientific research on these lines will undoubtedly

yield very important conclusions as to the actual cause and time of the submersion of Poseidonia.

BIBLIOGRAPHY.

- Hannes Alfvén. On the Cosmogony of the Solar System, P.I., II, III, 1942-1946.
- 2. Ibidem, P. II, 28. 3. Ibidem, P. II. 28.
- 4. E. Sykes, Atlantean Research, Vol. 2, No. 5, 68.

5. Ibidem, 68.

6. Ibidem, 65-70.

- René Malaise, Atlantean Research, November/December, 1948. The Great Cataclism of Prehistory.
- 8. E. Sykes, Atlantean Research, Vol. 2, No. 5, 67.

9. H. S. Bellamy, The Atlantis Myth.
"Built Before the Flood.

10. H. S. Bellamy, The Atlantis Myth.

TIAHUNACAO—THE NEXT STAGE.

By EDMUND KISS.

Dr. Edmund Kiss whose book Des Sonnentor Von Tiahunacao (The sun-gate of Tiahunacao, 1937) completed an important stage in the investigations into the mystery of the great calendar stone, and who is also the author of several important works on Atlantis and the Hoerbiger Theory, has sent us this note outlining the field work which, in his opinion, should be undertaken as soon as possible in order to round off the picture. We are very glad that the rumours as to his death in World War II have proved unfounded.

The following tasks in the exploration of the Andean highlands remain to be completed:—

1. The survey and measurement of the so-called upper strand-line, which lies approximately 200m. above the Tiahuan-aco strand-line, that is, above the line which descends southwards from the level of the mole in the harbour. Contrary to that of Tiahuanaco, this line does not consist of chalk deposited by water, or of tide marks, or of delta courses of ancient rivers, but of large masses of shells, chiefly mussels.

Stretches of this strand-line have disappeared in some places, but in others they are marked by the piled-up deposits of masses of shells. The Indians know these locations, since they burn the shells on the spot to make building-lime. The upper strand-line is therefore not as continuous as the lower one, although large gaps occur also in the latter.

In the South—Atakama, Ascotan—the upper mussel-shell line seems to me to terminate in the air, and not to be continuous, all the way round, as should be the case with an inland lake. If this line is fixed thus, it will prove that the Gulf of Tiahuanaco, the bottom of which is now the Meseta, was at one time connected with the ocean. The lower line was surveyed under the direction of the late A. Posnansky, but the upper line has only been briefly visited. These surveys, therefore, are as yet

inadequate to prove the existence of an ancient gulf which was joined with the ocean, because the lower chalk strand-line disappears some 10 km. to the south of Lake Poöpo in the deposits of sand, clay and salt, which have filled the southern basin of the Meseta. The work remaining to be done requires a great deal of time and expense. In my survey, I used three methods, the same as Alexander von Humbold. Errors are possible in the application of all three, but they can be kept to a minimum.

2. The buildings still lying at the bottom of the southern part of Lake Titicaca ought to be explored as I was able to carry out only a partial examination. Posnansky considered that they dated from the pre-ice age. I believe them to be the work of the same macros who fashioned the Calendar Cata.

the same masons who fashioned the Calendar Gate.

As a starting point, I recommend the Island of Simillake, which lies in the Peruvian part of the delta lagoon of the Desaguadero. The main walls of the square structure, measuring 50 x 50 m., which are still preserved, are faced inside and outside with polished Andesite slabs, similar to the buildings in Tiahuanaco, namely Puma Punku. The core of the main walls consists of chalk-cement with large round pebbles. There are many such buildings, but most of them lie under water. The present lower surface level of the great lake is much more favourable for exploration than it was in my time.

EARTH LODGE AND ETERNAL HOUSE.

By C. A. BURLAND.

Mr. Bentham's reference to the Omaha Earth Lodge raises many fascinating problems for the anthropologist. Why earthlodges? Who used them, and where? Did they develop into other types of house? Was the tomb house—the eternal home—any

development of the earth house of the living?

First let us define the term earth-lodge. As understood by the Omaha and many other Indian peoples a century ago it was an excavated pit in which poles were erected to support a tent-like roof of timbers and brushwood; this was covered by the earth from the excavation except for the central hole used as a smoke vent. Often the entrance was through a crooked passage which acted as a wind break. Now this kind of construction may be round or square, but although the poles are often arranged like the beams of Stonehenge, the essential difference is in the presence of the excavation which forms the walls of the earth-lodge.

If we prepare a map of the distribution of the earth-lodges we shall find some very interesting evidence to explain the reason. Some of the pits of the late palaeolithic period in Moravia were probably earth houses, and it is certain that late palaeolithic Siberians used earth houses in which the beams were made of mammoth and rhino bones. In mesolithic Britain a few earth-

lodges were constructed. On the other side of the hemisphere the late palaeolithic (but modern) Eskimos have the earth-lodge in many forms. The Greenland style with stone and whale's bones to support the roof has a considerable local antiquity, and the central Eskimo version is the well-known snow-house, while in Alaska a highly developed timber form of house goes back a few thousand years, and in at least one case was used as a communal grave. Among the American Indians the earth-lodge was the prototype of the secret underground meeting rooms of the religious societies of New Mexico and Arizona, and may even have been the origin of the meeting place of Mexican warriors excavated at Malinalco. In every-day life, however, it had become a century ago restricted to the Mississippi-Missouri area.

It is this modern American distribution which gives the clue—the earth-lodge covers the area of cold winters with heavy snow, the area without heavy forest, and the area where the people had begun to develop agriculture so that instead of following the animals they had at least a season when they could live in villages in one spot. The earth-lodge is therefore an answer to natural and social conditions. Natural—it is the warmest kind of dwelling devised before air-conditioning, and even as the snow igloo, it reduces its inhabitants to almost complete indoor nudity. Look on the map: the ancient examples are all along the fringe of hunting country south of the glaciers and north of the forest of their time, even in the Americas the distribution of these dwellings follows the route of the prairies which was an ice-free corridor during the last glaciation. Whether the idea was independently invented or whether it diffused from one tribe to another is not certain, but its markedly northern distribution suggests that diffusion was an easy matter, especially as nearly forty thousand years elapse between the earliest known examples and the latest. The social conditions associated with the earth-lodge are those of the people who need protection from weather, but are able to settle together in some numbers. There is a good deal of work involved, and the community has to be so well supplied with food resources that they can spare time for such activities. That it is why it is unlikely that the idea originated in human communities of the first three glaciations of the Pleistocene period, it was only the intensive economy of late paleolithic cultures that could provide the social conditions necessary.

Now the Eternal House has a very different idea behind it—the natural idea that the other world is very like this one. The attempt is to give the departed a home with symbolic representations of the every-day world to help him in the new life. You find this idea in a simple form in all burials where goods are deposited with the dead. From China to Peru we have this idea, and sometimes a grave made like a little house of the culture concerned; but a special group of graves has some closer

apparent connection with the earth-lodge. These are the passage graves and chamber tombs of the megalithic cultures. They have a chamber of great uprights with lintels across, and the whole is covered by a mound of earth. But they are limited in range. not even appearing over the whole megalithic area. If the dolmen be a simplified and degenerate form of this tomb we could give it a line of progress across Indonesia, India, and Europe, a line of warm climate lands, and even in the European field far later than the glacial period. But the most complete forms of these tombs have a surprisingly limited range—the Mediterranean and Western Europe. In Africa, if the Egyptian tombs can be equated with the passage grave, the idea spread only along the northern coast. In fact the whole range of passage and chamber tombs of megalithic type is associated with sea and river routes. It is connected with regions in which metal was rich: Ireland, Spain, South Sweden. Tin, Copper, Gold, and Amber seem to have been the lure which tempted the bearers of megalithic ideas. I decidedly say "ideas," for the region shows many kinds of pottery, many kinds of metal work. The daily life of the people was by no means uniform, so we have no evidence of conquest by the ship-borne traders. Just the idea of an eternal house made of stones and piled high with earth, not for the honour of every person but for the nobles or the chief. The dates are not so definite as one might hope, the cult seems to have flourished at its richest about the period when Knossos had fallen and golden Mykenae had not yet sent its sons to die at Trov.

The earth-lodge builders had long passed on their hunting way across the plains of Siberia before the megalithic people had set about their work of civilisation by trade. Whether the first spread was brought from Egypt with its perfected stone masonry, and poor ships, or whether it first spread on the dolphin ships of Knossos along with a belief in sacred caves and spiral ornaments is a matter of guesswork so far. Egyptian beads reached Yorkshire and Dorset. Irish gold spread towards Europe, Baltic amber came south.

With the aid of culture distribution maps we have solved our first set of problems. The earth-lodge was a way of protecting men from a cold climate, and of providing a centre for villagers just ceasing from the nomadic life. The megalithic chamber tombs were part of a religious cult carried by traders from the Mediterranean. It has a strikingly Atlantic distribution, but probably the Atlantic Ridge was already some five thousand years below the waters. There is just one strange little parallel—America. The megalithic chamber tomb may be paralleled in the great monuments of San Augustin in Columbia.

There is a matter to ponder over—was there some trans atlantic drift voyager? If snips were good enough to sail from Spain to Ireland they may well have been dragged away in the grip of the Westerlies. Alternatively the chamber tomb and the

megalithic culture may be natural developments when settled

agricultural people develop the idea of a "divine king."

At a later date we shall be able to use maps of culture distribution to show similar puzzling American parallels in the matter of the ziggurat (temple on top of terraced mound representing the layers of the heavens), and the shaft tomb with chambers at the bottom. The author would be glad to have notes from any reader giving further information of the occurrence of such monuments.

THANET ARCHAEOLOGICAL SOCIETY.

In a note from Mr. Harper Corv we are informed that an archaeologist of 30 years standing, who has worked both with Flinders Petrie in Egypt and Leonard Woollev at Ur. recently visited the Margate Grotto. He gave a considered opinion that the place is distinctly ancient, and must be older than the Phoenician visits to these shores. He admitted the resemblances of the symbolism to Egyptian ideas, but needed time for further consideration before acknowledging any Cretan influence. Concerning the winged flints found at the Grotto, he remarked that they were doves—votive offerings, of which he had found many in the Mediterranean area, where they are buried in a circle round each tomb. His final opinions are awaited with great interest. The investigators of the Grotto are open to conviction, but so far—apart from some severe personal attacks—no evidence has been forthcoming to refute their hypothesis of indications of Cretan influence.

Meanwhile, the activities of the Thanet Archaeological Society are not concerned only with solving the problem of the origin of the Margate Grotto. A number of very ancient burial places await further inestvigation, as well as Celtic and Roman sites and traces of Anglo-Saxon and later cultures. Each of these phases has its devotees, and it is hoped that their combined researches will produce an adequate picture of early life in Thanet.

Dear Editor—With reference to Leslie Young's "Platonic Miscelleny," I would observe that Plato was also aware of the basis of the periodical destructions, as he says in the Critias: "Often and in many ways has mankind suffered destruction and will again be destroyed, mainly through fire and water. . . . This sounds like a myth, but the true kernel of it is the altered courses of the bodies moving around the earth."

This statement on the part of the Egyptian priest is self explanatory, as we are aware of the alteration in the path of the moon in the event of a cataclysm. The Egyptians must have had a factual knowledge of this in their archives. I feel that this observation in Critias has not yet received the estimation which it merits.

EDMUND KISS.

(N.B.—The quotation from Critias is translated from the German text of Otto Apelt in the Philos Library, Leipzig, 1922).

Diego Rivera: An Artist's Testament

"I put Diego Rivera in the front rank of modern art, because he has revived the national spirit of the Mexican art tradition. Among the artists of his own country he holds first place. Apart from that he is a good painter, not only au courant of the artistic revolution of our epoch, but one

who has taken a definite part in the revolution.

"From the first, Diego always appeared old. Even as a young man, he carried about with him the sadness of his race. Perhaps Mexicans are like that because they are mixed — not pure Spaniards, nor pure Indians. His people have suffered much, under many masters. The World hears the song of their soul in the art of Diego Rivera."—PABLO PICASSO, in an interview with the author at Golfe Juan, Antibes, in the Preface.

The author, Miss Betty Ross, is a journalist with the knack of making her subjects live. Her report of her friendship with Diego Rivera is illustrated with forty-seven plates, reproductions of his paintings, water-colours, drawings, and a frontispiece of herself, painted whilst posing for

the artist when the book was being written.

This magnificently produced volume is written in a most engaging style and with a frankness that befits the artist. Is Mexican art broody or sensualistic, expressive of a true feeling for form or colour, wildly modernist or traditional? Diego Rivera's art, until now hardly known outside his own country, may well answer these and other questions. Betty Ross has written a volume which will take pride of place on the shelves of lovers of art and great journalism.

With 47 full-page plates — many in colour Cr. 4to, full cloth, approx. 200 pages, probably 22s. post free. Ready in the Spring of 1950.

Publishers: Pen in Hand, Ltd.

Obtainable through Markham House Press, Ltd., 31, KING'S ROAD, LONDON, S.W.3.

CORRECTION

My attention has been drawn to two errors of fact in "The Theory of Hoerbiger," published in the last issue. H. S. Bellamy points out that Hoerbiger had no daughters, and that, in consequence Fauth was not his son-in-law.

M. Kamienski observes that the statement that "The bulk of . . . comets is vast while their weight is . . . nil" is incorrect, as their nuclei may consist of one or many heavy lumps several miles in diameter. Many thanks to both these gentlemen for their kindness in pointing out these inaccuracies.